www.tnb.com.my

**Tenaga Nasional Berhad**
No. 129, Jalan Bangsar, 59200 Kuala Lumpur
Tel: 603 2180 4582
Fax: 603 2180 4589
Email: cosec@tnb.com.my

KEEPING THE LIGHTS ON

Annual Report 2012 | Tenaga Nasional Berhad 200866-W

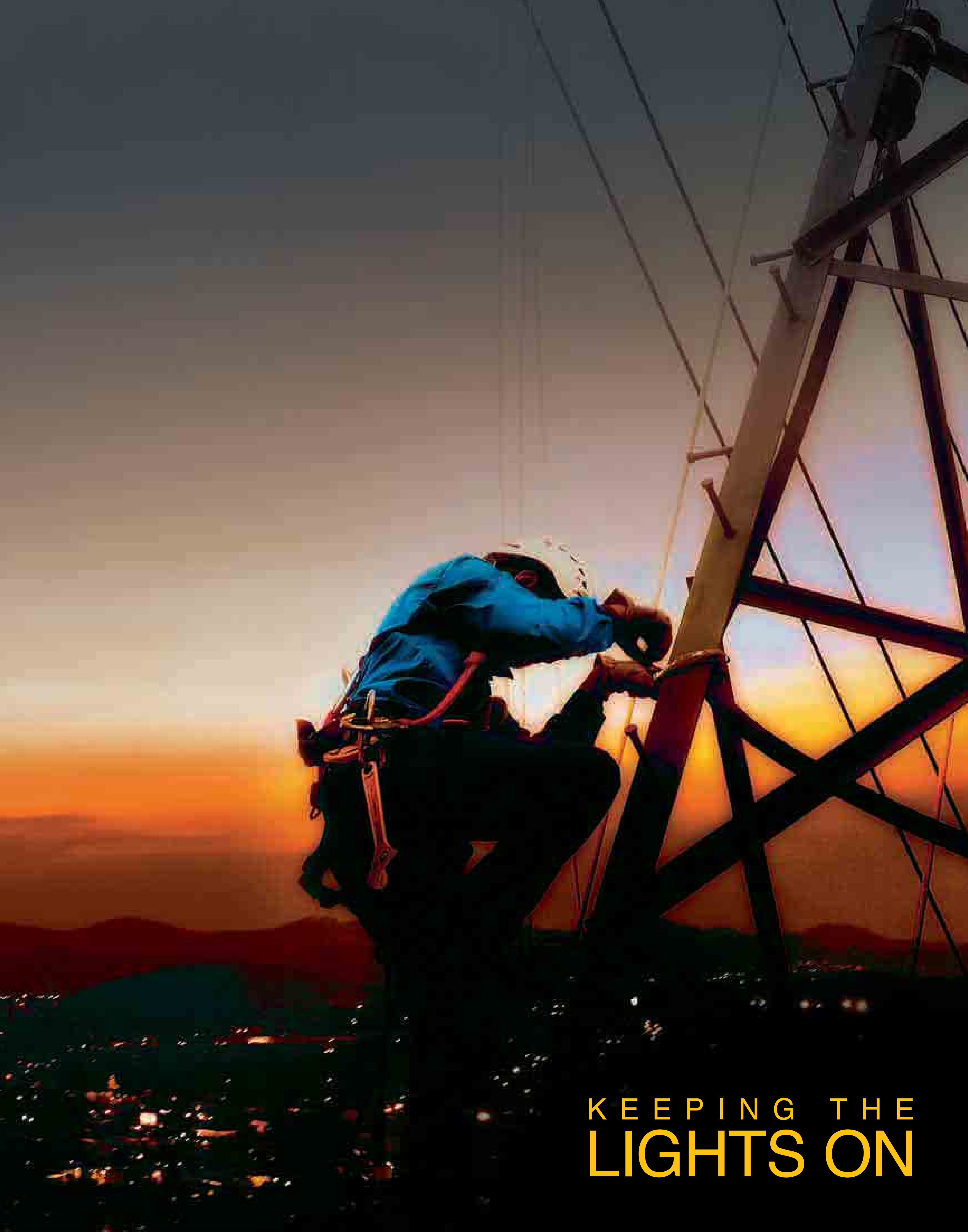
YOU SEE

annual report
**2012**

WE SEE...

# OUR COMMITMENT TO THE NATION

What you see is just one small piece of the big picture. Our role is to provide millions of Malaysians with affordable, reliable, efficient and uninterrupted access to electricity. From powering the nation's administrative capital to lighting up households and empowering all sectors of the economy, we have helped raise the quality of life in the country, and spur the nation's progress over the years. More than just lighting up homes and streets, TNB is committed to ensuring that every Malaysian is able to enjoy the benefits of electricity each and every day of the year by keeping the lights on.



# KEEPING THE LIGHTS ON

# what's INSIDE

## VISION

**TO BE AMONG THE LEADING CORPORATIONS IN ENERGY AND RELATED BUSINESSES GLOBALLY**

## MISSION

**WE ARE COMMITTED TO EXCELLENCE IN OUR PRODUCTS AND SERVICES**

# Notice of the 22nd Annual General Meeting

**NOTICE IS HEREBY GIVEN THAT the Twenty-Second Annual General Meeting ("22nd AGM") of Tenaga Nasional Berhad ("TNB") will be held on Tuesday, 18 December 2012 at 10.00 a.m. at Dewan Serbaguna, Kompleks Sukan TNB, Jalan Pantai Baru, 59200 Kuala Lumpur to transact the following businesses:**

## AS ORDINARY BUSINESS:

1. To receive the Audited Financial Statements for the Financial Year ended 31 August 2012 together with the Reports of the Directors and Auditors thereon.
**Ordinary Resolution 1**

2. To approve the declaration of a final single-tier dividend of 15.0 sen per ordinary share for the Financial Year ended 31 August 2012.
**Ordinary Resolution 2**

3. To approve the payment of Directors' fees of RM1,140,000.00 for the Financial Year ended 31 August 2012.
**Ordinary Resolution 3**

4. To re-elect the following Directors who retire in accordance with Article 135 of the Company's Articles of Association:

   (i) Dato' Fuad bin Jaafar
   **Ordinary Resolution 4**

   (ii) Dato' Abd Manaf bin Hashim
   **Ordinary Resolution 5**

   (iii) Datuk Wira Ir. Azman bin Mohd
   **Ordinary Resolution 6**

5. To re-appoint the following Directors who retire in accordance with Section 129 (6) of the Companies Act, 1965 ("Act") to hold office until the conclusion of the next Annual General Meeting ("AGM"):

   (i) Tan Sri Leo Moggie
   **Ordinary Resolution 7**

   (ii) Tan Sri Dato' Seri Siti Norma binti Yaakob
   **Ordinary Resolution 8**

6. To re-appoint Messrs PricewaterhouseCoopers, having consented to act as Auditors of the Company, to hold office until the conclusion of the next AGM and to authorise the Directors to fix their remuneration.
**Ordinary Resolution 9**

## AS SPECIAL BUSINESS:

To consider and if thought fit, to pass the following Resolutions:

7. Specific authority for the Directors to issue shares pursuant to the TNB Employees' Share Option Scheme II ("ESOS II").

   "THAT pursuant to ESOS II as approved at the Extraordinary General Meeting ("EGM") of the Company held on 29 May 2003, approval be and is hereby given to the Directors to issue shares in the Company at any time and in accordance with the terms and conditions of the said scheme."
   **Ordinary Resolution 10**

8. Proposed Offer and Grant of Options to Datuk Wira Ir. Azman bin Mohd.

   "THAT the Board be and is hereby authorised to, at any time and from time to time, offer and grant to Datuk Wira Ir. Azman bin Mohd, President/ Chief Executive Officer of TNB, options pursuant to ESOS II to subscribe for up to 1,200,000 TNB Shares subject always to such terms, conditions and/or any adjustments which may be made under the provisions of the Bye-Laws of ESOS II as approved at the EGM of the Company held on 29 May 2003."
   **Ordinary Resolution 11**

9. Proposed renewal of authority for the purchase by the Company of its own shares.

   "THAT subject to compliance with the Act, the Company's Memorandum and Articles of Association, the Main Market Listing Requirements of Bursa Malaysia Securities Berhad ("MMLR") and all other applicable laws, guidelines, rules and regulations for the time being in force or as may be amended from time to time, and the approvals from all relevant authorities, the Company be and is hereby authorised to purchase such amount of ordinary shares of RM1.00 each in the Company's issued and paid-up share capital through Bursa Malaysia Securities Berhad ("BMSB") upon such terms and conditions as the Directors of the Company ("Board") may deem fit and expedient in the interest of the Company provided that:

   (a) the aggregate number of shares purchased pursuant to this resolution shall not exceed 10% of the total issued and paid-up share capital of the Company ("Proposed Share Buy-Back");

# Notice of the 22nd Annual General Meeting

(b) the maximum amount of funds to be utilised for the purpose of the Proposed Share Buy-Back shall not exceed the Company's aggregate retained profits and/or share premium account at the time of purchase be allocated by the Company for the Proposed Share Buy-Back;

(c) the authority conferred by this resolution shall commence immediately upon the passing of this resolution and shall continue to be in force until:

(i) the conclusion of the next AGM of the Company at which time the authority shall lapse unless by an ordinary resolution passed by the shareholders of the Company in a general meeting, the authority is renewed either unconditionally or subject to conditions;

(ii) the expiry of the period within which the next AGM of the Company is required by law to be held;

(iii) the authority is revoked or varied by an ordinary resolution passed by the shareholders of the Company at a general meeting,

whichever is the earlier."

"AND THAT authority be and is hereby given to the Board to decide in its discretion to retain the ordinary shares in the Company so purchased by the Company as treasury shares or to cancel them or a combination of both and/or to resell them on BMSB and/or to distribute them as share dividends."

"AND THAT the Board be and is hereby authorised to take such steps to give full effect to the Proposed Share Buy-Back with full power to assent to any conditions, modifications, variations and/or amendments as may be imposed by the relevant authorities and/or to do all such acts and things as the Board may deem fit and expedient in the best interest of the Company."

**Ordinary Resolution 12**

10. Proposed Amendments to the Articles of Association of the Company.

"THAT, subject to the approval of any other parties, if required, the Articles of Association of the Company be altered, modified, added and/or deleted, as the case may be, in the form and manner as set out in the **Appendix I** of the 2012 Annual Report ("Proposed Amendments").

AND THAT the Board be and is hereby authorised to do all such acts, deeds and things as deemed necessary and/or expedient in order to give full effect to the Proposed Amendments with full powers to assent to any conditions, modifications and/or amendments as may be required by any relevant authorities or third parties to give effect to the Proposed Amendments."

**Special Resolution 1**

11. To transact any other business of which due notice shall have been given in accordance with the Act.

**FURTHER NOTICE IS HEREBY GIVEN THAT** for the purpose of determining a member who shall be entitled to attend this 22nd AGM, the Company shall be requesting Bursa Malaysia Depository Sdn. Bhd. ("Bursa Depository") in accordance with Article 87(B)(1) of the Company's Articles of Association and Section 34(1) of the Securities Industry ("Central Depositories") Act 1991 ("SICDA") to issue a General Meeting Record of Depositors ("ROD") as at 11 December 2012. Only a depositor whose name appears on the ROD as at 11 December 2012 shall be entitled to attend the said meeting or appoint proxy/proxies to attend and/or vote on his/her behalf.

## NOTICE ON ENTITLEMENT AND PAYMENT OF FINAL DIVIDEND

**NOTICE IS ALSO HEREBY GIVEN THAT** subject to the approval of Members at the 22nd AGM to be held on 18 December 2012, a final single-tier dividend of 15.0 sen per ordinary share for the Financial Year ended 31 August 2012 will be paid on 28 December 2012 to Depositors whose names appear in the ROD on 19 December 2012.

**FURTHER NOTICE IS HEREBY GIVEN THAT** a Depositor shall qualify for entitlement to the dividend only in respect of:

(a) shares transferred into the Depositor's securities account before 4.00 p.m. on 19 December 2012 in respect of ordinary transfers; and

(b) shares bought on BMSB on a cum entitlement basis according to the Rules of the BMSB.

**BY ORDER OF THE BOARD**

**Norazni binti Mohd Isa**
(LS 0009635)
Company Secretary

Kuala Lumpur
21 November 2012

# Notice of the 22nd Annual General Meeting

## EXPLANATORY NOTES ON SPECIAL BUSINESS

(i) **Ordinary Resolution 10: Power for the Directors to issue shares pursuant to the ESOS II.**

The proposed Ordinary Resolution, if passed, is to empower the Directors to issue shares in the Company pursuant to the terms and conditions of the ESOS II, which was approved at the EGM of the Company held on 29 May 2003.

(ii) **Ordinary Resolution 11: Proposed Offer and Grant of Options to Datuk Wira Ir. Azman bin Mohd.**

The proposed Ordinary Resolution, if passed, is to empower the Directors, to offer and grant to Datuk Wira Ir. Azman bin Mohd options pursuant to the ESOS II to subscribe for up to 1,200,000 TNB Shares subject to the provisions of the Bye-Laws of ESOS II, which was approved at the EGM of the Company held on 29 May 2003.

(iii) **Ordinary Resolution 12: Proposed Renewal of Share Buy-Back Authority.**

The proposed Ordinary Resolution, if passed, is to empower the Directors to purchase the Company's shares of up to 10% of the issued and paid-up share capital of the Company by utilising the funds allocated out of the retained profits and the share premium account of the Company. This authority, unless revoked or varied at a general meeting, will expire at the next AGM of the Company.

Information on the Proposed Renewal of Share Buy-Back Authority is set out in the Statement to Shareholders dated 21 November 2012 despatched together with the 2012 Annual Report.

(iv) **Special Resolution 1: Proposed Amendments to the Articles of Association of the Company.**

Details on the Proposed Amendments is set out in **Appendix I** of the 2012 Annual Report.

## NOTES:

### Registration of Members/Proxies

Registration of Members/Proxies attending the Meeting will be from 7.00 a.m. on the day of the Meeting. Members/Proxies are required to produce identification documents for registration.

### Proxy

(i) Any member entitled to attend and vote at this Meeting is entitled to appoint a proxy to attend and vote in his stead. A proxy may but need not be a member of the Company and the provisions of Section 149(1)(b) of the Act shall not apply to the Company.

(ii) The instrument appointing a proxy shall be in writing under the hand of the appointer or of his attorney duly appointed under a power of attorney. Where the instrument appointing a proxy is executed by a corporation, it shall be executed either under its common seal or under the hand of any officer or attorney duly appointed under a power of attorney.

(iii) A member shall not be entitled to appoint more than two (2) proxies to attend and vote at the Meeting. Where a member appoints two (2) proxies, the appointment shall be invalid unless the proportion of the shareholdings to be represented by each proxy is specified.

(iv) A corporation which is a member, may by resolution of its Directors or other governing body authorise such person as it thinks fit to act as its representative at the Meeting, in accordance with Article 107(6) of the Company's Articles of Association.

(v) Only members registered in the ROD as at 11 December 2012 shall be eligible to attend the AGM or appoint proxy to attend and vote on their behalf.

(vi) The instrument appointing a proxy must be deposited at Symphony Share Registrars Sdn. Bhd., Level 6, Symphony House, Pusat Dagangan Dana 1, Jalan PJU 1A/46, 47301 Petaling Jaya, Selangor Darul Ehsan not less than forty-eight (48) hours before the time set for the Meeting.

### Additional Information on Ordinary Resolutions 4 to 8

Additional Information on the Particulars of the retiring Directors, as required under Appendix 8A of the MMLR are detailed in the Annual Report.

# Appendix I

## PROPOSED AMENDMENTS TO THE ARTICLES OF ASSOCIATION OF THE COMPANY

| Article | Existing Provision | Proposed Amendments | Rationale |
|---|---|---|---|
| Article 1(2) | Interpretation<br>(New Provision) | Interpretation<br>"Exempt Authorised Nominee" refers to an authorised nominee which is exempted from compliance with the provisions of subsection 25A(1) of Central Depositories Act. | To define the word "Exempt Authorised Nominee" in view of the new provision introduced in paragraph 7.21(2) of the amended MMLR dated 22 September 2011. |
| Article 1(2) | Interpretation<br>(New Provision) | Interpretation<br>"Omnibus Account" means Securities Account in which ordinary shares are held in the Company for multiple beneficial owners in one securities account. | To define the word "Omnibus Account" in view of the new provision introduced in paragraph 7.21(1) of the amended MMLR dated 22 September 2011. |
| Article 1(2) | Interpretation<br>(New Provision) | Interpretation<br>"Share Issuance Scheme" means a scheme involving a new issuance of shares to the employees. | To define the word "Share Issuance Scheme" in view of the new provision introduced in paragraph 1.01 of the amended MMLR dated 22 September 2011. |
| Article 1(2) | Interpretation<br>(New Provision) | Interpretation<br>"Share Grant Scheme" means a scheme involving the grant of a listed issuer's existing shares to the employees. | To define the word "Share Grant Scheme" in view of the new provision introduced in paragraph 1.01 of the amended MMLR dated 22 September 2011. |
| Article 1(2) | Interpretation<br>(New Provision) | Interpretation<br>"Employee Share Scheme" means collectively a Share Issuance Scheme and a Share Grant Scheme. | To define the word "Employee Share Scheme" in view of the new provision introduced in paragraph 1.01 of the amended MMLR dated 22 September 2011. |
| Article 1(2) | Interpretation<br>"option" includes options under a share scheme for employees, convertible securities, warrants and any other types of options in respect of the issued or unissued securities of the Company. | Interpretation<br>"option" includes options under ~~a share scheme for employees~~ employee share scheme, convertible securities, warrants and any other types of options in respect of the issued or unissued securities of the Company. | To define the word "option" in view of the new provision introduced in paragraph 1.01 of the amended MMLR dated 22 September 2011. |
| Article 9(1) | Every issue of shares or options to employee and/or Director shall require the approval of shareholders in general meeting. No Director shall participate in a share scheme for employees unless shareholders in general meeting have approved of the specific allotment to be made to such Director. | Every issue of shares or options to employee and/or Director shall require the approval of shareholders in general meeting. No Director shall participate in a ~~share scheme for employees~~ Share Issuance Scheme unless shareholders in general meeting have approved of the specific allotment to be made to such Director. | In view of the amended provision introduced in paragraph 7.03 of the amended MMLR dated 22 September 2011. |

# Appendix I

| Article | Existing Provision | Proposed Amendments | Rationale |
|---|---|---|---|
| **Article 105(4)** | A proxy may but need not be a member of the Company and need not be an advocate, an approved Company auditor or a person approved by the registrar of companies. The provisions of Section 149(1)(b) of the Act shall not apply to the Company. | Subject to Article 106, a member shall be entitled to appoint not more than two (2) persons as his proxy to attend and vote instead of the member at any general meeting of the Company. There shall be no restriction as to the qualification of the proxy. Thus, the provisions of Section 149(1)(b) of the Act shall not apply to the Company. | **In view of the new provision introduced in paragraph 7.21A(1) of the amended MMLR dated 22 September 2011 as well as to enhance administrative efficiency at any general meeting of the Company.** |
| **Article 107(4)** | A corporation sole or a statutory corporation may appoint any person being Entitled Person (whether a member of the Company or not) as its proxies. | A corporation sole or a statutory corporation may appoint any person being Entitled Person ~~(whether a member of the Company or not)~~ as its proxies. | **Enhancement to the Articles of Association of the Company.** |
| **Article 107(A)** | Where a member of the Company is an Authorised Nominee as defined under the Central Depositories Act, it may appoint at least one proxy (but not more than two proxies) in respect of each securities account it holds with ordinary shares of the company standing to the credit of the said securities account. | (1) Where a Member of the Company is an Authorised Nominee as defined under the Central Depositories Act, it may appoint at least one proxy (but not more than two proxies) in respect of each securities account it holds with ordinary shares of the company standing to the credit of the said securities account. | **Renumbering of the Article in view of the new amended provision introduced in paragraph 7.21(1) of the amended MMLR dated 22 September 2011.** |
| **Article 107(A)** | **(New provision)** | (2) Where a Member of the Company is an Exempt Authorised Nominee who holds ordinary shares in Omnibus Account, there is no limit to the number of proxies which the Exempt Authorised Nominee may appoint in respect of each omnibus account it holds.<br><br>(3) Where an Authorised Nominee appoints two (2) proxies, or where an Exempt Authorised Nominee appoints two (2) or more proxies, the proportion of shareholdings to be represented by each proxy must be specified in the instrument appointing the proxies. | **In view of the new amended provision introduced in paragraph 7.21(1) of the amended MMLR dated 22 September 2011.** |

# Statement Accompanying Notice of the 22nd Annual General Meeting

(Pursuant To Paragraph 8.27(2) of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad)

**The Directors who are standing for re-election in accordance with Article 135 of the Company's Articles of Association:**

(i) Dato' Fuad bin Jaafar

(ii) Dato' Abd Manaf bin Hashim

(iii) Datuk Wira Ir. Azman bin Mohd

**The Directors who are standing for re-appointment in accordance with Section 129(6) of the Companies Act, 1965:**

(i) Tan Sri Leo Moggie

(ii) Tan Sri Dato' Seri Siti Norma binti Yaakob

The profiles of the above Directors are set out in the section entitled "Profile of Directors" on pages 84 to 89 in this Annual Report.

Their interest in the securities of the Company are set out in the section entitled "Directors' Report" on page 221 of the Audited Financial Statements in this Annual Report.

# Financial Calendar

## 2012

### QUARTERLY RESULTS

**17 January 2012**

Announcement of the unaudited consolidated first quarter results ended 30 November 2011

**12 April 2012**

Announcement of the unaudited consolidated second quarter results ended 29 February 2012

**19 July 2012**

Announcement of the unaudited consolidated third quarter results ended 31 May 2012

**31 October 2012**

Announcement of the audited consolidated fourth quarter results ended 31 August 2012

### DIVIDEND

**Announcement Date** – 26 April 2012
**Notice Date** – 27 April 2012
**Entitlement Date** – 16 May 2012
**Payment Date** – 25 May 2012

Interim Dividend of 5.09 sen per ordinary share comprising franked dividend of 0.38 sen gross per ordinary share less 25% income tax and a single tier dividend of 4.71 sen per ordinary share in respect of the Financial Year ending 31 August 2012

### ANNUAL GENERAL MEETING

**21 November 2012**

- Notice of the 22nd Annual General Meeting
- Issuance of 2012 Annual Report
- Statement to Shareholders on Proposed Renewal of Share Buy-Back Authority

**18 December 2012**

22nd Annual General Meeting

## 2011

### QUARTERLY RESULTS

**28 October 2011**

Announcement of the audited consolidated fourth quarter results ended 31 August 2011

### ANNUAL GENERAL MEETING

**17 November 2011**

- Notice of the 21st Annual General Meeting
- Issuance of 2011 Annual Report
- Statement to Shareholders on Proposed Renewal of Share Buy-Back Authority

**15 December 2011**

21st Annual General Meeting

# Investor Relations

**The year 2012 was eventful for the company's Investor Relations (IR) as stakeholders' interest escalated in line with raising concerns among the global and local investment communities on power supply sustainability. As various pressing issues became topical subjects of discussion, the IR team was constantly in the radar among the financial community to provide updates on regulatory issues and changes within the industry.**

The IR team drives and facilitates financial communication efforts with existing and potential institutional investors, financial analysts as well as retail shareholders. The IR function, placed under the Group Finance Division of TNB, resides in the Investor Relations and Management Reporting Department. The management reporting function complements and provides credibility to the IR role in order for the IR team to fully understand and appreciate the operations of the company, thus be able to provide accurate and timely information to stakeholders. Good communication and soft skills have helped the IR officers to communicate their stories, which provide greater clarity on the company's business operations and related issues in the local power industry.

## INTERACTION BETWEEN COMPANY AND MARKET

TNB maintains a strong rapport with the investment community through proactive and regular investor engagements. IR activities throughout the financial year 2012 were conducted primarily by the top management, namely the President/Chief Executive Officer and Chief Financial Officer, along with the IR officers. A series of meetings and events were held to allow the investment community greater access to top management in order to better understand latest developments in the company and current industry's issues.

**Key Events in Financial Year 2012 (FY2012)**

| Results Announcement | Date |
|---|---|
| *Fourth Quarter FY2011* | *28 October 2011* |
| *First Quarter FY2012* | *17 January 2012* |
| *Second Quarter FY2012* | *12 April 2012* |
| *Third Quarter FY2012* | *19 July 2012* |
| **Other Events** | **Date** |
| *Briefing Session by SEDA on the Implementation of Feed-in Tariff (FiT)* | *8 December 2011* |
| *Site Visit to Jana Landfill Sdn. Bhd., Puchong* | *20 December 2011* |
| *Site Visit to Tuanku Jaafar Power Station, Port Dickson* | *26 April 2012* |
| *Dialogue Session with TNB Chief Executive Officer (CEO) and Chief Operating Officer (COO)* | *22 May 2012* |

## STATISTICAL DATA ON ENGAGEMENT ACTIVITIES THROUGHOUT FY2012

| Events | Statistics (number of participants/meetings) |
|---|---|
| *Quarterly Financial Results Announcements and Analyst Briefings* | *307 research analysts and media (including teleconferencing)* |
| *Briefings and Dialogue Sessions* | *55 research analysts and fund managers* |
| *One-on-One & Group Meetings at Conferences & Site Visits* | *92 research analysts, fund managers and investors* |
| *In-house and External Meetings* | *57 meetings involving research analysts, fund managers and investors* |

# Investor Relations

## IR ROADSHOWS & CONFERENCES

TNB's commitment to IR is not limited to participation at the domestic front, but extends beyond Malaysian borders. Roadshows and conferences attended during the year under review were:

| Date | Activity |
|---|---|
| Sept 2011 | 18th CLSA Investors' Forum – Hong Kong |
| May 2012 | Invest Malaysia 2012 – Kuala Lumpur |
| June 2012 | 9th Nomura Asia Equity Forum – Singapore |

## RELATIONSHIP BUILDING WITH FINANCIAL FRATERNITY

Any queries on the company can be addressed to the IR team through tenaga_ird@tnb.com.my. In addition, the IR portal (http://www.tnb.com.my/investors-media.html) on the company's website serves as a key communication platform through which the IR team ensures up-to-date corporate information and financial data are readily accessible by stakeholders. The portal contains a number of segments, including News & Highlights (Announcements to Bursa Malaysia, Changes in Shareholding, News Clips and Conference Materials), Financial Info (Quarterly Results, Group Financial Statistics, Headline Key Performance Indicators, Credit Ratings and Top 30 Shareholders), Share Info (Price Ticker, Share Price Volume and Stock Chart), Demand Sales and Foreign Shareholding, Annual Reports, Request for Meeting and Request for IR Info.

## ANALYST COVERAGE

Consistent IR undertakings coupled with strong investor interest were reflected in good coverage by 22 equity research analysts in FY2012.

| No. | Research House | No. | Research House |
|---|---|---|---|
| 1 | Affin Investment Bank | 12 | JP Morgan |
| 2 | Alliance Research | 13 | KAF |
| 3 | AM Research | 14 | Kenanga Research |
| 4 | CIMB | 15 | Macquarie |
| 5 | Citi Research | 16 | Maybank |
| 6 | CLSA | 17 | MIDF Research |
| 7 | Credit Suisse | 18 | Nomura |
| 8 | Deutsche Bank | 19 | OSK Research |
| 9 | ECM Libra Investment Research | 20 | RHB Research |
| 10 | Hong Leong Investment Bank | 21 | TA Securities |
| 11 | Hwang DBSVickers | 22 | UBS Securities |

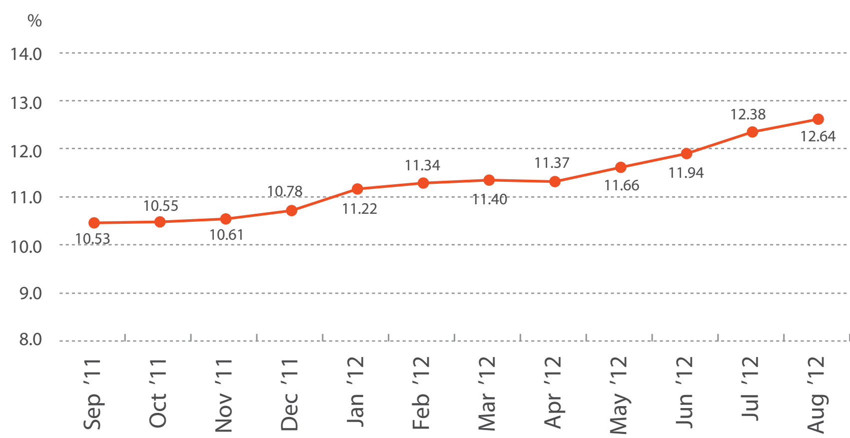
During the year, TNB received two awards in recognition of its IR efforts, namely the Certificate of Excellence by IR Magazine South East Asia and Best Senior Management IR Support by Alpha South East Asia.

## SHAREHOLDER BASE

TNB has a large shareholder base and as at 31 August 2012, this comprised 36,962 corporates, government agencies, institutional and individual shareholders. Khazanah Nasional Berhad continued to be the largest shareholder with 35.4% shares in the company while other corporations and government agencies held 45.7% shares, and the Malaysian public 6.3%.

TNB's foreign shareholding steadily edged up to 12.64% as at August 2012 compared to 10.72% a year ago.

**Foreign Shareholding In FY2012**



# Investor Relations

## COMMITMENT TO SHAREHOLDERS

TNB's commitment to its shareholders is reflected in the Group's Dividend Policy, which is geared towards providing stable and sustainable dividends while maintaining an efficient capital structure and ensuring sufficient funding for future growth. Under this policy, TNB is committed to distributing between 40%-60% of the company's annual free cash flow (after interest servicing and capital expenditure) as dividends.

For the financial year ended 31 August 2012, TNB's Board of Directors has declared:

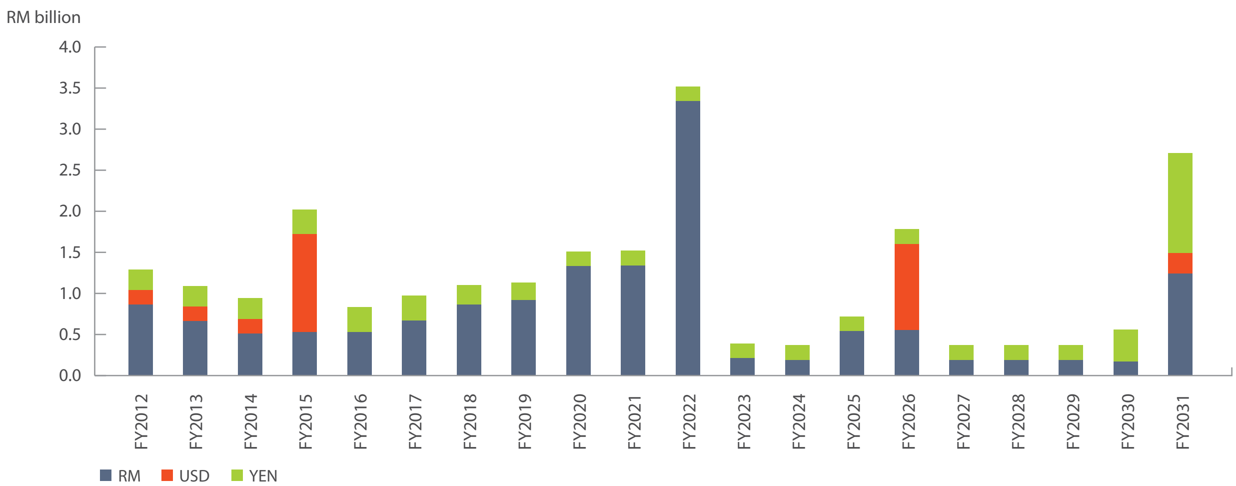
- an interim dividend of 5.09 sen per ordinary share less income tax of 25% (gross dividend of 0.38 sen and single tier dividend of 4.71 sen), amounting to RM273 million which was paid in May 2012; and
- a proposed final single-tier dividend of 15.00 sen per ordinary share.

## TNB CREDIT RATING BY EXTERNAL RATING AGENCIES

Details of the company's credit rating and its debt securities are as follows:

| Rating Agency | Outlook | Rating Classification | Rating Description |
|---|---|---|---|
| **MARC** | Stable | AAA – Issuer<br>$AAA_{ID}$ – Issue | MARC has affirmed TNB's issuer rating of AAA and the utility's Islamic debt rating at $AAA_{ID}$ for the following outstanding issues: i) RM1.0 billion Al-Bai' Bithaman Ajil notes Issuance Facility; and ii) RM2.0 billion Al-Bai' Bithaman Ajil bonds. |
| **RAM** | Stable | AAA | RAM Ratings has reaffirmed the AAA Long-Term rating of TNB's USD500 million equivalent Murabahah Medium-Term Notes Programme (2005/2025) (MMTN). |
| **S&P's** | Negative | BBB+ | This rating reflects Standard and Poor's opinion of TNB's very important role in, and strong link with the Government of Malaysia. S&P's views TNB's business and financial risk profile as *Satisfactory* and *Significant*. |
| **MOODY'S** | Stable | Baa1 | As a Government-Related Issuer (GRI), TNB's Baa1 rating reflects the company's standalone credit strength of 8-10, which maps with Moody's global Baa rating range. It also reflects strong support from the Government of Malaysia under the Joint Default Analysis (JDA) approach. |

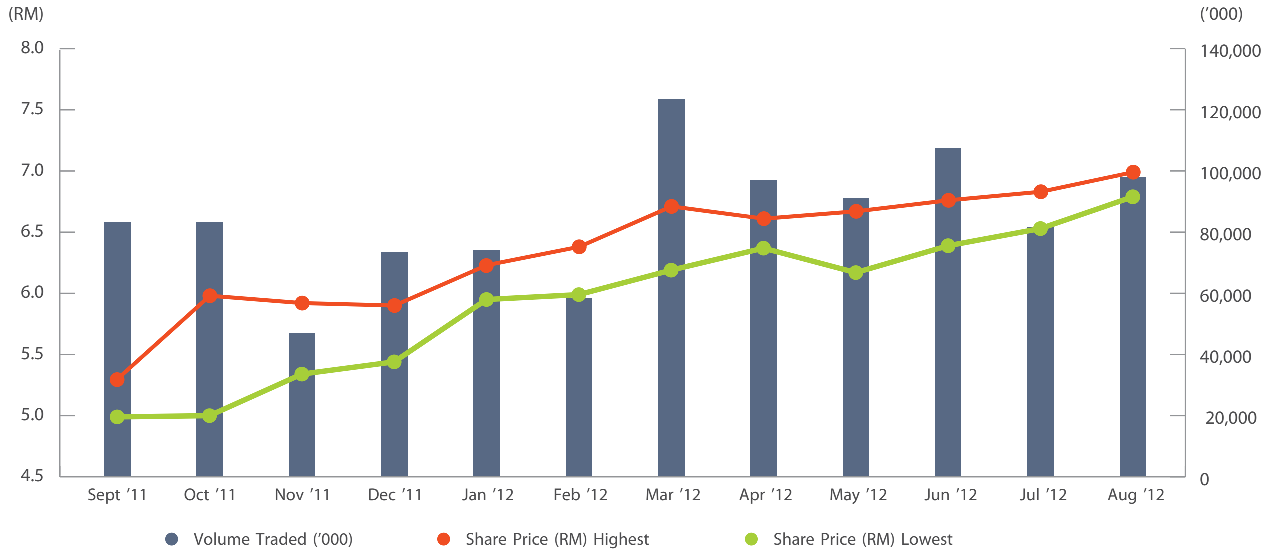
## DEBT MATURITY PROFILE



# Share Performance

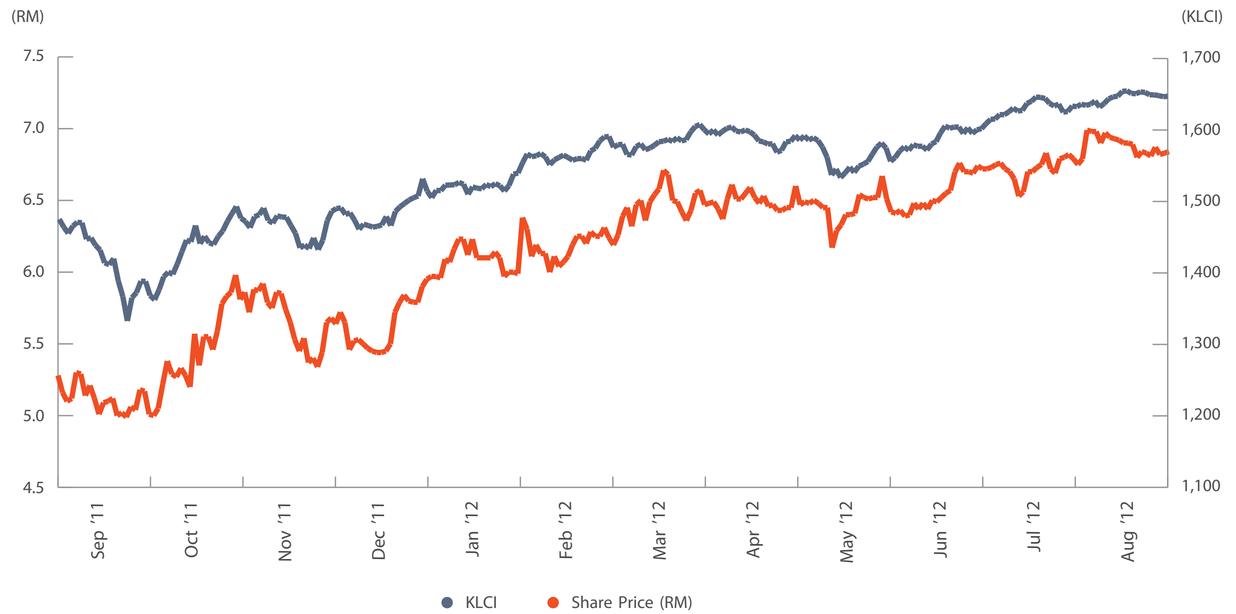
The Company is listed on the Main Board of Bursa Malaysia. In FY2012, TNB shares recorded a total turnover of RM6,337 million with 1,018 million shares traded as compared to a total turnover of RM11,429 million with 1,770 million shares traded in FY2011.

## TNB SHARE PRICE MOVEMENT & MONTHLY VOLUME TRADED




| | Sept '11 | Oct '11 | Nov '11 | Dec '11 | Jan '12 | Feb '12 | Mar '12 | Apr '12 | May '12 | Jun '12 | Jul '12 | Aug '12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volume Traded ('000) | 83,248 | 83,229 | 46,978 | 73,632 | 74,028 | 58,542 | 123,634 | 97,046 | 91,209 | 107,491 | 81,455 | 97,803 |
| Share Price (RM) Highest | 5.30 | 5.98 | 5.92 | 5.90 | 6.23 | 6.38 | 6.71 | 6.61 | 6.67 | 6.76 | 6.83 | 6.99 |
| Share Price (RM) Lowest | 4.99 | 5.00 | 5.34 | 5.44 | 5.95 | 5.99 | 6.19 | 6.37 | 6.17 | 6.39 | 6.53 | 6.79 |

## TNB SHARE PRICE PERFORMANCE VS FBM KLCI (2 SEPT 2011-30 AUG 2012)



# Facts at a Glance

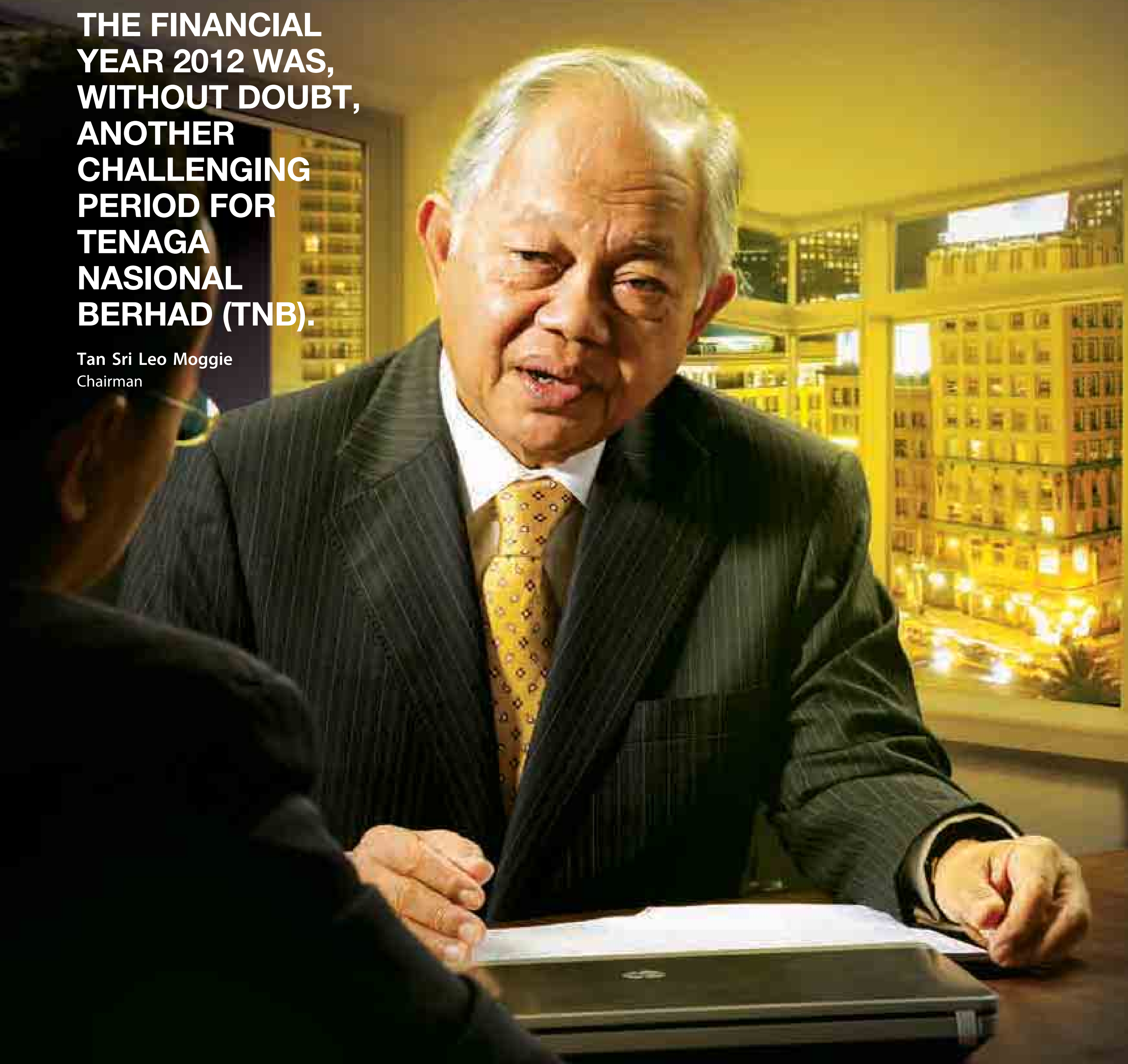
| | |
|---|---|
| **NO. OF EMPLOYEES** | Employs more than **33,500** people Group-wide |
| **ASSETS FIGURE** | Almost **RM88** billion in assets |
| **CUSTOMER BASE** | An estimated **8.3** million customers in Peninsular Malaysia, Sabah and Labuan |
| **SAIDI** | **63.32** minutes significant reduction in System Average Interruption Duration Index (SAIDI) per customer per year |
| **INSTALLED CAPACITY** | Total installed capacity of **9,041** MW comprising **7,130** MW thermal plants and **1,911** MW hydro plants |
| **REVENUE GROWTH** | **11.2%** (Peninsula at 10.8%, SESB at 18.7%) |

# Chairman's Letter to Shareholders

Dear Shareholders

**THE FINANCIAL YEAR 2012 WAS, WITHOUT DOUBT, ANOTHER CHALLENGING PERIOD FOR TENAGA NASIONAL BERHAD (TNB).**

**Tan Sri Leo Moggie**
Chairman



# Chairman's Letter to Shareholders

Globally, energy resources are depleting. This, coupled with geo-political instability, meant that fuel prices not only increased during the year but were also volatile. In Malaysia, along with economic development, demand for electricity continued to escalate, at 4.3% in the peninsula and 4.8% in Sabah, reinforcing the need to invest in major new infrastructure. Added to this were environmental concerns.

Most urgently, however, TNB had to manage the prolonged gas supply shortage. About 60% of the generation capacity in Peninsular Malaysia depends on gas, hence the shortfall took a significant toll on the company, requiring us to burn more expensive alternative fuels such as medium fuel oil (MFO) and distillates.

Faced with these challenges, it has become increasingly difficult to stay true to our core responsibility of *Keeping the Lights On*. Yet, rallying all our resources and working together as we have done for more than 60 years, TNB managed to achieve highly commendable financial results and operational performance.

In our quest to serve our consumers while ensuring financial prudence, we have kept innovating, seeking ever better technologies to improve our operational efficiencies hence drive down costs and boost our bottom line. Yet, we would not have been able to produce the results we did this financial year if not for the support of the Government, which helped tremendously to cushion the impact of the increased cost of fuel.

The Government introduced a compensation package that came into effect in January 2012, through which the additional costs that TNB has had to shoulder is being shared three ways by the Government, Petronas and the company. Since this compensation scheme was implemented, we have received a total of RM3,154.5 million, greatly easing our financial burden and leading to a rebound in our profit margins from the second quarter of the financial year 2012 onwards.

The cost compensation mechanism, however, is only a stopgap until sustainable measures are implemented that will lead to a more open, competitive and efficient industry. I am pleased to share that, already, a good deal of groundwork has been done towards this end. The government and regulators have indicated that new policies and regulatory frameworks will be put in place soon to redress the fuel cost issue in a way that benefits all parties involved.

# Chairman's Letter to Shareholders

## FINANCIAL PERFORMANCE

The Group's profit was a healthy RM4,197.6 million for the year, a more than three-fold increase of the RM965.4 million achieved in FY2011. Our total revenue, meanwhile, increased by 11.2% as against an increase of 2.1% in operating expenses. This resulted in a higher EBITDA margin of 25.1% as compared to 23.3% in FY2011. The increase in EBITDA margin was also partly contributed by the slight improvement of 1.5% in the daily average gas volume, from 946mmscfd in FY2011 to 960mmscfd in FY2012.

The Board of Directors is encouraged by TNB's robust performance. And it gives me great pleasure to announce that, after not being able to declare a final year dividend for FY2011, we are recommending for approval of shareholders at the forthcoming Annual General Meeting a final single tier dividend of 15.0 sen per ordinary share for this financial year. I am sure our shareholders will welcome this proposal and approve it at the forthcoming Annual General meeting.

## KEEPING THE LIGHTS ON…

As noted above, it has become increasingly more challenging to keep the nation's lights on while ensuring the sustainability of TNB's operations. However, we are guided in this on-going mission by our 20-year Strategic Transformation Plan which we embarked on in 2005. Divided into four five-year phases, this plan strengthens our fundamentals and places us on a stronger footing towards realising our long-term vision of becoming a leading energy corporation globally.

Although we are less than halfway through this Strategic Plan, we have already achieved some very encouraging results. Various key aspects of our performance in terms of electricity generation, transmission and distribution have reached, or are very close to reaching, world-class standards. For the year 2011, Platts rated TNB the 24th best electric utility company in the world, and the third best in Asia. Coming from such a renowned organisation, this ranking speaks volumes of our financial and operational management.

We are now in the midst of the second phase of the Strategic Plan, called *Gemilang 2015 – Growth, Global, Green*, which was launched on 4 January 2011. The focus of this phase is to further enhance our operations in the traditional domains of generating, transmitting and distributing electricity, while also exploring new energy-related ventures locally and abroad. As we strive towards business excellence, we will also ensure our operations are as environment-friendly as possible.

Towards further enhancing our core business, we have embarked on several initiatives to improve our cost-efficiency and operational effectiveness. These include comprehensive financial and asset management plans and programmes. I am pleased to note that the initiatives implemented are bearing results. A key achievement of the year has been a further reduction in Transmission and Distribution Losses to 8.25%, surpassing our target of less than 9%.

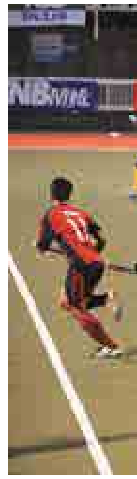
In terms of business expansion, we believe that TNB should leverage on its expertise to develop new sources of revenue in the energy industry locally, as well as abroad. To support our growth plans, we are working on an effective business development and policy framework which will set the company on the right path towards hitting our targeted non-regulated revenue of RM5 billion by 2015.

## … WHILE STAYING GREEN

Because of the nature of our business, it is critical for TNB to be conscious of our impact on the environment. Globally, energy is still very much hydrocarbon-based, which means that the more energy is produced, the more $CO_2$ is released into the atmosphere. In Malaysia, no less than 90% of the energy mix for power generation comes from fossil fuels.

In 2011, we launched a Green Energy Policy, which states that "TNB is committed to supporting the national green agenda and minimising the environmental impact of our business by applying sustainable and efficient operations and delivering green energy through the application of appropriate technologies and investment." Our green initiatives are grouped under a Green Renewable Energy and Energy Efficient Roundtable, or GREENER TNB, through which we have embarked on several programmes to promote not just greener operations within TNB but more generally a greener energy sector in the country.

We are supporting the Government's call to increase the contribution of renewable energy (RE) to the energy fuel mix to 5.5% by the year 2015 by investing in a number of RE projects that capitalise on the country's hydro and biomass potential. TNB is developing two new hydroelectric plants in Terengganu and Pahang, and a biomass plant in Pahang in collaboration with Felda Global Venture (FGV). We are also working with Sime Darby to study the potential of palm oil mill effluent for use in biogas plants.



# Chairman's Letter to Shareholders

Within the industry, we have been promoting RE among small producers by conducting studies to facilitate their connection onto the grid. TNB is also the administrator of the Feed-in-Tariff (FiT) recently implemented by the Government.

We believe that our actions to champion green energy can only bear real fruit if Malaysians buy into the underlying philosophy. Hence, we make a point of increasing environmental awareness of the public through various promotions and incentives in partnership with government agencies. Within TNB itself, our employees recycle and reduce waste, while those from Transmission are actively involved in tree planting activities. The idea is to plant infant trees to replace any felled while implementing Transmission infrastructure throughout the country. The young trees are planted at places of worship, orphanages and parks under a programme known as Tree For A Tree. To further cultivate an environment-conscious culture among our more than 33,500-strong workforce, we run awareness programmes and training, and send out circulars as well as information on our intranet. Our portal includes a GREEN Forum, on which employees discuss environment-related topics.

## THE CUSTOMER COMES FIRST

TNB has always valued our customers. The priority we place on our customers is reflected in the theme of the first phase of our 20-year Strategic Plan, namely *Service Excellence 10-10 (SE10-10)*. Various action plans were initiated to identify the needs and expectations of our customers and not just meet these, but exceed them so as to delight our end users. Now, under the second phase of the Strategic Plan, we are further developing all initiatives already undertaken to improve the customer experience.

During the year under review, we re-branded our Pusat Khidmat Pelanggan (Customer Service Centre), transforming it into the focal point for customer enquiries. In keeping with the times, we have also further enhanced our electronic services and facilities. As a result of such initiatives, in the financial year 2012, TNB scored 7.2 out of 10 in the annual Customer Satisfaction Survey conducted by an international market research company. We are heartened by this showing, as it marks an improvement from our previous score of 7.0.

## EMPLOYEE DEVELOPMENT

It goes without saying that the success of TNB hinges on our people. While we have a carefully laid out 20-year Strategic Plan, this will come to nothing if our human resources are unable to achieve the milestone goals placed throughout this journey. We have the strength in numbers – our workforce exceeding the 33,500 count – but are now ensuring we have equal strength in the quality, or level of professionalism, of this large number of employees.

Given our plans to further grow our business within Malaysia and abroad, it is imperative that we provide our employees with the right professional development opportunities so they are able to compete in the global space. Of late, there has been greater focus on job attachments both locally and overseas to equip our employees with valuable hands-on exposure. We are also placing more emphasis on internal coaching and mentoring to supplement the more traditional classroom training.

# Chairman's Letter to Shareholders


To inspire our employees, we reward them with due recognition and awards. At the same time, several members of our staff have received recognition from external institutions. In the current financial year, as an example, one of our executives was named Manager of the Year by the Malaysian Institute of Management. Our Innovative and Creative Circle (ICC) teams, meanwhile, regularly win awards from the Malaysia Productivity Corporation.

## CORPORATE SOCIAL RESPONSIBILITY

As developed as the country is, there remain pockets of communities in remote areas that do not have electricity. It is our mission to serve these communities, and to literally light up their lives via electric supply. Where it is not possible to connect these locations to the national grid, we install alternative sources of electricity such as solar and wind turbines.

We also empower marginalised and underprivileged sectors of the population through social outreach programmes such as Baiti Jannati. Via this programme, we upgrade the homes of single parents, the hardcore poor, senior citizens and other underprivileged families, and make sure the households receive all the basic amenities such as water, electricity and proper sanitation. Where possible, we support the educational needs of their children. To date, we have renovated 107 homes, allocating a total of RM1.75 million towards meeting the needs of the recipient families.

We are also resolute in our endeavour to help advance the nation's human capital through our continuing support of Universiti Tenaga Nasional (UNITEN) and other educational initiatives. Our foundation, Yayasan Tenaga Nasional (YTN), meanwhile, disburses scholarships and convertible loans to outstanding young Malaysians, allowing them to pursue their dreams of studying at the best local and foreign universities. Over 8,000 youth have benefitted from this financial aid

# Chairman's Letter to Shareholders

programme to date. In the financial year 2012 itself, YTN spent a total of RM42.9 million to sponsor 1,868 students, representing the largest annual contribution made by TNB towards enhancing our professional workforce, and that of the country.

We believe that everyone has latent potential, and if we can help to awaken this potential, we will have helped to empower the nation. This philosophy is applied equally in the business and sporting arenas, through our Vendor Development Programme and sports sponsorships.

## THE WAY FORWARD

Within the current scenario of depleting resources and rising costs of fuel, there has been an urgent need to re-evaluate the entire value chain of energy supply. At TNB, we are exploring several alternatives to safeguard future supply. Other than the RE initiatives mentioned earlier, we are looking at using more clean coal technology, importing LNG, importing hydro-based electricity from Sarawak and purchasing electricity from neighbouring countries.

I would like to emphasise that TNB has no intention of increasing energy demand in order to increase our sales. Rather, our aim is to encourage energy efficiency and demand side management in order to create a sustainable energy environment.

In this regard, we are encouraged by recent policy developments. Significantly, the Government aims to implement a pilot Incentive Based Regulation (IBR) scheme some time in 2013 or 2014. We welcome the IBR, which will benchmark our performance against best practices, because it complements our own journey towards service and operational excellence. Moreover, along with the IBR, the Ministry of Energy, Green Technology and Water and the Energy Commission have proposed an Imbalance Cost Pass-Through (ICPT) mechanism to fix the electricity tariff, in which the Fuel Cost Pass Through (FCPT) would form a major component.

It is our firm belief that the FCPT is critical to the sustainability of not just TNB but the Malaysian Electricity Supply Industry. I therefore look forward to the IBR, and to the tariff reviews which will reflect more accurately the cost of fuel driving our energy supply.

## ACKNOWLEDGEMENTS

I am heartened by TNB's performance during the year under review, and realise this is the result of the hard work of the entire TNB family. For this, I would like to express my sincere gratitude to every one of our more than 33,500 staff. I would also like to record a special tribute to Dato' Sri Che Khalib bin Mohamad Noh. Under his leadership over the last eight years, TNB has received numerous accolades, including the Prime Minister's Industry Excellence Award (AKIPM) in 2007, the highest industrial recognition in the nation for a corporate body. TNB's achievements reflect Dato' Sri's outstanding capabilities as President/CEO.

At the same time, I would like to welcome our new President/CEO, Datuk Wira Ir. Azman Mohd, a veteran of the company whose entire career has been with TNB. I share the Board's conviction that Datuk Wira Ir. Azman will build on the foundation laid by his predecessors to take this company to a brighter future.

As stated earlier in this letter, TNB could not have posted the results it did this year if not for the Government's positive intervention. I would like to take this opportunity to thank the Government of Malaysia and the regulatory bodies – particularly the Ministry of Energy, Green Technology and Water and the Energy Commission – for their cooperation and collaboration. With their continued support, I have every assurance that TNB will make great strides towards becoming a successful and responsible corporate citizen.

**Tan Sri Leo Moggie**
Chairman

# President/CEO's Review

Dear Shareholders

**GLOBALLY, ADVANCED NATIONS HAVE YET TO SHAKE OFF THE VESTIGES OF THE FINANCIAL CRISIS THAT UNFOLDED IN 2008.**

**Datuk Wira Ir. Azman bin Mohd**
President/Chief Executive Officer

## President/CEO's Review

The US economy is still floundering from a massive government deficit while in the Eurozone, several countries are grappling with sovereign debts that continue to hamper both internal growth and international trade. Added to fiscal frailties, oil and other fuel prices have been volatile as a result of political instability in the Middle East and dampened global demand.

Malaysia has been spared the brunt of the global crisis due to a relatively robust economy supported by strong internal demand, pragmatic macroeconomic policies and government efforts to further stimulate growth via the Economic Transformation Programme (ETP). Gross Domestic Product (GDP) growth for the calendar year 2011 stood at 5.1% and, although this has been predicted to decline to 4.0-5.0%[1] in 2012, economists maintain this is still healthy given the external drag. The fact remains that the domestic economy is buoyant, as reflected in an increasing demand for electricity.

In our Financial Year (FY) 2012, electricity demand increased by 4.3% in the peninsula and 4.8% in Sabah. Coupled with a challenging energy environment, this created some stress points for us. Most pressingly, the gas supply shortage improved only marginally. While the energy sector relies on the supply of 1,250 million standard cubic feet per day (mmscfd) of gas to keep all gas-fuelled power plants going, in 2012, the average supply of gas to the power sector was only 960mmscfd, marking a 1.5% increase from 946mmscfd in the previous year. This necessitated greater reliance on more costly alternative fuels such as coal, medium fuel oil (MFO) and distillates, resulting in an additional cost of more than RM2.2 billion in the 12 months under review.

[1] *BNM report 2012 (f)*

# President/CEO's Review

Fortunately, the Government stepped in to introduce a cost-sharing mechanism in December 2011 under which the additional cost of fuel to 'keep the lights on' is being shared equally by the Government, Petronas and us. With this significant financial aid, we have managed to improve our financial position and produce a commendable performance for the year.


## FINANCIAL PERFORMANCE

Group's net profit jumped significantly by 334.8% from RM965.4 million in FY2011 to RM4,197.6 million. This came on the back of an 11.2% increase in total revenue from RM32,241.2 million in FY2011 to RM35,848.4 million this financial year. Revenue was boosted by an 10.5% or RM3,275.6 million increase in Group sales of electricity as a result of escalating demand as well as the 7.1% tariff hike on 1 June 2011.

At the same time, concerted cost control measures contributed to a minimal rise in operational expenses of 2.1%, from RM30,956.4 million in FY2011 to RM31,592.1 million in FY2012. Consequently, our Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA) margin improved to 25.1% from 23.3% in the previous financial year (after restating the Fuel Cost Compensation into the respective financial years). However, if TNB were to be fully compensated for the additional fuel costs incurred due to higher usage of oil and distillate, our EBITDA margin would stand at 27.2%. The marginal increase in gas supply during the year also contributed to our healthier EBITDA margin.

In order to meet the increase in electricity demand, we were required to increase generation from coal-fired power plants, resulting in an increase of 10.1% in coal consumption from 18.9 million metric tonnes in FY2011 to 20.8 million metric tonnes in FY2012. However, the impact of this was cushioned by a global decrease in coal prices, as reflected in the lower average coal cost incurred for FY2012 of USD103.6 per metric tonne as compared to USD106.9 per metric tonne in FY2011.

I'm pleased to share that, in the year under review, we met all three financial Headline Key Performance Indicators, namely a return on assets (ROA) of 4.6%, surpassing our target of 2-3%; a company cost per unit (CPU) of 31.6sen/kWh, as compared to the target of between 32.7-33.7sen/kWh, and revenue from non-regulated business of RM2.3 billion, when the target was between RM1.8-1.9 billion. Admittedly, our ROA and company CPU reflected the fuel cost compensation received from the Government and Petronas.

## OPERATIONAL HIGHLIGHTS

While our financial performance was certainly boosted by the cost-sharing mechanism, it would be remiss not to acknowledge increased operational efficiencies across the board as well as concerted efforts to keep a tight rein on costs. All three core divisions, namely

# President/CEO's Review


Generation, Transmission and Distribution, continued to strive for world-class standards in key aspects of their individual businesses, and moved closer towards achieving these.

Generation Division recorded an equivalent availability factor (EAF) of more than 90% at 60% of the power stations, while reducing its equivalent unplanned outage factor (EUOF) to 3.5% from 7.1% in 2011. Transmission Division continued to improve on various indices, such as system minutes, monthly delays and transmission losses. Its system minutes have been constantly less than 1.03 minutes over the last four years (FY2010 – 0.9mins, FY2009, FY2011 and FY2012 – 1.0min). At the Distribution Division, meanwhile, the System Average Duration Index (SAIDI) further reduced to 62.3 minutes per customer a year, which is getting closer to our target of less than 50 minutes per customer a year by 2015. Most encouragingly, we met our targeted Transmission and Distribution losses of less than 9% with a significant margin, recording losses of 8.2%.

Our operational successes are due largely to the adoption of continuously more advanced and effective technologies as well as the increasing competency and level of professionalism of our workforce. These are among the four key focus areas of Gemilang 2015, the second phase of our 20-Year Strategic Plan.

## GEMILANG 2015 – GROWTH, GLOBAL, GREEN

Gemilang 2015 comprises four action plans which, together, ensure TNB is on the right track towards achieving our ultimate objective of becoming a leading energy player in the global space. These four action plans are:

- Financially, to optimise costs and capitalise on business opportunities
- Technologically, to enhance operational excellence via the latest technologies
- In terms of capability, to enhance the productivity and professionalism of our employees
- Externally, to delight our customer and establish TNB as a driver of green energy

***Optimising costs & capitalising on business opportunities.*** Towards optimising costs, all divisions within the Group are expected to closely monitor their expenses and ensure the judicious use of financial resources. In addition, we have placed increased emphasis on plugging leakages such as theft and pilferage, while prudently managing possible sources of avoidable loss or wastage of company funds. We are monitoring our cost optimisation performance by aiming for a ROA of 6-7% by the end of the Gemilang 2015 period, namely the financial year 2015.

For the same period, we have also set a value creation target of approximately RM7 billion. This is to be derived from strategic initiatives that include further reductions in Transmission and Distribution losses, geographical expansion, tariff adjustments, greater efficiency and productivity and financial management.

We are particularly excited by the potential of exploring new business opportunities, both locally and abroad. As the leading utility company in Malaysia with more than 60 years' experience, we are in the unique position of being able to leverage on the collective knowledge and expertise of the organisation to further expand our business and create new streams of steady income. The TNB brand is well-known internationally and there is much demand for the kind of products and services that we can offer, especially in developing Asian countries and in the Middle East.

We have, in fact, already made headway in this regard. A number of our subsidiaries – notably TNB Repair and Maintenance Sdn. Bhd. (REMACO), TNB Engineering Corporation Sdn. Bhd. (TNEC), Tenaga Switchgear Sdn. Bhd. (TSG), Malaysia Transformer Manufacturing Sdn. Bhd. (MTM), Tenaga Cable Industries Sdn. Bhd. (TCI) – have managed to penetrate our key markets. Even our education subsidiaries – TNB Integrated Learning Solution Sdn. Bhd. (ILSAS) and Universiti Tenaga Nasional Sdn. Bhd. (UNITEN) – have been successful in marketing their training and development programmes abroad.

Along with REMACO and TNEC, TNB Energy Services Sdn. Bhd. (TNBES) performed very well this year, and the three subsidiaries together contributed RM732.9 million towards our non-regulated revenue. As a result of the concerted efforts of all our subsidiaries, we hit our FY2012 target of drawing in RM2.3 billion from this non-regulated income stream. However, we can

# President/CEO's Review

do much more. In order to fully capitalise on the immense potential of new businesses, both locally and overseas, we recently established a New Business & Major Projects Division. It serves to coordinate and manage all new business development so that we attain our Gemilang 2015 goal of deriving RM5 billion from non-regulated business by 2015.

***Enhancing operational excellence via the latest technologies.*** To modernise our operations for maximum efficiency, we have an on-going Process Standardisation Improvement (PSI) programme, under which key business processes are continually reviewed and improved on. This is applicable to the entire value chain of our business, from the generation to distribution of electricity as well as to our customer interface.

In Generation, for example, we are implementing the latest supercritical coal power technology in a new plant being developed in Manjung, Perak, which will boast an efficiency level of 40%, as opposed to the average efficiency of conventional coal-fired power plants of around 37%. In Transmission, we are testing the Smart Grid at three sites to gauge how effective this is in helping end users minimise their costs via demand side management. By adjusting their power usage patterns, users can avoid peak hours, hence keep the maximum load demand at manageable levels while they themselves benefit from lower tariffs. This pilot project is an important component of more general efforts at TNB to create greater energy efficiency in the country.

The latest technologies are also adopted to provide our customers with a better experience in their dealings with TNB. To date, we have introduced several online facilities such as e-Services, e-Application and e-billing which have proved to be very popular. This quest for greater efficiency is on-going and will keep us innovating to further improve our customer service and quality of delivery.

***Enhancing the productivity and professionalism of employees.*** While we invest in technology, we realise there is an equally urgent need to ensure our people have the required skills and knowledge to derive maximum benefit from the latest processes and systems. Human capital development has always been a focal point in TNB, and this has only intensified over the years along with greater pressure to optimise productivity, performance and our level of professionalism. In our current mission to go global, moreover, we are ensuring that our workforce is second to none in the energy industry.

I personally take great interest in employee performance and, in July this year, introduced a Vibrant Workforce, Productivity Revolution programme to reinvigorate our people, empower and motivate them to work together in achieving the company's goals. Various workshops have been held across the organisation to spread this new mantra, so everyone is aware of it and is able to grasp its significance.

There are four main aspects of the Vibrant Workforce, Productivity Revolution, namely: Building Trust & Relationships, Building Capacity, Building Performance and Building Growth. Let me explain these in turn.

Trust is central to the success of any business – and is critical to establishing good relations both internally among employees and externally, between the company and its stakeholders. We are working to deepen the level of trust, hence the quality of our internal and external relationships in order to create a more conducive environment to move forward and grab opportunities as and when they arise. We believe that by engaging more actively with our stakeholders, we will be able to create an environment of greater openness and transparency, which in turn engenders trust. For the media, just as an example, we have set up a CEO Media Emergency Response Centre (CEO MERC) to which all queries will be channeled and responded to properly and promptly.

Building capacity is self-explanatory; as mentioned above, the capacity of our human resources is essential to our long-term success and sustainability. We have always invested a significant proportion of our capital in our own people; now we aim to see results of this investment. We intend to create a pipeline of talent to fill all leadership positions with our own people, not just within the company but in our subsidiaries too. Our ambition is for the Group to acquire the reputation of having the most experienced and knowledgeable people in the industry.

# President/CEO's Review

By Building Performance, we seek to increase the productivity of all our employees, at all levels. We would like our people to feel a sense of ownership in their roles and to take pride in carrying out their duties in the most productive manner. Finally, Building Growth links back to our aspiration to expand horizontally into new businesses, both locally and abroad.

***Delighting our customer.*** In the last annual report, we reported having introduced a Customer Charter to address standard performance requirements such as Minimum Service Level (MSL) and Guaranteed Service Level (GSL). This year, we have gone beyond expected practices to really delight our customers, for example by re-branding our Customer Service Centre (Pusat Khidmat Pelanggan). As mentioned above, we have also expanded our online services which is always much appreciated by the more tech-savvy among our customers. I am pleased to note that our efforts to enhance the customer experience have been appreciated, and are reflected in a higher Customer Satisfaction Survey score of 7.2 out of 10.0 from 7.0 in the previous financial year.

***Establishing TNB as a driver of green energy.*** A key component of Gemilang 2015 is to drive green energy in the country. In actuality, this is nothing new. For years, TNB has been supporting the Government's efforts to promote renewable energy (RE) in the energy mix, with the aim of achieving 5.5% contribution from RE by the year 2015. Of late, however, the call for RE has become more urgent given further escalations and volatility in fossil fuel prices and incontrovertible climate change issues. While stepping up efforts to champion RE, we are also ensuring all new projects developed are 'green' in the sense of employing the most advanced and eco-friendly technologies.

Over the next five years, Malaysia's electricity demand is expected to grow by 3.5%-4.6% a year. Along with the New Economic Model and Economic Transformation Programme, peak demand is anticipated to reach 20,699MW by 2020, from 15,826MW in the FY2012. In order to meet this demand, we are investing RM9.7 billion in new capacity for the next five years. The new power plants being developed include two hydroelectric projects in Hulu Terengganu, Terengganu, and Ulu Jelai, Pahang; a biomass plant in Jengka, Pahang (in collaboration with the Felda Group); and the earlier-mentioned coal-fired power plant in Manjung, Perak. Although the coal-fired plant is not an RE project, its supercritical boiler will maintain $CO_2$ emissions at a minimum. Together, these projects will boost the country's current capacity by 1,632MW.

Under our Rural Electrification Programme, undertaken with the Government, moreover, we are developing and operating solar hybrid systems with a total capacity of 4MW. In addition, TNB is involved in several mini-hydro, solar hybrid and biogas ventures, while encouraging greater involvement of the private sector in the nascent RE ecosystem in the country.

## CHAMPION OF RENEWABLE ENERGY (RE)

Besides being committed to buying RE from small developers, we also facilitate in connecting RE plants to the national electricity grid, while ensuring complete stability of the system. We help the RE developers to conduct Power System Studies and Connection Confirmation Checks to assess the impact of their RE plants on the grid system. We further ensure that the plants comply fully with all our specifications, for example that plants with a generation capacity of more than 2MW are equipped with a Supervisory Control and Data Acquisition (SCADA) system. In effect, in our bid to encourage more RE developers to connect to the national power grid, we have taken on the role of project consultants and project managers.

We are, further, ensuring the viability of the entire RE ecosystem by serving as an administrator of the RE Fund, which is used for the Feed-in-Tariff (FiT). Following the implementation of the FiT in December 2011, all TNB consumers are required to support the RE Fund by paying an extra 1% of their electricity bills towards it. As of July 2012, we had collected a total of RM171 million for the RE Fund, which represents 93.1% of the total FiT levied.

As of August 2012, we had signed 448 RE power purchase agreements (REPPAs) with RE developers in Peninsular Malaysia, with a total capacity of 270MW.

## THE ISSUE OF FUEL

The gas shortage in the last financial year was not redressed in the current financial year. As indicated earlier the Melaka Re-Gasification Terminal (RGT) would be ready by September 2012. However this date was subsequently pushed back to early 2013. There are two major consequences of the gas shortage: 1) the security of adequate supply is affected; and 2) the cost of supply increases.

Fuel is an increasingly scarce commodity, hence its cost is continuously escalating. As a result, it is a challenge to acquire sufficient fuel to replace the gas shortfall at all times to meet our consumers' needs. Although we have not to date had any issue with coal, other than its steadily rising market price, the availability of MFO, on which we depend quite significantly, is not as assured. MFO is also consumed by the transport sector, hence there is competition for its use. The uncertainties of fuel supply would be partly allayed once the Melaka terminal is functional. However, we would still have to contend with an increase in cost of fuel, as LNG imported here will reflect international prices, which would be higher than the price we have been paying for subsidised gas for the power sector.

The impact of such a price increase on TNB is substantial. Every RM3/mmbtu increase in the price of gas results in an additional RM1.23 billion per annum in our fuel cost. Already, TNB is paying an additional RM1.2 billion per annum from a mismatch in the market price and tariff price of coal, given that the tariff is set at the benchmark coal price of USD85 per tonne whereas the average market price of coal used stands at around USD105 per tonne.

The most practicable solution to this conundrum would be to pass on the market cost of fuel to the end user, as per the Fuel Cost Pass Through (FCPT) mechanism, which has been successfully implemented in several countries in the region such as

# President/CEO's Review


Singapore, the Philippines, Japan, Hong Kong, Europe and the United States. We have been discussing the possibility of implementing the FCPT with the Government and regulators for some years, and the Government has in theory approved it. A significant move in the right direction took place in June 2011, when the electricity tariff in Peninsular Malaysia was raised to reflect the increase in price of natural gas to the power sector, as well as the increase in the cost of supply.

We are also heartened by the Government's intention to introduce the Incentive-Based Regulation (IBR), as proposed by the Energy Commission (EC), as it entails implementation of the FCPT. Under the proposed mechanism, the estimated cost of gas and coal to the industry will be based on, and will reflect, changes in the market prices of fuel, the quantity of fuel needed, the generation mix and foreign exchange rate, among others. We are working closely with the Ministry of Energy, Green Technology and Water and the EC to finalise the FCPT formula and mechanism for its implementation.

## THE IMMEDIATE FUTURE

The business environment for electricity utilities promises to continue to be challenging in the financial year 2013 and beyond. The Government's proposed IBR is to be piloted for a period of one year, following which, if successful, it will be implemented on a permanent basis. But the interim regulatory period will begin only in FY2014, hence many issues related to fuel supply and cost will continue to be part of our working equation in the coming year.

We have been in constant discussion with the Government, the EC and other regulators over mechanisms such as the fuel cost sharing to ensure the terms are judicious and do not place an unmanageable strain on our capital cost structure. With the current cost-sharing mechanism, we have been able to increase our net profit from RM2.2 billion at the end of the financial year 2011 to RM2.9 billion this financial year. We would like to further increase our bottom line in order for it to better reflect our operational efficiencies, which today are very close to world standards. TNB is already a top-three electricity utility in Asia, and we intend to increase our world ranking – not just as an electricity company but more generally as an energy conglomerate. Indeed, as we have conquered almost the entire local market in Peninsular Malaysia, the only place to grow is internationally.

To date, the company has focused almost exclusively on our core business of generation, transmission and distribution. While we will always accord priority to keeping the lights on, we currently have very little control over the costs incurred and profits generated. To illustrate this point, the industry weighted return on costs is about 9% while our weighted return is generally 4%, reducing to 2% in the last few years, despite high levels of operational efficiency. With the IBR, we have been promised returns that are commensurate with our efficiency, which will greatly enhance our coffers. All the systems for operational efficiency are already in place, hence we are confident of higher returns without too much additional effort on our part.

The one area where we can channel more thought and resources in order to increase our revenue, and returns, is in non-regulated businesses. We believe this presents a Blue Ocean of opportunity for TNB. Although we have set a target of RM5.5 billion for the year 2015, I believe we can actually achieve more than that, and we are preparing all the necessary groundwork, such as the establishment of the New Business & Major Projects Division, to do so.

We are also very optimistic of reducing our costs with the changes being brought about by the open bidding system for the generation of capacity. Essentially, this means all projects to generate new capacity in the country will be evaluated through open tenders and the projects will be awarded to the most competitive bidders.

# President/CEO's Review

This applies to new plants as well as to extensions of licences of existing plants. The implication to TNB is garnering better terms when we renegotiate our power purchase agreements (PPAs) with the Independent Power Producers (IPPs), from whom we are obliged to purchase electricity. On 9 October 2012, the EC announced the results for two Tracks of Competitive Bidding. Track 1 was a competitive international bidding exercise to secure about 1,000MW-1,400MW from a new combined cycle gas turbine plant of which TNB was awarded the 2x535MW Prai Power Plant. We are now in the midst of finalising the PPAs with all the winning bidders. Already, we are reducing our capacity payment obligations to Track 2 winners, namely Genting Sanyen Power and Segari Energy Venture, not only during the extended term but also during the remaining terms of the PPA. More PPAs will be expiring in 2015/2016, and we expect to negotiate similarly attractive terms when these are renewed.

## ACKNOWLEDGEMENTS

Having been with the TNB family my entire working career, it has been a great honour to be chosen to take over the position of President/CEO of the Group. I would like to take this opportunity to thank the Board of Directors and my fellow management for their vote of confidence in me. I would also like to express my heartfelt gratitude to the Board for their wisdom in guiding the company in these challenging times. Meanwhile, a big thank you goes to all management and employees of TNB who have shown, yet again, that together we have what it takes to keep making progress even in the face of adversity.

There have been indications of positive regulatory changes, and for this I would like to thank the Government, the Energy Commission and all other regulators. With their continued support, I have the greatest confidence that TNB will be able to rise from the current environment of uncertainty into a position of greater strength and stability.

I would also like to thank all our other stakeholders, in particular our customers, business partners and members of the media, for their belief in us. As I mentioned earlier in this review, TNB highly values all our relationships and are keen to further strengthen these with greater openness and engagement.

# President/CEO's Review

Finally, I realise that an enormous responsibility has been bestowed on me. While I cherish this responsibility, I believe the success of an organisation like TNB does not rest solely on one person. It is the culmination of the cooperation and contributions of everyone. We have worked together to create a company that is good. Now, let us intensify our efforts to nurture an organisation that is truly great.

**Datuk Wira Ir. Azman bin Mohd**
President/Chief Executive Officer

# Key Highlights

**Unit Demand Growth (Peninsula)**

4.3%

3.1% in FY2011

**EBITDA Margin***

25.1%

23.3% in FY2011

**Revenue Growth**

11.2%

Peninsula at 10.8% and SESB at 18.7%

**ROA***

4.6%

4.1% in FY2011

**Operating Expenses Increase**

2.1%

19.1% in FY2011

**CAPEX**

RM7.3 billion

RM5.6 billion in FY2011

**Net Profit Attributable to Owners of the Company**

RM4.2 billion

RM0.96 billion in FY2011

**Average Coal Price**

USD103.6/mt

USD106.9/mt in FY2011

* *After adjusting for Fuel Cost Compensation:*
*FY2012 : RM 1.47 billion*
*FY2011 : RM 1.63 billion*
*FY2010 : RM 0.05 billion*

# Key Financial Highlights

| | GROUP | | COMPANY | |
|---|---|---|---|---|
| | 2011 (restated) | 2012 | 2011 (restated) | 2012 |
| **PROFITABILITY (RM Million)** | | | | |
| Revenue | 32,241.2 | **35,848.4** | 30,157.1 | **33,341.0** |
| Operating profit | 1,816.8 | **6,396.9** | 2,130.7 | **5,864.6** |
| Profit before taxation and zakat | 1,156.7 | **5,537.2** | 615.1 | **4,429.7** |
| Net profit attributable to owners of the Company | 965.4 | **4,197.6** | 578.3 | **3,118.1** |
| **KEY STATEMENT OF FINANCIAL POSITION DATA (RM Million)** | | | | |
| Property, plant and equipment | 61,872.8 | **64,779.7** | 60,494.4 | **61,281.6** |
| Total assets | 79,064.3 | **88,469.1** | 79,343.4 | **81,848.3** |
| Total borrowings | (19,054.1) | **(23,071.8)** | (12,174.2) | **(11,494.9)** |
| Total liabilities | (46,834.9) | **(52,070.8)** | (50,017.3) | **(49,410.5)** |
| Share capital | 5,456.6 | **5,501.6** | 5,456.6 | **5,501.6** |
| Shareholders' equity | 31,997.4 | **36,137.3** | 29,326.1 | **32,437.8** |
| **SHARE INFORMATION** | | | | |
| Per share (sen) | | | | |
| – Basic earnings | 17.71 | **76.82** | | |
| – Diluted earnings | 17.67 | **76.63** | | |
| Dividend: | | | | |
| Gross | 4.50 | **0.38** | | |
| Single-tier – Interim | | **4.71** | | |
| – Final (proposed) | | **15.00** | | |
| Net assets per share attributable to owners of the Company | 586.4 | **656.9** | | |
| **FINANCIAL RATIOS** | | | | |
| Return on assets (%)* | 4.1 | **4.6** | | |
| EBITDA margin (%)* | 23.3 | **25.1** | | |
| Debt-equity (net of cash) ratio | 0.47 | **0.40** | | |

* *After adjusting for Fuel Cost Compensation in respective periods*

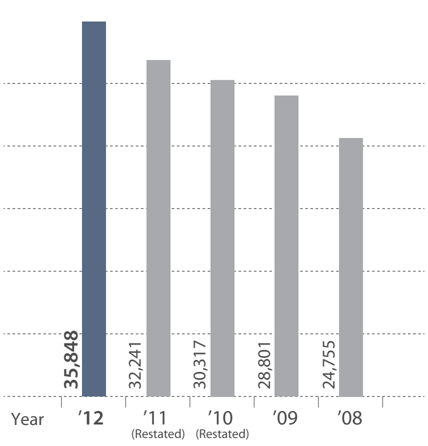
# Five-Year Group Financial Summary

| | GROUP | | | | |
|---|---|---|---|---|---|
| **Year Ended 31 August** | **2008** | **2009** | **2010 (restated)** | **2011 (restated)** | **2012** |
| **OPERATING RESULTS (RM Million)** | | | | | |
| Revenue | 24,755.3 | 28,801.3 | 30,317.4 | 32,241.2 | **35,848.4** |
| Operating profit | 3,851.0 | 3,714.6 | 4,180.0 | 1,816.8 | **6,396.9** |
| Profit before taxation and zakat | 3,025.2 | 1,558.8 | 4,019.4 | 1,156.7 | **5,537.2** |
| Net profit attributable to owners of the Company | 2,594.0 | 930.5 | 3,200.8 | 965.4 | **4,197.6** |
| **KEY STATEMENT OF FINANCIAL POSITION DATA (RM Million)** | | | | | |
| Property, plant and equipment | 58,333.4 | 59,080.6 | 58,913.3 | 61,872.8 | **64,779.7** |
| Total assets | 69,841.9 | 73,165.2 | 78,662.4 | 79,064.3 | **88,469.1** |
| Total borrowings | 22,740.4 | 22,616.0 | 21,095.6 | 19,054.1 | **23,071.8** |
| Total liabilities | 44,080.0 | 45,752.0 | 46,709.5 | 46,834.9 | **52,070.8** |
| Share capital | 4,334.5 | 4,337.0 | 4,352.7 | 5,456.6 | **5,501.6** |
| Shareholders' equity | 25,657.2 | 27,373.0 | 31,761.7 | 31,997.4 | **36,137.3** |
| **SHARE INFORMATION** | | | | | |
| Per share (sen): | | | | | |
| – Basic earnings | 59.87 | 21.47 | 58.92 | 17.71 | **76.82** |
| – Diluted earnings | 59.84 | 21.44 | 58.71 | 17.67 | **76.63** |
| Dividend: | | | | | |
| Gross | 20.00 | 17.77 | 26.00 | 4.50 | **0.38** |
| Single-tier – Interim | | | | | **4.71** |
| – Final (proposed) | | | | | **15.00** |
| Net assets per share attributable to owners of the Company | 591.9 | 631.2 | 729.7 | 586.4 | **656.9** |
| Share price as @ 31 August (RM) | 7.90 | 8.02 | 8.86 | 5.25 | **6.84** |
| **FINANCIAL RATIOS** | | | | | |
| Return on assets (%)* | 4.6 | 3.9 | 4.7 | 4.1 | **4.6** |
| Return on equity (%)* | 12.5 | 10.5 | 11.4 | 10.1 | **11.2** |
| Gearing (%) | 46.9 | 45.2 | 41.3 | 37.2 | **38.8** |
| EBITDA margin (%)* | 29.9 | 25.3 | 26.8 | 23.3 | **25.1** |
| Effective weighted average cost of funds (%) | 5.5 | 5.3 | 5.3 | 5.1 | **4.9** |
| Interest coverage (%)* | 6.8 | 6.5 | 7.6 | 8.5 | **10.9** |
| Currency mix (RM:Foreign) | 53:47 | 51:49 | 54:46 | 56:44 | **65:35** |
| Debt-equity (net of cash) ratio | 0.68 | 0.60 | 0.43 | 0.47 | **0.40** |

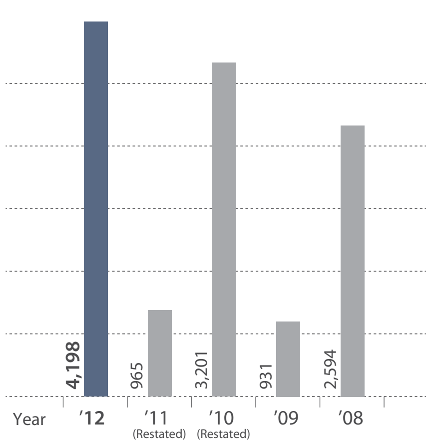
** FY2011 and FY2012 – after adjusting for Fuel Cost Compensation in respective periods*

# Five-Year Group Growth Summary

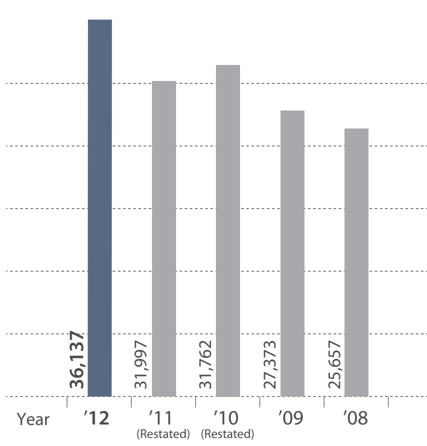
**Revenue**
(RM Million)



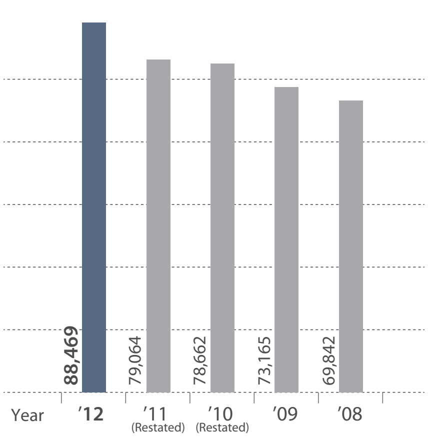

**Net Profit Attributable to Owners of the Company** (RM Million)



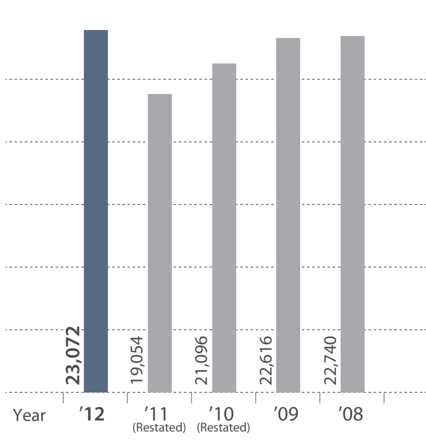

**Shareholder's Equity**
(RM Million)



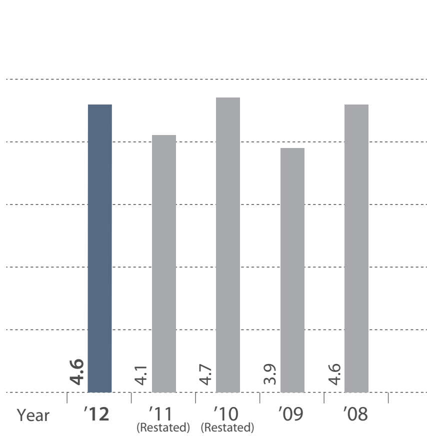

**Total Assets**
(RM Million)



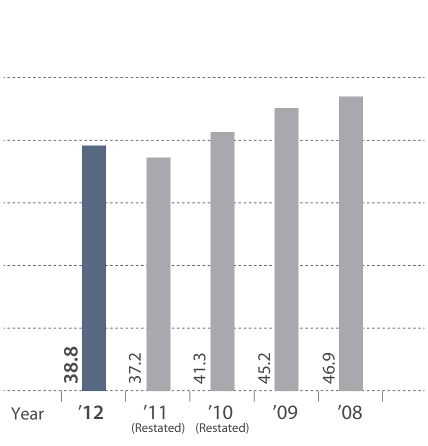

**Total Borrowings**
(RM Million)



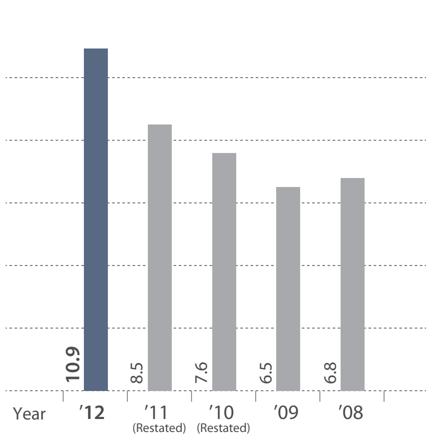

**Return on Assets***
(%)



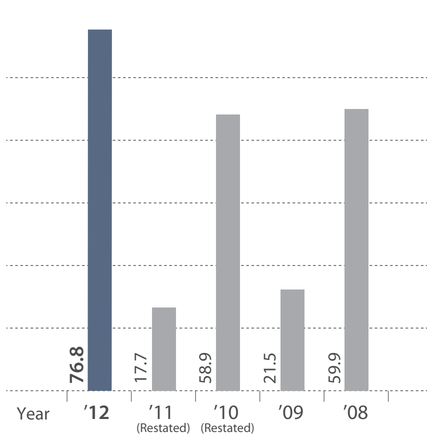

**Gearing**
(%)




**Interest Coverage***
(%)




**Basic EPS**
(Sen)




**FY2011 and FY2012 – after adjusting for Fuel Cost Compensation in respective periods*

YOU SEE

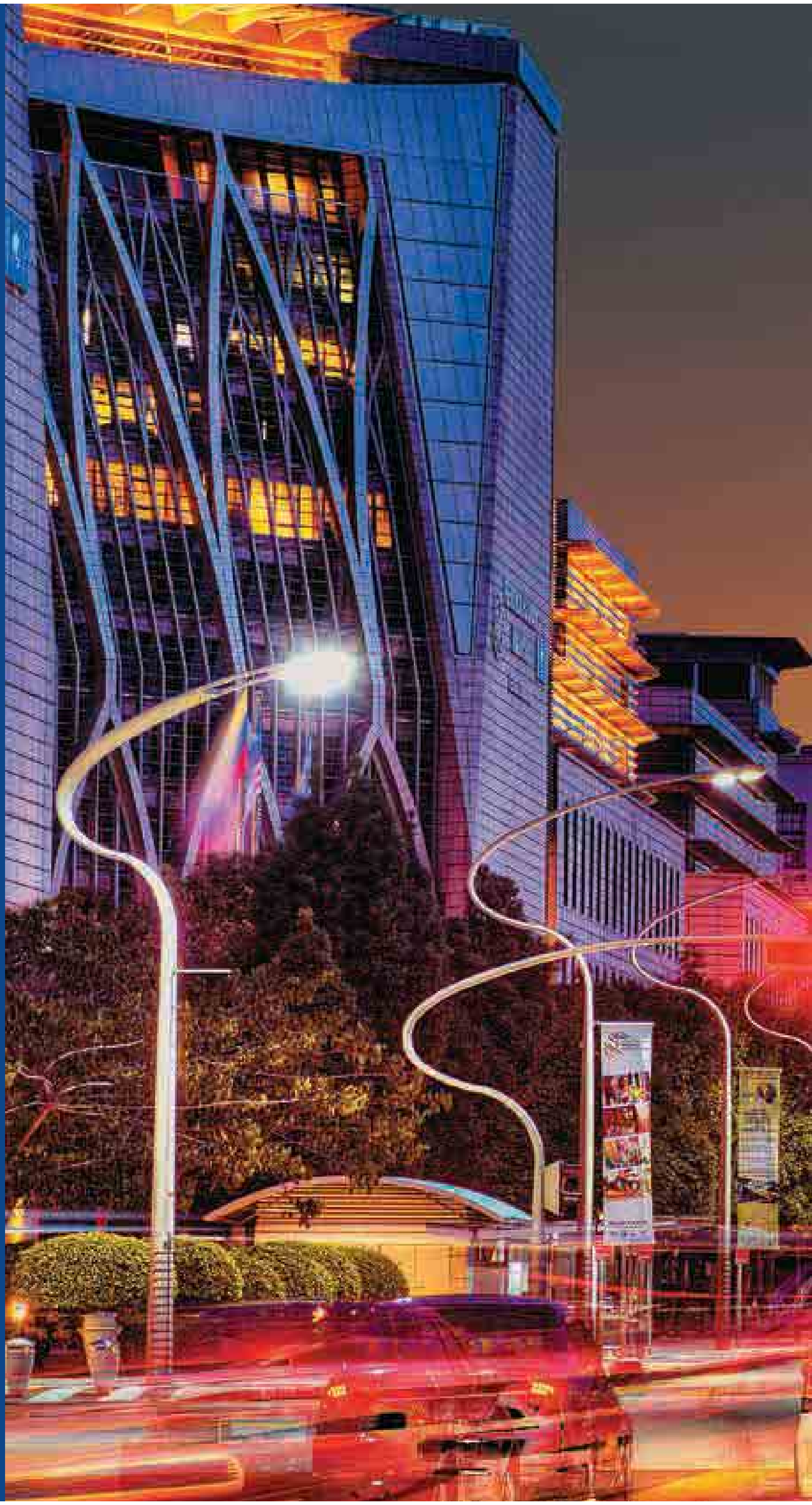
WE SEE...

# ILLUMINATING HOMES

Life would be very different without electricity. Electricity has provided us the means to enjoy domestic comforts and luxuries, and elevated our standard of living. From reading a book in a brightly lit corner to watching a video, from charging our mobile phones to microwaving our food, we depend on electricity. TNB's role is to ensure that all homes enjoy an uninterrupted supply of electricity so that families lead safe, healthy and comfortable lifestyles.

# KEEPING THE LIGHTS ON

# About Us



**Tenaga Nasional Berhad (TNB) is the largest electricity utility in Malaysia and a leading utility company in Asia. Listed on the Main Board of Bursa Malaysia with almost RM87 billion in assets, the Company's more than 33,500 employees serve an estimated 8.3 million customers in Peninsular Malaysia, Sabah and Labuan. TNB has been *Keeping the Lights On* in Malaysia ever since it was set up as the Central Electricity Board in 1949, powering national development via the provision of reliable and efficient electricity.**

# About Us



TNB's core businesses are in the generation, transmission and distribution of electricity. In Peninsular Malaysia, the Company supplies households and industry with electricity generated from six thermal stations and three major hydroelectric schemes. It also manages and operates the National Grid which links TNB power stations and IPPs to the distribution network. The grid is connected to Thailand's transmission system in the north and Singapore's transmission system in the south. In East Malaysia, TNB has an 80% equity in Sabah Electricity Sdn. Bhd. (SESB), which manages the Sabah Grid.

Other than its core business, TNB has diversified into the manufacture of transformers, high voltage switchgears and cables; the provision of professional consultancy services; and architectural, civil, electrical engineering works and services, repair and maintenance. The Company also engages in research and development, property development and management services. Tapping into opportunities available overseas, TNB is making inroads into emerging markets, focusing on the Asia-Pacific, Middle East and North Africa regions.

In 2005, the Company embarked on a 20-Year Strategic Plan with the ultimate objective of transforming into a world-class player by the year 2025. To support this vision, TNB invests significantly in the continuous professional development of its employees through structured programmes. There is also renewed emphasis on sustainability, both of the organisation and of the Malaysian environment. The Strategic Plan entails greater focus on green initiatives such as the development of renewable sources of fuel, and more effective demand side management via energy efficiency, thus complementing the Government's carbon reduction agenda.

As a leading Government-linked company, TNB also places strong emphasis on its social responsibilities. Through its foundation Yayasan Tenaga Nasional (YTN), established in 1993, the Company runs numerous CSR programmes that benefit the underprivileged. Among its many successful social outreach programmes are those that education via scholarships and better health for all.

# Corporate Information



## BOARD OF DIRECTORS

**Tan Sri Leo Moggie**
(Chairman)
(Non-Independent Non-Executive Director)

**Datuk Wira Ir. Azman bin Mohd**
(President/Chief Executive Officer)
(Non-Independent Executive Director)
(Redesignated w.e.f. 1 July 2012)

**Datuk Nozirah binti Bahari**
(Non-Independent Non-Executive Director)

**Dato' Mohammad Zainal bin Shaari**
(Non-Independent Non-Executive Director)

**Dato' Zainal Abidin bin Putih**
(Senior Independent Non-Executive Director)

**Tan Sri Dato' Hari Narayanan a/l Govindasamy**
(Independent Non-Executive Director)

**Dato' Fuad bin Jaafar**
(Independent Non-Executive Director)

**Tan Sri Dato' Seri Siti Norma binti Yaakob**
(Independent Non-Executive Director)

**Dato' Abd Manaf bin Hashim**
(Independent Non-Executive Director)

**Datuk Chung Hon Cheong**
(Independent Non-Executive Director)

**Suria binti Ab Rahman**
(Alternate Director to Dato' Mohammad Zainal bin Shaari)
(Non-Independent Non-Executive Director)

**Dato' Sri Che Khalib bin Mohamad Noh**
(Ceased as President/Chief Executive Officer w.e.f. 30 June 2012)

### SENIOR INDEPENDENT NON-EXECUTIVE DIRECTOR

**Dato' Zainal Abidin bin Putih**
Email: cosec@tnb.com.my

### COMPANY SECRETARIES

**Norazni binti Mohd Isa** (LS 0009635)

**Nor Zakiah binti Abd Ghani** (LS 0008795)
(Resigned w.e.f. 31 May 2012)

### SHARE REGISTRAR

**Symphony Share Registrars Sdn. Bhd.**
(378993-D)
Level 6, Symphony House
Pusat Dagangan Dana 1
Jalan PJU 1A/46
47301 Petaling Jaya
Selangor Darul Ehsan
Malaysia

Telephone : 603-7841 8000
Facsimile : 603-7841 8151

# Corporate Information



## PRINCIPAL BANKERS

**Malayan Banking Berhad**
Level 1, Tower A
Dataran Maybank
No. 1, Jalan Maarof
59000 Kuala Lumpur
Malaysia

**CIMB Bank Berhad**
No. 21 & 23, Lorong Ara Kiri 1
Lucky Garden, Bangsar
59100 Kuala Lumpur
Malaysia

**Bank Islam Malaysia Berhad**
KL Sentral Branch
Ground Floor, No. CS/3B/G
Block 3B, Plaza Sentral
KL Sentral
50474 Kuala Lumpur
Malaysia

## EXTERNAL AUDITORS

**Messrs PricewaterhouseCoopers**
(AF: 1146)
Level 10, 1 Sentral
Jalan Travers
KL Sentral
P.O. Box 10192
50706 Kuala Lumpur
Malaysia

Telephone : 603-2173 1188
Facsimile : 603-2173 1288

## REGISTERED OFFICE AND HEAD OFFICE

**Tenaga Nasional Berhad** (200866-W)
Pejabat Setiausaha Syarikat, Tingkat 2
Ibu Pejabat Tenaga Nasional Berhad
No. 129, Jalan Bangsar
59200 Kuala Lumpur
Malaysia

Telephone : 603-2296 5566
Facsimile : 603-2283 3686
Website : www.tnb.com.my
TNB Careline : 15454

One Stop Engagement Centre:
1-300-88-5454

Whistle Blowing Information System:
wbis.tnb.com.my
Toll Free: 1-800-888-862

## INVESTOR RELATIONS

**Investor Relations Department**
Tingkat 4
Ibu Pejabat Tenaga Nasional Berhad
No. 129, Jalan Bangsar
59200 Kuala Lumpur
Malaysia

Telephone : 603-2296 6077
Facsimile : 603-2284 0095
Email : tenaga_ird@tnb.com.my

## STOCK EXCHANGE LISTING

Main Market
Bursa Malaysia Securities Berhad, Malaysia
(Listed since 28 May 1992)

## RATINGS

| | |
|---|---|
| Moody's | Baa1 |
| Standard & Poor's | BBB+ |
| Rating Agency Malaysia | AAA |
| Malaysian Rating Corporation Berhad | |
| – Corporate Debt Ratings | AAA |
| – Islamic Debt Ratings | $AAA_{ID}$ |

## AMERICAN DEPOSITORY RECEIPTS PROGRAMME (ADR)

ADR Level 1

TENAGA NASIONAL BERHAD (200866-W)



# Group Corporate Structure

GROUP OF COMPANIES

**MALAYSIA TRANSFORMER MANUFACTURING SDN. BHD.** (100%)

**TNB VENTURES SDN. BHD.** (100%)
- Tenaga Cable Industries Sdn. Bhd. (76%)
- Northern Utility Resources Sdn. Bhd. *Dormant* (20%) *(Receiver and Manager Appointed)*

**TNB ENERGY SERVICES SDN. BHD.** (100%)
- Jana Landfill Sdn. Bhd. (20%)

**TNB RESEARCH SDN. BHD.** (100%)
- TNBR QATS Sdn. Bhd. (100%)

**POWER AND ENERGY INTERNATIONAL (MAURITIUS) LTD.** (100%)
- Independent Power International Ltd. (100%)
  - Malaysian Shoaiba Consortium Sdn. Bhd. (20%)
    - Saudi-Malaysia Water & Electricity Company Limited (50%)

**TNB POWER DAHARKI LTD.** (100%)
- TNB Liberty Power Limited (100%)

## ASSOCIATE COMPANIES

FIBRECOMM NETWORK (M) SDN. BHD. (49%)

TEKNOLOGI TENAGA PERLIS CONSORTIUM SDN. BHD. (20%)

FTJ BIO POWER SDN. BHD. (40%)

GB3 SDN. BHD. (20%)

INTEGRAX BERHAD (22.12%)

JIMAH ENERGY VENTURES HOLDINGS SDN. BHD. (20%)

*Dormant*
- PERUSAHAAN OTOMOBIL ELEKTRIK (MALAYSIA) SDN. BHD. (20%)

## INVESTMENT COMPANIES

LABUAN REINSURANCE (L) LTD. (10%)

FEDERAL POWER SDN. BHD. (8.91%)

*Dormant*
- BAKUN HYDRO-ELECTRIC CORPORATION SDN. BHD. (IN LIQUIDATION) (6.67%)

## JOINTLY CONTROLLED ENTITY

*Dormant*
- SEATRAC SDN. BHD. (50%)

## TRUST FOUNDATION

YAYASAN TENAGA NASIONAL

RETIREMENT BENEFIT TRUST FUND

YAYASAN CANSELOR UNIVERSITI TENAGA NASIONAL

# Group Corporate Structure



**TNB INTEGRATED LEARNING SOLUTION SDN. BHD.** (100%)

**TNB JANAMANJUNG SDN. BHD.** (100%)

**TNB FUEL SERVICES SDN. BHD.** (100%)

**TNB QUANTUM SOLUTIONS SDN. BHD.** (100%)

**ORION MISSION SDN. BHD.** (100%)

- Lahad Datu Holdings Sdn. Bhd. (100%)
  - Lahad Datu Energy Sdn. Bhd. *Dormant* (100%)
- Eastern Sabah Power Consortium Sdn. Bhd. (100%)

**TNB REPAIR AND MAINTENANCE SDN. BHD.** (100%)

- TNB Remaco Pakistan (Private) Limited (100%)
- Trichy Energy Limited *Dormant* (100%)
- Trichy Power Limited *Dormant* (100%)
- TNB Operations & Maintenance International Ltd. (100%)
  - Oasis Parade Sdn. Bhd. (100%)
    - Saudi Malaysia Operation and Maintenance Services Co. Ltd. (30%)
    - Alimtiaz Operation & Maintenance Company Ltd. (10%)

**TNB ENGINEERING CORPORATION SDN. BHD.** (100%)

- TNEC Construction Sdn. Bhd. (100%)
- Airport Cooling Energy Supply Sdn. Bhd. (77%)
- Bangsar Energy Systems Sdn. Bhd. (100%)
  - Selesa Energy Systems Sdn. Bhd. (70%)
- TNEC Operations and Maintenance Sdn. Bhd. (100%)
  - Tomest Energy Management Sdn. Bhd. (51%)
- Abraj Cooling LLC (49%)

**UNIVERSITI TENAGA NASIONAL SDN. BHD.** (100%)

- UNITEN R&D Sdn. Bhd. (100%)

**TNB CAPITAL (L) LTD.** (100%)

**SABAH ELECTRICITY SDN. BHD.** (83%)

**KAPAR ENERGY VENTURES SDN. BHD.** (60%)

**TENAGA SWITCHGEAR SDN. BHD.** (60%)

*Dormant Companies:*

TNB RISK MANAGEMENT SDN. BHD. (100%)
TNB LOGISTICS SDN. BHD. (100%)
TNB GENERATION SDN. BHD. (100%)
TNB HIDRO SDN. BHD. (100%)
TNB TRANSMISSION NETWORK SDN. BHD. (100%)
TNB DISTRIBUTION SDN. BHD. (100%)
TNB WORKSHOP SERVICES SDN. BHD. (100%)
TNB METERING SERVICES SDN. BHD. (100%)

TNB PRAI SDN. BHD. (100%)
TNB-IT SDN. BHD. (100%)
TNB INTERNATIONAL SDN. BHD. (100%)
TNB COAL INTERNATIONAL LIMITED (100%)
- Dynamic Acres Sdn. Bhd. (100%)

SEPANG POWER SDN. BHD. (70%)
TNB ENGINEERS SDN. BHD. (100%)

TNB PROPERTIES SDN. BHD. (100%)
- TNP Construction Sdn. Bhd. (100%)
- KM Metro-TNB Properties Sdn. Bhd. (40%)
- Indera-TNB Properties Sdn. Bhd. (40%)

# Organisational Structure

## BOARD OF DIRECTORS

- BOARD COMMITTEES
- COMPANY SECRETARY
- CHIEF INTERNAL AUDITOR

## PRESIDENT/ CHIEF EXECUTIVE OFFICER

- CHIEF STRATEGIC MANAGEMENT & PERFORMANCE

### CORE BUSINESS

- **Vice President**
  (Generation Division)
- **Vice President**
  (Transmission Division)
- **Vice President**
  (Distribution Division)

### NON-CORE BUSINESS

- **Vice President**
  (New Business & Major Projects Division)
- **Chief Financial Officer/Vice President**
  (Group Finance Division)
- **Vice President**
  (Planning Division)
- **Vice President**
  (Human Resource Division)
- **Chief Information Officer**
  (Information and Communication Technology Division)
- **Chief Procurement Officer**
  (Procurement Division)
- **Chief Corporate Officer**
  (Corporate Affairs & Services Division)

# Awards & Recognition



## OUTSTANDING PERSONALITY & POWER INDUSTRY TRAINING PROVIDER AWARDS

TNB Chairman Tan Sri Leo Moggie was conferred the Outstanding Personality Award while TNB Integrated Learning Solution Sdn Bhd (ILSAS) was presented with the Power Industry Award: Training Provider by the Energy Commission on 11 October 2011.

## GOLD FOR CRM IMPLEMENTATION & GOLD FOR TECHNOLOGY INNOVATION

TNB's call management centre, TNB CareLine, won the Gold Award for CRM Implementation in a Contact Centre and the Gold Award for Technology Innovation at the Contact Centre Association of Malaysia (CCAM) 2011 Awards held on 14 October 2011. TNB CareLine was also shortlisted in the following three categories:

- Best Video for Contact Centre
- Best In House In Bound Under 100 seats – OSEC 1300-88-5454
- Best In House In Bound Over 100 seats – CMC 1-5454

## ASIA GEOSPATIAL FORUM 2011 EXCELLENCE AWARD

TNB won the Asia Geospatial Forum 2011 Excellence Award in October 2011 in recognition of the deployment of effective technology and methodology in data collection by the Corporate Geospatial Information System Project Team.

## RISK MANAGER OF THE YEAR 2010

TNB was named Risk Manager of The Year 2010 by the Malaysian Association of Risk and Insurance Management in conjunction with the association's annual conference on 18 October 2011.

## APIC NATIONAL ICC EXCELLENCE AWARD 2011

TNB Janamanjung's WIT-ICC Horseshoescrab Group was declared Champion of the National ICC Excellence Award 2011 in the Service Sector Category at the Annual Productivity & Innovation Conference and Exposition (APIC 2011) held on 19-20 October 2011. Two other WIT-ICC Groups from the Company ranked among the top 10 teams, namely the ICC Meet 7 RMR Team from the Metering Unit, and the ICC 5 Trans Star Team from Asset Maintenance Kedah/Perlis, both from the Distribution Division.

Meanwhile, TNB Kulaijaya won the Overall QE (5S) Excellence Award 2011 as well as the QE (5S) Excellence Award – Private Sector (MNC/Large) Category at the QE (5S) Convention. Nine other TNB teams were honoured with Gold awards.

# Awards & Recognition

### WINNER OF 2011 CORPORATE AWARDS – TIER 4, CATEGORY 1

TNB was declared winner of the 2011 Corporate Awards – Tier 4, Category 1 by the Institute of Internal Auditors Malaysia. The award, presented on 31 October 2011, recognises the Company's commitment to the Continued Professional Development Programme in Auditing.

### LISTING ON PLATTS TOP 250 GLOBAL ENERGY COMPANIES

TNB was placed 90th overall in the Platts Top 250 Global Energy Companies Ranking 2011, and 20th in Asia while attaining 3rd position among electric utility companies in Asia, and 24th among global electric utility companies. The Platts awards are based on companies' financial performance and management. The awards were presented on 2 November 2011.

### TOP MANAGEMENT RECEIVE THE THE BRANDLAUREATE

Former TNB President and CEO Dato' Sri Che Khalib Mohamad Noh was awarded The BrandLaureate Transformational Corporate Leader Brand ICON Leadership Award 2011, while TNB Director Tan Sri Dato' Sri Siti Norma Yaakob was honoured with The BrandLaureate Most Eminent Brand ICON Leadership Award 2011 on 9 November 2011.

### NACRA CERTIFICATE OF MERIT

TNB received a Certificate of Merit at the National Annual Corporate Report Awards (NACRA) 2011 on 15 November 2011.

### WIT ICC CONVENTION INDONESIA 2011

Two teams from TNB competed at the Kualiti Mutu Indonesia 2011 convention in the QCC Forum Gugus Mutu Category. The WIT ICC Brassing Team from Transmission Division, Kluang, Johor and WIT ICC Volts Team from the Sultan Ismail Power Station, Paka, Terengganu won the Gold Award. The convention was held from 29 November to 2 December 2011.

### CERTIFICATE OF EXCELLENCE IN INVESTOR RELATIONS

TNB was honoured with a Certificate of Excellence in Investor Relations in the Singapore Market for a Malaysian Company in conjunction with the IR Magazine South East Asia Awards 2011, held on 6 December 2011.

### TOP NAfMA 2011 AWARD

TNB won the Excellence Award, which is the highest possible achievement, at the National Award for Management Accounting (NAfMA) 2011 in the public listed companies category. NAfMA recognises companies that

# Awards & Recognition



practise the most impressive accounting management systems. The award ceremony was held on 6 December 2011.

### MANAGER OF THE YEAR – SERVICE CATEGORY

Azrina Abdul Samat, Senior Manager (Micro Policy, Regulation & Pricing) of Planning Division, was named Manager of The Year - Service Category by the Malaysian Institute of Management on 6 December 2011. Zulbahari Mohd Ali, Senior Manager (Planning and Entrepreneur Development) of the Procurement Division was a finalist.

### IITU RECOGNISES TOP UNITEN MANAGEMENT

Dato' Seri Prof. Mashkuri Yaacob, Vice Chancellor of UNITEN, and Prof. Ir. Dr. Kamal Nasharuddin Mustapha, Deputy Vice Chancellor (Student Affairs, Alumni and Management), received the Honorary Professor of International University of Information Technology from the International University of Information Technology (IITU), Kazakhstan. The award was presented at its Almaty Campus, Kazakhstan, on 23 to 25 January 2012. The award recognised UNITEN's commitment to the collaboration between the two institutions of higher learning in academics as well as student affairs.

### DISTINCTION IN MALAYSIAN CORPORATE GOVERNANCE INDEX 2011

TNB won a Distinction at the Malaysian Corporate Governance Index 2011 awards on 7 December 2011.

### MALAYSIA ACHIEVEMENT HALL OF FAME AND SPECIAL ACHIEVEMENT AWARD

Former TNB President and CEO Dato' Sri Che Khalib Mohamad Noh was honoured with the Malaysia Achievement Hall of Fame and Special Achievement Award – Individual at the 1st Malaysia Achievement Summit & Awards held on 23 February 2012.

### FROST & SULLIVAN MALAYSIA EXCELLENCE AWARDS 2012

TNB REMACO was chosen as the Power Plant Service Provider of The Year in the Energy category at the Frost & Sullivan Malaysia Excellence Awards 2012, held on 12 April 2012. Factors taken into account were TNB REMACO's revenue, capabilities, marketing and overall contribution to the industry.

### LIFETIME ACHIEVEMENT AWARD

Former TNB President and CEO Dato' Sri Che Khalib Mohamad Noh was conferred the Lifetime Achievement Award at the Asian Utility Industry Awards 2012 held in Singapore on 17 April 2012.




# Awards & Recognition

## RECOGNITION FROM RAM HOLDINGS BERHAD

TNB received the RAM Awards of Distinction – Blue Print Award 2011 for a New Project Finance Benchmark Deal on 26 April 2012 for its record-breaking bond/sukuk fundraising. Manjung Island Energy Berhad (MIEB) issued up to RM5 billion in Islamic securities while TNBJ received an AAA rating for the sukuk financing of its Greenfield free power plant in Malaysia. The transaction received the Asia Pacific Bond Deal Award for 2011 from Project Finance International and was named the Ijarah Deal for 2012 by Islamic Finance News.

## BESTBRANDS BRANDLAUREATE 2011-2012

TNB was conferred the BestBrands BrandLaureate 2011-2012 on 5 May 2012 for the best brand in the Corporate Generation category – Energy Utility.

## RECOGNITION FROM IEM MALAYSIA

TNB received awards from the Institute of Engineers Malaysia (IEM) on 21 April 2012 for The Most Supportive Organisation for Recruitment of Graduate Members for the Institution 2011 and The Most Active Organisation for Recruitment of Members for the Institution 2011. The awards reflect the contributions of TNB engineers to engineering activities in Malaysia.

## THREE STAR AWARD AT QE CONVENTION

Universiti Tenaga Nasional (UNITEN) received the Three Star Award for Quality Environment (QE) initiatives at the Quality Environment Convention (5S) Northern Zone Level 2012 organised by the Malaysia Productivity Corporation in Penang on 18 and 19 July 2012. The Three Star is the highest award given for QE projects and achievements.

## BRAND RATING 2012 RECOGNITION FROM BRAND FINANCE PLC

TNB was listed in Brand Finance plc's Top 10 Malaysian Brands 2012 on 10 September 2012. TNB maintained its 8th position with an improved rating of AA-, from A.

## BEST SENIOR MANAGEMENT IR SUPPORT

TNB was awarded the Best Senior Management in IR Support 2012 among top companies in South East Asia on 11 September 2012.

# Key Past Awards



**Most Admired ASEAN Enterprise in Employment Category 2010**
TNB won in the Most Admired ASEAN Enterprise in Employment Category for its human resources management practices. The ASEAN Business Award ceremony was held on 27 October 2010 at the National Convention Center in Hanoi, Vietnam, in conjunction with the ASEAN Heads of Government Meeting.

**Brand Leadership Award**
TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh was among the recipients of the prestigious Brand Leadership Award at the World Brand Congress 2010 held in Mumbai, India, on 23 November 2010.

**IQC International Quality Crown Award – Gold Category**
Universiti Tenaga Nasional (UNITEN) received the QC International Quality Crown Award in the Gold Category at a ceremony held in London, England, on 29 November 2010. The award was given by the Business Initiative Directions (BID) in recognition of organisations and companies worldwide which succeed in strengthening their positions and reputation in the practice and promotion of quality work management.

**"Anugerah Kecemerlangan Perniagaan Beretika" 2010/2011**
TNB received the Highest Recognition for Large Companies at the "Anugerah Kecemerlangan Perniagaan Beretika" 2010/2011 ceremony held on 9 December 2010.

**550th position in Forbes Global 2000 Year 2011**
TNB jumped 159 spots to be placed 550th among the world's largest companies in the Forbes Global 2000 list.

**World's 72nd Largest Electricity Supplier**
TNB was named the World's 72nd largest company in electricity supply business and the 45th in terms business profit according to The Plimsoll Top 100 Global Analysis – Electricity Suppliers.

**Best Energy Sector – Global Leadership Awards 2011**
TNB won the Best Energy Sector Award at the Global Leadership Awards 2011 ceremony organised by The Leaders International on 22 July 2011 at the Kuala Lumpur Convention Centre (KLCC).

**Asia's Best Employer Brand Award 2011**
TNB won the 2nd Asia's Best Employer Brand Award at a ceremony in Suntec, Singapore, jointly organised by the Employer Branding Institute, World HRD Congress and the Stars Group. TNB was among 78 companies from 19 Asian countries recognised for implementing effective human resources practices and good employer branding practice.

**ACCA 2009/2010 (Association Of Chartered Certified Accountants) Approved Employer** – Professional Development

**4th Best Company in Malaysia** – Malaysia 1000

# Key Past Awards



**Lifetime Achievement Award** – The Contact Centre Association of Malaysia: TNB Chairman, Tan Sri Leo Moggie

**Distinction** – The Malaysian Corporate Governance (MCG) Index 2009

**Prime Minister's Award For Industry Excellence 2009:** UNITEN

**Best Power Utility Brand** – The BrandLaureate Awards 2009-2010

**Best CEO Asia** – Asia Power & Electricity Awards 2010: TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh

**Asia's Best Employer Brand & Human Resource Leadership Award** – Asia's Best Employer Brand Awards

**Distinction** – Malaysian Corporate Governance (MCG) Index 2009

**Grand Award** – MSOSH 2009: Putrajaya Power Station

**Excellence In Corporate Social Responsibility** – The BrandLaureate Awards 2008

**Overall Champion** – ITEX 2008: UNITEN

**575th In Forbes Global 2000 Ranking**

**3rd In Malaysia's Top 50 Most Valuable Brands**

**South East Asia Growth Strategy Leadership Award For Distribution Transformer Market:** TNB Subsidiary, Transformer Manufacturing Sdn. Bhd.

**Excellent Employee Award for Executives and Non-Executives** – National 2009 Workers Day Gathering

**2009 Invention, Innovation and Technology Exhibition (Itex 2009)**
- UNITEN Won 3 Gold Medals
- Gold Award For The Best Exhibition Booth Design

**Double Win by UNITEN at PERODUA Eco-Challenge 2009**

**100th On Platts Top 250 Global Energy Company 2008 List**

**Top Three Most Admired ASEAN Companies** – Employment Category – ASEAN Business Awards (ABA) 2008

**Asiamoney Awards 2006**
- Best Investor Relations, Malaysia
- Second Best for Corporate Governance
- Third Best Asian Investor Relations Company

**MS ISO 9001 Certification by SIRIM QAS International Sdn. Bhd.**

"**2008 Corporate Awards** – Tier 2, Category 1" by the Institute of Internal Auditors Malaysia (IIA Malaysia)

**Malaysia's Best Chief Executive Officer 2008: TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh**

**Silver** – Malaysia HR Award 2008-2009

Corporate Framework

# Key Past Awards

**National Level 2008 Workers Day Gathering**
- Competitive Employer Award (Large Industry)
- Outstanding Male Employee Award, Executive Group
- Outstanding Male Employee Award – Non-Executive Group

**Best Practice Award 2007 (Public Listed Company)** – NAfMA 2007

**Finalist for Platts 2007 Global Energy Awards for Top Power Company of the Year, Ranked 32nd Among Top Energy Companies in Asia and 42nd Among Global Top 250**

**Winner of the 2007 Corporate Award** – Tier 2, Category 1 – Institute of Internal Auditors Malaysia (IIA Malaysia)

**Business of the Year Award 2007** – Superior Company Category

**Anugerah Harapan Majikan Prihatin** – National Labour Day Celebration 2006

**Best Show Awards** – 5th Malaysia ICT ASEAN Communication & Multimedia (ACM) Expo & Forum 2006

**Juara Kaunter Perkhidmatan Terbaik** – Kedai Tenaga Kangar, Perlis – Malam Anugerah Kualiti Menteri Tenaga, Air & Komunikasi 2006

**Most Improved Company in Malaysia** – Deutsche Bank Study (Reported in The Star, 10 March 2006)

**Excellent Laboratory** – The Institute of Interlaboratory Studies (IIS): **Transformer Oil Lab, TNB Research (Three Consecutive Years)**

**Gold Award for the Best Emerging Contact Centre in a GLC:** TNB CareLine 15454

**Human Resources Minister Award in The Big Employers (Services) Category: Sabah Electricity Sdn. Bhd. (SESB)**
Best Training Provider – Minister of Human Resources Award 2007: TNB Integrated Learning Solution Sdn. Bhd. – ILSAS

**2nd Runner Up, Overall** – Malaysian Business – Chartered Institute of Management Accountants (CIMA) Enterprise Governance Awards 2009

**4th Best Company in Malaysia** – Malaysia 1000

**4th Most Outstanding Power Utility Company In Asia** – Platts Top 250 Global Energy Companies Rankings 2009

**Best Investor Relations in The Singapore Market for a Malaysian Company**

**Business Leadership Award** – Energy Sector – Malaysia Business Leadership Awards 2010: TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh

**Prime Minister's Industry Excellence Award (AKIPM) 2007**

# Media

Semua 18 projek disasar siap penghujung tahun 2013

## RM4.3 juta tingkat sistem TNB Segamat

## TNB ceburi tenaga dijana dari sisa

SERDANG 27 Mac – Tenaga Nasional Bhd., telah memeterai Perjanjian Pembelian Kuasa Tenaga Boleh Diperbaharui (Reppa) dengan Core Competencies Sdn. Bhd. untuk membeli tenaga yang dijana daripada sisa pepejal perbandaran.

Langkah itu menandakan era baharu untuk syarikat tenaga negara dalam mempromosikan penjanaan tenaga menggunakan teknologi hijau.

Pengarah Core Competencies, Datuk Ariffin Aton berkata, menerusi perjanjian ini, syarikat utiliti negara ini akan membeli tenaga yang dijana daripada lojinya, pada masa ini terletak di Semenyih, Selangor, dengan harga 42 sen setiap kilowatt/jam, tiga kali lebih tinggi daripada kadar normal IPP pada 13 sen.

Perjanjian itu, untuk tempoh 21 tahun, akan menyaksikan syarikat menyediakan 64 megawatt tenaga elektrik setiap hari.

TNB banyak membantu para pendayung di Kampung Kuantan. Antaranya, sumbangan sampan, baju-baju keselamatan dan kelas bahasa asing.

## Curi kabel: TNB rugi RM168.5 juta

## RM7.4j laksana enam projek pembangunan bekalan elektrik

ALOR GAJAH: Tenaga Nasional Berhad (TNB) akan melaksanakan RM7.4 juta bagi melaksanakan enam projek pembangunan bekalan elektrik di daerah ini.

# Highlights



TNB pertingkat kempen kesedaran keselamatan elektrik

Lihat waktu bulan gelap

TNB boss honoured with Asian Lifetime Achievement Award

TNB gets govt assurance on gas price impact

RM631.6m profit recharge for TNB

BRIGHT PROSPECTS

TNB posts RM632m net profit for Q3

Utility expected to record better results in current financial year

TNB gets govt pledge to offset future fuel costs

Coal price has been trending down and we are buying coal based on market prices

R&D for biogas, micro hydro power plant project

Tenaga Nasional regains spark

THREEFOLD JUMP: Group returns to the black with a RM2.8b net profit in second quarter

Manjung 4 power plant to boost TNB Janamanjung

It's back to school for TNB

EMPOWERING THE YOUNG: Utility company is spending RM650mil this year to teach pupils in Peninsular Malaysia about electricity safety

# Calendar of Events

**2 DECEMBER 2011**
**Historic S&P**
TNB signed a historic Energy Sale and Purchase (S&P) Agreement with Tanjung Bin at the Putrajaya International Convention Centre. This was the first S&P to be undertaken as a result of the Energy Commission's bidding process, which ensures the best commercial rates.

**6 DECEMBER 2011**
**TNB Wins Top NAfMA Award**
TNB received the Gold Merit, or the most prestigious accolade, at National Award for Management Accounting (NAfMA) 2011, in recognition of its impressive accounting practices.

**7 DECEMBER 2011**
**Distinction for Corporate Governance**
TNB was awarded a Distinction by the Malaysian Corporate Governance (MCG) Index 2011 at a ceremony held at the Sime Darby Convention Centre in Kuala Lumpur.

**7 JANUARY 2012**
**Launch of Baiti Jannati Project**
TNB officially launched the Baiti Jannati Project at the national level for the financial year in Kampung Rencong, Muar, Johor. Under the project, it repairs dilapidated houses belonging to the underprivileged.

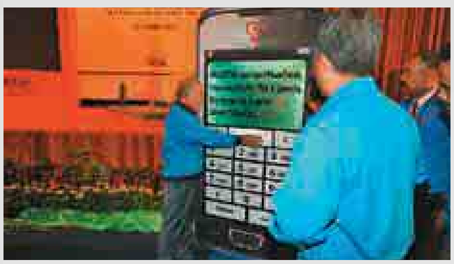
**17 JANUARY 2012**
**1Q Financial Results**
TNB announces its first quarter financial results for the financial year 2012 at its headquarters in Kuala Lumpur.

**19 JANUARY 2012**
**Annual Gathering of Employees**
All TNB employees in the Klang Valley attended the 2012 Annual Gathering at the headquarters in Kuala Lumpur to listen to the Chairman's New Year message and participate in a special forum with the President/Chief Executive Officer. TNB Excellence Awards and appreciation prizes to WIT/ICC Groups were also presented, while several new initiatives were launched. Employees outside of the Klang Valley witnessed the event 'live' through video conferencing.

**19 JANUARY 2012**
**Night for Vendors, Suppliers & Contractors**
TNB held its Vendors/Suppliers/Contractors Award Night 2011 at the Sime Darby Convention Centre in Kuala Lumpur to recognise its business partners.

**20 JANUARY 2012**
**TNB Risk Management Forum**
Enterprise Wide Risk Management (EWRM) of Group Finance Division held the First TNB Risk Management Forum for the financial year at the headquarters. Two working papers were presented: *Renewable Energy in Malaysia* and *Renewable Energy in TNB.*

**31 JANUARY 2012**
**CNY Goodwill Gathering**
TNB held its Chinese New Year Goodwill Gathering at the Multipurpose Hall in the Sports Complex of the company's headquarters in Kuala Lumpur.


# Calendar of Events

**5 FEBRUARY 2012**
**Maulidur Rasul**
TNB participated in the national level Maulidur Rasul 1432H/2012M Assembly and Procession at the Putra Mosque in Putrajaya.

**16 FEBRUARY 2012**
**TNB CareLine Launched**
The company launched its Call Management Center, TNB Careline 15454, at Wisma Annex MPE TNB, Petaling Jaya, in the presence of Dato' Sri Peter Chin Fah Kui, Minister of Energy, Green Technology and Water.

**18 FEBRUARY 2012**
**Jom La Futsal**
TNB organised the Jom La Futsal (Let's Futsal) Competition 2012 at the Sports Complex of its headquarters in Kuala Lumpur.

**20 FEBRUARY 2012**
**Dialogue with Energy Commission**
TNB held a dialogue session with the Energy Commission at the Sultan Mahmud Kenyir Power Station in Terengganu.

**21 FEBRUARY 2012**
**TOMS & MFFA Simulator Launched**
The company launched the TNB Outage Management System (TOMS) and Mobile Field Force Automation (MFFA) Simulator at the ILSAS Simulator Building. An agreement was signed on the Joint Development of Training Modules between ILSAS and TNB Distribution.

**25 FEBRUARY 2012**
**Residents Briefing**
TNB conducted a briefing session for residents involved in Option D of the Proposed Line Alignment to PMU Mahkota Cheras at the Sri Suria School in Taman Perkasa, Hulu Langat.

**1 MARCH 2012**
**ICT Productivity Day**
TNB held its ICT Productivity Day at the Multipurpose Hall of its Sports Complex at the headquarters in Kuala Lumpur.


Corporate Framework

# Calendar of Events



**3 MARCH 2012**
**PELITAWANIS AGM**
The 34th PELITAWANIS TNB Delegates Annual General Meeting was held at the Multipurpose Hall of the Sports Complex at the headquarters in Kuala Lumpur.

**13 MARCH 2012**
**Earth Hour Campaign**
The company launched the TNB-WWF Malaysia Earth Hour 2012 Awareness Campaign at its headquarters in Kuala Lumpur.

**17-18 MARCH 2012**
**Loyalty Recognised**
TNB presented its Loyal Service Awards at a ceremony held at the Multipurpose Hall of its Sports Complex at the headquarters in Kuala Lumpur.

**22 MARCH 2012**
**Corporate Identity for ILSAS**
Former TNB President/Chief Executive Officer Dato' Sri Che Khalib Mohamad Noh launched a new corporate identity for ILSAS, the group's training arm, at the UNITEN campus in Bangi. At the event, TNB Education Programme Certificates were also handed out to 1,069 employees.

**24 MARCH 2012**
**UNITEN Open Day**
UNITEN held its 2012 Open Day at its campus in Putrajaya.

**28 MARCH 2012**
**Royal Visit**
His Highness the Tengku Mahkota of Pahang visited the Ulu Jelai Hydroelectric Project site in Mukim Ulu Telom, Cameron Highlands.

**10-13 APRIL 2012**
**Mobile Cancer Screening**
MAKNA launched its Breast Cancer Mobile Screening Programme at TNB's headquarters in Kuala Lumpur.

# Calendar of Events

**12 APRIL 2012**
**2Q Financial Results**
TNB announced its unaudited financial results for the second quarter of the financial year 2012 at its headquarters.

**12 APRIL 2012**
**Frost & Sullivan Excellence Award**
TNB REMACO received the Frost & Sullivan Malaysia 2012 Excellence Award in the Power Plant Service Provider Category.

**20-28 APRIL 2012**
**Promoting Investments**
TNB participated in the Malaysian Unit Trust Week (MSAM), organised by Permodalan Nasional Berhad, at the Kota Kinabalu Sports Complex in Sabah.

**23 APRIL 2012**
**SL1M-IBE**
TNB officially launched the third Skim Latihan 1Malaysia-IBE (SL1M – IBE) programme in ILSAS.

**24 APRIL 2012**
**Safety, Health & Environment**
TNB holds its 6th National Symposium on Workers Safety & Health and Environment at UNITEN.

**24 APRIL 2012**
**SAFE Journey Campaign**
UNITEN, PERKESO, the Human Resource Ministry and TNB jointly organised the SAFE Journey Campaign in UNITEN, Bangi. The objective of the campaign was to encourage staff to take extra safety precautions when driving to their workplace.

**26 APRIL 2012**
**Young at Art**
TNB launched the Kidz Art Class at the company's Art Gallery in Wisma TNB, Petaling Jaya.


**27 APRIL 2012**
**Recognising Retirees**
TNB presented its annual Retirement Awards *(Jasamu DiKenang)* at a ceremony held at the headquarters in Kuala Lumpur.

**29 APRIL 2012**
**Charity Ride**
400 participants took part in the Janamanjung Fellowship Ride 2012 which flagged off from the Sultan Azlan Shah Power Station in Manjung, Perak. The ride involved stops at which the cyclists carried out welfare work.

**30 APRIL 2012**
**River Diversion**
TNB celebrated the completion of a river diversion project at the Hulu Terengganu Hydroelectric site in Terengganu.

**3 MAY 2012**
**Meeting the PM**
TNB employees took part in a GLC Employees' Session with Prime Minister Datuk Seri Najib Tun Razak on *Powering National Transformation* at the Putrajaya International Convention Centre.

# Calendar of Events

**9 MAY 2012**
**Welfare Body AGM**
TNB's Muslim Employees Welfare Association (PKPI) held its 44th Annual General Meeting.

**12 MAY 2012**
**Workers Unite**
TNM staff took part in the 2012 Workers Day' Solidarity Assembly at the Malaysia Agro Exposition Park Serdang in Selangor.

**15 MAY 2012**
**Farewell to CFO**
A farewell function was held at TNB's headquarters for former Chief Financial Officer/Vice President (Group Finance) Mohd Rafique Merican Mohd Wahiduddin Merican, who was replaced by Fazlur Rahman bin Zainuddin.

**16 MAY 2012**
**Safety, Health & Environment Campaign**
TNB launched its Workers Safety & Health and Environment Campaign 2012 at ILSAS, in conjunction with the training centre's Open Day.

**19 MAY 2012**
**Launch of Langkawi's TNB Office**
Former Prime Minister Tun Dr. Mahathir Mohamad officially opened TNB's new building in Langkawi.

**17-20 MAY 2012**
**Sports Carnival**
TNB held its 2012 Sports Carnival at the grounds of its headquarters as well as at the campuses of UNITEN and ILSAS.

**24 MAY 2012**
**Long-Term Pact with IKRAM**
TNB signed a Long-Term Service Agreement in Engineering Services and Capacity Building with Kumpulan IKRAM Sdn. Bhd.

**7-8 JUNE 2012**
**Koran Reading**
TNB held its 1433H/2012 National Level Koran Recitation and Memorisation ceremony at ILSAS.

**13 JUNE 2012**
**Central GRIP**
Members of TNB's Central Region took part in the Government Relations Information Program (GRIP) with Government departments in Putrajaya.

**13 JUNE 2012**
**Recognising Former Employees**
TNB's annual *JasaMu Di Kenang* event was held to honour retirees and former employees who have made significant contributions to the company's success.

**18 JUNE 2012**
**Eastern GRIP**
The Eastern Region's Government Relations Information Program (GRIP) Programme was held in Kota Bharu, Kelantan.

**22 JUNE 2012**
**PAKATAN TNB Annual General Meeting**
The 11th Pakatan Persatuan Kebajikan Islam Malaysia (PAKATAN) TNB Annual General Meeting was held at UNITEN.

**23 JUNE 2012**
**Auxiliary Police Training**
TNB marked the completion of its Auxiliary Police Basic Training Course at the Police Training Centre in Air Hitam, Negeri Sembilan.

# Calendar of Events

**26 JUNE 2012**
**Tenaga 2012 Expo**
The Tenaga 2012 Expo was held at the Kuala Lumpur Convention Centre, Kuala Lumpur. It was the largest electrical and power industry in the region. The Expo showcased the latest technological advances on power generation transmission & distribution.

**27 JUNE 2012**
**TNB HR Conference**
TNB's 3rd Human Resources Conference for the financial year was officiated by Dato' Sri Zainal Rahim Seman, Secretary General of the Ministry of Human Resources.

**27 JUNE 2012**
**A Visit by the Indonesian Delegation**
An Indonesian delegation led by Mr. Budi Susanto from the Industrial Ministry, visited TNB's National Load and Despatch Centre (NLDC) in the NLDC Building in Bangsar, Kuala Lumpur.

**29 JUNE 2012**
**Farewell to CEO**
A farewell function was held for former TNB President/Chief Executive Officer Dato' Sri Che Khalib Mohamad Noh at the company's headquarters in Kuala Lumpur.

**1 July 2012**
TNB officially appoints Datuk Wira Ir. Azman bin Mohd as the new CEO replacing Dato' Sri Che Khalid Mohamad Noh.

**10 JULY 2012**
**Meeting the new CEO**
Datuk Wira Ir. Azman bin Mohd held his first gathering as the new President/Chief Executive Officer with the employees at the Multipurpose Hall of TNB's Sports Complex at the headquarters in Kuala Lumpur.

**13 JULY 2012**
**Prayers for New Leadership**
A recitation of Yassin and prayers were held in conjunction with the appointment of the new CEO at the Balai Islam Mosque at TNB's headquarters in Kuala Lumpur.

**19 JULY 2012**
**3Q Financial Results**
TNB announced its unaudited financial results for the third quarter of the financial year 2012 at the company's headquarters in Kuala Lumpur.

**30 JULY 2012**
**Breaking of Fast**
TNB held a corporate level breaking of fast for the year 2012 in conjunction with the 10th Ramadhan 1433H at the Balai Islam in the company's headquarters.

**8 AUGUST 2012**
**Hari Raya Treat**
TNB handed over Hari Raya goodies to staff who were on duty during the Hari Raya public holiday at the company's headquarters in Kuala Lumpur.

**31 AUGUST 2012**
**Merdeka Celebrations**
TNB took part in the national level Merdeka Day celebrations held at the National Stadium in Bukit Jalil.

# Milestones Over 60 Years

## from 1949 to 1964

**1 September 1949**
The Central Electricity Board of the Federation of Malaya was formed, and became the controlling authority for electrical installation in the country, with W D Godsall as the first Chairman (1949-1952) and Frank P Egerton as the first General Manager (1949-1953).

**1953**
Frank P Egerton was succeeded by J Sharples as General Manager of the Central Electricity Board (1953-1964).

**1957**
The Central Electricity Board (CEB) took over the Huttenbachs installations in Province Wellesley (Seberang Perai), Penang. In March 1964, the Board took over all remaining Huttenbachs installations in the peninsula.

**1959**
Work commenced on the development of the Cameron Highlands hydroelectric power plant, a landmark in the history of hydroelectric technology in the country and region.

**1960**
Dato' Kurnia Jasa Haji Osman Taib became the first Malayan Chairman of the Central Electricity Board (1960-1970).

**1963**
A Grid Control Centre was set up in 1963 at the Connaught Bridge Power Station. Its main responsibility was to co-ordinate generation and control of the grid network of 66kV to 132kV.

**1964**
Raja Tan Sri Zainal Raja Sulaiman succeeded J Sharples to become the first Malaysian General Manager of CEB (1964-1974).

**1964**
Maimunah Suleiman joined NEB as its first woman engineer. She was also the first woman engineer in the country. She went on to become the Company's first female General Manager.

# Milestones Over 60 Years



## from 1965 to 1980

**22 June 1965**
CEB was renamed "Lembaga Letrik Negara (LLN)" Tanah Melayu (National Electricity Board or NEB) of the States of Malaya.

**1966**
NEB commissioned the first computer system in the country – an IBM 1440 mainframe with 8000KB memory – envisioned as the bedrock of the nerve centre of the Company's new HQ in Jalan Bangsar, Kuala Lumpur.

**26 March 1966**
The first Prime Minister, Tuanku Abdul Rahman Putra Al-Haj, officially opened the NEB Headquarters.

**1968**
Malaysianisation of the NEB was completed with more than 80 expatriate officers in key positions replaced by qualified Malaysians within a decade.

**1974**
Tan Sri Dato' Abu Zarim Haji Omar became General Manager of NEB (1974-1984).

**1976**
The Board, under the leadership of Tan Sri Dato' Abu Zarim Haji Omar, set up a training institute in 1976 known as the Institut Latihan Sultan Ahmad Shah (ILSAS).

First Grid connection was made from the West Coast to the East Coast, supplying Kuantan and Pekan.

NEB took over the installations of the Penang City Council at a cost of some $22 million. During the same year, the Central Government gained control of the Perak River Hydroelectric Power (PRHEP) company and its subsidiary, the Kinta Electrical Distribution Company. In 1978, the PRHEP system was integrated with that of the NEB.

**2 June 1979**
The National Load Despatch Centre (NLDC) was officially opened by Prime Minister Tun Hussein Onn. It was established in 1978.

**1980**
Construction begins on the 150m-high Kenyir dam, the largest hydroelectric scheme in the peninsula then. During construction, the Company was involved in Operation Jumbo to relocate a herd of elephants trapped by rising waters on the man-made islands in the lake. The dam was completed in December 1985.

Milestones Over 60 Years



# from 1981 to 1996

**1981**
First Grid connection (132kV) to Hadyai, Thailand, from Bukit Keteri, Kedah.

**July 1982**
NEB, under the aegis of ASEAN, signed bilateral agreements with the Electricity Generating Authority of Thailand (EGAT) and the Public Utilities Board (PUB) of Singapore, paving the way for systematic and integrated connections between NEB's system and those of its two neighbours.

**1984**
Tan Sri Mohd Jalaluddin Zainuddin succeeded Tan Sri Dato' Abu Zarim Haji Omar as Deputy Chairman and General Manager of NEB (1984-1989).

**November 1984**
Paka Power Station, one of the first combined cycle plants in the world, began receiving natural gas from Petronas.

**1985**
First undersea cable connection (230kV) to Singapore.

**1989**
Datuk Haji Ibak Abu Hussein succeeded Tan Sri Jalaluddin Zainuddin as Deputy Chairman/ General Manager (1989-1990).

**1 September 1990**
NEB was corporatised and changed its name to Tenaga Nasional Berhad (TNB). Tan Sri Ani Arope was appointed Chairman (1990-1992).

**28 May 1992**
TNB's shares made a successful debut on the KLSE at RM8.00, a solid premium of RM3.50 above its minimum issue price of RM4.50.

**1 September 1992**
Tan Sri Ani Arope was appointed Executive Chairman of TNB (1992-1996).

**29 September 1992**
Nationwide power blackout in Peninsular Malaysia. It resulted in a 'fast track' plant up programme through the installation of additional gas turbines at various existing plants.

**1993**
TNB Research was established as a department in TNB, and evolved into a subsidiary. In 1997, TNBR was approved as an R&D status company by MIDA.

**19 January 1993**
Minister of Energy, Telecommunications and Posts Dato' Seri Samy Vellu announced the formation of a Crisis Management Team headed by Executive Chairman Tan Sri Ani Arope to resolve the energy crisis.

**31 March 1993**
TNB signed a 21-year Electricity Power Purchase Agreement (PPA) with Independent Power Producer (IPP), Yeoh Tiong Lay Corporation Bhd., (YTL). This was the first PPA ever signed by TNB with an IPP.

**6 July 1993**
The Tenaga Nasional Foundation was launched at ILSAS.

**1994**
Establishment of Institut Kejuruteraan Teknologi Tenaga Nasional (IKATAN).

**1995**
TNB's monopoly in electricity generation ended with the establishment of five IPPs which supplied 30.99% of electricity to the National Grid. The five were YTL Power Generation Sdn. Bhd., Segari Energy Ventures Sdn. Bhd., Port Dickson Power Bhd., Powertek Bhd. and Genting Sanyen Power Sdn. Bhd.

**1 September 1995**
Tenaga Nasional Repair and Maintenance Sdn. Bhd. (REMACO) was incorporated to provide cost-effective maintenance services for TNB's power plants.

**November 1995**
The first of its kind wind turbine generator hybrid system was constructed and installed in Pulau Layang-Layang, Sabah, by TNB Research Sdn. Bhd.

**1996**
TNB became the first non-American and the first Asian to issue the Yankee Century bonds in New York. A tranche of USD150 million bonds with an interest rate of 7.5% per year was issued and was well received by investors.

# Milestones Over 60 Years

## from 1997 to 2011

**March 1996**
Putrajaya Power Station *(formerly known as Serdang Power Station)* became the first power plant in Malaysia to be awarded MS ISO 9000 certification. Subsequently, all other TNB power stations were accredited with the standard.

**3 August 1996**
Nationwide blackout lasting between two to 20 hours. It led to the implementation of an islandisation programme and strengthening of the National Grid with a 500kV network which would function as the new backbone of the distribution grid.

**1 September 1996**
Datuk Dr Ahmad Tajuddin Ali was appointed Executive Chairman of TNB (1996-2000).

**19 December 1996**
Education Minister Dato' Seri Najib Tun Razak handed over a Letter of Offer to TNB's Executive Chairman for the establishment of Universiti Tenaga Nasional (UNITEN).

**1 September 1997**
Two wholly-owned subsidiaries were established – TNB Generation Sdn. Bhd. and TNB Engineers Sdn. Bhd.

**26 August 1998**
TNB, through its wholly-owned subsidiary Sabah Electricity Sdn. Bhd. (SESB), entered into a privatisation agreement with the Government of Malaysia and Sabah Electricity Board (SEB) to take over SEB's electricity business operations in the state and the Federal Territory of Labuan.

**1998**
Tenaga Nasional Ventures Sdn. Bhd., TNB Metering Services Sdn. Bhd., TNB Workshop Services Sdn. Bhd. and TNB Fuel Services Sdn. Bhd. were operationalised.

**1 September 1999**
TNB celebrated its 50th anniversary.

Two subsidiaries were spawned on 1 September 1999. Tenaga's transmission and distribution divisions were hived off as part of the group's restructuring efforts to focus on core activities and supporting services.

**February 2000**
New Vision, Mission and Shared Values.

**September 2000**
Datuk Dr Jamaluddin Jarjis was appointed as Chairman of TNB (2000–2002).

**November 2000**
Dato' Fuad Jaafar was appointed as President/Chief Executive Officer of TNB (2000-2001).

**10 September 2001**
Commencement of the Liberty Power Limited (LPL) operations in Pakistan, involved in the generation and sale of electricity to the Water and Power Development Authority (WAPDA) of Pakistan. LPL operates a 235MW combined-cycle natural gas power plant.

**November 2001**
Dato' Pian Sukro was appointed as President/Chief Executive Officer of TNB (2001-2004).

**August 2002**
TNB declared that it intended to become the best corporation in Malaysia by a self-imposed deadline of August 2007. The Company aimed to do this via focusing on the T7 Strategy for transformation and the inculcation of an effective goal-oriented culture underpinned by its core values of Integrity, Customer Focus, Business Excellence and being Caring.

**18 October 2002**
Prime Minister Dato' Seri Dr Mahathir Mohamad officially launched the Liberty Power Plant in Pakistan.

**1 December 2002**
Datuk Dr Awang Adek Hussein was appointed Chairman of TNB (1 December 2002 – 31 March 2004).

**April 2004**
The Jana Landfill Small Renewable Energy Programme (SREP) developed by TNB-ES commenced commercial operations. It is based on a Renewable Energy (RE) power purchase agreement (REPPA) signed in October 2001.

# Milestones Over 60 Years



**12 April 2004**
Tan Sri Leo Moggie was appointed Chairman of TNB.

**1 July 2004**
Dato' Sri Che Khalib Mohamad Noh was appointed President/CEO of TNB.

**July 2004**
The Kapar Power Station was divested to Kapar Energy Ventures Sdn. Bhd. (KEV). TNB retained a 60 per cent share in KEV.

**16 April 2005**
Tun Dato' Seri Utama (Dr) Haji Abdul Rahman Haji Abbas, the Yang di-Pertua Negeri Pulau Pinang, was appointed Chancelor of UNITEN.

**June 2005**
The Saudi-Malaysian consortium (of which TNB was a member) was selected to build, own and operate the Shuaibah Independent Water and Power Project (IWPP) developed by the Shuaibah Water and Electricity Company.

**13 June 2005**
The new 750MW combined cycle power plant under Phase 1 of the Rehabilitation Project of the Tuanku Jaafar Power Station in Port Dickson, Negeri Sembilan, began commercial operations.

**26 September 2005**
TNB signed an agreement with the State Government of Selangor on the Kampung Kuantan Firefly Rehabilitation Project in Kuala Selangor.

**1 February 2006**
TNB Corporate as a whole achieved MS ISO 9000 certification.

**24 May 2006**
TNB announced its first tariff rebalancing exercise in nine years since 1997.

**13 June 2006**
TNB's CareLine 15454 service was launched by the Minister of Energy, Water and Communications Datuk Seri Lim Keng Yaik.

**2006**
TNB launched its 20-Year Strategic Plan, the first 5-year phase of which revolved around achieving Service Excellence.

**30 April 2007**
Official opening of the 3x700MW coal-fired Sultan Azlan Power Station in Manjung by the Sultan of Perak.

**26 November 2007**
Sabah Grid was launched by Tun Datuk Seri Panglima Haji Ahmadshah bin Abdullah, the Yang di Pertua Negeri Sabah. The East-West grid project in Sabah was completed on 28 July 2007 with the commissioning of the 275kV lines from Kolopis substation to Segaluid substation. With the commissioning of the 246km double circuit lines, the state-wide Sabah Grid was formed, linking the West Coast Grid and the East Coast Grid.

**2007**
Malaysia Transformer Manufacturing Sdn. Bhd. (MTM) became a wholly-owned subsidiary of the Tenaga Group following the successful acquisition of 27% of its equity by TNB from ABB.

**27 May 2008**
TNB received the coveted Prime Minister's Industry Excellence Award for 2007. It also won the Quality Management Excellence Award (Category 4).

**21 January 2009**
TNB, together with Sarawak Energy Berhad (SEB), announced its proposal to take over the Bakun project. Under the agreement, TNB and SEB would lease the dam from Sarawak Hidro Sdn. Bhd. after its completion, while a special purpose vehicle (SPV) would be set up to develop the cables. All three parties would hold stakes in the SPV, with Sarawak Hidro taking the lead.

**January 2009**
Maybank and TNB set a milestone in electronic payments in Malaysia with the launch of an innovative Online Bill service for customers who can now view and pay their electricity bills via Maybank2u.com.

**April 2009**
TNB was ranked the 575th biggest company in the world by Forbes Global 2000.

**June 2009**
The successful completion of the second phase of the Tuanku Jaafar Power Station Rehabilitation Project (PD2) was officiated by the Minister of Energy, Green Technology and Water, Dato' Sri Peter Chin Fah Kui.

**1 September 2009**
TNB celebrates its 60th anniversary.

**23 October 2009**
TNB signed an agreement with the Perusahaan Listrik Negara Indonesia (PLN) on the Sumatera-Peninsular Malaysia Interconnection, which

# Milestones Over 60 Years

forms part of the ASEAN Power Grid. The project is expected to be completed in 2015.

**31 October 2009**
TNB received the first official visit by Prime Minister Dato' Sri Mohd Najib bin Tun Haji Abdul Razak in conjunction with its 60th anniversary. The Prime Minister launched the 60th Anniversary of LLN/TNB Commemorative Book.

**12 February 2010**
TNB's hockey team won the Malaysian Hockey Championship League. Team players Baljit Singh Charun was named the Best Player, S. Kumar the Best Goal Keeper, and Mohd Amin Rahim the Best Scorer. The team also won the Fair Play Team Award.

**19 April 2010**
TNB President/Chief Executive Officer, Dato' Sri Che Khalib Mohamad Noh launched the Customer First Programme as part of the Company's initiative to upgrade the quality of its service.

**7 May 2010**
TNB signed a Memorandum of Understanding with Provincial Electricity Authority (PEA) Thailand on a 33kV Electricity Supply System from the Principal Distribution Substation (PPU) at Pengkalan Hulu, Perak, to Betong, Thailand. This would ensure stable electricity supply to Betong and Yala Districts in Thailand.

**10 June 2010**
TNB Nuclear Power Colloquium 2010 was held as part of initiatives to promote green technology. The colloquium served to create awareness and to expose TNB employees to the need for nuclear power in the country.

**28 June 2010**
TNB organised a two-day TNB-KEPCO Joint Workshop Nuclear Preliminary Feasibility Study. During the workshop, an agreement on Consultancy for Site Selection and Evaluation for Nuclear Power Plant in Peninsular Malaysia was signed between TNB Research Sdn. Bhd. and Korea Power Engineering Company Inc (KOPEC).

**30 June 2010**
The Ministry of Energy, Green Technology and Water organised a *Nuclear Power Development* Dinner Talk for Members of Parliament in Kuala Lumpur to clarify issues and concerns raised on using nuclear power to generate electricity in Malaysia.

**2 December 2010**
Dato' Sri Peter Chin Fah Kui, Minister of Energy, Green Technology and Water, launched the undersea cable in Pulau Ketam.

**8 December 2010**
Dato' Sri Peter Chin Fah Kui, Minister of Energy, Green Technology and Water, launched TNB's Customer Charter.

**1 March 2011**
The ground breaking ceremony of the Ulu Jelai Hydroelectric Project in Mukim Ulu Telom, Cameron Highlands was graced by the presence of His Royal Highness the Sultan of Pahang.

**31 May 2011**
The Energy Commission's new state-of-the-art green headquarters, the Diamond Building (Bangunan Berlian) in Putrajaya, was officially opened in conjunction with the commission's 10th anniversary.

**24-26 June 2011**
The GLC Open Day 2011 was held for the first time at the Kuala Lumpur Convention Centre, officiated by Prime Minister Dato' Sri Mohd Najib bin Tun Haji Abdul Razak.

**7 July 2011**
The government-funded SAVE (Sustainability Achieved Via Energy Efficiency) Programme was launched in Putrajaya. The programme offers consumers a rebate of RM200 on the purchase of energy efficient electrical appliances such as refrigerators, air-conditioners and chillers.

**26 July 2011**
Launch of the Skim Latihan 1Malaysia (SL1M), a graduate employability and outreach programme by Y.Bhg. Datuk Awang Adek Hussin, Deputy Finance Minister II Malaysia, at the Auditorium Abu Zarim of the TNB Integrated Learning Solution Sdn. Bhd. – ILSAS in Bangi.

**26 July 2011**
TNB held its Integrity Pledge ceremony held with the Malaysian Anti-Corruption Commission (MACC) at the Multipurpose Hall of the Sports Complex on Jalan Pantai Baru.

**6 December 2011**
TNB received the Gold Merit, the most prestigious accolade, at National Award for Management Accounting (NAfMA) 2011, in recognition of its impressive accounting practices.

# Milestones Over 60 Years



**16 February 2012**
The company launched its Call Management Centre (CMC), TNB Careline at Wisma Annex MPE TNB, Petaling Jaya, in the presence of Dato' Sri Peter Chin Fah Kui, Minister of Energy, Green Technology and Water.

**12 April 2012**
TNB REMACO received the Frost & Sullivan Malaysia 2012 Excellence Award in the Power Plant Service Provider Category.

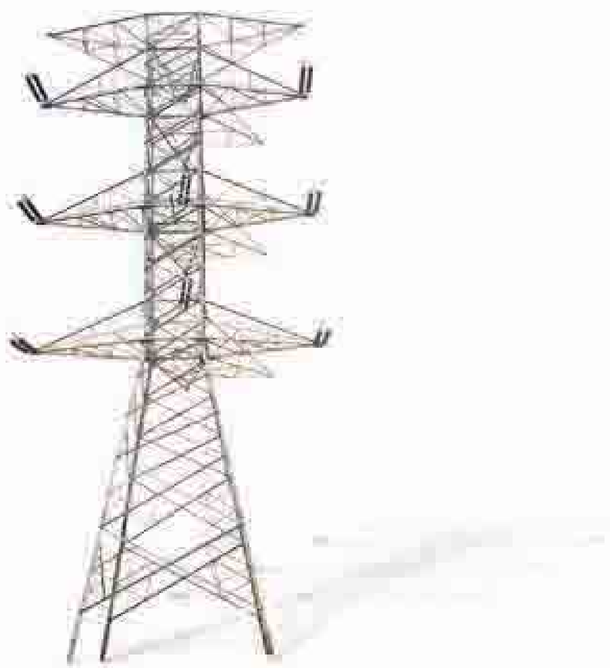
**30 April 2012**
TNB celebrated the completion of a river diversion project at the Hulu Terengganu Hydroelectric site in Terengganu.

**1 July 2012**
TNB officially appoints Datuk Wira Ir. Azman bin Mohd as the new CEO replacing Dato' Sri Che Khalib Mohamad Noh.

**10 July 2012**
Datuk Wira Ir. Azman bin Mohd held his first gathering as the new President/Chief Executive Officer with the employees at the Multipurpose Hall of TNB's Sports Complex at the headquarters in Kuala Lumpur.

## current 2012

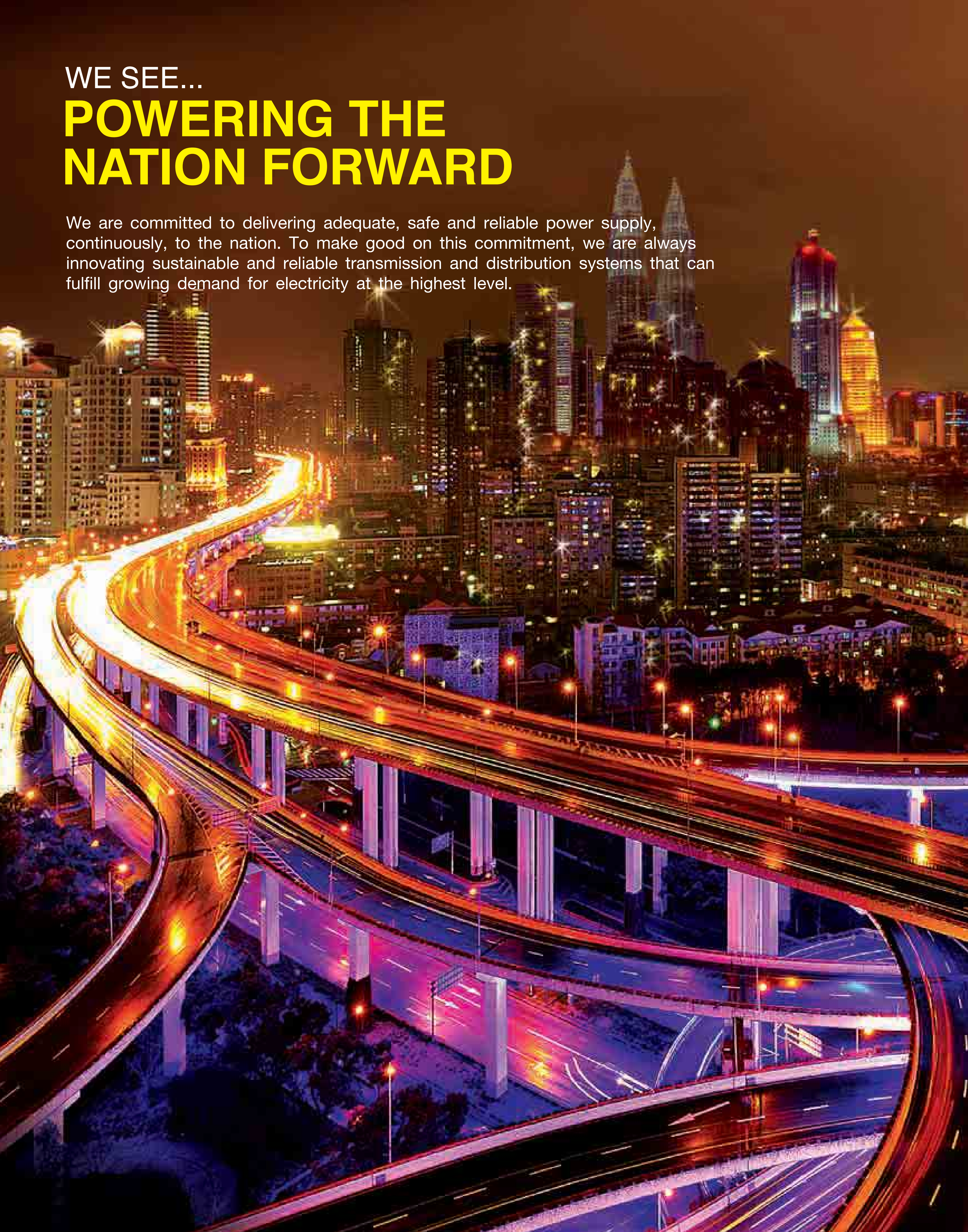
YOU SEE



WE SEE...

# POWERING THE NATION FORWARD

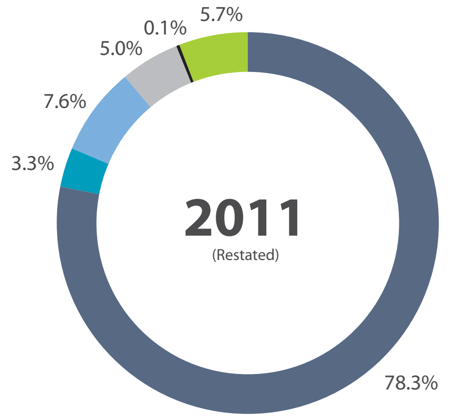
We are committed to delivering adequate, safe and reliable power supply, continuously, to the nation. To make good on this commitment, we are always innovating sustainable and reliable transmission and distribution systems that can fulfill growing demand for electricity at the highest level.

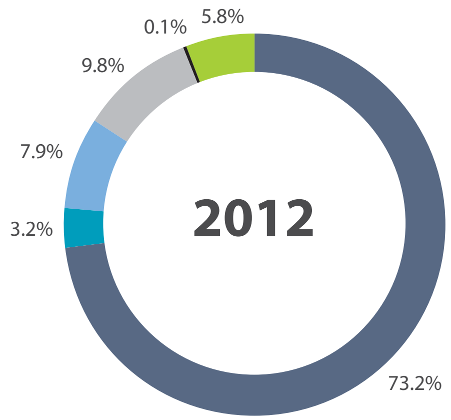


# KEEPING THE LIGHTS ON

# Simplified Group Statement of Financial Position

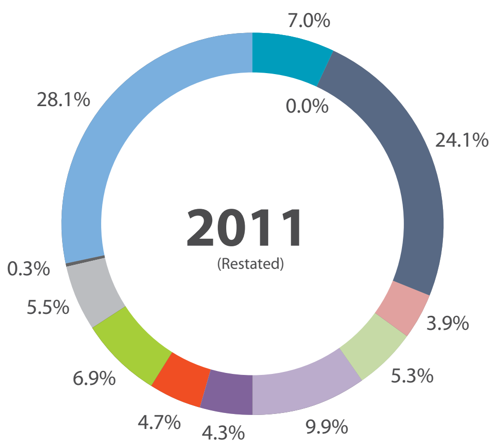
## TOTAL ASSETS
(RM Million)

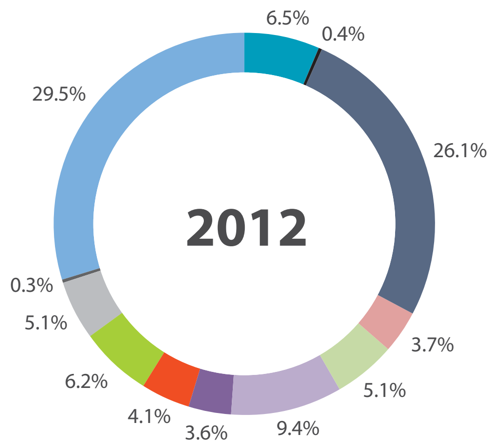



- Property, plant and equipment
- Inventories
- Trade and other receivables
- Deposits, bank and cash balances
- Derivative financial instruments
- Other assets

## TOTAL LIABILITIES & EQUITY
(RM Million)




- Trade and other payables
- Current taxation
- Total borrowings
- Consumer deposits
- Employee benefits
- Deferred taxation
- Deferred income
- Other current and non-current liabilities
- Share capital
- Share premium
- Non-controlling interest
- Retained profits and reserves

# Group Quarterly Financial Performance



2012

| In RM Million | 1Q12 | 2Q12 | 3Q12 | 4Q12 | 2012 |
|---|---|---|---|---|---|
| Revenue | 8,694.4 | 8,628.2 | 9,191.0 | 9,334.8 | **35,848.4** |
| Operating profit | 458.5 | 3,020.5 | 1,625.3 | 1,292.6 | **6,396.9** |
| Profit before taxation and zakat | (84.4) | 3,426.8 | 909.3 | 1,285.5 | **5,537.2** |
| Net profit attributable to owners of the Company | (127.4) | 2,698.0 | 619.1 | 1,007.9 | **4,197.6** |
| Basic earnings per share (sen) | (2.33) | 49.44 | 11.34 | 18.44 | **76.9** |

2011 (restated)

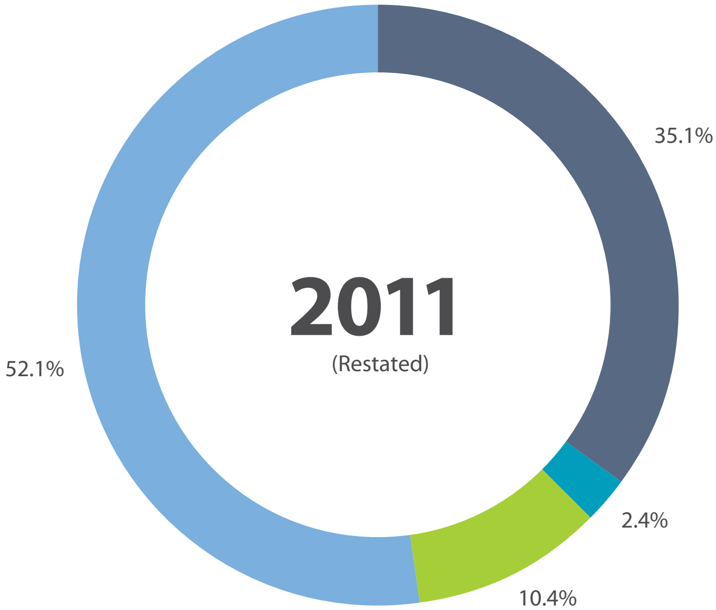
| In RM Million | 1Q11 | 2Q11 | 3Q11 | 4Q11 | 2011 |
|---|---|---|---|---|---|
| Revenue | 7,731.2 | 7,371.3 | 7,984.2 | 9,154.5 | **32,241.2** |
| Operating profit | 1,414.9 | 604.0 | (146.9) | (55.2) | **1,816.8** |
| Profit before taxation and zakat | 1,159.1 | 743.7 | (248.9) | (497.2) | **1,156.7** |
| Net profit attributable to owners of the Company | 838.3 | 644.9 | (179.2) | (338.6) | **965.4** |
| Basic earnings per share (sen) | 15.40 | 11.66 | (3.29) | (6.21) | **17.71** |

# Statement of Value Added

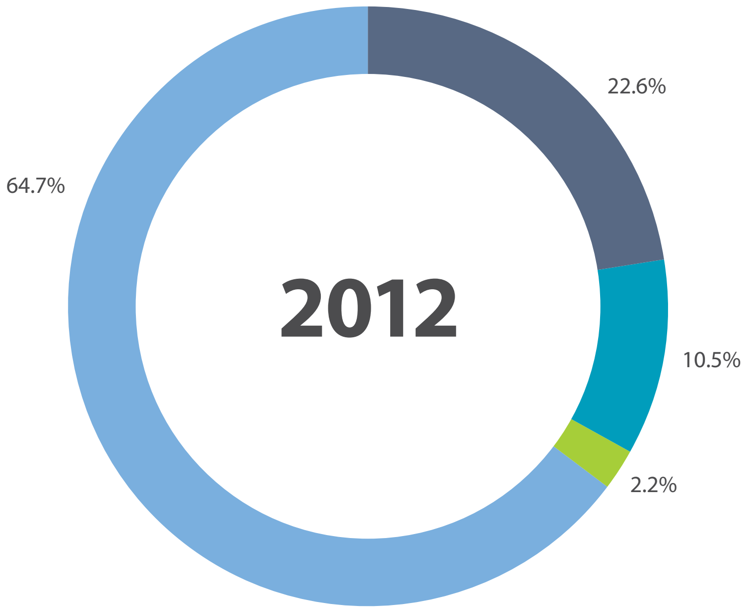
Value added is a measure of wealth created by the TNB Group. The statement of value added shows the total wealth created and its distribution to stakeholders, including the Government, with the balance retained in the Group for reinvestment and future expansion of the Group's business.

| | 2011 (restated) RM Million | 2012 RM Million |
|---|---|---|
| **VALUE ADDED** | | |
| Revenue | 32,241.2 | **35,848.4** |
| Operating expenses excluding staff costs, depreciation and amortisation | (24,075.0) | **(24,467.9)** |
| Other operating income | 532.0 | **2,140.6** |
| Finance income | 319.1 | **188.7** |
| Finance cost | (878.5) | **(823.0)** |
| Foreign exchange gain/(loss) on borrowings | (194.1) | **(252.2)** |
| Share of results of associates | 92.8 | **27.0** |
| **Value added available for distribution** | 8,037.5 | **12,661.6** |
| **DISTRIBUTION** | | |
| To employees: | | |
| Employment costs | 2,819.5 | **2,856.1** |
| To the Government: | | |
| Taxation and zakat | 192.2 | **1,331.0** |
| To shareholders: | | |
| Dividends | 838 | **273.0** |
| Non-controlling interest | (0.9) | **8.6** |
| To reinvest to the Group: | | |
| Depreciation and amortisation | 4,061.9 | **4,268.1** |
| Retained profits | 126.8 | **3,924.8** |
| **Total distributed** | 8,037.5 | **12,661.6** |

# Distribution of Value Added




- To Employees: Employment cost
- To Government: Taxation and zakat
- To Shareholders: Dividends and non-controlling at interest
- To reinvest to the Group: Depreciation, amortisation and retained profits




- To Employees: Employment costs
- To Government: Taxation and zakat
- To Shareholders: Dividends and non-controlling at interest
- To reinvest to the Group: Depreciation, amortisation and retained profits

** Excluding proposed final dividend*

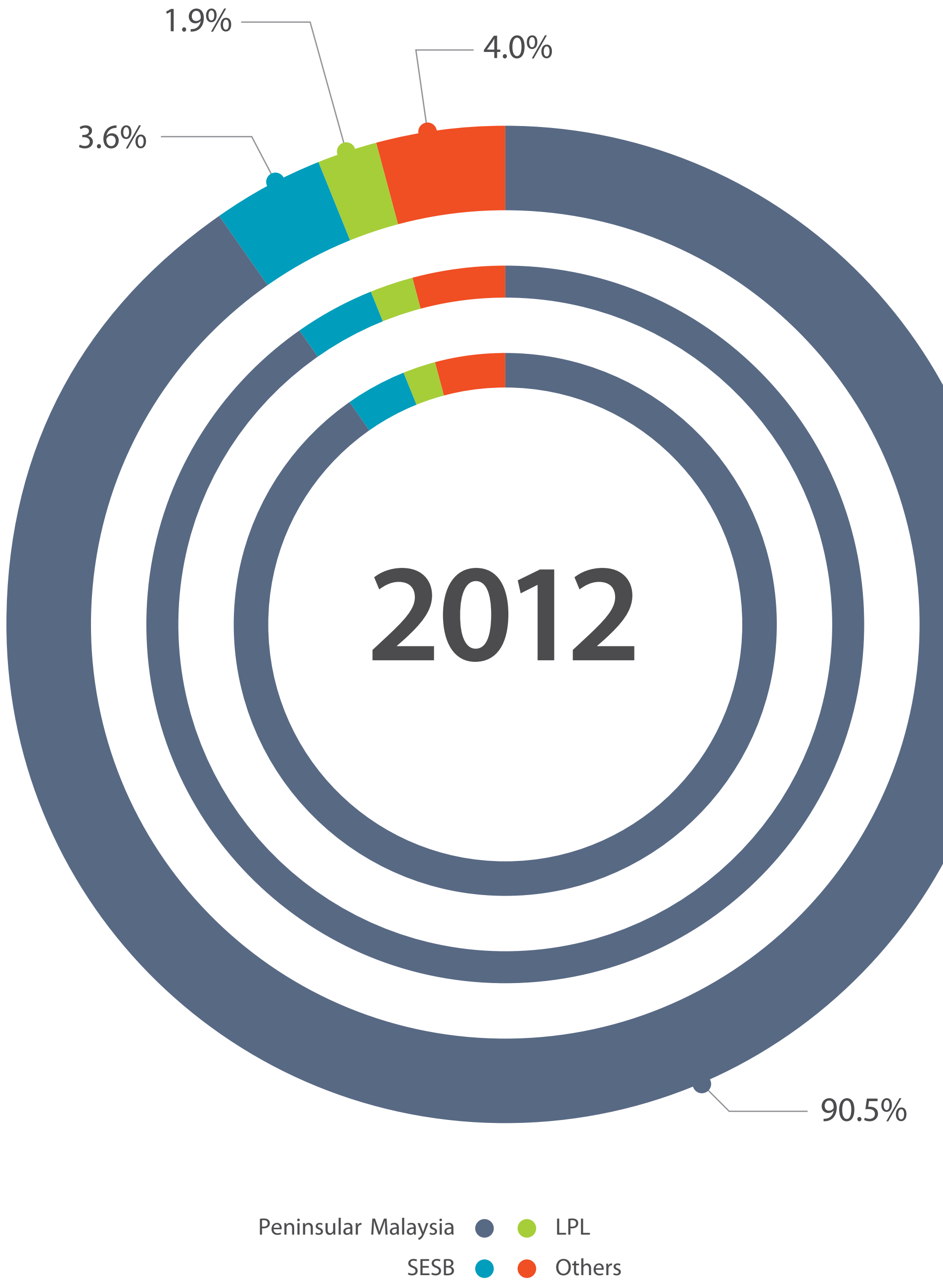
# FY2012 Core Revenue



FY2012 total

**35,848.4**

FY2011 (restated) total 32,241.2

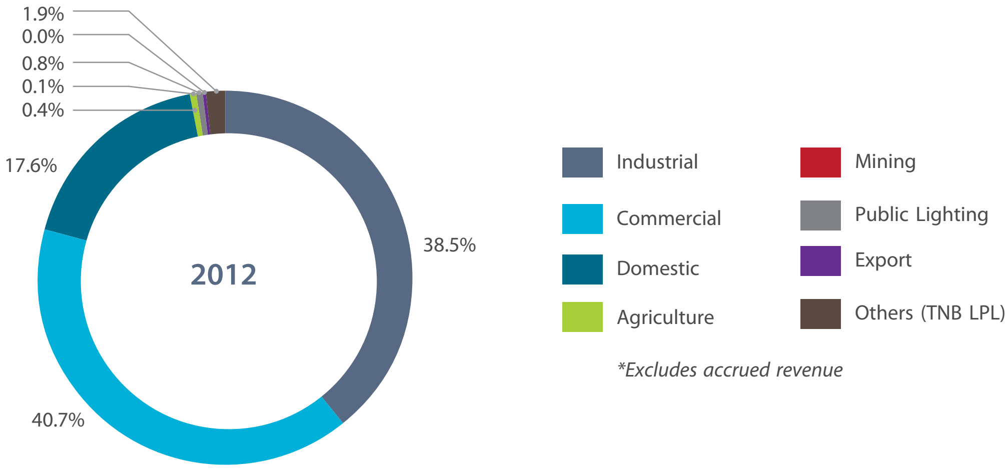



* Others include EGAT, Accrued Revenue, Goods & Services and Deferred Income

# Operational Statistics

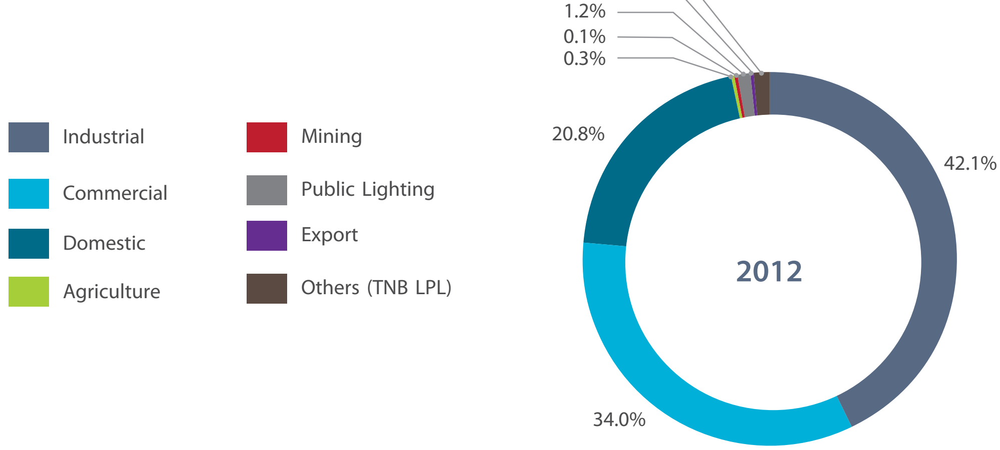


**SALES OF ELECTRICITY (RM'Million):**
(GROUP/RM'Million)

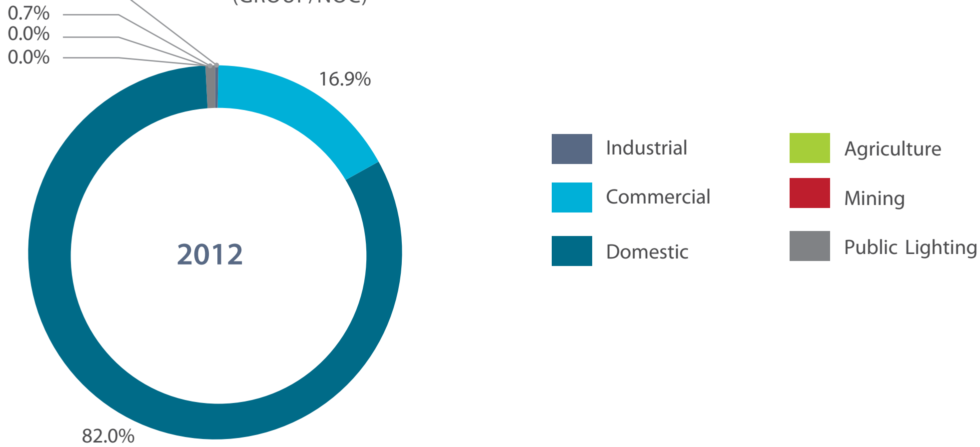



*Excludes accrued revenue

**SALES OF ELECTRICITY (GWh):**
(GROUP/GWh)




**NUMBER OF CUSTOMERS BY CLASSIFICATION:**
(GROUP/NOC)



# Group Financial Review

## REVENUE

For the financial year (FY) ended 31 August 2012, the Group's revenue increased by 11.2% to RM35,848.4 million from RM32,241.2 million in FY2011. This increase was mainly attributed to the growth in electricity units sold in Peninsula of 4.3%, which in turn was driven by the growth in the commercial sector of 5.1%. Another contributor is the tariff adjustment of 7.12% and 14.7% for the Peninsula and SESB which came into effect on 1 June 2011 and 15 July 2011 respectively.

## OPERATING EXPENSES

The Group's operating expenses increased by 2.1% for FY2012. However, after restating the fuel cost compensation received in FY2012 to the relevant financial years, the operating expenses for FY2011 would have been RM29,326.2 million compared to RM31,592.1 million for FY2012, representing an adjusted operating expense increase of 7.7% from FY2011.

### Fuel and IPP costs

The main contributor to the increase in the operating expenses is the fuel and IPP costs of RM1,717.3 million. The fuel expenses for FY2012 increased due to the 28% gas price increase in June 2011, whilst coal consumption increased 10.1% from 18.9 million metric tonnes in FY2011 to 20.8 million metric tonnes in FY2012. However, the global downward trends in coal prices from average coal cost of USD106.9 per metric tonne in FY2011 to USD103.6 per metric tonne in FY2012 had cushioned the impact on fuel cost increases.

### General Expenses

Other operating expense increases in FY2012 relate to the general expense provisions made during the year including the provisions for the legal case on claims made jointly by Irham Niaga Sdn. Bhd. and Irham Niaga Logistics Sdn. Bhd. amounting to a total of RM160.5 million. TNB is dissatisfied with the decision and had filed its Notice of Appeal to the Court of Appeal on 24 September 2012.

### Depreciation and Amortisation

The depreciation and amortisation for FY2012 stood at RM4,268.1 million, an increase of 5.1% from FY2011, in line with the increased capital expenditure programmes.

## OPERATING INCOME

The Group's operating income had increased from RM532.0 million in FY2011 to RM2,140.6 million in FY2012. The increase mainly resulted from the fuel cost compensation received in FY2012 totalling to RM1.68 billion in relation to the fuel expenses incurred in the prior years.

## TAXATION

For the reporting period 31 August 2012, the Group recorded a 24.0% effective tax rate which was lower than the statutory tax rate of 25.0%. This was mainly due to recognition of income not subject to tax which was partially offset by non-deductible expenses. In the previous year, the Group recorded a 16.6% effective tax rate, after restatement. Last year's effective tax rate was lower mainly due to the gain on the redemption of Redeemable Preference Shares for TNB Janamanjung Sdn. Bhd. which is not subject to tax.

## TOTAL ASSETS

As at 31 August 2012, the total asset amounted to RM88,469.1 million, an increase of 11.9% from RM79,064.3 million in the previous financial year.

### Property, plant and equipment (PPE)

The Group's PPE including the non-current asset held for sale in FY2012 of RM64,779.7 increased 4.7% in comparison to FY2011, in line with the higher capital expenditure in FY2012.

### Trade and other receivables

Trade and other receivables were recorded at RM6,988.7 million representing an increase of 16.1% compared to FY2011 and this includes fuel cost compensation claims receivable.

### Deposits, cash and bank balances

Deposits, cash and bank balances increased from RM3,954.2 million in FY2011 to RM8,626.3 million in FY2012 due to the proceeds from the TNB Janamanjung Sdn. Bhd.'s sukuk issuance of RM4,850.0 million and the RM2.4 billion fuel cost compensation received.

## TOTAL LIABILITIES

As at 31 August 2012, the total liabilities amounted to RM52,070.8 million, an increase of 11.2% compared to RM46,834.9 million in FY2011.

### Borrowings

The increase in liabilities is attributed to the increase in borrowings from RM19,054.1 million in FY2011 to RM23,071.8 million in FY2012. This is due to the issuance of the new Sukuk of RM4,850.0 million by TNB Janamanjung Sdn. Bhd. in November 2011, offset by repayments of borrowings in both Ringgit and foreign currencies amounting to RM1,275.1 million. As at 31 August 2012, the effective weighted average cost of funds for the Group stood at 4.9% compared to 5.1% in FY2011.

## TOTAL EQUITY

The total equity had increased from RM32,229.4 million in FY2011 to RM36,398.3 million in FY2012 mainly contributed by the increase in FY2012 profits.

### Earnings per share (EPS)

The basic EPS increased from 17.71 sen per ordinary share in FY2011 to 76.82 sen per ordinary share in FY2012. Accordingly, the return on equity also increased to 11.2% in FY2012 from 10.1% in FY2011.

### Dividends

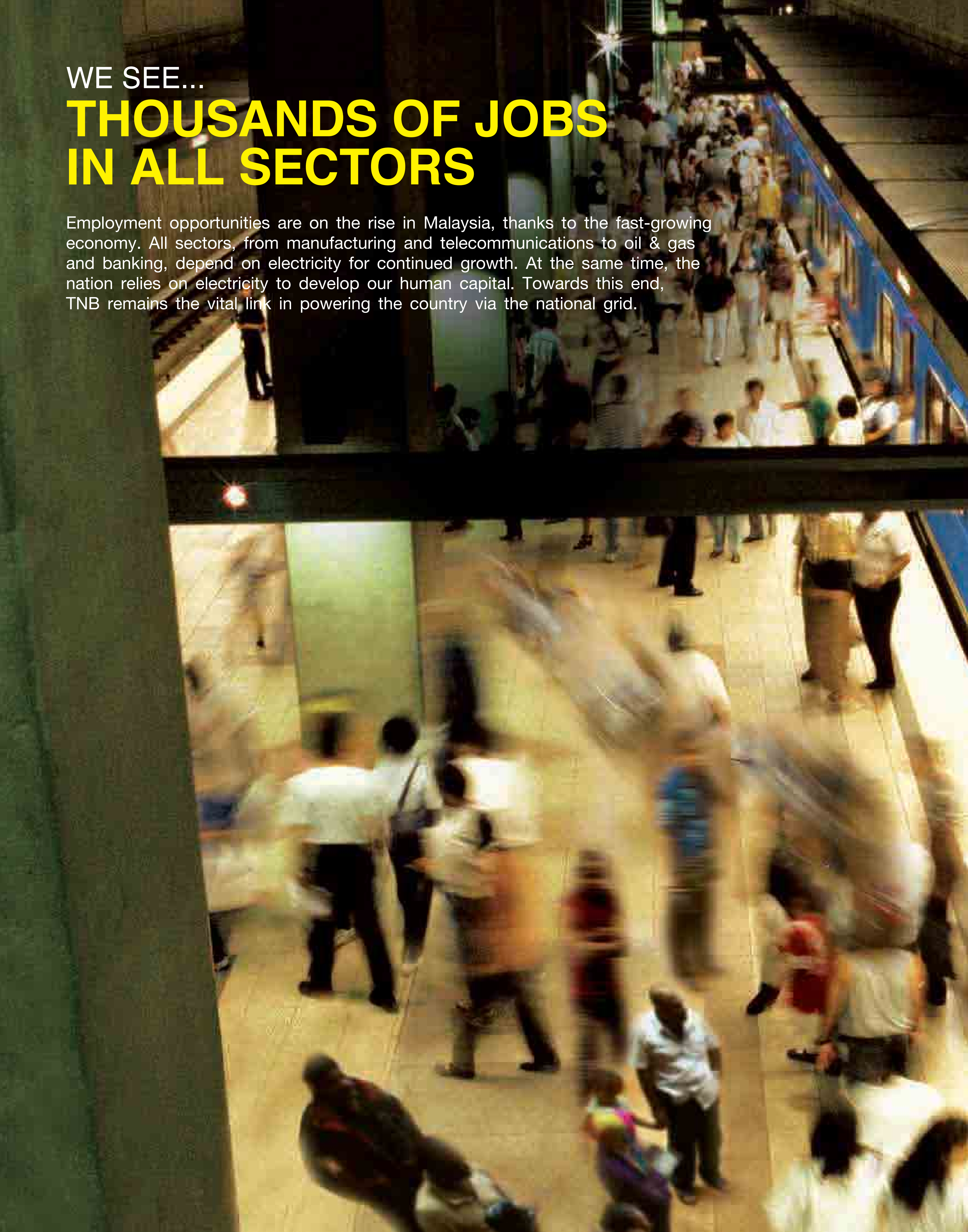
For FY2012, a gross interim dividend of 0.38 sen per ordinary share and a single-tier interim dividend of 4.71 sen per ordinary share amounting to RM273 million had been paid on 25 May 2012. The Board of Directors had proposed for a final single-tier dividend of 15.0 sen per ordinary share in respect of the period ended 31 August 2012.

YOU SEE

WE SEE...

# THOUSANDS OF JOBS IN ALL SECTORS

Employment opportunities are on the rise in Malaysia, thanks to the fast-growing economy. All sectors, from manufacturing and telecommunications to oil & gas and banking, depend on electricity for continued growth. At the same time, the nation relies on electricity to develop our human capital. Towards this end, TNB remains the vital link in powering the country via the national grid.



# KEEPING THE LIGHTS ON

# Board of Directors



**Above** (from left to right):

**Tan Sri Leo Moggie**
Chairman
Non-Independent Non-Executive Director

**Datuk Wira Ir. Azman bin Mohd**
President/Chief Executive Officer
Non-Independent Executive Director

**Dato' Zainal Abidin bin Putih**
Senior Independent Non-Executive Director



**Datuk Nozirah binti Bahari**
Non-Independent Non-Executive Director

**Dato' Mohammad Zainal bin Shaari**
Non-Independent Non-Executive Director

**Tan Sri Dato' Seri Siti Norma binti Yaakob**
Independent Non-Executive Director

**Bottom** (from left to right):

**Dato' Abd Manaf bin Hashim**
Independent Non-Executive Director

**Dato' Fuad bin Jaafar**
Independent Non-Executive Director

**Datuk Chung Hon Cheong**
Independent Non-Executive Director

**Tan Sri Dato' Hari Narayanan a/l Govindasamy**
Independent Non-Executive Director

**Suria binti Ab Rahman**
(Alternate Director to
Dato' Mohammad Zainal bin Shaari)
Non-Independent Non-Executive Director

**Norazni binti Mohd Isa**
Company Secretary



# Profile of Directors



## Tan Sri Leo Moggie

(71 years of age – Malaysian)
Non-Independent Non-Executive Chairman

Master of Arts in History, University of Otago, New Zealand

Master of Business Administration, Pennsylvania State University, USA

- Appointed to the Board on 12 April 2004
- Attended all 14 Board meetings held in the Financial Year
- Chairman of the Board Finance and Investment Committee

**Skills, Experience and Expertise:**

Prior to his appointment as Chairman of Tenaga Nasional Berhad, Tan Sri Leo Moggie served the Malaysian Government for more than 38 years. He held several senior ministerial positions at both the Federal and State levels from 1976 until 2004 that included Minister of Energy, Communications and Multimedia (1998-2004), Minister of Works (1989-1995), Minister of Energy, Telecommunications and Posts (1978-1989 and 1995-1998), Minister of Local Government (1977-1978) and Minister of Welfare Services (1976-1977) in the State Government of Sarawak. He was elected as Member of Sarawak State Council from 1974 until 1978 and a Member of Parliament from 1974 until 2004.

**Current Directorships:**

Digi.Com Berhad, ACE Jerneh Insurance Berhad, TNB Group of Companies and several other private companies.

## Datuk Wira Ir. Azman bin Mohd

(55 years of age – Malaysian)
President/Chief Executive Officer
Non-Independent Executive Director

Master of Business Administration (MBA), University of Malaya

Bachelor of Engineering (Electrical Engineering), University of Liverpool, United Kingdom

- Appointed to the Board on 15 April 2010
- Attended all 14 Board meetings held in the Financial Year

**Skills, Experience and Expertise:**

Datuk Wira Ir. Azman was appointed as President/Chief Executive Officer of Tenaga Nasional Berhad on I July 2012. He has served the Company in various capacities within Distribution Division since 1979 including as Assistant District Engineer, District Manager, Area Manager, Assistant General Manager, General Manager and Senior General Manager. He was the Vice President of Distribution from 14 November 2008 until 14 April 2010. Prior to assuming his current position, he was the Executive Director/Chief Operating Officer of TNB.

**Current Directorships:**

TNB Group of Companies.

*Left* : Tan Sri Leo Moggie
*Right* : Datuk Wira Ir. Azman bin Mohd

# Profile of Directors



## Dato' Zainal Abidin bin Putih

(66 years of age – Malaysian)
Senior Independent Non-Executive Director

Chartered Accountant of the England and Wales Institute

- Appointed to the Board on 1 May 2003
- Attended all 14 Board meetings held in the Financial Year
- Chairman of the Board Audit Committee and Member of the Board Finance and Investment Committee

**Skills, Experience and Expertise:**

Dato' Zainal Abidin was formerly the Chairman of Malaysian Accounting Standards Board (MASB), Mentakab Rubber Company Berhad and Pengurusan Danaharta Nasional Berhad. He was also a past President of the Malaysian Institute of Certified Public Accountants (MICPA), a former member of the Malaysian Communications and Multimedia Commission and a former Advisor to Messrs Ernst & Young Malaysia. Dato' Zainal Abidin has extensive experience in public accounting practice and has been a Partner, Executive Director, Country Managing Partner and Chairman in the firm of Hanafiah Raslan & Mohamad, which merged with Ernst & Young in 2002. He is currently the Chairman of Mobile Money International Sdn. Bhd. and a Trustee of the National Heart Institute Foundation.

**Current Directorships:**

CIMB Group Holdings Berhad, Petron Malaysia Refining & Marketing Berhad (formerly known as ESSO Malaysia Berhad), Dutch Lady Milk Industries Berhad, Land & General Berhad, CIMB Investment Bank Berhad, CIMB Bank Berhad, Southeast Asia Special Asset Management Berhad and several other private companies.

*Left* : Dato' Zainal Abidin bin Putih
*Right* : Datuk Nozirah binti Bahari

## Datuk Nozirah binti Bahari

(57 years of age – Malaysian)
Non-Independent Non-Executive Director

Bachelor of Social Science (Hons.) (Urban Studies), University of Science, Malaysia

Diploma in Public Administration, Institute of Public Administration (INTAN)

- Appointed to the Board on 28 June 2011
- Attended 12 out of 14 Board meetings held in the Financial Year
- Chairman of the Board Tender Committee

**Skills, Experience and Expertise:**

Datuk Nozirah is the Deputy Secretary General (Management) in the Ministry of Finance. She has over 30 years' service in the Malaysian Civil Service starting as Assistant Secretary, Finance Division in the Ministry of Finance before rising to her current position. Among other positions she has held were Deputy Under Secretary, Procurement and Supplies Division (2002-2004), Deputy Under Secretary, Loan Management, Financial Market and Actuary Division (2005-2007), Under Secretary, Loan Management, Financial Market and Actuary Division (2007-2011) and Director of Budget Management Division (21 March-20 May 2011) in the Ministry of Finance.

**Current Directorships:**

Proton Holdings Berhad and Bank Simpanan Nasional Berhad.

# Profile of Directors



## Dato' Mohammad Zainal bin Shaari

(49 years of age – Malaysian)
Non-Independent Non-Executive Director

Fellow of the Institute of Chartered Accountants in England and Wales

Fellow of the Association of Chartered Certified Accountants (ACCA) of the United Kingdom

Member of the Malaysian Institute of Accountants (MIA)

Member of the Malaysian Institute of Certified Public Accountants (MICPA)

- Appointed to the Board on 31 March 2007
- Attended 12 out of 14 Board meetings held in the Financial Year
- Member of the Board Tender Committee, Board Nomination and Remuneration Committee and Board Finance and Investment Committee

**Skills, Experience and Expertise:**

Dato' Mohammad Zainal is the Executive Director/Chief Operating Officer of Khazanah Nasional Berhad. He has served in various capacities in the private sector, including a public accounting firm in the United Kingdom from 1984 until 1990 and thereafter PricewaterhouseCoopers until 2002. He was with BinaFikir Sdn. Bhd. for a brief stint prior to joining Khazanah Nasional Berhad in October 2004.

## Tan Sri Dato' Hari Narayanan a/l Govindasamy

(62 years of age – Malaysian)
Independent Non-Executive Director

Bachelor of Electrical and Electronics Engineering, University of Northumbria, England

- Appointed to the Board on 1 March 1995
- Attended 13 out of 14 Board meetings held in the Financial Year
- Member of the Board Audit Committee and Board Nomination and Remuneration Committee

**Skills, Experience and Expertise:**

Tan Sri Dato' Hari Narayanan is a Registered Professional Engineer with the Board of Engineers, Malaysia. He has vast and diverse experience in the field of electrical and electronics engineering and has held key positions in InchCape Berhad and Tamco Cutler-Hammer Sdn. Bhd. He was formerly the Chairman of Noblemax Resources Sdn. Bhd. and Deputy Chairman of Emrail Sdn. Bhd.

**Current Directorships:**

SP Setia Berhad, Puncak Niaga Holdings Berhad, IEV Holdings Ltd. and several other private companies.

*Left* : Tan Sri Dato' Hari Narayanan a/l Govindasamy
*Right* : Dato' Mohammad Zainal bin Shaari

# Profile of Directors



## Dato' Fuad bin Jaafar

(69 years of age – Malaysian)
Independent Non-Executive Director

Diploma in Technology, Brighton College of Technology (now Brighton University), United Kingdom

- Appointed to the Board on 15 March 2007
- Attended 13 out of 14 Board meetings held in the Financial Year
- Member of the Board Tender Committee, Board Nomination and Remuneration Committee and Board Disciplinary Committee

**Skills, Experience and Expertise:**

Dato' Fuad began his career with Tenaga Nasional Berhad in 1966. He served for 35 years in various key positions including Assistant Distribution Engineer, Senior District Manager, Construction Engineer, Assistant Senior Construction Engineer, Senior Construction Engineer, Deputy Chief Engineer/Assistant General Manager and Deputy General Manager. Dato' Fuad was appointed as General Manager of the Transmission Division in January 1994 and was later made Senior General Manager of Energy Supply. He was TNB's Chief Operating Officer and Executive Director from 4 September 1997, and then appointed as President/Chief Executive Officer on 16 October 2000, a position he held until November 2001.

**Current Directorships:**

Sarawak Hidro Sdn. Bhd. and TNB Group of Companies.

*Left* : Tan Sri Dato' Seri Siti Norma binti Yaakob
*Right* : Dato' Fuad bin Jaafar

## Tan Sri Dato' Seri Siti Norma binti Yaakob

(72 years of age – Malaysian)
Independent Non-Executive Director

Barrister-at-Law, Gray's Inn, London

Certificate in Public International Law in Post-Finals Course, Council of Legal Education, London

- Appointed to the Board on 12 September 2008
- Attended all 14 Board meetings held in the Financial Year
- Chairman of the Board Nomination and Remuneration Committee and Board Disciplinary Committee and Member of the Board Finance and Investment Committee

**Skills, Experience and Expertise:**

Tan Sri Dato' Seri Siti Norma has held various senior positions in the Legal Service of Malaysia including Senior Assistant Registrar of the High Court, President of the Sessions Court, Senior Federal Counsel of the Attorney General's Chambers, Deputy Public Trustee and Chief Registrar of the Federal Court. Tan Sri Dato' Seri Siti Norma was appointed as a Judge of the High Court of Malaya from 1983 until 1994 and thereafter appointed as a Judge of the Court of Appeal, Malaysia from 1994 until 2000. She was made a Judge of the Federal Court of Malaysia on 1 January 2001 and eventually elevated to Chief Judge of Malaya, a position she held from 8 February 2005 until her retirement on 5 January 2007. Tan Sri Dato' Seri Siti Norma is presently the Chairman of the Malaysian Competition Commission.

**Current Directorships:**

KAF Investment Bank Berhad, RAM Holdings Berhad, RAM Rating Services Berhad and RAM Rating (Lanka) Limited.

# Profile of Directors



## Dato' Abd Manaf bin Hashim

(56 years of age – Malaysian)
Independent Non-Executive Director

OND (Engineering), Cambridgeshire College of Arts and Technology, HND, Thames Valley University (Slough Campus)

- Appointed to the Board on 1 February 2010
- Attended all 14 Board meetings held in the Financial Year
- Member of the Board Audit Committee, Board Tender Committee and Board Disciplinary Committee

**Skills, Experience and Expertise:**

Dato' Abd Manaf has been a member of the Suruhanjaya Perkhidmatan Awam Negeri Perak since 2009 and serves as Chairman in several private companies that involve in the construction, telecommunications and solar hybrid sectors since 1993. Prior to that, he held various positions in Shapadu Decloedt Dredging Sdn. Bhd. (1990-1992), Industrial Boilers and Allied Equipment (IBAE)(1984-1986), Hakasa Sdn. Bhd. (1983-1984) and Asie Sdn. Bhd. (1982-1983).

**Current Directorships:**

Integrax Berhad and a number of private companies.

*Left* : Dato' Abd Manaf bin Hashim
*Middle* : Datuk Chung Hon Cheong
*Right* : Suria binti Ab Rahman

# Profile of Directors



## Datuk Chung Hon Cheong

(51 years of age – Malaysian)
Independent Non-Executive Director

Advanced Computer Programming, CDS Computer Data Services

- Appointed to the Board on 1 October 2010
- Attended all 14 Board meetings held in the Financial Year
- Member of the Board Audit Committee, Board Finance and Investment Committee and Board Disciplinary Committee

**Skills, Experience and Expertise:**

Datuk Chung Hon Cheong is the Chief Executive Officer/Executive Director of Rexit Berhad. He has over 30 years of professional experience in the information technology (IT) industry, where he began his career in the early 1980s. In 2001, he was appointed Managing Director of E-Resource.com Sdn. Bhd., a company that conducts research and development in RFID applications. Thereafter, he joined Rexit Solution Sdn. Bhd. in 2003 and later became Managing Director of Rexit Venture Sdn. Bhd.

**Current Directorships:**

Rexit Berhad, Rexit (Labuan) Berhad and a number of private companies.

## Suria binti Ab Rahman

(39 years of age – Malaysian)
(Alternate Director to Dato' Mohammad Zainal bin Shaari)
Non-Independent Non-Executive Director

Master of Business Administration (MBA), Judge Business School, University of Cambridge

Bachelor of Science in Economics (Accounting and Finance), London School of Economics

Associate of the Institute of Chartered Accountants in England and Wales (ICAEW)

Associate of the Institute of Internal Auditors, United Kingdom and Ireland

Member of the Malaysian Institute of Accountants

- Appointed to the Board on 30 November 2009

**Skills, Experience and Expertise:**

Suria is a Director in Strategic Human Capital Management of Khazanah Nasional Berhad. Prior to that, she served the Managing Director's Office as a Director from June 2009 until June 2012. She has held various key roles in Khazanah Nasional Berhad that included Head of Risk Management Unit from February 2006 until May 2009 and Vice President, Risk Management Unit from April 2005 until January 2006. Prior to joining Khazanah Nasional Berhad, she served KPMG in its London offices for nine-and-a-half years from mid-1996 until 2005.

**Note:**

Other than as disclosed, none of the Directors has any:

1. Family relationship with any other Director and/or Major Shareholder of Tenaga Nasional Berhad;
2. Conflict of interest with Tenaga Nasional Berhad; or
3. Conviction for any offence within the past 10 years.

Leadership

# Group Executive Council Committee – GECC

The Group Executive Council Committee (GECC) is entrusted with the responsibility to ensure that the Group's operations are aligned with its vision and mission as well as ensuring that it is implemented in accordance with the Group's policies and strategies.

The GECC is also responsible for monitoring the overall performance of the Group and the other Management Committees, appointing members of the Management Committees and for promoting executives within the Group.

The GECC held eight (8) meetings in the Financial Year ended 31 August 2012.

1

2

3

4

5

6

Composition:

1. **Datuk Wira Ir. Azman bin Mohd**
   President/Chief Executive Officer

2. **Fazlur Rahman bin Zainuddin**
   Chief Financial Officer/Vice President, Group Finance

3. **Dato' Ir. Mohd Nazri bin Shahruddin**
   Vice President, New Business & Major Projects

4. **Zainudin bin Ibrahim**
   Vice President, Generation

5. **Datuk Rozimi bin Remeli**
   Vice President, Transmission

6. **Datuk Ir. Baharin bin Din**
   Vice President, Distribution

# Energy Supply Committee – ESC

The Energy Supply Committee (ESC) is the highest management forum with the authority to endorse and approve all power system development plans and proposals for TNB in Peninsular Malaysia prior to submission to the Board of Directors. The ESC also makes decisions on major operational issues affecting the Company's core business as well as matters related to the expedition of on-going generation, transmission and primary distribution development projects in Peninsular Malaysia.

The ESC held three (3) meetings in the Financial Year ended 31 August 2012.







Composition:

1. **Datuk Wira Ir. Azman bin Mohd**
   President/Chief Executive Officer
2. **Fazlur Rahman bin Zainuddin**
   Chief Financial Officer/
   Vice President, Group Finance
3. **Zainudin bin Ibrahim**
   Vice President, Generation
4. **Datuk Rozimi bin Remeli**
   Vice President, Transmission
5. **Datuk Ir. Baharin bin Din**
   Vice President, Distribution
6. **Datin Roslina binti Zainal**
   Vice President, Planning

# Group Executive Management Committee – GEMC







The Group Executive Management Committee (GEMC), headed by the President/Chief Executive Officer, assumes the responsibility for the daily management of the Company's business and operations, strategic planning, resource management and risk assessment. The GEMC oversees and manages issues to ensure that the Company's obligations are fulfilled and the expectations of the shareholders and other stakeholders are met.

The GEMC also deliberates on the achievements of the Divisions' Key Performance Indicators (KPIs) and the challenges faced in achieving these KPIs. The KPIs are then reviewed and realigned with the targets set for the year.

The GEMC generally meets on a monthly basis and as and when the need arises. The GEMC held 14 meetings in the Financial Year ended 31 August 2012.

Composition:

1. **Datuk Wira Ir. Azman bin Mohd**
   President/Chief Executive Officer
2. **Fazlur Rahman bin Zainuddin**
   Chief Financial Officer/Vice President, Group Finance
3. **Dato' Ir. Mohd Nazri bin Shahruddin**
   Vice President, New Business & Major Projects
4. **Zainudin bin Ibrahim**
   Vice President, Generation
5. **Datuk Rozimi bin Remeli**
   Vice President, Transmission
6. **Datuk Ir. Baharin bin Din**
   Vice President, Distribution

# Group Executive Management Committee – GEMC









7. **Dato' Muhammad Razif bin Abdul Rahman**
Vice President, Human Resource

8. **Datin Roslina binti Zainal**
Vice President, Planning

9. **Kamaruddin bin Mahmood**
Chief Information Officer

10. **Ir. Nor Azmi bin Ramli**
Chief Procurement Officer

11. **Dato' Roslan bin Ab Rahman**
Chief Corporate Officer

12. **Norazni binti Mohd Isa**
Company Secretary

# Profile of Management Team







Composition:

1. **Datuk Wira Ir. Azman bin Mohd**
   President/Chief Executive Officer
2. **Fazlur Rahman bin Zainuddin**
   Chief Financial Officer/Vice President, Group Finance
3. **Dato' Ir. Mohd Nazri bin Shahruddin**
   Vice President, New Business & Major Projects
4. **Zainudin bin Ibrahim**
   Vice President, Generation
5. **Datuk Rozimi bin Remeli**
   Vice President, Transmission
6. **Datuk Ir. Baharin bin Din**
   Vice President, Distribution

# Profile of Management Team









7. **Dato' Muhammad Razif bin Abdul Rahman**
   Vice President, Human Resource

8. **Datin Roslina binti Zainal**
   Vice President, Planning

9. **Kamaruddin bin Mahmood**
   Chief Information Officer

10. **Ir. Nor Azmi bin Ramli**
    Chief Procurement Officer

11. **Dato' Roslan bin Ab Rahman**
    Chief Corporate Officer

12. **Norazni binti Mohd Isa**
    Company Secretary

# Profile of Management Team

## 1 Datuk Wira Ir. Azman bin Mohd
President/Chief Executive Officer

Datuk Wira Ir. Azman bin Mohd, 55, has held several key positions in TNB since joining the organisation 31 years ago. Starting his career as a District Office electrical engineer, he gradually acquired positions of greater responsibility, holding posts such as District Manager, State General Manager and General Manager of Strategic Management & Organisation Development at the company headquarters before being appointed as Senior General Manager of Operational Region 2 in 2006. On 14 November 2008, he was made Vice President of Distribution; and on 15 April 2010, he was appointed as Chief Operating Officer/Executive Director of TNB. He took over the helm of the company as its President/CEO on 1 July 2012.

Datuk Wira Ir. Azman obtained a Diploma in Engineering from the England Newark Technical College, UK, in 1976, a Bachelor of Engineering in Electrical Engineering from the University of Liverpool, UK, in 1979, and a Master of Business Administration from the University of Malaya in 1996.

## 2 Fazlur Rahman bin Zainuddin
Chief Financial Officer/Vice President, Group Finance

Fazlur Rahman bin Zainuddin, 43, was appointed TNB Chief Financial Officer and Vice President (Group Finance) on 1 July 2012. Prior to this, he was the Chief Financial Officer of the Naza Group. Before joining the Naza Group in 2010, Fazlur was with Telekom Malaysia Berhad (TM) for five years from 2005, during which time he served in a number of different capacities culminating in the position of Vice President, Business Development. Fazlur also spent 10 years from 1995 with Shell Malaysia in various financial management and corporate roles. Prior to that, he gained four years' experience in public accounting practice, which included almost three years in Pricewaterhouse Kuala Lumpur as a tax consultant.

Fazlur also sits on the Board of Directors of various TNB subsidiaries. He is a professional accountant by training, a Fellow of the Association of Chartered Certified Accountants (ACCA), UK, and a member of the Malaysian Institute of Accountants (MIA).

## 3 Dato' Ir. Mohd Nazri bin Shahruddin
Vice President, New Business & Major Projects

Dato' Ir. Mohd Nazri bin Shahruddin, 55, joined the National Electricity Board (NEB) on 1 September 1979 upon completion of his studies in the UK as an NEB scholar. He served in several power stations in the field of Operations and Maintenance and was involved in developing a number of power plants, most notably the Sultan Azlan Shah Power Station in Perak. Later, Dato' Nazri headed a team from TNB, Khazanah Nasional and Malakoff which, in association with a private Saudi firm, developed the first Independent Water and Power Producer (IWPP) project in Saudi Arabia, the Shuaibah Power and Water Facility. He was based in Jeddah for three years to complete the project. In 2008, Dato' Nazri was appointed Vice President of Generation, a position he held until his appointment in September 2012 as Vice President of New Business & Major Projects.

Dato' Nazri holds a Bachelor of Science in Mechanical Engineering from King's College, University of London.

## 4 Zainudin bin Ibrahim
Vice President, Generation

Tuan Haji Zainudin Ibrahim, 56, began his 32-year career in TNB as a Mechanical Engineer at Tuanku Ja'afar Power Station in 1980. Following a two-year stint as a Shift Charge Engineer at Sultan Ismail Power Station, Paka, he returned to Tuanku Ja'afar Power Station where he continued to serve for the next 20 years in various positions in the Maintenance Department culminating as a Senior Manager. Between 2007 and April 2012, he assumed the post of General Manager, first at the Putrajaya Power Station, and later at the Tuanku Ja'afar Power Station. He then spent six months as the Senior General Manager (Operations) of Generation Division. On 3 September 2012, he assumed his current position as the Vice President, Generation.

Tuan Haji Zainudin obtained his Bachelor of Engineering in Mechanical Engineering from the University of Sheffield, UK in 1980 and his Master of Engineering Management from University Tenaga Nasional in 2005.

## 5 Datuk Rozimi bin Remeli
Vice President, Transmission

Datuk Rozimi bin Remeli, 55, has spent over 33 years in TNB. He started as a Technical Assistant in Distribution Butterworth, Penang. He then served in Transmission Maintenance since 1984 untill he was promoted to General Manager (GM) of Maintenance in 2006. Later in 2007 he was again promoted to hold a position as a Senior General Manager (SGM) Transmission Asset Development. On 9 January 2010, he assumed his current position as the Vice President, Transmission Division

# Profile of Management Team

Datuk Rozimi holds a Diploma in Electrical Engineering from Universiti Teknologi Malaysia, a Bachelor of Engineering from Northorp University, USA, and a Master of Business Administration (MBA) from Universiti Sains Malaysia. In addition, he is currently the Adjunct Professor in the Civil Engineering Department of University Tenaga Nasional (UNITEN). He is also the National Mirror Committee Chairman for IEC/TC 115 where Malaysia is the participating member.

## 6 Datuk Ir. Baharin bin Din
Vice President, Distribution

Datuk Ir. Baharin bin Din, 49, has spent almost his entire 27-year career at various engineering positions in TNB, with the exception of two-and-a-half years when he served the Ministry of Energy, Telecommunications & Posts Malaysia, first as a Deputy Director, then a Director, of the Electrical Inspectorate Department, in Sabah then Pahang. At TNB, he has taken on managerial positions in the Engineering Department overlooking the development of Distribution; he has been involved in Business Development, Network Maintenance, Metering Services, Construction Service, Network Service, and Engineering Service and Logistics. In March 2007, he was made Managing Director of Sabah Electricity, a position he held for four years before being assigned as Senior General Manager, Customer Service & Metering, in the Distribution Division on 1 December 2011. He was promoted to Vice President of Distribution on 1 January 2012.

Datuk Ir. Baharin obtained a Bachelor of Science in Electrical Engineering from Syracuse University, New York, USA, and a Master of Business Administration from UNITEN and Bond University, Australia, under a joint UNITEN/Bond MBA programme.

## 7 Dato' Muhammad Razif bin Abdul Rahman
Vice President, Human Resources

Dato' Muhammad Razif bin Abdul Rahman, 50, has spent his entire 28-year career with LLN/TNB. During this time, he has served in various capacities as Transmission Protection Engineer, Power Plant Engineer, TNB Workshop Services Sdn. Bhd. Business Development Manager, Perusahaan Otomobil Elektrik Malaysia's Operations Manager and Head of Training at TNB Transmission Network Sdn. Bhd. In 2002, he moved from operations to the Group Human Resources Division, where he served as Head of Training & Development and, later, as Head of Human Resources Planning and Staffing, before been promoted to Vice President of Human Resources in December 2008.

Dato' Muhammad Razif obtained a degree in Electrical Engineering from the University of Liverpool in 1984.

## 8 Datin Roslina binti Zainal
Vice President, Planning

Datin Roslina binti Zainal, 50, has served TNB for 27 years, beginning as an electrical engineer in Johor Bahru when she joined Lembaga Letrik Negara (as TNB was known then) on 1 July, 1985. She was promoted to a Senior Engineer of Energy Planning at the Planning and Development Department in TNB's headquarters in 1988, following which she was seconded as the Assistant Director of Energy in the Economic Planning Unit of the Prime Minister's Office from 1991 to 1993. On her return to TNB, she was appointed as Manager, Regulatory & Business Strategy at the Corporate Planning Division and then Senior Manager, Strategic and Business Management. In 2005, she was made General Manager, Procurement of Energy, and on 1 April 2009, she assumed her current position of Vice President, Planning.

Datin Roslina is also a member of the Planning Committee of the National Nuclear Development Programme, member of the Board of Engineers Malaysia, an advisor to the Institute of Energy Policy and Research, UNITEN, and a Director of TNB Fuel Services Sdn. Bhd.

She obtained a degree in Electrical Engineering from the University of Lakehead, Canada, and a Master of Business Administration from the University of New England, Australia.

# Profile of Management Team



## 9 Kamaruddin bin Mahmood
Chief Information Officer

Kamaruddin bin Mahmood, 52, has more than 27 years' experience in the Information & Communication Technologies (ICT) industry, the last seven years of which have been spent in TNB. He joined TNB in May 2005 as General Manager of the IT Department in the ICT Division. Since then, he has acquired a range of expertise within the ICT Division, spending seven months as GM of IT & Telecommunications Development Department, one-and-a-half years as GM of the IT & Business Solutions Department, and another two years as Senior GM of the same department, following which he was promoted to his current position as Chief Information Officer (CIO) in March 2012. As CIO, Kamaruddin is responsible for ensuring the company's vision, mission, strategy and goals are achieved through the effective use of ICT. Before joining TNB, he served in various key positions in ICT in large companies dealing in commodities and oil and gas.

Kamaruddin obtained a Bachelor of Science from Murdoch University, Australia, and attended a Management Programme at Cambridge University, UK.

## 10 Ir. Nor Azmi bin Ramli
Chief Procurement Officer

Ir. Nor Azmi bin Ramli, 54, has served in TNB for 31 years in various positions in the areas of operations & maintenance and management spanning the Distribution, Generation and Procurement Divisions. His last nine years of service with TNB have been in Procurement. Before his current appointment as the Chief Procurement Officer for TNB, he was Head of Procurement for Generation Division.

Ir. Nor Azmi is a certified Competent Engineer 66KV, Steam Engineer Grade 2 and Internal Combustion Engineer Grade 2. He is also a member of the Institution of Engineers Malaysia, Institution of Certified Engineers Malaysia and the Chartered Institute of Purchasing and Supply.

Ir. Nor Azmi graduated in 1981 with a Bachelor of Science in Electrical and Electronics Engineering from the University of Brighton, UK. He also holds a Master of Business Administration from Ohio University, USA, and a Master of Science in Logistics and Supply Chain Management from the University of Bolton, UK.

## 11 Dato' Roslan bin Ab Rahman
Chief Corporate Officer

Dato' Roslan bin Ab Rahman, 55, began his more than 30-year career at TNB in 1980, when he joined the company as an electrical engineer based in Batu Pahat, Johor. He then assumed positions of greater responsibility – from District Officer in Termerloh, Pahang to Senior Manager of Distribution at the headquarters, and Senior District Manager in Klang followed by Kuantan. In 1999, he was promoted to Head of Corporate Quality at TNB's headquarter; two years later he became General Manager (GM) of TNB Putrajaya/ Cyberjaya, following which he was appointed GM of Customer Service and Marketing, Distribution. Prior to being promoted to Chief Corporate Officer on 1 September 2012, Dato' Roslan was Senior General Manager, Operation Region 2, for a period of three years.

Dato' Roslan holds a Bachelor of Science in Electrical Engineering from the University of Southampton, UK.

## 12 Norazni binti Mohd Isa
Company Secretary

Norazni binti Mohd Isa, 49, has served more than 22 years in TNB, with vast experience in tender and contract management. She held various positions in the Shared Purchasing Department, Procurement Division. Previous positions in TNB before assuming her current role include Legal Executive in the Legal Services Department, Company Secretary's Office, Manager of Licensing and Compliance Unit in Corporate Communications Department and Head of Tender and Contract, Procurement Division. Norazni was appointed as a Deputy Company Secretary on 1 April 2011 and assumed the position of Joint Company Secretary on 1 July 2011 and subsequently to her present position as Company Secretary on 31 May 2012.

Norazni obtained a Diploma and an Advanced Diploma in Law from MARA Institute of Technology (now Universiti Teknologi MARA) and a Masters of Law from the University of Malaya.

YOU SEE

WE SEE...

# TRANSFORMING ECONOMIES TO THE NEXT LEVEL OF GROWTH

TNB is a conduit to the nation's phenomenal industrial development, our extensive and reliable network serving as one of the major contributors to attracting foreign investments into Malaysia. As the leading energy producer, we play a key role in sustaining world-class power supply to keep the nation's economic engine going.

# KEEPING THE LIGHTS ON

# Statement of Corporate Governance

Corporate governance is core to ensuring the creation, protection and enhancement of shareholders' value. The Board maintains and requires that the Management of TNB maintains the highest level of corporate ethics.

The Board of Directors of TNB (Board) is concerned to ensure that the Group is properly managed to protect and enhance shareholders' interests, and that the Company, its Directors, officers and employees operate in an appropriate environment of corporate governance.

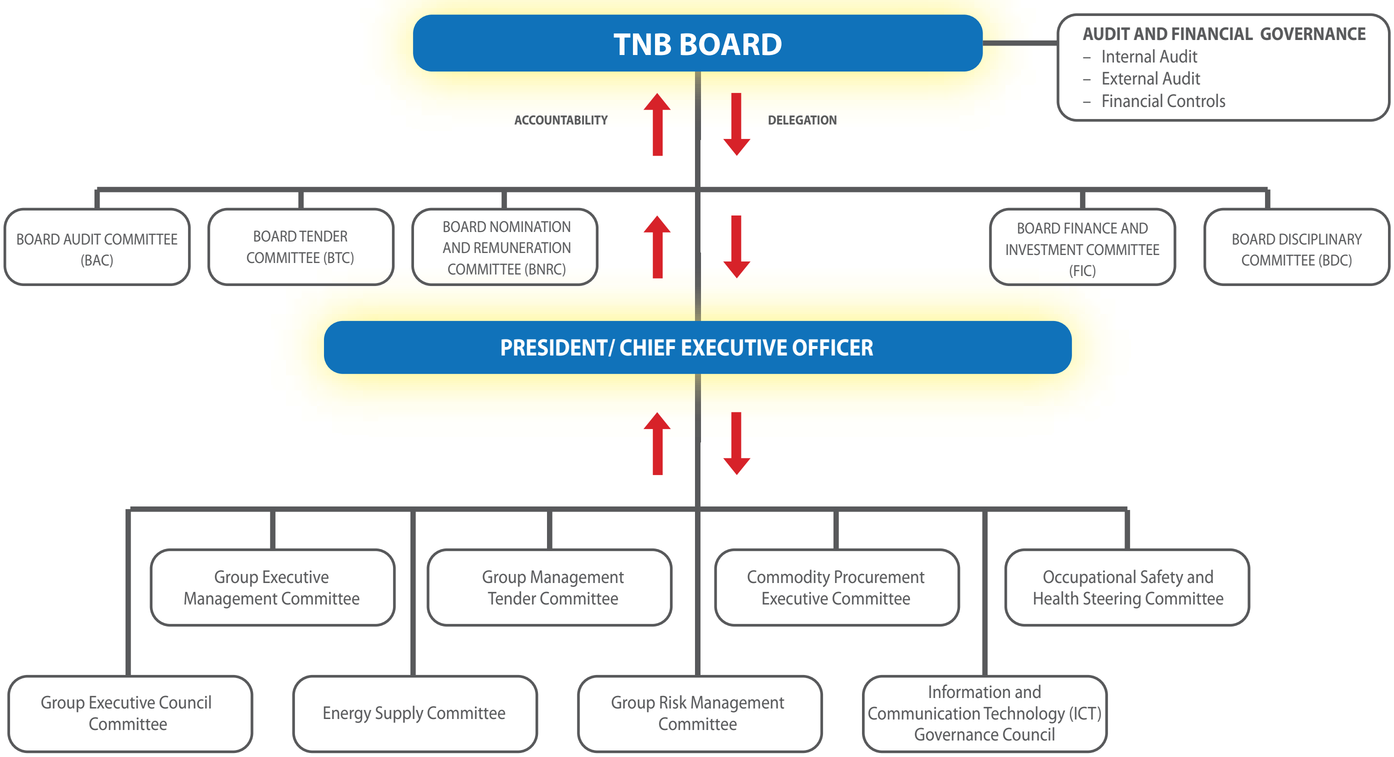
The Board has adopted a corporate governance framework comprising principles and policies that are consistent with the Malaysian Code of Corporate Governance (Revised 2007) (the Code) and the Main Market Listing Requirements of Bursa Malaysia Securities Berhad (MMLR). This framework is designed to promote responsible management and assists the Board to discharge its corporate governance responsibilities on behalf of the Company's shareholders.

The statement outlines the Group's main corporate governance practices and policies in place throughout the Financial Year and at the date of this statement, through discussion of:

i. Clear Roles and Responsibilities;
ii. Strengthen Composition;
iii. Reinforce Independence;
iv. Foster Commitment;
v. Uphold Integrity in Financial Reporting;
vi Recognise and Manage Risks;
vii. Ensure Timely and High Quality Disclosure;
viii. Strengthen Relationship Between Company and Shareholders.

In furtherance, the Board supports the eight (8) principles and 26 recommendations laid down in the Malaysian Code of Corporate Governance 2012 in achieving excellence in corporate governance through reinforcing self and market discipline and promoting good compliance and corporate governance culture. The Board will review the existing corporate governance practices throughout the Group and will undertake appropriate action in embedding the said principles and recommendations of the Malaysian Code of Corporate Governance 2012 in the existing framework.

## CORPORATE GOVERNANCE FRAMEWORK



# Statement of Corporate Governance



## CLEAR ROLES AND RESPONSIBILITIES

### Principal Responsibilities of the Board

The Board is primarily responsible for setting and reviewing the strategic direction of the Group and monitoring the implementation of that strategy by the Management including:

- Approving the strategic direction of the Group;
- Promoting ethical and responsible decision-making;
- Monitoring compliance with all applicable laws and regulations, applicable accounting standards and significant corporate policies;
- Overseeing and reviewing the conduct of the Group's business including its control and accountability systems;
- Approving the annual operating and capital budget and monitoring the financial performance of the Group;
- Appointing and determining the duration, remuneration and other terms of appointment of the President/Chief Executive Officer as well as the Senior Management;
- Evaluating and monitoring the performance of the President/Chief Executive Officer and the Senior Management through their Key Performance Indicators (KPIs);
- Developing and reviewing the succession planning of the Senior Management; and
- Monitoring and reviewing the Group's Risk Management System and internal compliance and control.

The Articles of Association of the Company enable the Board to delegate to Board Committees and the Management. The roles and responsibilities delegated to the Board Committees are captured in the Terms of References (TORs) of each of the established Committees.

The Delegated Authority Policy Framework outlines principles to govern decision-making within the Group, including appropriate escalation and reporting to the Board. The Board has also delegated to the President/Chief Executive Officer, and through the President/Chief Executive Officer to other Senior Management, responsibility for the day-to-day management of the Company. These delegations balance effective oversight with appropriate empowerment and accountability of Management.

The distinct and separate roles of the Chairman and President/Chief Executive Officer, with a clear division of responsibilities, ensures a balance of power and authority, such that no one individual has unfettered power of decision-making.

TNB Board is headed by Tan Sri Leo Moggie, whose extensive knowledge, experience and reputation is unrivalled in the industry. He plays a vital role in leading and guiding the Board with a keen focus on governance and compliance. He maintains a constant flow of dialogue with the President/Chief Executive Officer and provides appropriate mentoring and guidance. Tan Sri Leo Moggie also acts as a conduit between the Management and the Board, and serves as the primary point of communication between the Board and the President/Chief Executive Officer.

The President/Chief Executive Officer, Datuk Wira Ir. Azman bin Mohd and his Management team are responsible for developing the strategic objectives for the business and for the day-to-day management of the Company with all powers, discretions and delegations authorised from time to time by the Board.

### Board of Directors

The Board may appoint a new Director either to fill a casual vacancy or to add to the existing Directors, provided the total number of Directors does not exceed 12 as stipulated in the Articles of Association of the Company. The Minister of Finance Incorporated (MoF Inc), being the Special Shareholder, shall have the right to appoint up to six (6) Directors.

The Board currently has ten (10) members, six (6) of whom are Independent Non-Executive Directors. These Directors are considered by the Board to be independent of management and free of any business or other relationship or circumstances that could materially interfere with the exercise of objective, unfettered or independent judgment.

The Board considers that it should include significant representation by Directors who are capable and willing to make decisions in the best interests of the shareholders, free from interests or influences which conflict with that duty and are also independent of the management.

The Board collectively has a broad range of experience and skills appropriate to meet its objectives. Board members have expertise and experience in areas of public service, administration, finance, engineering, law, accounting and business. A brief profile of each Director is presented on pages 84 to 89 of the Annual Report.

# Statement of Corporate Governance



**Re-election of Directors**

The Company's Articles of Association states that one third of the Directors shall retire from office by rotation at each Annual General Meeting (AGM) and all Directors shall retire from office at least once every three (3) years but shall be eligible, and may offer themselves for re-election.

Sections 129(2) and 129(6) of the Companies Act, 1965 state that a Director who is over 70 years of age shall retire at every AGM and may offer himself for re-appointment to hold office until the Company's next AGM.

The Board makes recommendations concerning the re-election of any Director by shareholders at the AGM. Information on the Directors standing for re-election at the forthcoming 22nd AGM is contained in the Statement Accompanying Notice of the 22nd AGM.

**Board Committees**

TNB's five (5) standing Board Committees assist the Board in its oversight functions. The functions of the Committees are governed by clearly defined TORs, which are reviewed periodically to ensure that they are relevant and up-to-date. The five (5) Board Committees are as follows:

i. Board Audit Committee

ii. Board Tender Committee

iii. Board Nomination and Remuneration Committee

iv. Board Finance and Investment Committee

v. Board Disciplinary Committee

Each Committee has to submit reports of their respective deliberations and recommendations to the Board. All deliberations and recommendations taken have to be minuted and approved by each Committee and confirmed by the Chairman of the Committee at the next Board's meeting.

The salient TORs of the five (5) established Board Committees are as follows:

**Board Audit Committee (BAC)**

Responsibilities

- The principal function of the BAC is to oversee the integrity of the financial statements in compliance with the legal and applicable accounting standard and to assess the effectiveness of the Group's enterprise wide risk management and internal control framework.
- The detailed TOR of the BAC are on pages 125 to 128 of the Annual Report.

**Board Tender Committee (BTC)**

Responsibilities

- To establish the framework of TNB's Procurement Policy and Procedures.
- To advise the Board regarding the details and implementation of the framework of TNB's Procurement Policy and Procedures.
- To assist the Board in regulating the compliance of Senior Management and Executive Director with TNB's Procurement Policy and Procedures.
- To ensure TNB complies with the applicable laws, regulations, rules and guidelines to achieve best practices in its procurement of equipment, materials, work and services.

**Board Nomination and Remuneration Committee (BNRC)**

Responsibilities

- To identify and recommend new nominees to the Board, Board Committees and TNB's Group of Companies.
- To assist the Board in reviewing the Board's required mix of skills, experience and other qualities, including core competencies which Non-Executive Directors should bring to the Board.
- To implement the process formulated by the Board to assess the effectiveness of the Board as a whole, the Board Committees and the contribution of each individual Director.
- To determine and recommend to the Board the remuneration packages of Non-Executive Directors.

# Statement of Corporate Governance



**Board Finance and Investment Committee (FIC)**

Responsibilities

To establish a framework of policies to assist the Committee in making recommendations to the Board in relation to the management of the Group's financial and investment activities as well as in evaluating corporate proposals.

**Board Disciplinary Committee (BDC)**

Responsibilities

- To manage disciplinary issues and actions with regard to employees' misconduct except for the hearing of appeal of executives of grade M15 and above or equivalent grade with regard to disciplinary cases, for which the power lies with the Board.
- To establish new disciplinary procedures or amend existing procedures whenever applicable, subject to the Board's approval.

**Board Meetings**

The Board schedules monthly meetings with additional meetings convened as and when key strategic issues or urgent matters arises that require deliberation in between the scheduled meetings. During the Financial Year under review, 14 Board meetings were held and all Directors complied with the requirement of at least 50% attendance as prescribed by the MMLR.

The Board and Board Committee meetings are scheduled well in advance, with dates for the year circulated in the month of October of the preceding year to give the Directors ample time to plan ahead.

A pre-Board meeting is held prior to any Board meeting for the Management to provide the Chairman with insights into the papers to be deliberated. Senior Management and external advisors may be invited to attend Board meetings to advise the Board and to furnish information or clarification as and when required on matters to be deliberated so as to enable the Board to make informed decisions. When a Director is unable to attend a meeting, his views are sought in advance then put to the meeting to facilitate a comprehensive discussion. This way, each Director makes himself/herself available to fellow Directors and contributes to all major decisions before the Board.

The agenda of Board meetings is drawn up upon consultation with the Chairman at the pre-Board meetings, after which the agenda and Board papers are circulated to Board members at least three (3) working days prior to the Board meetings. This is to allow the Directors to review, consider and if necessary obtain further information on the matters to be deliberated at the meeting.

A comprehensive Board paper is prepared which includes the objectives, background, issues, implications, risks and other relevant information to facilitate the Board to make informed and effective decisions.

Board meetings were also held at various business operating units or sites of new projects to allow the Board to better assess progress made and note any other important issue. The Board visited TNB's two (2) major on-going projects, namely the 1x1,000MW Manjung Coal Fired Power Plant Project and the Hulu Terengganu Hydroelectric Project during the Financial Year under review.

Decisions of the Board are made unanimously or by consensus and these decisions and conclusions are recorded in the minutes. Minutes of the meetings are circulated to all Directors for their perusal and confirmation. The Directors may request for clarification or raise comments on the minutes prior to confirmation of the minutes.

The number of meetings of the Board and Board Committees held during the Financial Year ended 31 August 2012 and the number of meetings attended by each Director and Committee member are set out below.

# Statement of Corporate Governance



Board and Board Committee Members attendance details for the Financial Year ended 31 August 2012:

| Name of Directors | BOD | | BAC | | BTC | | BNRC | | FIC | | BDC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Attendance | % | Attendance | % | Attendance | % | Attendance | % | Attendance | % | Attendance | % |
| Tan Sri Leo Moggie[1] | 14 (Chairman) | 100 | – | | – | | 6 | 100 | 5 (Chairman) | 100 | – | |
| Datuk Wira Ir. Azman bin Mohd[2] | 14 | 100 | – | | – | | – | | – | | – | |
| Datuk Nozirah binti Bahari[3] | 12 | 86 | – | | 12 (Chairman) | 92 | – | | – | | – | |
| Dato' Mohammad Zainal bin Shaari | 12 | 86 | – | | 8 | 62 | 8 | 100 | 5 | 100 | – | |
| Dato' Zainal Abidin bin Putih | 14 | 100 | 14 (Chairman) | 100 | – | | – | | 5 | 100 | – | |
| Tan Sri Dato' Hari Narayanan a/l Govindasamy | 13 | 93 | 12 | 86 | – | | 7 | 88 | – | | – | |
| Dato' Fuad bin Jaafar | 13 | 93 | – | | 12 | 92 | 7 | 88 | – | | 1 | 100 |
| Tan Sri Dato' Seri Siti Norma binti Yaakob[4] | 14 | 100 | – | | – | | 8 (Chairman) | 100 | 5 | 100 | 1 (Chairman) | 100 |
| Dato' Abd Manaf bin Hashim | 14 | 100 | 14 | 100 | 13 | 100 | – | | – | | 1 | 100 |
| Datuk Chung Hon Cheong[5] | 14 | 100 | 12 | 86 | – | | – | | 4 | 80 | N/A* | |
| Suria binti Ab Rahman (Alternate Director to Dato' Mohammad Zainal bin Shaari) | 1 | 100 | – | | 5 | 100 | – | | – | | – | |
| Dato' Sri Che Khalib bin Mohamad Noh[6] | 11 | 100 | – | | – | | – | | – | | – | |
| **Number of Meetings held in FY2012** | **14** | | **14** | | **13** | | **8** | | **5** | | **1** | |

* No meeting was held since the appointment date.

**Note:-**

1 Ceased as Chairman of BNRC w.e.f. 22 May 2012
2 Redesignated as President/Chief Executive Officer w.e.f. 1 July 2012
3 Ceased as member of BDC w.e.f. 27 January 2012
4 Appointed as Chairman of BNRC w.e.f. 22 May 2012
5 Appointed as member of BDC w.e.f. 27 January 2012
6 Ceased as President/Chief Executive Officer w.e.f. 30 June 2012

# Statement of Corporate Governance



### Directors' Code of Ethics

The Board continues to observe a high standard of ethical conduct based on the Company Directors' Code of Ethics established by the Companies Commission of Malaysia.

In addition, each Director is supplied with the Directors' Handbook, which provides reference to the Directors in relation to their professional responsibilities as well as the terms and conditions of their service. The Directors' Handbook is updated as and when the need arises so as to reflect any changes in the rules and procedures that govern the conduct of the Directors.

### Indemnification of Directors and Officers

Directors and Officers are indemnified under a Directors' and Officers' Liability Insurance against any liability incurred by them in discharging of their duties while holding office as Directors and Officers of the Company. The Directors and Officers shall not be indemnified where there is any negligence, fraud, breach of duty or breach of trust proven against them.

### Supply of Information and Access to Advice

All Directors have unrestricted access to company records and information, and receive regular detailed financial and operational reports from the Management.

The Chairman and other Non-Executive Directors regularly consult with the President/Chief Executive Officer, Chief Financial Officer and other Senior Management, and may consult with, and request additional information from, any of the Group's employees.

The Board collectively and individually has the right to seek external and independent professional advice at the Company's expense, to help carry out its responsibilities.

The Board Breakout Session (BBO) is an avenue for the Board and Management to deliberate and exchange views as well as opinions in formulating strategic plans and to chart the direction of the Group. At these sessions, the Management will highlight to the Board, issues and challenges encountered by the Group. During the Financial Year under review, a BBO was held on 9 February 2012.

### Company Secretary

The Company Secretary appointed by the Board attends Board and Board Committee meetings and is responsible for providing Directors with advice on compliance and corporate governance issues. The Company Secretary is responsible for the operation of the secretarial functions, including lodgments with relevant statutory and regulatory bodies, the administration of Board and Board Committee meetings (including preparation of the minutes, matters arising and Chairman's reports), the management of dividend payments and the Employees' Share Option Scheme (ESOS), the administration of the Company's subsidiaries and oversight of the relationship with the Company's Share Registrar.

## STRENGTHEN COMPOSITION

The Board strives to achieve a balance of skills, experience, diversity and perspective among its Directors.

The BNRC is delegated the responsibility of reviewing and making recommendations to the Board regarding Board composition and to assist with the selection and appointment of high calibre Directors who are able to meet the present and future needs of the Company. The BNRC is headed by Tan Sri Dato' Seri Siti Norma binti Yaakob, an Independent Non-Executive Director and a majority of the Committee members are also Independent Non-Executive Directors.

The BNRC conducts an annual review of the size and composition of the Board and Board Committees, taking into consideration the required mix of skills, competencies and experience relevant to the business of TNB.

For the year under review, the Board is satisfied with the existing number and composition of its members and is of the view that, with the current mix of skills, knowledge, experience and strength, the Board is able to discharge its duties effectively and in a competent manner.

# Statement of Corporate Governance



**Board Performance Evaluation**

The BNRC is also responsible for undertaking the annual assessment of the Board's performance as a whole and the performance of its Committees. This is used as a tool to recognise the Board's strengths and to identify gaps or areas for improvement for the Board as well as its Committees. The Board evaluates its overall performance against predetermined criteria which cover the following key areas:

- Board Structure
- Board Operations and Interaction
- Board Roles and Responsibilities
- Understanding the Committees' Roles
- Mix of Skills and Knowledge
- Commitment of Members
- Depth of Discussions

The findings of the evaluation are compiled into a report and deliberated by the BNRC and subsequently, by the Board.

The Board performance evaluation process in 2011 reported that the Board and Board Committees had continued to operate effectively in discharging their duties and responsibilities. On the whole, the Board is of the opinion that the Directors have fulfilled their responsibilities as members of the Board and Board Committees.

**Directors' Remuneration Framework**

The Board, with the assistance of the BNRC, reviews the overall remuneration policy of the Non-Executive Directors, Executive Director and Senior Management to attract and retain executives and Directors who will create sustainable value and returns for members and other stakeholders of the Company.

The Board as a whole recommends the remuneration of the Non-Executive Directors to the shareholders for approval at the AGM. Non-Executive Directors are paid fixed monthly fees, meeting allowances and benefits-in-kind comprising reimbursement on electricity bills and business peripherals.

The policy for Directors' remuneration is to provide a package that is able to attract and retain Directors of calibre, thus acquire the leadership skills and experience required. The policy also ensures that the remuneration package does commensurate with the Director's responsibilities for the effective management and operations of the Group.

The remuneration package for the Executive Director is structured in such a way as to link rewards to corporate and individual performance. It comprises salary, allowances, bonuses and other customary benefits as accorded by comparable companies. A significant portion of an Executive Director's compensation package has been made variable, to be determined by performance during the year against individual KPIs in a scorecard aligned with the corporate objectives as approved by the Board. The Executive Director abstains from deliberation and voting on his/her remuneration at Board meetings.

The BNRC reviews the performance of the Executive Director annually and submits recommendations to the Board on adjustments in remuneration and/or rewards to reflect the Executive Director's contributions towards the Group's achievements for the year.

# Statement of Corporate Governance

Details of comprehensive remuneration package of each Director of the Company, categorised into appropriate components for the Financial Year ended 31 August 2012:

| Name of Directors | (i) Salary<br>(ii) Contribution to EPF<br>(RM) | Director's Fees | | Meeting Allowances | | (i) Bonus<br>(ii) Variable Pay<br>(iii) Ex-Gratia<br>(iv) Completion Payment<br>(RM) | Benefits-in-Kind | | | | Total<br>(RM) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Company<br>(RM) | Subsidiaries<br>(RM) | Company<br>(RM) | Subsidiaries<br>(RM) | | (i) Car Allowance<br>(ii) Management Allowance<br>(iii) Special Allowance<br>(RM) | Utilities<br>(RM) | Others<br>(RM) | Subsidiary<br>(RM) | |
| **Executive Directors** | | | | | | | | | | | |
| Datuk Wira Ir. Azman bin Mohd | (i) 706,450.00<br>(ii) 117,897.00 | – | – | – | – | (i) 50,000.00<br>(ii) 132,060.00<br>(iii) 50,000.00 | (i) 85,000.00<br>(ii) 8,000.00<br>(iii) – | 906.00 | 28,338.04 | – | |
| | **824,347.00** | **–** | **–** | **–** | **–** | **232,060.00** | **93,000.00** | **906.00** | **28,338.04** | **–** | **1,178,651.04** |
| Dato' Sri Che Khalib bin Mohamad Noh (Ceased as President/ Chief Executive Officer w.e.f. 30 June 2012) | (i) 1,000,000.00<br>(ii) 1,012,308.00 | – | – | – | – | (i) –<br>(ii) 460,000.00<br>(iii) –<br>(iv) 4,201,680.00 | (i) 98,000.00<br>(ii) –<br>(iii) 6,000.00 | – | 285,792.10 | – | |
| | **2,012,308.00** | **–** | **–** | **–** | **–** | **4,661,680.00** | **104,000.00** | **–** | **285,792.10** | **–** | **7,063,780.10** |
| **Non-Executive Directors** | | | | | | | | | | | |
| Tan Sri Leo Moggie | – | 180,000.00 | 300,000.00 | 46,500.00 | 37,300.00 | – | – | 4,253.86 | 14,570.60 | – | 582,624.46 |
| Datuk Nozirah binti Bahari | – | 120,000.00 | – | 37,500.00 | – | – | – | – | 20,000.00 | – | 177,500.00 |
| Dato' Mohammad Zainal bin Shaari | – | *120,000.00 | – | *39,500.00 | – | – | – | 27,774.65 | 10,000.00 | – | 197,274.65 |
| Dato' Zainal Abidin bin Putih | – | 120,000.00 | – | 51,500.00 | – | – | – | 21,556.75 | 10,000.00 | – | 203,056.75 |
| Tan Sri Dato' Hari Narayanan a/l Govindasamy | – | 120,000.00 | 18,000.00 | 42,000.00 | 850.00 | – | – | 4,509.00 | 10,000.00 | – | 195,359.00 |
| Dato' Fuad bin Jaafar | – | 120,000.00 | 36,000.00 | 41,000.00 | 6,800.00 | – | – | 7,946.60 | 12,925.58 | 6,000.00 | 230,672.18 |
| Tan Sri Dato' Seri Siti Norma binti Yaakob | – | 120,000.00 | – | 38,000.00 | – | – | – | 1,829.45 | 10,000.00 | – | 169,829.45 |
| Dato' Abd Manaf bin Hashim | – | 120,000.00 | – | 51,000.00 | – | – | – | 1,272.20 | 19,472.40 | – | 191,744.60 |
| Datuk Chung Hon Cheong | – | 120,000.00 | – | 40,500.00 | – | – | – | 22,670.20 | 9,972.00 | – | 193,142.20 |
| Suria binti Ab Rahman (Alternate Director to Dato' Mohammad Zainal bin Shaari | – | – | – | *8,000.00 | – | – | – | – | – | – | 8,000.00 |
| **Total** | **2,836,655.00** | **1,140,000.00** | **354,000.00** | **395,500.00** | **44,950.00** | **4,893,740.00** | **197,000.00** | **92,718.71** | **431,070.72** | **6,000.00** | **10,391,634.43** |

** Inclusive of RM120,000.00 and RM47,500.00 paid to Khazanah Nasional Berhad, in respect of Director's Fees and Meeting Allowances provided for Dato' Mohammad Zainal bin Shaari and Puan Suria binti Ab Rahman.*

Accountability

# Statement of Corporate Governance



## REINFORCE INDEPENDENCE

The Board considers that it should include significant representation by Directors who are capable and willing to make decisions which are in the best interests of shareholders free from interests and influences which conflict with that duty and are also independent of Management.

Independent Directors are those who have the ability to exercise their duties unfettered by any business or other relationship and are willing to express their opinions at the Board free of concern about their position or the position of any third party.

Currently, TNB's Board consists of six (6) Independent Non-Executive Directors. The Independent Directors fulfill the criteria of "Independence" as prescribed under Paragraph 1.01 of the MMLR. The Independent Non-Executive Directors are persons of high calibre and integrity, who collectively provide skills and competencies to ensure the effectiveness of the Board. Among the key criteria of the independence framework adopted by TNB are independence from Management and the absence of any business relationship which could materially interfere with the Independent Director's judgment and ability to provide a strong, valuable contribution to the Board's deliberations or which could interfere with the Director's ability to act in the best interest of TNB.

The Board continually assesses the independence of each Director in accordance with the terms of the Directors' Handbook, the interests they have disclosed and such other factors as the Board determines appropriate to take into account.

Dato' Zainal Abidin bin Putih, who was appointed as the Senior Independent Non-Executive Director in 2010, acts as a designated contact to whom shareholders and stakeholders may convey any concerns or queries on the affairs of the Company, as an alternative to the formal channel of communication with shareholders.

The Senior Independent Non-Executive Director may be contacted at the following email address: cosec@tnb.com.my.

### Conflicts of Interests

Over and above the issue of independence, each Director has a continuing responsibility to determine whether he/she has a potential or actual conflict of interest in relation to any material matter which comes before the Board. Such a situation may arise from external associations, interests or personal relationships.

The Company has adopted a practice whereby each Director is required to declare whether he/she has any interest in any transaction. If so, the Director abstains from deliberations and decisions of the Board on the subject proposal.

## FOSTER COMMITMENT

### Commitment by the Board

The Directors' Handbook stipulates that a Director, upon acceptance of his appointment, must commit sufficient time to carry out his duties and declare to the Board details of all other significant business and interests, indicating broadly the time spent on such commitments. The Director must advise the Board of any subsequent changes to these commitments.

In line with the MMLR, all Directors of TNB complied with the requirements on directorships held in other companies.

### Continuing Development Program for Directors

An induction programme is made available to newly appointed Directors, specifically designed to help familiarise them with issues relating to the current business before the Board. Newly appointed Directors are provided with a comprehensive information pack which contains the Directors' Handbook, the Company's Memorandum and Articles of Association, relevant Acts to the nature of business of the Company, the latest Annual Report, TNB's Procurement Policy and Procedures, Procurement's Code of Conduct and Code of Ethics in order to facilitate the Directors in discharging their duties.

New Board members are provided with the opportunity to experience first-hand the operations of the Company and to meet and discuss all aspects of the Company's operations with the Senior Management. As part of the induction programme, the Company Secretary provides access to information in areas such as operations, finance, treasury and risk management to assist the new Board member as required.

All Directors of the Company have successfully completed the Mandatory Accreditation Programme (MAP) as prescribed by the MMLR. The Board encourages Directors to continue their education by participating in workshops held throughout the year, visiting relevant project sites and undertaking relevant external programmes. The Board has attended training programmes such as McCloskey South Africa Coal Exports Conference 2012, Building High Performance Directors (BHPD), The Malaysian Corporate Governance Code 2012 – The Implication and Challenges to Public Listed Companies, Financial Institutions Directors' Education Program and MINDA Luncheon Talk on Board Composition and Diversity: Strategies, Lessons and Looking Forward.

# Statement of Corporate Governance



The Company Secretary facilitates in organising internal and external programmes, training sessions, briefings, workshops and seminars for Directors. The annual Board Development Programme (BDP) is organised in-house as part of TNB's Continuing Development Programme for the Board. During the Financial Year under review, BDP 2012 entitled *Electricity Industry Reform, Markets and Strategy Discussions on Maintaining the Vertically Integrated Utility*, by Dr. Fereidoon P. Sioshansi, President of Menlo Energy Economics, USA, was conducted.

The Board also participates in annual Board Technical Visits, either locally or abroad, with the aim of enhancing the Board's understanding and knowledge of the technical and operational aspects of the power sector as well as to keep abreast with the latest technologies.

## UPHOLD INTEGRITY IN FINANCIAL REPORTING

### Financial Reporting

The Board aims to provide a clear, balanced and comprehensive assessment of the Group's financial performance and prospects via the Audited Financial Statements and quarterly financial reports as well as through material disclosure made in accordance with the MMLR.

The Board is assisted by the BAC to oversee the integrity of the Group's financial reporting and as part of these roles, the operation of the financial reporting processes. The processes are aimed at providing assurance that the financial statements and related notes are completed in accordance with applicable legal requirements and accounting standards and give a true and fair view of the Group's financial positions.

For the year under review, a session between the BAC and the external auditors in the absence of Management was held as part of the medium for greater exchange of views and opinions between both parties in relation to the financial reporting.

## RECOGNISE AND MANAGE RISKS

### Internal Control

It is important to emphasise that the ultimate responsibility for ensuring a sound internal control system and reviewing the effectiveness of the system lies with the Board. The Group's inherent system of internal control is designed to manage, rather than eliminate, the risk of failure to achieve the Company's corporate objectives as well as to safeguard shareholders' investments and the Company's assets. Details of the Company's internal control system and framework are set out in the Statement of Internal Control on pages 116 to 119 in the Annual Report.

## ENSURE TIMELY AND HIGH QUALITY DISCLOSURE

TNB's practice is to release all price sensitive information to Bursa Malaysia Securities Berhad (Bursa Malaysia) in a timely manner as required under the MMLR and to the market and community generally through TNB's media releases, website and other appropriate channels.

Through TNB's Corporate Disclosure Policy, TNB demonstrates its commitment to achieving best practice in terms of disclosure by acting in accordance with the spirit, intention and purpose of the applicable regulatory requirements and by looking beyond form to substance. The Corporate Disclosure Policy reflects relevant obligations prescribed by the MMLR.

For disclosure purposes, price sensitive information is information that a reasonable person would expect to have a material effect on the price or value of TNB's securities. The Company Secretary is responsible for reviewing proposed disclosures and making decisions in relation to what information can or should be disclosed to the market. Each division in TNB is required to inform the Company Secretary about any potentially price sensitive information concerning TNB as soon as this becomes known.

### Insider trading

The Directors and Senior Management of TNB are prohibited from trading in securities or any kind of price sensitive information and knowledge which have not been publicly announced in accordance with the MMLR and the relevant provisions of the Capital Markets and Services Act 2007. Notices on the closed period for trading in TNB's securities are circulated to Directors and Senior Management who are deemed to be privy to any price sensitive information and knowledge, in advance of the closed period where applicable.

# Statement of Corporate Governance



## STRENGTHEN RELATIONSHIP BETWEEN COMPANY AND SHAREHOLDERS

The Board of TNB is committed to providing shareholders, investors and other stakeholders with comprehensive, timely and equal access to information about the Group's activities to enable them to make informed investment decisions.

TNB employs a wide range of communication approaches such as direct communication and publication of all relevant Group's information on the website at www.tnb.com.my.

TNB utilises its corporate website as a means of providing information to its shareholders and the broader investment community. A section of the website is dedicated to TNB's investors where media releases, investor presentations and quarterly and annual financial statements are available for review. These announcements, presentations and reports are posted on the website immediately after being released to the market.

Shareholders are encouraged to attend the AGMs and to use the opportunity to ask questions and vote on important matters affecting the Group, including the election of Directors, the receipt of the Audited Financial Statements and the advisory vote on the remuneration report. The external auditors attend the AGM and are available to answer questions.

TNB further encourages shareholders to access the Annual Report online to complement the Group's commitment to the environment as well as to achieve greater cost efficiencies. Nevertheless, shareholders are still provided with the Annual Report in CD-ROM format together with a summarised version of the Financial Statements, Notice of AGM and Form of Proxy.

### Relations Between the Company and Investors

TNB continually strives towards higher standards of disclosure and corporate transparency by disseminating accurate and relevant information to the marketplace expeditiously to help investors make informed decisions, providing regular access to the Company's Management through one-on-one meetings (in-house meetings), conferences, conference calls and briefings as well as meeting investors' growing demand for transparency and governance and balancing that with commercial sensitivities of TNB's business operations. On top of that, developments of the International Financial Reporting Standards (IFRS) convergence were communicated to uphold transparency, ensuring that all stakeholders are informed at all times.

The Investor Relations (IR) team has continued to engage with the buy-side investors and sell-side analysts in order to provide them with company updates. This is important as IR officers can gain internal traction and secure access to key information flow and understand the expectations of stakeholders. Fund managers around the globe face ever-increasing challenges to obtain optimal valuation. Hence, the Company's engagement with fund managers is vital as the latter will share their views on the factors affecting the decision to invest.

Given current volatility, investors' need for information has grown and they seek to meet more frequently. Over the years, TNB's IR has strengthened its efforts to increase accessibility and visibility of the Company's management to analysts and investor groups. Various communication platforms are offered to the financial fraternity by the IR team, to ensure regular engagement with the institutional investment community.

- ***Quarterly and Full Year Financial Results Announcements***

  TNB conducts media and analyst briefings at its headquarters following its quarterly and full year financial results announcements and subsequent to the release of disclosures to Bursa Malaysia. The Company also hosts conference calls during briefings to accommodate those who are not able to attend as well as to enable the investment community at major financial hubs worldwide to participate.

- ***Analyst Briefing Presentations***

  For the quarterly financial announcements, TNB presents detailed financial statements and other key financial and technical information of the Company in the form of presentation slides, which help the analysts and investors better understand the Group's financial results and performance. These slides are made available promptly on the Company's website under the IR portal following the release of the financial results to Bursa Malaysia. At the same time, a copy of the presentation slides is e-mailed to all analysts and investors on IR's distribution list.

- ***One-on-One & Group Meetings at Conferences***

  Regular participation at local and overseas conferences allows TNB to reach out to local and foreign fund managers on developments within the Group and emerging challenges.

# Statement of Corporate Governance

- ***Site Visits***

  Investors have grown more demanding and requested for more site visits. Hence, as part of our continuous efforts to ensure the financial community gets transparent information and firsthand updates on the Company, during the year under review, IR organised two (2) site visits. The first was a Malaysian Industrial Development Finance (MIDF) visit to Jana Landfill Sdn. Bhd., Puchong to provide better understanding of electricity generation through a renewable energy plant. The second was to the Tuanku Jaafar Power Station, Port Dickson to observe the technical day-to-day operations of a gas-fired power plant and its alternative fuel, distillate.

- ***In-house and External Meetings***

  With a strong domestic and foreign institutional shareholder base, face time with Top Management is crucial to deliver convincing Company's message and views. The Management and IR team frequently play host to local and international fund managers and investors who request for meetings. During these meetings, the fund managers and investors are updated on the Company's business operations and recent developments.

- ***Briefing and Dialogue Sessions***

  As part of IR's annual programme and to provide a better understanding of the Feed-in Tariff (FiT) to research analysts and fund managers, a briefing session on the overview, mechanism and prospect of FiT was held. The event was organised in collaboration with the Sustainable Energy Development Authority (SEDA), whose Chief Operating Officer provided the audience with insights into FiT. A separate event was held for analysts and fund managers to get to know TNB's incoming President/Chief Executive Officer. During this dialogue, the audience was able to voice their queries and views to Management and received immediate feedback.

**Whistle-blowing Procedure**

The Whistle-blowing procedure is a mechanism by which TNB employees, contractors and members of the public are encouraged to report serious issues relating to illegal, unethical or improper conduct on a confidential basis, without fear of possible adverse repercussion. An independent investigation team investigates all reported concerns appropriately and will, where applicable, provide feedback regarding the investigation's outcome.

Complaints can be channeled online via http://wbis.tnb.com.my or by calling the toll-free line at 1-800-888-862.

## RESPONSIBILITY STATEMENT IN RESPECT OF THE FINANCIAL YEAR UNDER REVIEW

*(Pursuant to paragraph 15.26(a) of the MMLR)*

The Board is fully accountable for ensuring the Audited Financial Statements are prepared in accordance with the Companies Act, 1965 and the applicable approved accounting standards set out by the Malaysian Accounting Standards Board so as to present a true and fair view of the state of affairs of the Group and of the profit or loss and cash flow as at the end of the accounting period.

In preparing the Audited Financial Statements, the Directors are satisfied that the applicable approved accounting standards in Malaysia have been complied with and reasonable and prudent judgments and estimates have been made. The Audited Financial Statements are also prepared on a going concern basis as the Board has a reasonable expectation, after having made enquiries, that the Group has adequate resources to continue its operational existence for the foreseeable future.

# Statement of Corporate Governance



## ADDITIONAL COMPLIANCE STATEMENT

1. **Utilisation of Proceeds Raised from Any Corporate Proposal**

   TNB Janamanjung Sdn. Bhd., a wholly owned subsidiary of TNB, raised funds via Sukuk to pay for its Engineering, Procurement and Construction (EPC) Contract. As of 31 August 2012, the Sukuk had raised RM4.850 million, of which RM2,040.82 million was paid to the EPC contractor.

2. **Share Buy-Back for the Financial Year**

   The Company did not propose any share buy-back during the Financial Year under review.

3. **Options, Warrants or Convertible Securities Exercised**

   During the Financial Year under review, 44,896,592 new ordinary shares of RM1.00 each were issued by the Company pursuant to the Employees' Share Option Scheme II (ESOS II) at exercise prices of RM4.45, RM5.06, RM5.08, RM5.36, RM5.45, RM5.59, RM5.62, RM5.64, RM5.74, RM5.86, RM5.93, RM6.09, RM6.24, RM6.40 and RM8.85 per share.

   The new ordinary shares issued during the Financial Year ranked pari passu in all respects with the existing ordinary shares of the Company.

   The Company has been granted exemption by the Companies Commission of Malaysia via a letter dated 8 October 2012 from having to disclose in the Audited Financial Statements the names of the persons to whom options have been granted during the Financial Year and details of their holdings pursuant to Section 169 (11) of the Companies Act, 1965 except for information on employees who were granted options representing 756,000 ordinary shares or more. The employee who was granted options representing 756,000 ordinary shares or more under ESOS II is set out on page 219 in this Annual Report.

4. **American Depository Receipts (ADR)**

   In January 1994, TNB launched its Level 1 American Depository Receipts (ADR) in New York, USA. Each ADR carries an equivalent of four (4) underlying TNB shares. The only custodian bank for TNB's ADR programme is Malayan Banking Berhad. The Bank of New York in the USA is the depository bank and the ADRs are traded over the counter. As at 31 August 2012, a total of 5,013,848 ordinary shares were held through these ADRs, which represented less than 5% of the issued and paid-up capital of the 5,501,553,731 shares of TNB.

5. **Imposition of Sanctions and/or Penalties**

   Neither the Company nor any of its subsidiaries, Directors or Management was imposed with any sanction and/or penalty by the relevant regulatory bodies in the Financial Year ended 31 August 2012.

6. **Non-Audit Fees**

   The Group's non-audit fees payable to the external auditors, Messrs PricewaterhouseCoopers, for the Financial Year ended 31 August 2012 amounted to RM639,147.00 and PKR1,432,910.00.

7. **Variation in Results**

   The Group did not issue any profit forecast for the Financial Year ended 31 August 2012.

8. **Profit Guarantee**

   The Group did not issue any profit guarantee for the Financial Year under review.

# Statement of Corporate Governance



**9. Material Contracts**

Save as disclosed below, the Group and/or its subsidiaries did not enter into any material contracts involving the interest of the Directors or Major Shareholders which are still subsisting as at 31 August 2012:

| | |
|---|---|
| **Lender** | Lembaga Kumpulan Wang Simpanan Pekerja (KWSP) |
| **Borrower** | Tenaga Nasional Berhad |
| **Borrower/Lender Relationship** | KWSP is one of the Major Shareholders in TNB (approximately 13.88% as at 22 August 2012) |
| **Purpose of Loan** | Refinancing |
| **Amount** | An aggregate of RM2,800 million |
| **Details of facility** | Facility I – RM700.0 million<br>Facility II – RM700.0 million<br>Facility III – RM700.0 million<br>Facility IV – RM350.0 million<br>Facility V – RM350.0 million |
| **Interest Rate** | Facility I – 5.45%<br>Facility II – 5.50%<br>Facility III – 5.60%<br>Facility IV – 5.65%<br>Facility V – 5.70% |
| **Payment terms** | <u>Interest Payment</u><br>30 June and 31 December each calendar year<br><br><u>Principal repayment</u><br>Facility I – 31 December 2019<br>Facility II – 31 December 2020<br>Facility III – 31 December 2021<br>Facility IV – 31 December 2024<br>Facility V – 31 December 2025 |

**10. Related Party Transactions**

The Group has established appropriate procedures to ensure it complies with MMLR with regard to related party transactions. All related party transactions are reviewed by the Group Internal Audit (GIA), following which a Group-Wide Report is submitted to the BAC on a quarterly basis for monitoring purposes.

The Group did not seek any mandate of its shareholders pertaining to related party transactions during the Financial Year under review.

## STATEMENT ON COMPLIANCE WITH THE REQUIREMENTS OF BURSA MALAYSIA IN RELATION TO APPLICATION OF PRINCIPLES AND ADOPTION OF BEST PRACTICES LAID DOWN IN THE MALAYSIAN CODE OF CORPORATE GOVERNANCE

*(Pursuant to paragraph 15.25 of the MMLR)*

The Board is pleased to report to its shareholders that the Group has complied with and shall remain committed to attaining the highest possible standards through the continuous adoption of the principles and best practices of the Code and all other applicable laws.

Signed on behalf of the Board in accordance with their resolution dated 31 October 2012.

**Dato' Zainal Abidin bin Putih**
Senior Independent Non-Executive Director

# Statement of Internal Control



## BOARD RESPONSIBILITY

The Board of Directors (Board) is responsible for the system of internal control at Tenaga Nasional Berhad Group (the Group). The system is designed to safeguard shareholders' investments, the interest of customers, regulators and employees and the Group's assets.

The system of internal control covers risk management, finance, operations, management information systems and compliance with the relevant laws, regulations, policies and procedures. The system is designed to manage rather than eliminate risk that may impede the attainment of the Group's business objectives. Thus, the system only provides reasonable but not absolute assurance against material misstatement, loss or fraud.

The Board has set a framework in place for identifying, evaluating and managing significant risks faced by the Group, except for associate companies and joint ventures which are not under the control of the Group. The framework and risk management processes are reviewed regularly by the Board, and are in line with the *Statement on Internal Control: Guidance for Directors of Public Listed Companies*.

The Board is assisted by Management to ensure that internal controls and risk management practices are implemented within the Group.

## RISK MANAGEMENT

The Board approved the set-up of the Enterprise Wide Risk Management (EWRM) function in 2003. An EWRM framework guides risk management processes and incorporates the assessment, reporting, treatment, monitoring and reviewing of strategic and operational risks within the Group. The Board Audit Committee (BAC) reviews the effectiveness of the EWRM functions and deliberates on the risk reports issued and the risk management activities undertaken during the year. The BAC is assisted by the Group Risk Management Committee, Group Risk Management Working Committee, Chief Risk Officer, Planning Division, EWRM Department and operations staff to effectively embed a risk management culture within the Group.

The EWRM Department works with the Group Internal Audit (GIA) Department to provide assurance on the adequacy and effectiveness of the EWRM system in mitigating and managing risks faced by the Group. In the year under review, the EWRM Department undertook the following initiatives to enhance EWRM implementation within the Group:

- Conducted two (2) risk management forums and 29 risk awareness and review sessions in TNB divisions, departments and subsidiaries.
- Conducted six (6) two-days risk management training sessions as part of the New Executive Training Programme.
- Conducted 11 Risk Management & Compliance Reviews to establish the adequacy of the TNB Risk Information System (TRIS) and the effectiveness of identified mitigation controls.
- Implemented the TRIS Helpdesk for better management of queries/feedback.

## CONTROL STRUCTURES

The Board has established control structures and is committed to evaluating, enhancing and maintaining these to ensure effective strategic and operational control over the Group's business operations. The following key control structures are in place to assist the Board to maintain a proper control environment:

### Board and Management Committees

To promote corporate governance, transparency and accountability, the Board has set up Board and Management Committees to assist in accomplishing the vision, mission, strategies and objectives set for the Group. The Committees oversee the areas assigned to them under their Terms of Reference. The Committees play an important role in directing, monitoring and ensuring that the plans and operations are in accordance with the Group's policies and its approved long-term and short-term business plans. The Committees are:

# Statement of Internal Control



| Board Committees | Management Committees |
| --- | --- |
| • Audit Committee<br>• Tender Committee<br>• Disciplinary Committee<br>• Nomination & Remuneration Committee<br>• Finance & Investment Committee | • Group Executive Council Committee<br>• Group Executive Management Committee<br>• Energy Supply Committee<br>• Group Management Tender Committee<br>• Group Risk Management Committee<br>• Commodity Procurement Executive Committee<br>• Information and Communication Technology Governance Council<br>• Incentive Based Regulation Council |

**Organisation Structure**

The Board has implemented a divisional structure for the Group. Clear lines of authority, responsibility and accountability have been established to support the Group in achieving its vision, mission, strategies and operational objectives. The divisional structure enhances the ability of each division to focus on its assigned core or support functions within the Group.

The Board also reviews and refines the effectiveness of the Group's organisation and control structures to enhance the Group's ability to achieve its strategic and operational objectives and manage challenges in its operating environment. In September 2012, the Board approved the restructuring of the organisation to enhance its effectiveness in achieving its short and long-term objectives. The changes were as follows:

- The Chief Operating Officer (COO) position was abolished when the former COO became the President/Chief Executive Officer.
- A new division, New Business and Major Projects, was established. The Business Development Department, Generation Asset Development Department, Investment Management Department and TNB Repair and Maintenance Sdn. Bhd. are placed in this division.
- A new department, Strategic Management & Performance, was established.
- The Corporate Services Division and Corporate Affairs Division were merged to become the Corporate Affairs & Services Division.

**Management Information Systems**

The Board recognises the importance of leveraging on information and communication technology to promote effective and efficient business operations, timely and accurate communication with stakeholders, and enhance the Group's performance in the long term.

The major systems used by the Group are:

- Enterprise Resource Management System (ERMS)
- eCustomer Information & Billing System (eCIBS)
- Enterprise Human Resources Management System (EHRMS)
- Supervisory Control and Data Acquisition System (SCADA)
- Remote Meter System (RMR)
- Employee Self Service (ESS)
- TNB Outage Management Systems (TOMS)
- Corporate Geospatial Information System (CGIS)

For the Corporate Geospatial Information System (CGIS), four modules have been rolled out in the Financial Year, bringing the total number of operational modules to date to 20. The project spans ten (10) years with 50 modules at the end of the project period.

TNB initiated a Supply Change Management System during the Financial Year and is in the final stages of implementing the following modules within the system:

- Supplier Relationship Management (SRM)
- Contract Lifecycle Management (CLM)
- Spend Performance Management (SPM)

**Group Policies and Procedures**

The Board has approved policies and procedures to govern the financial and operational functions, and ethics of the Group. The policies ensure that ethics and internal control principles and mechanisms are embedded in operations. This enables the Group to respond quickly to evolving risks and immediately report on any significant control failure. The policies and procedures are also reviewed on a regular basis to ensure relevance and effectiveness.

# Statement of Internal Control



Among others, the policies and procedures implemented are:

- Internal Control Guidelines
- Group Financial Policies & Procedures
- Treasury Policy
- Safety & Health Policy
- Environmental Policy
- Investment Policy
- Procurement Policy & Procedures (PP&P)
- Anti-Fraud Policy
- Disciplinary Policy & Procedures
- Information & Communication Policy & Codes of Practice
- Enterprise Wide Risk Management Policy & Guidelines
- Limits of Authority
- Code of Ethics
- Procurement Code of Conduct
- Whistle Blowing Procedures

During the year, the Group Procurement Division undertook several initiatives to improve internal control in the procurement process, as follows:

- PP&P training module for Executives and Non-Executives
- PP&P Dissemination Roadshow Programme
- Revision of circulars relating to Procurement Procedures & Processes, Tenders and Contracts
- Implementation of Procurement Compliance Review
- Mandatory Annual Assessment of Vendors
- Procurement Risk Profile Review

### Talent Management and Development

The Board acknowledges the importance of having leaders with technical and management capabilities to steer the Company forward. A structured talent management framework has been established at both Company and Divisional levels to identify and develop the workforce to achieve the Group's strategic objectives. Development programmes were designed to prepare talents for positions of greater responsibility and expose them to the challenges these entail. In the Financial Year 2012, besides classroom training and project assignments, talents underwent experiential learning through job attachments and secondments.

### Revenue Assurance Department

On 7 August 2009, the Revenue Assurance Department (RAD) was set up following the Board's approval. Its role is to curb meter installation tampering (MIT) and curtail revenue leakages from billing, metering and administrative errors. RAD is also responsible for improving MIT internal control mechanisms and ensure process compliance.

## MONITORING & REVIEW

### Board Interactions with Management via Breakout Sessions

The Board interacts actively with Management during breakout sessions to discuss and review the Group's plans, strategies, performance and risks faced by the Group. During the year, one (1) Board Breakout and two Subsidiary Breakout Sessions were held. The Board Breakout Session provides a monitoring and review mechanism to enhance the Board's effectiveness and enable Management to seek mandates to address risks faced in its internal and external environment. The Subsidiaries Breakout Sessions serve to enhance interaction between TNB and its subsidiaries, and to assist in aligning subsidiaries' policies and procedures to the Group's policies and procedures.

### Business Planning and Budgeting

The Board approved the implementation of a 20-Year Strategic Plan starting from 2005 until 2025. The 20-Year Strategic Plan is divided into four phases to steer the Group towards its vision of becoming a leading corporation in energy and related businesses globally. Each phase comprises a Five-Year Strategic Plan.

The Group's second phase of the Five-Year Strategic Plan, from 2011-2015 (i.e. Gemilang 2015), is geared towards Geographical Expansion. It guides Management in preparing their Annual Operating Plans, Key Performance Indicators (KPIs) and budgets.

The strategies identified in the 20-Year Strategic Plan, Five-Year Strategic Plans and Annual Operating Plans as well as KPIs are reviewed, approved and monitored by the Board. Progress reports of the Five-Year Strategic Plans are presented and deliberated during the Board and Management Breakout sessions.

### Long-Term System Planning and Development

The Board is involved in reviewing and approving Long-Term System Planning and Development. The Planning Division carries out long-term system planning and development of the electricity supply infrastructure, specifically generation capacity development and transmission infrastructure development to cater for load demand. The long-term load forecasts take into consideration changes in the economic climate and are monitored closely to response to the load demand situation.

For generation capacity planning and development, the Planning Division works closely with the Energy Commission to present the load forecast and generation development plans. These plans are endorsed by the Jawatankuasa Perancangan, Pembangunan dan Perlaksanaan Tariff or JPPPET (Planning, Development and Tariff Implementation Committee) which is chaired by the Minister of Energy, Green Technology & Water (KeTTHA). The Board keeps abreast of generation developments. Generation expansion plans

# Statement of Internal Control



formulated for Peninsular Malaysia take into account long-term energy security vis-à-vis the diversification of fuel resources, generation plant type and global energy outlook scenarios.

As for transmission expansion plans, these are submitted by the Planning Division based on the Malaysian Grid Code, Transmission System Reliability Standards and TNB License Conditions. The transmission plans are justified and approved by the Energy Supply Committee at Management level before final approval by the Board.

The above activities were carried out with effect from 1 September 2011, according to the requirements set in the new Licensee Supply Regulations 1990 (Amendment 2002).

**Financial and Operational Review**

The BAC reviews the Group's quarterly financial performance together with Management, and these are subsequently reported to the Board. The quarterly reviews enable the BAC to deliberate and assess the Group's financial results and operational performance. Monthly management accounts, which serve as a monitoring tool, are also circulated to the Board and key Management to provide information on key financial results, operational performance indicators and budget variances to enable them to monitor and contribute towards improving performance.

The BAC also reviews and monitors the imminent implementation of the Malaysian Financial Reporting Standards (MFRS) Framework initiated by the Group Finance Division.

**Division Compliance Departments/Units**

The Board approved the set-up of Compliance departments, units and taskforces at the EWRM Department and Generation, Transmission, Distribution, Group Finance and ICT Divisions. During the Financial Year, a new taskforce was established within Group Human Resources. The Compliance departments, units and taskforces ensure that operations adhere to approved policies and procedures, and enhance control consciousness.

**Group Internal Audit (GIA)**

The GIA was set up by the Board to provide independent assurance of the adequacy of risk management, internal control and governance systems. GIA activities are guided by an Internal Audit Charter which is approved by the BAC.

GIA carries out regular reviews of business processes to assess the adequacy and effectiveness of internal controls, compliance with regulations and the Group's policies and procedures, and highlight significant risks and control weaknesses affecting the Group.

GIA also performs strategic review/consultancy services where relevant to assist entities to improve their operational performance. Ad hoc appraisals, investigations or reviews are also conducted as and when requested by the Board, BAC and Management.

BAC meetings are held regularly to deliberate audit findings, management response, corrective actions, and to monitor actions taken by Management in areas with significant control weaknesses. Follow-up audits are conducted to review the adequacy and effectiveness of corrective actions taken by Management on all significant matters raised. A certain percentage of KPIs is allocated to each Division Head for completion of corrective actions taken by Management. The achievement of the Corrective Action KPIs by each Division is deliberated during the BAC meeting.

GIA has an independent status in the Group and reports functionally to the Board through the BAC. GIA's annual audit plans, budgets, competency and resources are reviewed and approved by the BAC. This is to ensure the adequacy of coverage of significant and high-risk areas and adequacy of resources. The BAC also approves the GIA's outsourcing and co-sourcing of internal audit assignments to facilitate transfer of knowledge from consultants in areas where technical skills are not available internally.

## CONCLUSION

For the Financial Year under review, some weaknesses in internal control were detected. However, after due and careful inquiry, and based on the information and assurance provided, the Board is satisfied that all necessary actions and enhancements in control systems have been taken to address the weaknesses detected. Nevertheless, for areas requiring attention, measures have been and are being taken to ensure on-going adequacy and effectiveness of internal control and to safeguard shareholders' investments and the Group's assets.

This statement is made in accordance with the resolution of the Board of Directors dated 31 October 2012.

# Board Audit Committee Report


1. **Dato' Zainal Abidin bin Putih**
   Chairman
   Senior Independent Non-Executive Director
2. **Tan Sri Dato' Hari Narayanan a/l Govindasamy**
   Independent Non-Executive Director
3. **Dato' Abd Manaf bin Hashim**
   Independent Non-Executive Director
4. **Datuk Chung Hon Cheong**
   Independent Non-Executive Director

The Board Audit Committee (BAC) was established on 9 December 1990 by the Board of Directors to assist the Directors to carry out their responsibilities. The BAC is guided by its Terms of Reference which are set out on pages 125 to 128 of the Annual Report.

## MEMBERSHIP AND MEETINGS

The BAC members and details of their attendance at the BAC meetings held during the Financial Year are as follows:

| No. | Name | Status of Directorship | Independent | No. of Meetings Attended |
|---|---|---|---|---|
| 1. | **Dato' Zainal Abidin bin Putih**<br>Chairman | Non-Executive Director | Yes<br>(Senior Independent) | 14/14 |
| 2. | **Tan Sri Dato' Hari Narayanan a/l Govindasamy**<br>Member | Non-Executive Director | Yes | 12/14 |
| 3. | **Dato' Abd Manaf bin Hashim**<br>Member | Non-Executive Director | Yes | 14/14 |
| 4. | **Datuk Chung Hon Cheong**<br>Member | Non-Executive Director | Yes | 12/14 |

# Board Audit Committee Report

While BAC's Terms of Reference require the Committee to meet six (6) times a year, BAC met 14 times during the Financial Year. The Chief Internal Auditor and Company Secretary who is also the secretary to BAC were in attendance during the meetings. The President/Chief Executive Officer and other officers were invited to the meetings to deliberate on matters within their purview.

After each meeting, the BAC Chairman submits a report on matters deliberated to the Board of Directors for their information and attention. Action sheets are issued by the Company Secretary on the decisions made and actions required. These are circulated to Management for their action.

## SUMMARY OF ACTIVITIES OF THE BOARD AUDIT COMMITTEE

A summary of the activities carried out by the BAC during the Financial Year is set out below:

### Risk Management

- Reviewed the TNB Strategic Risks Report, TNB Biannual Risk Assessment Reports and the activities undertaken by the Enterprise Wide Risk Management Department to promote and improve risk management awareness and processes.

### Internal Audit

- Reviewed and approved Group Internal Audit (GIA)'s structure, budget and Annual Audit Plan to ensure adequacy of resources, competencies and coverage of auditable entities with significant and high risks.
- Reviewed internal audit reports issued by GIA and external parties on the effectiveness and adequacy of governance, risk management, operational and compliance processes.
- Reviewed the adequacy and effectiveness of corrective actions taken by Management on all significant matters raised.
- Reviewed the Quality Assurance Review Report on the internal audit function carried out by an external consultant.
- Deliberated the results of ad-hoc investigations performed and confirmed that appropriate actions were taken to correct the weaknesses.
- Reviewed and approved the appointment of consultants for co-sourced audits in technical areas.
- Reviewed the Terms of Reference, list of consultants, timeframe and budget for consultancy fees for TNB's Management & Engineering Audit 2012.
- Assessed the performance of the Group Internal Audit Department.
- Reviewed the Key Performance Indicators achieved by Division Heads in completing corrective actions.

### External Audit

- Reviewed and approved the External Auditor's audit plan and the scope of the annual audit.
- Deliberated and reported the results of the annual audit to the Board of Directors.
- Assessed the performance of the External Auditors and recommended their appointment and remuneration to the Board of Directors.
- Met with the External Auditors without the presence of Management to discuss matters that they wishes to present.

### Financial Results

- Reviewed the Quarterly and Annual Financial Statements of the Company and Group including announcements, and recommended them to the Board for approval.

### Related Party Transactions

- Reviewed the system for identifying, monitoring and disclosing related party transactions for TNB and its subsidiaries.

### Annual Reporting

- Reviewed and recommended the Statement on Corporate Governance, Statement on Internal Control, Board Audit Committee Report, Statement of Internal Audit Function, Report on Related Party Transactions and Recurrent Related Party Transactions and Corporate Social Responsibility Report to the Board for approval.

# Board Audit Committee Report

**Others**

- Reviewed and approved the allocation of options granted under the Employees' Share Option Scheme (ESOS) during the Financial Year against the provisions set out under the Company's Scheme.
- Reviewed the implementation of initiatives under the Malaysian Financial Reporting Standards (MFRS) Framework.
- Conducted two (2) Subsidiary Board Breakout Sessions with the Top Management and Boards of Subsidiaries to discuss subsidiaries' related matters and the streamlining of subsidiaries' policies and procedures against TNB's policies and procedures.
- Reviewed the customisation of policies and procedures of TNB's subsidiaries.
- Visited the Tuanku Jaafar Power Station to enhance awareness of operations and provided feedback to Management on areas requiring improvement.

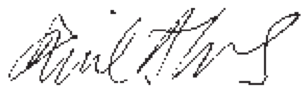
## GROUP INTERNAL AUDIT

The BAC is assisted by the GIA Department in the discharge of its duties and responsibilities. GIA is independent of operations, with the primary responsibility of providing reasonable assurance to the BAC that the system continues to operate effectively within the Group through regular and systematic reviews of internal control.

GIA's role includes evaluation and contribution to the improvement of governance, strategic management, risk management, financial and operational controls, compliance with established procedures, laws and regulations, and reliability and integrity of information. GIA uses a risk-based approach to prioritise internal audit activities, consistent with the Group's strategies.

During the Financial Year, a total of 202 reports covering 337 assignments were issued. The areas reviewed included generation, transmission, distribution, procurement, engineering, projects, finance, corporate governance, human resources, logistics, information and communication technologies, investment in subsidiaries and risk management.

The internal audit reports issued to Management included advice and recommendations on best practices (wherever appropriate) that add value to the Group. Management is required to respond on corrective and preventive actions as well as deadlines to complete the actions. The reports were tabled to the BAC for deliberation. Management were present during the deliberation of the reports to ensure that they carry out preventive and corrective actions on the weaknesses reported.



**Dato' Zainal Abidin bin Putih**
Chairman
Board Audit Committee
Tenaga Nasional Berhad
(Senior Independent Non-Executive Director)

# Statement on Internal Audit Function

The Group Internal Audit Department (GIA) carries out the internal audit function of Tenaga Nasional Berhad (TNB). GIA was established to support the Board, through the Board Audit Committee (BAC) to discharge its responsibilities in maintaining a sound system of internal control to safeguard shareholders' investment, the interest of stakeholders and the Group's assets.

GIA reports functionally to the BAC and administratively to the Chief Executive Officer. GIA's authority, scope and responsibilities are governed by an Internal Audit Charter.

## MISSION/OBJECTIVES

GIA's mission is to provide objective and independent assurance of the Group's system of internal control, through the following:

- Preparing and implementing a risk-based strategic annual audit plan which covers the auditable entities within the organisation.
- Reviewing the adequacy and effectiveness of governance, risk management, strategic management and control processes established by the Group to manage its risks and operations.
- Reporting internal control weaknesses and recommending preventive/corrective actions to improve operations, enable accurate reporting, safeguard assets and promote the economic utilisation of resources.
- Monitoring the implementation of corrective actions to ascertain their adequacy and the ability of the auditable entities to strengthen internal control in their areas of operation.

## RESOURCES

GIA is structured into core and non-core units. The audit coverage includes the functions of governance, risk management and review of control in the areas of generation, transmission, distribution, procurement, projects, engineering, accounting and finance, human resources, information and communication technologies (ICT) and investment in subsidiaries.

During the Financial Year, GIA issued 202 reports arising from the performance of 140 planned jobs, eight (8) ad hoc jobs and 189 follow-up audits on corrective actions. One (1) planned audit was co-sourced to an external consultant and the rest were performed in-house by GIA.

GIA has a total of 122 auditors, comprising staff from various backgrounds in engineering, finance, business, accounting, ICT and quantity surveying. During the Financial Year, 39 staff joined while 13 staff left the department. The BAC is informed of promotions and movements of GIA personnel.

In the Financial Year 2012, GIA spent a total of RM15.8 million. 70% of which was for staff related costs, 25% for other operating costs and 5% for consultancy fees.

## COMMITMENT TO COMPETENCE

Total training costs for the Financial Year 2012 was RM235,546.00. GIA staff are sent for training in the areas of auditing skills, technical skills, business acumen, strategic management and personal development.

At the same time, staff are encouraged to take Certified Internal Audit examinations to become Certified Internal Auditors (CIA). They are provided with incentives such as allowances and reimbursement of examination and registration fees when they pass the CIA examinations. During the year, two (2) staff completed the examination, bringing the total number of Certified Internal Auditors in GIA to seven (7). Meanwhile, 23 staff are pursuing the CIA qualification.

GIA won the 2012 Corporate Award – 3rd Place, Category 2 for demonstrating strong commitment to the Certified Internal Auditor Program for the period of January 2011 to December 2011 from The Institute of Internal Auditors Malaysia. This is the 5th consecutive year that GIA has won awards. The earlier four (4) awards were for strong commitment to Continuous Professional Development whilst the latest award is for strong commitment to the Certified Internal Auditor Program.

# Statement on Internal Audit Function



## INITIATIVES/IMPROVEMENTS

GIA carried out the following initiatives/improvements during the financial year:

i. Provided training for staff from the Group to enable them to better understand systems, processes and controls, and enhance operational systems and process controls.

ii. Provided advice on the set up of compliance units in subsidiaries.

iii. Coordinated the Management & Engineering (M&E) Audit 2012 for TNB and assisted in the review of the Terms of Reference for the M&E Audit 2012 for TNB, Sabah Electricity Sdn. Bhd., Kapar Energy Ventures Sdn. Bhd. and TNB Janamanjung Sdn. Bhd.

iv. Implemented Control Objectives for Information and Related Technology (COBIT) by the ICT Audit Unit for information technology audits.

v. Initiated formal training on governance, risk management and compliance and internal auditing for TNB staff, in collaboration with the Institute of Internal Auditors Malaysia and ILSAS.

vi. Implemented job rotation to enable GIA staff to broaden their exposure and skills. Priority is given to Senior Executives and those who have requested for a rotation/transfer to other units.

vii. Set up a database on customer satisfaction survey results to enable analysis of results to improve GIA's services.

viii. Revised the Quality Assurance Improvement Programme (QAIP) arising from the Quality Assurance Review of the internal audit function by an external party.

ix. Introduced a risk weighting system to prioritise audit areas in the Core Business Audit Units.

x. Provided half-yearly reports on the implementation of the Annual Audit Plan to enable monitoring by the BAC.

xi. Use of the IDEA system for continuous auditing by the Distribution Audit Unit.

GIA is committed to providing objective and independent assurance as well as value-added services to its customers in accordance with the International Professional Practices Framework on Internal Auditing.

**Dato' Zainal Abidin bin Putih**
Chairman
Board Audit Committee
Tenaga Nasional Berhad
(Senior Independent Non-Executive Director)

# Terms of Reference of The Board Audit Committee



## 1. CONSTITUTION

1.1 The Board of Directors of Tenaga Nasional Berhad (TNB), in accordance with Article 146 of the Memorandum and Articles of Association of TNB, established a Committee of the Board, known as the Board Audit Committee (BAC), vide Minute No. 39/90 on 9 October 1990.

1.2 The function and authority of the BAC extend to TNB and all its subsidiaries, joint ventures and associates where management responsibility is vested to TNB or its subsidiaries (collectively referred to as the "Group").

## 2. COMPOSITION OF THE COMMITTEE

2.1 Members of the BAC shall be appointed by the Board of Directors of TNB and shall consist of not less than three Directors, all of whom must be Non-Executive Directors, with the majority being independent, in accordance with the Bursa Malaysia Listing Requirements.

2.2 Where the members for any reason are reduced to less than three, that Board shall within three months of the event, appoint such number of new members as may be required to make up the minimum number of three members.

2.3 At least one member of the Committee must meet the criteria set by the Bursa Malaysia Listing Requirements, i.e.:

i. must be a member of the Malaysian Institute of Accountants or

ii. if he/she is not a member of the Malaysian Institute of Accountants, he must have at least three years' working experience, and:

a. must have passed the examinations specified in Part 1 of the 1st Schedule of the Accountants Act 1967; or

b. must be a member of one of the associations of accountants specified in Part II of the 1st Schedule of the Accountants Act 1967.

2.4 The Board shall elect a Chairman from the Committee who shall be an Independent Director as set out in the Bursa Malaysia Listing Requirements.

2.5 The term of office and performance of the Committee shall be reviewed by the Board to determine whether the Committee has carried out its duties in accordance with its terms of reference.

2.6 No alternate Directors shall be appointed to the BAC.

## 3. CHAIRMAN OF THE COMMITTEE

3.1 The following are the main duties and responsibilities of the Chairman of the Committee:

3.1.1 to steer the Committee to achieve its objectives;

3.1.2 to provide leadership to the Committee and ensure proper flow of information to the Committee, review adequacy and timing of documentation;

3.1.3 to provide a reasonable time for discussion at the Committee meetings, organise and present the agenda for Committee meetings based on input from members, and ensure that all relevant issues are on the agenda. In addition, the Chairman should encourage a healthy level of skepticism and independence;

3.1.4 to ensure that consensus is reached on every Committee resolution and, where considered necessary, call for a vote for the decision to be made by a simple majority. Dissenting opinions should be captured;

3.1.5 to manage the process and working of the Committee and ensure that the Committee discharges its responsibilities;

3.1.6 to ensure that all members participate in the discussion to enable effective decisions to be made; and

3.1.7 to be available to answer questions about the Committee's work at the Annual General Meeting of the company.

## 4. COMMITTEE MEMBERS

4.1 Each Committee member is expected to:-

4.1.1 provide independent opinions to the fact-finding, analysis and decision-making process of the Committee, based on his/her experience and knowledge;

4.1.2 consider viewpoints of the other Committee members, and make decisions and recommendations in the best interest of the Group;

4.1.3 keep abreast of the latest corporate governance guidelines in relation to the Committee and the Board as a whole; and

4.1.4 continuously seek out best practices in terms of the processes utilised by the Committee, following which these should be discussed with the rest of the Committee for possible adoption.

# Terms of Reference of The Board Audit Committee



## 5. OBJECTIVES OF THE COMMITTEE

The objectives of the Committee are:

5.1 to ensure transparency, integrity and accountability in the Group's activities so as to safeguard the rights and interests of the shareholders;

5.2 to provide assistance to the Board in fulfilling its fiduciary responsibilities relating to corporate accounting and reporting practices;

5.3 to improve the Group's business efficiency, the quality of the accounting and audit function and strengthen public confidence in the Group's reported financial results;

5.4 to maintain, through regularly scheduled meetings, a direct line of communication between the Board and the External and Internal Auditors;

5.5 to ensure the independence of the external and internal audit functions; and

5.6 to create a climate of discipline and control which will reduce the opportunity for fraud.

## 6. AUTHORITY OF THE COMMITTEE

The Committee is authorised by the Board to:

6.1 investigate any activity within its Terms of Reference, or as directed by the Board of Directors;

6.2 determine and obtain the resources required to perform its duties, including approving the budget for the external and internal audit functions;

6.3 have full and unrestricted access to all employees, the Group's properties and works, to all books, accounts, records and other information of the Group in whatever form;

6.4 have direct communication channels with external auditors and person(s) carrying out the internal audit function or activity for the Group;

6.5 direct the internal audit function in the Group;

6.6 approve the appointment of the Head of Internal Audit;

6.7 engage independent advisers and to secure the attendance of outsiders with relevant experience and expertise if considered necessary; and

6.8 review the adequacy of the structure and Terms of Reference of the Board Committees, including the BAC.

## 7. FUNCTIONS OF THE COMMITTEE

The functions and responsibilities of the Committee are as follows:

7.1 Corporate Financial Reporting

7.1.1 To review and recommend acceptance or otherwise of accounting policies, principles and practices.

7.1.2 To review the quarterly results and annual financial statements of the Company and Group before submission to the Board. The review should focus primarily on:

i. any changes in the existing accounting policies or implementation of new accounting policies;

ii. major judgment areas, significant and unusual events;

iii. significant adjustments resulting from audit;

iv. the going concern assumptions;

v. compliance with accounting standards; and

vi. compliance with Bursa Malaysia Listing Requirements and other legal and statutory requirements.

7.1.3 To review with Management and the external auditors the results of the audit, including any difficulties encountered.

7.1.4 To review and verify the allocation of scheme options pursuant to the company's Employee Share Option Scheme (ESOS) in accordance with the Bursa Securities Listing Requirements as to provide a statement in the annual report.

7.2 Enterprise Wide Risk Management

7.2.1 To review the adequacy, and to provide independent assurance to the Board, of the effectiveness of the risk management functions in the TNB Group.

7.2.2 To ensure that the principles and requirements of managing risk are consistently adopted throughout the TNB Group.

7.2.3 To deliberate on the key risk issues highlighted by the Group Risk Management Committee in their reports to BAC.

# Terms of Reference of The Board Audit Committee



7.3 Internal Control

7.3.1 To assess the quality and effectiveness of the system of internal control and the efficiency of the Group's operations.

7.3.2 To review the findings on internal control in the Group by the internal and external auditors.

7.3.3 To review and approve the Statement on Internal Control for the annual report as required under Bursa Malaysia Listing Requirements.

7.4 Internal Audit

7.4.1 To approve the Corporate Audit Charter of the internal audit function in the Group.

7.4.2 To ensure that the internal audit function has appropriate standing in the Group and has the necessary authority, resources and competency to carry out its work. This includes a review of the organisational structure, resources, budgets and qualifications of the internal audit personnel.

7.4.3 To review internal audit reports and Management's response and actions taken in respect of these. Where actions are not taken within an adequate timeframe by Management, the BAC will report the matter to the Board.

7.4.4 To review the adequacy of internal audit plans and the scope of audits, and ensure that the internal audit functions are carried out without any hindrance.

7.4.5 To appraise the performance of the Head of Internal Audit.

7.4.6 To be informed of resignations and transfers of senior internal audit staff and provide resigning/transferred staff an opportunity to express their views.

7.4.7 To direct any special investigation to be carried out by internal audit.

7.4.8 To review and approve the Statement on Internal Audit Function required under Bursa Malaysia Listing Requirements.

7.5 External Audit

7.5.1 To nominate the external auditors together with such other functions as may be agreed to by the Board and recommend for approval of the Board the external audit fee, and consider any question of resignation or termination.

7.5.2 To review the external audit reports and Management's response and actions taken in respect of these. Where actions are not taken within an adequate timeframe by Management, the BAC will report the matter to the Board.

7.5.3 To review the external audit's plans and scope of work.

7.5.4 The BAC shall meet the external and internal auditors or both at least twice a year to discuss problems and reservations arising out of audits and any matters the auditors may wish to discuss, in the absence of Management, Executive Directors or Non-Independent Directors where necessary.

7.6 Corporate Governance

7.6.1 To review the effectiveness of the system for monitoring compliance with laws and regulations and the results of Management's investigation and follow-up (including disciplinary action) of any instances of non-compliance.

7.6.2 To review the findings of any examinations by regulatory authorities.

7.6.3 To review any related party transaction or conflict of interest situation that arises within the Group, including any transaction, procedure or course of conduct that raises questions of integrity.

7.6.4 To review and approve the Statement of Corporate Governance for the annual report as required under Bursa Malaysia Listing Requirements.

7.6.5 To review the investor relations programme and shareholder communications policy for the company.

7.6.6 To examine instances and matters that may have compromised the principles of corporate governance and report back to the Board.

7.6.7 To develop and regularly review TNB's Code of Corporate Governance and Business Ethics.

7.6.8 Where the BAC is of the view that a matter reported by it to the Board has not been satisfactorily resolved, resulting in a breach of Bursa Malaysia Listing Requirements, to promptly report such matters to Bursa Malaysia.

# Terms of Reference of The Board Audit Committee



## 8. COMMITTEE MEETINGS

8.1 The Committee shall convene meetings as and when required, and at least six times during the financial year of TNB.

8.2 The number of Committee meetings held a year and the details of attendance of each individual member in respect of meetings held should be disclosed in the annual report.

8.3 The Chairman or Secretary of the Committee, on the request of any member, the Head of Internal Audit or the External Auditors, shall at any time summon a meeting of the Committee by giving reasonable notice. It shall not be necessary to give notice of a Committee meeting to any member who at the time is overseas.

8.4 No business shall be transacted at any meeting of the Committee unless the quorum of three members is satisfied.

8.5 The Chairman of the Committee shall chair the Committee meetings and in his absence, the members present shall elect one amongst themselves to be the Chairman of the meeting.

8.6 In appropriate circumstances, the Committee may deal with matters by way of circular reports and resolution in lieu of convening a formal meeting.

8.7 Officers of the Group or others as necessary may be invited to attend meetings where the Committee considers their presence necessary.

8.8 All recommendations of the Committee shall be submitted to the Board for approval.

8.9 A Committee member shall excuse himself/herself from the meeting during discussions or deliberations of any matter which gives rise to an actual or perceived conflict of interest situation for the member. Where this causes insufficient Directors to make up a quorum, the Committee has the right to appoint one or more Director(s), who meet the membership criteria.

8.10 The Committee, through its Chairman, shall report to the Board after each meeting.

8.11 Subject to the provisions of these Terms of Reference and Memorandum and Articles of Association of TNB, the Committee shall establish its own procedures for meetings.

## 9. SECRETARY OF THE COMMITTEE

9.1 The Secretary of the Committee shall be the Company Secretary.

9.2 The Secretary shall draw up an agenda for each meeting, in consultation with the Chairman of the Committee. The Agenda shall be sent to all members of the Committee and the Head of Internal Audit at least three working days before each meeting, together with the relevant papers.

9.3 The Secretary shall promptly prepare the written minutes of the meeting and distribute it to each member. The minutes of the Committee meeting shall be confirmed and signed by the Chairman of the meeting at the next meeting.

9.4 The minutes of each meeting shall be entered into the minutes book kept at the registered office of the Company under the custody of the Company Secretary. The minutes shall be available for inspection by members of the Board, external auditors, internal auditors, and other persons deemed appropriate by the Company Secretary.

## 10. DISCLOSURE

10.1 The Committee shall assist the Board in making disclosures concerning the activities of the Committee, in the Report of the Board Audit Committee, to be issued in the annual report.

10.2 The Board requires all Directors to submit a Disclosure of Interest to avoid any conflict between their personal interests and the interests of the Company. In the event of a conflict, either perceived or actual, this Disclosure of Interest shall be submitted to the Chairman of the Committee with a copy to the Company Secretary.

## 11. REVISION OF THE TERMS OF REFERENCE

11.1 Any revision or amendment to the Terms of Reference, as proposed by the Committee or any third party, shall be presented to the Board for its approval.

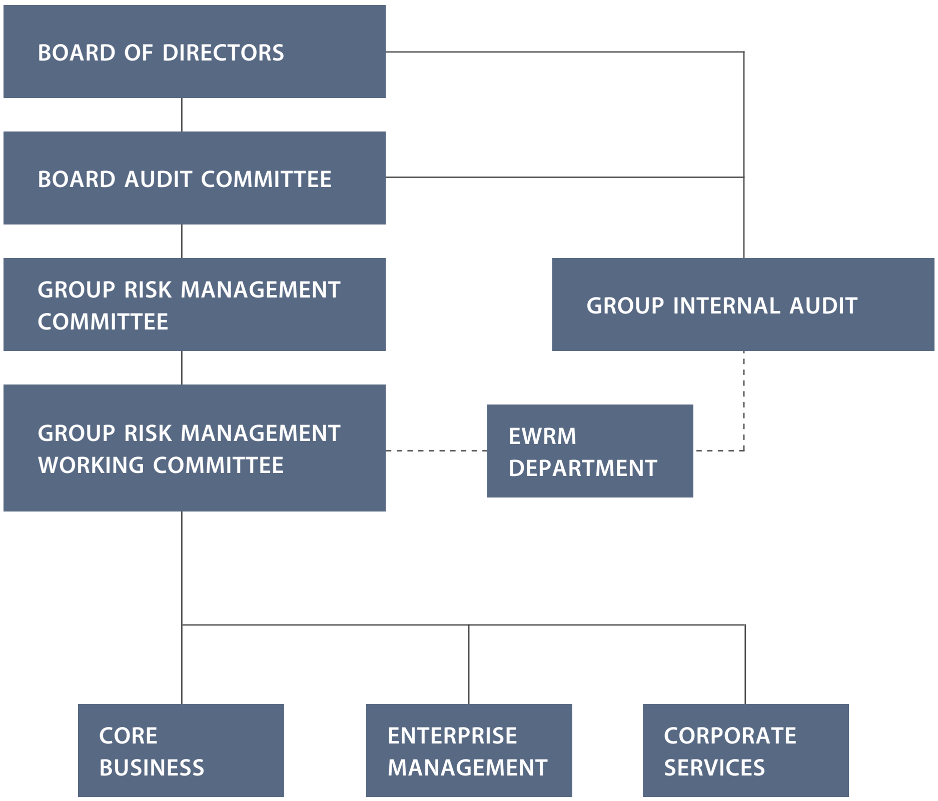
11.2 Upon the Board's approval, the said revision or amendment shall form part of these Terms of Reference, which shall be considered duly revised or amended.

# Enterprise Wide Risk Management (EWRM)



Enterprise Wide Risk Management (EWRM) is a robust framework that strives to create value for stakeholders as TNB fulfills its core business function of providing reliable and affordable electricity.
In place since 2003, the framework prioritises strategic and operational risks throughout the Group while enabling the development of an effective internal compliance and review plan. This framework provides a complete risk management cycle incorporating the assessment, reporting, treatment, monitoring and review of business risks within the Group.

## EWRM REPORTING STRUCTURE



# Enterprise Wide Risk Management (EWRM)



## EWRM ACTIVITIES

| | |
|---|---|
| **Risk Reporting & Monitoring** | 29 risk awareness and review sessions |
| | Analysis and reporting of half-year risk assessments to risk management committees (see EWRM reporting structure) |
| | Communication of decisions from risk management committees to the respective parties for further action |
| **Risk Communication** | Two risk management forums on:<br>(1) Risks and opportunities of Renewable Energy in Malaysia from the perspectives of the Sustainable Energy Development Authority (SEDA) and TNB<br>(2) Best practices in project risk management and insurance |
| | Three risk management training sessions by TNB's training subsidiary, TNB Integrated Learning Solutions Sdn Bhd (ILSAS) |
| | Six two-day risk management training sessions as part of the New Executives Training Programme (PEP) |
| | Six Risk Bulletins sent to all TNB email users |
| | Risk information regularly communicated through the internal TNB Group Finance website |
| **TNB Risk Information System (TRIS)** | 227 TRIS Helpdesk requests received and resolved |
| **Risk Management Compliance Review** | 11 risk management compliance reviews<br>Observation: Most of the divisions/departments/subsidiaries reviewed have fulfilled the requirements stipulated in the EWRM Policy and Procedures |
| **TNB Corporate Emergency Response Plan (CERP)** | A full-scale unannounced CERP drill |
| | Six training sessions across Peninsular Malaysia |
| | Ongoing activities towards ISO/IEC 27001:2005 Information Security Management System (ISMS) certification as a safeguard against cyber or information security threat |

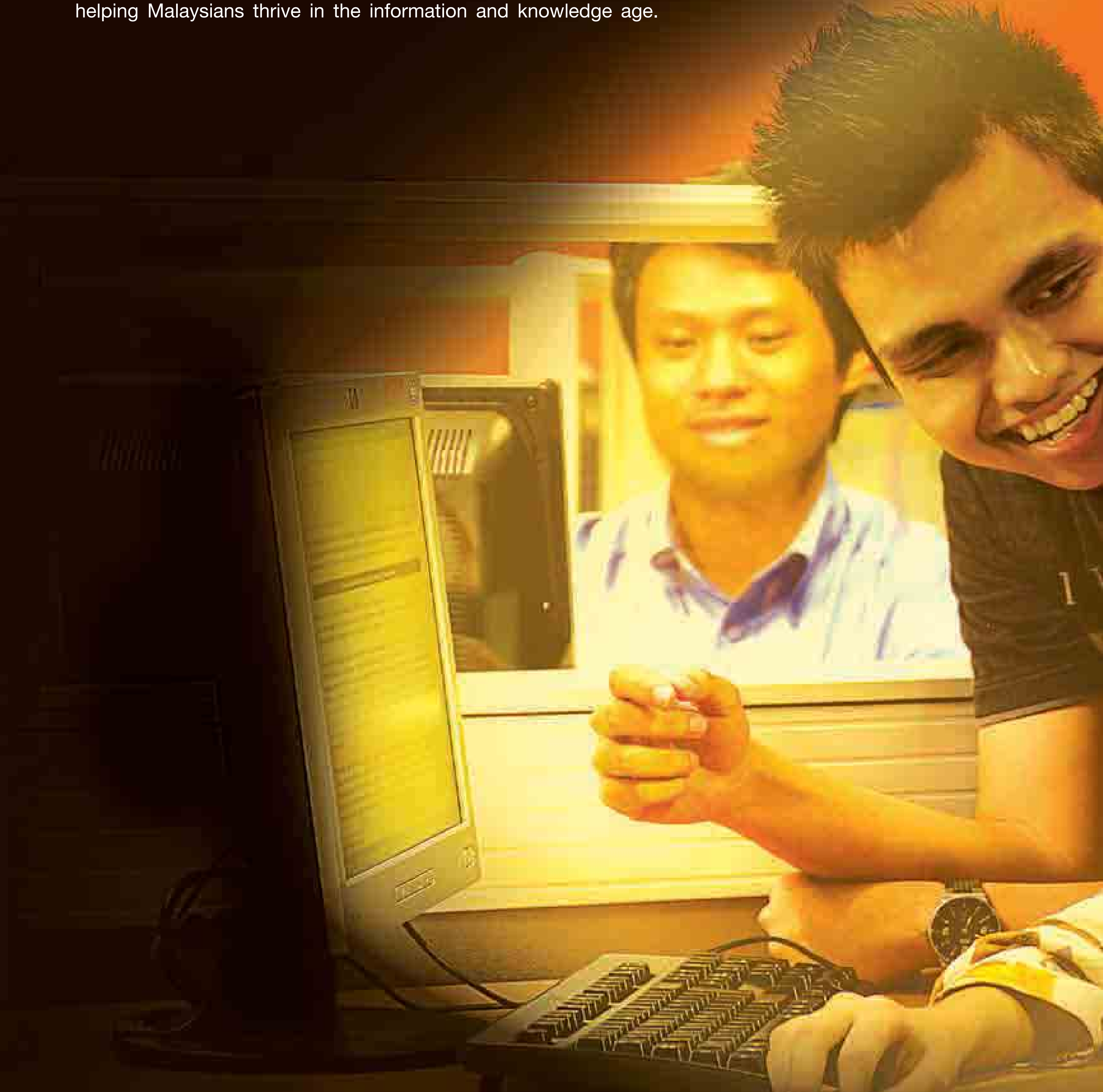
Enterprise Wide Risk Management enables management to deal effectively with uncertainties and associated risks and opportunities, enhancing the capacity to build value. It helps TNB to keep the lights on while avoiding pitfalls and surprises along the way.

YOU SEE

WE SEE...

# SWITCHING ON TO A KNOWLEDGE-BASED SOCIETY

Knowledge is recognised as one of the primary factors in sustaining social and economic growth. To support the government's drive to transform the nation into a knowledge-based society, we are determined to play our role in helping Malaysians thrive in the information and knowledge age.



# KEEPING THE LIGHTS ON

# Operations Review

# CORE-BUSINESSES

TNB's core business lies in the generation, transmission and distribution of electricity. Driven by its central role to *'Keep the Lights On'*, the company has become a leading utilities provider in the region.

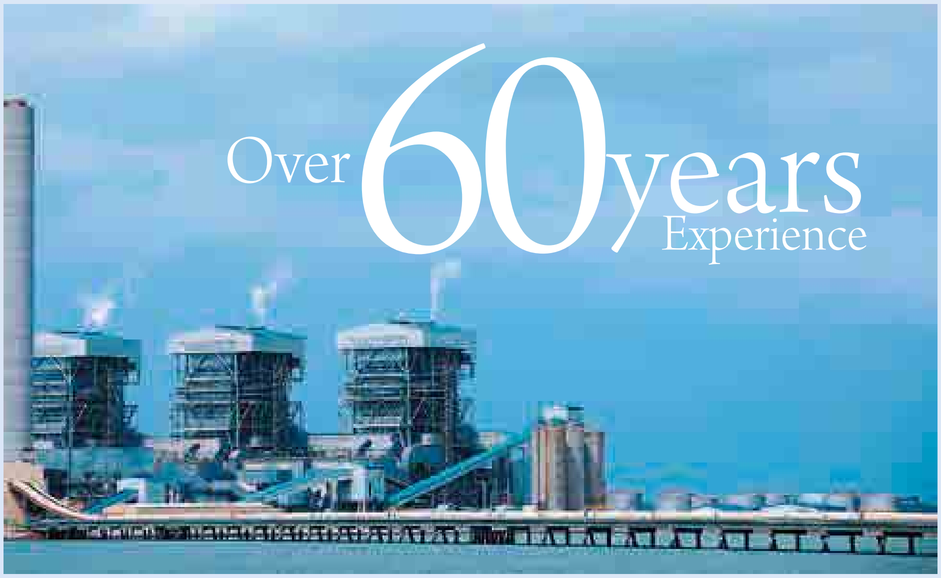
The Generation Division is responsible for generating electricity at TNB's six thermal power stations and three hydroelectric power generating schemes in Peninsular Malaysia. Together with two independent power producers (IPPs) that it supports, namely the wholly-owned Sultan Azlan Shah Power Station and the majority-owned Sultan Salahuddin Abdul Aziz Shah Power Station, these plants make up 36.6% of the generation market share in the peninsula. Generation also owns TNB Liberty Power Limited of Pakistan.

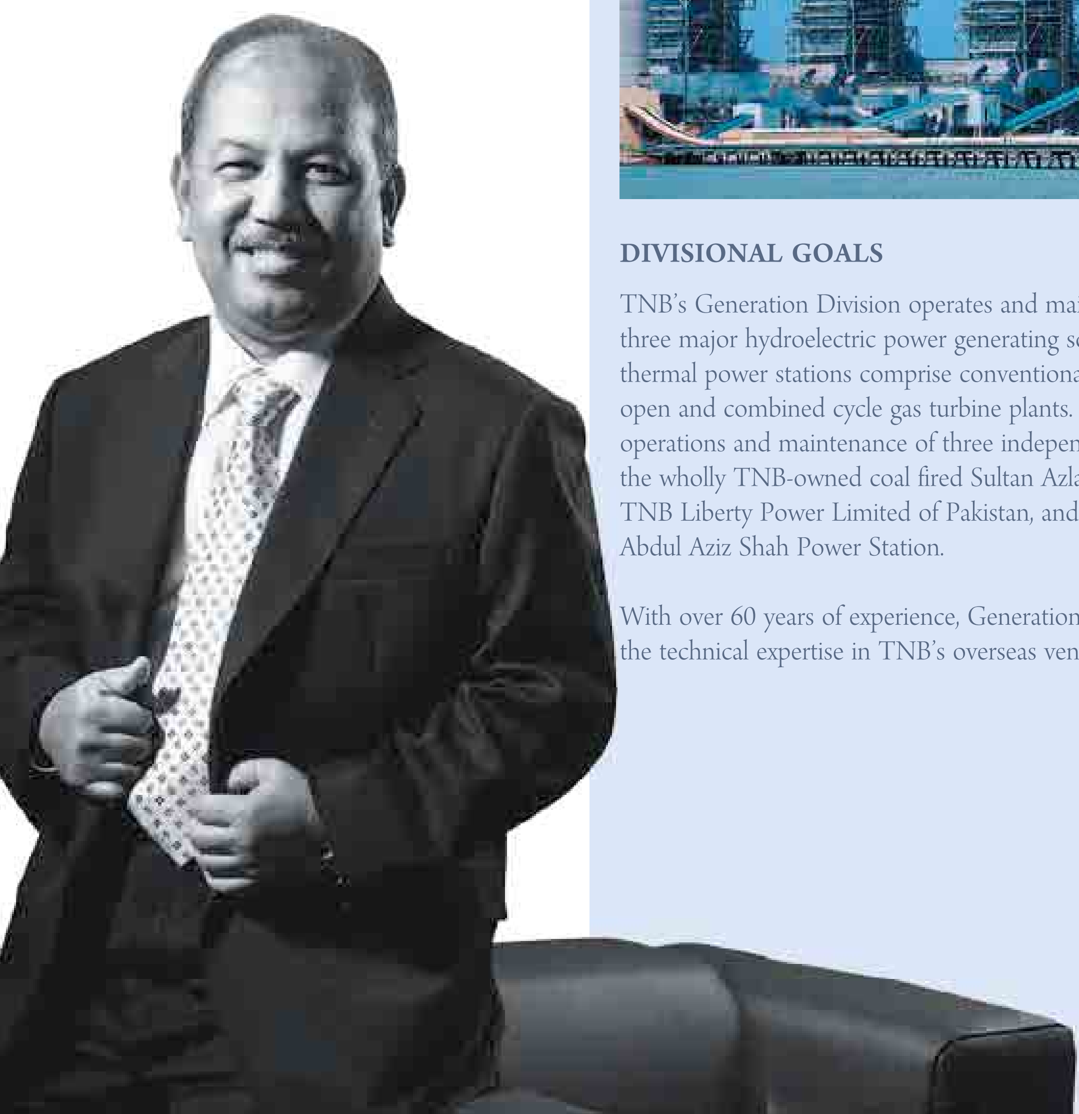
The Transmission Division transports electricity from power generators to distributors and large industrial customers. Its primary business includes operating the grid and maintaining thousands of circuit-kilometres of transmission lines and pylons in the peninsula. The division is committed to providing safe, secure and reliable electricity supply at optimal cost.

The Distribution Division is responsible for reliable and robust network delivery. It plans, designs, constructs, operates and maintains the nation's electricity supply system to provide sufficient electricity to all segments of customers, as efficiently as possible. The division also presents TNB's frontline service, handling the Customer Service Centres, collecting revenue, and operating the Call Management Centres.

# GENERATION

Zainudin bin Ibrahim
Vice President



## DIVISIONAL GOALS

TNB's Generation Division operates and maintains six thermal power stations and three major hydroelectric power generating schemes in Peninsular Malaysia. The six thermal power stations comprise conventional gas and oil-fired plants as well as open and combined cycle gas turbine plants. The division further supports the operations and maintenance of three independent power producers (IPPs), namely the wholly TNB-owned coal fired Sultan Azlan Shah Power Station and gas fired TNB Liberty Power Limited of Pakistan, and the majority-owned Sultan Salahuddin Abdul Aziz Shah Power Station.

With over 60 years of experience, Generation Division takes the lead in providing the technical expertise in TNB's overseas ventures.

# Operations Review – Generation



## OPERATIONAL SUMMARY

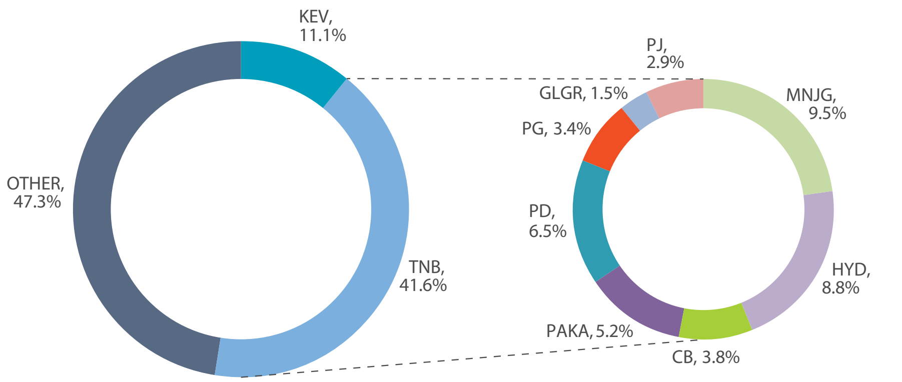
Peak demand for electricity in Peninsular Malaysia increased 2.3% to 15,826MW, as recorded in June 2012, from 15,476MW recorded in May 2011. Generation Division has a total installed capacity of 9,041MW, comprising 7,130MW thermal plants and 1,911MW hydro plants[1]. Graph 1 shows the overall generation installed capacity for the financial year 2012 in Peninsular Malaysia.

Due to several major scheduled planned outages carried out in the financial year under review, TNB's generation market share dropped 1.4 percentage point year-on-year to 36.6%. Among the planned outages carried out are Major Overhaul of Unit 2 at Sultan Azlan Shah Power Station in Manjung, Major Overhaul of Block 3 at Sultan Ismail Power Station in Paka and Major Overhaul GT3B at Sultan Iskandar Power Station in Pasir Gudang. The Sultan Azlan Shah Power Station in Manjung and Tuanku Ja'afar Power Station in Port Dickson continued to be the major contributors of energy generated, constituting 36.1% and 24.4% of TNB's total generation respectively.

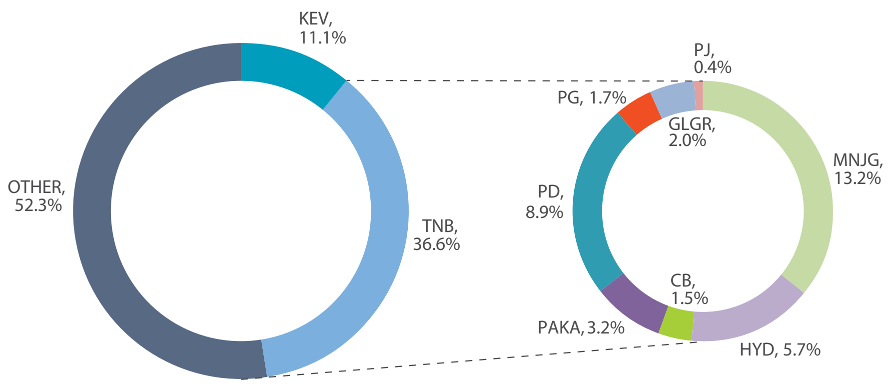
Graph 2 shows the overall generation market share for the financial year under review while Graph 3 compares TNB's monthly market share for the financial years 2011 and 2012.

[1] *Based on Generation Security Standard (June 2011) by Energy Procurement Department, TNB.*

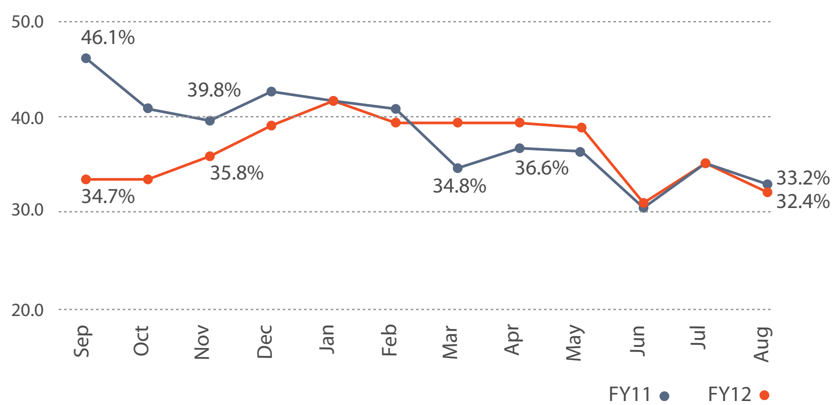
**Graph 1:**
**Generation Installed Capacity for FY2012**




**Graph 2:**
**Overall Generation Market Share by Sales for FY2012**



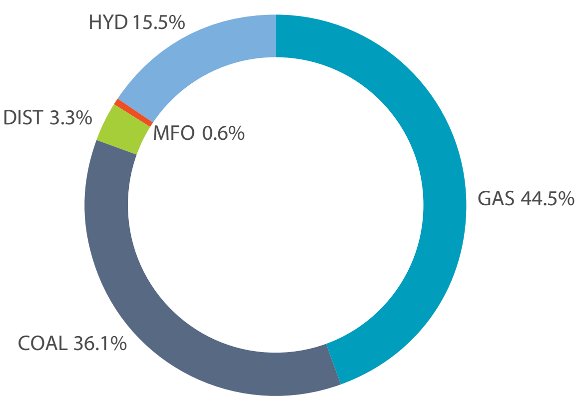

**Graph 3:**
**Comparison of Monthly Market Share for FY2011 and FY2012**



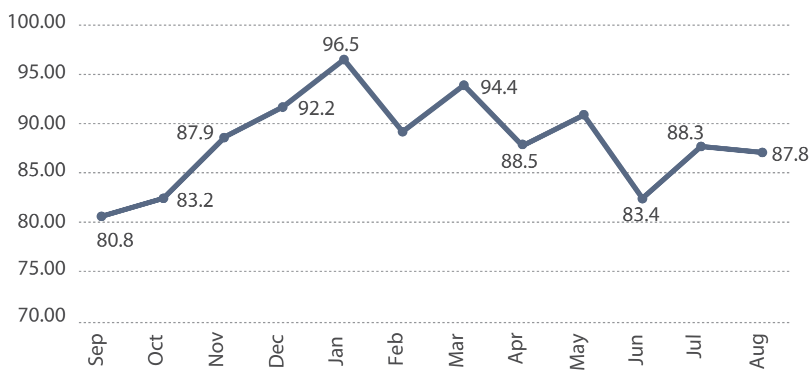
# Operations Review – Generation



**Graph 4:**
**Generation Mix in FY2012**




**Graph 5:**
**Equivalent Availability Factor for FY2012 (%)**




Generation from gas contributed to 44.5% of the total energy generated by TNB in the financial year, followed by coal at 36.1%, hydro at 15.5%, distillate at 3.3% and medium fuel oil (MFO) at 0.6%. TNB's generation fuel mix for the period under review has slightly changed due to the improved reliability of gas supply by Petronas as compared to the previous financial year. Graph 4 shows TNB's generation fuel mix for the financial year 2012.

## TECHNICAL PERFORMANCE REVIEW

### Plant Equivalent Availability Factor (EAF)

Generation's EAF for the financial year was 88.7%, a significant increase of 2.2 percentage points from the previous financial year.

The overall station performance is good, with 60% of the power stations achieving or exceeding an EAF of 90%. Among the different plant types, open-cycle gas turbines achieved an EAF of 96.6%, hydro plants 91.8%, combined-cycle plants 87.6%, conventional coal thermal plants 83.0% and conventional oil/gas thermal plants 80.8%.

As shown in Graph 5, the lowest EAF of 80.8% was recorded in September 2011, when major planned outages were carried out. Among these were major overhauls of Unit 2 at the Sultan Azlan Shah Power Station in Manjung, Unit 3 at the Pergau Power Station and Unit 3 at the Sultan Mahmud Power Station in Kenyir.

# Operations Review – Generation



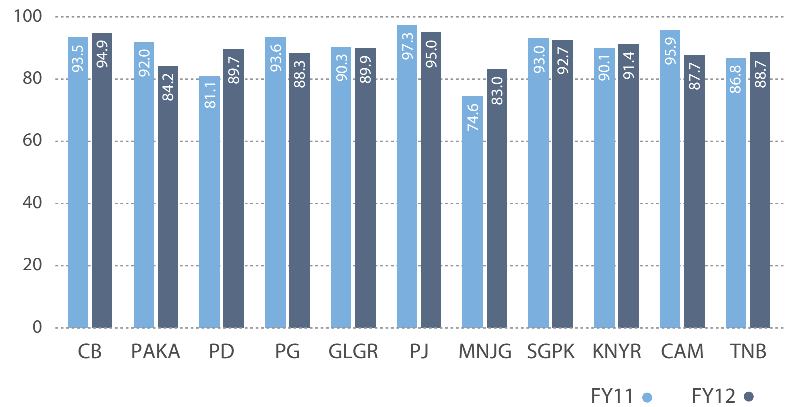
The significant increase in EAF from the previous financial year was largely due to the lower EUOF of 3.5%. Graph 6 shows the EAF of TNB stations in the financial years 2011 and 2012. Graph 7 shows the EAF trend since the financial year 2008. The EAF in the financial year 2012 was higher than the target value of 88.4% by 0.3 percentage points.

**Plant Equivalent Unplanned Outage Factor (EUOF)**

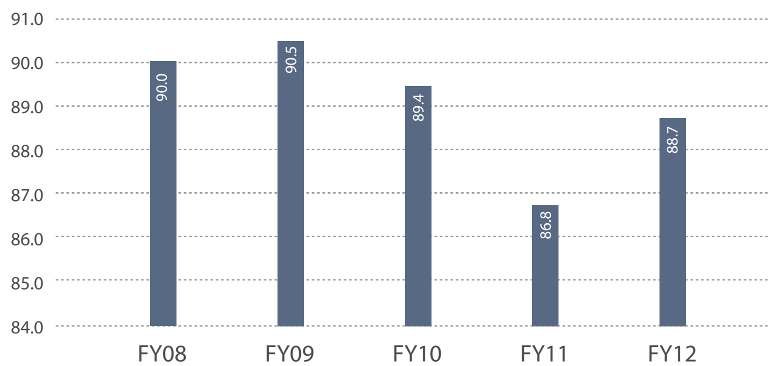
Overall station reliability during the financial year was good, with the exception of high unplanned outages at the Sultan Ismail Power Station in Paka and Gelugor Power Station in Gelugor. Generation's EUOF for the financial year was 3.5%, which marked an improvement of 50% from the previous year. Graph 8 shows the EUOF trend from the financial years 2008 to 2012.

The EUOF of most of the power stations was good, with 70% of the stations achieving an EUOF of less than 4%. The Sultan Mahmud Power Station in Kenyir recorded EUOF of less than 0.5%. The Sultan Ismail Power Station in Paka and the Gelugor Power Station in Gelugor recorded high EUOF of 9.9% and 5.0% respectively.

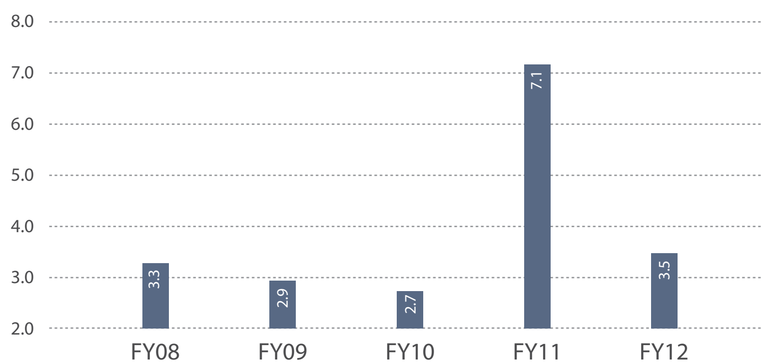
**Graph 6:**
**Equivalent Availability Factor by Station (%)**




**Graph 7:**
**Equivalent Availability Factor (%), from FY2008-2012**



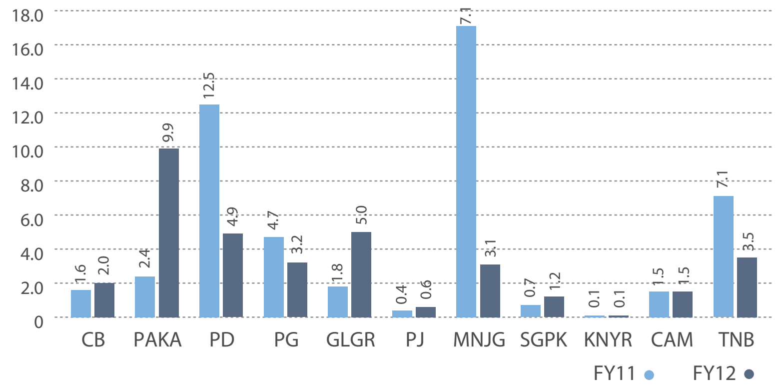

**Graph 8:**
**Equivalent Unplanned Outage Factor (%), from FY2008-2012**



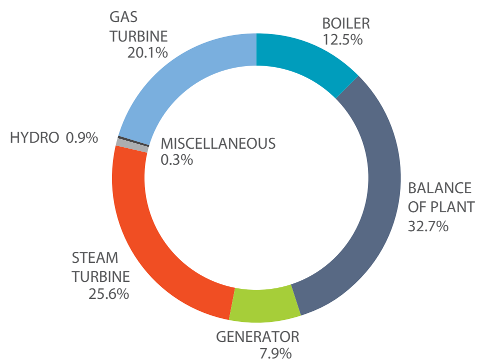
# Operations Review – Generation



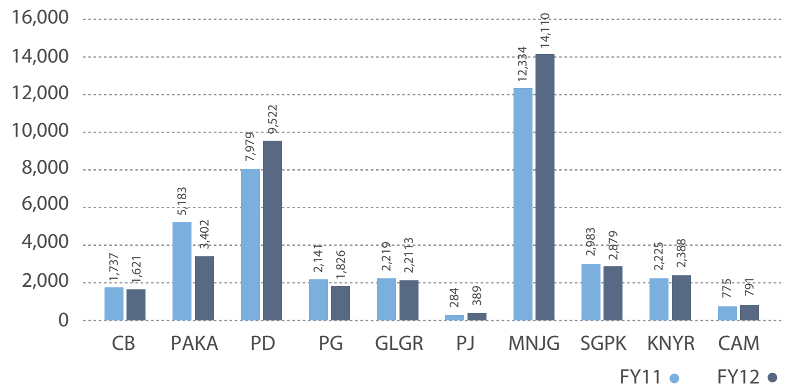
**Graph 9:**
**Equivalent Unplanned Outage Factor by Station (%)**



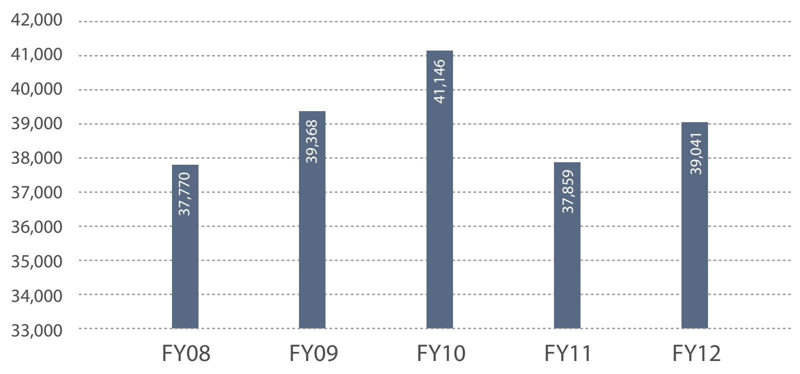

**Graph 10:**
**Unplanned Outage Analysis**




**Graph 11:**
**Net Unit Generated by Station (GWh)**




**Graph 12:**
**Net Unit Generated (GWh), FY2008-2012**




The EUOF for the financial year exceeded the target of 3.3% by 0.2 percentage points, mainly due to the prolonged unplanned outages of GT3B at the Sultan Ismail Power Station and mechanical failure of ST1C at the Gelugor Power Station.

Graph 9 shows the EUOF of all the power stations in the financial year 2012. The major components that contributed to the unplanned outages are as indicated in Graph 10.

**Net Unit Generated (NUG)**

The total Net Unit Generated increased by 3.1% from the previous financial year to 39,041GWh. The Sultan Azlan Shah Power Station in Manjung contributed to the highest generation of 14,110GWh followed by the Tuanku Ja'afar Power Station in Port Dickson (9,522GWh) and the Sultan Ismail Power Station in Paka (3,402GWh).

Graph 11 shows a comparison of the energy generated by power stations in the financial years 2011 and 2012. The annual trend of energy generated from the financial years 2008 to 2012 is depicted in Graph 12.

### Net Thermal Efficiency (NEFF)

Generation Division's overall net thermal efficiency during the financial year was 39.0%. Graph 13 shows a comparison of the thermal efficiency by station for the financial years 2011 and 2012. This translates to an improvement of 0.26% over 38.9% achieved in the previous financial year. Continuous efforts to improve TNB's thermal efficiency have resulted in this improvement.

Overall, thermal efficiency has improved by 1.1 percentage points from the financial year 2008 to the financial year 2012, as depicted in Graph 14.

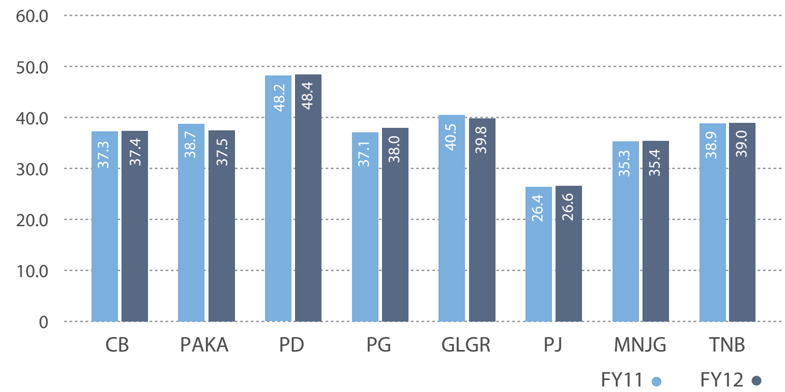
### Carbon Emission

Total $CO_2$ emissions in the financial year was 0.55 metric tons per MWh, which represents an increase of 1.9% from the total emission of 0.54 metric tons of $CO_2$/MWh in the previous financial year. This was due to high utilisation of coal-fired plants throughout the year.

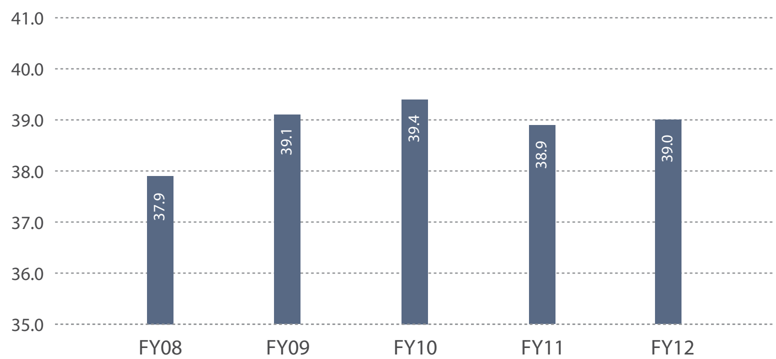
Graph 15 shows the total emissions of $CO_2$ by all power stations for the financial year.

MFO and coal fuel contributed to the highest emissions of $CO_2$ of 0.94 metric tons per MWh and 0.87 metric tons per MWh respectively, followed by distillate fuel at 0.64 metric tons per MWh and natural gas at 0.48 metric tons per MWh. Initiatives to mitigate $CO_2$ emissions are ongoing. These include improving performance tracking parameters for gas turbines and standardising the compressor water washing for CCP.

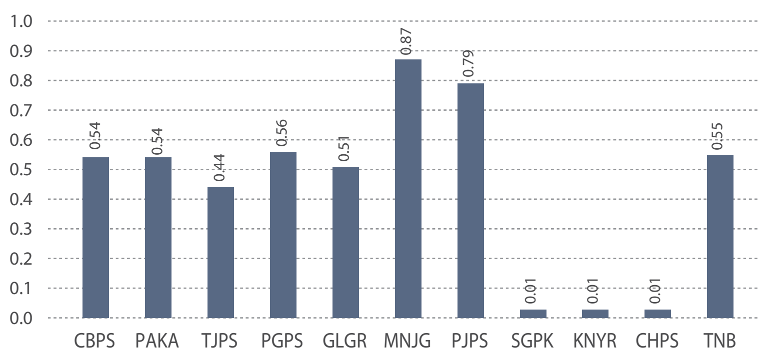
**Graph 13:**
**Thermal Efficiency by Station (%)**




**Graph 14:**
**Thermal Efficiency (%), from FY2008-2012**




**Graph 15:**
**Total Emissions of $CO_2$ by all power stations (metric tons/MWh)**



# TRANSMISSION

Datuk Rozimi bin Remeli
Vice President

The year under review was once again a remarkable year for Transmission Division. Business as usual for the Division is no longer about doing the same thing in the same way, but more about sustaining the Division's outstanding world-class performance. 'Striving for Sustainability' is the new division mantra as it embarks on the 20 Transmission Key Action Plans outlined in Gemilang 2015 in order to attain the objectives of TNB's 20-Year Strategic Plan.

**1.03** System Minutes
or less for the last four years

# Operations Review – Transmission



## TRANSMISSION IN BRIEF

Transmission Division plans, operates and develops TNB's 132kV, 275kV and 500kV transmission network which transports electricity in bulk from power generators to distributors and also in some cases transports directly, to large industrial customers. Its primary business activities include operating the grid on a 24/7 basis by monitoring electricity flow across the system, monitoring all network components and replacing those that are no longer functioning optimally, and further developing the network to meet the ever-growing electricity demand.

The division continues to live up to the challenge of maintaining thousands of circuit-kilometres of transmission lines and pylons in the peninsula. It is committed to providing safe, secure and reliable electricity supply at optimal cost. Most importantly, in running its day-to-day business, the division ensures it delivers quality service, practicing good corporate governance, caring for the environment and meeting corporate social responsibilities.

The division aims to be the leading transmission entity and grid system operator in ASEAN, and among the best in the world.

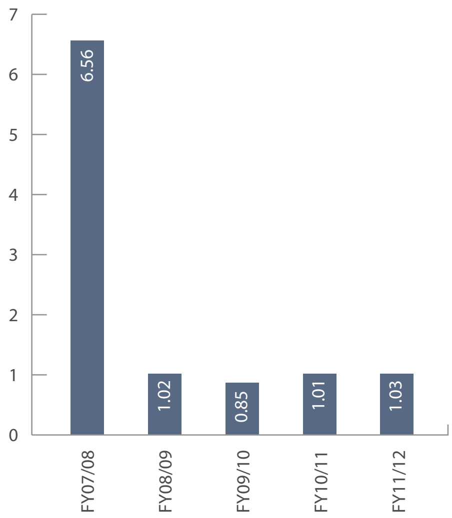
## TRANSMISSION IN NUMBERS

The division achieved numerous milestones in operational and corporate performance over the year, some of which are highlighted as follows:

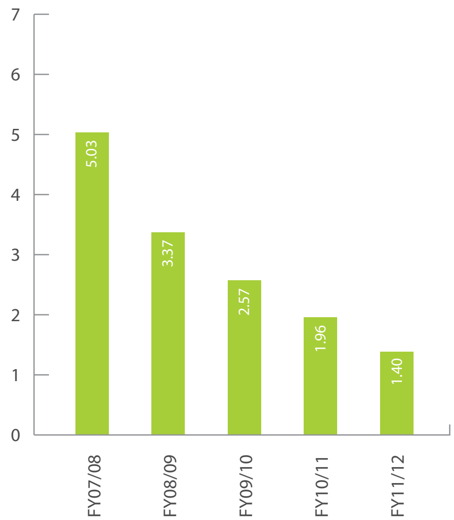
### Operational Excellence

- Superior performance in Transmission System Minutes, which measures the performance of the National Grid, has not exceeded 1.03 minutes in the last four years.
- Further reduction in number of transmission-related tripping to 276 incidents in FY2011/12 from 305 incidents in FY2010/11.
- A new record of 1.67% transmission system loss, inclusive of losses from distribution power transformers.
- Further reduction in the Monthly Delay Index, which measures transmission project delivery, from 5.03 months in the financial year 2007/08 to 1.40 months in the financial year 2011/12.

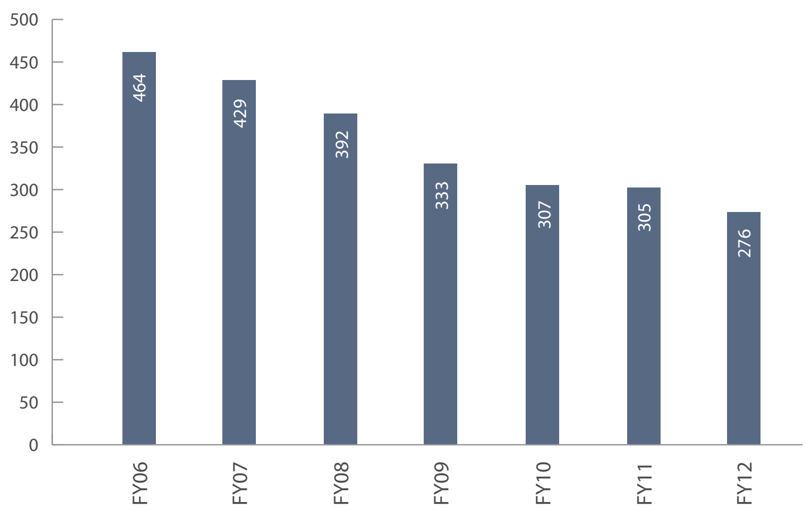
**System Minutes (min)**




**Monthly Delay Index (Month)**




**Total No. of Transmission Related Tripping**



# Operations Review – Transmission



- Zero major disturbance over the last seven years.
- Zero tripping with load loss at the 500kV and 275kV levels for four consecutive years.
- Highest maximum demand of 15,826 MW (recorded on 20 June 2012).
- Increased system capacity with additional 2,160 MVA transformer capacity, 149.0 circuit km of transmission lines and 45.8 circuit km of underground cables through the completion of 54 transmission projects.
- Occupational Health Safety Assessment Series (OHSAS) certification of all 25 business units in Transmission, the first achievement for the division.
- Attainment of 16 Gold awards from the Malaysian Society for Occupational Safety & Health (MSOSH) for the second year running, with three business units – Asset Development (East), Asset Maintenance (Kelantan) and Asset Maintenance (Pahang) – receiving the highest award, the Gold Merit.
- All 25 business units maintained 5 Star 5S Certificate with Asset Maintenance (Pahang) being additionally recognised with the Anugerah Terbaik 5S at the corporate level.
- Passing the SIRIM Surveillance Audit with zero Non-Conformance Report (NCR) for the second year running.

## DRIVING OPERATIONAL EXCELLENCE THROUGH GEMILANG 2015

Transmission's unwavering focus for the last seven years on achieving operational excellence by reducing System Minutes and transmission losses and commissioning projects on time while maintaining zero major disturbance has contributed to TNB establishing itself as one of the best power utilities in the region. To propel TNB to greater heights, Transmission is now implementing all initiatives as outlined for the division under Gemilang 2015, the second phase of TNB's 20-year Strategic Plan. These serve to drive TNB towards its vision of becoming a global leader by 2025.

Transmission Division has been entrusted with 20 Key Action Plans under the five-year Gemilang 2015, and has already completed 75% of these. These comprise four breakthrough strategies:

1. **Enhancing supply reliability via Zero Tripping Action Plan (ZTAP) & Critical Installation Maintenance (CRIM) Initiatives**
   - These initiatives are to mitigate the strategic risk of inability to fully ensure reliability and quality of supply as to maintain low system minutes. The activities focused on refurbishment and replacement of ageing and problematic equipment that have been identified at critical installations, for instance; replacement of earthing transformer, surge arrester, wooden to composite arm and under-rated capbank tuning reactor, transformer oil reclamation, installation of anti-theft lock nut, and replacement of static and electromechanical relay.

2. **Enhancing supply reliability via the development and implementation of pilot SmartGrid – Wide Area Intelligence System (WAIS) to maintain zero major disturbance**
   - Fully completed and operational 3 out of 6 key activities:
     - i. **Real Time Application Platform:** Intelligent processing unit capable of gathering data and able to make real time decision and perform automated control actions.
     - ii. **Advance Overload Protection Scheme:** Second level protection system to minimise the risks of cascading trippings.
     - iii. **Under Voltage Load Shedding Scheme:** Intelligent Under Voltage Load shedding using wide area information.

# Operations Review – Transmission



3. **Reducing transmission losses by introducing low loss conductor:**
   - 6 projects have been identified and one is currently under implementation: **60-km-circuit length of 275kV overhead lines (OHL) Ulu Jelai-Tapah**.

4. **Deploying innovation and proven technology through the International Electrotechnical Commission Standard IEC 61850 based Substation Protection Automation and Control System (SPACS)**
   - Successfully commissioned the following:
     - i. Real Time Digital Simulator (RTDS) with IEC 61850 Interface and Digital Teleprotection Simulator as the testing facilities to test the SPACS
     - ii. IEC 61850 based Substation Intelligent Management System (61850 SIMS) as a component of SPACS
     - iii. Awarded the IEC 61850 SPACS pilot project in a transmission substation at PMU Kajang Estate 132/33kV GIS
   - On building capacity, SPACS technical expert has been conducting a series of courses for transmission and distribution protection engineers using the IEC 61850 System Verification & Simulation laboratory (IEC 61850 SVS Lab) at TNBR.

## PROSPECTS

Transmission Division will continue to implement initiatives identified under Gemilang 2015. These have been laid down in line with the division's goal to be the leading transmission entity and grid system operator in ASEAN and among the best in the world.

The division is committed to managing its assets to fulfill the needs and requirements of stakeholders, while optimising performance, risks and costs throughout the life-cycle of these assets to ensure safe, secure and reliable electricity supply. The division is working towards PAS55 certification by streamlining its asset management practices and processes in accordance with the British Standards Institution's (BSI) Publicly Available Specifications. This will ensure its Asset Management Plan is in line with asset management best practices, and allow Transmission to abide by all statutory, regulatory and legal requirements related to its business and operations, maintain an accurate and up-to-date asset information system, integrate risk management as part of the asset management system, and continually improve the existing system.

As the backbone of the electricity supply chain for more than 8 million electricity consumers in Peninsular Malaysia, the division is focused on deploying high-impact technology to maintain a high level of productivity. The division will be establishing its second live-substation maintenance team in the next financial year to ensure continuing efficiency and reliability of electricity supply. This will allow for maintenance work to be carried out at the critical substations and major load centres without any power interruption to customers.

In the financial year 2011/12, the division has completed Phases 1 and 2 of the Transmission Operation Monitoring & Analysing System (TOMAS), a centralised maintenance information system consisting of work process management and dashboard monitoring. After two years of operation, TOMAS will be further enhanced and will be integrated with the Corporate Geospatial Information System (CGIS).

The division is committed to completing and delivering all its projects on time, as any delay in critical transmission development projects poses a risk to the security and reliability of the National Grid. There is at present some public objection to certain major transmission projects. Transmission is trying to overcome this by seeking the support and cooperation of all relevant stakeholders for the benefit of all concerned.

Last but not least, the division remains committed to ensuring excellence in its products and services towards becoming the leading transmission entity and grid system operator in ASEAN, and among the best in the world.

Operations Review



# DISTRIBUTION

Datuk Ir. Baharin bin Din
Vice President

The Distribution Division performed commendably during the year under review, achieving above average scores for most of the major performance indicators. This can be attributed to the effective implementation and close monitoring of Gemilang 2015 initiatives by various units within the Division.

## OPERATIONAL SUMMARY

As the Division in TNB with the closest dealings with customers, a primary role of the Distribution Division is to ensure reliable and robust network delivery. Distribution Division plans, designs, constructs, operates and maintains the nation's electricity supply system at voltage levels of 33kV, 22kV, 11kV, 6.6kV and 400/230V in order to provide sufficient electricity to all segments of customers, as efficiently as possible.

In addition, the Division is also entrusted with retail operations. In this regard, it markets and sells electricity, connects new supply, provides counter services at TNB's Customer Service Centres (Pusat Khidmat Pelanggan or PKP), collects revenue, operates the Call Management Centres (TNB Careline 15454 and One Stop Engagement Centre 1-300-88-5454), handles customer enquiries and complaints, and nurtures strong customer and government relationships. To serve its customers optimally, Distribution has established a network of 13 State and 45 Area Offices, covering strategic locations nationwide.

# Operations Review – Distribution



## +4.3% sales of electricity (units)

For the period under review, a total of 227,239 new customers were connected. This effectively increased TNB's customer base to 7.88 million. Meanwhile, electricity sales (in units) grew by 4.3% to 96,257.2GWh.

The year saw a change in leadership in which Vice President Hj Hussin Othman retired effective 1 January 2012. He was succeeded by Datuk Ir. Baharin bin Din, who served TNB as an engineer in the early days of his career before being appointed as the Managing Director of SESB from 2007 to 2011. Since assuming his current position, Datuk Ir. Baharin Din has introduced several initiatives to further strengthen TNB's network delivery as well as enhance its customer service.

The Division has implemented a 10-year Roadmap, developed under the McKenzie 7S framework, which takes Distribution beyond the Gemilang 2015 objectives. Among the new objectives of the Distribution 10-year Roadmap are:

1. to optimise and focus limited resources on major and impactful areas of the business in order to attain world-class standards as envisaged under TNB's 20-Year Strategic Plan, and

2. to engage all Distribution Division staff in efforts to achieve world-class standards.

Another initiative introduced by Datuk Ir. Baharin is the D.O.I.T concept of Discipline, Objectives, Integrity and Teamwork. Distribution Division has adopted D.O.I.T as a strong and influential rallying point for its more than 16,000 personnel. D.O.I.T also reinforces TNB's shared values of Customer, Integrity, Business Excellence and Caring.

# Operations Review – Distribution



It is envisaged that D.O.I.T and the 10-year Roadmap will provide both the "soft" and "hard" tools to achieve TNB's new goals as unveiled by the new Chief Executive Officer, Datuk Wira Ir. Azman bin Mohd. TNB's new goal focuses on the creation of a more vibrant workforce and achieving a "productivity revolution". D.O.I.T and the 10-year Roadmap also complement the Four Thrusts as underlined by the CEO (Building Trust and Relationships, Building Capacity, Building Performance and Building Growth) which are designed to bring about greater professionalism.

## HIGHLIGHT OF ACHIEVEMENTS

Distribution Division's main achievements during the Financial Year 2011/2012 include:

- The official launch of TNB Careline by the Minister of Energy, Green Technology and Water on 16 February 2012.
- The introduction of five new main communication channels to customers on 16 February 2012, namely:
  - Telephone/fax: 1300-88-5454
  - Telephone/SMS: 1-5454
  - Email: tnbcareline@tnb.com.my
  - Webchat: (www.tnb.com.my)
  - Facebook: www.facebook.com.my/tnbcareline
- Gold Award for Best Technology Innovation in Contact Centre as recognised by Contact Centre Association Malaysia (CCAM) in October 2011.
- Gold Award for Best CRM Implementation in Contact Centre as recognised by Contact Centre Association Malaysia (CCAM) in October 2011.
- Obtaining the highest score ever of 7.2 in the Customer Satisfaction Index (CSI) Survey.
- Enhanced network reliability as indicated by the significant reduction in System Average Interruption Duration Index (SAIDI) to 62.32 minutes per customer per year from 78.9 minutes in the previous Financial Year.
- Reduction in the number of medium voltage breakdowns to 2,621 cases as compared to 13,428 cases in the previous Financial Year.
- Recording a significant drop of 0.21% in Distribution Losses from 6.79% in the previous Financial Year to 6.58%, resulting in a financial gain for Distribution in excess of RM63 million.
- Collecting a total of RM51.87 million and RM0.746 million (in kind payment) in under-charged from detected meter tampering cases.
- The recertification of all 119 stations under the Division by the Malaysian Productivity Corporation (MPC) for Quality Environment Management System (WIT-5S).
- Naming of TNB Kulaijaya as the Overall Champion of the 2011 Ministry of Trade and Industry Award; and Champion in the Private Sector Category.
- Contributing significantly to TNB winning the Best Award in the 2011 National Award for Management Accounting (NAfMA).

### Business Performance Improvement

In the year under review, two major projects were implemented by the Distribution Division to assist in improving business performance at the operational level.

1. **Management Control System for Area and Branch Managers**

   As part of continuous efforts to improve its business performance, Distribution Division introduced a Unit Review Meeting (URM) and Supervisory Review Meeting (SRM) at all its stations in 2011 to provide a more structured and systematic way of monitoring operational activities, especially at the area and branch levels.

2. **Branch Manager Operations Manual**

   A structured and documented set of guidelines has been developed for Branch Managers to prioritise their roles and responsibilities and assist them in managing daily activities. The guidelines, contained in a *Branch Manager Operations Manual*, are based on relevant best practices documented in Distribution Division over the years. In addition to operational tasks, the guidelines also cover related areas such as industrial relations and public relations. This manual is designed to serve as a table file for quick reference.

# Operations Review – Distribution



## OPERATIONAL IMPROVEMENTS

### Customer Satisfaction Index (CSI) Survey

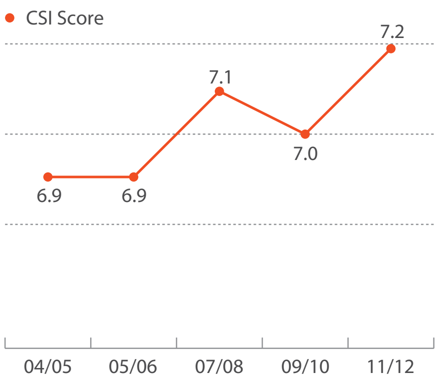
The CSI measures the level of satisfaction of a sample population of TNB customers. In the year under review, the survey involved 8,578 domestic, commercial and industrial customers in Peninsular Malaysia.

### Findings of the CSI

The CSI study is based on ratings given to 35 service deliveries spread across 11 service categories, namely Connections/Upgrades, Breakdowns, Shutdowns, Quality of Supply, Customer Service Centre, Safety & Advisory, TNB Careline, Restoration, Meter Reading-Billing-Payments, Complaint Handling and Enquiry Management.

The national CSI scores for the last five years are as follows:

**Chart 1:**
**National CSI scores over five years**




These scores indicate that the public's perception of TNB's customer service has improved over the years.


### People 1st Programme for Distribution (P1PD)

As part of efforts to provide customers with a positive and memorable experience at all times, the People 1st Programme for Distribution (P1PD) was developed and implemented. Under the P1PD, all Distribution Division frontliners at the Pusat Khidmat Pelanggan (PKP) are given relevant training and motivation in order to meet the various needs of customers efficiently and professionally.

Distribution Division has also revamped the PKP and would be introducing uniforms for counter service staff, enabling more online transactions such as bill payments, and by using the electronic media to showcase TNB's products and services.

Strengthening TNB's mission to power the nation, Distribution Division is also contributing to the Government's Transformation Programme by participating in the Urban Transformation Centre (UTC). UTC is a one-stop centre through which urban residents as well as micro enterprises and small businesses are able to carry out transactions with utility companies and government bodies. PKP @ UTC Melaka is pioneering this new operation, which will be extended to all states nationwide.

### TNB Careline

TNB Careline represents the company's main customer engagement centre and consists of two main sub-units, namely the Call Management Centre (CMC) and the One Stop Engagement Centre (OSEC). The key role of the CMC is to manage reports and complaints from customers pertaining to electricity supply disruption, including street light malfunction. OSEC, on the other hand, manages enquiries and complaints regarding bills and accounts.

TNB Careline was officially launched by the Minister of Energy, Green Technology and Water, Datuk Seri Peter Chin Fah Kui, on 16 February 2012. It is integral to the Company's long-term strategy of developing an Online Customer Service. This will become the main platform for TNB's virtual centre through which customers can apply for electricity supply, conduct Self Meter Reading (SMR) and terminate their accounts.

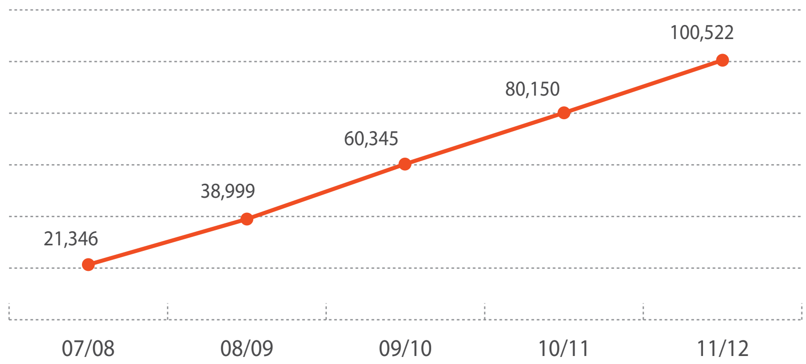
### e-Services

Via TNB's secured web portal **https://e-services.tnb.com.my**, customers can view and track their monthly electricity consumption online, monitor their billing details as well as pay their bills. At the same time, owners of premises can monitor their tenants' billing and payment information. TNB's e-Services include an e-Bulk Payment facility to government and private agencies with many accounts and high consumption, in order to better manage their payments.

# Operations Review – Distribution



**Chart 2:**
**Customers enrolment in eServices**




| FY | 07/08 | 08/09 | 09/10 | 10/11 | 11/12 |
|---|---|---|---|---|---|
| Total Customer Enrolled | 21,346 | 38,999 | 60,345 | 80,150 | **100,522** |

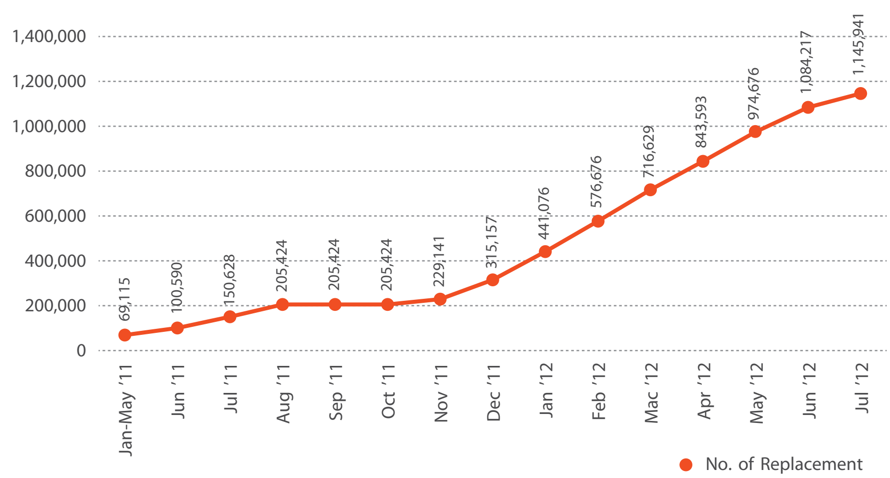
### Self Meter Reading (SMR)

Self Meter Reading (SMR) is a new initiative introduced to address complaints pertaining to electricity bills. Through SMR, domestic customers are given the option of reading their own meters for three consecutive months following which the meter will be read by TNB personnel on the fourth month as part of a verification process. Customers will be notified via SMS or email on the meter reading date. They are required to submit their meter readings via SMS to 15454 or via the e-Services platform on TNB's website within three days of receiving this notification from TNB. SMR allows for precise reading of electricity consumption in which the customer also stands to benefit from managing their monthly electricity consumption.

### Remote Meter Reading (RMR)

The Remote Meter Reading project (RMR) was successfully implemented for 4,500 high and medium voltage customers (HVMV) and 60,000 low voltage large power customers (LV LPC) during the year under review. This technology, which improves operational efficiency, will be implemented for the 1,000,000 ordinary power customers

**Chart 3:**
**Meter Replacement Program FY11/12**




(OPC) within the next 10 years. In addition, Distribution Division will install smart meters as a pilot project for 1,000 customers in the next Financial Year.

### Aged Meter Replacement Programme

Under TNB's revenue assurance initiative, Distribution Division has embarked on a systematic programme to replace electricity meters that are more than 15 years old. As at July 2012, a total of 1,145,941 meters has been replaced.

### Asset Management PAS 55

Distribution Division operates network assets with a net book value of RM17.87 billion (as at 31 August 2011). To ensure these assets are effectively and efficiently managed, the Division has established an Asset Management (AM) System and prepared a five-year Asset Management Strategy supported by annual Asset Management Plans. This is consistent with the requirements of the BSi PAS 55:2008 Asset Management System and the soon-to-be-introduced ISO 55000 standard on asset management.

# Operations Review – Distribution



The business objectives of the Asset Management Strategy and Plan are:

- to achieve a Customer Satisfaction Index Score of 7.5
- to achieve a SAIDI of 50 minutes and
- to reduce losses to 5%

These objectives complement TNB's Gemilang 2015 mission of being "committed to excellence in our products and services".

The Asset Management Plan is linked with the Division's national as well as state business objectives and targets for the Financial Year. It provides an overview of TNB's initiatives and key activities planned for the current Financial Year which are integral to fulfilling the Company's business objectives.

The Asset Management Plan also addresses TNB's core Business As Usual activities and summarises the Company's planned expenditure to ensure its asset management and risk capabilities conform with emerging international best practices.

## SUPPLY RELIABILITY IMPROVEMENT

### SAIDI Segmentation

In order to optimise resources and focus on relevant areas so as to meet customers' expectations, Automation technology will be one of the enablers for SAIDI segmentation. Distribution Division has segmented its SAIDI targets according to the following categories:

**Urban Areas**

– In areas under the administration of *Dewan Bandaraya or Majlis Perbandaran,* automation is maximised to achieve targeted restoration time in less than 15 minutes.

**Rural Areas**

– In these areas, restoration time is targeted at less than four hours.

**Industrial Areas**

– In areas gazetted by the Malaysian Industrial Development Authority (MIDA), electricity supply is critical, therefore automation is targeted to achieve restoration in less than one minute.

SAIDI Segmentation allows TNB to manage targeted areas and respective networks more effectively and efficiently, while undertaking relevant steps to enhance restoration time with better and reliable network configuration as well as network automation packages.

### Distribution Regional Control Centres

Regional Control Centres (RCCs) in TNB play a vital role in ensuring reliability, continuity and security of the electrical supply system. The Distribution RCCs are situated in two locations:

- Seberang Jaya, where the Northern and Eastern Control Rooms are located (NERCC)
- Bangsar, where the Metro and Southern Control Rooms are located (MSRCC)

### SCADA

TNB has completed the installation of the Supervisory Control and Data Acquisition (SCADA) system in 94% of its primary substations. All primary distribution substations are targeted to be equipped with SCADA by 2015.

Secondary substations in prime areas are also equipped with SCADA facilities. A total of 1,131 VCB substations and 343 RMU substations are already equipped with full SCADA functionalities.

With the installation of SCADA, more medium voltage feeders and substations are being monitored and controlled remotely. This enables personnel at the control centres to restore electricity supply quickly in the event of an unscheduled power outage, thereby reducing the duration of outage as measured by SAIDI. The table below indicates a significant reduction in SAIDI over the last two Financial Years.

| Voltage | FY2009/10 | FY2010/11 | % Reduction |
|---|---|---|---|
| 33 kV | 58.52 | 47.03 | 20% |
| 22 kV | 88.16 | 62.74 | 29% |
| 11 kV | 80.85 | 72.06 | 11% |

### Power Quality (PQ)

In the Financial Year under review, TNB successfully conducted five seminars for large power customers from various industries including the semiconductor and textile sectors. Among the topics presented were PQ standards, PQ case studies, PQ monitoring and PQ mitigation.

A new power quality guidebook, titled *A Guidebook for Managing Power System Harmonics*, was also launched which is aligned to the supply application procedures and technical requirements in the new Distribution Code.

### Arc Flash Protection Scheme

An Arc Flash Protection scheme has been incorporated into switchgears that serve critical areas to provide additional protection to equipment and limit the extent of potential damage in the event of a flashover. It has been observed that Main Intake Substations (PMU) and Distribution Intake Substations (PPU) installed with the system suffer less damage from flashovers than substations without it. Customer interruptions have also been significantly shortened. To date, 59 substations have been installed with the scheme and TNB is targeting its installation at 50 substations annually.

## NEW TECHNOLOGIES

TNB leverages on new technologies to achieve its performance targets. Among the proven technologies introduced during the year were:

| | | | |
|---|---|---|---|
| a. | Insulating cover H/pole 11kV | : | Reduce breakdowns at pole mounted S/S |
| b. | 5 MVA Mini PPU 33/11kV | : | Reduce SAIDI and losses |
| c. | Pre-moulded transition joint | : | Reduce breakdown due to joints |
| d. | SF6 Pole Top LBS | : | Reduce breakdowns at MV overhead lines |
| e. | Online battery monitoring system | : | Avoid malfunction of protection system |
| f. | Mobile SSU | : | Reduce restoration time at MV substations |
| g. | Mobile compact substation | : | Reduce restoration time at MV substations |
| h. | Circuit Breaker RMU | : | Reduce the number of customers affected by breakdowns |
| i. | Mini PPU | : | Rural area primary substations |
| j. | Directional Ultrasonic Detector | : | Diagnostic tool |
| k. | Magnetic probe for Advanced TEV | : | Diagnostic tool |
| l. | Portable PQ recorder | : | Diagnostic tool |
| m. | SF6 load break switch | : | Reduce breakdowns at MV overhead lines |
| n. | SCADA-ready line fault | : | Reduce restoration at MV overhead lines |

### Electricity Tariff

At the end of 2011, the Government introduced the Feed-in-Tariff (FiT) mechanism with the aim of promoting the development of Renewable Energy (RE) in Malaysia. An FiT contribution of 1% was imposed on all TNB customers, except domestic customers with a monthly electricity consumption of 300kWh and below, effective from 1 December 2011. The RE fund will be utilised to develop RE projects and initiatives, and will be managed by the Sustainable Energy Development Authority (SEDA) under the Ministry of Energy, Green Technology and Water.

In addition, as of 1 December 2011, electricity bills included the amount of subsidy paid by the Government. This is to create public awareness of the increasing cost of generating electricity and the burden borne by the Government to maintain competitive tariffs in the country.

TNB continues to give privileged customers, including government schools and institutions of higher learning, places of worship and welfare homes, a 10% discount on their electricity bills. This amounted to RM78.84 million (unaudited 12 months actual) during the year under review. The 10% discount for institutions of higher learning is being extended to educational institutions that are partly funded by the Government, underlining TNB's commitment to support the country's education system.

Operations Review



# NON-CORE BUSINESSES

TNB's Generation, Transmission and Distribution Divisions are strongly supported by other divisions in the Group that bring into play their knowledge and expertise to ensure TNB operates as a dynamic, well-run enterprise that is able to fulfill its promise of '*Keeping the Lights On*'. Among these support divisions are New Business & Major Projects, Group Finance, Planning, Corporate Affairs, Corporate Services and Procurement.

***New Business & Major Projects Division*** represents a new division created in 2012 to spearhead the growth of TNB's non-regulated business locally and internationally. The division will oversee and consolidate all business development roles and services under one roof to capitalise on the Group's extensive knowledge and capabilities in providing a range of energy-related services.

***The Group Finance Division*** is responsible for strategising TNB's overall financial management. It assumes the conventional financial functions of financial and management reporting, taxation, budgeting, corporate finance and treasury operations. In addition, the division also undertakes the financial planning, business development, enterprise-wide risk management and investor relations aspects of the Group's business.

***The Planning Division*** comprises departments responsible for strategic planning, system planning and development, as well as energy procurement activities. These departments collaborate to formulate and implement TNB's long-term strategies, ensure reliable national supply as well as manage energy procurement activities, including power purchase agreements (PPAs).

***The Corporate Affairs & Communications Division*** ensures the Group communicates effectively with its internal and external audiences in order to maintain close relationships with TNB's various stakeholders and build the TNB brand. The division also oversees the Group's foundation, Yayasan Tenaga Nasional (YTN), through which TNB supports the educational and welfare needs of deserving students, and provides aid to the underprivileged. In addition, Corporate Affairs coordinates the activities of Regulatory and Relationship Management.

***The Corporate Services Division*** is tasked with managing and ensuring the security of all TNB's properties and assets while also providing logistics, project management and consultancy support services.

***The Procurement Division*** supports the other divisions by formulating effective procurement policies and implementing strategic supply chain initiatives that enhance procurement activities.

# NEW BUSINESS & MAJOR PROJECTS

Dato' Ir. Mohd Nazri bin Shahruddin
Vice President

## INTERNAL BUSINESS AND MAJOR PROJECTS DIVISION

The International Business and Major Projects Division has been created to implement breakthrough strategies targeted at expanding TNB's global business while streamlining investment vehicles and processes for overseas expansion. These functions were previously entrusted to the Investment Management Department and Business Development Department of Group Finance, and the Generation Asset Development of Generation Division.

Consolidating the three departments within one single structure will ensure:

– Better coordination in strategising for new projects, including bidding for new generation projects.

– More efficient and effective flow of data and information, and the sharing of lessons learnt from past projects.

– The optimal use of expertise within the division to create a competitive advantage for TNB. For example, expertise in generation development locally can be deployed for overseas generation ventures while expertise in business development overseas can assist in bidding for new projects domestically.

The main functions of the International Business and Major Projects Division include monitoring the investment portfolio of TNB subsidiaries, implementing generation project development, bidding for new generation capacity and developing new domestic and international business.

# Operations Review – New Business & Major Projects



| Subsidiaries | Business | Projects/Achievements | Prospects |
|---|---|---|---|
| **TNB Engineering Corporation Sdn. Bhd.** | Provider of District Cooling Systems with Thermal Energy Storage. | Completed 95% of District Cooling plant in KLIA2 PV02, to supply cooling energy to the Main Terminal Building of Malaysia Airports Holdings Berhad and Integrated Complex. | Mergers, acquisition and expansion of existing District Cooling System projects. |
| | Specialise in Project Development Ownership, Energy, Procurement and Construction and Comprehensive Operations and Maintenance. | In Abu Dhabi, the 8,000RT and 30,000RT plants' testing and commissioning were completed in May 2012 and targeted to complete in October 2012, respectively. | Energy management projects for Government buildings. |
| **TNB Energy Services Sdn. Bhd.** | Provider of green energy solutions and services for development, operation and maintenance of renewable energy projects. | Consultant to Public Private Partnership Unit for its solar hybrid station and supply system to rural of Sarawak. | Power system studies for future RE developers. |
| | Involved in power quality and energy efficiency audits. | Develop solar hybrid station for RPS Kemar in Grik. | Opportunities in ASEAN region and Middle East. |
| **Tenaga Switchgear Sdn. Bhd.** | Manufacture high voltage switchgears through joint venture and collaborations with business partners. | Successfully supplied commissioned substations and provided maintenance and switchgear refurbishment. | Contracts to supply gas circuit breakers to Pakistan, Vietnam and Indonesia. |
| | Offer turnkey contracting of transmission and distribution substation services, substation engineering and design and specialised maintenance and repair of high, medium and low voltage equipment services. | Certified ISO 9001:2008, ISO 14001 and OHSAS 18001:2007 and products are accredited by international test labs with Type Test Certificates. | Provide engineering design and solution to Perusahaan Listrik Negara Indonesia. |

## DEVELOPING NEW BUSINESS OPPORTUNITIES

In the spirit of expanding its footprint globally, TNB has focused on enhancing its earning base locally and in emerging markets which are expected to see continuous and dynamic growth. The Business Development Department spearheads this initiative by continually exploring opportunities for partnerships and collaborations with international corporations in electricity related businesses.

Despite the Arab Spring that stymied TNB's efforts in the Middle East and North Africa during the year under review, TNB continues to seek potential power projects in this region. Within Southeast Asia, TNB is exploring opportunities in Indonesia, Vietnam and Bangladesh. The company has also begun to look into the possibility of venturing into upstream businesses in order to enhance fuel security.

# Operations Review – New Business & Major Projects



Although TNB's prospects are challenged by global uncertainties and increasingly competitive markets, there are more opportunities now than ever given the liberalisation of power markets throughout the region. TNB has therefore outlined several strategies to gain a competitive edge, which includes creating effective market intelligence and partnership programmes. TNB looks forward to collaborations with major players in the industry to broaden its business opportunities and enhance its investment prospects in the longer term.

## INVESTMENT MANAGEMENT

The Investment Management Department in Group Finance oversees TNB's local and foreign investments with the aim of bringing positive value to TNB as a whole. This it achieves by closely monitoring the financial and operational aspects of TNB's investments in key subsidiaries and associate companies. The Department sets strategic directions for each subsidiary and continuously monitors performance towards achieving TNB's long-term goal of increasing its non-regulated revenue.

## MAJOR PROJECTS

### On-going Projects

#### Hulu Terengganu Hydroelectric Project (250MW)

Construction of the Hulu Terengganu Hydroelectric Project consists of four work packages – the Preliminary Civil Works, Main Civil and Associated Works, Electrical and Mechanical Plant and the High Voltage Switchyard. Preliminary Civil Works was awarded to AZRB and commenced in January 2010. Upon its completion in May 2011, the project site was handed over to the Main Civil Works contractor, Loh & Loh Sinohydro JV, which was awarded the contract in September 2010 with a construction period of 56 months. The contract for the Electrical & Mechanical Works was awarded in October 2010 to the consortium of Alstom Hydro Malaysia & Alstom Power India Ltd, with a construction period of 55 months. The High Voltage Switchyard works will be undertaken by Transmission Division. HTJV, a consortium of SNC Lavalin Inc, SNC Lavalin Power (Malaysia) Sdn. Bhd., KTA Tenaga and G&P Associates, is the engineering consultant for this project. Commercial operations of the first unit is targeted to begin on 16 September 2015, followed by the second unit on 17 December 2015. In addition, the Energy Supply Committee (ref: JPT Bil. 4/2011 dated 12 August 2011) approved a proposal to implement a small Hydropower Plant (2x7.5MW, 53 GWh/a) at the Tembat Transfer Tunnel outlet. This will be done through an open tender separate from the main contract. Commercial operations is targeted for 2016.

#### Ulu Jelai Hydroelectric Project (372MW)

Preliminary Civil Works for the Ulu Jelai Hydroelectric Project was awarded to the TM-Salini consortium in August 2010, with a construction period of 12 months. Work commenced in October 2010. The contract for the Main Civil and Electrical & Mechanical Works was awarded to the same consortium in December 2010, and work commenced in March 2011. SMEC International Pty Ltd entered into a joint venture agreement with SMEC (Malaysia) Sdn. Bhd. as the engineering consultant for this project. The first unit is targeted to begin commercial operations in December 2015, followed by the second unit in March 2016.

#### Manjung Coal-Fired Power Plant Project (1,000MW)

On 23 August 2010, the Government awarded TNB a contract to build a 1,000MW Coal-Fired Power Plant ("Project") based on the build, own and operate (BOO) concept. For strategic financing purposes, TNB has

# Operations Review – New Business & Major Projects



identified TNB Janamanjung Sdn. Bhd. (TNBJ) as the owner and developer of the project, hence will operate the new power plant as an independent power producer (IPP). TNBJ subsequently awarded the engineering, procurement and construction (EPC) contract to the ALSTOM-CMC consortium on 31 March 2011, which also serves as the commencement date of the contract. The project is located adjacent to the existing Sultan Azlan Shah Power Station in Manjung, Perak.

The new power plant will use the latest supercritical boiler technology, which is more efficient than conventional coal-fired boilers. Accordingly, the new plant is expected to operate at an efficiency level of 39.8%, which is higher than the 35% efficiency level of the existing Sultan Azlan Shah Power Station. This means that the boiler will burn less coal, hence emit less $NO_X$, $SO_X$, $CO_2$ and particulates.

The Detailed Environmental Impact Assessment Report was approved by the Department of Environment on 22 February 2011, following which the Manjung Municipal Council granted it planning permission (Development Order) on 24 March 2011. TNBJ has also successfully achieved its financial closing date on 15 November 2011. All project documents related to the new power plant, such as the Power Purchase Agreement, Coal Supply and Transportation Agreement, and two Shared Facilities Agreements were executed successfully on 25 October 2011. TNBJ has also obtained an IPP Licence from the Energy Commission of Malaysia on 30 January 2012 for a 25-year period commencing 31 March 2015 up to and including 31 March 2040. For the coal handling from the jetty to the new power plant, TNBJ and Lekir Bulk Terminal Sdn. Bhd. (LBT) signed a Jetty Terminal Usage Agreement No. 2 on 27 July 2012 which was approved by the shareholders of Integrax Berhad (a holding company of LBT) on 24 August 2012. The overall EPC contract is progressing ahead of plan and the plant is scheduled to begin commercial operations on 31 March 2015.

**Lahad Datu Combined Cycle IPP Project (300MW)**

The Federal Government, through the Public Private Partnership Unit (UKAS), awarded the combined cycle project to a consortium of TNB (50%), Petronas (30%) and the Sabah State Government (20%) on 25 July 2011. The power plant will be fueled by natural gas from the proposed Petronas LNG plant in the same area.

A project company, Eastern Sabah Power Consortium Sdn. Bhd., was formed by TNB in October 2011 to undertake the project. Subsequently, in August 2012, a Subscription and Shareholders' Agreement was signed between Orion Mission Sdn. Bhd. (representing TNB), Petronas Power Sdn. Bhd. (representing Petronas) and Warisan Harta Sabah Sdn. Bhd. (representing the Sabah State Government) to subscribe to shares in the project company. Preliminary works are on-going with the Power System Studies while the Geotechnical Investigations were completed in July 2012 and the Environmental Impact Assessment is pending approval from the Department of Environment. Negotiations for a Power Purchase Agreement with SESB, Gas Supply Agreement with Petronas and Land Lease Agreement with POIC Sabah Sdn. Bhd. are on-going. The EPC contract is expected to be awarded in mid-2013 while the first unit is expected to be commissioned by end 2015.

**Jengka Biomass Power Project (10MW)**

FTJ Bio Power Sdn. Bhd. (FTJ), a joint venture (JV) company between TNB and Felda Palm Industries Sdn. Bhd. (FPI), is developing a 10MW biomass power plant in Jengka, Pahang, with financing from the Kuwait Finance House (Malaysia) Berhad. The project was developed under the Small Renewable Energy Power Programme (SREP) launched by the Government to promote renewable energy in power generation in line with the Fifth Fuel Policy and to reduce greenhouse gas emissions. The plant, located at Jengka 9, Mukim Chenor in Maran, will use palm oil empty fruit bunches (EFB) as its primary source of fuel. A Fuel Supply Agreement (FSA) between FPI and FTJ has been signed for supply of EFB from neighbouring FPI palm oil mills. An Operation & Maintenance Agreement (OMA), valid for six years will be signed between TNB REMACO and FTJ.

# Operations Review – New Business & Major Projects



Construction of the power plant commenced in May 2011 and is expected to be completed in December 2012. FTJ obtained Feed-in Approval (FiA) from the Sustainable Energy Development Authority (SEDA) in March 2012 under the Feed-in Tariff (FiT) policy, which allows FTJ to sell power to TNB at RM0.30/kWh in its first year of operation. FTJ has also applied for the project to be registered under the Clean Development Mechanism (CDM) in line with the Kyoto Protocol. This will allow FTJ to participate in carbon credit trading based on Certified Emission Reduction (CER). The project is expected to contribute to a reduction of about 35,000 tons of $CO_2$ emissions annually.

### Feasibility Study MOU of Potential Biogas Projects at Sime Darby Plantations

Technical and financial feasibility studies for potential biogas power plants using palm oil mill effluents at identified Sime Darby plantations were completed in November 2011. In February 2012, Mitsui & Co Ltd decided not to invest in the joint venture and withdrew from the MOU. In July 2012, TNB and Sime Darby agreed to proceed with developing the biogas power plants at selected palm oil mills. A joint venture company for the development and implementation of the power plant will be formed in the first quarter of the financial year 2013.

### Geothermal Development Programme

The geothermal development programme has been stopped as TNB's prerequisite for exclusivity to access and develop the identified potential sites was denied.

## New Projects

### Connaught Bridge Single Shaft Combined Cycle Project (350MW)

The project will utilise an M701F3 MHI gas turbine, to be incorporated with a generator and a steam turbine in a single-shaft arrangement. Connaught Bridge power station was selected as the most suitable site because of its available infrastructure and strategic location to the load centre. The Environmental Impact Assessment study has been in progress and is expected to be completed in November 2012. The EPCC tender has been floated and will be awarded in April 2013. The plant is expected to begin commercial operations in August 2015.

### Chenderoh Additional Generation Capacity – Unit 5

This project will add a fifth generating unit to the existing four units at the Chenderoh Hydroelectric scheme. It will harness the otherwise wasted energy from the water spilling off the Chenderoh dam, especially in the monsoon season. The estimated annual energy output that can be generated is 22.5GWh per year. The contract for engineering services is expected to be awarded by end of 2012, while commercial operations is expected to begin by end of 2018.

### Tekai Hydroelectric Project (155.8MW)

The proposed project is located on Tekai River in the district of Jerantut, Pahang. The project will consist of two cascading dams, namely Upper Tekai Dam and Lower Tekai Dam, both of which will have surface powerhouses or power stations. The surface power station at Upper Tekai will have an installed capacity of 150MW peaking generating units while Lower Tekai will have an installed capacity of 5.8MW base-load generating unit. The proposed scheme will have a total installed capacity of 155.8MW and an average annual energy output of 274GWh.

In July 2012, the Government awarded the project to TNB with a Commercial Operation Date (COD) commencing in year 2020 with reasonable tariff. The project will replace the need to plant up an equivalent open cycle gas turbine (OCGT) plant. The objective is to provide a financially viable peaking hydroelectric scheme designed in accordance with international standards.

# Operations Review – New Business & Major Projects



**Future Projects**

Proposed projects in Telom (132MW), Sungai Pelus (34MW), Talong Sengoh (200GWh per year), Lebir (274MW) and Nenggiri (416MW) are at various stages of discussion/action between TNB management and state authorities.

**TNB Repair and Maintenance Sdn. Bhd.**

TNB Repair and Maintenance Sdn. Bhd. (TNB REMACO), a business unit under New Buisiness & Major Projects Division, provides repair, maintenance and testing services as well as the refurbishment of components. Throughout the years, it has diversified into project development and operations and maintenance, both locally and overseas.

The primary focus of TNB Repair and Maintenance Sdn. Bhd. (TNB REMACO) is on TNB's power plants in the fields of scheduled maintenance and repair, refurbishment of components and testing services. With a proven track record of over 30 years in power plant repair and maintenance, TNB REMACO is Malaysia's premier specialist in this area. Over the years, however, it has expanded beyond TNB and diversified its business into other areas such as project development and operation and maintenance (O&M). TNB REMACO was awarded the Power Plant Service Provider of the Year at the 2012 Frost & Sullivan Malaysia Excellence Awards.

During the financial year, TNB REMACO achieved a record revenue of RM543 million; an increase of RM188 million from the previous year. Among the significant contracts awarded during the year were the Relocation of 2X32MW Frame 6 Gas Turbine Generating Sets and Balance of Plant from Teluk Ewa to Tawau Main Intake Sabah; and the provision of Project Management and Consultancy Services (PMC) for the Construction of a 300MW Gas Fired Combined Cycle Plant by Eastern Sabah Power Consortium (ESPC) in Lahad Datu, Sabah. The company also undertook refurbishment works in Pupuk Kaltim, Indonesia and Pulau Seraya, Singapore; and completed a second job in Yemen for Public Electricity Corporation (PEC). This was to perform a 16,000EOH Minor Inspection on the 3Xv94.2 Siemens Gas Turbine at the Marib Power Station.

TNB REMACO signed a few Memorandums of Understanding (MoUs), Joint Ventures (JVs) and Non Disclosure Agreements (NDAs) with its Malaysian and international partners for overseas ventures. Among these are:

- JV with Kharafi National, Kuwait for Shuaibah North, Az-Zour and Sibayya for O&M contracts
- NDA on Rehabilitation and Long Term Service with DHA, Pakistan
- Agency Agreement with Sawary, Saudi Arabia
- MoU with Mashor, Brunei
- NDA with Crescent Power and WIKA, Indonesia
- NDA with Dyna Synegy and AYD, Myanmar

TNB REMACO is currently exploring some O&M contracts within its target markets, including:

- 2X750MW combined cycle gas turbine plant in Dairut, Egypt
- 94MW combined cycle and desalination plant in DHA, Pakistan
- 2X600MW plant in Duyen Hai, Vietnam
- 2XFrame 5 Murphy Oil, Bintulu, Sarawak

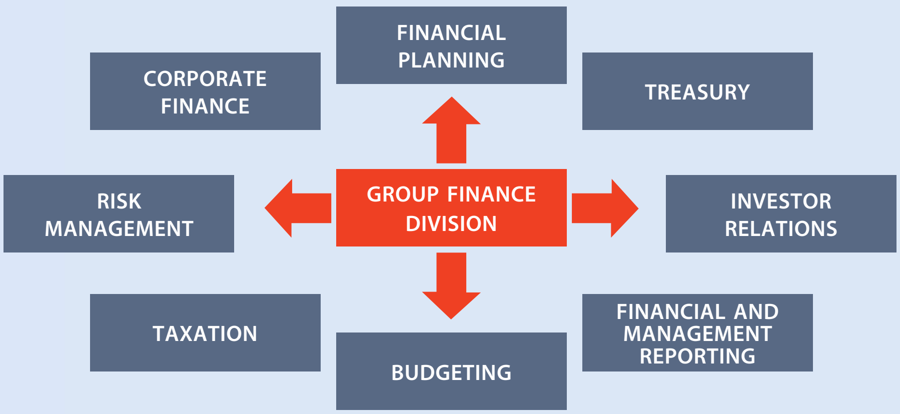
In addition, TNB REMACO is exploring defect warranty work in Yemen; a gas turbine overhaul and balance of plant project in Vietnam; and steam turbine overhaul in Myanmar among various other maintenance and repair projects globally.

# GROUP FINANCE

Fazlur Rahman bin Zainuddin
Chief Financial Officer/Vice President

Group Finance Division has always supported TNB's core function of '*Keeping the Lights On*' by sustaining the company's financial health whilst ensuring sound investment decisions and financial management.

Towards enhancing TNB's financial management, Group Finance Division manages not only the conventional finance functions but also other related functions, as depicted below:




In addition, the various units in Group Finance Division play key roles in:

- Keeping TNB's costs at manageable levels
- Acting as a focal point in assisting other business units to make informed decisions on financial and commercial matters

# Operations Review – Group Finance



## KEY ACHIEVEMENTS

During the financial year 2012, Group Finance Division continued to play a vital role in managing the finance functions of the TNB Group. Key achievements include the following:

- Assisting TNB Janamanjung Sdn Bhd in the RM4.85 billion Islamic Securities issue for the development of the 1,100MW coal-fired power plant
- Implementing strategic initiatives to optimise costs incurred in developing TNB Janamanjung Sdn Bhd's coal-fired power plant
- Supporting the SAVE programme initiated by the Ministry of Energy, Green Technology and Water
- Implementing prudent tax management as part of TNB's cost optimisation initiatives
- Preparing for the implementation of the Incentive-Based Regulation

## ASSISTING TNB JANAMANJUNG SDN BHD IN THE ISSUANCE OF ISLAMIC SECURITIES

During the year, the Corporate Finance Unit assisted TNB Janamanjung Sdn Bhd to issue 20-year Ringgit denominated Islamic Securities worth RM4.85 billion to fund the expansion of the 1,100MW coal-fired power plant at the Sultan Azlan Shah Power Station in Manjung, Perak.

The Islamic Securities, based on an Ijarah structure, were assigned a long-term AAA rating by RAM Ratings. During the book-building period, the Islamic Securities were 4.76 times oversubscribed and carried coupons ranging between 3.80% and 4.90%. The exercise was named the Asia-Pacific Bond Deal of the Year by Project Finance International (PFI) and the Ijarah Deal of the Year at the Islamic Finance News Annual Awards.

## OPTIMISING THE DEVELOPMENT COST OF TNB JANAMANJUNG SDN BHD'S COAL-FIRED POWER PLANT

In efforts to optimise the development cost of TNB Janamanjung Sdn Bhd's coal-fired power plant, the Treasury Unit in collaboration with TNB Janamanjung Sdn Bhd has been carrying out opportunistic spot purchasing of the US Dollar (USD) and Euro (EUR) whenever the Malaysian Ringgit strengthens against these currencies to set up floats in Foreign Currency Accounts (FCAs) which will act as a natural hedge. The funds are then invested in the USD and EUR deposits until the project payment date.

## SUPPORTING THE SAVE PROGRAMME

The Treasury Unit was entrusted to carry out the payment for the Sustainability Achieved via Energy Efficiency (SAVE) programme initiated by the Ministry of Energy, Green Technology and Water. The programme aims to encourage greater adoption by the public of energy-saving electrical appliances by providing rebates for air-conditioners and refrigerators. In support of this programme, more than 6,000 payment transactions were executed in the financial year 2012.

## IMPLEMENTING PRUDENT TAX MANAGEMENT

The Tax Unit facilitates TNB and its subsidiaries, both locally and overseas, in implementing strategic tax planning initiatives which include continuous efforts to obtain government fiscal incentives and exemptions in addition to implementing compliance efforts to keep abreast of new tax legislations. Key achievements in the year include:

- obtaining approval for tax incentives and exemptions resulting in tax savings of RM2.1 billion for TNB Janamanjung Sdn Bhd's 1,100MW coal-fired power plant, and
- achieving RM267 million in tax exemptions, thus reducing TNB's capital cost structure

## PREPARING FOR THE INCENTIVE-BASED REGULATION

Preparations for the Incentive-Based Regulation (IBR) proposed by the Energy Commission are on-going and Group Finance through its Financial Planning and Divisional Accounting Unit is part of the Working Group entrusted to ensure that TNB complies with the framework as outlined in the Regulatory Implementation Guidelines (RIGs). Key tasks include establishing a more robust and comprehensive Revenue Requirement Model, Regulatory Weighted Average Cost of Capital, Cost of Service Model and Regulatory Accounting Framework to complement and support the IBR initiatives.


## OUTLOOK AND THE WAY FORWARD

The financial year 2012 was initially challenging to TNB's cash position following the increase in fuel costs due to the shortage of natural gas supply in the first quarter. However, subsequent compensation by Petronas and the Government helped to ease the burden.

Globally, the economic slowdown, especially in the United States and China, and the current European sovereign debt crisis had resulted in the weakening of the Ringgit against the US Dollar. This in turn affected TNB's operation costs.

Going forward, the main areas of focus in the power sector will be: open bidding for new power plants, implementing the Incentive-Based Regulation, establishing an effective fuel cost pass through mechanism and renewing power purchase agreements with independent power producers (IPPs).

Even as the market conditions remain uncertain, Group Finance Division will continue to support the Group's capabilities and growth aspirations to safeguard TNB's financial viability particularly in relations to cash liquidity. The Division as a whole will continue to strive for efficient and effective cost management initiatives, with special focus on value creation in the financial year 2013 to ensure financial sustainability. As the Group moves forward to expand globally, the Division will continue to play a leading role in the quest to achieve TNB's strategic objectives.

# PLANNING

Datin Roslina binti Zainal
Vice President

## HIGHLIGHTS OF ACHIEVEMENTS

- Financial compensation for the natural gas shortfall
- Competitive bidding for new power plants
- Implementation of the Incentive-Based Regulation (IBR)
- Progress on TNB's 5-Year Strategic Plan – GEMILANG 2015

Planning Division is entrusted with three key responsibilities:

- To ensure sufficient, reliable and affordable power supply to meet the nation's electricity demand
- To ensure activities related to energy procurement, including negotiations and management of power purchase agreements (PPA) with power producers and cross border interconnections, are administered effectively and professionally in accordance with provisions of the PPA
- To ensure the formulation and subsequent implementation of long-term strategic plans are aligned towards TNB vision, mission and strategic objectives

# Operations Review – Planning



## MANAGEMENT OF MAJOR STRATEGIC ISSUES

### Impact of Gas Shortfall, Mitigation and Compensation

The power industry began to experience major interruptions in gas supply in early 2010, which worsened in December 2010 due to fire at Petronas Bekok C platform. In order to keep the lights on, TNB had to turn to alternate fuels (oil and distillates) which are five to six times more expensive than gas. It also had to purchase more expensive electricity from neighbouring utilities to ensure continuous supply. Following the Government's decision to implement a cost sharing mechanism as a result of the gas curtailment, TNB is being compensated for two-thirds of the additional fuel costs it has had to face. To date, it has received RM2,046 million in January 2012 as compensation for the period January 2010–October 2011, and RM356 million for the period November 2011 to March 2012. TNB is also expected to receive RM751 million to compensate for the cost differential for the remaining period of the financial year 2012.

### Competitive Bidding to Meet Future Generation Capacity Needs

In view of increasing electricity demand and the expiry of existing generators in the system (including those in first-generation Independent Power Producers), there is a need to secure fresh generation capacity. This is being done via an international competitive bidding process, facilitated by the Energy Commission (EC). The EC has to date invited bidders to participate in two tracks of competitive bidding. Track 1 targets to secure between 1,000MW to 1,400MW capacity of combined cycle power plant at Prai while Track 2 targets the extension of existing generators for a total capacity of about 2,250MW. Both Tracks 1 and 2 are to fulfil the capacity requirement for years 2016 and 2017. Tenders will be awarded to the successful bidders in October 2012.

### Incentive-Based Regulation (IBR)

The EC has initiated the introduction of a new tariff regulation framework called the Incentive-Based Regulation (IBR). Its key objectives are to enhance the electric utility's efficiency and improve transparency in determining consumer tariffs. Salient features of the IBR include:

a. Accounting separation of TNB's business entities
b. Imbalanced cost pass through, including the fuel cost pass through mechanism
c. Incentive mechanism for performance indicators
d. Determination of reasonable returns to TNB
e. Tariff determination process and decision (regulatory period)
f. Stakeholders/consumers consultation regarding tariff reviews
g. Regulatory accounts and reporting

Planning Division leads a cross-divisional team to engage with the EC in a series of meetings and discussions to ensure the successful implementation of IBR. A TNB IBR Council was formed in June 2011 comprising members of the Group Executive Council Committee and led by the CEO to manage, coordinate and oversee the implementation of the IBR. All information and data dissemination to the EC in relation to IBR will be centralised and coordinated by the TNB IBR Council and taskforce.

# Operations Review – Planning



The EC has released a set of IBR Regulatory Implementation Guidelines (RIGs) and implementation plan indicating a trial period for IBR from September 2013 to August 2014. The first regulatory period with full IBR will be from September 2014 to August 2017.

**Periodic Fuel Cost Pass Through (FCPT) Mechanism**

From 2009, the Government has in principle approved six-monthly reviews of gas and coal prices, with the electricity tariff adjusted accordingly, under the Fuel Cost Pass Through (FCPT) mechanism. Tariff reviews since then have incorporated the price reviews of gas and coal. The FCPT is crucial for TNB, particularly in view of the fluctuating market price of coal as well as the inevitable increase in fuel cost associated with the introduction of LNG into the generation mix.

Planning Division leads a cross-divisional tariff team tasked with engaging relevant Government agencies in tariff review exercises, including the FCPT. Under RIG 8 of the IBR framework, the EC has proposed the implementation of a mechanism known as the Imbalance Cost Pass Through (ICPT) in which the FCPT would form a major component. TNB has worked closely with the EC to develop and refine a more transparent ICPT/FCPT formula in addition to providing the necessary fuel cost data. To date, the ICPT/FCPT principles and calculations have been agreed by the EC and will be tabled to the Ministry of Energy, Green Technology and Water for approval.

**TNB Initiatives in Supporting Sustainable Clean Power Options**

Together with the pledge of *Keeping the Lights On*, TNB is constantly expanding its business strategies and practices that support sustainable development across the organisation's value chain. These developments can be divided into two main categories which reflect the fundamentals of the electricity supply industry – the supply and demand sides. The supply side comprises generation, transmission and distribution of the electricity value chain while the demand side is made up of electricity customers.

***Supply Side:***

- ***Continuous Support of Low-Carbon Generation Technologies:*** These include the development of the 10MW Biomass Plant in Jengka, Pahang; mini-hydros; solar hybrids and bio-gas projects alongside the continuous improvement of TNB plant's efficiency utilising the latest technologies available. TNB further manifests its commitment to the development of Green Energy via the Small Renewable Energy Programme (SREP) and the current Feed-in-Tariff (FiT) framework.
- ***Smart Grid Plan and Projects:*** Pilot projects with low network loss and higher reliability have been identified in the Bukit Bintang commercial area, Bayan Lepas industrial area and Medini (Wilayah Iskandar, Johor). The Government has agreed to provide some funding via the AAIBE fund for Smart Grid initiatives.
- ***Research, Training and Capacity Building:*** TNB's training and research centres, namely the Centre for Renewable Energy (CRE), Institute of Energy Policy and Research (IEPRe) and ILSAS, conduct carbon footprint studies and provide training for energy managers while developing EE equipment/processes leveraging on in-house research and expertise.

***Demand Side:***

- ***Demand Side Management (DSM) and Energy Efficiency (EE) Initiatives:*** These include DSM analysis of tariff schemes/incentives and Demand Response (DR) studies and pilot projects, as well as continuous communication and awareness programmes through internal and external media on the creation of EE buildings and paperless office environments.

## GEMILANG 2015 MONITORING PROCESS

| | | |
|---|---|---|
| CORPORATE LEVEL | Top Management KPIs *(derived from Division Balanced Score card)* | 28 Key Initiatives *(derived from Annual Operating Plan)* |
| | Monitored by Strategic Planning (Quarterly) | |
| OVERSIGHT PLATFORM | Critical work plan for critical key initiatives | |
| | Monitor through Strategic Planner Meeting (Quarterly) | |
| DIVISION LEVEL | Division KPIs, Key Initiatives and detailed work plan all key initiatives | |
| | Monitored by Div SMOD (Monthly) | |

All of these developments are coordinated via Green Renewable Energy and Energy Efficiency Roundtable, otherwise known as GREENER TNB. The aim is to coordinate the green initiatives of all TNB business entities and subsidiaries and to define their roles in view of the broad spectrum of TNB's Green Energy Policy. In extending the role of GREENER to a wider audience, a GREENER portal has been established as a platform for green energy awareness.

### Malaysian Electricity Supply Industry (MESI) Reform Initiatives

As the country faces challenges in ensuring electricity supply availability and affordability, the Government has launched reforms to enhance transparency and efficiency of the industry as well as to ensure competitive end user tariffs. TNB supports the Government in its efforts to reform the Malaysia Electricity Supply Industry (MESI) through various initiatives, workshops and Government engagements. These include the MESI Reform Lab, New National Energy Policy, Subsidy Reduction Plan, Incentive-Based Regulation and the KETTHA/MyPower MESI reform. TNB also supports related programmes, notably the New Economic Model (NEM), Economic Transformation Programme (ETP) and Government Transformation Programme (GTP).

## FUEL SUPPLY SECURITY

### Natural Gas and LNG Supply Arrangement

In 2011, the average supply of gas to the power sector was only 924mmscfd, well below the power sector requirement of 1,250mmscfd. Hence, TNB was unable to fully utilise all the gas-fired power plants to meet consumers' demand. As a result, alternative fuels namely coal, MFO and distillates were used and electricity was imported from neighbouring countries – all at about six times the cost of gas – to meet TNB's obligation "to keep the lights on at all costs".

However, the gas supply situation is expected to improve through the commissioning of the Re-Gasification Terminal (RGT) in Melaka by the end of 2012. This will allow TNB to use imported LNG to make up for the shortage of gas supply to the power sector.

### Long-Term Generation Fuel Mix Study

Generation Planning Unit of the Planning Division is working closely with the Ministry of Energy, Green Technology and Water, the Energy Commission, MyPower Corporation and the Economic Planning Unit in the Prime Minister's Department to formulate a long-term generation fuel mix for Peninsular Malaysia. The study is critical for the country to move forward in view of the numerous challenges faced in keeping the lights on. Issues such as prolonged gas curtailment, pressure of increasing gas price and future dependency on expensive imported LNG have forced the country to relook the current fuel mix in the power sector. To ensure a secure, reliable and sustainable supply of electricity, a balanced fuel mix approach must consider the availability of domestic resources and the availability and risks associated with imported resources and their countries of origin. The study also serves as a strategic guide for future fuel procurement planning and generation system expansion plans.

### 5-Year GEMILANG 2015 Implementation, Monitoring and Progress

The monitoring of Key Action Plans for each Key Initiative under GEMILANG 2015 is important to ensure TNB achieves its targets of expanding its businesses and services globally by 2015. The division's Key Action Plans and annual KPIs are monitored collectively to ensure proper alignment between the business planning activities and the annual KPI Plan, and also to increase the effectiveness in the execution of the action plans and activities. At the corporate level, the status of GEMILANG 2015 Key Action Plans and TNB's annual KPIs are reported to the management on a quarterly basis.

# Operations Review – Planning



## LONG-TERM SYSTEM PLANNING AND DEVELOPMENT

### Long-Term New Generation Option

Generation Planning Unit of the Planning Division has assisted the EC in analysing and studying the long-term generation system expansion plan. The outcome of the study was then presented to the Electricity Supply and Tariff Planning and Implementation Committee (JPPPET) chaired by the Minister of Energy, Green Technology and Water. The study incorporates all potential big hydro power plants (more than 30MW) as future candidates in order to diversify the country's fuel mix. It also included thermal power plants with high efficiency levels – e.g. coal plants with 40% efficiency and gas fired power plants with 50%-60% efficiency. Moving forward, long-term options being considered include importing energy from Sarawak and Sumatera, and developing nuclear power plants locally.

### Transmission Development Plan

Planning of the transmission system is carried out annually to ensure that the power supply in Peninsular Malaysia is adequate and secure in catering for growth in electricity demand while complying with the Malaysian Grid Code. The planning incorporates detailed evaluation of the adequacy and security of the system through comprehensive simulation studies. It also identifies appropriate locations for future power plants and ensures adequate power compensation requirements.

## QUALITY MANAGEMENT AND OTHER INITIATIVES

Planning Division strives to improve its planning and operational processes through quality initiatives such as Planning Operation Control via Process Improvement in line with ISO 9001:2008. To date, 29 processes and 30 work instructions have been created for the Division. These processes have been, and will continue to be, closely monitored and continually improved through audits and other processes/initiatives. Recent audits have seen a shift from a procedural to a process approach and the division is well-positioned to adapt to this development. The Process Standardisation and Improvement (PSI) culture has been fully adopted by the Division and the management has demonstrated strong commitment to continually improving its implementation.

At the same time, Planning Division continues to strengthen the spirit of team work internally through the Ganbatte programme, which has also served to facilitate a positive culture of change management.

## PROSPECTS

Planning Division faced numerous challenges in the financial year under review, the most significant being the gas shortfall, which severely impacted the company's bottom line. However, this has subsequently been partially alleviated by the Government's compensation scheme.

With uncertainties in global economies, especially in Europe, the coming years are expected to be increasingly more challenging. Over and above economic uncertainties, TNB faces the additional challenges of depleting indigenous energy resources, volatile LNG market prices, and the implementation of the IBR as well as increased environmental concerns.

Given this scenario, Planning Division's role will be even more critical than ever in identifying and strategising opportunities that lie ahead in order that TNB is able to realise its 20-Year Strategic Plan.

# CORPORATE AFFAIRS & SERVICES

Dato' Roslan bin Ab Rahman
Chief Corporate Officer

## OFFICE OF THE CHIEF CORPORATE OFFICER

Corporate Affairs and Services is a new division that incorporates the functions previously carried out by Corporate Affairs and Corporate Services, which include regulatory matters and stakeholder management.

One of the main focus areas of the division is the engagement and education of stakeholders. In times of rapid change such as the present, TNB needs to ensure that its interests and business viability are protected. Among the many challenges it can expect to face in the near future is the Incentive-Based Regulation (IBR) under which the regulator will introduce industry incentives and penalties based on international benchmarks.

The open access gas network will present another challenge, as it will entail the creation of various regulations and codes such as the Gas Act, Gas Network Code and RGT Code.

The Chief Corporate Officer will undertake to manage these and other challenges while also ensuring that TNB's corporate social responsibility (CSR) serves as a strategic tool to enhance TNB's image.

# Operations Review – Corporate Affairs & Services



Adelina Iskandar
Vice President

## CORPORATE AFFAIRS & COMMUNICATIONS

Once again, in 2011/12, TNB won the Brand Laureate Award in the category of Power Utilities. As the division responsible for managing TNB's brand and image, Corporate Affairs is proud of this external recognition of the company's strengths and identity. It is through the division's strategic communication initiatives that TNB's reputation is constantly reinforced.

Yet another reflection of TNB's growing market reputation was its being placed 8th on the list of 100 Most Valued Brands in Malaysia, following a survey conducted by Brand Finance Consultancy Pte. Ltd. (Singapore).

In the financial year 2012, Corporate Affairs Division continued its communication and branding support of the Group, focusing in particular on its energy efficiency initiatives. This was achieved through print advertisements and promotional efforts. TNB issued ads in the News Straits Times (NSTP) publications featuring energy saving tips using Dato' Lat's cartoons; and continued to distribute energy-efficient light bulbs at community events.

It also initiated an energy efficiency awareness campaign, in collaboration with WWF Earth Hour 2012. For five days from 13 March 2012, at selected Customer Service Centre counters, TNB gave away car stickers to promote renewable energy. TNB further reinforced its image as a driver of green energy during Earthweek 2012, when it organised several educational activities to increase the public's awareness of energy efficiency. Over and above these events, Corporate Affairs continued to collaborate with FOMCA on energy efficiency awareness programmes.

Corporate Affairs also embarked a public awareness campaign on the challenges faced by TNB in Keeping the Lights On within the context of depleting fuel and escalating costs. A special 18-episode programme was broadcast on Buletin Utama TV3, highlighting these issues to some 2.3 million viewers in an easy-to-understand format.

To improve TNB's relationship with the media, various media communication and crisis management workshops including media visits were conducted for Senior Management at the organisation. Media briefings were also structured to promote TNB's involvement in green technologies, energy efficiency and the Feed-in-Tariff.


Corporate Affairs also focused on TNB's Government Relations Internal Programme (GRIP), which serves as one of many platforms used to discuss issues and matters at a regional level.

Meanwhile, Regulatory Relations Management continued to improve its operations by developing a Regulatory Compliance Database (RCD) with assistance from the Legal Services and Information Communication Technology (ICT) Departments. RCD acts as a depository centre for all TNB regulatory compliance issues.

Besides managing TNB's external stakeholders, Corporate Affairs also organised social activities for TNB staff, such as Jom la Futsal and Jom la Smash. In addition, staff are also kept updated on the latest corporate developments via SMS blasts, news flashes, Bersama CEO and the NewsTube.

Social activities were also extended to TNB's kindergarten children. A Kidz Art Class was conducted at our gallery to encourage the use of art as a medium of expression.

Corporate Affairs continues to provide communication and branding services to support the TNB Group in upholding its image among all its stakeholders.

## PROSPECTS

Moving forward, Corporate Affairs has reviewed and strategised its communication and networking initiatives in line with Gemilang 2015, to better serve TNB's stakeholders – internally and externally.

A comprehensive Communication Policy has been put in place to ensure consistency in information management. Corporate Affairs is also in the midst of reviewing and updating its Corporate Identity Manual to meet expectations in the current environment.

INFO

Kedudukan jenama Malaysia teratas dengan (nilai jenama)

1. Petronas (A$5.7 bilion / RM17.985 bilion)
2. Genting (A$2.9 bilion / RM9.11 bilion)
3. CIMB (A$1.8 bilion / RM5.71 bilion)
4. YTL (A$1.7 bilion / RM5.275 bilion)
5. Maybank (A$1.5 bilion / RM4.654 bilion)
6. Sime Darby (A$1.3 bilion / RM4.25 bilion)
7. Public Bank (A$1.2 bilion / RM3.826 bilion)
8. TNB (A$1.0 bilion / RM3.351 bilion)
9. MAS (A$0.9 bilion / RM2.944 bilion)
10. DiGi (A$0.7 bilion / RM2.358 bilion)

# Operations Review – Corporate Affairs & Services




Md. Jailani Abas
Senior General Manager

## CORPORATE SERVICES

As a business partner to TNB's core divisions and subsidiaries, the Corporate Services Division (CSD) is committed to ensuring TNB meets its objectives by providing efficient and effective support services as well as day-to-day operations. CSD supports the Group in the areas of security and intelligence, land and wayleave procurement, project management, asset and archives management, architectural related works, building maintenance, fleet and freight management, Customs clearance, mobile generator set (genset) services and the management of telephone and mail services at the headquarters. CSD carries out its wide-ranging duties through the core departments of Security and Intelligence Services, Property Services, Logistics Services, Land & Wayleave Management and its own Support Services Department.

# Operations Review – Corporate Affairs & Services



## ACHIEVEMENTS

Achievements of CSD during the year under review are highlighted below, listed according to its core departments.

- **Land & Wayleave Management Department (LWMD)**

  In order to mitigate objections from land owners and reduce costs in land procurement and construction, a long-term plan is being implemented to reserve and gazette land required by TNB, especially for transmission line corridors. Taking advantage of new technology by working with UNITEN, TNB is planning a 20-Year Corridor for Transmission Lines using 'Geomatic Innovation' which involves new survey methodology utilising GIS software. This project is being carried out in collaboration with the Federal Department of Town and Country Planning Peninsular Malaysia (JPBD), Department of Survey and Mapping Malaysia (JUPEM) and the Corporate Geospatial Information System (CGIS) team.

  At the same time, the procurement of land for wayleave will be done through the Land Acquisition Act 1960 and Electricity Supply Act 1990. To date, Johor, Perak and Negeri Sembilan have agreed to the use of the Land Acquisition Act 1960, which will hasten the land procurement process and reduce its cost.

- **Security Services & Intelligence Department (SSID)**

  SSID successfully implemented an Integrated Security Management System (ISMS) in the Northern Zone (Perak, Pulau Pinang & Kedah/Perlis), Central Zone (Kuala Lumpur, Selangor & Putrajaya) and Southern Zone (Johor, Melaka & Negeri Sembilan). To support the ISMS, patrol-cum-response teams have been set up in the critical zones.

  The department also obtained the approval of the Polis DiRaja Malaysia (PDRM) for the power of investigation under the Criminal Procedure Code (CPC). Subsequently, a Criminal Investigation Unit was formed with branches at every state to investigate offences under the Penal Code in relation to TNB assets.

- **Property Services Department (PSD)**

  PSD continued to expand TNB's working space through the purchase and rent of office buildings and space, as well as through renovation. Notably, an 11-storey office building was acquired for the offices of the General Manager (Selangor) and Area Manager (Subang Jaya) of Distribution Division.

  PSD also achieved value creation from idle assets and asset management amounting to RM51.52 million.

- **Logistics Services Department (LSD)**

  LSD now operates as a one-stop centre for generator set services, managing the gensets belonging to TNB and private vendors. To promote greater efficiency of Genset Management, several Genset centre were set up – in the Klang Valley (Kelana Jaya), Northern region (Chain Ferry) and Eastern region (Gong Badak, Temerloh and Muadzam Shah). LSD, together with ICT, had developed an Integrated Genset Management System (IGMS) to manage requests and payments for genset services.

  Over the year, LSD achieved RM39.8 million in value creation from its daily operations of freight management and tax exemption, fleet management and mobile genset services.


## DIVISIONAL GOALS/OBJECTIVES

CSD continuously strives to provide cost-effective services to its internal and external customers, both in project implementation and operations in line with TNB's vision, mission and strategies. Apart from supporting TNB's Strategic Plan, CSD's core focus is to assure the Group's stakeholders and shareholders of quality security services, and property and logistics management, and lend them confidence in its ability to procure land as required for projects.

## OPERATIONAL SUMMARY

*Security Services & Intelligence Department* (SSID) consists of four units, namely Operation, Planning & Crisis Management, Criminal Investigation and Support Services, which provide security protection to thousands of TNB installations across the country. SSID also investigates criminal-related cases involving TNB's assets and assists the Project team for site entry and in cases of electricity power theft.

In the financial year 2011/2012, SSID provided in-house security personnel for TNB's strategic and critical installations such as its power stations, 500kV and 275kV substations, regional warehouses and control centres. It also provided private security personnel for installations such as the 132kV substations, PPUs, PEs, Kedai Tenaga, and state and district offices. Additionally, the department provided

# Operations Review – Corporate Affairs & Services



surveillance, enforcement and theft prevention support operations with the use of appropriate technology, investigations and intelligence operations, thus safeguarding TNB's assets.

The *Land & Wayleave Management Department* (LWMD) comprises five units, namely the Transmission Services Unit, Distribution Services Unit, Generation Services Unit, Geomatics & Technical Services Unit and Planning & Support Services Unit. Among the core functions of the department are to procure land & wayleave as required for Distribution, Transmission and Generation projects.

The *Property Services Department* (PSD) comprises five units that provide property support services to the core business of TNB. It carries out property planning and development, project and property management and property maintenance with the objective of enhancing TNB's asset value.

The *Logistics Services Department* (LSD) comprises three units – Fleet, Mobile Genset and Freight Management – and plays the role of a one-stop integrated centre that coordinates and provides cost-effective and timely logistics services to TNB. It is responsible for appointing panel workshops, procuring new vehicles and disposing of old ones, providing genset as a back-up for system availability, and providing freight services.

## MAJOR PROJECTS

SSID is implementing the Integrated Security Management System (ISMS) which consists of deterrent, detection and response modules at the Northern, Central, Southern and Eastern Zones. Combining different security solutions into one control system, ISMS plays a crucial role in safeguarding TNB's assets from threats and intruders.

LWMD is securing sites and wayleave for major projects, including the 275kV Kg. Pandan-Ampang East, 500kV for S.J Janamanjung, 275kV for bulk supply VALE Iron Ore, Manjung, 275kV Ulu Jelai Hydro Project, 275kV Air Tawar-Bukit Merah, 275kV Baharu Steel, 275kV Eastern Steel and 132kV Hongkew Cement. It is also implementing a long-term plan to reserve and gazette corridors for transmission lines.

LSD is managing Centralised Genset Services via an Integrated Genset Management System (IGMS) which was developed jointly with ICT. A centralised Genset Control Centre was set up at Kelana Jaya to cater for all requests for genset services from Generation, Transmission and Distribution.

PSD procured two multi-storey office buildings in Kuala Lumpur and Subang Jaya with a total nett floor area of 520,000 square feet, which will relieve TNB from renting office space in various locations in Kuala Lumpur, Petaling Jaya and Shah Alam.

# Operations Review – Corporate Affairs & Services



## OPERATIONAL IMPROVEMENTS

To ensure continuous improvement in its daily operations, CSD has initiated various programmes covering human resources management, risk management, KPI monitoring, customer engagement, quality management, compliance management and vendor management. It also overseas TNB's networking with customers and regulators such as state governments, land offices, PUSPAKOM, Customs, PDRM, the Malaysia Anti-Corruption Agency (SPRM) and the local authorities to foster better relationships with them. At the same time, a review of major processes has been done to improve operations.

## KEY PERFORMANCE INDICATORS (KPIs)

CSD measures the quality of its products and services using feedback from customers, benchmarking, auditing and through the application of its KPIs. KPIs are identified via the Business Planning process to measure the division's performance in the areas of finance, customer service, internal processes and learning & growth. Its Major KPIs are the management of OPEX, value creation, the management of assets, security, the fleet, mobile gensets (ISMS, IFMS, IGMS), wayleave and land procurement. CSD strives to satisfy customers by delivering excellent service.

## CHALLENGES AND PROSPECTS

In its quest to uphold the highest standards of service, CSD faces numerous challenges. The task of protecting thousands of TNB installations across the country requires top technology coupled with human effort. Towards this end, SSID adopts and adheres strictly to all necessary legislations while continuously updating its security technology. It also works closely with enforcement agencies to carry out its functions effectively.

LWMD, meanwhile, faces the dual challenges of a continuously appreciating market value for land, which it needs to procure, and public objection towards TNB projects, especially those in urban areas. These necessitate the constant reviewing of plans to procure land.

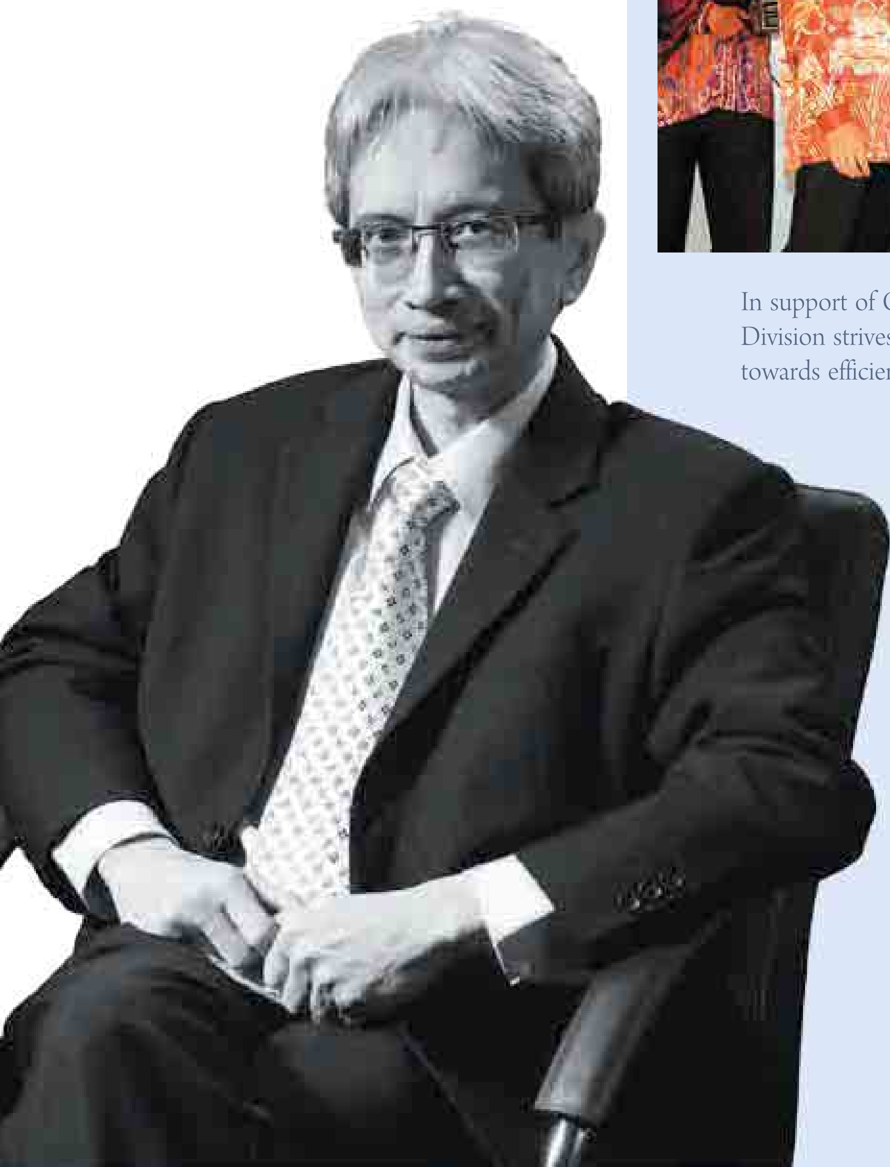
Another challenge is the management of under-utilised assets (non-core assets) belonging to TNB to unlock their value with minimum risk to the Group in terms of financial exposure. To accomplish this, PSD plans to conduct further feasibility studies on certain plots of available land.

LSD also faces the challenge of implementing the Integrated Genset Management System nationwide.

In order to overcome these challenges, CSD maintains a close rapport with all its customers and stakeholders, and is confident of continuing to support TNB's business excellence in the years to come.

# PROCUREMENT

Ir. Nor Azmi bin Ramli
Chief Procurement Officer

In support of Gemilang 2015 – Growth, Global, Green, Procurement Division strives to pursue its strategic role of managing TNB's procurement towards efficient and effective supply chain management.

# Operations Review – Procurement

## OPERATIONAL SUMMARY

Procurement Division continues its efforts towards optimising procurement costs, benchmarking and emulating procurement best practices, developing a stable and competitive supplier base for the organisation, implementing supply chain management initiatives and enhancing TNB's procurement expertise and capabilities.

In FY2012, Procurement Division focused its core activities on eight key initiatives as part of the five-year Gemilang 2015 to enhance procurement efficiency and effectiveness, as listed below:

- Enhance procurement value creation
- Explore and promote new businesses for the Bumiputera Vendor Development Programme
- Increase value to internal and external customers
- Develop a Green Procurement Policy and Strategy
- Implement procurement best practices
- Implement international supply chain management benchmarking activities
- Develop TNB's procurement expertise and capabilities
- Implement an ICT Supply Chain Management System

The success of these key initiatives depends largely on the competency and operational performance of the division's five departments, namely Sourcing Controller, Best Practice and Policies, Shared Purchasing, Strategic Supplier Management and Human Resources Management & Administration Services.

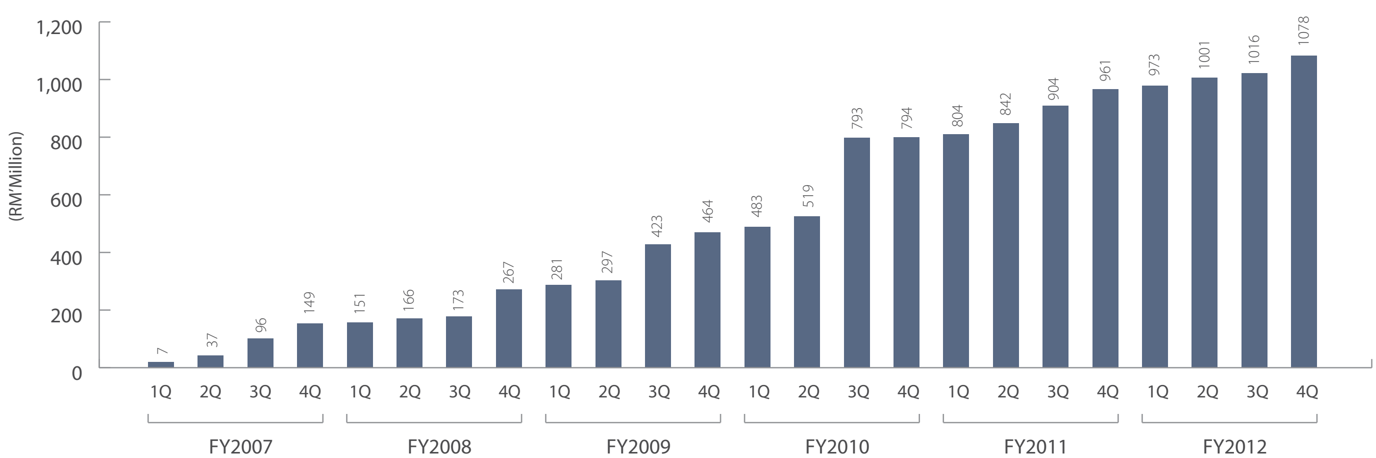
## HIGHLIGHTS OF ACHIEVEMENTS

- Significant Procurement Value Creation in FY2012 amounting to RM117.56 million
- Nationwide Procurement Community 2012 roadshows to disseminate the revised TNB Procurement Policy and Procedures (PPP) and revision of the subsidiaries' PPPs
- Implementing a Supply Chain Management System to enhance the technological backbone of Procurement's ICT system
- Special Trade Mission to the Kingdom of Saudi Arabia yielding potential sales of RM1 billion for TNB's subsidiaries and vendors

### Procurement Value Creation

Procurement continued to achieve significant value creation of RM117.56 million in FY2012 mainly through e-Bidding, the application of tax exemptions and negotiations. Other contributing factors were Purchase Consolidation and Category Sourcing.

### Procurement Value Creation Achievement



# Operations Review – Procurement



### Revision & Dissemination of TNB Procurement Policy & Procedures (PPP)

Having launched the revised TNB PPP in FY2011, Procurement Division continued to disseminate the new policy and procedures across the peninsula in a total of 13 sessions covering almost 1,000 TNB personnel in FY2012. Subsequent to the revision, the division enhanced the training modules with ILSAS to ensure continuous updating while coaching the subject matter experts to ensure that training on the TNB PPP is conducted effectively.

In an effort to ensure the subsidiaries conduct effective procurement for their nature of business, Procurement Division also embarked on developing PPPs for the different subsidiaries following instruction from the Board Audit Committee. To date, it has successfully completed drafting the PPPs for Tenaga Nasional Engineering Corporation (TNEC) and Sabah Electricity Sdn. Bhd. (SESB).

While the PPPs are being disseminated and training carried out, the effectiveness of implementation is being evaluated via Procurement Compliance Reviews conducted across the core divisions.

### TNB Supply Chain Management System

As part of its future positioning, Procurement Division has charted the inclusion of a holistic Supply Chain Management (SCM) system in its five-year business plan for 2010-2015. This system is intended to provide TNB with the technological ability to implement best practices in procurement processes, analyses and standardisation of work processes to create value opportunities and sustain efficiency, transparency and consistency.

The SCM system includes modules on electronic tendering, electronic contract management system, a supplier-buyer service portal, spend analytics and a centralised supplier database and assessment. The system involves end-to-end procurement processes and best practices that can reduce procurement costs by facilitating TNB-supplier collaboration and streamlining procurement processes.

The system itself testifies to TNB's recognition of the supplier community as strategic partners. The system will go live in stages and is expected to be completed in early 2013.

### Award Presentation to Excellent Suppliers and Contractors

Procurement Division conducted a Malam Anugerah Vendor/Pembekal/Kontraktor Cemerlang TNB 2012 on 19 January 2012. Twelve categories of awards were created with 38 nominations received from various divisions.

The awards were presented by Senator Datuk Awang Adek Hussein, Deputy Finance Minister of Malaysia. The event served as a platform to acknowledge excellent suppliers and contractors for products and services rendered from 2010 to 2011. It was also conducted to enhance the relationship and collaboration between TNB and its suppliers and contractors.

# Operations Review – Procurement



### GLC's Vendor Development Programme (VDP) Sub-Group Circle

TNB has been appointed by the Putrajaya Committee on GLC High Performance (PCG) to chair the VDP Sub-Group Circle Meeting. The first meeting cum workshop was held on 11 July 2012 and was attended by 26 representatives from 14 GLCs. The circle is an effort to ensure more GLCs are committed to national wealth creation by implementing structured vendor development programmes at their respective companies. At the meeting, the members deliberated and shared their experiences of the vendor development programme.

### Strategic Sourcing Methodology Training

In February and March 2012, Procurement Division engaged A.T Kearney Inc., a leading global strategic procurement practitioner, to train 30 TNB procurement personnel on the 7-Step Strategic Sourcing Methodology to enable TNB to embark on Category Management and Strategic Sourcing initiatives.

The training was conducted over six weeks in ILSAS, during which the participants were given hands-on experience on how to conduct a proper strategic sourcing effort which involves Spend Analysis, Category Management, Market Analysis and Supplier Relationship Management. The training provided insights on TNB's procurement spend on items such as transformers, switchgears, IT products, Personal Protective Equipment and Generation spares, and how to develop the most suitable strategic sourcing initiatives based on the information gathered.

### Special Trade Mission to the Kingdom of Saudi Arabia

Subsequent to the invitation by Saudi Electricity Company (SEC), a special trade mission to the Kingdom of Saudi Arabia was organised from 25 to 30 May 2012 with the support of the Malaysia External Trade Development Corporation (MATRADE). The mission's participants were from 11 companies including TNB subsidiaries and TNB vendors.

The objective was to promote products and services related to the power generation sector and related services to SEC and the Saudi business community by leveraging on the TNB and Malaysia brands. The Kingdom's growing demand for electricity at 8% annually is considered as a highly potential market for business opportunities, thus making this mission a significant initiative towards TNB's global and regional business expansion.

## CHALLENGES AND PROSPECTS

Pursuant to Gemilang 2015 – Growth, Global, Green, the main challenges for the division are still related to enhancing its strategic role to meet the increasing expectations of stakeholders and elevating its operational performance.

In FY2012, Procurement Division strove to provide continuous professional development opportunities for its staff throughout the year through a series of procurement skills-set training programmes in an effort to produce capable and competent personnel. The enhancement of TNB procurement expertise and capabilities through skills training and development programmes is in line with the mandatory subjects required for Chartered Institute of Purchasing and Supply (CIPS) certification, and is essential to ensure readiness of procurement personnel in the global arena.

Currently, Procurement Division is stepping up its efforts towards executing Category Management and Strategic Sourcing as methodologies to ensure that TNB obtains more value creation from effective and efficient Supply Chain Management. The division has also embarked on a significant benchmarking initiative with China Light and Power (CLP), the best utility company in the Asia-Pacific region in the area of procurement, to learn and adopt procurement best practices in an effort to improve TNB's bottom line and reduce unnecessary procurement costs.

The rescheduled commissioning of the Supply Chain Management System to FY2013 poses a big challenge to the division in entailing a holistic overhaul of procurement processes via the ICT platform. Nevertheless, its success is expected to turn around TNB's procurement practices and result in an integrated system that employs procurement best practices while enhancing efficiency, transparency and consistency of processes in the procurement community.

# Sabah Electricity Sdn. Bhd.


SESB continues to play its role of meeting the increasing demand for electricity in Sabah. With grants from the Government, SESB targets to enable more people in the state to have access to electricity supply as part of its contribution to the social and economic development of Sabah.

Demand for electricity in Sabah is expected to be approximately 7% growth per year until 2013, and to increase substantially in the following years, reaching about 1,476MW by 2019.

Electrification coverage in Sabah as of December 2011 was 81.5%. SESB aims to achieve 95% electrification coverage by end 2012 to enable more people in Sabah to enjoy the benefits of electricity supply. This is part of SESB's contribution to the socio-economic development of Sabah.

## FINANCE

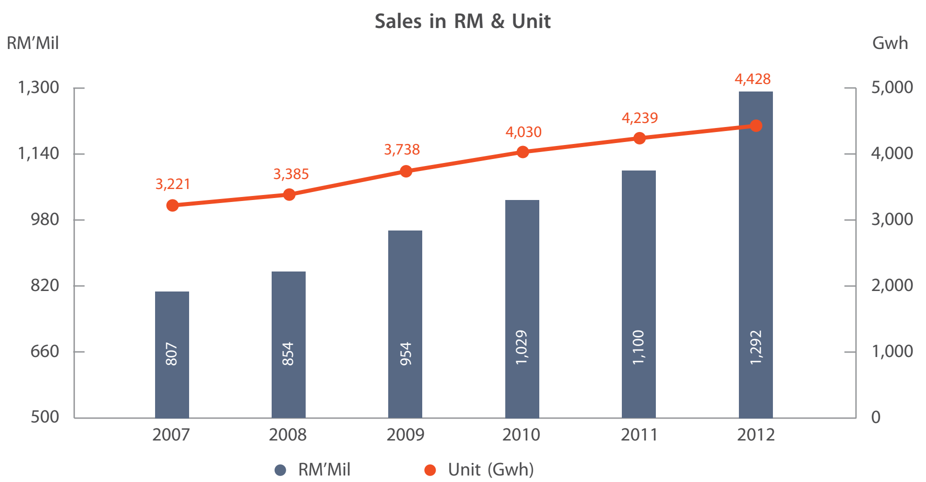
The sale of electricity in Sabah for FY2012 grew by 17%, RM1.29 billion compared to RM1.10 billion recorded last financial year.

Total units sold for FY2012 was 4,428 GWh compared with 4,239 GWh in FY2011.

Total audited operating expenditure for FY2012 amounted to RM1,367 million compared to RM1,227 million for FY2011 (Restated). SESB received substantial diesel and medium fuel subsidies from the Malaysian Government and the amount is presented net of total subsidy.

Total operating loss was at RM50.20 million. Total finance costs and foreign exchange losses for FY2012 amounted to RM181.34 million compared to RM124.07 million in FY2011. Cost Per Unit (CPU) SESB as at 31 August 2012 was 34.97 cent per kWh.

| No. | Item | Denominator | FY2012 | FY2011 (Restated) |
|---|---|---|---|---|
| 1 | Sales | RM'mil | 1,291.7 | 1,100.2 |
| 2 | Unit sold | GWh | 4,428 | 4,239 |
| 3 | Opex | RM'Mil | 1,367.2 | 1,226.6 |
| 4 | Fuel subsidy claim | RM'Mil | 543.4 | 547.5 |



# Operations Review – Sabah Electricity Sdn. Bhd.

## ENGINEERING

An Engineering Divison was set up in June 2011 to design major development projects and to enhance their quality assurance as well as material procurement. The division is also responsible for factory and site acceptance testing, specification compliance audits and pre-commissioning inspection and testing of all turnkey, independent power producer (IPP), Small Renewable Energy Power Programme (SREP) and rural electrification projects.

Among the major projects undertaken in the year under review were:

- a 132kV Kolopis-Kota Belud line LILO for the construction of a 132/33kV Main Intake Substation (PMU) in Tuaran
- a 132kV Beaufort-Penampang line LILO for the PMU in Lansat
- Construction of the 1-Sulaman Distribution Intake Substation (PPU)

Other intiatives carried out include:

- A lightning performance study on Transmission lines
- Installation of 22-11kV outdoor voltage regulators in Kota Belud
- An energy audit demonstration on commercial buildings

## OPERATIONS

### Generation

The total installed capacity in Sabah stands at 1,324MW, of which 527.8MW is from SESB, inclusive of 80MW from canopy gen-sets. The remaining 796.2MW comes from independent power producers (IPPs).

### Transmission

To further enhance its services, SESB formed a Live Line Squad in March 2012 under the purview of Transmission Division, to train qualified staff to conduct maintenance work on live lines without shutting off the electricity supply. A total of 17 technical staff were sent for Live Line Training, at the end of which eight were given a certificate of competence from the Electricial Industrial Training Institute (EITI) headed by Ir. Stenold Pauli.

The division also engaged Sabah Air Aviation Sdn. Bhd. to conduct a helicopter survey of SESB's transmission lines to gauge the condition of both lines and towers, ensuring the latter had not been affected by factors such as erosion. The survey also focused on the wayleaves to ascertain that these pathways remained clear of obstructions such as trees.

### Distribution

In February 2011, SESB's management had approved the implementation of an Assisted Rural Wiring Scheme (ARWS) with a revolving fund of RM5 million. The scheme is intended to help rural folk who are unable to pay wiring contractors under the normal electricity application process. With the ARWS, these applicants pay SESB the cost of internal wiring of RM510 in monthly installments of RM14.20 for the first six months followed by RM14.16 per month for 30 months. In addition, they pay a security deposit of RM40 and stamp duty of RM10 upon signing the consumer agreement with SESB.

The programme was launched in April 2011 in collaboration with Persatuan Elektrik Sabah (PES). Contractors selected for the programme have to be registered with SESB, PES and the Energy Commission (EC). As at 31 August 2012, an estimated 16,080 houses had been identified for aid under the programme and 2,944 applications had been received from customers, 2,128 (72.28%) of which have been completed. Meanwhile, the programme has been extended until March 2013.

SESB has also continued to carry out the Old Meter Replacement Programme among domestic, commercial and industrial customers statewide. In 2012, a total of 56,052 old meters were replaced.

# Operations Review – Sabah Electricity Sdn. Bhd.

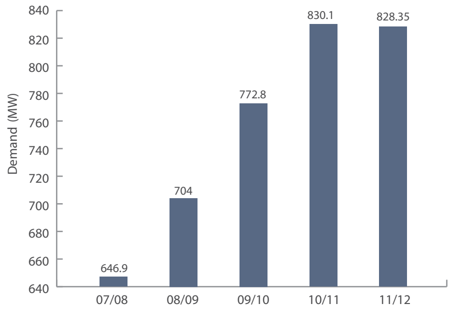


## OPERATIONS SYSTEMS

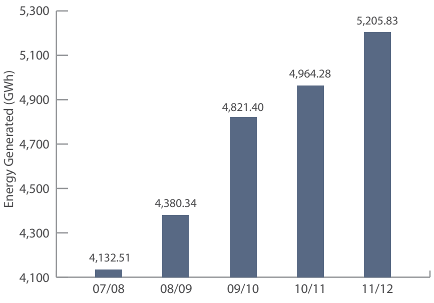
Maximum demand in the Sabah Grid during the financial year 2011/12 was 828.4MW, which was a 0.21% decrease from the maximum demand of 830.1MW recorded in the financial year 2010/11.

SESB generated a total of 5205.83GWh in the Sabah Grid System in the financial year 2011/12, marking a 4.87% increase from 4,964.28GWh in the previous financial year.

**Sabah Grid Maximum Demand FY2007/2008 – 2011/2012**

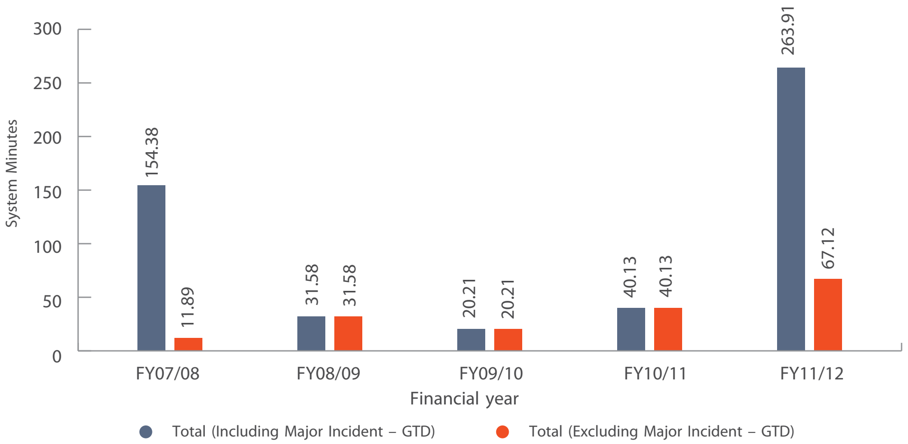



**Sabah Grid Energy Generated**




The Delivery Point Unreliability Index (DPUI) trend over the past five years for Transmission is as shown in the graph below.

**Sabah Grid**
**Delivery Point Unreliability Index**

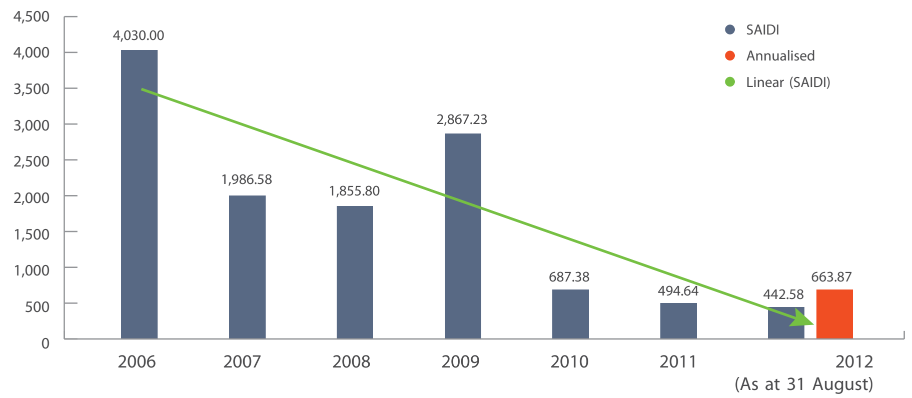



| Financial Year | 2007/2008 | 2008/2009 | 2009/2010 | 2010/2011 | 2011/2012 |
|---|---|---|---|---|---|
| Total System Minutes (Including Major Incident – GTD) | 154.38 | 31.58 | 20.21 | 40.13 | 263.91 |
| Total System Minutes (Excluding Major Incident – GTD) | 11.89 | 31.58 | 20.21 | 40.13 | 67.12 |

# Operations Review – Sabah Electricity Sdn. Bhd.



SESB Saidi CY2006-2012




| Calendar Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 (As at 31 August) |
|---|---|---|---|---|---|---|---|
| SAIDI (mins/cust/year) | 4,030.00 | 1,986.58 | 1,855.80 | 2,867.23 | 687.38 | 494.64 | 442.58 (Annualised 663.87) |

## ORGANISATIONAL DEVELOPMENT

SESB's Key Performance Indicators (KPIs) for the financial year 2012 fell under four strategic themes, namely Enhanced Financial Sustainability, Delighting the Customers, Improving System Performance and Improving Productivity. There are nine strategic objectives within the strategic themes under the Balanced Score Card framework as follows:

1. **Enhanced Financial Sustainability**
   - Enhance Business Sustainability
   - Reduce Revenue Leakages
2. **Improving System Performance**
   - Enhance Supply Security & Reliability
   - Enhance Supply System Development
   - Enhance Supply Improve Processes
3. **Improving Productivity**
   - Develop Highly Competent Workforce
   - Enhance Organisational Productivity
4. **Delighting the Customers**
   - Improve Customer Satisfaction
   - Enhance Stakeholder Satisfaction

**5-Year Business Plan (FY2011–2015) and Annual Operations Plan (FY2012)**

SESB's management conducted a review of the 5-Year Business Plan FY2011–2015 and Annual Operations Plan for the financial year 2012 on 11-13 May 2012. Participants of the review session comprised SESB's Management Committee, selected executives and members of the local union.

Following an analysis of SESB's performance in relation to the Operations Plan and KPIs for the financial year 2011, a fresh Operations Plan and KPIs for FY2012 were drawn up. As a result of the review, the following actions are being taken:

- Identify the gap between business and operational targets and actual achievements for the purpose of taking corrective measures so that the said targets can be achieved.
- Each division in SESB to develop its own 5-Year Business Plan and Annual Operations Plans based on SESB's strategic objectives.
- Additional initiatives/activities to be introduced to further strengthen operational activities and to expedite and or launch the implementation of the said activities.
- Ensuring that daily activities and initiatives are aligned to the objectives of the Strategic Transformation Action Roadmap 2026 (STAR 2026) FY2007 – FY2026.
- Launch of the Information Security Management System (ISMS) on 16 May 2012 to make progress on SESB's MS ISO 27001:2007 certification by December 2012.

## MAJOR PROJECTS

SESB's Major Projects Division was established in 2007 to manage all construction projects related to Generation, Transmission and Distribution. Major Project Division is committed to achieving excellence in its services to meet its customers' requirements and complete projects within the specified time and budget while maintaining top quality.

During the financial year 2012, Major Projects supervised 28 projects valued at a total of RM3,779.3 million. Seven of these projects have been completed while the remaining 21 projects are on-going.

## CORPORATE SERVICES

The Corporate Services Division plays a vital role in providing support services to ensure SESB continues to meet its objectives. Main achievements by the division in 2012 include:

# Operations Review – Sabah Electricity Sdn. Bhd.




1. **Improved stakeholder relations:**
   - Implementation of a Tariff Communication Plan resulted in minimal objections from stakeholders and the wider public.
   - Timely briefings were held on energy supply and new initiatives with the Chief Minister, Cabinet, state leaders and other key stakeholders.
   - Organisation of the Community Leaders Outreach Progamme (CLOP) in Tawau, Sandakan, Labuan, Papar, Kota Belud, Ranau, Semporna, Kuala Penyu, Tenom, Beaufort, Penampang, Kota Kinabalu and Beluran.
   - Enhancement of SESB's corporate website.

2. **Improved media relations via media build-up programme, as exemplified by an increase in positive media reports from 75% to 85%.**

3. **Improved non-tariff revenue collection:**
   - Effective legal advice and action to assist the relevant departments within SESB to secure:
     - i. RM10 million in compensation for losses suffered by SESB due to delays by IPP to complete project in accordance with the terms and conditions of the Power Purchase Agreement (PPA), necessitating Supplemental Agreement to the PPA;
     - ii. RM13.5 million in Liquidated Ascertained Damages due to IPP not achieving Scheduled Commercial Operation Date pursuant to PPA and Supplemental Agreement;
     - iii. RM76,296.64 in recovery of losses due to meter tempering matters; and
     - iv. RM30,122.20 in recovery of outstanding rentals, in relation to tenancy matters.
   - Winning two criminal cases on action taken by the Department of Occupational Safety and Health for non-compliance of noise monitoring.

4. **Improved Cost Management**
   - The cost of fleet maintenance and fuel consumption was reduced by 22% due to the replacement of 38 old vehicles with new ones.

5. **Improved Security & Integrity Management**
   - With the reinforcement of security policies, 16 people including four staff members were caught for various offences including cable theft and illegal connections of electricity supply.
   - To further enhance SESB's Integrity Governance, an MOU was signed with the Malaysian Anti-Corruption Commission (MACC), an Ethics Committee was set up, and staff integrity sessions were organised with MACC.

6. **Promotion of Energy Efficient (EE) Practices**
   - As part of awareness creation, EE posters and relevant corporate gifts were distributed to stakeholders, consumers and the media.
   - EE talks and product exhibitions were held in Tawau, Sandakan, Labuan, Kota Kinabalu, Papar, Kota Belud, Ranau, Semporna, Kuala Penyu, Tenom, Beaufort, Penampang and Beluran involving stakeholders, school students and members of the public.
   - As part of SESB's corporate social responsibility, it donated EE products to orphanages in Tawau and Tambunan, and the Hospice & Dialysis Centre in Sandakan.
   - An energy audit was conducted at Wisma SESB in July 2011.
   - Members of the public, including school children, were encouraged to enrol in Rakan EE.

# Legal Services Department

The Legal Services Department (LSD) provides quality in-house legal services to TNB and its subsidiaries to support value creation in the Group's core business, non-core business and management services.

## DEPARTMENT SUMMARY

LSD comprises three distinct units and one section, as follows:

### Corporate Advisory Unit

This unit is responsible for the overall provision of legal advisory on all legal matters related to the business of TNB and its subsidiaries including legal opinions, drafting, vetting and negotiating construction contracts and other project documents required for local bidding exercises, shareholder matters, financing documentation for conventional and Islamic facilities, commercial documentation including ICT licensing agreements and intellectual property-related agreements and all other contractual documents related to the business of TNB and its subsidiaries.

### Regulatory & Legal Documentation Unit

This unit is responsible for advising TNB on operational legal issues in relation to electricity supply, land and consumer matters. It is also responsible for preparing various types of agreements, including Electricity Supply Agreements, Electricity Infrastructure Agreements, Co-generation and Customised Agreements. The unit further ensures TNB's compliance with prevailing Acts of Parliament, by-laws, regulations and terms and conditions of license as well as assisting in the drafting and amendments of Electricity Supply Acts 1990 and other Acts which are relevant to the electricity industry in Malaysia. This unit is also involved in the formulation and implementation of new legislation in the areas of renewable energy and energy efficiency.

### Litigation Unit

This unit manages, supervises, coordinates and liaises with appointed panel lawyers in all court cases pertaining to claims made by third parties against TNB in Malaysia and abroad. It also handles the recovery of debts and enforcement of TNB's rights against third parties. The unit further oversees disputes referred to the Consumer Tribunal, mediation, adjudication or arbitration.

### Business Enterprise Section

The Business Enterprise Section primarily provides legal advisory for the Group's international power projects and transactions related to the power industry. This section also provides legal support on diverse special projects including domestic power bidding and Group-level corporate compliance programmes.

# Operations Review – Legal Services Department



## IMPROVING CUSTOMER SERVICE

In the financial year 2011/2012, LSD embarked on a number of initiatives to improve customer service.

### Legal Awareness

- **Brainstorming/Dialogue Sessions**

  LSD conducted several brainstorming/dialogue sessions with Distribution Division regarding recurring legal issues to improve customer service. The sessions were held in several states in Peninsular Malaysia by the Regulatory & Legal Documentation Unit involving executives and non-executives from Distribution. The focus was on legal issues regarding land, for example trespassing and the acquisition of land for the construction of TNB's installations, rechargeable job orders, terms and conditions of licensee housing loans for TNB staff, and supply matters involving Distribution's operations.

- **Legal Forum**

  The Corporate Advisory Unit together with the Business Enterprise Section of LSD organised its 7th Annual Legal Forum 2012 on 27-28 February 2012. More than 80 participants from various divisions and TNB subsidiaries attended the forum which dealt with the legal implications of specific issues that affect TNB. Presentations were made on Bidding for Power, Asean Power Grid Legal Issues and Challenges, Renewable Energy, Mergers and Acquisitions, Industrial Relations Issues Pursuant To A Change In The Ownership of Business and What Do You Do When You Meet With An Accident?

- **Legal Bulletin**

  LSD published two editions of the Legal Bulletin to heighten legal awareness across the board in TNB, and mitigate the risks of staff breaching the law while performing their daily tasks.

- **Personal Data Protection Act 2010 – Tenaga Nasional Berhad Personal Data Protection Compliance Programme**

  The Business Enterprise Section organised and spearheaded the TNB Group Personal Data Protection Compliance Programme in anticipation of the Personal Data Protection Act 2010 (PDPA) coming into force. The programme was implemented as part of TNB's continuous commitment to maintaining the privacy and security of personal information of customers, employees and other individuals. The programme included a review and update of TNB's existing privacy and document retention policies and procedures, preparing revised customer and employment forms, and conducting internal briefing sessions to raise awareness of the PDPA.

- **Competition Act 2010 – Tenaga Nasional Berhad Competition Compliance Programme**

  The Business Enterprise Section implemented the TNB Group Competition Compliance Programme ahead of the Competition Act 2010 (CA) coming into force on 1 January 2012. The programme identified the Group's commercial activities that are governed by the CA and by the Energy Commission Act 2001. Actions performed included a review and update of the Group's existing competition and procurement policies, practices and manuals, a review of existing contracts and agreements, and internal briefing sessions on the principles of healthy and fair competition in business dealings.

## LITIGATION UNIT'S KNOWLEDGE-SHARING SESSIONS

The Litigation Unit continued to meet with representatives from Distribution Division from every state to discuss supply issues such as meter tampering and outstanding bills, and asset issues including electrical accidents and property damage. The objective was to obtain updates on the status of litigation cases in the various states and to create greater awareness of the proper management of operations and consumers to prevent, or at least reduce, the number of claims made against TNB.

The Litigation Unit also conducted various sessions with the Generation, Transmission and Distribution Divisions on land matters to ensure compliance with the Electricity Supply Act 1990 with regard to land procurement and wayleave.

A session was also organised with Group Human Resources Division on the recovery of housing, cars and computer loans from ex-staff and scholars.

# Productivity and Quality Management (PQM)

The Productivity & Quality Management Department (PQM) is responsible for propelling the company towards its mission of attaining product and service excellence. This is accomplished through strategic transformation initiatives, performance enhancement projects, quality management programmes, change management programmes and business process reengineering.

On 15 March 2012, PQM was registered as a wholly-owned management consultancy subsidiary of TNB known as TNB Quantum Solutions Sdn. Bhd. (QUANTUM). Its objective is to serve TNB and its subsidiaries as well as external parties.

Externally, QUANTUM strives to be the management consultancy group of choice in ASEAN by delivering professional business solutions in quality excellence, business process improvement and change management through long-term and meaningful relationships with clients.

Within TNB, QUANTUM ensures the maintenance of standards by carrying out business as usual quality management programmes such as the Work Improvement Teams – Innovative and Creative Circle (WIT-ICC) and 5S.

# Operations Review – Productivity and Quality Management (PQM)



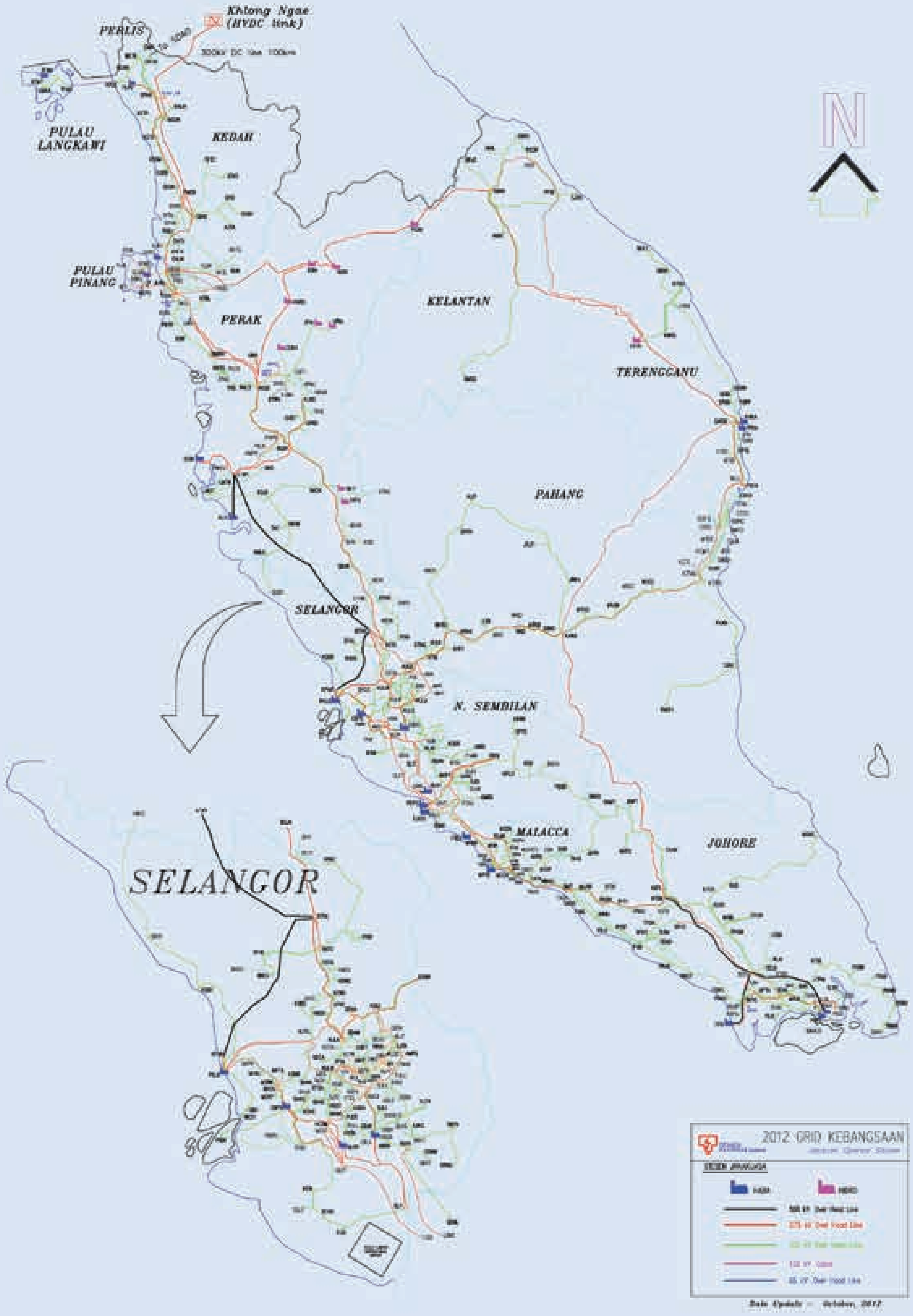
TNB currently has over 800 active Work Improvement Teams across the board in the organisation, the best of which is routinely entered into the Malaysia Productivity Corporation (MPC) National Innovative and Creative Circles Convention. Meanwhile, TNB's 5S programme is focused on the Save (Energy Resources, the Earth) Programme in line with the Group's overall strategy of going green.

TNB also runs a Process Standardisation & Improvement (PSI) programme, which forms a major initiative to propel the company towards business excellence. The company as a whole is now ISO 9001:2008 certified, with a pool of appointed ISO teams consisting of management representatives, document control managers and internal auditors maintaining and improving standardised processes.

As part of the Gemilang 2015 strategic programme, TNB has embarked on a Culture Change Programme aimed at building and strengthening a vibrant culture within the organisation. Initially, the programme entailed 57 key activities, each of which was to be driven by a champion. Heads of Culture Change Programme were also appointed to assist in spearheading the activities. However, there has been a change in the original set of activities so as to be aligned with the four main thrusts mooted by TNB President/Chief Executive Officer Datuk Wira Ir. Azman bin Mohd. A workshop to brainstorm the re-alignment was attended by culture change agents from various divisions and departments.

Operations Review

# National Grid



YOU SEE

WE SEE...

# CONSERVING OUR PRECIOUS RESOURCES

As a power producer and distributor, we take great pride in protecting our environment. Which is why we explore alternative sources of energy that have the least impact on the environment, such as solar, wind, biomass and hydro power. In embracing sustainable energy, we are establishing TNB as a primary driver of green energy in Malaysia.

# KEEPING THE LIGHTS ON

Key Initiatives

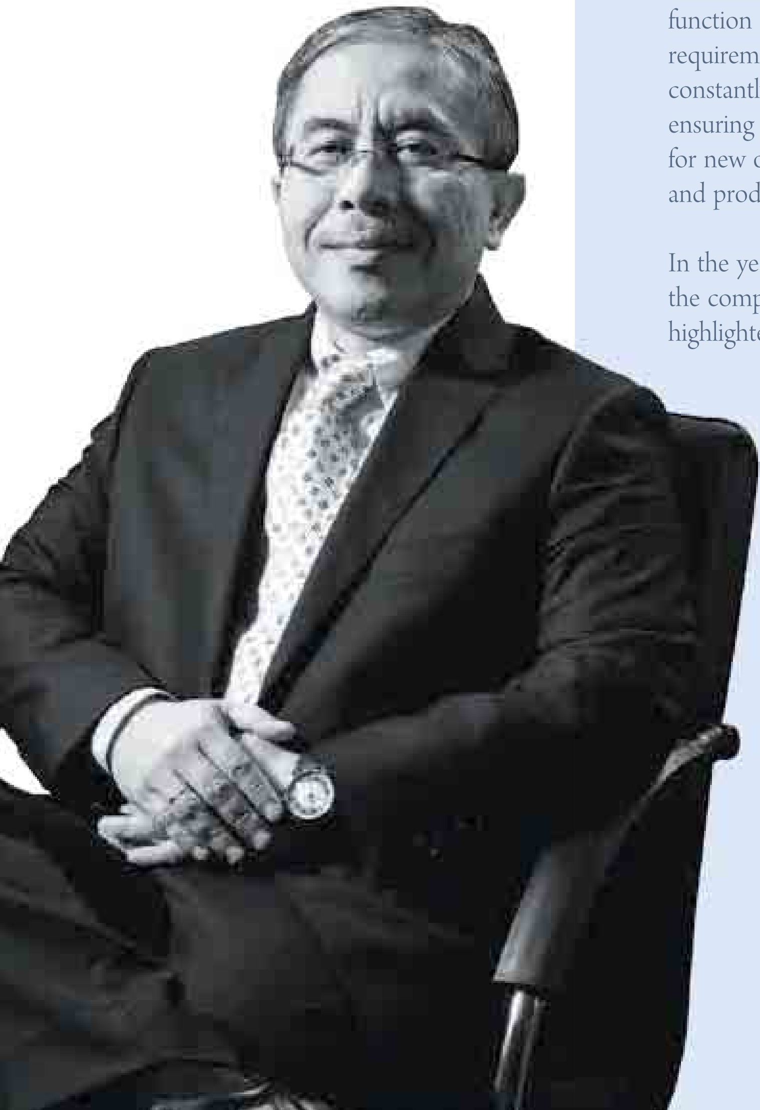
# Towards Greater INNOVATION

Kamaruddin bin Mahmood
Chief Information Officer

## OPERATIONS REVIEW

ICT Division ensures that TNB's ICT infrastructure, systems and applications function optimally, so that the company is able to meet its own operational requirements while providing excellent service to its customers. The division constantly aligns all ICT services to the company's strategic business direction, ensuring they cater for dynamic business requirements. It also seeks continuously for new opportunities and the latest technologies to increase employees' efficiency and productivity.

In the year under review, ICT implemented several projects which directly support the company's strategic business initiatives under TNB Gemilang 2015. These are highlighted on the next page.



# Towards Greater Innovation



## MAJOR PROJECTS

- **Customer Relationship Management (CRM) & Billing**

  ICT, together with Distribution Division, has embarked on a CRM & Billing project to transform TNB's current Customer Relationship Management (CRM) and billing solutions capabilities. The objective is to replace the current e-CIBS billing and CRM satellite systems with a flexible CRM & billing solution which will enable TNB to support regulatory changes fast and allow for extensive customer self-service capabilities. This project will adopt and adapt the utility-specific best practice solution.

- **Customer Management System (CMS) Upgrade**

  The Customer Management System was first implemented by ICT in 2009 as a self-service tool for customers to lodge technical incidents and requests for new ICT products or services. During the year under review, ICT undertook to upgrade the system by improving its features and functions while also enhancing its look and feel. The new CMS will provide better and enriched user experience by having reporting capabilities, an easier system maintenance and an improved system design.

- **Supply Chain Management (SCM)**

  This on-going project supports Group Procurement Division's strategic goals to improve its business processes and implement best practices, particularly in the areas of tendering and purchasing, spend analysis, contract management and supplier relationship management. The first module is expected to automate and improve operational business processes to monitor policy and process compliance, better manage vendor development programmes, give a holistic view and control of suppliers in TNB as well as to provide in-depth visibility of TNB's procurement spending.

- **Application Performance Monitoring (APM)**

  In production since June 2012, this project covers 22 critical applications in TNB. The APM tool is a single platform to monitor end-to-end system performance thereby allowing visibility of overall application performance including the server, network and applications layers. The tool will enable ICT to proactively monitor critical TNB systems by setting various performance thresholds and trigger auto alerts.

- **Competency-Based Performance Management System (CBPMS) for Non-Execs**

  TNB has been using a Competency-Based Performance Management System (CBPMS) to plan, track, evaluate and assess the competencies and KPIs of executives and technical supervisors online since 2003. The Company is currently rolling out an enhanced CBPMS4 which will allow non-executives to participate in the online performance management system.

- **Security Information & Event Management (SIEM)**

  SIEM is a tool that will assist in log management, security incidents correlation, analysis and notification to alert all support teams of security incidents and to allow the Computer Security Incident Response Team (CSIRT) to mitigate such events. SIEM is also in line with the Government's directive for all Critical National Information Infrastructure (CNII) to be ISO 27001 certified.

- **Internal social media – Powerfaces**

  During the year under review, ICT collaborated with the Corporate Communications Department to implement a corporate social networking & knowledge management tool called Powerfaces. This web-based channel enhances knowledge-sharing and promotes work collaboration by allowing TNB staff to tap into each other's capabilities and experience. Powerfaces has been successfully rolled out to approximately 19,000 TNB staff. It has also fostered a more open work culture and improved overall engagement between TNB management and staff.

## PROSPECTS

ICT strives continuously to implement innovative solutions to support TNB's overall vision and mission. Increased customer demand together with a built-in culture for international benchmarking has brought new challenges for the division to tackle.

**Focus on Business Value & Expansion**

- **Improved Customer Centricity**

  In line with TNB's transformation into a customer-centric organisation in recent years, ICT is always on the look-out for new technologies and solutions to support the company's business requirements as well as its vision and mission. The division's commitment towards this end has led it to top TNB's Internal Customer Satisfaction Survey (TICSS) for the last five consecutive years, maintaining a consistent score of above 9.0 over 10.0 for service delivery in the Customer Satisfaction Index (CSI).

  In providing the best service to its customers, ICT together with Distribution Division is currently implementing an Email Billing project to promote e-billing as an alternative to traditional posted bills. The e-bills will be supplemented by SMS notification as an early reminder to TNB customers.

# Towards Greater Innovation



In addition, the use of e-Application has been extended with the development of a Staff Module. This enables all Pusat Khidmat Pelanggan personnel to key in electricity application forms into the e-Application system. As a result, the processing time of applications will be shorter, and there will be greater transparency as applicants can track their application status online.

- **Seek new business opportunities**

  ICT Division intends to maximise the value of its IT investments by remaining as the preferred ICT provider and enabler to support TNB's core businesses. Since 2008, it has also become a revenue earner for the company by leasing TNB infrastructure to various telcos. Among the infrastructure being leased are Fibre Optic Cables on LV Poles, Broadband over Powerline (BPL), Telecommunications Towers and Co-locations. Moving forward, ICT will continue to look for new business opportunities to increase its revenue contribution to TNB.

- **Green IT**

  ICT Division is committed in providing quality service while protecting the environment. All IT equipment used therefore are energy efficient and meet Green IT standards. At the same time, initiatives such as the Electronic Document Management System (EDMS), Desktop & Video Conferencing, Server Consolidation & Virtualisation, paperless meetings and virtual meeting workspaces further contribute to a greener TNB.

# Human Capital DEVELOPMENT Towards Business Expansion

Dato' Muhammad Razif bin Abdul Rahman
Vice President

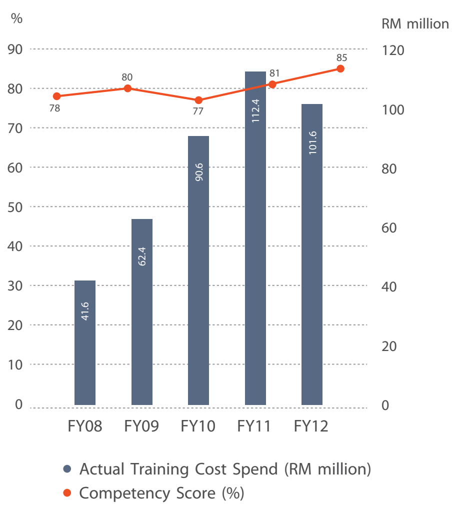

TNB has an on-going programme to build its workforce and ensure its employees are equipped with the right capabilities to carry out their functions. Over the years, millions of ringgit have been spent in learning and development programmes, and the trend will continue now that the company is spreading its wings overseas. The establishment of a competent and productive workforce forms a cornerstone of TNB's growth and features among the objectives of the company's current Strategic Plan.

During the year 2012, human capital development was achieved not only through training programmes, but also via experiential learning through job attachments, cross assignments and job rotations. In addition, the company is focusing more intently on mentoring as part of initiatives to create a wider pool of talented employees.

# Human Capital Development Towards Business Expansion




The graph below shows the relation between training budget utilisation and employees' competency scores over the last five years. The competency score of 81% obtained in the financial year 2012 is the highest during this period.




## EXPERIENTIAL LEARNING AND CAPACITY BUILDING

TNB believes that providing high-potential employees hands-on experience is one of the most effective approaches in developing leaders across the organisation. In 2012, the company embarked on numerous job attachment programmes either overseas or in selected units within Group Internal Audit, Group Finance and Group Human Resources (GHR). The aim is to expose employees to cross-cultural situations and diverse disciplines so that they are able to see the bigger picture in managing the business. A total of 22 employees are currently attached at various projects and stations overseas while 16 employees from the Corporate Talent Pool were stationed at various units to further expand their knowledge base throughout the year.

In addition, TNB participates in the annual cross-assignment and cross-fertilisation programmes between GLCs and the Government. In 2012, six employees were placed at several departments within the Government and other GLCs, exposing them to different environments and cultures.

# Human Capital Development Towards Business Expansion



With regard to mentoring, every new executive recruited is assigned a mentor. At the same time, all employees undergoing internal certification programmes to facilitate their career progression are paired with mentors during on-the-job training modules at stations. During the year under review, 226 non-executives underwent these development programmes and were successfully upgraded to higher positions upon their completion.

## TALENT MANAGEMENT FRAMEWORK ENHANCED

TNB recognises that it is crucial to have a pool of leaders who are able to steer the company as it expands its business. An assessment tool has been developed to identify potential leaders by measuring their competencies and readiness for greater responsibilities. An established Corporate Talent Pool (CTP) is now also supported by Divisional Talent Pool (DTP) initiatives. There are currently 320 and 660 employees in the CTP and DTP respectively. The development programme for the CTP is centralised at GHR while that for the DTP is designed by the respective Divisions, focusing on technical functionalities. These frameworks are crucial in establishing efficient succession plans for key posts in the company.

The Specialist Career Path Scheme, meanwhile, was made more attractive by introducing flexi-grades for all positions enabling incumbents to be promoted right up to top management level. Currently, there are three specialists and 32 technical experts in the fields of Generation, Transmission, Distribution and ICT.

Most future leaders of the company are recruited into the Trainee Executive Programme (PEP) itself, hence the selection process for this is monitored rigorously. A new executive has to undergo three stages of group discussions, technical interviews and experiential learning before being recruited into the company. Upon completion of the PEP programme, a module focusing on functional competency is provided to ensure continuity in career development.

## ENGAGED WORKFORCE FOR HIGHER PRODUCTIVITY

Acknowledging the importance of an engaged workforce, TNB has embarked on various initiatives to inspire employees to perform their best. In 2012, four aspects of engagement were highlighted, namely communication by leaders, career opportunities, recognition and performance management. These focus areas were chosen based on the Employee Engagement Survey (EES) conducted in the previous year, in which the company managed to obtain a commendable score of 84%.

Activities to engage employees include Management by Walking About (MBWA), an outreach programme, job rotation and assignment, recognition standardisation and workshops on performance management. Emphasis is also placed on building relationships and trust among employees as well as between the management and employees in order to create an environment in which job functions are carried out smoothly and effectively.

Towards maintaining close ties with employees, the management engages regularly with the three TNB unions, namely Persatuan Eksekutif TNB (PET), Kesatuan Percantuman Pekerja-Pekerja TNB (K3P) and Junior Officer Union (JOU). There is a constant flow of feedback from the unions and all concerns raised are addressed in the spirit of achieving the company's goals.

## WORKFORCE OPTIMISATION

TNB's Strategic Plan highlights the importance of efficiency in optimising the company's workforce. Accordingly a manpower planning process has been established and is regularly reviewed to reflect optimum productivity. The Labour Productivity Index (LPI) was introduced at core and support divisions in the year under review to measure workforce productivity. Meanwhile, a High Performing Workforce (HPW) initiative is being reviewed as a mechanism to boost productivity.

Other workforce optimisation initiatives include:

- Consistent reviews of job descriptions with the help of the Job Description (JD) online system
- Implementation of a culture change programme which places emphasis on learning and cross-functional teams
- Process reviews and restructuring

## INTERNAL PROCESS ENHANCEMENT

HR strives continuously to improve its service efficiency and transparency through the enhancement of various systems. For example, the Employee Self Service (ESS) e-leave module for non-executives was completed in June 2012, while in July 2012 HR began trials on the e-pay slip. In addition, HR is implementing an On-Line Performance Improvement Programme (PIP), an E-Promotion to Position (e-POP) and a Long Service Award System.

# Human Capital Development Towards Business Expansion



In the financial year 2012, two lab sessions were conducted on caring for employees and compliance with regulatory requirements, and the recommendations put forward are being implemented. These labs are taking forward work initiated following three labs held in the previous year. To date, 75% of initiatives implemented as a result of the first three labs have been completed and efforts are being made to ensure the objectives are fully achieved.


A total of 25 HR practitioners within the company have completed a series of courses and evaluations towards obtaining HR certification from the Malaysian Institute of Human Resource Management (MIHRM). The management believes that the certification will increase the level of professionalism among the HR practitioners and act as recognition of their capabilities in HR management.

A GHR Compliance Task Force (GHRCT) was established in early 2012 to ensure all HR practitioners at every level comply fully with the company's HR policies and procedures. Part of the function of the GHRCT is to detect issues at the business unit level and to resolve these via appropriate recommendations.

## 3RD TNB HR CONFERENCE

More than 400 HR practitioners from all levels in TNB attended the 3rd HR Conference organised by GHR on 27-28 June 2012. Prominent leaders from government, multinational companies, NGOs and GLCs were invited to share the latest developments as well as best practices in HR. The conference's theme, *HR Transformation – Building a Strategic HR*, reflects the commitment of GHR to be a strategic business partner to the company in realising its vision. The conference provided an ideal platform for HR practitioners from TNB to network with their counterparts from other GLCs and relevant agencies.

## BEYOND THE COMPANY, FOR THE COUNTRY

For TNB, recognition from external parties indicates that we are moving in the right direction. In the financial year 2012, TNB Integrated Learning Solution Sdn Bhd (ILSAS) received the Energy Industry Award for Energy Training Providers from the Energy Commission for excellence in training and competency development. Meanwhile, two employees were recognised by the Malaysian Institute of Management (MIM). Pn Azrina Abdul Samad, Senior Manager (Macro Policy, Regulation & Pricing), from the Planning Division won the MIM - Public Bank Manager of the Year Award - Service Category while another talent was a finalist in the same category. The award underlines TNB employees' contributions and professional experience.

In support of the national agenda, TNB takes part in the Skim Latihan 1Malaysia (SL1M). Throughout the financial year, TNB took on a total of 210 unemployed graduates for 12-month work exposure in various business functions. The company also participated in numerous career fairs throughout the country and continued to work closely with government units such as the Ministry of Human Resources on issues related to human resources development.

# Occupational Safety and Health

## OVERVIEW

**34,280**

**CONTRACTORS ATTENDED NIOSH-TNB SAFETY PASSPORT (NTSP) PROGRAMME SINCE ITS INTRODUCTION IN 2006**

**1.42**

**OCCUPATIONAL ACCIDENT RATE PER 1,000 WORKERS**

**OHSAS 18001 CERTIFICATION**

**FULL RECOGNITION FROM THIRD PARTY FOR TRANSMISSION AND GENERATION DIVISIONS**

**90%**

**5 STAR ACHIEVEMENTS IN SAFETY EXCELLENCE MANAGEMENT SYSTEM (SEMS) AUDIT**

TNB, as a government-linked company (GLC), has successfully demonstrated outstanding achievements in managing occupational safety and health at the workplace. This would not be possible without the strong commitment and support from top management and all staff. These achievements have propelled TNB to the next level with better ability to compete globally. Various efforts and initiatives have been implemented to ensure that occupational safety and health management remains effective and aligned to current regulatory requirements and new technologies.

## STRATEGIC PLAN

Rapid development of the country in various industrial sectors, together with the evolution of new technologies, pose a challenge to TNB. The company has to ensure its safety and health controls are effective and in keeping with national development. Thus, a strategic and systematic plan has been developed by the company for a period of five years, from 2010 to 2015.

Key initiatives include enhancing the effectiveness of safety enforcement with the objective of attaining full compliance with occupational safety and health requirements. Several programmes have been developed and designed for TNB to remain relevant and ultimately geared towards realising TNB's 20-Year Strategic Plan for geographical expansion in 2015.

## AWARDS AND RECOGNITIONS

Malaysian Society for Occupational Safety and Health (MSOSH) Award 2011

The MSOSH Award is an annual award presented to companies in Malaysia with proven outstanding Occupational Safety and Health (OSH) performance.

## GOLD MERIT

- Putrajaya Power Station, Generation Division
- Asset Maintenance Department – Kelantan, Transmission Division
- Asset Maintenance Department – Pahang, Transmission Division
- Asset Development Department – Eastern Region, Transmission Division

## GOLD CLASS I

- TNB Janamanjung Sdn Bhd
- Chenderoh Power Station, Generation Division
- Gelugor Power Station, Generation Division
- Connaught Bridge Power Station, Generation Division
- Sultan Ismail Power Station, Generation Division
- Cameron Highlands Power Stations, Generation Division
- Asset Development Department – Major Project, Transmission Division

# Occupational Safety and Health



- Asset Development Department – Central Region, Transmission Division
- Asset Development Department – Northern Region, Transmission Division
- Asset Development Department – Southern Region, Transmission Division
- Asset Maintenance Department – Johor II (Kluang), Transmission Division
- Asset Maintenance Department – Kedah & Perlis, Transmission Division
- Asset Maintenance Department – Kuala Lumpur, Transmission Division
- Asset Maintenance Department – Pulau Pinang, Transmission Division
- Asset Maintenance Department – Melaka, Transmission Division
- Asset Maintenance Department – Terengganu, Transmission Division
- TNB Kuala Lumpur, Distribution Division
- TNB Melaka, Distribution Division
- TNB Pahang, Distribution Division

## GOLD CLASS II

- Sultan Mahmud Power Station, Kenyir, Generation Division
- Asset Maintenance Department – Johor I (Johor Bahru), Transmission Division
- Asset Maintenance Department – Negeri Sembilan, Transmission Division
- Asset Maintenance Department – Perak, Transmission Division

## SILVER

- Sultan Iskandar Power Station, Generation Division
- Sungai Perak Power Stations, Generation Division

## EMERGENCY PREPAREDNESS & RESPONSE DRILL

The emergency preparedness drill is an annual event conducted at all TNB divisions, with particular focus on the power stations. The objectives of this exercise are to test:

- the state of readiness of the power station's emergency management team in handling emergencies,
- the ability to command and control,
- the effectiveness of communication protocols, and
- the ability of the emergency response team to respond tactically in containing the situation.

This exercise involves a total of 13 power stations in collaboration with agencies such as the Fire Department, Police and Hospitals. The drill emergency scenario is simulated to resemble as closely as possible a real emergency situation. Desktop drills are similarly conducted for system emergency scenarios involving the critical "Islanding Operation". The outcomes of all drill exercises are reported to TNB's Corporate Emergency Response Plan (CERP) Steering Committee.

## WAY FOWARD

- **TNB Safety Information System (TSIS)**

  TNB Safety Information System (TSIS) is a computerised information system that provides a platform to standardise information relating to occupational safety, health and environment. There are four main modules, namely risk, incident and action management, reports and dashboards. Once established, this system will make the safety information systems more effective and accessible to all employees.

- **New Occupational Safety, Health and Environment (OSHE) Policies**

  TNB will implement new policies relating to:

  a. Corporate Fire Safety
  b. Personal Protective Equipment
  c. Occupational Health, Safety and Environment Enforcement

  These policies have been developed to serve as reference points throughout the organisation to achieve the highest standards of OSHE practice. Adherence to these policies will strengthen OSHE management and contribute to added value in the organisation.

- **Building Capacity**

  TNB's Safety School has been given the role of organising and conducting OSHE training to ensure the development of relevant skills and knowledge among employees. During the year under review, 90 training sessions were successfully conducted involving a total of 2,700 staff. The Safety School has also been entrusted to provide consultancy services in the implementation of an Occupational, Safety and Health management system for certifications such as OHSAS 18001 and ISO 14001.

# Commitment to the Environment

## TNB Recognises that Economic Growth, Sustainable Development and Quality of Life Go Hand in Hand.

## We are Committed to the Continuous Improvement of Our Environmental Performance whilst Providing Safe, Efficient and Reliable Electricity Supply.

### ENVIRONMENTAL POLICY

As the main electricity provider, TNB is sensitive to its responsibility of managing the country's natural resources wisely to conserve the environment and minimise carbon emissions. In 2005, the company implemented an Environmental Policy with the aim of:

- Taking environmental protection and conservation into consideration in all operations and decision-making
- Complying with all applicable laws and regulations, and establishing standards that will lead to the continuous improvement of its environment performance

# Commitment to the Environment



- Implementing an Environmental Management System (EMS) to eliminate or minimise the environmental impact of its operations
- Conducting environmental audits and training programmes
- Promoting environmental awareness among contractors, the public and other stakeholders and to make available the Environmental Policy to them

**A. Environmental Management Plan**

The Environmental Management Plan was formulated as a licensing requirement under the Environmental Quality Act, 1974; and to ensure TNB's power stations comply with the Department of Environment's detailed Environmental Impact Assessment. The programme focuses on monitoring air and water quality as well as the boundary noise level at all major projects.

**B. Environmental Audits and MS ISO Certification**

To ensure an effective environment system is in place and that environmental management is continuously improved, all TNB power plants have implemented the Environmental Management System MS ISO 14001:2004, and have succeeded in getting the certification from SIRIM QAS International Sdn. Bhd.

**C. Scheduled Waste Disposal**

TNB has implemented a Scheduled Waste Management programme to comply with the Environmental Quality (Scheduled Waste) Regulation 2005. Scheduled waste includes all waste that requires disposal by contractors registered with the Department of Environment (DoE).

The DoE is notified of all scheduled waste generated, which is deposited at the Scheduled Waste Store prior to disposal. Environmental Management Representatives are responsible for recording, monitoring and managing wastes generated at their respective units.

**D. Recycling Programme**

Waste recycling and reduction programmes are included in EMS initiatives at the division level. Most power plants are implementing this programme in addition to the Environmental Management programme to reduce consumption and minimise wastage. Meanwhile, Transmission Division has implemented a Condition Monitoring Programme in which used transformer oil is filtered using the latest technology and then recycled back for use in operations.

### E. Crisis Management

Crisis Management in TNB is coordinated by the Emergency Response Team (ERT) under TNB's Safety Excellence Management System (SEMS), which has been implemented in all the divisions. SEMS identifies every possible emergency that could take place in the divisions' business activities. An Emergency Response Plan (ERP) has been developed to mitigate these emergencies.

### F. Halon Replacement

All equipment in TNB's Generation, Transmission and Distribution Divisions are now halon-free.

### G. Current Issues

*i. **Clean Development Mechanism (CDM) at Ulu Jelai Hydroelectric Project***

TNB is currently developing a Clean Development Mechanism (CDM) at the Ulu Jelai Hydroelectric Project in Pahang. The CDM, as defined by Kyoto Protocol/UNFCCC, has two objectives: 1) to assist developed/industrial countries achieve sustainable development and to reduce the emission of greenhouse gaseous; and 2) to assist developing countries, for example Malaysia, achieve their emission limits and reduction commitments.

The 372MW Ulu Jelai Hydroelectric Project is estimated to generate an average of 374GWh of electricity per annum. Its clean technologies will contribute to the elimination of the equivalent of 250,387 tonnes of $CO_2$ a year, or 1,752,709 tonnes over a seven-year crediting period.

*ii. **Research on Carbon Fixation of Flue Gas using Microalgae***

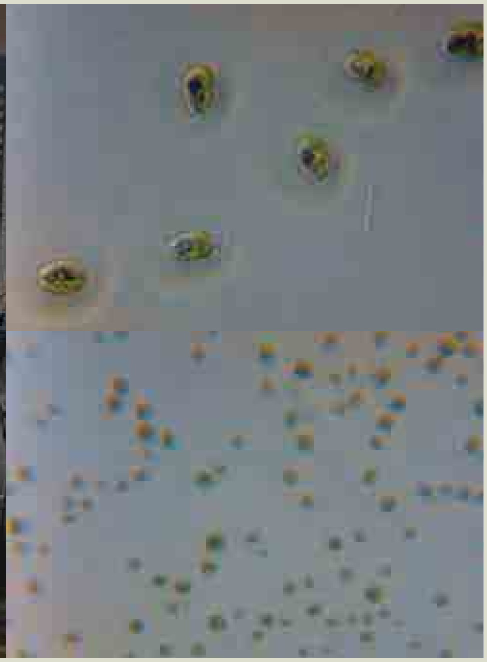
The Electricity and Energy Industry contributes to about 26% of total $CO_2$ emissions in the country. As an industry leader, TNB is exploring the possibility of employing biological sequestration of $CO_2$ to fix some of the $CO_2$ from the flue gas released from its power plants as an alternative to Carbon Capture and Storage. Based on photosynthesis, this natural and sustainable method of CO2 sequestration has the added advantage of producing valuable by-products such as biodiesel. TNB's research focuses on the potential of carbon fixation using the marine microalgae, Isochrysis sp.

Upcoming initiatives involve the design and development of a pilot photobioreactor plant at a coal-fired power station.

*iii. **Lake Brief Programme for lakes under hydroelectric schemes***

All lakes under the supervision of TNB's Generation Division are being monitored under a Lake Brief programme run in collaboration with the National Hydraulic Research Institute of Malaysia (NAHRIM). Beginning early 2010, the programme seeks to determine the quality of the lakes' water, level of sedimentation, pollution and eutrophication, as well as fish population.

# Commitment to the Environment



Lake Brief takes into account details such as the size of the lake, volume of water, morphology, topography, water consumption, in flow and out flow, its socio-economic role and land use within the catchment areas. The information gathered is fed into NAHRIM's database, which will later be useful for policy-making and guidelines on the conservation of lakes as valuable natural resources.

iv. ***Fish Rescue during Sg Terengganu Diversion***

A Fish Rescue Programme was conducted at the Hulu Terengganu Hydroelectric Project site, when Sg Terengganu had to be diverted to make way for a cofferdam. Fish caught during this rescue operation were transferred to temporary fish ponds located at TNB Research Centre, within the project area, before being released to the upper stream away from the project area and human intrusion.

Via the initiative, 59 species were saved, including the valuable freshwater species, Tor tambroides (ikan kelah). The programme was supported by local government agencies such as the Fisheries Department, DOE and Forestry Department.

v. ***Wildlife Management Programme in Hulu Terengganu***

A Wildlife Management Programme (WMP) was developed for the Hulu Terengganu Hydroelectric project to protect the flora and fauna of the Tembat and Petuang Forest Reserves in Hulu Terengganu. The collaboration between TNB Research Sdn Bhd and the Department of Wildlife and National Parks, Peninsular Malaysia (PERHILITAN) consists of:

- Monitoring the project area to ensure no violations of the Wildlife Act 716/2010
- Wildlife surveys to provide baseline data for developing a comprehensive wildlife rescue plan in advance of the rescue operation
- Researching the effects of constructing a dam on the human-elephant conflict in the area
- Ensuring the wildlife rescue operation is carried out smoothly

The WMP is being implemented in two phases; Phase 1 during the construction activities (2011-2014), and Phase 2 during the impoundment activities, which are scheduled for early 2015.

# Corporate Social Responsibility




Corporate Social Responsibility (CSR) is about how an organisation assumes responsibility for the impact of its actions and operations on customers, suppliers, employees, shareholders, local communities and other stakeholders, as well as the environment. It stems from an organisation's commitment to operating in an economically, socially and environmentally sustainable manner, often going beyond statutory obligations to enhance the well-being of society, and nation, and in the process gain greater stakeholder trust and confidence.

At TNB, our core business of supplying electricity fulfills a basic socio-economic need, hence all our efforts to improve the efficiency of our operations necessarily enhances the way we fulfill our social contract. However, as with the best CSR efforts, our concept of corporate citizenry is holistic and we ensure that we make a meaningful as well as sustainable impact on all the lives that we touch via education, community outreach programmes, staff welfare, the promotion of small and medium-sized vendor companies, supporting sports and artistic talent, as well as by protecting our natural resources and the environment.

As with our business operations, our CSR initiatives continue to evolve as we strive to implement global best practices. A discernible example of this is our CSR reporting this year. In the past, we have reported our CSR under the seven pillars of

# Corporate Social Responsibility



Powering Communities, Powering Education, Powering Business Excellence, Powering a Green Nation, Powering Champions, Powering the Workforce and Powering Unity. This year, we have collapsed the seven pillars into four, in line with guidelines of leading CSR authorities such as the Global Reporting Index (GRI), ACCA and Bursa Malaysia. The four categories are: the Community, Marketplace, Workplace and the Environment.

## SERVING THE COMMUNITY

Within the community, TNB has a **tradition of promoting education**, aiding the underprivileged and supporting the development of sports and arts in the country.

Our education initiatives date back to the early days when employees had to be sponsored to obtain the necessary technical qualifications to contribute towards developing the power industry. For many years, the engineers who would go on to bring electricity to millions of Malaysians received their tertiary education abroad, many under scholarship from TNB itself. As the company's internal knowledge base increased, it found itself in the position of being able to set up its own training centre, the **Institut Latihan Sultan Ahmad Shah (ILSAS)**, in 1976.

This was followed by the establishment in 1997 of the wholly-owned **University Tenaga Nasional (UNITEN)**, which offers quality programmes in engineering, IT and business management at the foundation, undergraduate and postgraduate levels. All the programmes are recognised by the Malaysian Qualifications Agency (MQA), while the Engineering programmes are recognised by the Board of Engineers Malaysia (BEM) and UK bodies such as the Institution of Mechanical Engineers, Institution of Engineering and Technology and the Institution of Civil Engineering. By end 2011, UNITEN had produced more than 17,495 graduates who are now serving the sectors of engineering, accountancy, management and finance both locally and abroad. UNITEN offers scholarships to its students, under the Yayasan Canselor UNITEN, a trust fund that was incorporated for a period of five years from 2010 to 2014 under the Trustees (Incorporation) Act 1952 (Act 258) on 2 June 2009.

At the same time, the Group's **scholarship programme** for outstanding Malaysians seeking to further their studies at local and foreign universities has continued, funded by TNB's foundation, Yayasan Tenaga Nasional (YTN). In the FY2012, YTN spent a total of RM42.9 million to sponsor 1,868 students. This represents the largest annual contribution made by TNB towards promoting the professional workforce.

# Corporate Social Responsibility



At the primary level, TNB is a staunch advocate of the Khazanah Nasional-inspired school adoption project, PINTAR. Standing for Promoting Intelligence, Nurturing Talent and Advocating Responsibility, PINTAR is implemented by government linked companies (GLCs) to enhance the educational level and promote excellence among underserved schools in Malaysia. TNB has adopted 27 primary schools nationwide under the programme, and assigned a liaison officer in each state to mentor the adopted schools. In the FY2012, a total of 2,635 Year 6 students benefitted from the activities organised to improve their performance in the Ujian Pencapaian Sekolah Rendah (UPSR).

Other than supporting the underprivileged through education, TNB extends a helping hand to the hardcore poor via the **Baiti Jannati** programme, which means 'My Home, My Heaven' in Arabic. Under this programme, TNB transforms dilapidated houses into comfortable homes equipped with electricity, water and proper sanitation. The company also provides furniture, basic food stuff and educational support for the recipients' children. Priority is given to senior citizens, single parents and the disabled. Since the programme was introduced in 2007, 107 houses have been repaired at a cost of RM1.75 million.

Since 2008, we have also adopted the fishing community in Kampung Kuantan, Kuala Selangor, and are helping them improve their livelihood by **upgrading the firefly centre** in their village and placing signages along the route from Kuala Lumpur to attract more visitors. In FY2012, we also bought 10 new boats to replace damaged ones, and arranged 23 visits by government agencies and corporate bodies. We are also sponsoring Arabic and Japanese classes for the boatmen so they can communicate with tourists from these countries, and organise an annual *Let's Go to School with TNB* programme for their children. We have put aside RM1.50 million for this community project.

More generally, TNB contributes to the well-being of the poor by paying zakat (business tithes) to the religious authorities in all the states where we operate. The amount paid in each state depends on the number of poor households, as determined by the Economic Planning Unit (EPU). In FY2012, the Group's zakat amounted to RM3,375,872.50.

Through YTN, we also regularly donate to the **Majlis Kanser Nasional (MAKNA)** and **National Heart Institute (IJN)**. During the year under review, we channeled RM100,000 towards MAKNA's Mobile Cancer Screening programme in rural communities. As of August 2012 a total of 1,125 kampung folk had been screened for cancer. YTN also allocated RM100,000 to the IJN to help finance heart surgeries for underprivileged patients below the age of 18 years. YTN has been supporting IJN since 2007 and, to date, 54 children have benefited from its donations.

TNB has always been a loyal supporter of **sporting activities and local sporting talents**, providing funds to uplift sports standards in the country. From the early days, we have welcomed national sportsmen and women on our payroll to provide them with a steady income as they continued to train for local and international competitions. Since 2006, we have sponsored the activities of the Malaysian Hockey Confederation (MHC). TNB also organises a hockey coaching programme

# Corporate Social Responsibility



for students aged 13-17 years, conducted by employees who are national hockey players. To date, 2,000 new talents have been identified from seven states through this programme. In addition, hockey clinics are run for the company's PINTAR students.

Other than hockey, TNB has a tradition of supporting **SUKMA**, and this year was a Platinum Sponsor, donating RM100,000 towards SUKMA XV, held in Pahang from 7-16 July 2012.

The progressive management at TNB has also always believed in the inherent value of art, and has served to promote artistic talent in the country. The company began collecting the works of prominent Malaysian artists in the 1960s, and today has a collection of more than 70 pieces, representing one of the oldest corporate collections in the country. This body of art is housed in Galeri Tenaga, in Wisma TNB, Petaling Jaya. In addition to its own collection, the gallery holds exhibitions of contemporary Malaysian artists.

Both sports and art contribute towards creating a Malaysian identity, which in turn serves to maintain national unity. To further support the Government's aspiration to nurture 1Malaysia, TNB hosts internal programmes and sends contingents to participate in events organised by the Government that bring together Malaysians of all creeds from all walks of life. These include occasions such as Independence Day, Malaysia Day, Federal Territory Day, Labour Day, Women's Day, Sambutan Maulidur Rasul and Maal Hijrah.

## A LEADER IN THE MARKETPLACE

TNB has distinguished itself in the marketplace not just as Malaysia's leading electricity utility, but as an organisation that uses its leadership position to further develop the energy industry. We have also been a partner to the Government in ensuring the widest possible distribution of electricity, extending its reach to remote villages and islands.

# Corporate Social Responsibility

TNB's successes in the marketplace to date are underpinned by a strong **Corporate Governance (CG)** framework which enhances transparency as well as stakeholder value. The Board of Directors takes the lead in ensuring the company adopts best practices in CG, and keeps up-to-date with the latest enhancements in this area. The Board is guided by the Malaysian Code on Corporate Governance and other relevant legislation to protect the well-being of all stakeholders at all times.

In terms of stakeholder engagement, we have in place various programmes targeted at the different groups of stakeholders. We have a well-oiled **Investor Relations Programme** which includes investor briefings, site visits and one-on-one dialogue. We recently revised our **Procurement Policy and Procedures** (PPP) both to reduce costs and to strengthen our relationship with suppliers. TNB is a role model in terms of vendor development, our **Bumiputera Vendor Development Programme** (VDP) having benefited 468 companies to date. Just in FY2012, we awarded a total of about RM1.0 billion in contracts to our vendors. Our VDP is so successful that TNB has been appointed by the Putrajaya Committee on GLC High Performance (PCG) to chair the VDP Sub-Group Circle Meeting, aimed at spurring on more GLCs to contribute to national wealth creation by implementing their own structured vendor development programmes.

TNB also engages regularly with local communities at the grassroots level. For example, staff at power stations organise annual **Power Station Open Days**, provide free medical check-ups for the people and take part in *gotong-royong* programmes. Via the **Community Leaders Outreach Programme (CLOP)** launched in early 2005, Management communicate directly with community leaders, heads of local governments and stakeholders on services, complaints, enquiries and suggestions. The feedback obtained is used to improve our services. In conjunction with the programme, we also organise exhibitions on our products, services and activities. In the FY2012, TNB spent RM353,979.67 to organise 13 CLOP sessions throughout the peninsula.

As a responsible power company, TNB also undertakes to educate children and members of the public on using electricity safely. The Electricity Safety Awareness Campaign is an on-going effort organised in collaboration with State Education Departments (SED). In FY2012, 3,449 participants benefitted from the programme.

But perhaps the most significant contribution TNB is able to make in the marketplace is to stay true to our core promise of Keeping the Lights On, and to ensure that consumers can afford to do so. We have set ourselves high standards to drive operational excellence and are guided to achieve these by our 20-Year Strategic Plan.

While staying focused on our core business responsibility, TNB also fully supports the Government in its efforts to achieve 100% electrification of the country. Through the Rural Electrification Programme, TNB provides electricity to communities in

# Corporate Social Responsibility



remote villages and estates as well as to the many small islands that dot Malaysia's coastline. The programme is run in collaboration with the Ministry of Rural and Regional Development (KKLW) and the Electricity Supplies Industry Trust Account (AAIBE) under the Ministry of Energy, Green Technology and Water (KeTTHA). Electricity is provided in these areas either by extending TNB's grid or via the installation of generator sets, solar hybrid systems or other forms of renewable energy. In FY2012, TNB was awarded 91 rural electrification projects at a total cost of RM83.5 million involving close to 2,000 kampung houses. Of these, 54 projects were funded by KKLW and another 37 projects by AAIBE/KeTTHA. Also with the KKLW, TNB has been installing street lights in villages around Malaysia. Since the **Village Street Lights Project** started in 2005, a total of 137,109 street lights have been erected throughout Peninsular Malaysia.

In addition, TNB has been involved in a **Rural School Electrification Project** to provide 24-hour supply to 42 schools in very remote areas. Of the schools, 19 have been connected through grid lines, 19 are supplied via a solar hybrid system and four receive electricity from standalone generator systems. We were awarded the RM98 million project by the Ministry of Education in 2010, and completed it on 30 June 2012.

Finally, TNB plays a critical role in providing the industry's perspective in any policy-making that affects the power sector. At present, Planning Division leads a cross-divisional team engaged with Government agencies on the Fuel Cost Pass Through (FCPT), which is to be part of the soon-to-be-implemented Incentive-Based Regulation (IBR).

## WELL-BEING AT THE WORKPLACE

TNB has always valued our employees and provided them with a conducive work environment that is both challenging and rewarding. In July 2012, our President/CEO Datuk Wira Ir. Azman Mohd introduced a 'Vibrant Workforce, Productivity Revolution' driven by four thrusts: Building Trust and Relationships, Building Capacity, Building Performance and Building Growth. The objective is to create an environment where our more than 33,500 employees are motivated, competent and committed to the company's goals.

For our part, we empower our workforce by providing systematic training programmes and career development opportunities, a safe and healthy working environment, attractive compensation and benefits scheme, and work-life balance.

# Corporate Social Responsibility



TNB has embarked on an integrated human resources and career development initiative, in which **training, education and development programmes** are directly linked to the career path and progression of our employees. Although there are distinct career plans for executives and non-executives, there is a link between the two, offering opportunities for career advancement for non-executives who aspire to serve the company in executive positions. In FY2012, RM101.6 million was spent on professional development, and 84.2% of the workforce attended at least three days training.

Our **employee healthcare benefits** are among the most comprehensive in the country. Currently, we have 1,136 clinics and hospitals across the country on our panel. In addition to paying for medical bills, we also provide our employees and retirees medical aids such as wheelchairs, hearing aids and prosthetic limbs. Our healthcare benefits cover our employees' immediate families. Children are eligible for medical benefits up to the age of 18 years or up to 24 years if they are still studying; and there is no age limit for 'special children'. Employees aged 40 and above are encouraged to undergo full medical examinations at least once every two years, while health talks and screenings are routinely held. In FY2012, 74 health campaigns were organised benefiting more than 7,500 employees and retirees.

We believe that an engaged workforce is the most productive. Hence, we adopt several measures to engage all our employees, from keeping them updated on the latest corporate developments through various electronic and print channels to more personal sessions at which top Management meet employees at the regional and state levels. An important event on our calendar is the Annual Assembly held in conjunction with our Anniversary celebration and New Year gathering. At this gathering, both the Chairman and the President/CEO address employees and share with them their vision for the company.

Employees have the opportunity to voice out their opinions or grouses directly to the top Management through emails and dialogue sessions. These efforts are integral to our efforts to be 'The Employer of Choice'. We conduct an annual Employee

# Corporate Social Responsibility



Engagement Survey (EES) to gauge the effectiveness of our programmes and to monitor employees' commitment to the organisation.

Towards promoting a **safe work environment**, Occupational Safety and Health (OSH) courses such as SEMS Auditors, Safety Representatives and Office Safety are organised to ensure all employees attend at least one day of OSH training per year. At the same time, a Safety Excellence Management System (SEMS) is being adopted by all divisions and subsidiaries. As a result of these initiatives, more departments have been certified to OHSAS 18000 and MS 1722.

We believe, further, that employees need to enjoy a healthy **work-life balance** in order to perform optimally. Towards this end, we support the childcare needs of employees with young children by providing nine nurseries and 11 kindergartens. Tuition is offered for older children, at a minimal rate. Staff are also encouraged to take part in physical, recreational and social activities organised by in-house clubs and societies. There are 63 registered Kilat Clubs in the country, to which TNB channeled approximately RM496,000 to finance sports and social activities. Women employees and wives of employees have the option of joining PELITAWANIS, which has a membership of 6,037. The society organises charitable events, which are supported with funds from TNB. In FY2012, the company contributed about RM817,000 towards PELITAWANIS. The welfare of our Muslim employees is looked after by PAKATAN/ Persatuan Kebajikan Pekerja Islam TNB (PKPI), which also organises outreach programmes. In FY2012, this included donating about USD4,800 to Islamic communities in three villages in Cambodia. TNB, meanwhile, supported PKPI with a donation of RM270,000 for the financial year.

Families are invited to take part in fun-filled Family Days which alternate on a yearly basis with Sports Carnivals. The Family Days are held at the headquarters and at the individual states, while the Sports Carnival brings together sportsmen from the TNB family from all over Malaysia to the Klang Valley.

Retirees are not left out, and have their own society, *Persatuan Bekas Pekerja LLN/ TNB,* which organises various social events. In FY2012, RM130,000 was spent on social and recreational activities including Majlis Berbuka Puasa and Majlis Hari Raya.

To keep a constantly high morale at work, TNB recognises outstanding employees at the Meritorious Service Awards held at the corporate and divisional levels. At the corporate level, 33 employees in the Executive, Non-Executive (Technical) and Non-Executive (Non-Technical) categories were awarded at the Majlis Perhimpunan Warga Kerja TNB held on 19 January 2012. The company also shows its appreciation to long-serving employees. On 17-18 March 2012, 1,425 employees from all over the country who have served between 25-35 years were feted.

In the event of the death of an employee, the company provides RM2,000 to widows and gives monthly stipends of RM60 each to orphans aged seven to 12 years, and RM90 each to children aged 13-17 years. In FY2012, TNB spent approximately RM698,000 on both programmes, benefiting 40 TNB widows and 662 TNB orphans. Meanwhile, Kumpulan Wang Khairat Pekerja dan Pesara TNB (KWKPPTNB) helps the families of the bereaved to pay for funeral expenses. Funds for the scheme are collected from RM1 monthly contributions from members. KWKPPTNB currently has 12,116 ordinary members and 4,398 life members (those who have been contributing for more than 15 years at retirement).

# Corporate Social Responsibility



Internally, TNB fosters the spirit of 1Malaysia by celebrating Hari Raya Aidilfitri, Chinese New Year and Deepavali by hosting open days at the headquarters and all state offices at which management, staff, stakeholders and other guests come together in the spirit of unity. The company also has a nationwide Buka Puasa programme during the month of Ramadan, when the Management in every state hosts about 300-400 guests, including community leaders, to a breaking of fast at a local mosque.

## CHAMPION OF A GREENER ENVIRONMENT

In light of the urgency of climate change issues, TNB has stepped up our efforts to ensure all our operations are eco-friendly, creating minimal impact on the natural environment. The company is guided by our Green Energy Policy, introduced in 2011, which states: "TNB is committed to support the national green agenda and by applying sustainable, efficient operations and delivering green energy through the application of appropriate technologies and investments."

Our commitment to the green agenda is reflected in on-going efforts to reduce the country's carbon footprint via both demand side and supply side management. In the former, we have been **promoting energy efficiency (EE)** through educational campaigns while towards the latter we have been **investing in renewable energy (RE)** such as hydroelectricity and biomass, and to a smaller extent, solar-fuelled energy. TNB supports the **Government's Small Renewable Energy Programme (SREP)** by helping RE producers to connect to the national grid. To fund the Feed-in-Tariff (FiT) introduced at end 2011, the Government set up an RE Fund. We ensure all consumers contribute to this fund by channelling 1% of their electricity bills towards it. TNB plays a critical role in the success of SREP by collecting the RE Fund contributions and paying the FiT. In effect, TNB is the administrator of this fledgling RE sector.

TNB further supports all EE and RE efforts by investing in research in these areas. In 2008, we set up the **Institute of Energy Policy and Research (IEPRe)** and the **Centre of Renewable Energy (CRE)** at UNITEN.

Our own plants incorporate green technologies. The Sultan Azlan Shah Power Station in Perak (TNB Janamanjung), for example, employs **clean coal technology** which meets World Health Organisation (WHO) standards. Flue-gas desulphurisation equipment traps dust before pollution-free hot gases are discharged. The power plant is further equipped with a first of its kind smart weather-based coal dust suppression system for a coal stock yard in the country. At the Sultan Salahuddin Abdul Aziz Power Station in Kapar, Selangor, meanwhile, the ash ponds are so pristine they have been recognised by the Asia Pacific Migratory Waterbird Conservation Strategy as an important migratory shorebird sanctuary, and included in the East Asian-Australasian Shorebird Site Network.

As part of our commitment towards the environment, we have 'adopted' the firefly colony in Kampung Kuantan and scientists at TNB Research have undertaken **firefly conservation studies** to ensure the sustainability of this fascinating insect species.

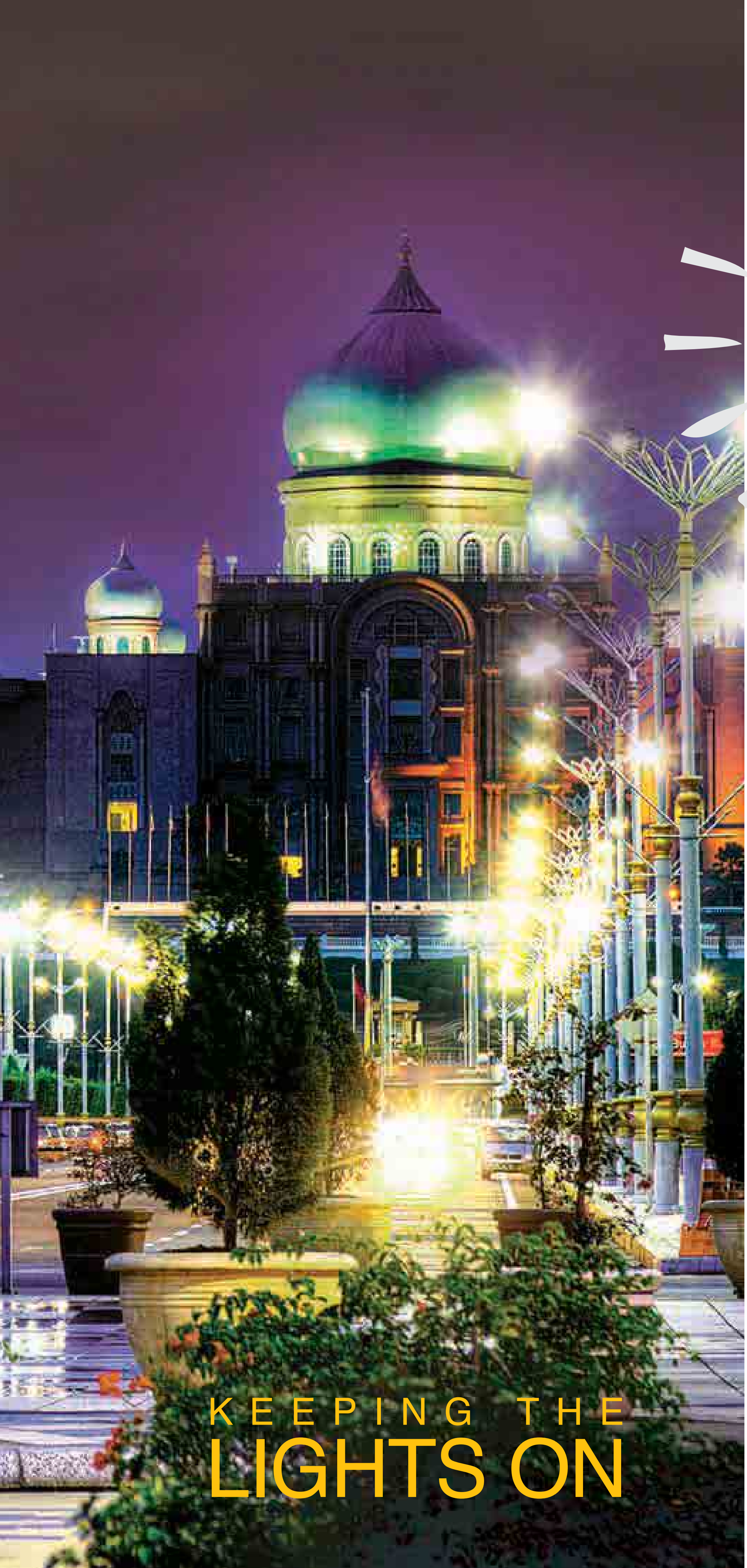
Environment consciousness at the Group level has trickled down to the ground, and staff at the Transmission Division run a **Tree For A Tree programme** through which trees that are felled to make way for transmission infrastructure are replaced with new trees elsewhere. To date, some 420 saplings have been planted. Staff from the division also collaborate with non-governmental organisations to carry out river and seashore cleaning activities.

YOU SEE

WE SEE...

# SAFETY AND SECURITY FOR EVERYONE

We've lit up thousands of street lights across the nation so that roads and highways have a high level of visibility. Good street lighting not only contributes to safe travelling but also enhances safety in public places, which is why we ensure the nation never switches off.




# FINANCIAL statements

# Directors' Report



The Directors have pleasure in submitting their Report with the audited financial statements of the Group and Company for the financial year ended 31 August 2012.

## PRINCIPAL ACTIVITIES

The Group and Company are primarily involved in the business of the generation, transmission, distribution and sales of electricity and those tabulated in Note 14 to the financial statements.

There have been no significant changes in these activities during the financial year under review.

## FINANCIAL RESULTS

| | Group RM'million | Company RM'million |
|---|---|---|
| Profit for the financial year attributable to: | | |
| – Owners of the Company | 4,197.6 | 3,118.1 |
| – Non-controlling interests | 8.6 | 0 |
| Profit for the financial year | 4,206.2 | 3,118.1 |

## DIVIDENDS

The dividends paid or declared since the previous financial year ended 31 August 2011 were as follows:

| | RM'million |
|---|---|
| In respect of the financial year ended 31 August 2012: | |
| Interim dividend of 5.09 sen per ordinary share comprising franked dividend of 0.38 sen gross per ordinary share less income tax of 25.0% and a single-tier dividend of 4.71 sen per ordinary share, paid on 25 May 2012 | 273.0 |

For the financial year ended 31 August 2012, the Directors had on 31 October 2012 recommended the payment of a final single-tier dividend of 15.0 sen per ordinary share, subject to the approval of the shareholders at the forthcoming Annual General Meeting of the Company. The books closure and payment dates will be announced in due course.

## RESERVES AND PROVISIONS

All material transfers to or from reserves and provisions during the financial year are shown in the financial statements.

## ISSUE OF SHARES

During the financial year, 44,896,592 new ordinary shares of RM1.00 each were issued by the Company pursuant to the Employees' Share Option Scheme II ('ESOS II') at exercise prices of RM4.45, RM5.06, RM5.08, RM5.36, RM5.45, RM5.59, RM5.62, RM5.64, RM5.74, RM5.86, RM5.93, RM6.09, RM6.24, RM6.40 and RM8.85 per share.

The new ordinary shares issued during the financial year ranked pari passu in all respects with the existing ordinary shares of the Company.

## EMPLOYEES' SHARE OPTION SCHEME ('ESOS')

Options under the ESOS were granted to eligible Directors, employees and retirees of the Group to subscribe for ordinary shares of RM1.00 each in TNB. The first ESOS expired on 11 May 2002.

The Company implemented a new Employees' Share Option Scheme II ('ESOS II') on 8 July 2003 for a period of 10 years. The ESOS II is governed by the bye-laws, which were approved by the shareholders at the Extraordinary General Meeting ('EGM') held on 29 May 2003 and amended at the EGM held on 15 December 2005.

The main features and movements during the financial year in the number of options over the shares of the Company are set out in Note 38 to the financial statements.

The Company has been granted an exemption by the Companies Commission of Malaysia via a letter dated 8 October 2012 from having to disclose in this Report the name of the persons to whom options have been granted under the ESOS II and details of their holdings pursuant to Section 169 (11) of the Companies Act, 1965 except for information on employees who were granted options representing 756,000 ordinary shares and above.

The employee of the Company who was granted options representing 756,000 ordinary shares and above under ESOS II is as follows:

| **Name** | **Designation** | **No. of ordinary shares granted under the options** | **No. of ordinary shares exercised under the options** | **No. of ordinary shares available under the options** |
|---|---|---|---|---|
| Datuk Wira Ir. Azman bin Mohd | President/Chief Executive Officer | 878,427 | 20,000 | 858,427 |

None of the subsidiaries' employees were granted options representing 756,000 ordinary shares and above under ESOS II.

## DIRECTORS

The Directors who have held office during the period since the date of the last Report are:

| | |
|---|---|
| Tan Sri Leo Moggie | |
| Datuk Wira Ir. Azman bin Mohd | (Appointed as President/Chief Executive Officer w.e.f. 1 July 2012) |
| Dato' Mohammad Zainal bin Shaari | |
| Tan Sri Dato' Hari Narayanan a/l Govindasamy | |
| Dato' Zainal Abidin bin Putih | |
| Dato' Fuad bin Jaafar | |
| Tan Sri Dato' Seri Siti Norma binti Yaakob | |
| Dato' Abd Manaf bin Hashim | |
| Datuk Chung Hon Cheong | |
| Suria binti Ab Rahman | (Alternate Director to Dato' Mohammad Zainal bin Shaari) |
| Datuk Nozirah binti Bahari | |
| Dato' Sri Che Khalib bin Mohamad Noh | (Ceased as President/Chief Executive Officer on 30 June 2012) |

## DIRECTORS' BENEFITS

During and at the end of the financial year, no arrangements subsisted to which the Company is a party, being arrangements with the object or objects of enabling Directors of the Company to acquire benefits by means of the acquisition of shares in or debentures of the Company or any other body corporate, except for the options granted to the President/Chief Executive Officer pursuant to the ESOS II.

Since the end of the previous financial year, no Director has received or become entitled to receive a benefit (other than benefits disclosed as Directors' remuneration and benefits in Note 5 to the financial statements) by reason of a contract made by the Company or a related corporation with the Director or with a firm of which the Director is a partner, or with a company in which the Director has a substantial financial interest.

# Directors' Report



## DIRECTORS' INTERESTS IN SHARES AND DEBENTURES

According to the Register of Directors' shareholdings, particulars of the interests of Directors who held office as at the end of the financial year in shares in the Company are as follows:

| | Number of ordinary shares of RM1.00 each | | | |
|---|---|---|---|---|
| | As at 1.9.2011 | Acquired | Disposed | As at 31.8.2012 |
| Datuk Wira Ir. Azman bin Mohd | 4,375* | 0 | 0 | 4,375* |
| Dato' Zainal Abidin bin Putih | 1,562 | 0 | 0 | 1,562 |
| Dato' Fuad bin Jaafar | 78,125 | 0 | 0 | 78,125 |
| Tan Sri Dato' Seri Siti Norma binti Yaakob | 1,562 | 0 | 0 | 1,562 |

| | Options over ordinary shares of RM1.00 each | | | |
|---|---|---|---|---|
| | As at 1.9.2011 | Options granted | Exercised | As at 31.8.2012 |
| Datuk Wira Ir. Azman bin Mohd | 798,427 | 60,000 | 0 | 858,427 |

* *Through nominees of Tasec Nominees (Tempatan) Sdn. Bhd.*

According to the Register of Directors, none of the other Directors held any options over shares in the Company.

Other than as those disclosed above, none of the Directors in office at the end of the financial year held any other interest in shares and debentures of the Company and its related corporations.

## STATUTORY INFORMATION ON THE FINANCIAL STATEMENT

Before the consolidated income statements, statements of comprehensive income and statements of financial position of the Group and Company were prepared, the Directors took reasonable steps:

(a) to ascertain that proper action had been taken in relation to the writing off of bad debts and the making of allowance for doubtful debts and satisfied themselves that all known bad debts had been written off and that adequate allowance had been made for doubtful debts; and

(b) to ensure that any current assets, other than debts, which were unlikely to be realised in the ordinary course of business their values as shown in the accounting records of the Group and Company had been written down to an amount which they might be expected to be realised.

At the date of this Report, the Directors are not aware of any circumstances:

(a) which would render the amount written off for bad debts or the amount of the allowance for doubtful debts in the financial statements of the Group and Company inadequate to any substantial extent; or

(b) which would render the values attributed to current assets in the financial statements of the Group and Company misleading; or

(c) which have arisen which render adherence to the existing method of valuation of assets or liabilities of the Group and Company misleading or inappropriate.

No contingent or other liability has become enforceable or is likely to become enforceable within the period of twelve months after the end of the financial year which, in the opinion of the Directors, will or may affect the ability of the Group or of the Company to meet their obligations when they fall due.

At the date of this Report, there does not exist:

(a) any charge on the assets of the Group and Company which has arisen since the end of the financial year which secures the liability of any other person; or

(b) any contingent liability of the Group and Company which has arisen since the end of the financial year.

At the date of this Report, the Directors are not aware of any circumstances not otherwise dealt with in this Report or the financial statements which would render any amount stated in the financial statements misleading.

## STATUTORY INFORMATION ON THE FINANCIAL STATEMENTS (CONTINUED)

In the opinion of the Directors:

(a) the results of the Group's and Company's operations during the financial year were not substantially affected by any item, transaction or event of a material and unusual nature other than as disclosed in the financial statements; and

(b) there has not arisen in the interval between the end of the financial year and the date of this report any item, transaction or event of a material and unusual nature likely to affect substantially the results of the operations of the Group or Company for the financial year in which this Report is prepared.

## AUDITORS

The auditors, PricewaterhouseCoopers, have expressed their willingness to continue in office.

Signed on behalf of the Board of Directors, in accordance with their resolution dated 31 October 2012.

| | |
|---|---|
| **TAN SRI LEO MOGGIE** | **DATUK WIRA IR. AZMAN MOHD** |
| CHAIRMAN | PRESIDENT/CHIEF EXECUTIVE OFFICER |

# Consolidated Income Statements

for the financial year ended 31 August 2012

| | Note | Group 2012 RM'million | Group 2011 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million |
|---|---|---|---|---|---|
| Revenue | 4 | **35,848.4** | 32,241.2 | **33,341.0** | 30,157.1 |
| Operating expenses | 5 | **(31,592.1)** | (30,956.4) | **(29,656.8)** | (28,779.3) |
| Other operating income | 7 | **2,140.6** | 532.0 | **2,180.4** | 752.9 |
| Operating profit | | **6,396.9** | 1,816.8 | **5,864.6** | 2,130.7 |
| Foreign exchange loss | 8 | **(252.2)** | (194.1) | **(225.8)** | (208.7) |
| Share of results of jointly controlled entities | 15 | **(0.2)** | 0.6 | **0** | 0 |
| Share of results of associates | 16 | **27.0** | 92.8 | **0** | 0 |
| Profit before finance cost | | **6,171.5** | 1,716.1 | **5,638.8** | 1,922.0 |
| Finance income | 9 | **188.7** | 319.1 | **304.8** | 404.6 |
| Finance cost | 9 | **(823.0)** | (878.5) | **(1,513.9)** | (1,711.5) |
| Profit before taxation and zakat | | **5,537.2** | 1,156.7 | **4,429.7** | 615.1 |
| Taxation and zakat | 10 | **(1,331.0)** | (192.2) | **(1,311.6)** | (36.8) |
| Profit for the financial year | | **4,206.2** | 964.5 | **3,118.1** | 578.3 |
| Profit attributable to: | | | | | |
| – Owners of the Company | | **4,197.6** | 965.4 | **3,118.1** | 578.3 |
| – Non-controlling interests | | **8.6** | (0.9) | **0** | 0 |
| Profit for the financial year | | **4,206.2** | 964.5 | **3,118.1** | 578.3 |

| | Note | Sen | Sen (Restated) |
|---|---|---|---|
| Earnings per share: | | | |
| – Basic | 11(a) | **76.82** | 17.71 |
| – Diluted | 11(b) | **76.63** | 17.67 |

| Dividends per share: | Note | Sen | Sen |
|---|---|---|---|
| Interim dividend (gross) | 12 | **0.38** | 4.5 |
| Interim dividend (single-tier) | 12 | **4.71** | 0 |
| Proposed final dividend (single-tier) | 12 | **15.0** | 0 |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Comprehensive Income

for the financial year ended 31 August 2012



| | Note | Group 2012 RM'million | Group 2011 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million |
|---|---|---|---|---|---|
| Profit for the financial year | | **4,206.2** | 964.5 | **3,118.1** | 578.3 |
| Other comprehensive expense: | | | | | |
| Foreign currency translation differences | | **(51.2)** | (8.1) | **0** | 0 |
| Total comprehensive income for the financial year | | **4,155.0** | 956.4 | **3,118.1** | 578.3 |
| Total comprehensive income attributable to: | | | | | |
| – Owners of the Company | | **4,146.4** | 957.3 | **3,118.1** | 578.3 |
| – Non-controlling interests | | **8.6** | (0.9) | **0** | 0 |
| Total comprehensive income for the financial year | | **4,155.0** | 956.4 | **3,118.1** | 578.3 |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Financial Position

as at 31 August 2012



| | Note | Group 2012 RM'million | Group 2011 (Restated) RM'million | Group 1.9.2010 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million | Company 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|---|---|---|
| **NON-CURRENT ASSETS** | | | | | | | |
| Property, plant and equipment | 13 | **64,769.9** | 61,861.4 | 58,895.3 | **61,271.8** | 60,483.0 | 60,028.8 |
| Subsidiaries | 14 | **0** | 0 | 0 | **2,964.2** | 3,916.3 | 3,443.4 |
| Jointly controlled entities | 15 | **0.4** | 0.6 | 0 | **0** | 0 | 0 |
| Associates | 16 | **491.2** | 407.8 | 245.7 | **213.0** | 218.2 | 110.6 |
| Investment in unquoted debt securities | 17 | **163.7** | 164.0 | 164.0 | **163.7** | 164.0 | 164.0 |
| Available-for-sale financial assets | 18 | **38.0** | 38.0 | 38.0 | **38.0** | 38.0 | 38.0 |
| Deferred tax assets | 19 | **0** | 30.2 | 55.9 | **0** | 0 | 0 |
| Derivative financial instruments | 20 | **116.3** | 89.9 | 53.4 | **0** | 0 | 0 |
| Long term receivables | 21 | **419.2** | 388.6 | 448.7 | **1,184.6** | 1,088.3 | 1,151.7 |
| Prepaid leases | 22 | **3,789.3** | 3,161.0 | 2,606.1 | **3,539.1** | 2,930.3 | 2,380.0 |
| | | **69,788.0** | 66,141.5 | 62,507.1 | **69,374.4** | 68,838.1 | 67,316.5 |
| **CURRENT ASSETS** | | | | | | | |
| Non-current assets held-for-sale | 23 | **9.8** | 11.4 | 18.0 | **9.8** | 11.4 | 18.0 |
| Inventories | 24 | **2,842.2** | 2,645.9 | 2,450.4 | **1,529.6** | 1,356.7 | 1,265.0 |
| Receivables, deposits and prepayments | 25 | **6,988.7** | 6,022.1 | 5,200.4 | **4,963.3** | 3,724.9 | 3,453.6 |
| Current tax assets | | **142.4** | 264.5 | 15.2 | **0** | 236.5 | 0 |
| Amounts due from subsidiaries | 26 | **0** | 0 | 0 | **1,939.3** | 2,447.2 | 2,573.0 |
| Amounts due from associates | | **62.6** | 14.6 | 5.7 | **61.6** | 14.6 | 5.3 |
| Short term investments | | **0** | 0 | 113.3 | **0** | 0 | 113.3 |
| Financial assets at fair value through profit or loss | 27 | **9.1** | 8.6 | 8.6 | **9.1** | 8.6 | 8.6 |
| Derivative financial instruments | 20 | **0** | 1.5 | 0 | **0** | 1.5 | 0 |
| Deposits, bank and cash balances | 28 | **8,626.3** | 3,954.2 | 8,343.7 | **3,961.2** | 2,703.9 | 6,456.6 |
| | | **18,681.1** | 12,922.8 | 16,155.3 | **12,473.9** | 10,505.3 | 13,893.4 |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Financial Position
as at 31 August 2012



| | Note | Group 2012 RM'million | Group 2011 (Restated) RM'million | Group 1.9.2010 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million | Company 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|---|---|---|
| **CURRENT LIABILITIES** | | | | | | | |
| Payables | 29 | **5,746.6** | 5,571.4 | 5,276.9 | **3,485.6** | 3,549.8 | 3,439.6 |
| Amounts due to subsidiaries | 26 | **0** | 0 | 0 | **1,246.0** | 1,608.6 | 1,105.1 |
| Amounts due to associates | | **697.9** | 707.9 | 623.6 | **697.9** | 707.9 | 623.6 |
| Current tax liabilities | | **331.0** | 5.7 | 317.6 | **263.5** | 0 | 306.6 |
| Deferred income | 30 | **894.7** | 523.9 | 331.3 | **770.0** | 487.4 | 331.3 |
| Short term borrowings | 31 | **1,604.2** | 1,727.3 | 3,162.7 | **759.3** | 954.5 | 2,531.8 |
| Hire purchase creditors and finance lease obligation | 33 | **55.1** | 49.1 | 2.6 | **671.6** | 384.8 | 163.0 |
| | | **9,329.5** | 8,585.3 | 9,714.7 | **7,893.9** | 7,693.0 | 8,501.0 |
| **NET CURRENT ASSETS** | | **9,351.6** | 4,337.5 | 6,440.6 | **4,580.0** | 2,812.3 | 5,392.4 |
| **TOTAL ASSETS LESS CURRENT LIABILITIES** | | **79,139.6** | 70,479.0 | 68,947.7 | **73,954.4** | 71,650.4 | 72,708.9 |
| **NON-CURRENT LIABILITIES** | | | | | | | |
| Borrowings | 32 | **(21,467.6)** | (17,326.8) | (17,932.9) | **(10,735.6)** | (11,219.7) | (11,880.1) |
| Amounts due to subsidiaries | | **0** | 0 | 0 | **(2,383.4)** | (2,467.8) | (2,796.7) |
| Consumer deposits | 34 | **(3,284.7)** | (3,084.9) | (2,903.9) | **(3,093.8)** | (2,901.7) | (2,731.3) |
| Derivative financial instruments | 20 | **(21.5)** | (44.1) | (70.8) | **(21.5)** | (44.1) | (70.8) |
| Employee benefits | 35 | **(4,489.7)** | (4,220.5) | (3,866.3) | **(4,286.0)** | (4,043.7) | (3,704.8) |
| Other liabilities | 36 | **(892.2)** | (910.0) | (1,031.6) | **(496.7)** | (496.5) | (567.2) |
| Deferred tax liabilities | 19 | **(8,284.6)** | (7,852.2) | (7,815.9) | **(6,589.3)** | (6,130.5) | (6,204.3) |
| Deferred income | 30 | **(2,291.2)** | (2,849.6) | (2,710.9) | **(2,016.4)** | (2,454.8) | (2,345.1) |
| Government development grants | 37 | **(671.0)** | (627.2) | (599.0) | **0** | 0 | 0 |
| Hire purchase creditors and finance lease obligation | 33 | **(1,338.8)** | (1,334.3) | (63.5) | **(11,893.9)** | (12,565.5) | (12,950.3) |
| | | **(42,741.3)** | (38,249.6) | (36,994.8) | **(41,516.6)** | (42,324.3) | (43,250.6) |
| **TOTAL NET ASSETS** | | **36,398.3** | 32,229.4 | 31,952.9 | **32,437.8** | 29,326.1 | 29,458.3 |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Financial Position

as at 31 August 2012

| | Note | Group 2012 RM'million | Group 2011 (Restated) RM'million | Group 1.9.2010 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million | Company 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|---|---|---|
| **EQUITY** | | | | | | | |
| Share capital | 38 | **5,501.6** | 5,456.6 | 4,352.7 | **5,501.6** | 5,456.6 | 4,352.7 |
| Share premium | 39 | **4,529.1** | 4,332.6 | 5,354.2 | **4,529.1** | 4,332.6 | 5,354.2 |
| Revaluation and other reserves | 40 | **648.7** | 689.4 | 682.8 | **1,051.9** | 1,041.3 | 1,015.5 |
| Retained profits | 41 | **25,457.9** | 21,518.8 | 21,372.0 | **21,355.2** | 18,495.6 | 18,735.9 |
| **CAPITAL AND RESERVES ATTRIBUTABLE TO OWNERS OF THE COMPANY** | | **36,137.3** | 31,997.4 | 31,761.7 | **32,437.8** | 29,326.1 | 29,458.3 |
| **NON-CONTROLLING INTERESTS** | | **261.0** | 232.0 | 191.2 | **0** | 0 | 0 |
| **TOTAL EQUITY** | | **36,398.3** | 32,229.4 | 31,952.9 | **32,437.8** | 29,326.1 | 29,458.3 |

| | Sen | Sen (Restated) | Sen (Restated) |
|---|---|---|---|
| **NET ASSETS PER SHARE ATTRIBUTABLE TO OWNERS OF THE COMPANY** | **656.9** | 586.4 | 729.7 |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Changes in Equity

for the financial year ended 31 August 2012

| | Note | Attributable to equity holders of the Company | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Note | Ordinary shares of RM1.00 each RM'million | Share premium RM'million | Employees' Share Option Scheme reserve RM'million | Revaluation and other reserves RM'million | Retained profits RM'million | Non-controlling interests RM'million | Total equity RM'million |
| Group | | | | | | | | |
| **At 1 September 2011 (as previously reported)** | | **5,456.6** | **4,332.6** | **156.6** | **532.8** | **19,701.5** | **91.6** | **30,271.7** |
| Prior Year Adjustment | 48 | 0 | 0 | 0 | 0 | 1,817.3 | 140.4 | 1,957.7 |
| **As at 1 September 2011 (restated)** | | **5,456.6** | **4,332.6** | **156.6** | **532.8** | **21,518.8** | **232.0** | **32,229.4** |
| Profit for the financial year | | 0 | 0 | 0 | 0 | 4,197.6 | 8.6 | 4,206.2 |
| Total other comprehensive income | | 0 | 0 | 0 | (51.2) | 0 | 0 | (51.2) |
| **Total comprehensive income for the financial year** | | **0** | **0** | **0** | **(51.2)** | **4,197.6** | **8.6** | **4,155.0** |
| Realisation of revaluation reserve | 40 | 0 | 0 | 0 | (14.5) | 14.5 | 0 | 0 |
| **Transaction with owners:** | | | | | | | | |
| Changes in ownership interest in a subsidiary | | 0 | 0 | 0 | 0 | 0 | 21.9 | 21.9 |
| Dividend paid for the financial year 2012 | 12 | 0 | 0 | 0 | 0 | (273.0) | 0 | (273.0) |
| Dividend paid to non-controlling interest | | 0 | 0 | 0 | 0 | 0 | (1.5) | (1.5) |
| Employees' Share Option Scheme: – Options granted | | 0 | 0 | 25.0 | 0 | 0 | 0 | 25.0 |
| Issuance of share capital: – Share options | 38, 39 | 45.0 | 196.5 | 0 | 0 | 0 | 0 | 241.5 |
| **Total transaction with owners** | | **45.0** | **196.5** | **25.0** | **0** | **(273.0)** | **20.4** | **13.9** |
| **At 31 August 2012** | | **5,501.6** | **4,529.1** | **181.6** | **467.1** | **25,457.9** | **261.0** | **36,398.3** |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Changes in Equity
for the financial year ended 31 August 2012

| | Note | Attributable to equity holders of the Company | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Ordinary shares of RM1.00 each RM'million | Share premium RM'million | Employees' Share Option Scheme reserve RM'million | Revaluation and other reserves RM'million | Retained profits RM'million | Non-controlling interests RM'million | Total equity RM'million |
| Group | | | | | | | | |
| **At 1 September 2010 (as previously reported)** | | **4,352.7** | **5,354.2** | **122.5** | **560.3** | **20,020.6** | **42.9** | **30,453.2** |
| Prior Year Adjustment | 48 | 0 | 0 | 0 | 0 | 1,351.4 | 148.3 | 1,499.7 |
| **As at 1 September 2010 (restated)** | | **4,352.7** | **5,354.2** | **122.5** | **560.3** | **21,372.0** | **191.2** | **31,952.9** |
| Profit for the financial year | | 0 | 0 | 0 | 0 | 965.4 | (0.9) | 964.5 |
| Total other comprehensive income | | 0 | 0 | 0 | (8.1) | 0 | 0 | (8.1) |
| **Total comprehensive income for the financial year** | | **0** | **0** | **0** | **(8.1)** | **965.4** | **(0.9)** | **956.4** |
| Realisation of revaluation reserve | 40 | 0 | 0 | 0 | (19.4) | 19.4 | 0 | 0 |
| **Transaction with owners:** | | | | | | | | |
| Dividends paid for the financial year ended: | | | | | | | | |
| – 31.08.2010 | 12 | 0 | 0 | 0 | 0 | (654.0) | 0 | (654.0) |
| – 31.08.2011 | 12 | 0 | 0 | 0 | 0 | (184.0) | 0 | (184.0) |
| Redesignation of liability to non-controlling interest | | 0 | 0 | 0 | 0 | 0 | 41.7 | 41.7 |
| Employees' Share Option Scheme: | | | | | | | | |
| – Options granted | | 0 | 0 | 34.1 | 0 | 0 | 0 | 34.1 |
| Issuance of share capital: | | | | | | | | |
| – Share options | 38, 39 | 13.8 | 68.5 | 0 | 0 | 0 | 0 | 82.3 |
| – Bonus share | | 1,090.1 | (1,090.1) | 0 | 0 | 0 | 0 | 0 |
| **Total transaction with owners** | | **1,103.9** | **(1,021.6)** | **34.1** | **0** | **(838.0)** | **41.7** | **(679.9)** |
| **At 31 August 2011 (restated)** | | **5,456.6** | **4,332.6** | **156.6** | **532.8** | **21,518.8** | **232.0** | **32,229.4** |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Changes in Equity

for the financial year ended 31 August 2012

| | | Non-distributable | | | | Distributable | |
|---|---|---|---|---|---|---|---|
| | Note | Ordinary shares of RM1.00 each RM'million | Share premium RM'million | Employees' Share Option Scheme reserve RM'million | Revaluation and other reserves RM'million | Retained profits RM'million | Total equity RM'million |
| Company | | | | | | | |
| **At 1 September 2011 (as previously reported)** | | **5,456.6** | **4,332.6** | **156.5** | **884.8** | **18,630.5** | **29,461.0** |
| Prior Year Adjustment | 48 | 0 | 0 | 0 | 0 | (134.9) | (134.9) |
| **At 1 September 2011 (restated)** | | **5,456.6** | **4,332.6** | **156.5** | **884.8** | **18,495.6** | **29,326.1** |
| Profit for the financial year | | 0 | 0 | 0 | 0 | 3,118.1 | 3,118.1 |
| **Total comprehensive income for the financial year** | | **0** | **0** | **0** | **0** | **3,118.1** | **3,118.1** |
| Realisation of revaluation reserve | 40 | 0 | 0 | 0 | (14.5) | 14.5 | 0 |
| **Transaction with owners:** | | | | | | | |
| Dividend paid for the financial year 2012 | 12 | 0 | 0 | 0 | 0 | (273.0) | (273.0) |
| Employees' Share Option Scheme: | | | | | | | |
| – Options granted | | 0 | 0 | 25.1 | 0 | 0 | 25.1 |
| Issuance of share capital: | | | | | | | |
| – Share options | 38, 39 | 45.0 | 196.5 | 0 | 0 | 0 | 241.5 |
| **Total transaction with owners** | | **45.0** | **196.5** | **25.1** | **0** | **(273.0)** | **(6.4)** |
| **At 31 August 2012** | | **5,501.6** | **4,529.1** | **181.6** | **870.3** | **21,355.2** | **32,437.8** |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Changes in Equity
for the financial year ended 31 August 2012

| | Note | Ordinary shares of RM1.00 each RM'million | Non-distributable Share premium RM'million | Non-distributable Employees' Share Option Scheme reserve RM'million | Non-distributable Revaluation and other reserves RM'million | Distributable Retained profits RM'million | Total equity RM'million |
|---|---|---|---|---|---|---|---|
| Company | | | | | | | |
| **At 1 September 2010 (as previously reported)** | | **4,352.7** | **5,354.2** | **111.3** | **904.2** | **19,030.5** | **29,752.9** |
| Prior Year Adjustment | 48 | 0 | 0 | 0 | 0 | (294.6) | (294.6) |
| **At 1 September 2010 (restated)** | | **4,352.7** | **5,354.2** | **111.3** | **904.2** | **18,735.9** | **29,458.3** |
| Profit for the financial year | | 0 | 0 | 0 | 0 | 578.3 | 578.3 |
| **Total comprehensive income for the financial year** | | **0** | **0** | **0** | **0** | **578.3** | **578.3** |
| Realisation of revaluation reserve | 40 | 0 | 0 | 0 | (19.4) | 19.4 | 0 |
| **Transaction with owners:** | | | | | | | |
| Dividend paid for the financial year ended: | | | | | | | |
| – 31.08.2010 | 12 | 0 | 0 | 0 | 0 | (654.0) | (654.0) |
| – 31.08.2011 | 12 | 0 | 0 | 0 | 0 | (184.0) | (184.0) |
| Employees' Share Option Scheme: | | | | | | | |
| – Options granted | | 0 | 0 | 45.2 | 0 | 0 | 45.2 |
| Issuance of share capital: | | | | | | | |
| – Share options | 38, 39 | 13.8 | 68.5 | 0 | 0 | 0 | 82.3 |
| – Bonus shares | | 1,090.1 | (1,090.1) | 0 | 0 | 0 | 0 |
| **Total transaction with owners** | | **1,103.9** | **(1,021.6)** | **45.2** | **0** | **(838.0)** | **(710.5)** |
| **At 31 August 2011 (restated)** | | **5,456.6** | **4,332.6** | **156.5** | **884.8** | **18,495.6** | **29,326.1** |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Cash Flows

for the financial year ended 31 August 2012



| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 2012 | 2011 (Restated) |
| | RM'million | RM'million | RM'million | RM'million |
| **CASH FLOWS FROM OPERATING ACTIVITIES** | | | | |
| Profit for the financial year | **4,206.2** | 964.5 | **3,118.1** | 578.3 |
| Adjustments for: | | | | |
| Taxation and zakat | **1,331.0** | 192.2 | **1,311.6** | 36.8 |
| Property, plant and equipment: | | | | |
| – Depreciation | **4,268.1** | 4,061.9 | **4,033.6** | 3,952.8 |
| – Written off | **44.4** | 35.5 | **31.3** | 34.8 |
| – Gain on disposals | **(5.8)** | (1.4) | **(5.8)** | (1.4) |
| Provision for retirement benefits | **877.5** | 859.6 | **840.3** | 818.4 |
| Provision for share options | **25.0** | 34.1 | **21.2** | 29.8 |
| Translation loss | **230.8** | 227.0 | **213.1** | 244.1 |
| Gain on: | | | | |
| – Disposal of non-current assets held for sale | **(1.8)** | (43.3) | **(1.8)** | (43.3) |
| – Redemption of redeemable preference shares in a subsidiary | **0** | 0 | **(56.8)** | (259.7) |
| – Disposal of short term investment | **(0.2)** | (5.0) | **(0.1)** | (5.0) |
| Share of results in jointly controlled entity | **0.2** | (0.6) | **0** | 0 |
| Share of results in associates | **(54.4)** | (62.9) | **0** | 0 |
| Reversal/(Recognition) of negative goodwill on acquisition of an associate | **27.4** | (29.9) | **0** | 0 |
| Dividend income | **0** | (5.4) | **(108.2)** | (88.2) |
| Interest income | **(172.2)** | (319.1) | **(316.5)** | (434.8) |
| Interest on borrowings | **664.3** | 865.3 | **414.1** | 582.7 |
| Release of deferred income | **(928.2)** | (652.8) | **(811.4)** | (595.2) |
| Release of Government development grants | **(77.0)** | (64.6) | **0** | 0 |
| Allowance for impairment: | | | | |
| – Receivables | **122.9** | 100.5 | **111.6** | 66.3 |
| – Amounts due from subsidiaries | **0** | 0 | **292.8** | 187.7 |
| Reversal of impairment: | | | | |
| – Receivables | **(141.1)** | (24.5) | **(125.2)** | (19.1) |
| – Amounts due from jointly controlled entities | **(0.5)** | (3.2) | **(0.5)** | (3.2) |
| Allowance for diminution in value of investments in subsidiaries | **0** | 0 | **774.1** | 0 |
| Write-back of diminution in value of marketable securities | **(0.5)** | 0 | **(0.5)** | 0 |
| Allowance for inventory obsolescence | **132.9** | 109.2 | **132.9** | 109.2 |
| Write-back of inventory obsolescence | **(111.8)** | (117.8) | **(111.8)** | (117.7) |
| Inventories written off | **18.6** | 22.9 | **18.4** | 21.4 |
| Changes in fair value of derivatives and amortisation | **(50.1)** | (78.1) | **(6.5)** | 5.1 |
| | **10,405.7** | 6,064.1 | **9,768.0** | 5,099.8 |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Cash Flows
for the financial year ended 31 August 2012



| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 2012 | 2011 (Restated) |
| | RM'million | RM'million | RM'million | RM'million |
| **CASH FLOWS FROM OPERATING ACTIVITIES (CONTINUED)** | | | | |
| Inventories | **(236.0)** | (209.8) | **(212.4)** | (104.5) |
| Receivables | **(1,594.7)** | (1,296.2) | **(1,898.4)** | (271.3) |
| Payables | **21.3** | 533.3 | **(421.5)** | (485.5) |
| Amounts due from subsidiaries | **0** | 0 | **(410.7)** | (505.2) |
| Amounts due (from)/to associates | **(58.0)** | 75.4 | **(57.1)** | 75.0 |
| Amounts due to jointly controlled entities | **0.5** | 3.1 | **0.6** | 3.1 |
| Cash generated from operations | **8,538.8** | 5,169.9 | **6,768.5** | 3,811.4 |
| Employee benefits paid | **(608.3)** | (505.4) | **(598.0)** | (479.5) |
| Contributions received | **777.4** | 949.3 | **655.6** | 861.0 |
| Consumer deposits received | **199.8** | 181.0 | **192.1** | 170.5 |
| Taxation and zakat paid | **(432.1)** | (696.8) | **(352.9)** | (653.7) |
| Net cash flows generated from operating activities | **8,475.6** | 5,098.0 | **6,665.3** | 3,709.7 |
| **CASH FLOWS FROM INVESTING ACTIVITIES** | | | | |
| Additional investments in: | | | | |
| – Subsidiary | **0** | 0 | **(91.9)** | (437.2) |
| – Associates | **(91.9)** | (113.3) | **0** | (112.9) |
| Proceeds from redemption: | | | | |
| – Redeemable preference shares in a subsidiary | **0** | 0 | **494.0** | 850.0 |
| – Unsecured loan notes in an associate | **5.2** | 5.2 | **5.2** | 5.2 |
| Dividend income received | **25.4** | 56.4 | **86.8** | 76.5 |
| Interest income received | **166.7** | 308.0 | **138.7** | 274.0 |
| Property, plant and equipment: | | | | |
| – Additions | **(7,004.4)** | (5,655.9) | **(4,655.4)** | (4,257.7) |
| – Proceeds from disposals | **6.0** | 2.0 | **6.0** | 2.0 |
| Proceeds from disposal of non-current assets held for sale | **18.3** | 67.0 | **18.3** | 67.0 |
| Proceeds from disposal of short term investments | **0.2** | 118.3 | **0.2** | 118.3 |
| Net cash flows used in investing activities | **(6,874.5)** | (5,212.3) | **(3,998.1)** | (3,414.8) |

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Consolidated Statements of Cash Flows

for the financial year ended 31 August 2012

| | Note | Group 2012 RM'million | Group 2011 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million |
|---|---|---|---|---|---|
| **CASH FLOWS FROM FINANCING ACTIVITIES** | | | | | |
| Government development grants received | | **120.8** | 92.8 | **0** | 0 |
| Proceeds from issuance of shares | | **241.5** | 82.3 | **241.5** | 82.3 |
| Long term borrowings: | | | | | |
| – Drawdown | | **4,888.2** | 438.6 | **0** | 0 |
| – Repayments | | **(1,275.1)** | (3,100.1) | **(824.5)** | (2,531.2) |
| Short term borrowings: | | | | | |
| – Drawdown | | **353.5** | 332.7 | **0** | 0 |
| – Repayments | | **(329.6)** | (284.5) | **0** | 0 |
| Interest paid | | **(675.2)** | (995.8) | **(553.9)** | (760.7) |
| Dividends paid to shareholders | | **(273.0)** | (838.0) | **(273.0)** | (838.0) |
| Dividends paid to non-controlling interest | | **(1.5)** | 0 | **0** | 0 |
| Issue of shares to non-controlling interest | | **21.9** | 0 | **0** | 0 |
| Net cash flows generated from/(used in) financing activities | | **3,071.5** | (4,272.0) | **(1,409.9)** | (4,047.6) |
| NET INCREASE/(DECREASE) IN DEPOSIT, BANK AND CASH BALANCES | | **4,672.6** | (4,386.3) | **1,257.3** | (3,752.7) |
| EFFECT OF CHANGES IN FOREIGN CURRENCY | | **(0.5)** | (3.2) | **0** | 0 |
| DEPOSIT, BANK AND CASH BALANCES AT THE BEGINNING OF THE FINANCIAL YEAR | | **3,954.2** | 8,343.7 | **2,703.9** | 6,456.6 |
| DEPOSIT, BANK AND CASH BALANCES AT THE END OF THE FINANCIAL YEAR | 28 | **8,626.3** | 3,954.2 | **3,961.2** | 2,703.9 |
| Cash at bank, held in trust* | | **(97.9)** | (465.7) | **0** | 0 |
| Debt reserve account** | 32(b)(i) | **(218.6)** | (225.2) | **0** | 0 |
| Funds from MOF*** | | **(2.5)** | (5.2) | **0** | 0 |
| CASH AND CASH EQUIVALENTS AT THE END OF THE FINANCIAL YEAR | | **8,307.3** | 3,258.1 | **3,961.2** | 2,703.9 |

* The cash at bank held in trust is in respect of a grant given to a subsidiary by the Government of Malaysia for a designated capital project.

** Debt reserve account relates to deposits placed with licensed financial institution as part of security obligations for bond financing.

*** Ministry of Finance (MOF) fund given to a subsidiary under stimulus package for training programmes.

The notes set out on pages 236 to 363 form an integral part of these financial statements.

# Notes to the Financial Statements
– 31 August 2012



## 1 GENERAL INFORMATION

The Group and Company are primarily involved in the business of the generation, transmission, distribution and sale of electricity and those tabulated in Note 14 to these financial statements.

There have been no significant changes in these activities during the financial year.

The Company is a public limited liability company, incorporated and domiciled in Malaysia and listed on the Main Board of Bursa Malaysia Securities Berhad.

The address of the registered office of the Company is Pejabat Setiausaha Syarikat, Tingkat 2, Ibu Pejabat Tenaga Nasional Berhad, No. 129, Jalan Bangsar, 59200 Kuala Lumpur, Malaysia.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Unless otherwise stated, the following accounting policies have been applied consistently in dealing with items that are considered material in relation to the financial statements. These policies have been consistently applied to all the years presented, unless otherwise stated.

### (a) Basis of preparation

The financial statements of the Group and Company have been prepared in accordance with the provisions of the Companies Act 1965 and Financial Reporting Standards ('FRS'), the MASB Approved Accounting Standards in Malaysia for Entities Other than Private Entities.

The financial statements have been prepared under the historical cost convention except as disclosed in this summary of significant accounting policies.

The preparation of financial statements in conformity with FRS, requires the use of certain critical accounting estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reported period. It also requires Directors to exercise their judgement in the process of applying the Group's accounting policies. Although these estimates and judgement are based on the Directors' best knowledge of current events and actions, actual results may differ.

The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 3 to these financial statements.

The financial statements have been approved for issue in accordance with a resolution of the Board of Directors on 31 October 2012.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (a) Basis of preparation (continued)

(i) Standards, amendments to published standards, Interpretation Committee ("IC") Interpretations and improvements that are effective

The new accounting standards, amendments to published standards, IC Interpretations and improvement to existing standards effective for the Group's and Company's financial year beginning 1 September 2011 are as follows:

- Amendments to FRS 2 "Share-based Payment" and "Group Cash-settled Share-based Payment Transactions"
- Amendments to FRS 7 "Financial Instruments: Disclosures – Improving Disclosures About Financial Instruments"
- IC Interpretation 4 "Determining Whether an Arrangement Contains a Lease"
- Amendments to IC Interpretation 14 "Prepayment of a Minimum Funding Requirement"
- Amendments to IC Interpretation 19 "Extinguishing Financial Liabilities with Equity Instruments"
- Improvements to FRSs (2010)

A summary of the material impact of the new accounting standards, amendments and improvements to published and existing standards and IC Interpretations on the financial statements of the Group and Company is set out in Note 48 to the financial statements.

The Notes to the balances as at 1 September 2010 that were restated due to a change in accounting policy have been disclosed in the financial statements whilst the Notes to the unaffected balances have not been included.

(ii) Standards early adopted by the Group and Company

The Group and Company did not early adopt any new accounting standards, amendments and improvements to published and existing standards and IC Interpretations.

(iii) Standards, amendments to published standards, IC Interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective

In the next financial year, the Group will be adopting the new IFRS-compliant framework, Malaysian Financial Reporting Standards ("MFRS"). In adopting the new framework, the Group will be applying MFRS 1 "First-time Adoption of MFRS".

The Group will apply the new standards, amendments to standards and interpretations in the following period:

(i) Financial year beginning on/after 1 September 2012

- The revised MFRS 124 "Related Party Disclosures" (effective from 1 January 2012) removes the exemption to disclose transactions between government-related entities and the government, and all other government-related entities. The following new disclosures are now required for government related entities:
  - The name of the government and the nature of their relationship;
  - The nature and amount of each individually significant transactions; and
  - The extent of any collectively significant transactions, qualitatively or quantitatively.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (a) Basis of preparation (continued)

(iii) Standards, amendments to published standards, IC Interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective (continued)

(i) Financial year beginning on/after 1 September 2012 (continued)

- Amendment to MFRS 112 "Income taxes" (effective from 1 January 2012) introduces an exception to the existing principle for the measurement of deferred tax assets or liabilities arising on investment property measured at fair value. MFRS 112 currently requires an entity to measure the deferred tax relating to an asset depending on whether the entity expects to recover the carrying amount of the asset through use or sale. It can be difficult and subjective to assess whether recovery will be through use or through sale when the asset is measured using the fair value model in MFRS 140 "Investment property". As a result of the amendments, IC Interpretation 121 "Income taxes – recovery of revalued non-depreciable assets" will no longer apply to investment properties carried at fair value. The amendments also incorporate into MFRS 112 the remaining guidance previously contained in IC Interpretation 121 which is withdrawn.

- Amendment to MFRS 7 "Financial instruments: Disclosures on transfers of financial assets" (effective from 1 January 2012) promotes transparency in the reporting of transfer transactions and improve users' understanding of the risk exposures relating to transfers of financial assets and the effect of those risks on an entity's financial position, particularly those involving securitisation of financial assets.

- Amendment to MFRS 101 "Presentation of items of other comprehensive income" (effective from 1 July 2012) requires entities to separate items presented in 'other comprehensive income' (OCI) in the statement of comprehensive income into two groups, based on whether or not they may be recycled to profit or loss in the future. The amendment does not address which items are presented in OCI.

(ii) Financial year beginning on/after 1 September 2013

- MFRS 10 "Consolidated financial statements" (effective from 1 January 2013) changes the definition of control. An investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. It establishes control as the basis for determining which entities are consolidated in the consolidated financial statements and sets out the accounting requirements for the preparation of consolidated financial statements. It replaces all the guidance on control and consolidation in MFRS 127 "Consolidated and separate financial statements" and IC Interpretation 112 "Consolidation – special purpose entities".

- MFRS 11 "Joint arrangements" (effective from 1 January 2013) requires a party to a joint arrangement to determine the type of joint arrangement in which it is involved by assessing its rights and obligations arising from the arrangement, rather than its legal form. There are two types of joint arrangement: joint operations and joint ventures. Joint operations arise where a joint operator has rights to the assets and obligations relating to the arrangement and hence accounts for its interest in assets, liabilities, revenue and expenses. Joint ventures arise where the joint operator has rights to the net assets of the arrangement and hence equity accounts for its interest. Proportional consolidation of joint ventures is no longer allowed.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (a) Basis of preparation (continued)

(iii) Standards, amendments to published standards, IC Interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective (continued)

(ii) Financial year beginning on/after 1 September 2013 (continued)

- MFRS 12 “Disclosures of interests in other entities” (effective from 1 January 2013) sets out the required disclosures for entities reporting under the two new standards, MFRS 10 and MFRS 11, and replaces the disclosure requirements currently found in MFRS 128 “Investments in associates”. It requires entities to disclose information that helps financial statement readers to evaluate the nature, risks and financial effects associated with the entity’s interests in subsidiaries, associates, joint arrangements and unconsolidated structured entities.

- MFRS 13 “Fair value measurement” (effective from 1 January 2013) aims to improve consistency and reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across MFRSs. The requirements do not extend the use of fair value accounting but provide guidance on how it should be applied where its use is already required or permitted by other standards. The enhanced disclosure requirements are similar to those in MFRS 7 “Financial instruments: Disclosures”, but apply to all assets and liabilities measured at fair value, not just financial ones.

- The revised MFRS 127 “Separate financial statements” (effective from 1 January 2013) includes the provisions on separate financial statements that are left after the control provisions of MFRS 127 have been included in the new MFRS 10.

- The revised MFRS 128 “Investments in associates and joint ventures”(effective from 1 January 2013) includes the requirements for joint ventures, as well as associates, to be equity accounted following the issue of MFRS 11.

- Amendment to MFRS 1 “First time adoption of MFRSs: Government loans” (effective from 1 January 2013) provides relief to first-time adopters from the retrospective application of MFRS 120 “Accounting for Government Grants and Disclosure of Government Assistance” on government loans at a below-market rate of interest existing at the date of transition to MFRS.

- Amendment to MFRS 7 “Financial instruments: Disclosures” (effective from 1 January 2013) requires more extensive disclosures focusing on quantitative information about recognised financial instruments that are offset in the statement of financial position and those that are subject to master netting or similar arrangements irrespective of whether they are offset.

- Amendment to MFRS 119 “Employee benefits” (effective from 1 January 2013) makes significant changes to the recognition and measurement of defined benefit pension expense and termination benefits, and to the disclosures for all employee benefits. Actuarial gains and losses will no longer be deferred using the corridor approach. MFRS 119 shall be withdrawn on application of this amendment.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (a) Basis of preparation (continued)

(iii) Standards, amendments to published standards, IC Interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective (continued)

(iii) Financial year beginning on/after 1 September 2014

- Amendment to MFRS 132 "Financial instruments: Presentation" (effective from 1 January 2014) does not change the current offsetting model in MFRS 132. It clarifies the meaning of 'currently has a legally enforceable right of set-off' that the right of set-off must be available today (not contingent on a future event) and legally enforceable for all counterparties in the normal course of business. It clarifies that some gross settlement mechanisms with features that are effectively equivalent to net settlement will satisfy the MFRS 132 offsetting criteria.

(iv) Financial year beginning on/after 1 September 2015

- MFRS 9 "Financial instruments – classification and measurement of financial assets and financial liabilities" (effective from 1 January 2015) replaces the multiple classification and measurement models in MFRS 139 with a single model that has only two classification categories: amortised cost and fair value. The basis of classification depends on the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial asset.

- The accounting and presentation for financial liabilities and for de-recognising financial instruments has been relocated from MFRS 139, without change, except for financial liabilities that are designated at fair value through profit or loss ("FVTPL"). Entities with financial liabilities designated at FVTPL recognise changes in the fair value due to changes in the liability's credit risk directly in other comprehensive income (OCI). There is no subsequent recycling of the amounts in OCI to profit or loss, but accumulated gains or losses may be transferred within equity.

  The guidance in MFRS 139 on impairment of financial assets and hedge accounting continues to apply.

  MFRS 7 requires disclosures on transition from MFRS 139 to MFRS 9.

(v) Impact arising from the initial application of the above standards in the financial statements of the Group and Company.

- The Group has not completed its assessment of the financial effects of the differences between Financial Reporting Standards and accounting standards under the MFRS Framework. Accordingly, the consolidated financial performance and financial position as disclosed in these financial statements for the year ended 31 August 2012 could be different if prepared under the MFRS Framework.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (b) Subsidiaries and basis of consolidation

(i) Subsidiaries

Subsidiaries are those corporations or other entities (including special purpose entities) in which the Group has power to exercise control over the financial and operating policies so as to obtain benefits from their activities, generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity.

In the Company's separate financial statements, investments in subsidiaries are stated at cost less accumulated impairment losses. On disposal of such investments, the difference between net disposal proceeds and their carrying amounts is included in the income statement.

(ii) Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries. The financial statements of the subsidiaries are prepared for the same reporting date as the Company.

Subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases. In preparing the consolidated financial statements, intragroup balances, transactions and unrealised gains or losses are eliminated in full. Uniform accounting policies are adopted in the consolidated financial statement for like transactions and events in similar circumstances.

The consideration transferred for acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

In a business combination achieved in stages, the previously held equity interest in the acquiree is re-measured at its acquisition date fair value and the resulting gain or loss is recognised in profit or loss.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the gain is recognised in profit or loss. Refer to accounting policy Note 2(f) on goodwill.

Non-controlling interest is the equity in a subsidiary not attributable, directly or indirectly, to a parent. On an acquisition-by-acquisition basis, the Group measures any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets. At the end of reporting period, non-controlling interest consists of amount calculated on the date of combinations and its share of changes in the subsidiary's equity since the date of combination.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (b) Subsidiaries and basis of consolidation (continued)

(ii) Basis of consolidation (continued)

All earnings and losses of the subsidiary are attributed to the parent and the non-controlling interest, even if the attribution of losses to the non-controlling interest results in a debit balance in the shareholders' equity. Profit or loss attribution to non-controlling interests for prior years is not restated.

(iii) Changes in ownership interest

When the Group ceases to have control, joint control or significant influence, any retained interest in the entity is re-measured to its fair value with the change in carrying amount recognised in the income statement. This fair value is its fair value on initial recognition as a financial asset in accordance with FRS 139. Any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. Subsequently, it is accounted for as an equity accounted investee or as an available-for-sale financial asset depending on the level of influence retained.

### (c) Transactions with non-controlling interests

The Group applies a policy of treating transactions with non-controlling interests as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share of the carrying value of net assets of the subsidiary acquired is deducted from equity. For disposals to non-controlling interests, where there is no change in controls, differences between any proceeds received and the relevant share of non-controlling interests are also recorded in equity.

### (d) Jointly controlled entities

Jointly controlled entities are corporations, partnerships or other entities over which there is contractually agreed sharing of control by the Group with one or more parties where the strategic financial and operating decisions relating to the entities require unanimous consent of the parties sharing control. The Group's interest in jointly controlled entities is accounted for in the consolidated financial statements using the equity method of accounting.

Equity accounting involves recognising in the consolidated income statement and consolidated statement of changes in equity, the Group's share of profits less losses of jointly controlled entities based on the latest audited financial statements or management accounts of the jointly controlled entities, made up to the financial year end of the Group. Where necessary, adjustments are made to the results and net assets of jointly controlled entities to ensure consistency of accounting policies with those of the Group. The Group's investment in jointly controlled entities is recorded at cost inclusive of goodwill and adjusted thereafter for accumulated impairment loss and the post acquisition change in the Group's share of net assets of the jointly controlled entities.

Unrealised gains on transactions between the Group and its jointly controlled entities are eliminated to the extent of the Group's interest in the jointly controlled entities. Unrealised losses are also eliminated on the same basis but only to the extent of the costs that can be recovered, and the balance that provides evidence of reduction in net realisable value or an impairment of the asset transferred are recognised in the consolidated income statement.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (e) Associates

Associates are enterprises in which the Group exercises significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the associates but not control over those policies.

Investments in associates are accounted for in the consolidated financial statements using the equity method of accounting and are initially recognised at cost. The equity method is applied based on the latest financial statements or management accounts of the associates, made up to the financial year end of the Group. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment losses (see Note 2(k)).

The Group's share of its associates' post-acquisition profits or losses is recognised in the income statement, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

Unrealised profits on transactions between the Group and associates are eliminated partially to the extent of the Group's interest in the associates; unrealised losses are also eliminated unless the transaction provides evidence on impairment of the asset transferred. Where necessary, in applying the equity method, adjustments are made to the financial statements of associates to ensure consistency of accounting policies with those of the Group.

Dilution of gains and losses in associates are recognised in the income statement:

For incremental interest in an associate, the date of acquisition is the date at which significant influence is obtained. Goodwill is calculated at each purchase date based on the fair value of assets and liabilities identified. The previously acquired stake is stepped up to fair value and the share of profits and equity movements for the previously acquired stake are not recognised since they are embedded in the step up.

### (f) Goodwill

Goodwill represents the excess of the cost of the acquisition over the Group's share of the fair value of the identifiable net assets including contingent liabilities of subsidiaries, jointly controlled entities and associates at the date of the acquisition. Goodwill is tested for impairment at least annually, or if events or circumstances occur indicating that impairment may exist. Impairment of goodwill is charged to the income statement as and when it arises. Impairment losses on goodwill (inclusive of impairment losses recognised in a previous interim period) are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity disposed.

Goodwill on acquisition of jointly controlled entities and associates is included in the investments in jointly controlled entities and associates respectively. Such goodwill is tested for impairment as part of the overall carrying amount.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (g) Property, plant and equipment and depreciation

Property, plant and equipment are stated at cost or valuation less accumulated depreciation and accumulated impairment losses. Cost includes expenditure that is directly attributable to the construction or acquisition of the items and bringing them to the location and condition so as to render them operational in the manner intended by the Group. The Group allocates the cost of an item of property, plant and equipment to its significant system and component parts.

The Directors have applied the transitional provisions of International Accounting Standard No. 16 (revised) “Property, Plant and Equipment” as adopted by the Malaysian Accounting Standards Board which allow the freehold land, buildings and civil works to be stated at their previous years’ valuations less accumulated depreciation.

When an asset’s carrying amount is increased as a result of a revaluation, the increase is recognised in other comprehensive income as a revaluation surplus reserve.

When the asset’s carrying amount is decreased as a result of a revaluation, the decrease is recognised in the income statement. However, the decrease is recognised in other comprehensive income to the extent of any credit balance existing in the revaluation surplus reserve of that asset.

Subsequent costs are included in the asset’s carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised.

The cost of major overhaul/inspection is recognised in the asset’s carrying amount as a replacement and the remaining carrying amount of the previous major overhaul/inspection is derecognised.

Major spare parts and standby equipment are recognised as assets when the Group expects to use them during more than one period. Similarly, if the spare parts and servicing equipment can be used only in connection with an item of property, plant and equipment, they are accounted for as property, plant and equipment.

Gains and losses on disposal of property, plant and equipment are determined by reference to their carrying amount and are taken into account in determining profit/(loss) before taxation. On disposal of revalued assets, the amount in revaluation reserve relating to those property, plant and equipment are transferred to retained profits.

Freehold land and capital project-in-progress are not depreciated. Leasehold land classified as finance lease (refer to accounting policy Note 2(m)(i) on finance leases) is amortised over the remaining period of the respective leases ranging from 5 to 99 years on the straight line basis.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (g) Property, plant and equipment and depreciation (continued)

Depreciation is provided on all other categories of property, plant and equipment on the straight line basis which reflects the estimated useful lives of the assets, summarised as follows:

| | |
|---|---|
| Buildings and civil works | 10 to 60 years |
| Plant and machinery | 3 to 40 years |
| Lines and distribution mains | 15 to 40 years |
| Distribution services | 20 years |
| Meters | 10 to 15 years |
| Public lighting | 15 to 20 years |
| Furniture, fittings and office equipment | 3 to 15 years |
| Motor vehicles | 5 to 15 years |

Residual values and useful lives of assets are reviewed, and adjusted if appropriate, at the end of the reporting period.

At the end of the reporting period, the Group assesses whether there is any indication of impairment. If such indications exist, an analysis is performed to assess whether the carrying amount of the asset is fully recoverable. A write down is made if the carrying amount exceeds the recoverable amount (see Note 2(k)).

### (h) Non-current assets held-for-sale

The Group shall classify a non-current asset as held-for-sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

The assets classified as non-current assets held-for-sale will be measured at the lower of its carrying amount and fair value less costs to sell.

No depreciation or amortisation is provided against the assets while it is classified as non-current assets held-for-sale.

The assets shall be derecognised on disposal and the difference between the net disposal proceeds and the carrying amount is recognised as profit or loss in the period of disposal.

An asset that ceases to be classified as non-current assets held-for-sale shall be measured at the lower of its carrying amount before the asset was classified as non-current assets held-for-sale, adjusted for any depreciation, amortisation or revaluations that would be recognised had the asset not be classified as non-current assets held-for-sale, and its recoverable amount at the date of the subsequent decision not to sell.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (i) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the income statement as an expense as incurred.

Expenditure on development activities, whereby the application research findings are applied to a plan or design for the production of new or substantially improved products and processes, is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Group has sufficient resources to complete the development and to use or sell the asset.

The expenditure capitalised includes the cost of materials, direct labour and overheads costs that are directly attributable to preparing the assets for its intended use. For qualifying assets, borrowing costs are capitalised in accordance with the accounting policy on borrowing costs. Other development expenditure is recognised in income statement as incurred.

Capitalised development costs are recognised as intangible assets and amortised from the point at which the asset is ready for use on a straight-line basis over its useful life.

### (j) Capitalisation of borrowing costs

Borrowing costs incurred to finance the construction of any qualifying assets are capitalised as part of the cost of the assets during the period of time that is required to complete and prepare the asset for its intended use. All other borrowing costs are expensed off to the income statement.

### (k) Impairment of non-financial assets

Property, plant and equipment and other non-current assets, including intangible assets, are reviewed for impairment losses whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Impairment loss is recognised for the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of fair value less cost to sell and its value-in-use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows.

Impairment loss is charged to the statement of comprehensive income unless it reverses a previous revaluation in which case it is charged to the revaluation surplus. Any subsequent increase in recoverable amount is recognised in the statement of comprehensive income unless it reverses an impairment loss on a revalued asset in which case it is taken to revaluation surplus.

### (l) Customers' contributions

Contributions (assets in the form of PPE or cash to acquire such assets) received from customers consist mainly of upfront capital contributions for the construction of assets, used to connect the customers to a network or to provide them with the service, are credited to the deferred income account upon recognition of the assets.

Contributions received prior to 1 January 2011 are amortised over 15 years, being the average useful life of the asset.

Effective 1 January 2011, in compliance with IC Interpretation 18, all contributions received from customers, when that amount of contributions must be used only to construct or acquire an item of property, plant and equipment, and the item of property, plant and equipment is used to either connect the customer to a network or to provide the customer with ongoing access to supply of goods or services, or to do both, the contributions received are recognised as revenue. Revenue arising from assets received from customers are recognised in the income statement when the performance obligations associated with receiving those customer contributions are met.

# Notes to the Financial Statements
– 31 August 2012



## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (m) Leases

A lease is an agreement whereby the lessor conveys to the lessee in return for a payment, or series of payments, the right to use an asset for an agreed period of time.

**(i)** Finance leases – where the group is the lessee

The group leases certain property, plant and equipment. Leases of property, plant and equipment where the group has substantially transferred all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the lease's commencement at the lower of the fair value of the leased asset and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the finance balance outstanding. The corresponding rental obligations, net of finance charges, are included in other short-term and long term payables. The interest element of the finance cost is charged to profit or loss within finance cost over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases are depreciated or amortised over the shorter of the useful life of the asset and the lease term.

(ii) Operating leases – where the group is the lessee

Leases where substantially all of the risks and rewards of ownership are not transferred to the group are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss within other operating expenses on the straight-line basis over the period of the lease.

**(iii)** Operating leases – where the group is the lessor

Leases where substantially all of the risks and rewards of ownership are not transferred to the lessee (i.e. the group is the lessor) are classified as operating leases. Payments received under operating leases that relate to sales of electricity are recognised in profit or loss within revenue on the straight-line basis over the period of the lease. All other payment received under operating leases are presented in profit or loss within other income.

### (n) Inventories

Inventories are stated at the lower of cost and net realisable value.

Cost of work-in-progress and finished goods comprise raw materials, direct labour and a proportion of the production overheads. Cost is determined on the weighted average basis and comprises all costs of purchase and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business, less the costs of completion and selling expenses.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (o) Trade and other receivables

Trade and other receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If collection is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less accumulated impairment losses.

### (p) Trade and other payables

Trade and other payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost, which is the fair value of the consideration to be paid in the future for the goods and services received.

### (q) Cash and cash equivalents

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash in hand, deposits held at call with banks, bank overdrafts and short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

### (r) Share capital

(i) Classification

Ordinary shares and non-redeemable preference shares with discretionary dividends are classified as equity. Other shares are classified as equity and/or liability according to the economic substance of the particular instrument.

Distributions to holders of a financial instrument classified as an equity instrument are charged directly to equity.

(ii) Share issue costs

Incremental external costs directly attributable to the issuance of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

(iii) Dividends to shareholders of the Company

Dividends on redeemable preference shares are recognised as a liability and expressed on an accrual basis. Other dividends are recognised as a liability in the period in which they are approved.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (s) Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. In subsequent periods, borrowings are stated at amortised cost using the effective interest method, any difference between proceeds (net of transaction costs) and the redemption value is recognised in the income statement over the period of the borrowings.

Interest, dividends, losses and gains relating to a financial instrument, or a component part, classified as a liability is reported within finance cost in the income statement.

Borrowings are classified as current liabilities unless the Group and Company have an unconditional right to defer settlement of the liability for at least twelve (12) months after the statement of financial position date.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs.

### (t) Income tax and zakat

Income tax

Current tax expense is determined according to the tax laws of the countries in which the Company and its subsidiaries operate and generate the taxable profits.

Deferred tax is recognised in full, using the liability method, on temporary differences arising between the amounts attributed to assets and liabilities for tax purposes and their carrying amounts in the financial statements. However, deferred tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination as at that time the transaction affects neither accounting nor taxable profit or loss.

Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, unused tax losses and unutilised tax credits can be utilised.

Deferred tax is recognised on temporary differences arising on investments in subsidiaries and associates except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and deferred tax liabilities are offset when there is a legally and enforceable right to set off current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

Tax rates enacted or substantively enacted at the end of the reporting date are used to determine deferred tax.

Zakat

The Group recognises its obligation towards the payment of zakat on business income in the income statement. Zakat payment is an obligation and is accrued based on 2.5% of profit before tax and determined according to the percentage of Muslim shareholding in the Company.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (u) Employee benefits

(i) Short-term employee benefits

Wages, salaries, paid annual leave, bonuses, and non-monetary benefits are accrued in the financial year in which the services are rendered by employees of the Group.

(ii) Post-employment benefits

The Group has various post-employment benefit schemes which are either defined contribution or defined benefit plans.

Defined contribution plans

The Group's contributions to defined contribution plans are charged to the statements of comprehensive income in the financial year to which they relate. Once the contributions have been paid, the Group has no further payment obligations.

Defined benefit plans

The Group makes contributions to the Company's Retirement Benefit Plan, a defined benefit plan and approved fund independent of the Company's finances. A book provision is also provided by the Company as the contribution rate required to fund the benefits under the said plan is in excess of the Inland Revenue maximum limit. The Group and Company also provide for a post retirement medical plan for certain employees.

The liability in respect of a defined benefit plan is the present value of the defined benefit obligation at the statements of financial position date minus the fair value of plan assets, together with adjustments for actuarial gains/losses and past service cost. The Group determines the present value of the defined benefit obligation and the fair value of any plan assets with sufficient regularity such that the amounts recognised in the financial statements do not differ materially from the amounts that would be determined at the end of reporting date.

The defined benefit obligation, calculated using the Projected Unit Credit Method, is determined by an independent actuarial firm, considering the estimated future cash outflows using market yields at statement of financial position date of Government securities which have currency and terms to maturity approximating the terms of the related liability. The last revaluation was done in December 2009.

The amount of net actuarial gains and losses are credited or charged to the income statement, as the case may be, over the expected average remaining service lives of the participating employees.

# Notes to the Financial Statements
– 31 August 2012



## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (u) Employee benefits (continued)

(iii) Share-based compensation

The Group has applied the provision of FRS 2 to all equity instruments granted after 31 December 2004 but not yet vested as at 1 September 2006, the effective date the Group adopted this FRS.

The Group operates an equity-settled, share-based compensation plan for the employees of the Group. Employee services received in exchange for the grant of the share options is recognised as an expense in the income statement over the vesting periods of the grant with a corresponding increase in equity.

The total amount to be expensed over the vesting period is determined by reference to the fair value of the share options granted, excluding the impact of any non-market vesting conditions (for example, profitability and sales growth targets). Non-market vesting conditions are included in assumptions about the number of options that are expected to be vested. At the end of each reporting date, the Group revises its estimates of the number of share options that are expected to be vested. It recognises the impact of the revision of original estimates, if any, in the income statement, with a corresponding adjustment to equity.

The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when the options are exercised.

### (v) Government development grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the income statement over the period necessary to match them with the costs they are intended to compensate.

Government grants relating to construction of property, plant and equipment are included in non-current liabilities as deferred income and are credited to the income statement on the straight line basis over the expected lives of the related assets.

### (w) Contingent liabilities

The Group does not recognise a contingent liability but discloses its existence in the financial statements. A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by uncertain future events beyond the control of the Group or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (x) Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of the Group's activities, net of estimated returns, rebates and discounts.

Electricity revenue

Electricity revenue is recognised when electricity is consumed by customers. Electricity revenue includes an estimated value of the electricity consumed by customers from the date of their last meter reading and period end. Accrued unbilled revenues are reversed the following month when actual billings occur.

Sale of goods

Sale of goods is recognised when significant risks and rewards of ownership have passed and the collectability of the related receivable is reasonably assured.

Rendering of services

For services rendered, revenue is recognised in the accounting period in which the services are rendered, by reference to stage of completion of the specific transaction and assessed on the basis of the actual service provided as a proportion of the total services to be provided.

Construction contracts

Contract revenue includes the initial amount agreed in the contract plus any variations in contract work to the extent that it is probable that they will result in revenue and can be measured reliably. As soon as the outcome of a construction contract can be estimated reliably, contract revenue is recognised in profit or loss in proportion to the stage of completion of the contract. Contract expenses are recognised as incurred unless they create an asset related to future contract activity.

The stage of completion is assessed by reference to the contract costs incurred to the reporting date as a percentage of total estimated costs for each contract.

When an outcome of a construction contract cannot be estimated reliably, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable. An expected loss on a contract is recognised immediately in the income statement.

Other income

Other operating income earned by the Group and Company comprises interest and leasing income as well as dividend income. Leasing income is accrued, unless collectability is in doubt. Dividend income is recognised when the shareholders' rights to receive payment is established.

Interest income is recognised using the effective interest method. When a loan and receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at the original effective interest rate of the instrument, and continues unwinding the discount as interest income. Interest income on impaired loan and receivables are recognised using the original effective interest rate.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (y) Foreign currencies

(i) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The financial statements are presented in Ringgit Malaysia, which is the Company's functional and presentation currency.

(ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities in foreign currencies are translated at exchange rates ruling at the statement of financial position date. All exchange differences are recognised in the statement of comprehensive income within the category of foreign exchange gain/loss.

(iii) Group companies

The results and financial position of all the Group entities (none of which has the currency of a hyperinflationary economy) that have functional currencies different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- income and expenses for each statement of comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
- all resulting exchange differences are recognised as a separate component of equity.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations are taken to shareholders' equity. When a foreign operation is partially disposed of or sold, exchange differences that were recorded in equity are recognised in the income statement as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

The principal closing rates used in translation of foreign currency amounts were as follows:

| | **2012 RM** | **2011 RM** |
|---|---|---|
| Foreign currency | | |
| 1 US Dollar | **3.1251** | 2.9770 |
| 100 Japanese Yen | **3.9740** | 3.8801 |
| 1 Sterling Pound | **4.9491** | 4.8778 |
| 100 Pakistani Rupee | **3.3000** | 3.4100 |
| 1 EURO | **3.9237** | 4.3283 |

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (z) Financial instruments

Financial assets

(i) Classification

The Group and Company classify its financial assets in the following categories: at fair value through profit or loss ("FVTPL"), loans and receivables, available-for-sale ("AFS") and held-to-maturity ("HTM"). The classification depends on the purpose for which the financial assets were acquired. Management determines the classification at initial recognition.

(a) Financial assets at FVTPL

Financial assets at FVTPL are financial assets held-for-trading. A financial asset is classified in this category if it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term. Derivatives are also categorised as held-for-trading unless they are designated as hedges.

(b) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than twelve (12) months after the end of the reporting period. These are classified as non-current assets.

(c) AFS financial assets

AFS financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless the investment matures or management intends to dispose of it within twelve (12) months from the end of the reporting period.

(d) HTM financial assets

HTM financial assets are non-derivative financial assets with fixed or determinable payments and fixed maturities that the Group's and Company's management have the positive intention and ability to hold to maturity. If the Group and Company were to sell other than an insignificant amount of HTM financial assets, the whole category would be tainted and reclassified as AFS. HTM financial assets are included in non-current assets, except for those with maturities less than twelve (12) months from the end of the reporting period, which are classified as current assets.

(ii) Recognition and initial measurement

Regular purchases and sales of financial assets are recognised on the trade-date, the date on which the Group and Company commit to purchase or sell the asset.

Financial assets are initially recognised at fair value plus transaction costs for all financial assets not carried at FVTPL. Financial assets carried at FVTPL are initially recognised at fair value and transaction costs are expensed in the income statement.

## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (z) Financial instruments (continued)

Financial assets (continued)

(iii) Subsequent measurement – gains and losses

AFS financial assets and financial assets at FVTPL are subsequently carried at fair value. Loans and receivables and HTM financial assets are subsequently carried at amortised cost using the effective interest method.

Changes in the fair values of financial assets at FVTPL, including the effects of currency translation are recognised in the income statement in the period in which the changes arise.

(iv) Subsequent measurement – Impairment of financial assets

(a) Assets carried at amortised cost

The Group and Company assess at the end of the reporting period whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

The criteria that the Group and Company use to determine that there is objective evidence of an impairment loss include:

- Significant financial difficulty of the issuer or obligor;
- A breach of contract, such as a default or delinquency in interest or principal payments; or
- The Group, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider;
- It becomes probable that the borrower will enter bankruptcy or other financial reorganisation; or
- Disappearance of an active market for that financial asset because of financial difficulties; or
- Observable data indicating that there is a measurable decrease in the estimated future cash flows from a portfolio of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial assets in the portfolio, including:
  (i) adverse changes in the payment status of borrowers in the portfolio; and
  (ii) national or local economic conditions that correlate with defaults on the assets in the portfolio.

# Notes to the Financial Statements
– 31 August 2012



## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

**(z) Financial instruments (continued)**

Financial assets (continued)

(iv) Subsequent measurement – Impairment of financial assets (continued)

(a) Assets carried at amortised cost (continued)

The amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The asset's carrying amount is reduced and the amount of the loss is recognised in the income statements. If 'loans and receivables' or a 'HTM investment' has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group and Company may measure impairment on the basis of an instrument's fair value using an observable market price.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the reversal of the previously recognised impairment loss is recognised in the income statement.

When an asset is uncollectible, it is written off against the related accumulated impairment losses account. Such assets are written off after all the necessary procedures have been completed and the amount of the loss has been determined.

(b) Assets classified as AFS

The Group and Company assess at the end of the reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired.

For debt securities, the Group and Company use criteria and measurement of impairment loss applicable for 'assets carried at amortised cost' above. If, in a subsequent period, the fair value of a debt instrument classified as AFS increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in the income statement, the impairment loss is reversed through the income statement.

In the case of equity securities classified as AFS, in addition to the criteria for 'assets carried at amortised cost' above, a significant or prolonged decline in the fair value of the security below its cost is also considered as an indicator that the assets are impaired. If any such evidence exists for AFS financial assets, the cumulative loss that had been recognised directly in equity is removed from equity and recognised in the income statements. The amount of cumulative loss that is reclassified to the income statement is the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in the income statement. Impairment losses recognised in the income statement on equity instruments classified as AFS are not reversed through the income statement.

(v) De-recognition

Financial assets are de-recognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group and Company have transferred substantially all risks and rewards of ownership to related party.

# Notes to the Financial Statements
– 31 August 2012



## 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (z) Financial instruments (continued)

Financial liabilities

The Group and Company classify its financial liabilities in the following categories: at fair value through profit or loss or other financial liabilities. Management determines the classification of its financial liabilities at initial recognition.

Other financial liabilities are non-derivatives financial liabilities. Other financial liabilities are initially recognised at fair value plus transaction cost and subsequently carried at amortised cost using the effective interest method. Changes in the carrying value of these liabilities are recognised in the income statement.

The Group and Company's other financial liabilities comprise trade and other payables and borrowings in the statement of financial position. Financial liabilities are classified as current liabilities; except for maturities more than 12 months after the reporting date, in which case they are classified as non-current liabilities.

Financial liabilities are derecognised when the liability is either discharged, cancelled, has expired or has been restructured with substantially different terms.

### (aa) Offsetting financial instruments

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

### (bb) Derivative financial instruments

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value.

Fair value changes on derivatives that are not designated or do not qualify for hedge accounting are recognised in the income statement when the changes arise.

### (cc) Financial guarantee contracts

Financial guarantee contracts are contracts that require the Group or Company to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due, in accordance with the terms of a debt instrument.

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of the amount determined in accordance with FRS 137 "Provisions, Contingent Liabilities and Contingent Assets" and the amount initially recognised less cumulative amortisation, where appropriate.

The fair value of financial guarantees is determined as the present value of the difference in net cash flows between the contractual payments under the debt instrument and the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

## 3 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Estimates and judgements are continually evaluated by the Directors and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

### (a) Critical judgement in applying the Group's accounting policies

There are no significant areas of critical judgement in applying accounting policies that have significant effetcs on the amounts recognised in the financial statements.

### (b) Critical accounting estimates and assumptions

The Group and Company make estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, rarely equate to the related actual results. To enhance the information content of the estimates, certain key variables that are anticipated to have a material impact on the Group's and Company's results and financial position are tested for sensitivity to changes in the underlying parameters. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

(i) Impairment of property, plant and equipment

The Group and Company assess impairment of assets whenever the events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable, i.e., the carrying amount of the asset is more than the recoverable amount.

Recoverable amount is measured at the higher of the fair value less cost to sell for that asset and its value-in-use. The value-in-use is the net present value of the projected future cash flow derived from that asset discounted at an appropriate discount rate. Projected future cash flows are based on Group's and Company's estimates calculated based on historical, sector and industry trends, general market and economic conditions, changes in technology and other available information. The assumptions used, results and conclusion of the impairment assessment are stated in the Note 13 to these financial statements.

(ii) Estimated useful lives of property, plant and equipment

The Group and Company regularly reviews the estimated useful lives of property, plant and equipment based on factors such as business plan and strategies, expected level of usage and future technological developments. Future results of operations could be materially affected by changes in these estimates brought about by changes in the factors mentioned above. A reduction in the estimated useful lives of property, plant and equipment would increase the recorded depreciation and decrease the value of property, plant and equipment.

(iii) Contingent liabilities

Determination of the treatment of contingent liabilities is based on management's view of the expected outcome of the contingencies after consulting legal counsel for litigation cases and internal and external experts to the Group for matters in the ordinary course of business.

## 3 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

### (b) Critical accounting estimates and assumptions (continued)

(iv) Impairment of trade receivables

Management reviews its loans and receivables for objective evidence of impairment at least quarterly. Significant financial difficulties of the debtor, the probability that the debtor will enter bankruptcy, and default or significant delay in payments are considered objective evidence that a receivable is impaired. In determining this, management makes judgement as to whether there is observable data indicating that there has been a significant change in the payment ability of the debtor, or whether there have been significant changes with adverse effect in the technological, market, economic or legal environment in which the debtor operates in.

Where there is objective evidence of impairment, management makes judgements as to whether an impairment loss should be recorded as an expense. The methodology and assumptions used for estimating both the amount and timing of future cash flows are reviewed regularly to reduce any differences between the estimated loss and actual loss experience.

(v) Estimation of income taxes

Income taxes are estimated based on the rules governed under the Income Tax Act 1967.

Differences in determining the capital allowances and deductibility of certain expenses may arise during the estimation of the provision for income taxes between tax calculated at the statements of financial position date, and the final submission to the tax authorities as a result of obtaining further detailed information that may become available subsequent to the statements of financial position date.

Where the final tax outcome of these matters is different from the amounts that were initially recognised, such differences will impact the income tax provisions and deferred tax balance in the period in which such determination is made.

(vi) Revenue recognition

Electricity revenue for energy supply activities includes an assessment of energy supplied to customers between the date of the last meter reading and the financial year end of the Group and Company (unread and unbilled). An assessment is also made of any factors that are likely to materially affect the ultimate economic benefits which will flow to the Group and Company, including bill cancellation and adjustments. To the extent that the economic benefits are not expected to flow to the Group and Company, the value of that revenue is not recognised.

## 3 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

**(b) Critical accounting estimates and assumptions (continued)**

(vii) Fair value of derivatives and other financial instruments

Certain financial instruments such as investments and derivative financial instruments are carried on the statements of financial position at fair value, with changes in fair value reflected in the income statements.

Fair values are estimated by reference in part to published price quotations and in part by using valuation techniques. The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques.

The Group and Company uses its judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each financial reporting period.

(viii) Lease accounting

As a result of adopting IC 4 "Determining Whether an Arrangement Contains a Lease", certain of the Group's and Company's power purchase agreements have been accounted for as finance lease rather than the normal sale and purchase arrangements. This has resulted in finance lease accounting being applied to these power purchase agreements. To apply finance lease accounting, a number of assumptions in the lease models have been made, such as the determination of minimum lease payments, implicit interest rates and residual values of the power plants at the end of contract periods. Any future changes to these assumptions will affect the value of the lease assets and liabilities recognised and the corresponding lease income and expenses.

## 4 REVENUE

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011 (Restated)** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| Sales: | | | | |
| – Electricity | **34,475.2** | 31,199.6 | **32,529.6** | 29,561.9 |
| – Goods and services | **405.7** | 327.3 | **0** | 0 |
| – Contract revenue | **39.3** | 52.1 | **0** | 0 |
| – Recognition of customers' contributions | **571.4** | 268.7 | **489.6** | 263.9 |
| Release of deferred income | **356.8** | 393.5 | **321.8** | 331.3 |
| | **35,848.4** | 32,241.2 | **33,341.0** | 30,157.1 |

# Notes to the Financial Statements
– 31 August 2012



## 5 OPERATING EXPENSES

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 2012 | 2011 (Restated) |
| | RM'million | RM'million | RM'million | RM'million |
| Cost of sales: | | | | |
| – Energy cost | **23,175.5** | 22,494.3 | **21,317.9** | 21,821.1 |
| – Transmission cost | **1,365.0** | 1,276.5 | **1,360.6** | 1,276.5 |
| – Distribution cost | **4,346.3** | 3,998.3 | **4,338.0** | 3,998.3 |
| | **28,886.8** | 27,769.1 | **27,016.5** | 27,095.9 |
| Administrative expenses | **1,471.5** | 1,945.8 | **1,112.1** | 1,181.5 |
| Other operating expenses | **1,233.8** | 1,241.5 | **1,528.2** | 501.9 |
| | **31,592.1** | 30,956.4 | **29,656.8** | 28,779.3 |

Operating expenses include the following items:

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 2012 | 2011 (Restated) |
| | RM'million | RM'million | RM'million | RM'million |
| Purchases from Independent Power Producers (IPPs) | **13,976.7** | 13,565.8 | **18,135.1** | 17,286.7 |
| Directors' remuneration: | | | | |
| – Fees and allowances | **1.9** | 2.3 | **1.5** | 1.9 |
| – Other emoluments | **7.8** | 3.2 | **7.8** | 3.2 |
| Auditors' remuneration: | | | | |
| – Statutory audit fees | | | | |
| – PricewaterhouseCoopers, Malaysia | | | | |
| Current year | **1.4** | 1.6 | **0.7** | 0.7 |
| Under provision in prior year | **0.4** | 0 | **0.3** | 0 |
| – Member firm of PricewaterhouseCoopers International Limited*# | **0** | 0 | **0** | 0 |
| – Assurance related fees | **0.3** | 0.3 | **0.3** | 0.3 |
| – Non-audit fees | | | | |
| – PricewaterhouseCoopers, Malaysia## | **0.6** | 0.2 | **0.6** | 0 |
| Staff cost (Note 6) | **3,300.9** | 3,220.8 | **2,926.9** | 2,831.8 |
| Property, plant and equipment: | | | | |
| – Depreciation | **4,268.1** | 4,061.9 | **4,033.6** | 3,952.8 |
| – Written off | **44.4** | 35.5 | **31.3** | 34.8 |
| Allowance for impairment: | | | | |
| – Receivables | **122.9** | 100.5 | **111.6** | 66.3 |
| – Amounts due from subsidiaries | **0** | 0 | **292.8** | 187.7 |

## 5 OPERATING EXPENSES (CONTINUED)

Operating expenses include the following items:

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 2012 | 2011 (Restated) |
| | RM'million | RM'million | RM'million | RM'million |
| Reversal for impairment: | | | | |
| – Receivables | **(141.1)** | (24.5) | **(125.2)** | (19.1) |
| – Amounts due from a jointly controlled entity | **(0.5)** | (3.2) | **(0.5)** | (3.2) |
| Write-back of diminution in value of marketable securities | **(0.5)** | 0 | **(0.5)** | 0 |
| Allowance for inventory obsolescence | **132.9** | 109.2 | **132.9** | 109.2 |
| Write-back of inventory obsolescence | **(111.8)** | (117.8) | **(111.8)** | (117.7) |
| Allowance for diminution in value of investments in subsidiaries | **0** | 0 | **774.1** | 0 |
| Inventories written off | **18.6** | 22.9 | **18.4** | 21.4 |
| Rental of land and buildings | **162.7** | 52.9 | **141.5** | 31.7 |
| Rental of plant and machinery | **25.3** | 11.5 | **25.3** | 11.5 |
| Research and development expenses | **46.9** | 54.1 | **46.2** | 53.3 |
| Receipt of Government subsidies** | **(543.4)** | (547.5) | **0** | 0 |
| Alternate fuel cost differential compensation*** | **(1,475.9)** | 0 | **(1,475.9)** | 0 |

* *This represents the audit fees for Liberty Power Ltd amounting to RM35,120 (2011: RM34,479) and TNB Remaco Pakistan Pvt Ltd amounting to RM9,422 (2011: RM44,255).*

** *This represents the subsidies that Sabah Electricity Sdn. Bhd. ('SESB') received for diesel and medium fuel oil from the Government of Malaysia. The total amount credited in the current year was RM543.4 million (2011: RM547.5 million) and it has been offset against energy cost.*

*** *This represents alternate fuel cost differential compensation from Petronas and the Government of Malaysia in respect of the fuel-cost past through sharing mechanism for the current financial year.*

\# *PricewaterhouseCoopers Malaysia and other member firms of PricewaterhouseCoopers International Limited are separate and independent legal entities.*

\#\# *This year amount primarily relates to due diligence and related services.*

The estimated monetary value of benefits-in-kind received by the Directors was RM726,789 (2011: RM344,826) for the Group and Company.

There was no amount paid and payable to any firm, of which a Director is a partner, for professional services rendered to the Group and Company (2011: Nil).

# Notes to the Financial Statements
– 31 August 2012



## 6 STAFF COST

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| Wages, salaries and bonuses | **1,969.0** | 1,912.9 | **1,699.6** | 1,656.7 |
| Defined contribution retirement plan | **227.1** | 216.2 | **188.7** | 161.4 |
| Retirement benefit plan (Note 35) | **299.7** | 308.7 | **292.7** | 297.2 |
| Retirement medical plan (Note 35) | **577.8** | 550.9 | **547.6** | 521.2 |
| Employees' Share Option Scheme II | **24.8** | 34.1 | **21.2** | 29.8 |
| Other employee benefits | **202.5** | 198.0 | **177.1** | 165.5 |
| | **3,300.9** | 3,220.8 | **2,926.9** | 2,831.8 |

Details of the retirement benefit and retirement medical plans of the Group and Company are set out in Note 35 to these financial statements.

## 7 OTHER OPERATING INCOME

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| Dividend income from subsidiaries | **0** | 0 | **83.7** | 46.1 |
| Dividend income from equity securities: | | | | |
| – Quoted shares | **0** | 3.3 | **2.7** | 13.9 |
| – Unquoted shares | **0** | 2.1 | **21.8** | 28.2 |
| Leasing income | **42.2** | 9.2 | **44.5** | 11.5 |
| Rental income | **11.1** | 12.9 | **34.2** | 32.9 |
| Release of Government development grants (Note 37) | **77.0** | 64.6 | **0** | 0 |
| Government grants relating to income | **3.3** | 0 | **0** | 0 |
| Alternate fuel cost differential compensation* | **1,678.6** | 0 | **1,678.6** | 0 |
| Gain on disposals: | | | | |
| – Property, plant and equipment | **5.9** | 1.4 | **5.8** | 1.4 |
| – Non-current assets held for sale | **1.8** | 43.3 | **1.8** | 43.3 |
| – Short term investment | **0.1** | 5.0 | **0.1** | 5.0 |
| Interest on late payments | **66.2** | 132.4 | **64.5** | 132.4 |
| Minimum charges | **32.2** | 32.7 | **32.2** | 32.7 |
| Gain on redemption of redeemable preference shares in a subsidiary | **0** | 0 | **56.8** | 259.7 |
| Other income | **222.2** | 225.1 | **153.7** | 145.8 |
| | **2,140.6** | 532.0 | **2,180.4** | 752.9 |

* *This represents reimbursement from Petronas and the Government of Malaysia in respect of the alternate fuel cost differential compensation for additional fuel costs caused by gas curtailment incurred in prior periods (from January 2010 to August 2011) but was received during the year.*

Other income comprises primarily of income from rechargeable jobs and recovery from insurance claims.

Notes to the Financial Statements
– 31 August 2012



## 8 FOREIGN EXCHANGE

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 | 2012 | 2011 |
| | RM'million | RM'million | RM'million | RM'million |
| Foreign exchange (loss)/gain comprises: | | | | |
| Translation loss – foreign currency denominated term loans | **(275.4)** | (105.6) | **(256.8)** | (100.5) |
| Translation gain/(loss) – others | **44.6** | (121.4) | **43.7** | (143.6) |
| Transaction (loss)/gain – foreign term loans | **(2.6)** | 34.8 | **(2.6)** | 35.4 |
| Transaction loss – others | **(18.8)** | (1.9) | **(10.1)** | 0 |
| | **(252.2)** | (194.1) | **(225.8)** | (208.7) |

## 9 FINANCE INCOME/COST

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 2012 | 2011 (Restated) |
| | RM'million | RM'million | RM'million | RM'million |
| Finance income: | | | | |
| Interest from subsidiaries | **0** | 0 | **176.1** | 186.7 |
| Interest from deposits, staff loans and associates | **269.0** | 283.5 | **140.4** | 249.3 |
| Changes in fair value and amortisation | **16.5** | 0 | **(11.7)** | (31.4) |
| Waiver of loan interest | **0** | 35.6 | **0** | 0 |
| Less: Reduction of borrowing costs capitalised into property, plant and equipment | **(96.8)** | 0 | **0** | 0 |
| | **188.7** | 319.1 | **304.8** | 404.6 |
| Finance cost: | | | | |
| Interest on borrowings | **1,045.2** | 1,071.7 | **630.9** | 789.1 |
| Less: Amount capitalised into property, plant and equipment | **(380.9)** | (206.4) | **(216.8)** | (206.4) |
| | **664.3** | 865.3 | **414.1** | 582.7 |
| Finance charges under finance leases | **117.4** | 50.7 | **1,043.4** | 1,117.3 |
| Interest on consumer deposits | **74.9** | 40.6 | **74.6** | 37.8 |
| Changes in fair value of derivatives and amortisation | **(33.6)** | (78.1) | **(18.2)** | (26.3) |
| | **823.0** | 878.5 | **1,513.9** | 1,711.5 |

## 10 TAXATION AND ZAKAT

| | Note | Group 2012 RM'million | Group 2011 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million |
|---|---|---|---|---|---|
| Current tax: | | | | | |
| – Malaysian corporate income tax | | **845.1** | 113.5 | **830.4** | 93.9 |
| – Foreign corporate income tax | | **0.9** | 0 | **0** | 0 |
| Deferred tax | 19 | **462.6** | 62.0 | **458.8** | (73.8) |
| Tax expense | | **1,308.6** | 175.5 | **1,289.2** | 20.1 |
| Zakat | | **22.4** | 16.7 | **22.4** | 16.7 |
| | | **1,331.0** | 192.2 | **1,311.6** | 36.8 |

| | Group 2012 RM'million | Group 2011 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million |
|---|---|---|---|---|
| The analysis of the tax expense is as follows: | | | | |
| Current tax: | | | | |
| – Current year | **839.7** | 99.9 | **826.8** | 83.2 |
| – Under accrual in prior years | **6.3** | 13.6 | **3.6** | 10.7 |
| | **846.0** | 113.5 | **830.4** | 93.9 |
| Deferred tax: | | | | |
| – Origination and reversal of temporary differences | **462.6** | 62.0 | **458.8** | (73.8) |
| | **1,308.6** | 175.5 | **1,289.2** | 20.1 |

## 10 TAXATION AND ZAKAT (CONTINUED)

The explanation of the relationship between tax expense and profit before taxation is as follows:

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 2012 | 2011 (Restated) |
| | RM'million | RM'million | RM'million | RM'million |
| Profit before taxation and zakat | **5,537.2** | 1,156.7 | **4,429.7** | 615.1 |
| Tax calculated at the Malaysian corporate income tax rate of 25.0% (2011: 25.0%) | **1,384.3** | 289.2 | **1,107.4** | 153.8 |
| Tax effects of: | | | | |
| – Share of results of associates | **(10.1)** | (23.3) | **0** | 0 |
| – Income not subject to tax | **(202.5)** | (128.9) | **(223.6)** | (186.6) |
| – Expenses not deductible for tax purposes | **84.7** | 91.7 | **375.1** | 145.6 |
| – Expenses qualifying for double deduction | **(14.2)** | (7.3) | **(12.8)** | (6.0) |
| – Benefits from previously unrecognised tax losses | **(3.0)** | (0.2) | **0** | 0 |
| – Current year unrecognised temporary differences and unused tax losses | **16.4** | 29.9 | **0** | 0 |
| – Foreign jurisdiction | **(0.4)** | 0 | **0** | 0 |
| Under accrual of current tax in prior years | **6.3** | 13.6 | **3.6** | 10.7 |
| Recognition and reversal of prior year temporary differences | **47.1** | (89.2) | **39.5** | (97.4) |
| Zakat | **22.4** | 16.7 | **22.4** | 16.7 |
| Tax and zakat charge | **1,331.0** | 192.2 | **1,311.6** | 36.8 |
| Average effective tax rate (%) | **24.0** | 16.6 | **29.6** | 6.0 |

## 11 EARNINGS PER SHARE (EPS)

### (a) Basic earnings per share

Basic earnings per share is calculated by dividing the profit attributable to owners of the Company for the financial year by the weighted average number of ordinary shares in issue during the financial year.

| | Group | |
|---|---|---|
| | 2012 | 2011 (Restated) |
| Profit attributable to owners of the Company (RM'million) | **4,197.6** | 965.4 |
| Weighted average number of ordinary shares in issue ('000) | **5,464,516** | 5,450,741 |
| Basic earnings per share (sen) | **76.82** | 17.71 |

## 11 EARNINGS PER SHARE (EPS) (CONTINUED)

### (b) Diluted earnings per share

For the purpose of calculating diluted earnings per share, the profit attributable to owners of the Company for the financial year and the weighted average number of ordinary shares in issue during the financial year has been adjusted for the dilutive effects of all potential ordinary shares such as share options granted to employees.

| | Group | |
|---|---|---|
| | **2012** | **2011 (Restated)** |
| Profit used to determine diluted earnings per share (RM'million) | **4,197.6** | 965.4 |
| Weighted average number of ordinary shares in issue ('000) | **5,464,516** | 5,450,741 |
| Adjustment for share options ('000) | **13,484** | 11,706 |
| Weighted average number of ordinary shares for diluted earnings per share ('000) | **5,478,000** | 5,462,447 |
| Diluted earnings per share (sen) | **76.63** | 17.67 |

As per Note 2(a)(i), the changes in accounting policy due to the adoption of IC Interpretation 4 resulted in an increase to the basic earnings per share and diluted earnings per share for the period ended 31 August 2011 by 8.55 sen and 8.53 sen respectively. The effect of the adoption to the financial statements is disclosed in Note 48.

## 12 DIVIDENDS

| | Company | |
|---|---|---|
| | **2012 RM'million** | **2011 RM'million** |
| Interim dividend of 0.38 sen gross per ordinary share, less income tax of 25.0% and a single-tier dividend of 4.71 sen per ordinary share (2011: 4.5 sen gross per ordinary share, less income tax at 25.0%) | **273.0** | 184.0 |
| Proposed final single-tier dividend of 15.0 sen per ordinary share (2011: Nil) | **826.5** | 0 |
| | **1,099.5** | 184.0 |

Interim dividends are paid and accounted for in shareholders' equity as an appropriation of retained profits in the financial year.

At the forthcoming Annual General Meeting, a final single-tier dividend in respect of the financial year ended 31 August 2012 of 15.0 sen per ordinary share will be proposed for shareholders' approval. The books closure and payment dates will be announced in due course.

# Notes to the Financial Statements
– 31 August 2012



## 13 PROPERTY, PLANT AND EQUIPMENT

| Group | As at 1.9.2011 (Restated) RM'million | Exchange rate adjustment RM'million | Additions RM'million | Disposals RM'million | Transfers/ Adjustments/ Reclassi-fication/ Write off RM'million | As at 31.8.2012 RM'million |
|---|---|---|---|---|---|---|
| **2012** | | | | | | |
| Cost/Valuation | | | | | | |
| At 1984 and earlier valuations: | | | | | | |
| Long leasehold land | 8.4 | 0 | 0 | 0 | 0 | **8.4** |
| At 1994 valuation: | | | | | | |
| Freehold land | 543.9 | 0 | 0 | 0 | (15.1) | **528.8** |
| Long leasehold land | 601.5 | 0 | 0 | (0.1) | 0.9 | **602.3** |
| Short leasehold land | 2.4 | 0 | 0 | 0 | 0 | **2.4** |
| Buildings and civil works | 442.8 | 0 | 0 | (0.2) | (1.3) | **441.3** |
| | 1,599.0 | 0 | 0 | (0.3) | (15.5) | **1,583.2** |
| At cost: | | | | | | |
| Freehold land | 260.6 | (0.2) | 8.1 | 0 | (26.9) | **241.6** |
| Long leasehold land | 353.5 | 0.1 | 9.5 | 0 | 34.2 | **397.3** |
| Short leasehold land | 181.9 | 0 | 10.8 | 0 | 0.9 | **193.6** |
| Buildings and civil works | 12,558.9 | (0.1) | 446.4 | (0.1) | 8.8 | **13,013.9** |
| | 14,953.9 | (0.2) | 474.8 | (0.4) | 1.5 | **15,429.6** |
| Plant and machinery: | | | | | | |
| – Owned | 45,618.8 | (20.8) | 1,715.6 | (142.3) | 4,122.1 | **51,293.4** |
| – Leased | 1,312.8 | 0 | 0 | 0 | 0 | **1,312.8** |
| Lines and distribution mains | 30,328.4 | 0 | 1,857.5 | (0.1) | 90.4 | **32,276.2** |
| Distribution services | 3,100.6 | 0 | 198.5 | 0 | 17.3 | **3,316.4** |
| Meters | 1,783.7 | 0 | 271.3 | 0 | (0.1) | **2,054.9** |
| Public lighting | 350.6 | 0 | 26.9 | 0 | (5.1) | **372.4** |
| Furniture, fittings and office equipment | 1,312.3 | (0.1) | 92.4 | (17.2) | (1.0) | **1,386.4** |
| Motor vehicles | 437.9 | 0 | 65.4 | (13.3) | (7.4) | **482.6** |
| | 99,199.0 | (21.1) | 4,702.4 | (173.3) | 4,217.7 | **107,924.7** |
| Capital project-in-progress | 5,646.3 | 0 | 7,067.8 | 0 | (5,121.8) | **7,592.3** |
| | 104,845.3 | (21.1) | 11,770.2 | (173.3) | (904.1) | **115,517.0** |

## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

| Group | As at 1.9.2011 (Restated) RM'million | Charged for the financial year RM'million | Released on disposals/ Transfers/ Write off RM'million | As at 31.8.2012 RM'million |
|---|---|---|---|---|
| **2012** | | | | |
| Accumulated depreciation | | | | |
| At 1984 and earlier valuations: | | | | |
| Long leasehold land | 2.5 | 0 | 0 | **2.5** |
| At 1994 valuation: | | | | |
| Freehold land | 0 | 0 | 0 | **0** |
| Long leasehold land | 161.5 | 11.2 | 0 | **172.7** |
| Short leasehold land | 1.7 | 0.1 | 0 | **1.8** |
| Buildings and civil works | 248.5 | 13.3 | (0.6) | **261.2** |
| | 414.2 | 24.6 | (0.6) | **438.2** |
| At cost: | | | | |
| Freehold land | 0 | 0 | 0 | **0** |
| Long leasehold land | 51.7 | 4.9 | 1.6 | **58.2** |
| Short leasehold land | 69.8 | 7.3 | 0 | **77.1** |
| Buildings and civil works | 3,886.3 | 342.4 | (1.8) | **4,226.9** |
| | 4,422.0 | 379.2 | (0.8) | **4,800.4** |
| Plant and machinery: | | | | |
| – Owned | 20,512.2 | 2,175.7 | 3,536.9 | **26,224.8** |
| – Leased | 20.9 | 62.5 | 0 | **83.4** |
| Lines and distribution mains | 13,313.8 | 1,271.5 | (4.7) | **14,580.6** |
| Distribution services | 1,660.0 | 140.1 | 0 | **1,800.1** |
| Meters | 971.2 | 110.6 | 0 | **1,081.8** |
| Public lighting | 208.1 | 11.8 | 0 | **219.9** |
| Furniture, fittings and office equipment | 1,153.4 | 68.6 | (17.3) | **1,204.7** |
| Motor vehicles | 282.1 | 48.1 | (19.0) | **311.2** |
| | 42,543.7 | 4,268.1 | 3,495.1 | **50,306.9** |
| Accumulated impairment losses | | | | |
| Plant and machinery | 440.2 | 0 | 0 | **440.2** |

# Notes to the Financial Statements
– 31 August 2012



## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

| Group | As at 1.9.2010 RM'million | Exchange rate adjustment RM'million | Additions (Restated) RM'million | Disposals RM'million | Transfers/ Adjustments/ Reclassi-fication/ Write off RM'million | As at 31.8.2011 (Restated) RM'million |
|---|---|---|---|---|---|---|
| **2011** | | | | | | |
| Cost/Valuation | | | | | | |
| At 1984 and earlier valuations: | | | | | | |
| Long leasehold land | 8.4 | 0 | 0 | 0 | 0 | **8.4** |
| At 1994 valuation: | | | | | | |
| Freehold land | 562.4 | 0 | 0 | (0.5) | (18.0) | **543.9** |
| Long leasehold land | 602.8 | 0 | 0 | (0.5) | (0.8) | **601.5** |
| Short leasehold land | 2.4 | 0 | 0 | 0 | 0 | **2.4** |
| Buildings and civil works | 446.5 | 0 | 0 | (3.7) | 0 | **442.8** |
| | 1,622.5 | 0 | 0 | (4.7) | (18.8) | **1,599.0** |
| At cost: | | | | | | |
| Freehold land | 361.4 | (0.1) | 6.1 | 0 | (106.8) | **260.6** |
| Long leasehold land | 330.7 | 0 | 3.2 | (0.1) | 19.7 | **353.5** |
| Short leasehold land | 181.9 | 0 | 0 | 0 | 0 | **181.9** |
| Buildings and civil works | 12,352.3 | (0.2) | 203.8 | (10.6) | 13.6 | **12,558.9** |
| | 14,848.8 | (0.3) | 213.1 | (15.4) | (92.3) | **14,953.9** |
| Plant and machinery: | | | | | | |
| – Owned | 43,490.4 | (47.8) | 2,032.9 | (234.6) | 377.9 | **45,618.8** |
| – Leased | 0 | 0 | 1,312.8 | 0 | 0 | **1,312.8** |
| Lines and distribution mains | 28,521.6 | 0 | 1,678.5 | (0.1) | 128.4 | **30,328.4** |
| Distribution services | 2,899.7 | 0 | 213.3 | 0 | (12.4) | **3,100.6** |
| Meters | 1,649.9 | 0 | 131.9 | 0 | 1.9 | **1,783.7** |
| Public lighting | 327.4 | 0 | 23.2 | 0 | 0 | **350.6** |
| Furniture, fittings and office equipment | 1,252.6 | (0.3) | 66.6 | (1.8) | (4.8) | **1,312.3** |
| Motor vehicles | 310.4 | (0.1) | 126.7 | (5.9) | 6.8 | **437.9** |
| | 93,300.8 | (48.5) | 5,799.0 | (257.8) | 405.5 | **99,199.0** |
| Capital project-in-progress | 4,499.1 | (0.2) | 6,007.6 | 0 | (4,860.2) | **5,646.3** |
| | 97,799.9 | (48.7) | 11,806.6 | (257.8) | (4,454.7) | **104,845.3** |

# Notes to the Financial Statements
– 31 August 2012



## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

| Group | As at 1.9.2010 RM'million | Charged for the financial year (Restated) RM'million | Released on disposals/ Transfers/ Write off RM'million | As at 31.8.2011 (Restated) RM'million |
|---|---|---|---|---|
| **2011** | | | | |
| Accumulated depreciation | | | | |
| At 1984 and earlier valuations: | | | | |
| Long leasehold land | 2.4 | 0.1 | 0 | **2.5** |
| At 1994 valuation: | | | | |
| Long leasehold land | 151.0 | 11.2 | (0.7) | **161.5** |
| Short leasehold land | 1.6 | 0.1 | 0 | **1.7** |
| Buildings and civil works | 238.3 | 13.5 | (3.3) | **248.5** |
| | 393.3 | 24.9 | (4.0) | **414.2** |
| At cost: | | | | |
| Long leasehold land | 45.1 | 6.6 | 0 | **51.7** |
| Short leasehold land | 62.6 | 7.2 | 0 | **69.8** |
| Buildings and civil works | 3,550.8 | 334.9 | 0.6 | **3,886.3** |
| | 4,051.8 | 373.6 | (3.4) | **4,422.0** |
| Plant and machinery: | | | | |
| – Owned | 18,378.7 | 2,105.0 | 28.5 | **20,512.2** |
| – Leased | 0 | 20.9 | 0 | **20.9** |
| Lines and distribution mains | 12,106.7 | 1,202.5 | 4.6 | **13,313.8** |
| Distribution services | 1,529.2 | 130.8 | 0 | **1,660.0** |
| Meters | 876.2 | 95.0 | 0 | **971.2** |
| Public lighting | 192.1 | 16.0 | 0 | **208.1** |
| Furniture, fittings and office equipment | 1,083.1 | 76.3 | (6.0) | **1,153.4** |
| Motor vehicles | 246.6 | 41.8 | (6.3) | **282.1** |
| | 38,464.4 | 4,061.9 | 17.4 | **42,543.7** |
| Accumulated impairment losses | | | | |
| Plant and machinery | 440.2 | 0 | 0 | **440.2** |

## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

| Company | As at 1.9.2011 (Restated) RM'million | Additions RM'million | Disposals RM'million | Transfers/ Adjustments/ Reclassi-fication/ Write off RM'million | As at 31.8.2012 RM'million |
|---|---|---|---|---|---|
| **2012** | | | | | |
| Cost/Valuation | | | | | |
| At 1994 valuation: | | | | | |
| Freehold land | 543.9 | 0 | 0 | (15.1) | **528.8** |
| Long leasehold land | 601.5 | 0 | (0.1) | 0.9 | **602.3** |
| Short leasehold land | 2.4 | 0 | 0 | 0 | **2.4** |
| Buildings and civil works | 437.1 | 0 | (0.1) | (1.2) | **435.8** |
| | 1,584.9 | 0 | (0.2) | (15.4) | **1,569.3** |
| At cost: | | | | | |
| Freehold land | 197.2 | 8.1 | 0 | (27.0) | **178.3** |
| Long leasehold land | 338.2 | 9.5 | 0 | 31.2 | **378.9** |
| Short leasehold land | 1.3 | 0 | 0 | 0.9 | **2.2** |
| Buildings and civil works | 10,917.3 | 422.8 | (0.1) | (9.6) | **11,330.4** |
| | 13,038.9 | 440.4 | (0.3) | (19.9) | **13,459.1** |
| Plant and machinery: | | | | | |
| – Owned | 34,603.9 | 1,629.5 | (99.0) | (18.6) | **36,115.8** |
| – Leased | 13,653.1 | 0 | 0 | 0 | **13,653.1** |
| Lines and distribution mains | 29,059.6 | 1,798.0 | 0 | 10.1 | **30,867.7** |
| Distribution services | 2,947.8 | 191.5 | 0 | 5.9 | **3,145.2** |
| Meters | 1,733.5 | 262.9 | 0 | (0.2) | **1,996.2** |
| Public lighting | 350.6 | 26.9 | 0 | (5.1) | **372.4** |
| Furniture, fittings and office equipment | 1,122.9 | 80.3 | (2.5) | (0.6) | **1,200.1** |
| Motor vehicles | 366.6 | 57.9 | (11.7) | (0.8) | **412.0** |
| | 96,876.9 | 4,487.4 | (113.5) | (29.2) | **101,221.6** |
| Capital project-in-progress | 4,311.0 | 4,871.7 | 0 | (4,487.4) | **4,695.3** |
| | 101,187.9 | 9,359.1 | (113.5) | (4,516.6) | **105,916.9** |

Financial Statements

## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

| Company | As at 1.9.2011 (Restated) RM'million | Charged for the financial year RM'million | Released on disposals/ Transfers/ Write off RM'million | As at 31.8.2012 RM'million |
|---|---|---|---|---|
| **2012** | | | | |
| Accumulated depreciation | | | | |
| At 1994 valuation: | | | | |
| Long leasehold land | 161.5 | 11.2 | 0 | **172.7** |
| Short leasehold land | 1.7 | 0.1 | 0 | **1.8** |
| Buildings and civil works | 244.3 | 13.2 | (0.5) | **257.0** |
| | 407.5 | 24.5 | (0.5) | **431.5** |
| At cost: | | | | |
| Freehold land | 0 | 0 | 0 | **0** |
| Long leasehold land | 49.3 | 4.7 | 0 | **54.0** |
| Short leasehold land | 0.3 | 0.2 | 0 | **0.5** |
| Buildings and civil works | 3,375.0 | 277.6 | (0.3) | **3,652.3** |
| | 3,832.1 | 307.0 | (0.8) | **4,138.3** |
| Plant and machinery: | | | | |
| – Owned | 16,394.5 | 1,603.7 | (78.0) | **17,920.2** |
| – Leased | 3,671.3 | 557.8 | 0 | **4,229.1** |
| Lines and distribution mains | 12,858.4 | 1,217.2 | (0.1) | **14,075.5** |
| Distribution services | 1,563.5 | 132.8 | 0 | **1,696.3** |
| Meters | 944.7 | 106.5 | 0 | **1,051.2** |
| Public lighting | 208.1 | 11.8 | 0 | **219.9** |
| Furniture, fittings and office equipment | 1,000.6 | 54.8 | (2.6) | **1,052.8** |
| Motor vehicles | 231.7 | 42.0 | (11.9) | **261.8** |
| | 40,704.9 | 4,033.6 | (93.4) | **44,645.1** |

## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

| Company | As at 1.9.2010 (Restated) RM'million | Additions RM'million | Disposals RM'million | Transfers/ Adjustments/ Reclassi-fication/ Write off RM'million | As at 31.8.2011 (Restated) RM'million |
|---|---|---|---|---|---|
| **2011** | | | | | |
| Cost/Valuation | | | | | |
| At 1994 valuation: | | | | | |
| Freehold land | 562.4 | 0 | (0.5) | (18.0) | **543.9** |
| Long leasehold land | 602.7 | 0 | (0.5) | (0.7) | **601.5** |
| Short leasehold land | 2.4 | 0 | 0 | 0 | **2.4** |
| Buildings and civil works | 440.8 | 0 | (3.7) | 0 | **437.1** |
| | 1,608.3 | 0 | (4.7) | (18.7) | **1,584.9** |
| At cost: | | | | | |
| Freehold land | 297.9 | 6.1 | 0 | (106.8) | **197.2** |
| Long leasehold land | 310.9 | 3.2 | (0.1) | 24.2 | **338.2** |
| Short leasehold land | 1.3 | 0 | 0 | 0 | **1.3** |
| Buildings and civil works | 10,737.4 | 189.4 | (8.4) | (1.1) | **10,917.3** |
| | 12,955.8 | 198.7 | (13.2) | (102.4) | **13,038.9** |
| Plant and machinery: | | | | | |
| – Owned | 32,680.4 | 1,875.3 | (201.0) | 249.2 | **34,603.9** |
| – Leased | 13,653.1 | 0 | 0 | 0 | **13,653.1** |
| Lines and distribution mains | 27,295.4 | 1,655.2 | (0.1) | 109.1 | **29,059.6** |
| Distribution services | 2,763.7 | 208.6 | 0 | (24.5) | **2,947.8** |
| Meters | 1,607.4 | 124.5 | 0 | 1.6 | **1,733.5** |
| Public lighting | 327.5 | 23.2 | 0 | (0.1) | **350.6** |
| Furniture, fittings and office equipment | 1,092.3 | 51.5 | (1.0) | (19.9) | **1,122.9** |
| Motor vehicles | 246.2 | 119.0 | (5.7) | 7.1 | **366.6** |
| | 92,621.8 | 4,256.0 | (221.0) | 220.1 | **96,876.9** |
| Capital project-in-progress | 4,102.7 | 4,464.3 | 0 | (4,256.0) | **4,311.0** |
| | 96,724.5 | 8,720.3 | (221.0) | (4,035.9) | **101,187.9** |

## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

| Company | As at 1.9.2010 (Restated) RM'million | Charged for the financial year (Restated) RM'million | Released on disposals/ Transfers/ Write off RM'million | As at 31.8.2011 (Restated) RM'million |
|---|---|---|---|---|
| **2011** | | | | |
| Accumulated depreciation | | | | |
| At 1994 valuation: | | | | |
| Long leasehold land | 150.9 | 11.3 | (0.7) | **161.5** |
| Short leasehold land | 1.7 | 0 | 0 | **1.7** |
| Buildings and civil works | 234.1 | 13.4 | (3.2) | **244.3** |
| | 386.7 | 24.7 | (3.9) | **407.5** |
| At cost: | | | | |
| Freehold land | 0 | 0 | 0 | **0** |
| Long leasehold land | 42.5 | 6.7 | 0.1 | **49.3** |
| Short leasehold land | 0.3 | 0 | 0 | **0.3** |
| Buildings and civil works | 3,104.5 | 271.4 | (0.9) | **3,375.0** |
| | 3,534.0 | 302.8 | (4.7) | **3,832.1** |
| Plant and machinery: | | | | |
| – Owned | 14,696.2 | 1,611.6 | 86.7 | **16,394.5** |
| – Leased | 3,113.5 | 557.8 | 0 | **3,671.3** |
| Lines and distribution mains | 11,706.0 | 1,152.4 | 0 | **12,858.4** |
| Distribution services | 1,438.7 | 124.8 | 0 | **1,563.5** |
| Meters | 853.1 | 91.6 | 0 | **944.7** |
| Public lighting | 191.7 | 16.4 | 0 | **208.1** |
| Furniture, fittings and office equipment | 961.4 | 59.1 | (19.9) | **1,000.6** |
| Motor vehicles | 201.1 | 36.3 | (5.7) | **231.7** |
| | 36,695.7 | 3,952.8 | 56.4 | **40,704.9** |

## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

| | Group | | | Company | | |
|---|---|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 1.9.2010 (Restated) | 2012 | 2011 (Restated) | 1.9.2010 (Restated) |
| | RM'million | RM'million | RM'million | RM'million | RM'million | RM'million |
| Net book value | | | | | | |
| At 1984 and earlier valuations: | | | | | | |
| Long leasehold land | **5.9** | 5.9 | 6.0 | **0** | 0 | 0 |
| At 1994 valuation: | | | | | | |
| Freehold land | **528.8** | 543.9 | 562.4 | **528.8** | 543.9 | 562.4 |
| Long leasehold land | **429.6** | 440.0 | 451.8 | **429.6** | 440.0 | 451.8 |
| Short leasehold land | **0.6** | 0.7 | 0.8 | **0.6** | 0.7 | 0.7 |
| Buildings and civil works | **180.1** | 194.3 | 208.2 | **178.8** | 192.8 | 206.7 |
| | **1,145.0** | 1,184.8 | 1,229.2 | **1,137.8** | 1,177.4 | 1,221.6 |
| At cost: | | | | | | |
| Freehold land | **241.6** | 260.6 | 361.4 | **178.3** | 197.2 | 297.9 |
| Long leasehold land | **339.1** | 301.8 | 285.6 | **324.9** | 288.9 | 268.4 |
| Short leasehold land | **116.5** | 112.1 | 119.3 | **1.7** | 1.0 | 1.0 |
| Buildings and civil works | **8,787.0** | 8,672.6 | 8,801.5 | **7,678.1** | 7,542.3 | 7,632.9 |
| Total land and buildings | **10,629.2** | 10,531.9 | 10,797.0 | **9,320.8** | 9,206.8 | 9,421.8 |
| Plant and machinery: | | | | | | |
| – Owned | **24,628.4** | 24,666.4 | 24,671.5 | **18,195.6** | 18,209.4 | 17,984.2 |
| – Leased | **1,229.4** | 1,291.9 | 0 | **9,424.0** | 9,981.8 | 10,539.6 |
| Lines and distribution mains | **17,695.6** | 17,014.6 | 16,414.9 | **16,792.2** | 16,201.2 | 15,589.4 |
| Distribution services | **1,516.3** | 1,440.6 | 1,370.5 | **1,448.9** | 1,384.3 | 1,325.0 |
| Meters | **973.1** | 812.5 | 773.7 | **945.0** | 788.8 | 754.3 |
| Public lighting | **152.5** | 142.5 | 135.3 | **152.5** | 142.5 | 135.8 |
| Furniture, fittings and office equipment | **181.7** | 158.9 | 169.5 | **147.3** | 122.3 | 130.9 |
| Motor vehicles | **171.4** | 155.8 | 63.8 | **150.2** | 134.9 | 45.1 |
| | **57,177.6** | 56,215.1 | 54,396.2 | **56,576.5** | 56,172.0 | 55,926.1 |
| Capital project-in-progress | **7,592.3** | 5,646.3 | 4,499.1 | **4,695.3** | 4,311.0 | 4,102.7 |
| | **64,769.9** | 61,861.4 | 58,895.3 | **61,271.8** | 60,483.0 | 60,028.8 |

## 13 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Had the revalued property, plant and equipment been included in the financial statements at cost less accumulated depreciation and accumulated impairment losses, the net book value of the revalued property, plant and equipment would have been as follows:

| | Group | | | Company | | |
|---|---|---|---|---|---|---|
| | **2012 RM'million** | **2011 RM'million** | **1.9.2010 RM'million** | **2012 RM'million** | **2011 RM'million** | **1.9.2010 RM'million** |
| Freehold land | **48.0** | 48.0 | 48.2 | **48.0** | 48.0 | 48.2 |
| Leasehold land | **49.9** | 51.6 | 53.5 | **49.2** | 50.9 | 52.8 |
| Buildings and civil works | **75.7** | 82.4 | 89.3 | **75.2** | 81.8 | 88.6 |
| | **173.6** | 182.0 | 191.0 | **172.4** | 180.7 | 189.6 |

The valuations of freehold land, buildings and civil works of the Group and Company was based on an independent valuation by a professional firm of valuers on the open market value basis in 1994. The net surplus on revaluation was incorporated into the financial statements as at 31 August 1996 and transferred to revaluation reserve.

The valuations of buildings of a subsidiary were carried out in 1982 and 1984 respectively based on independent valuations by professional firms of valuers on the open market value basis. The net surplus on revaluation was transferred to revaluation reserve.

The title deeds of certain land are in the process of being registered in the name of the Company and certain subsidiaries.

Net book value of property, plant and equipment pledged as security for borrowings are disclosed in Note 32.

Interest capitalised during the financial year in capital project-in-progress amounted to RM284.1 million (2011: RM206.4 million) for the Group and RM216.8 million (2011: RM206.4 million) for the Company.

The capitalisation rate used to determine the amount of borrowing cost eligible for capitalisation is 6.23% (2011: 6.17%) for the Company.

Impairment test for property, plant and equipment

TNB Liberty Power Limited has recognised in prior years, a provision for impairment totalling RM440.2 million. Current year assessment showed that no further impairment loss is required for the carrying amount of property, plant and equipment assessed. The carrying value of the property, plant and equipment at statements of financial position date is RM236.0 million (2011: RM281.6 million). The recoverable amount of the property, plant and equipment is determined based on value in use.

Notes to the Financial Statements
– 31 August 2012



## 14 SUBSIDIARIES

| | Note | Company 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|
| At cost: | | | | |
| Unquoted ordinary shares | | **296.6** | 296.6 | 296.6 |
| Redeemable preference shares | | **3,577.3** | 3,922.6 | 4,075.7 |
| Options granted to employees of subsidiaries | | **19.2** | 15.4 | 0 |
| Advance to subsidiaries treated as quasi-investment | (a) | **774.1** | 610.6 | 0 |
| | | **4,667.2** | 4,845.2 | 4,372.3 |
| Less: Accumulated impairment losses | (b) | **(1,703.0)** | (928.9) | (928.9) |
| | | **2,964.2** | 3,916.3 | 3,443.4 |

(a) The advances are unsecured and are non-interest bearing with no fixed terms of repayment. The Company does not anticipate any repayment of the advances and will only recall the loans when the subsidiaries have surplus cash. These advances are treated as an extension of its investments in subsidiaries.

(b) During the financial year, the Company recognised an impairment loss of RM774.1 million in respect of investment in subsidiaries as the recoverable amount is lower than the carrying amount. The resulting impairment loss was recognised within operating expenses line item of the Income Statement. The recoverable amounts are determined based on value in use.

| Name of subsidiary | Group's interest 2012 | 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| TNB Janamanjung Sdn. Bhd. | **100%** | 100% | Generate and deliver electricity and generating capacity to TNB | Malaysia |
| TNB Power Daharki Ltd.# | **100%** | 100% | Investment holding | Mauritius |
| TNB Fuel Services Sdn. Bhd. | **100%** | 100% | Supplying fuel and coal for power generation | Malaysia |
| TNB Energy Services Sdn. Bhd. | **100%** | 100% | Generating, distributing, supplying, dealing, selling of different kinds of energy sources and related technical services | Malaysia |

# Notes to the Financial Statements
– 31 August 2012



## 14 SUBSIDIARIES (CONTINUED)

| Name of subsidiary | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| TNB Research Sdn. Bhd. | **100%** | 100% | Research and development, consultancy and other services | Malaysia |
| TNB Ventures Sdn. Bhd. | **100%** | 100% | Investment holding | Malaysia |
| TNB Engineering Corporation Sdn. Bhd. | **100%** | 100% | Principally engaged as turnkey contractors, energy project development specialising in district cooling system and co-generation including operation and maintenance works | Malaysia |
| TNB Repair And Maintenance Sdn. Bhd. | **100%** | 100% | Repair and maintenance services to heavy industries and other related services | Malaysia |
| TNB Engineers Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB Capital Ltd. | **100%** | 100% | Investment holding | Malaysia |
| Universiti Tenaga Nasional Sdn. Bhd. | **100%** | 100% | Providing higher education and training | Malaysia |
| Malaysia Transformer Manufacturing Sdn. Bhd. | **100%** | 100% | Principally engaged in the manufacturing, selling and repairing distribution, power and earthing transformers | Malaysia |
| TNB Coal International Ltd.* | **100%** | 100% | Dormant | Mauritius |
| Power and Energy International (Mauritius) Ltd.* | **100%** | 100% | Investment holding | Mauritius |
| Orion Mission Sdn. Bhd. | **100%** | 100% | Investment holding | Malaysia |
| Sabah Electricity Sdn. Bhd. | **83%** | 80% | Business of generation, transmission, distribution and sale of electricity and services in Sabah | Malaysia |

## 14 SUBSIDIARIES (CONTINUED)

| Name of subsidiary | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| Tenaga Switchgear Sdn. Bhd. | **60%** | 60% | Principally engaged in the business of assembling and manufacturing of high voltage switchgears and contracting of turnkey transmission substations | Malaysia |
| Kapar Energy Ventures Sdn. Bhd. | **60%** | 60% | Generate and deliver electricity energy and generating capacity to TNB | Malaysia |
| TNB Integrated Learning Solution Sdn. Bhd. | **100%** | 100% | Providing training and consultancy services | Malaysia |
| TNB Generation Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB Transmission Network Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB Distribution Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB Risk Management Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB Logistics Sdn. Bhd.** | **100%** | 100% | Dormant | Malaysia |
| TNB – IT Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB Workshop Services Sdn. Bhd.** | **100%** | 100% | Dormant | Malaysia |
| TNB Metering Services Sdn. Bhd.** | **100%** | 100% | Dormant | Malaysia |
| TNB Hidro Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB Prai Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB Properties Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNB International Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |

## 14 SUBSIDIARIES (CONTINUED)

| Name of subsidiary | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| Sepang Power Sdn. Bhd. | **70%** | 70% | Dormant | Malaysia |
| TNB Quantum Solutions Sdn. Bhd. | **100%** | 0% | Carry out the business of consultancy, advisory, capability development and corporate coordination programs | Malaysia |
| **Subsidiaries of TNB Engineering Corporation Sdn. Bhd.** | | | | |
| Bangsar Energy Systems Sdn. Bhd. | **100%** | 100% | Operating an integrated district cooling system for air conditioning systems of office building | Malaysia |
| TNEC Construction Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| TNEC Operations and Maintenance Sdn. Bhd. | **100%** | 100% | Operations and maintenance of cooling and power plants | Malaysia |
| Airport Cooling Energy Supply Sdn. Bhd. | **77%** | 100% | A special purpose vehicle (SPV) company to undertake the build, operate and transfer (BOT) project with MAHB for the supply of chilled water to the KLIA 2 building (LCCT) and other facility | Malaysia |
| **Subsidiary of Power and Energy International (Mauritius) Ltd.** | | | | |
| Independent Power International Ltd.* | **100%** | 100% | Investment holding | Mauritius |
| **Subsidiary of Bangsar Energy Systems Sdn. Bhd.** | | | | |
| Selesa Energy Systems Sdn. Bhd. | **70%** | 70% | Dormant | Malaysia |

## 14 SUBSIDIARIES (CONTINUED)

| Name of subsidiary | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| **Subsidiary of TNEC Operations and Maintenance Sdn. Bhd.** | | | | |
| Tomest Energy Management Sdn. Bhd. | **51%** | 51% | Dormant | Malaysia |
| **Subsidiary of TNB Power Daharki Ltd.** | | | | |
| TNB Liberty Power Ltd.# | **100%** | 100% | Operation of power plant and generation of electricity | Pakistan |
| **Subsidiary of TNB Properties Sdn. Bhd.** | | | | |
| TNP Construction Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| **Subsidiary of Universiti Tenaga Nasional Sdn. Bhd.** | | | | |
| UNITEN R & D Sdn. Bhd. | **100%** | 100% | Providing research and development in areas related to engineering, information technology, business, accountancy, liberal studies and other services | Malaysia |
| **Subsidiaries of TNB Repair And Maintenance Sdn. Bhd.** | | | | |
| Trichy Power Ltd.** | **100%** | 100% | Dormant | India |
| Trichy Energy Ltd.** | **100%** | 100% | Dormant | India |
| TNB Operations and Maintenance International Ltd. | **100%** | 100% | Investment holding | Mauritius |
| TNB Remaco Pakistan Private Limited# | **100%** | 100% | Providing repair and maintenance services to heavy industries and other related services | Pakistan |

# Notes to the Financial Statements
– 31 August 2012



## 14 SUBSIDIARIES (CONTINUED)

| Name of subsidiary | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| **Subsidiary of TNB Operations and Maintenance International Ltd.** | | | | |
| Oasis Parade Sdn. Bhd. | **100%** | 100% | Investment holding | Malaysia |
| **Subsidiary of TNB Ventures Sdn. Bhd.** | | | | |
| Tenaga Cable Industries Sdn. Bhd. | **76%** | 76% | Manufacturing and distribution of power and general cables, aluminium rods and related activities | Malaysia |
| **Subsidiary of TNB Coal International Ltd.** | | | | |
| Dynamic Acres Sdn. Bhd.* | **100%** | 100% | Dormant | Malaysia |
| **Subsidiary of Orion Mission Sdn. Bhd.** | | | | |
| Lahad Datu Holdings Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |
| Eastern Sabah Power Consortium Sdn. Bhd. | **100%** | 0% | To carry on the business of any matter relating to electricity especially the business of generation and supply of electricity for any purpose in Malaysia and other parts of the world | Malaysia |
| **Subsidiary of Lahad Datu Holdings Sdn. Bhd.** | | | | |
| Lahad Datu Energy Sdn. Bhd. | **100%** | 100% | Dormant | Malaysia |

## 14 SUBSIDIARIES (CONTINUED)

| Name of subsidiary | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| **Subsidiary of TNB Research Sdn. Bhd.** | | | | |
| TNBR QATS Sdn. Bhd. | **100%** | 0% | Provide quality assurance, chemical and scientific testing services | Malaysia |

\# Audited by a member firm of PricewaterhouseCoopers International Limited which is a separate and independent legal entity from PricewaterhouseCoopers Malaysia.

* Not audited by PricewaterhouseCoopers.

** The company is in the process of striking off.

## 15 JOINTLY CONTROLLED ENTITIES

| | Group 2012 RM'million | Group 2011 RM'million |
|---|---|---|
| Share of net assets of jointly controlled entities | **0.4** | 0.6 |

The Group's share of revenue, profit, assets and liabilities of jointly controlled entities are as follows:

| | 2012 | 2011 |
|---|---|---|
| Revenue | **0** | 0.8 |
| (Loss)/Profit after tax | **(0.2)** | 0.6 |
| Non-current assets | **0** | 0 |
| Current assets | **2.1** | 2.7 |
| Current liabilities | **(12.4)** | (12.8) |
| Less: Accumulated impairment loss | **(7.9)** | (7.9) |
| Accumulated losses not recognised | **18.6** | 18.6 |
| | **0.4** | 0.6 |

## 15 JOINTLY CONTROLLED ENTITIES (CONTINUED)

| | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|
| Unquoted ordinary shares, at cost | **7.9** | 7.9 |
| Less: Accumulated impairment losses | **(7.9)** | (7.9) |
| | **0** | 0 |

Details of the jointly controlled entities are as follows:

| Name of jointly controlled entity | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| Seatrac Sdn. Bhd. | **50%** | 50% | Dormant | Malaysia |
| TNB Energy Services Sdn. Bhd. & Eramaz Technology Sdn. Bhd. JV | **51%** | 51% | As the turnkey contractor to undertake the design, building and commissioning of the system for the supply of electricity in Kalabakan, Sabah awarded by Kementerian Kemajuan Luar Bandar dan Wilayah ("KKLW") | Malaysia |

## 16 ASSOCIATES

| | Group 2012 RM'million | Group 2011 RM'million |
|---|---|---|
| Share of net assets of associates | **491.2** | 407.8 |

| | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|
| Unquoted shares, at cost | **67.0** | 67.0 |
| Quoted shares, at cost | **106.5** | 106.5 |
| Less: Accumulated impairment losses | **(9.6)** | (9.6) |
| | **163.9** | 163.9 |
| Redeemable preference shares, at cost | **33.2** | 33.2 |
| Unsecured loan notes, at amortised cost | **15.9** | 21.1 |
| | **213.0** | 218.2 |
| Quoted shares, at fair value | **99.1** | 77.2 |

The Group's share of revenue, profit, assets and liabilities of associates are as follows:

| | Group 2012 RM'million | Group 2011 RM'million |
|---|---|---|
| Revenue | **780.1** | 1,120.4 |
| Profit after taxation | **27.0** | 92.8 |
| Non-current assets | **1,669.7** | 1,595.4 |
| Current assets | **556.8** | 548.9 |
| Current liabilities | **(365.3)** | (356.8) |
| Non-current liabilities | **(1,467.5)** | (1,423.2) |
| Accumulated losses not recognised | **97.5** | 43.5 |
| Net assets | **491.2** | 407.8 |

# Notes to the Financial Statements
– 31 August 2012



## 16 ASSOCIATES (CONTINUED)

Details of the associates are as follows:

| Name of associate | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| Teknologi Tenaga Perlis Consortium Sdn. Bhd. | **20%** | 20% | Design, construction, divesting, operation and maintenance of electricity generating facility | Malaysia |
| Perusahaan Otomobil Elektrik (Malaysia) Sdn. Bhd. | **20%** | 20% | Dormant | Malaysia |
| GB3 Sdn. Bhd. | **20%** | 20% | Design, construction, operation and maintenance of electricity generating facility | Malaysia |
| Fibrecomm Network (M) Sdn. Bhd. | **49%** | 49% | Provision of fibre optic transmission network services | Malaysia |
| Jimah Energy Ventures Holdings Sdn. Bhd. | **20%** | 20% | Generate electric power and investment holdings | Malaysia |
| FTJ Bio Power Sdn. Bhd. | **40%** | 24.5% | Generation and distribution of electricity using palm empty fruit bunch as its main fuel source | Malaysia |
| Intergrax Berhad | **22.1%** | 22.1% | Investment holding and coal handling services | Malaysia |
| **Associates of TNB Properties Sdn. Bhd.** | | | | |
| INDERA-TNB Properties Sdn. Bhd. | **40%** | 40% | Dormant | Malaysia |
| KM Metro-TNB Properties Sdn. Bhd. | **40%** | 40% | Dormant | Malaysia |
| **Associate of TNB Ventures Sdn. Bhd.** | | | | |
| Northern Utility Resources Sdn. Bhd. (Receivers and Managers Appointed) | **20%** | 20% | Dormant | Malaysia |

## 16 ASSOCIATES (CONTINUED)

| Name of associate | Group's interest 2012 | Group's interest 2011 | Principal activities | Country of incorporation |
|---|---|---|---|---|
| **Associate of Independent Power International Ltd.** | | | | |
| Malaysian Shoaiba Consortium Sdn. Bhd. | **20%** | 20% | Investment holding | Malaysia |
| **Associate of Oasis Parade Sdn. Bhd.** | | | | |
| Saudi-Malaysia Operation and Maintenance Services Company Limited | **30%** | 30% | Investment holding | Saudi Arabia |
| **Associate of TNB Energy Services Sdn. Bhd.** | | | | |
| Jana Landfill Sdn. Bhd. | **20%** | 20% | Generation and distribution of heat and electricity using methane gas from landfill sites | Malaysia |
| **Associate of TNB Engineering Corporation Sdn. Bhd.** | | | | |
| Abraj Cooling LLC | **49%** | 49% | Contracting works for the construction of District Cooling Plants | United Arab Emirates |

## 17 INVESTMENT IN UNQUOTED DEBT SECURITIES

| | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|
| Unsecured loan notes | **163.7** | 164.0 | **163.7** | 164.0 |

# Notes to the Financial Statements
– 31 August 2012



## 18 AVAILABLE-FOR-SALE FINANCIAL ASSETS

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Available-for-sale financial assets | **38.0** | 38.0 | **38.0** | 38.0 |

Available-for-sale financial assets comprise unquoted shares and are denominated in Ringgit Malaysia.

## 19 DEFERRED TAXATION

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred taxes relate to the same tax authority. The following amounts, determined after appropriate offsetting, are shown in the statements of financial position:

| | 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
|---|---|---|---|
| **Group** | | | |
| Deferred tax assets | **0** | 30.2 | 55.9 |
| Deferred tax liabilities | **(8,284.6)** | (7,852.2) | (7,815.9) |
| Net total | **(8,284.6)** | (7,822.0) | (7,760.0) |
| **Company** | | | |
| Deferred tax liabilities | **(6,589.3)** | (6,130.5) | (6,204.3) |

Financial Statements

## 19 DEFERRED TAXATION (CONTINUED)

The movements during the financial year relating to deferred tax are as follows:

| Group | 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
|---|---|---|---|
| As at the beginning of the financial year (charged)/credited | **(7,822.0)** | (7,760.0) | (7,075.7) |
| to income statement: | | | |
| – Property, plant and equipment | **(431.9)** | (310.6) | (294.1) |
| – Unutilised tax losses | **(6.3)** | (1.6) | 18.4 |
| – Provision and allowances | **139.5** | 469.8 | 134.8 |
| – Accrued revenue | **(13.2)** | (67.6) | 1.7 |
| – Temporary difference from lease accounting | **(150.7)** | (152.0) | (545.1) |
| | **(462.6)** | (62.0) | (684.3) |
| As at the end of the financial year | **(8,284.6)** | (7,822.0) | (7,760.0) |

Subject to income tax

| | | | |
|---|---|---|---|
| Deferred tax assets (before offsetting): | | | |
| – Provision and allowances | **1,670.6** | 1,531.1 | 1,061.3 |
| – Unutilised tax losses | **24.8** | 31.1 | 32.7 |
| – Property, plant and equipment | **15.1** | 122.1 | 238.6 |
| Offsetting | **(1,710.5)** | (1,654.1) | (1,276.7) |
| Deferred tax assets (after offsetting) | **0** | 30.2 | 55.9 |
| Deferred tax liabilities (before offsetting): | | | |
| – Property, plant and equipment | **(8,632.8)** | (8,307.9) | (8,113.9) |
| – Accrued revenue | **(514.5)** | (501.3) | (433.6) |
| – Temporary difference from lease accounting | **(847.8)** | (697.1) | (545.1) |
| Offsetting | **1,710.5** | 1,654.1 | 1,276.7 |
| Deferred tax liabilities (after offsetting) | **(8,284.6)** | (7,852.2) | (7,815.9) |

# Notes to the Financial Statements
– 31 August 2012

## 19 DEFERRED TAXATION (CONTINUED)

The amount of deductible temporary differences, unused tax losses and reinvestment allowance (which have no expiry date) for which no deferred tax assets is recognised in the statements of financial position are as follows:

| | 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
|---|---|---|---|
| Deductible temporary differences | **1,855.1** | 1,557.6 | 1,432.7 |
| Tax losses | **1,376.1** | 1,312.0 | 1,682.5 |
| Reinvestment allowance | **0** | 35.5 | 28.2 |

The movements during the financial year relating to deferred tax are as follows:

| Company | 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
|---|---|---|---|
| As at the beginning of the financial year (charged)/credited to income statement: | **(6,130.5)** | (6,204.3) | (6,180.4) |
| – Property, plant and equipment | **(444.6)** | 60.7 | (257.2) |
| – Provision and allowances | **106.4** | 134.1 | 133.3 |
| – Accrued revenue | **(13.2)** | (67.7) | 1.7 |
| – Temporary difference from lease accounting | **(107.4)** | (53.3) | 98.3 |
| | **(458.8)** | 73.8 | (23.9) |
| As at the end of the financial year | **(6,589.3)** | (6,130.5) | (6,204.3) |

<u>Subject to income tax</u>

| | 2012 | 2011 | 1.9.2010 |
|---|---|---|---|
| Deferred tax assets (before offsetting): | | | |
| – Provision and allowances | **1,297.9** | 1,191.5 | 1,057.4 |
| Offsetting | **(1,297.9)** | (1,191.5) | (1,057.4) |
| Deferred tax assets (after offsetting) | **0** | 0 | 0 |
| Deferred tax liabilities (before offsetting): | | | |
| – Property, plant and equipment | **(7,310.3)** | (6,865.7) | (6,926.4) |
| – Accrued revenue | **(514.5)** | (501.3) | (433.6) |
| – Temporary difference from lease accounting | **(62.4)** | 45.0 | 98.3 |
| Offsetting | **1,297.9** | 1,191.5 | 1,057.4 |
| Deferred tax liabilities (after offsetting): | **(6,589.3)** | (6,130.5) | (6,204.3) |

## 20 DERIVATIVE FINANCIAL INSTRUMENTS

| Group | Note | Notional amount RM'million | Assets RM'million | Liabilities RM'million |
|---|---|---|---|---|
| **2012** | | | | |
| Non-current | | | | |
| Non-hedge accounting qualified derivative financial instruments: | | | | |
| – Currency options contracts | (a) | **1,033.2** | **116.3** | **0** |
| – Interest rate swap contracts | (b) | **462.3** | **0** | **21.5** |
| Total | | **1,495.5** | **116.3** | **21.5** |
| **2011** | | | | |
| Current | | | | |
| Non-hedge accounting qualified derivative financial instruments: | | | | |
| – Forward foreign currency contracts | | 87.8 | 1.5 | 0 |
| Non-current | | | | |
| Non-hedge accounting qualified derivative financial instruments: | | | | |
| – Currency options contracts | (a) | 1,008.8 | 89.9 | 0 |
| – Interest rate swap contracts | (b) | 616.6 | 0 | 44.1 |
| Total | | 1,713.2 | 91.4 | 44.1 |

## 20 DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

| Company | Note | Notional amount RM'million | Assets RM'million | Liabilities RM'million |
|---|---|---|---|---|
| **2012** | | | | |
| Non-current | | | | |
| Non-hedge accounting qualified derivative financial instruments: | | | | |
| – Interest rate swap contracts | (b) | **462.3** | **0** | **21.5** |
| Total | | **462.3** | **0** | **21.5** |
| **2011** | | | | |
| Current | | | | |
| Non-hedge accounting qualified derivative financial instruments: | | | | |
| – Forward foreign currency contracts | | 87.8 | 1.5 | 0 |
| Non-current | | | | |
| Non-hedge accounting qualified derivative financial instruments: | | | | |
| – Interest rate swap contracts | (b) | 616.6 | 0 | 44.1 |
| Total | | 704.4 | 1.5 | 44.1 |

Details of derivative financial instruments are as follows:

(a) Forward Start JPY call spread

In April 2004, TNB Capital (L) Limited (TNBCL) entered into Currency Option Agreements with a notional amount of JPY26.0 billion as a hedge on its 30-year JPY26.0 billion term loan. This transaction enables TNBCL to reduce its exposure to losses that may arise from adverse fluctuation on USD/JPY exchange rates in relation to the above term loan.

(b) Interest Rate Swap ('IRS')

The Company entered into IRS agreements on 10 October 2008 with effective period from 15 October 2008 to 28 February 2015 that entitle it to receive interest at floating rates, and oblige it to pay interest at fixed rate of 3.8% on aggregate notional principal of USD384.6 million.

The effect of this transaction is to effectively fix the interest rate payable on the 9-year USD503.0 million term loan (ECA Loan).

## 21 LONG TERM RECEIVABLES

| | Note | 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| Other debtors | (a) | **317.7** | 388.6 | 448.7 |
| Advance to contractors | (b) | **101.5** | 0 | 0 |
| | | **419.2** | 388.6 | 448.7 |
| **Company** | | | | |
| Other debtors | (a) | **317.7** | 388.6 | 448.7 |
| Amounts due from subsidiaries | (c) | **331.4** | 164.2 | 167.5 |
| Redeemable unsecured loan stocks ('RULS') | (d) | **535.5** | 535.5 | 535.5 |
| | | **1,184.6** | 1,088.3 | 1,151.7 |

(a) Other debtors comprise advances given to Yayasan Tenaga Nasional and staff loans which are not expected to be received within 12 months from the statement of financial position date.

(b) Advance to contractors primarily relates to construction of plant which will be utilised against milestone payment invoices, which is more than 12 months.

(c) The amounts due from subsidiaries comprise advances and other receivables mainly from TNB Power Daharki Ltd. ('TPD') and Kapar Energy Ventures Sdn. Bhd. ('KEV'). The amount due from TPD is subject to interest at rates ranging from 2.3% to 3.8% (2011: 1.9% to 3.4%) per annum and is unsecured. Amount due from Sabah Electricity Sdn. Bhd. ('SESB') and TNB Coal International Ltd. are subject to an interest rate of 6.0% (2011: 6.0%) and 7.0% (2011: 7.0%) per annum respectively, are unsecured and have no fixed term of repayment.

(d) Redeemable unsecured loan stocks bear interest at 15.0% (2011: 15.0%) per annum on the outstanding nominal value of the principal and a compounding interest will be charged at 5.0% (2011: 5.0%) per annum on the unpaid interest after the due date. Refer to Note 32(e) for the terms of RULS.

## 22 OPERATING LEASE PAYMENTS

(a) Prepaid leases

| | Group 2012 RM'million | Group 2011 (Restated) RM'million | Group 1.9.2010 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million | Company 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|---|---|
| Prepaid leases | **3,789.3** | 3,161.0 | 2,606.1 | **3,539.1** | 2,930.3 | 2,380.0 |

Payments made in advance to Independent Power Producers (IPPs) are primarily to reserve generating capacity for the future goods and services. These amounts will be used as partial settlement towards the future amounts payable to the IPPs. There is no contractual right to receive a refund in cash or another financial instrument from the IPPs.

(b) Lease payable and prepayment by lessee

| | Group 2012 RM'million | Group 2011 (Restated) RM'million | Group 1.9.2010 (Restated) RM'million | Company 2012 RM'million | Company 2011 (Restated) RM'million | Company 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|---|---|
| Lease payable | **147.9** | 141.7 | 199.2 | **147.9** | 141.7 | 199.2 |
| Prepayment by lessee | **357.7** | 327.8 | 362.1 | **0** | 0 | 0 |
| | **505.6** | 469.5 | 561.3 | **147.9** | 141.7 | 199.2 |

These amounts are disclosed in Note 36.

## 23 NON-CURRENT ASSETS HELD-FOR-SALE

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Cost/Valuation | | | | |
| As at 1 September | **12.3** | 19.9 | **12.3** | 19.9 |
| Amount transferred from: | | | | |
| – Property, plant and equipment (Note 13) | **15.6** | 18.6 | **15.6** | 18.6 |
| Amount transferred to: | | | | |
| – Property, plant and equipment (Note 13) | **0** | (1.2) | **0** | (1.2) |
| Disposals | **(17.8)** | (25.0) | **(17.8)** | (25.0) |
| As at 31 August | **10.1** | 12.3 | **10.1** | 12.3 |
| Accumulated depreciation/Amortisation | | | | |
| As at 1 September | **0.9** | 1.9 | **0.9** | 1.9 |
| Amount transferred from: | | | | |
| – Property, plant and equipment (Note 13) | **0.7** | 0.5 | **0.7** | 0.5 |
| Amount transferred to: | | | | |
| – Property, plant and equipment (Note 13) | **0** | (0.2) | **0** | (0.2) |
| Disposals | **(1.3)** | (1.3) | **(1.3)** | (1.3) |
| As at 31 August | **0.3** | 0.9 | **0.3** | 0.9 |
| Net book amount | | | | |
| Property, plant and equipment | **9.8** | 11.4 | **9.8** | 11.4 |
| As at 31 August | **9.8** | 11.4 | **9.8** | 11.4 |

During the financial year, the Company entered into several sale and purchase agreements with various parties, for which the disposals are still in progress.

# Notes to the Financial Statements
– 31 August 2012



## 24 INVENTORIES

| | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|
| Raw materials, fuel and consumables | **2,766.1** | 2,462.3 | **1,529.6** | 1,356.7 |
| Work-in-progress | **37.6** | 169.8 | **0** | 0 |
| Finished goods | **38.5** | 13.8 | **0** | 0 |
| | **2,842.2** | 2,645.9 | **1,529.6** | 1,356.7 |

## 25 RECEIVABLES, DEPOSITS AND PREPAYMENTS

| | Note | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|---|
| Trade receivables | | **6,417.0** | 5,426.7 | **5,231.1** | 4,088.1 |
| Staff advances/loans | | **70.2** | 62.0 | **66.2** | 56.0 |
| Partial payment to contractors | | **353.2** | 527.0 | **90.7** | 50.7 |
| Deposits and prepayments | | **133.2** | 114.0 | **26.8** | 26.1 |
| Other receivables | | **630.5** | 554.1 | **63.3** | 70.6 |
| Rechargeable debtors | | **83.9** | 55.8 | **83.9** | 45.7 |
| | | **7,688.0** | 6,739.6 | **5,562.0** | 4,337.2 |
| Allowance for impairment: | | | | | |
| Trade receivables | 46 (c)(i) | **(573.1)** | (607.7) | **(490.2)** | (530.3) |
| Others | 46 (c)(i) | **(126.2)** | (109.8) | **(108.5)** | (82.0) |
| | | **(699.3)** | (717.5) | **(598.7)** | (612.3) |
| | | **6,988.7** | 6,022.1 | **4,963.3** | 3,724.9 |

The Group's and Company's credit policy provides trade receivables with a 30 days (2011: 30 days) credit period. The Group has no major significant concentration of credit risk other than business and residential trade receivables due to its diverse customer base. All credit and recovery risks associated with receivables have been provided for in the financial statements.

Credit risks relating to Receivables, Deposits and Prepayments is disclosed in Note 46 (c)(i) to the financial statements.

## 26 AMOUNTS DUE FROM/(TO) SUBSIDIARIES

Amount due to TNB Capital (L) Ltd. is subject to interest rates ranging from 0.7% to 5.3% (2011: 0.5% to 5.3%) per annum, is unsecured and has no fixed term of repayment.

Amount due from/(to) all other subsidiaries are unsecured, interest free and repayable on demand.

## 27 FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Financial assets at fair value through profit or loss | **9.1** | 8.6 | **9.1** | 8.6 |

Financial assets represent investments in a unit trust.

## 28 DEPOSITS, BANK AND CASH BALANCES

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Cash in hand and at bank | **856.1** | 1,005.0 | **466.2** | 500.9 |
| Deposits with licensed banks | **7,770.2** | 2,949.2 | **3,495.0** | 2,203.0 |
| | **8,626.3** | 3,954.2 | **3,961.2** | 2,703.9 |

The interest rate per annum of deposits, bank and cash balances that were effective as at the end of the reporting date were as follows:

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 % | 2011 % | 2012 % | 2011 % |
| Deposits with licensed banks | **0.1 – 5.0** | 1.5 – 7.5 | **3.2 – 3.4** | 2.9 – 3.6 |
| Bank balances | **0.1** | 0.1 | **0.1** | 0.1 |

Deposits with licensed banks are held in the short-term money market. Deposits have maturity periods ranging from 5 to 366 days (2011: 4 to 29 days) for the Group and 9 to 70 days (2011: 4 to 25 days) for the Company.

# Notes to the Financial Statements
– 31 August 2012



## 28 DEPOSITS, BANK AND CASH BALANCES (CONTINUED)

Deposits of the Group and Company at the end of the financial year have an average maturity period of 113 days (2011: 16 days).

| | | Group | | Company | |
|---|---|---|---|---|---|
| | | 2012 | 2011 | 2012 | 2011 |
| | Note | RM'million | RM'million | RM'million | RM'million |
| Cash and cash equivalents at the end of the financial year comprise: | | | | | |
| Cash in hand and at bank | | **856.1** | 1,005.0 | **466.2** | 500.9 |
| Deposits with licensed banks | | **7,770.2** | 2,949.2 | **3,495.0** | 2,203.0 |
| Deposit, bank and cash balances | | **8,626.3** | 3,954.2 | **3,961.2** | 2,703.9 |
| Cash at bank held in trust* | | **(97.9)** | (465.7) | **0** | 0 |
| Debt reserve account** | 32 (b)(i) | **(218.6)** | (225.2) | **0** | 0 |
| Funds from MOF*** | | **(2.5)** | (5.2) | **0** | 0 |
| | | **8,307.3** | 3,258.1 | **3,961.2** | 2,703.9 |

* The cash at bank held in trust is in respect of a grant and deposit given to subsidiaries by the Government of Malaysia for designated capital projects

** Debt reserve account relates to deposits placed with licensed financial institution as part of security obligations for bond financing

*** Ministry of Finance (MOF) fund given to a subsidiary under a stimulus package for training programmes

## 29 PAYABLES

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 | 2012 | 2011 |
| | RM'million | RM'million | RM'million | RM'million |
| Trade payables | **4,629.4** | 4,116.3 | **2,710.2** | 2,906.9 |
| Payroll liabilities | **491.4** | 473.1 | **444.3** | 437.3 |
| Deposits | **24.7** | 23.7 | **19.3** | 17.9 |
| Provisions | **278.6** | 388.6 | **209.1** | 58.2 |
| Other payables and accruals | **322.5** | 569.7 | **102.7** | 129.5 |
| | **5,746.6** | 5,571.4 | **3,485.6** | 3,549.8 |

Credit terms of trade payables of the Group and Company vary from 30 to 60 days (2011: 30 to 60 days) depending on the terms of the contracts.

## 30 DEFERRED INCOME

| Group | 2012 RM'million | 2011 RM'million |
|---|---|---|
| As at the beginning of the financial year | **3,373.5** | 3,042.2 |
| Received during the financial year | **777.4** | 949.3 |
| Released to income statement | **(928.2)** | (652.8) |
| Reclassified (to)/from other liabilities | **(36.8)** | 34.8 |
| As at the end of the financial year | **3,185.9** | 3,373.5 |
| Realised within 12 months | **894.7** | 523.9 |
| Realised after 12 months | **2,291.2** | 2,849.6 |
| | **3,185.9** | 3,373.5 |

| Company | 2012 RM'million | 2011 RM'million |
|---|---|---|
| As at the beginning of the financial year | **2,942.2** | 2,676.4 |
| Received during the financial year | **655.6** | 861.0 |
| Released to income statement | **(811.4)** | (595.2) |
| As at the end of the financial year | **2,786.4** | 2,942.2 |
| Realised within 12 months | **770.0** | 487.4 |
| Realised after 12 months | **2,016.4** | 2,454.8 |
| | **2,786.4** | 2,942.2 |

Deferred income relates to contributions paid in advance by electricity customers for the construction of electricity network assets.

# Notes to the Financial Statements
– 31 August 2012



## 31 SHORT TERM BORROWINGS

| | Note | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|---|
| Portion of borrowings due within one financial year (Note 32): | | | | | |
| – Secured | | **324.8** | 294.5 | **0** | 0 |
| – Unsecured | | **989.0** | 1,164.0 | **759.3** | 954.5 |
| | | **1,313.8** | 1,458.5 | **759.3** | 954.5 |
| Short term loans | | | | | |
| – Secured | 32 (b)(i) | **223.1** | 225.8 | **0** | 0 |
| – Unsecured | | **0.6** | 0.4 | **0** | 0 |
| Bankers' acceptances | | **66.7** | 42.6 | **0** | 0 |
| | | **1,604.2** | 1,727.3 | **759.3** | 954.5 |

The short term borrowings carry interest at rates ranging from 0.8% to 14.0% (2011: 0.8% to 15.5%) per annum for the Group and from 0.8% to 8.3% (2011: 0.8% to 6.3%) for the Company.

## 32 BORROWINGS

| | Note | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|---|
| Secured: | | | | | |
| – Term loans | (a) | **1,490.1** | 1,312.5 | **0** | 0 |
| – Bonds | (b) | **5,562.8** | 1,940.3 | **0** | 0 |
| | | **7,052.9** | 3,252.8 | **0** | 0 |
| Unsecured: | | | | | |
| – Term loans | | **9,525.9** | 9,903.8 | **8,007.1** | 8,147.4 |
| – Bonds | | **5,597.7** | 4,479.6 | **3,487.8** | 3,425.3 |
| – Income securities | (c) | **0** | 514.4 | **0** | 514.4 |
| – Amount due to Cagamas Berhad | (d) | **0** | 87.1 | **0** | 87.1 |
| – Redeemable unsecured loan stocks | (e) | **604.9** | 547.6 | **0** | 0 |
| | | **15,728.5** | 15,532.5 | **11,494.9** | 12,174.2 |
| | | **22,781.4** | 18,785.3 | **11,494.9** | 12,174.2 |

## 32 BORROWINGS (CONTINUED)

| | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|
| Payable within one year included under short-term borrowings (Note 31) | **1,313.8** | 1,458.5 | **759.3** | 954.5 |
| Repayable after one year: | | | | |
| After one and up to two years | **1,015.0** | 1,075.9 | **493.2** | 637.4 |
| After two and up to five years | **3,774.3** | 3,840.4 | **1,229.5** | 1,462.2 |
| After five and up to ten years | **9,006.3** | 3,713.9 | **4,816.7** | 2,213.2 |
| After ten and up to twenty years | **6,237.3** | 7,150.3 | **3,010.3** | 5,630.6 |
| After twenty and up to thirty years | **1,201.9** | 1,324.6 | **953.1** | 1,054.6 |
| After thirty years | **232.8** | 221.7 | **232.8** | 221.7 |
| | **21,467.6** | 17,326.8 | **10,735.6** | 11,219.7 |
| | **22,781.4** | 18,785.3 | **11,494.9** | 12,174.2 |

| | Group 2012 RM'million | Group 2011 RM'million |
|---|---|---|
| Net book values of property, plant and equipment pledged as security for borrowings: | | |
| (i) Machinery and equipment | **4,769.8** | 4,730.5 |
| (ii) Building | **657.0** | 695.3 |
| (iii) Leasehold land | **63.7** | 64.6 |
| | **5,490.5** | 5,490.4 |

(a) Term loans

The Federal Government loans obtained by SESB are secured by the following:

(i) A debenture creating:

(i) a first fixed charge over all present and future freehold and leasehold properties including all buildings and fixtures; and

(ii) a first floating charge over all present and future assets of the Company not effectively charged by way of the fixed charge.

(ii) A deed of assignment transferring all the Company's present and future rights and interest in all sales proceeds or revenue derived from the sale of electricity generated from the projects funded.

(iii) A deed of assignment transferring all the Company's present and future rights and interests in the bank account in which the loan proceeds are credited.

The tenure of the loans ranges from 20 to 25 years with a profit rate of between 3.0% to 6.0% per annum.

## 32 BORROWINGS (CONTINUED)

(b) Bonds

(i) ISLAMIC DEBT SECURITIES – BAI BITHAMIN AJIL ('BaIDS')

On 28 June 2004, KEV obtained RM3,402.0 million BaIDS to finance the acquisition of Stesen Janaelektrik Sultan Salahuddin Abdul Aziz. The tenure of the BaIDS Facility ranges from 1 to 15 years with a profit rate of between 3.7% and 8.7% per annum.

The BaIDS are secured by the following:

(i) charge over TNB's leased land. The charge of the leased land was not effected as at 31 August 2012.

(ii) debenture over KEV's assets and properties and assignment of all rights, title interest and benefits under the project documents, the assigned insurances, and the designated accounts to secure the payment and repayment of the total secured amounts.

(iii) the Priority and Security Sharing Agreement.

The terms of BaIDS require deposits to be placed in the debt reserve account with a licensed bank to meet the debt servicing requirements. The terms of BaIDS also require KEV to maintain certain financial covenants.

The BaIDS is inclusive of a revolving credit facility for working capital purposes amounting to RM200.0 million which has been classified as short term. (Refer Note 31)

(ii) ISLAMIC SECURITIES PROGRAMME

On 25 November 2011, TNB Janamanjung Sdn. Bhd. obtained RM4.85 billion Islamic Securities Programme to finance the construction of 1,010 MW coal fired power plant. The tenure of the Islamic Securities Programme ranges from 5 to 20 years with a profit rate between 3.80% and 4.90% per annum.

The Islamic Securities Programme consists of 2 series and the details of the series are as follows:

(i) Series 1 consists of 15 tranches, with tenures ranging from 5 years to 19 years

(ii) Series 2 consists of 1 tranche, with tenure of 20 years.

The Islamic Securities Programme Series 1 is secured by the following:

(i) a first ranking assignment of all the Company's rights, interest, titles and benefits under PPA1 (Manjung 1, 2 & 3) and PPA2 (Manjung 4) inclusive of the proceeds therefrom; and

(ii) a first ranking assignment of all designated accounts and the related credit balances.

The Islamic Securities Programme Series 2 is unsecured and have the benefit of unconditional and irrevocable guarantee from Tenaga Nasional Berhad, to meet the payment obligations of the Company.

The Islamic Securities Programme are issued by Manjung Island Energy Berhad (MIEB) which is a special purpose vehicle company. All of the issued shares of MIEB are held by Equity Trust (Malaysia) Berhad as share trustee for the benefit of certain specified charities, under the terms of a declaration of trust.

## 32 BORROWINGS (CONTINUED)

(c) Income securities

Fixed Income Securities ('FIS')

The FIS consists of both redeemable bonds and Redeemable Preference Shares ('RPS'), details of which are as follows:

(i) 1,500 interest bearing 10-year redeemable unsecured bonds ("Bonds") of an aggregated nominal value of RM999.0 million issued at 100.0% of nominal value (in denominations of RM999,000.00 each), with detachable coupons representing interest on the Bonds. The Bonds are to be redeemed at par in two tranches with redemption amounts of RM999.0 million and RM499.5 million on 16 August 2011 and 19 September 2011 respectively; and

(ii) 1,000 Class A RPS of RM1.00 each, issued at a premium of RM999.00 per share and 500 Class B RPS of RM1.00 each, issued at a premium of RM999.00 per share. Both classes of RPS are redeemable at RM1,000 each at the Company's option at any time on or after 16 August 2010 and 19 September 2010, for Class A and B RPS respectively. If the Class A and B RPS are not redeemed by 16 August 2011 and 19 September 2011 respectively, an additional sum of RM1.0 million on the first tranche and RM0.5 million on the second tranche shall become due and payable under the final Bond Coupon payment for each of the tranches.

With the adoption of the Single-tier Tax System, the Company is now making coupon payments on the FIS instead of dividend. The interest payable under the Bond Coupon is RM94.5 million per annum payable semi-annually.

The FIS are classified as debt instruments and hence are reported as liabilities. The FIS (Tranche 2) amounting to RM500.0 million has since matured on 19 September 2011.

(d) Amount due to Cagamas Berhad

On 16 January 1995, TNB had entered into an Agreement with Cagamas Berhad whereby TNB can sell on a recourse basis its housing loans provided by the Company to its employees to Cagamas Berhad. It has been repurchased on 22 March 2012 (2011: RM87.1 million).

(e) Redeemable unsecured loan stocks ('RULS')

On 29 June 2004, KEV issued RM957,574,000.00 of Redeemable Unsecured Loan Stocks (RULS) to the Company and Malakoff Berhad to finance the acquisition of Stesen Janaelektrik Sultan Salahuddin Abdul Aziz, Kapar. The portion subscribed by Malakoff Bhd amounts to RM383,029,600.00.

The main features of the RULS are as follows:

(i) The RULS bear interest at 15.0% (2011: 15.0%) per annum on the outstanding nominal value of the RULS. The interest is repayable semi-annually on the last day of the relevant six month period from the issue date of RULS. A compounding interest will be charged at 5.0% (2011: 5.0%) per annum on the unpaid interest after the due date. The change in the compounding interest rate from 15.0% to 5.0% has been approved by the RULS holders at its meeting on 15 October 2008 and is effective from the first issuance date of the RULS.

(ii) The RULS are repayable from the third year from the issue date of RULS as stipulated in the agreement dated 29 June 2004. The RULS has to be settled in full by the final maturity date of 8 July 2029.

Financial Statements

## 33 HIRE PURCHASE CREDITORS AND FINANCE LEASE OBLIGATION

| | Note | 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| Finance lease liabilities | (a) | **1,350.8** | 1,328.6 | 0 |
| Hire purchase creditors | (b) | **43.1** | 54.8 | 66.1 |
| | | **1,393.9** | 1,383.4 | 66.1 |
| **Company** | | | | |
| Finance lease liabilities | (a) | **12,565.5** | 12,950.3 | 13,113.3 |

(a) The Group's and the Company's obligations under finance lease liabilities arise predominantly from the power purchase agreements with several Independent Power Producers (IPPs). These power purchase agreements are accounted for as finance leases in accordance with IC 4 and FRS 117.

| | Group | | Company | | |
|---|---|---|---|---|---|
| | 2012 RM'million | 2011 (Restated) RM'million | 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
| Present value of minimum lease payments | **1,312.8** | 1,312.8 | **13,653.1** | 13,653.1 | 13,653.1 |
| Amount payable under finance lease: | | | | | |
| Within one year | **39.6** | 34.9 | **671.6** | 384.8 | 163.0 |
| After one year but within two years | **42.8** | 39.3 | **715.1** | 671.6 | 384.8 |
| After two years but within five years | **154.2** | 140.9 | **2,324.9** | 2,204.4 | 2,102.7 |
| Over five years | **1,114.2** | 1,113.5 | **8,853.9** | 9,689.5 | 10,462.8 |
| | **1,350.8** | 1,328.6 | **12,565.5** | 12,950.3 | 13,113.3 |
| Analysed as: | | | | | |
| Current: | | | | | |
| Amount due for settlement within 12 months | **39.6** | 34.9 | **671.6** | 384.8 | 163.0 |
| Non-current: | | | | | |
| Amount due for settlement after 12 months | **1,311.2** | 1,293.7 | **11,893.9** | 12,565.5 | 12,950.3 |
| | **1,350.8** | 1,328.6 | **12,565.5** | 12,950.3 | 13,113.3 |
| Average effective interest rate (%) | **8.8%** | 9.2% | **8.0%** | 8.3% | 8.8% |

The finance charges associated with the finance leases were charged to the income statement in the financial year in which they were actually incurred.

## 33 HIRE PURCHASE CREDITORS AND FINANCE LEASE OBLIGATION (CONTINUED)

(b) This represents future instalments under hire purchase of motor vehicles, repayable as follows:

| | Group | |
|---|---|---|
| | 2012 RM'million | 2011 RM'million |
| Minimum lease payments: | | |
| – Not later than 1 year | **17.5** | 16.9 |
| – Later than 1 year and not later than 5 years | **29.0** | 43.7 |
| | **46.5** | 60.6 |
| Future finance charges on hire purchase | **(3.4)** | (5.8) |
| Present value of hire purchase | **43.1** | 54.8 |
| Present value of hire purchase: | | |
| – Not later than 1 year | **15.5** | 14.2 |
| – Later than 1 year and not later than 5 years | **27.6** | 40.6 |
| | **43.1** | 54.8 |

Finance lease liabilities are effectively secured as the rights to the leased assets revert to the lessors in the event of default.

As at 31 August 2012, the weighted average effective interest rate applicable to the lease liabilities as at the financial year end is 5.5% (2011: 5.6%) per annum and interest for the financial year is at 3.0% (2011: 3.0%) per annum for the Group. The entire balance is denominated in Ringgit Malaysia.

## 34 CONSUMER DEPOSITS

Consumers (with the exception of employees and government departments/agencies) are required to deposit a sum sufficient to cover charges for two months supply of energy as allowed under the regulation of the Licensee Supply (Amendment) Regulations 2002. In default of payment of the deposit within the time specified, the supply to the consumer's installation may be disconnected, subject to certain conditions laid out in the Regulations.

TNB and SESB pay 2.5% per annum on the amount of cash deposit as rebate in January every year.

## 35 EMPLOYEE BENEFITS

The movements during the financial year in the amounts recognised in the financial statements are as follows:

| | Retirement benefit plan RM'million | Retirement medical plan RM'million | Total RM'million |
|---|---|---|---|
| **Group** | | | |
| At 1 September 2010 | 1,404.4 | 2,461.9 | 3,866.3 |
| Charged to income statement (Note 6) | 308.7 | 550.9 | 859.6 |
| Contribution and benefits paid | (254.4) | (251.0) | (505.4) |
| At 31 August 2011 | 1,458.7 | 2,761.8 | 4,220.5 |
| Charged to income statement (Note 6) | 299.7 | 577.8 | 877.5 |
| Contribution and benefits paid | (344.2) | (264.1) | (608.3) |
| At 31 August 2012 | 1,414.2 | 3,075.5 | 4,489.7 |

The amounts recognised in the consolidated statement of financial position are analysed as follows:

| | Retirement benefit plan RM'million | Retirement medical plan RM'million | Total RM'million |
|---|---|---|---|
| At 31 August 2011 | | | |
| Present value of obligations | 2,851.7 | 4,225.4 | 7,077.1 |
| Fair value of plan assets | (924.8) | 0 | (924.8) |
| Present value of unfunded obligations | 1,926.9 | 4,225.4 | 6,152.3 |
| Unrecognised actuarial losses | (462.5) | (1,463.6) | (1,926.1) |
| Unrecognised past service cost | (15.1) | 0 | (15.1) |
| Others: | | | |
| – Retirement benefits plan | 3.0 | 0 | 3.0 |
| – Gratuity and retirement benefit | 6.4 | 0 | 6.4 |
| Liability in the statement of financial position | 1,458.7 | 2,761.8 | 4,220.5 |

# Notes to the Financial Statements
– 31 August 2012



## 35 EMPLOYEE BENEFITS (CONTINUED)

The amounts recognised in the consolidated statement of financial position are analysed as follows: (continued)

| | Retirement benefit plan RM'million | Retirement medical plan RM'million | Total RM'million |
|---|---|---|---|
| At 31 August 2012 | | | |
| Present value of obligations | **2,911.7** | **4,379.6** | **7,291.3** |
| Fair value of plan assets | **(1,146.0)** | **0** | **(1,146.0)** |
| Present value of unfunded obligations | **1,765.7** | **4,379.6** | **6,145.3** |
| Unrecognised actuarial losses | **(362.2)** | **(1,304.1)** | **(1,666.3)** |
| Unrecognised past service cost | **0** | **0** | **0** |
| Others: | | | |
| – Retirement benefits plan | **3.1** | **0** | **3.1** |
| – Gratuity and retirement benefit | **7.6** | **0** | **7.6** |
| Liability in the statements of financial position | **1,414.2** | **3,075.5** | **4,489.7** |

The expense recognised in the consolidated statement of comprehensive income is analysed as follows:

| Group | Retirement benefit plan RM'million | Retirement medical plan RM'million | Total RM'million |
|---|---|---|---|
| **2011** | | | |
| Current service cost | 150.4 | 29.7 | 180.1 |
| Interest cost | 171.8 | 274.6 | 446.4 |
| Expected return on plan assets | (50.8) | 0 | (50.8) |
| Actuarial losses recognised | 20.7 | 246.6 | 267.3 |
| Past service cost | 15.1 | 0 | 15.1 |
| Others | 1.5 | 0 | 1.5 |
| Total included in staff costs (Note 6) | 308.7 | 550.9 | 859.6 |
| Actual return on plan assets | 60.3 | 0 | 60.3 |

# Notes to the Financial Statements
– 31 August 2012



## 35 EMPLOYEE BENEFITS (CONTINUED)

The expense recognised in the consolidated statement of comprehensive income is analysed as follows: (continued)

| Group | Retirement benefit plan RM'million | Retirement medical plan RM'million | Total RM'million |
|---|---|---|---|
| **2012** | | | |
| Current service cost | **140.1** | **30.2** | **170.3** |
| Interest cost | **177.7** | **283.5** | **461.2** |
| Expected return on plan assets | **(57.1)** | **0** | **(57.1)** |
| Actuarial losses recognised | **19.1** | **264.1** | **283.2** |
| Past service cost | **15.1** | **0** | **15.1** |
| Others | **4.8** | **0** | **4.8** |
| Total included in staff costs (Note 6) | **299.7** | **577.8** | **877.5** |
| Actual return on plan assets | **176.9** | **0** | **176.9** |

The charge to the income statement is included in operating expenses.

The principal actuarial assumptions used in respect of the Group's defined benefit plans were as follows:

| Group | Retirement benefit plan % | Retirement medical plan % |
|---|---|---|
| At 31 August 2011 | | |
| Discount rates | 6.6 | 7.1 |
| Expected return on plan assets | 6.0 | N/A |
| Expected rate of salary increases | 6.0 | N/A |
| Medical cost inflation: | | |
| – inpatient | N/A | 8.0 |
| – outpatient | N/A | 5.0 |
| Others: | | |
| – specialist | N/A | 5.0 |
| At 31 August 2012 | | |
| Discount rates | **6.6** | **7.1** |
| Expected return on plan assets | **6.0** | **N/A** |
| Expected rate of salary increases | **6.0** | **N/A** |
| Medical cost inflation: | | |
| – inpatient | **N/A** | **8.0** |
| – outpatient | **N/A** | **5.0** |
| Others: | | |
| – specialist | **N/A** | **5.0** |

## 35 EMPLOYEE BENEFITS (CONTINUED)

The movements during the financial year in the amounts recognised in the Company's financial statements are as follows:

| Company | Retirement benefit plan RM'million | Retirement medical plan RM'million | Total RM'million |
|---|---|---|---|
| At 1 September 2010 | 1,391.5 | 2,313.3 | 3,704.8 |
| Charged to income statements (Note 6) | 297.2 | 521.2 | 818.4 |
| Contributions and benefits paid | (251.9) | (227.6) | (479.5) |
| At 31 August 2011 | 1,436.8 | 2,606.9 | 4,043.7 |
| Charged to income statements (Note 6) | 292.7 | 547.6 | 840.3 |
| Contributions and benefits paid | (337.0) | (261.0) | (598.0) |
| At 31 August 2012 | 1,392.5 | 2,893.5 | 4,286.0 |

The amounts recognised in the Company's statement of financial position are analysed as follows:

| | Retirement benefit plan RM'million | Retirement medical plan RM'million | Total RM'million |
|---|---|---|---|
| At 31 August 2011 | | | |
| Present value of obligations | 2,838.3 | 4,070.5 | 6,908.8 |
| Fair value of plan assets | (924.1) | 0 | (924.1) |
| Present value of unfunded obligations | 1,914.2 | 4,070.5 | 5,984.7 |
| Unrecognised actuarial losses | (462.3) | (1,463.6) | (1,925.9) |
| Unrecognised past service cost | (15.1) | 0 | (15.1) |
| Liabilities in the statement of financial position | 1,436.8 | 2,606.9 | 4,043.7 |
| At 31 August 2012 | | | |
| Present value of obligations | **2,900.8** | **4,197.5** | **7,098.3** |
| Fair value of plan assets | **(1,146.0)** | **0** | **(1,146.0)** |
| Present value of unfunded obligations | **1,754.8** | **4,197.5** | **5,952.3** |
| Unrecognised actuarial losses | **(362.3)** | **(1,304.0)** | **(1,666.3)** |
| Unrecognised past service cost | **0** | **0** | **0** |
| Liabilities in the statement of financial position | **1,392.5** | **2,893.5** | **4,286.0** |

## 35 EMPLOYEE BENEFITS (CONTINUED)

The expense recognised in the Company's statement of comprehensive income is analysed as follows:

| Company | Retirement benefit plan RM'million | Retirement medical plan RM'million | Total RM'million |
|---|---|---|---|
| **2011** | | | |
| Current service cost | 140.4 | 0 | 140.4 |
| Interest cost | 171.7 | 274.6 | 446.3 |
| Expected return on plan assets | (50.7) | 0 | (50.7) |
| Actuarial losses recognised | 20.7 | 246.6 | 267.3 |
| Past service cost | 15.1 | 0 | 15.1 |
| Total included in staff costs (Note 6) | 297.2 | 521.2 | 818.4 |
| Actual return on plan assets | 60.3 | 0 | 60.3 |
| **2012** | | | |
| Current service cost | **136.9** | **0** | **136.9** |
| Interest cost | **177.7** | **283.5** | **461.2** |
| Expected return on plan assets | **(57.2)** | **0** | **(57.2)** |
| Actuarial losses recognised | **19.8** | **264.1** | **283.9** |
| Past service cost | **15.5** | **0** | **15.5** |
| Total included in staff costs (Note 6) | **292.7** | **547.6** | **840.3** |
| Actual return on plan assets | **176.9** | **0** | **176.9** |

The charge to the income statements is included in operating expenses.

## 35 EMPLOYEE BENEFITS (CONTINUED)

The principal actuarial assumptions used in respect of the Company's defined benefit plans were as follows:

| **Company** | **Retirement benefit plan %** | **Retirement medical plan %** |
|---|---|---|
| At 31 August 2011 | | |
| Discount rates | 6.6 | 7.1 |
| Expected return on plan assets | 6.0 | N/A |
| Expected rate of salary increases | 6.0 | N/A |
| Medical cost inflation: | | |
| – inpatient | N/A | 8.0 |
| – outpatient | N/A | 5.0 |
| Others: | | |
| – specialist | N/A | 5.0 |
| At 31 August 2012 | | |
| Discount rates | **6.6** | **7.1** |
| Expected return on plan assets | **6.0** | **N/A** |
| Expected rate of salary increases | **6.0** | **N/A** |
| Medical cost inflation: | | |
| – inpatient | **N/A** | **8.0** |
| – outpatient | **N/A** | **5.0** |
| Others: | | |
| – specialist | **N/A** | **5.0** |

The effect of a 1% movement in the assumed medical cost trend rate is as follows:

| | **Group** | | **Company** | |
|---|---|---|---|---|
| | **Increase RM'million** | **Decrease RM'million** | **Increase RM'million** | **Decrease RM'million** |
| Effect on the aggregate of the current service cost and interest cost | 51.8 | (42.0) | 48.9 | (39.8) |
| Effect on the defined benefit obligation | 763.0 | (621.0) | 735.6 | (599.0) |

Plan assets comprise:

| | **Group and Company** | |
|---|---|---|
| | **2012 %** | **2011 %** |
| Equity instruments | **22.9** | 24.4 |
| Debt instruments | **72.7** | 72.7 |
| Others | **4.4** | 2.9 |
| | **100.0** | 100.0 |

# Notes to the Financial Statements
– 31 August 2012



## 35 EMPLOYEE BENEFITS (CONTINUED)

Pension plan assets include the Company's ordinary shares with a fair value of RM5.5 million (2011: RM3.1 million).

The expected return on plan assets is determined by considering the expected returns available on the assets underlying the current investment policy. Expected yields on fixed interest investments are based on gross redemption yields as at the end of the reporting period. Expected returns on equity and property investments reflect long term real rates of return experienced in the respective markets.

Expected contributions to post-employment benefit plans for the financial year ending 31 August 2013 are RM49.2 million.

| | 2012 RM'million | 2011 RM'million | 2010 RM'million | 2009 RM'million | 2008 RM'million |
|---|---|---|---|---|---|
| **Group** | | | | | |
| At 31 August | | | | | |
| Present value of defined benefit obligation | **7,287.0** | 7,072.3 | 6,809.5 | 6,521.5 | 5,412.7 |
| Fair value of plan assets | **(1,146.0)** | (996.8) | (852.1) | (717.1) | (615.1) |
| Deficit in the plan | **6,141.0** | 6,075.5 | 5,957.4 | 5,804.4 | 4,797.6 |
| Experience adjustments on plan liabilities | **(144.4)** | (97.7) | (86.2) | (894.7) | (15.3) |
| Experience adjustments on plan assets | **119.8** | 9.6 | 6.8 | 7.5 | (119.6) |
| **Company** | | | | | |
| At 31 August | | | | | |
| Present value of defined benefit obligation | **7,098.3** | 6,908.9 | 6,657.2 | 6,376.5 | 5,278.5 |
| Fair value of plan assets | **(1,146.0)** | (996.8) | (852.1) | (717.1) | (615.1) |
| Deficit in the plan | **5,952.3** | 5,912.1 | 5,805.1 | 5,659.4 | 4,663.4 |
| Experience adjustments on plan liabilities | **(144.4)** | (97.7) | (90.0) | (903.8) | (23.8) |
| Experience adjustments on plan assets | **119.8** | 9.6 | 6.8 | 7.5 | (119.6) |

# Notes to the Financial Statements
– 31 August 2012



## 36 OTHER LIABILITIES

| | Note | 2012 RM'million | 2011 (Restated) RM'million | 1.9.2010 (Restated) RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| Long term payable to State Government | | **45.2** | 45.2 | 48.0 |
| Lease payable under operating lease | 22 (b) | **147.9** | 141.7 | 199.2 |
| Prepayment by lessee | 22 (b) | **357.7** | 327.8 | 362.1 |
| Others | | **341.4** | 395.3 | 422.3 |
| | | **892.2** | 910.0 | 1,031.6 |
| **Company** | | | | |
| Payable to State Government | | **45.2** | 45.2 | 48.0 |
| Lease payable under operating lease | 22 (b) | **147.9** | 141.7 | 199.2 |
| Others | | **303.6** | 309.6 | 320.0 |
| | | **496.7** | 496.5 | 567.2 |

## 37 GOVERNMENT DEVELOPMENT GRANTS

| | Group | |
|---|---|---|
| | 2012 RM'million | 2011 RM'million |
| As at the beginning of the financial year | **627.2** | 599.0 |
| Received during the financial year | **120.8** | 92.8 |
| Released to income statements (Note 7) | **(77.0)** | (64.6) |
| As at the end of the financial year | **671.0** | 627.2 |

The development grants are provided by the Government mainly for the construction of transmission lines.

## 38 SHARE CAPITAL

| | Group and Company 2012 | 2011 |
|---|---|---|
| Authorised: | | |
| Ordinary shares of RM1.00 each | **10,000,000,000** | 10,000,000,000 |
| Special Rights Redeemable Preference Share of RM1.00 each | **1** | 1 |
| Class B Redeemable Preference Shares of RM1.00 each | | |
| As at the beginning/end of the financial year | **0** | 500 |
| Issued and fully paid: | | |
| Ordinary shares of RM1.00 each | **5,501,553,731** | 5,456,657,139 |
| Special Rights Redeemable Preference Share of RM1.00 each | **1** | 1 |
| Total share capital issued and fully paid as at the end of the financial year | **5,501,553,732** | 5,456,657,140 |
| Movements in issued ordinary shares of RM1.00 each | | |
| As at the beginning of the financial year | **5,456,657,139** | 4,352,719,795 |
| Issuance of ordinary shares of RM1.00 each under the ESOS II | **44,896,592** | 13,804,154 |
| Issuance of Bonus Shares as fully paid up, on the basis of one (1) Bonus Share for every four (4) existing TNB shares held by shareholders via the capitalisation of the share premium account | **0** | 1,090,133,190 |
| As at the end of the financial year | **5,501,553,731** | 5,456,657,139 |

## 38 SHARE CAPITAL (CONTINUED)

Employees' Share Option Scheme ('ESOS')

The Company implemented a new Employees' Share Option Scheme II ('ESOS II') on 8 July 2003 for a period of 10 years. The ESOS II is governed by the bye-laws, which were approved by the shareholders at an Extraordinary General Meeting ('EGM') on 29 May 2003 and amended at the EGM held on 15 December 2005.

The main features of ESOS II are as follows:

(a) The total number of ordinary shares to be issued by the Company under the ESOS II shall not exceed 10.0% of total issued and paid-up ordinary shares of the Company, such that not more than 50.0% of the shares available under the ESOS II are allocated, in aggregate, to Directors and senior management.

(b) Not more than 10.0% of the shares available under the ESOS II is allocated to any individual Director or employee who, either singly or collectively through his/her associates, holds 20.0% or more in the issued and paid-up capital of the Company.

(c) Any employee, including any Executive Director and those categorised as Fixed Term Senior Management, but excluding a Skim A employee (the scheme governing employees who, upon the corporatisation and privatisation of the Lembaga Letrik Negara in 1990, remain employed under the Government's terms and conditions) are eligible to participate in the ESOS II. Employees under the Fixed Term Senior Management are also entitled to the Performance Options based on them meeting prescribed performance targets.

(d) The option price under the ESOS II is the higher of the weighted average market price of the shares as shown in the daily official list issued by the Bursa Malaysia Securities Berhad for the five trading days preceding the date of offer with a 10.0% discount on the nominal value of the shares, subject always that the discount shall not be applicable to any shares under the Performance Option.

(e) In the event of any alteration to the capital structure of the Company during the option period which expires on 7 July 2013, such corresponding alterations shall be made in:

  (i) the number of new shares in relation to the ESOS II so far as unexercised;

  (ii) the option price; and/or

  (iii) the method of the exercise of the option.

(f) Options granted under the ESOS II carry no dividends or voting rights. Upon exercise of the options, shares issued rank pari passu in all respects with the then existing ordinary shares of the Company.

(g) The persons to whom the options have been granted under the ESOS II have no right to participate in any share issue of any other company within the Group.

# Notes to the Financial Statements
– 31 August 2012



## 38 SHARE CAPITAL (CONTINUED)

Employees' Share Option Scheme ('ESOS') (continued)

Movements in the number of shares represented by options outstanding and their related weighted average exercise prices are as follows:

| | 2012 Average exercise price RM/share | 2012 Number of shares '000 | 2011 Average exercise price RM/share | 2011 Number of shares '000 |
|---|---|---|---|---|
| As at the beginning of the financial year | **7.16** | **165,391** | 7.39 | 123,641 |
| Granted | **5.68** | **23,255** | 5.51 | 26,968 |
| Exercised | **5.38** | **(44,897)** | 6.45 | (13,804) |
| Expired | **5.80** | **(725)** | 9.18 | (443) |
| Bonus issue | **0** | **0** | 7.42 | 29,029 |
| As at the end of the financial year | **7.49** | **143,024** | 7.16 | 165,391 |

Details relating to the options exercised during the financial year are as follows:

| Exercise date | Fair value of shares at share issue date RM/share | Exercise price RM/share | Number of shares issued as at 31.8.2012 |
|---|---|---|---|
| September 2011 | 5.37 – 4.89 | 4.45/5.45 | **4,000** |
| October 2011 | 5.98 – 4.97 | 5.36/5.06 | **2,249** |
| November 2011 | 5.95 – 5.34 | 5.36/4.45/5.45 | **53,121** |
| December 2011 | 5.92 – 5.36 | 5.06/4.45/5.45 | **72,747** |
| January 2012 | 6.40 – 5.81 | 5.36/5.06/4.45/5.45 | **256,241** |
| February 2012 | 6.38 – 5.88 | 5.36/5.59/5.93/5.86/5.06/4.45/5.74/5.45 | **454,784** |
| March 2012 | 6.72 – 6.13 | 5.36/5.59/5.93/5.86/5.06/4.45/5.74/5.45 | **1,715,368** |
| April 2012 | 6.62 – 6.37 | 5.36/5.59/5.93/5.86/5.06/4.45/5.74/5.45 | **5,564,199** |
| May 2012 | 6.67 – 6.10 | 5.36/5.59/5.93/5.86/5.06/4.45/5.74/5.45/5.64/5.08/5.62 | **5,952,358** |
| June 2012 | 6.77 – 6.39 | 5.36/5.59/5.93/5.86/5.06/4.45/5.74/5.45/5.64 | **4,773,157** |
| July 2012 | 6.86 – 6.50 | 5.36/5.59/5.93/5.86/5.06/4.45/5.74/5.45/5.64/6.24/6.09 | **10,464,257** |
| August 2012 | 7.01 – 6.73 | 5.36/5.59/5.93/5.86/8.85/5.06/4.45/5.74/5.45/5.64/6.24/6.40 | **15,584,111** |
| Total | | | **44,896,592** |

## 38 SHARE CAPITAL (CONTINUED)

Employees' Share Option Scheme ('ESOS') (continued)

Share options outstanding at the end of the year have the following expiry dates and exercise price.

| Expiry date | Exercise price RM/share | Number of shares 2012 '000 | 2011 '000 |
|---|---|---|---|
| 07.07.2013 | 5.36 | **33,639** | 43,562 |
| 07.07.2013 | 5.59 | **4,213** | 5,243 |
| 07.07.2013 | 6.20 | **219** | 219 |
| 07.07.2013 | 5.93 | **7,165** | 7,758 |
| 07.07.2013 | 6.24 | **326** | 359 |
| 07.07.2013 | 5.86 | **7,325** | 8,520 |
| 07.07.2013 | 5.86 | **3,014** | 3,425 |
| 07.07.2013 | 7.35 | **1,632** | 1,632 |
| 07.07.2013 | 8.85 | **18,177** | 18,235 |
| 07.07.2013 | 9.24 | **16** | 16 |
| 07.07.2013 | 8.98 | **43** | 43 |
| 07.07.2013 | 7.35 | **112** | 112 |
| 07.07.2013 | 7.35 | **1,278** | 1,278 |
| 07.07.2013 | 5.06 | **6,634** | 11,188 |
| 07.07.2013 | 5.86 | **1,309** | 1,402 |
| 07.07.2013 | 5.62 | **27** | 27 |
| 07.07.2013 | 6.36 | **22** | 22 |
| 07.07.2013 | 7.33 | **54** | 54 |
| 07.07.2013 | 7.33 | **307** | 307 |
| 07.07.2013 | 7.35 | **47** | 47 |
| 07.07.2013 | 7.35 | **100** | 100 |
| 07.07.2013 | 7.35 | **864** | 864 |
| 07.07.2013 | 8.57 | **112** | 112 |
| 07.07.2013 | 9.24 | **47** | 47 |
| 07.07.2013 | 4.45 | **5,043** | 9,965 |
| 07.07.2013 | 7.35 | **225** | 225 |
| 07.07.2013 | 7.35 | **52** | 52 |
| 07.07.2013 | 7.35 | **157** | 157 |
| 07.07.2013 | 7.33 | **25** | 25 |
| 07.07.2013 | 7.33 | **63** | 63 |
| 07.07.2013 | 6.36 | **212** | 212 |
| 07.07.2013 | 6.09 | **161** | 161 |
| 07.07.2013 | 5.62 | **63** | 63 |
| 07.07.2013 | 7.35 | **224** | 224 |
| 07.07.2013 | 9.24 | **63** | 63 |
| 07.07.2013 | 7.35 | **262** | 262 |
| 07.07.2013 | 4.76 | **88** | 88 |
| 07.07.2013 | 8.57 | **150** | 150 |
| 07.07.2013 | 7.33 | **174** | 174 |
| 07.07.2013 | 6.09 | **21** | 52 |
| 07.07.2013 | 5.74 | **15,661** | 22,353 |
| 07.07.2013 | 4.76 | **88** | 88 |

## 38 SHARE CAPITAL (CONTINUED)

Employees' Share Option Scheme ('ESOS') (continued)

Share options outstanding at the end of the financial year have the following expiry dates and exercise price.

| Expiry date | Exercise price RM/share | Number of shares 2012 '000 | 2011 '000 |
|---|---|---|---|
| 07.07.2013 | 5.08 | **0** | 150 |
| 07.07.2013 | 5.62 | **77** | 137 |
| 07.07.2013 | 6.09 | **422** | 485 |
| 07.07.2013 | 6.36 | **212** | 212 |
| 07.07.2013 | 6.38 | **37** | 37 |
| 07.07.2013 | 6.53 | **90** | 90 |
| 07.07.2013 | 6.56 | **63** | 63 |
| 07.07.2013 | 6.60 | **150** | 150 |
| 07.07.2013 | 6.75 | **27** | 27 |
| 07.07.2013 | 7.33 | **270** | 270 |
| 07.07.2013 | 7.35 | **63** | 63 |
| 07.07.2013 | 8.57 | **150** | 150 |
| 07.07.2013 | 9.24 | **63** | 63 |
| 07.07.2013 | 5.45 | **15,380** | 24,545 |
| 07.07.2013 | 5.64 | **15,181** | 0 |
| 07.07.2013 | 6.36 | **90** | 0 |
| 07.07.2013 | 4.76 | **53** | 0 |
| 07.07.2013 | 6.75 | **8** | 0 |
| 07.07.2013 | 5.08 | **120** | 0 |
| 07.07.2013 | 6.09 | **324** | 0 |
| 07.07.2013 | 7.33 | **175** | 0 |
| 07.07.2013 | 5.62 | **98** | 0 |
| 07.07.2013 | 6.53 | **92** | 0 |
| 07.07.2013 | 6.60 | **90** | 0 |
| 07.07.2013 | 6.56 | **50** | 0 |
| 07.07.2013 | 6.38 | **50** | 0 |
| 07.07.2013 | 6.98 | **38** | 0 |
| 07.07.2013 | 6.40 | **208** | 0 |
| 07.07.2013 | 6.28 | **30** | 0 |
| | | **143,025** | 165,391 |

# Notes to the Financial Statements
– 31 August 2012



## 38 SHARE CAPITAL (CONTINUED)

Employees' Share Option Scheme ('ESOS') (continued)

The weighted average fair value of options granted during the respective financial year was determined using the Trinomial valuation model. The significant inputs into the model were as follows:

| Grant date | Share price at grant date RM | Exercise price RM | Option life Years | Expected dividend yield % | Risk free interest rate % | 5 year average share price movement % |
|---|---|---|---|---|---|---|
| 25.02.2005 | 8.24 | 7.75 | 8 | 1.14 | 3.64 | 21.57 |
| 30.03.2005 | 8.00 | 7.42 | 8 | 1.14 | 3.33/3.72 | 22.13 |
| 17.07.2005 | 8.56 | 7.80 | 7 | 1.14 | 3.40 | 19.41 |
| 24.02.2006 | 8.70 | 7.33 | 7 | 1.14 | 3.43/3.63/3.77 | 24.01 |
| 16.04.2006 | 8.65 | 7.33 | 7 | 1.14 | 3.55/3.96 | 18.07 |
| 25.09.2006 | 9.91 | 9.19 | 6 | 1.14 | 3.86/3.95 | 18.52 |
| 28.03.2007 | 11.50 | 11.07 | 6 | 1.14 | 3.48/3.50 | 17.59 |
| 26.07.2007 | 10.95 | 11.56 | 6 | 1.14 | 3.48 | 17.45 |
| 24.08.2007 | 10.29 | 11.24 | 6 | 1.14 | 3.60 | 19.92 |
| 27.10.2007 | 9.28 | 9.19 | 6 | 1.14 | 3.56 | 17.40 |
| 27.12.2007 | 9.54 | 9.19/10.72 | 6 | 1.14 | 3.64/3.79 | 17.47 |
| 25.04.2008 | 6.76 | 6.33 | 5 | 1.14 | 3.37/3.45 | 20.32 |
| 30.07.2008 | 8.35 | 7.33 | 5 | 1.14 | 3.73/3.89 | 22.42 |
| 06.11.2008 | 6.11 | 9.189 | 5 | 1.14 | 3.73 | 23.43 |
| 14.11.2008 | 6.20 | 9.189 | 5 | 1.14 | 3.60 | 23.47 |
| 19.12.2008 | 5.97 | 7.03/7.95/ 9.17/9.189/ 10.716/ | 5 | 1.14 | 2.94/3.02 | 23.45 |
| 26.12.2008 | 6.01 | 9.17 | 5 | 1.14 | 2.92 | 23.40 |
| 27.03.2009 | 6.10 | 5.57 | 4 | 1.14 | 1.98/2.81 | 23.93 |
| 26.06.2009 | 7.73 | 9.189/9.17 | 4 | 1.14 | 2.89 | 23.82 |
| 06.07.2009 | 7.77 | 9.189 | 4 | 1.14 | 2.92 | 23.82 |
| 15.07.2009 | 7.92 | 9.189 | 4 | 1.14 | 3.72 | 23.79 |
| 30.12.2009 | 8.29 | 5.95/6.35/ 7.03/7.18/ 7.62/7.95/ 9.17/9.189/ 10.716/ 11.558 | 4 | 1.14 | 3.24 | 18.72 |
| 29.04.2010 | 8.48 | 7.18 | 3 | 1.14 | 2.57/2.99 | 15.80 |
| 30.12.2010 | 8.37 | 4.76/5.08 5.62/6.09 6.36/6.38 6.53/6.56 6.60/6.75 7.33/7.35 8.57/9.24 | 3 | 1.14 | 3.12 | 25.14 |

## 38 SHARE CAPITAL (CONTINUED)

Employees' Share Option Scheme ('ESOS') (continued)

| Grant date | Share price at grant date RM | Exercise price RM | Option life Years | Expected dividend yield % | Risk free interest rate % | 5 year average share price movement % |
|---|---|---|---|---|---|---|
| 29.04.2011 | 6.01 | 5.45 | 2 | 1.14 | 2.92/3.29 | 23.07 |
| 10.04.2012 | 6.37 | 5.64 | 1 | 1.14 | 3.03/3.10 | 24.29 |
| | | 6.36/4.76 | | | | |
| | | 6.75/5.08 | | | | |
| | | 6.09/7.33 | | | | |
| | | 5.62/6.53 | | | | |
| | | 6.60/6.56 | | | | |
| | | 6.38/6.98 | | | | |
| | | 6.40/6.28 | | | | |

The charges to the income statement arising from share-based payments during the financial year amounted to RM24.8 million (2011: RM34.1 million) for the Group and RM21.2 million (2011: RM29.8 million) for the Company as set out in Note 6 to these financial statement.

| | 31.8.2012 RM'000 |
|---|---|
| Ordinary share capital, at par | 44,896,592 |
| Share premium | 196,542,119 |
| Proceeds received on exercise of share options | 241,438,711 |
| Fair value at exercise date of shares issued | 298,700,859 |

Special Rights Redeemable Preference Share ('Special Share')

(a) The Special Share would enable the Government of Malaysia through the Minister of Finance Incorporated to ensure that certain major decisions affecting the operations of the Company are consistent with the Government's policies. The Special Shareholder, which may only be the Government or any representative or person acting on its behalf, is entitled to receive notices of meetings but not to vote at such meetings of the Company. However, the Special Shareholder is entitled to attend and speak at such meetings.

The Special Shareholder has the right to appoint any person, but not more than six at any time, to be the Board of Directors of the Company.

(b) Certain matters, in particular the alteration of the Articles of Association of the Company relating to the rights of the Special Shareholder, creation and issue of additional shares which carry different voting rights, the dissolution of the Company, substantial disposal of assets, amalgamations, merger and takeover, require the prior consent of the Special Shareholder.

(c) The Special Shareholder does not have any right to participate in the capital or profits of the Company.

(d) The Special Shareholder has the right to require the Company to redeem the Special Share, at par, at any time.

## 38 SHARE CAPITAL (CONTINUED)

Class B Redeemable Preference Shares ('RPS')

The main features of the Company's Class B RPS is as follows:

(a) The RPS do not carry any right to participate in the assets and surplus profit of the Company.

(b) The RPS holders have no voting rights except on resolution to amend the RPS holders' rights.

(c) These RPS are not convertible into ordinary shares.

(d) The Company has the right to redeem all Class B RPS on or after 19 September 2010 at RM1,000 each.

As described in Note 32(b) to these financial statements, these RPS form part of the Company's Fixed Income Securities.

## 39 SHARE PREMIUM

| | Group and Company | |
|---|---|---|
| | **2012** | **2011** |
| | **RM'million** | **RM'million** |
| As at the beginning of the financial year | **4,332.6** | 5,354.2 |
| Arising in respect of ordinary shares issued during the financial year | **196.5** | 68.5 |
| Bonus issue during financial year | **0** | (1,090.1) |
| As at the end of the financial year | **4,529.1** | 4,332.6 |

## 40 REVALUATION AND OTHER RESERVES

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| Non-distributable | | | | |
| Revaluation reserve | **880.4** | 894.9 | **870.3** | 884.8 |
| Foreign currency translation reserve | **(266.7)** | (215.5) | **0** | 0 |
| Reserve on consolidation | **(146.6)** | (146.6) | **0** | 0 |
| Employees' Share Option Scheme reserve | **181.6** | 156.6 | **181.6** | 156.5 |
| | **648.7** | 689.4 | **1,051.9** | 1,041.3 |

# Notes to the Financial Statements
– 31 August 2012



## 40 REVALUATION AND OTHER RESERVES (CONTINUED)

The movements in each category of reserves were as follows:

| | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|
| Revaluation reserve | | | | |
| As at the beginning of the financial year | **894.9** | 914.3 | **884.8** | 904.2 |
| Realisation of revaluation reserve | **(14.5)** | (19.4) | **(14.5)** | (19.4) |
| As at the end of the financial year | **880.4** | 894.9 | **870.3** | 884.8 |

Revaluation reserve represents the revaluation of freehold land, buildings and civil works in the past.

| | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|
| Foreign currency translation reserve | | | | |
| As at the beginning of the financial year | **(215.5)** | (207.4) | **0** | 0 |
| Arising in the financial year | **(51.2)** | (8.1) | **0** | 0 |
| As at the end of the financial year | **(266.7)** | (215.5) | **0** | 0 |

The foreign currency translation reserve comprises exchange differences resulting from the translation of the results and financial position of foreign operations.

| | Group 2012 RM'million | Group 2011 RM'million | Company 2012 RM'million | Company 2011 RM'million |
|---|---|---|---|---|
| Reserve on consolidation | | | | |
| As at the beginning/end of the financial year | **(146.6)** | (146.6) | **0** | 0 |

The reserve on consolidation comprise goodwill which arose from acquisition of subsidiaries prior to financial year ended 2006, and had been taken directly to reserves.

## 40 REVALUATION AND OTHER RESERVES (CONTINUED)

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Employees' Share Option Scheme reserve | | | | |
| As at the beginning of the financial year | **156.6** | 122.5 | **156.5** | 111.3 |
| Arising in the financial year | **25.0** | 34.1 | **25.1** | 45.2 |
| As at the end of the financial year | **181.6** | 156.6 | **181.6** | 156.5 |

The share options reserve comprises the fair value of options granted, less any shares issued under the ESOS. When share options are exercised, the proceeds received from the exercise of these options together with the corresponding share options reserve, net of any directly attributable transactions costs are transferred to share capital (nominal value) and share premium.

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Total revaluation and other reserves | | | | |
| As at the beginning of the financial year | **689.4** | 682.8 | **1,041.3** | 1,015.5 |
| Arising in the financial year | **(26.2)** | 26.0 | **25.1** | 45.2 |
| Realisation of revaluation reserve | **(14.5)** | (19.4) | **(14.5)** | (19.4) |
| As at the end of the financial year | **648.7** | 689.4 | **1,051.9** | 1,041.3 |

## 41 RETAINED PROFITS

The Finance Act 2007 introduced the single-tier system with effect from the year of assessment 2008. Under the single-tier system, companies are not required to have a Section 108 balance for dividend payment purposes. Dividends paid under the single-tier system are tax exempt in the hands of the shareholders. The Section 108 balance as at 31 December 2007 will be available to companies until such time that the balance is fully utilised or upon expiry of the six-year transitional period on 31 December 2013, whichever is earlier, unless the companies opt to disregard the Section 108 balance and pay dividends under the single-tier system as provided for under the special transitional provisions of the Finance Act 2007.

As at 31 August 2012, the Company's Section 108 balance is insignificant and the intention is for the balance not be utilised. The Company has now moved to the single-tier system to replace the imputation system. Dividends paid under the single-tier system are now tax exempt in the hands of the shareholders.

Therefore, the retained profits of RM21,355.2 million (2011: RM18,480.0 million) as at 31 August 2012 can be distributed as exempt dividends under the single-tier system.

In addition, the Company has tax exempt income as at 31 August 2012 arising from the Income Tax (Amendment) Act 1999, relating to tax on income earned in 1999 being waived and exempt dividend income amounting to approximately RM3.1 million (2011: RM3.1 million) available for distribution as tax exempt dividends to shareholders.

## 42 COMMITMENTS

(a) Capital and other commitments for 5 years

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| Authorised capital expenditure not provided in the financial statements: | | | | |
| – Contracted | **4,224.6** | 10,831.7 | **1,039.5** | 5,587.9 |
| – Not contracted | **13,513.9** | 9,101.9 | **12,909.3** | 8,369.6 |
| | **17,738.5** | 19,933.6 | **13,948.8** | 13,957.5 |

## 42 COMMITMENTS (CONTINUED)

(b) Operating lease commitments – as lessee

The Group and the Company leases a number of plant and machineries under operating leases. These leases have an average tenure between 21 and 25 years. None of the leases includes contingent rentals.

Future minimum rental payable under non-cancellable operating leases at the reporting date are as follows:

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Payable not later than one year | **5,457.1** | 5,456.3 | **5,152.2** | 5,155.4 |
| Payable later than one year but not later than five years | **20,289.8** | 21,252.8 | **19,095.5** | 20,042.5 |
| Payable more than five years | **32,236.8** | 36,731.0 | **30,440.5** | 34,645.8 |
| | **57,983.7** | 63,440.1 | **54,688.2** | 59,843.7 |

(c) Operating lease commitments – as lessor

The Group leases out its plant and equipment under non-cancellable operating leases. The lessees are required to pay absolute fixed lease payments during the lease period. Total future minimum lease receivables under non-cancellable operating leases contracted for at the reporting date but not recognised as receivables, are as follows:

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Payable not later than one year | **139.5** | 143.7 | **47.7** | 48.3 |
| Payable later than one year but not later than five years | **291.3** | 378.6 | **95.4** | 95.4 |
| Payable more than five years | **452.9** | 520.0 | **0** | 0 |
| | **883.7** | 1,042.3 | **143.1** | 143.7 |

## 43 CONTINGENT LIABILITIES (UNSECURED)

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Claims by third parties | **320.8** | 594.9 | **314.8** | 402.9 |
| Trade guarantees and performance bonds | **27.4** | 152.5 | **0** | 0 |
| Bank guarantees | **0** | 3.6 | **0** | 0 |
| Other contingent liabilities | **5.0** | 2.4 | **0** | 0 |
| | **353.2** | 753.4 | **314.8** | 402.9 |

Claims by third parties include claims by contractors, consultants, consumers and former employees. These claims are being resolved and the Directors are of the opinion that their outcome will not have a material adverse effect on the financial position of both the Group and the Company.

## 44 SIGNIFICANT RELATED PARTY DISCLOSURES

The related party transaction of the Company comprises mainly transactions between the Company and its subsidiaries and associates namely the following:

Subsidiaries

- TNB Janamanjung Sdn. Bhd.
- TNB Fuel Services Sdn. Bhd.
- Kapar Energy Ventures Sdn. Bhd.
- Tenaga Switchgear Sdn. Bhd.
- Malaysia Transformers Manufacturing Sdn. Bhd.
- TNB Integrated Learning Solution Sdn. Bhd.
- TNB Engineering Corporation Sdn. Bhd.
- Sabah Electricity Sdn. Bhd.
- TNB Research Sdn. Bhd.
- TNB Capital Ltd.
- TNB Power Daharki Ltd.
- Tenaga Cable Industries Sdn. Bhd.
- Universiti Tenaga Nasional Sdn. Bhd.
- TNB Repair And Maintenance Sdn. Bhd.

Associates

- Teknologi Tenaga Perlis Consortium Sdn. Bhd.
- GB3 Sdn. Bhd.
- Fibrecomm Network (M) Sdn. Bhd.
- Jimah Energy Ventures Holdings Sdn. Bhd.
- Integrax Berhad

All related party transactions were entered into a normal course of business and at prices available to third parties or at negotiated terms.

As stated under paragraph 5 of FRS Standard No. 124 "Related Party Disclosures", disclosure of significant related party transactions between a state-controlled enterprise with other state-controlled enterprise is not required to be disclosed in the financial statements.

## 44 SIGNIFICANT RELATED PARTY DISCLOSURES (CONTINUED)

Accordingly, significant related party transactions between the Company and other Government controlled entities are not presented as the principal shareholders of the Company are the Government of Malaysia and related entities owned by the Government.

In addition to related party balances mentioned elsewhere in the financial statements, set out below are other significant related party transactions which were carried out on terms and conditions negotiated amongst the related parties:

| | Company | |
|---|---|---|
| | **2012 RM'million** | **2011 RM'million** |
| (a) Transactions with subsidiaries | | |
| Income: | | |
| – Sales of electricity | **35.2** | 31.9 |
| – Interest income | **176.1** | 185.5 |
| – Dividend income | **83.7** | 46.2 |
| – Rental income | **27.3** | 27.3 |
| Expenditure: | | |
| – Purchases of electricity | **4,844.5** | 4,527.3 |
| – Training fees | **56.3** | 50.2 |
| – Interest expense | **90.4** | 88.0 |
| Amounts due from subsidiaries | **2,270.7** | 2,611.4 |
| Amounts due to subsidiaries | **3,629.4** | 4,076.4 |

| | Group | | Company | |
|---|---|---|---|---|
| | **2012 RM'million** | **2011 RM'million** | **2012 RM'million** | **2011 RM'million** |
| (b) Transactions with associates | | | | |
| Income: | | | | |
| – Sales of electricity | **0.6** | 0.5 | **0.6** | 0.5 |
| – Interest income | **43.3** | 43.9 | **43.3** | 43.9 |
| – Dividend income | **24.5** | 36.8 | **24.5** | 36.8 |
| – Leasing income | **42.2** | 9.2 | **42.2** | 9.2 |
| Expenditure: | | | | |
| – Purchases of electricity | **3,618.8** | 3,966.3 | **3,618.8** | 3,966.3 |
| Amounts due from associates | **62.6** | 14.6 | **61.6** | 14.6 |
| Amounts due to associates | **697.9** | 707.9 | **697.9** | 707.9 |

Sales and purchases of electricity to and from associates are aggregated because the transactions are similar in nature and no single transaction is significant enough to warrant separate disclosure.

## 44 SIGNIFICANT RELATED PARTY DISCLOSURES (CONTINUED)

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| (c) Key management compensation | | | | |
| Short-term employee benefits: | | | | |
| – Salaries, allowances and bonus | **21.7** | 17.7 | **14.3** | 10.1 |
| – Benefits-in-kind | **1.0** | 1.0 | **0.7** | 0.8 |
| – Defined contribution retirement plan | **2.6** | 1.7 | **1.9** | 1.0 |
| – Other staff benefits | **0.4** | 0.3 | **0.3** | 0.3 |
| Share-based payment: | | | | |
| – ESOS expense | **0.3** | 1.7 | **0.3** | 1.5 |

Key management personnel are the persons who have authority and responsibility for planning, directing and controlling the activities of the Company or the Group either directly or indirectly.

Whenever exist, related party transactions also includes transaction with entities that are controlled, jointly controlled or significantly influenced directly or indirectly by any key management personnel or their close family members.

## 45 SEGMENTAL REPORTING

Segmental reporting is not presented as the Group is principally engaged in the generation, transmission, distribution and sales of electricity and the provision of other related services, which are substantially within a single business segment and this is consistent with the current practice of internal reporting. The Group operates primarily in Malaysia.

## 46 FINANCIAL INSTRUMENTS

(a) Categories of financial instruments

The table below provides an analysis of financial instruments categorised as follows:

(i) Loans and receivables (L&R);
(ii) Fair value through profit or loss (FVTPL);
(iii) Available-for-sale financial assets (AFS); and
(iv) Other financial liabilities measured at amortised cost (OL).

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(a) Categories of financial instruments (continued)

| 2012 | Carrying amount RM'million | L&R/ OL RM'million | FVTPL RM'million | AFS RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| Financial assets | | | | |
| Unsecured loan stocks in associate | 15.9 | 15.9 | 0 | 0 |
| Investment in unquoted debt securities | 163.7 | 163.7 | 0 | 0 |
| Available-for-sale financial assets | 38.0 | 0 | 0 | 38.0 |
| Derivative financial instruments | 116.3 | 0 | 116.3 | 0 |
| Long term receivables | 419.2 | 419.2 | 0 | 0 |
| Trade and other receivables | 6,988.7 | 6,988.7 | 0 | 0 |
| Amounts due from associates | 62.6 | 62.6 | 0 | 0 |
| Financial assets at fair value through profit and loss | 9.1 | 0 | 9.1 | 0 |
| Deposits, bank and cash balances | 8,626.3 | 8,626.3 | 0 | 0 |
| | 16,439.8 | 16,276.4 | 125.4 | 38.0 |

| | Carrying amount RM'million | L&R/ OL RM'million | FVTPL RM'million | AFS RM'million |
|---|---|---|---|---|
| **Company** | | | | |
| Financial assets | | | | |
| Unsecured loan stocks in associate | 15.9 | 15.9 | 0 | 0 |
| Investment in unquoted debt securities | 163.7 | 163.7 | 0 | 0 |
| Available-for-sale financial assets | 38.0 | 0 | 0 | 38.0 |
| Derivative financial instruments | 0 | 0 | 0 | 0 |
| Long term receivables | 853.2 | 853.2 | 0 | 0 |
| Trade and other receivables | 4,963.3 | 4,963.3 | 0 | 0 |
| Amounts due from subsidiaries | 2,270.7 | 2,270.7 | 0 | 0 |
| Amounts due from associates | 61.6 | 61.6 | 0 | 0 |
| Financial assets at fair value through profit and loss | 9.1 | 0 | 9.1 | 0 |
| Deposits, bank and cash balances | 3,961.2 | 3,961.2 | 0 | 0 |
| | 12,336.7 | 12,289.6 | 9.1 | 38.0 |

Financial Statements

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(a) Categories of financial instruments (continued)

| 2011 | Carrying amount RM'million | L&R/ OL RM'million | FVTPL RM'million | AFS RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| Financial assets | | | | |
| Unsecured loan stocks in associate | 21.1 | 21.1 | 0 | 0 |
| Investment in unquoted debt securities | 164.0 | 164.0 | 0 | 0 |
| Available-for-sale financial assets | 38.0 | 0 | 0 | 38.0 |
| Derivative financial instruments | 91.4 | 0 | 91.4 | 0 |
| Long term receivables | 388.6 | 388.6 | 0 | 0 |
| Trade and other receivables | 6,022.1 | 6,022.1 | 0 | 0 |
| Amounts due from associates | 14.6 | 14.6 | 0 | 0 |
| Financial assets at fair value through profit and loss | 8.6 | 0 | 8.6 | 0 |
| Deposits, bank and cash balances | 3,954.2 | 3,954.2 | 0 | 0 |
| | 10,702.6 | 10,564.6 | 100.0 | 38.0 |

| | Carrying amount (Restated) RM'million | L&R/ OL (Restated) RM'million | FVTPL (Restated) RM'million | AFS (Restated) RM'million |
|---|---|---|---|---|
| **Company** | | | | |
| Financial assets | | | | |
| Unsecured loan stocks in associate | 21.1 | 21.1 | 0 | 0 |
| Investment in unquoted debt securities | 164.0 | 164.0 | 0 | 0 |
| Available-for-sale financial assets | 38.0 | 0 | 0 | 38.0 |
| Derivative financial instruments | 1.5 | 0 | 1.5 | 0 |
| Long term receivables | 924.1 | 924.1 | 0 | 0 |
| Trade and other receivables | 3,724.9 | 3,724.9 | 0 | 0 |
| Amounts due from subsidiaries | 2,611.4 | 2,611.4 | 0 | 0 |
| Amounts due from associates | 14.6 | 14.6 | 0 | 0 |
| Financial assets at fair value through profit and loss | 8.6 | 0 | 8.6 | 0 |
| Deposits, bank and cash balances | 2,703.9 | 2,703.9 | 0 | 0 |
| | 10,212.1 | 10,164.0 | 10.1 | 38.0 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(a) Categories of financial instruments (continued)

| 2012 | Carrying amount RM'million | L&R/ OL RM'million | FVTPL RM'million |
|---|---|---|---|
| **Group** | | | |
| Financial liabilities | | | |
| Payables | 5,716.0 | 5,716.0 | 0 |
| Amounts due to associates | 697.9 | 697.9 | 0 |
| Derivative financial instruments | 21.5 | 0 | 21.5 |
| Borrowings | 23,071.8 | 23,071.8 | 0 |
| Other liabilities | 341.4 | 341.4 | 0 |
| | 29,848.6 | 29,827.1 | 21.5 |
| **Company** | | | |
| Financial liabilities | | | |
| Payables | 3,478.9 | 3,478.9 | 0 |
| Amounts due to subsidiaries | 3,629.4 | 3,629.4 | 0 |
| Amounts due to associates | 697.9 | 697.9 | 0 |
| Derivative financial instruments | 21.5 | 0 | 21.5 |
| Borrowings | 11,494.9 | 11,494.9 | 0 |
| Other liabilities | 303.6 | 303.6 | 0 |
| | 19,626.2 | 19,604.7 | 21.5 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(a) Categories of financial instruments (continued)

| 2011 | Carrying amount (Restated) RM'million | L&R/ OL (Restated) RM'million | FVTPL (Restated) RM'million |
|---|---|---|---|
| **Group** | | | |
| Financial liabilities | | | |
| Payables | 5,527.0 | 5,527.0 | 0 |
| Amounts due to associates | 707.9 | 707.9 | 0 |
| Derivative financial instruments | 44.1 | 0 | 44.1 |
| Borrowings | 19,054.1 | 19,054.1 | 0 |
| Other liabilities | 395.3 | 395.3 | 0 |
| | 25,728.4 | 25,684.3 | 44.1 |
| **Company** | | | |
| Financial liabilities | | | |
| Payables | 3,541.2 | 3,541.2 | 0 |
| Amounts due to subsidiaries | 4,076.4 | 4,076.4 | 0 |
| Amounts due to associates | 707.9 | 707.9 | 0 |
| Derivative financial instruments | 44.1 | 0 | 44.1 |
| Borrowings | 12,174.2 | 12,174.2 | 0 |
| Other liabilities | 309.6 | 309.6 | 0 |
| | 20,853.4 | 20,809.3 | 44.1 |

(b) Net gains and losses arising from financial instruments

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Net gains/(losses) on: | | | | |
| Financial assets at fair value through profit and loss | **39.7** | 64.8 | **21.0** | 28.2 |
| Loans and receivables | **16.5** | 0 | **(11.7)** | (31.4) |
| Financial liabilities measured at amortised cost – Borrowings | **(6.1)** | 13.3 | **(2.8)** | (1.9) |
| | **50.1** | 78.1 | **6.5** | (5.1) |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management

The Group has exposure to the following risks from its use of financial instruments:

- Credit risk;
- Liquidity risk; and
- Market risk

Credit risk

Credit risk is the risk of a financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Group's exposure to credit risk arises principally from its receivables from customers, deposits, bank and cash balances, derivative instruments and investment securities. In addition, the Company's exposure to credit risk arises principally from loans and advances to subsidiaries and financial guarantees given to banks for credit facilities granted to subsidiaries.

(i) Receivables

*Risk management objectives, policies and processed for managing the risk*

Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Normally financial guarantees given by banks, shareholders or directors of customers are obtained, and credit evaluations are performed on customers requiring credit over a certain amount.

*Exposure to credit risk*

The Group's and the Company's credit policy provides trade receivables with a 30 days (2011: 30 days) credit period. The Group has no major significant concentration of credit risk due to its diverse customer base. An allowance has been made for estimated unrecoverable amounts, determined by reference to past default experience of individual debtors and collective portfolio.

The total trade receivables and impairment provided are as follows:

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 RM'million | 2011 RM'million | 2012 RM'million | 2011 RM'million |
| Trade receivables | **6,417.0** | 5,426.7 | **5,231.1** | 4,088.1 |
| Less: Impairment losses | **(573.1)** | (607.7) | **(490.2)** | (530.3) |
| | **5,843.9** | 4,819.0 | **4,740.9** | 3,557.8 |

Given the varied nature of the Group's customer base, the following analysis of trade receivables by type of customer is considered the most appropriate disclosure of credit concentrations.

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Credit risk (continued)

(i) Receivables (continued)

*Exposure to credit risk (continued)*

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| Industrial | **2,368.0** | 1,826.0 | **1,795.0** | 1,176.1 |
| Commercial | **2,578.5** | 2,001.4 | **2,141.9** | 1,587.6 |
| Domestic | **1,312.1** | 1,396.8 | **1,188.5** | 1,217.7 |
| Specific agriculture | **20.1** | 10.2 | **20.1** | 10.2 |
| Mining | **4.4** | 2.0 | **4.4** | 2.0 |
| Public lighting | **90.1** | 110.3 | **81.2** | 94.5 |
| Others | **43.8** | 80.0 | **0** | 0 |
| | **6,417.0** | 5,426.7 | **5,231.1** | 4,088.1 |

The net trade receivables are denominated in the following currencies:

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| MYR | **5,519.4** | 4,551.5 | **4,740.9** | 3,557.8 |
| USD | **13.2** | 10.5 | **0** | 0 |
| PKR | **310.9** | 257.0 | **0** | 0 |
| Others | **0.4** | 0 | **0** | 0 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Credit risk (continued)

(i) Receivables (continued)

*Impairment losses*

The ageing of trade receivables as at the end of the reporting period was:

| 2012 | Gross RM'million | Individual impairment RM'million | Collective impairment RM'million | Net RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| Not past due | 4,473.9 | (1.0) | (0.2) | 4,472.7 |
| Past due 0-30 days | 426.5 | (1.8) | (0.3) | 424.4 |
| Past due 31-120 days | 720.9 | (4.4) | (1.3) | 715.2 |
| Past due 121-240 days | 219.3 | (15.7) | (2.0) | 201.6 |
| Past due more than 240 days | 576.4 | (476.9) | (69.5) | 30.0 |
| | 6,417.0 | (499.8) | (73.3) | 5,843.9 |
| **Company** | | | | |
| Not past due | 3,862.6 | (0.9) | (0.2) | 3,861.5 |
| Past due 0-30 days | 314.2 | (1.5) | (0.3) | 312.4 |
| Past due 31-120 days | 406.1 | (4.3) | (1.0) | 400.8 |
| Past due 121-240 days | 183.3 | (15.1) | (2.0) | 166.2 |
| Past due more than 240 days | 464.9 | (410.3) | (54.6) | 0 |
| | 5,231.1 | (432.1) | (58.1) | 4,740.9 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Credit risk (continued)

(i) Receivables (continued)

*Impairment losses (continued)*

| 2011 | Gross RM'million | Individual impairment RM'million | Collective impairment RM'million | Net RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| Not past due | 3,493.0 | (2.4) | (0.5) | 3,490.1 |
| Past due 0-30 days | 575.0 | (1.4) | (0.3) | 573.3 |
| Past due 31-120 days | 602.6 | (5.5) | (1.1) | 596.0 |
| Past due 121-240 days | 249.0 | (87.9) | (2.0) | 159.1 |
| Past due more than 240 days | 507.1 | (429.7) | (76.9) | 0.5 |
| | 5,426.7 | (526.9) | (80.8) | 4,819.0 |
| **Company** | | | | |
| Not past due | 2,781.6 | (2.4) | (0.5) | 2,778.7 |
| Past due 0-30 days | 293.9 | (1.4) | (0.3) | 292.2 |
| Past due 31-120 days | 384.2 | (5.0) | (1.1) | 378.1 |
| Past due 121-240 days | 198.0 | (87.2) | (2.0) | 108.8 |
| Past due more than 240 days | 430.4 | (387.8) | (42.6) | 0 |
| | 4,088.1 | (483.8) | (46.5) | 3,557.8 |

Trade receivables that are neither past due nor impaired

With respect to the trade receivables that are neither past due nor impaired, there is no indication as of the reporting date that the debtors will not meet their payment obligations. The quality of these trade receivables is such that management believes no impairment is necessary, except in situations where they are part of individually impaired trade receivables.

Trade receivables that are past due but not impaired

Full allowance for impairment was not made in respect of these past due trade receivable based on the past historical collection trends and available deposits.

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Credit risk (continued)

(i) Receivables (continued)

*Impairment losses (continued)*

The movements in the allowance for impairment losses of trade receivables during the financial year were:

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| At 1 September | **(607.7)** | (576.7) | **(530.3)** | (500.3) |
| Impairment loss recognised | **(96.4)** | (36.4) | **(85.1)** | (30.0) |
| Impairment loss reversed | **131.0** | 5.4 | **125.2** | 0 |
| At 31 August | **(573.1)** | (607.7) | **(490.2)** | (530.3) |

The movements in the allowance for impairment losses of other receivables during the financial year were:

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011** | **2012** | **2011** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| At 1 September | **(109.8)** | (64.8) | **(82.0)** | (64.8) |
| Impairment loss recognised | **(26.5)** | (64.1) | **(26.5)** | (36.3) |
| Impairment loss reversed | **10.1** | 19.1 | **0** | 19.1 |
| At 31 August | **(126.2)** | (109.8) | **(108.5)** | (82.0) |

Trade receivables are secured by deposits in the form of cash and bank guarantees. The deposits amount are reviewed on an individual basis periodically.

(ii) Investments, deposits, bank and cash balances and derivative instruments

*Risk management objectives, policies and processes for managing the risk*

Investments and deposits, bank and cash balances are allowed only in liquid securities and only with reputable financial institutions. Transactions involving derivative financial instruments are with approved financial institutions.

*Exposure to credit risk, credit quality and collateral*

The maximum exposure to credit risk is represented by the carrying amounts in the statements of financial position.

In view of the sound credit rating of counterparties, management does not expect any counterparty to fail to meet its obligations. The Group does not have overdue investments that have not been impaired.

The investments, deposits, cash and bank balances and derivative instruments are unsecured.

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Credit risk (continued)

(iii) Financial guarantees

*Risk management objectives, policies and processes for managing the risk*

The Company provides unsecured financial guarantees to banks in respect of banking facilities granted to certain subsidiaries and associates. The Company monitors on an ongoing basis the results and repayments made by the subsidiaries and associates.

*Exposure to credit risk, credit quality and collateral*

The maximum exposure to credit risk amounts to RM8.7 million (2011: RM269.8 million) and RM2,766.5 million (2011: RM2,766.2 million) for the Group and Company respectively representing the total banking facilities limit of the subsidiaries and associates as at end of the reporting period.

As at end of the reporting period, there was no indication that any subsidiary or associate would default on repayment.

The financial guarantees have not been recognised since the fair value on initial recognition is not material as the probability of the subsidiaries and associates defaulting on its banking facilities is remote.

(iv) Intercompany balances

*Risk management objectives, policies and processes for managing the risk*

The Company provides unsecured loans and advances to subsidiaries. The Company monitors the results of the subsidiaries regularly.

*Exposure to credit risk, credit quality and collateral*

As at the end of the reporting period, the maximum exposure to credit risk is represented by their carrying amounts in the statements of financial position.

Loans and advances are only provided to subsidiaries by the Company.

*Impairment losses*

As at the end of the reporting period, there was no indication that the loans and advances to the subsidiaries are not recoverable other than those which have already been impaired. The Company does not specifically monitor the ageing of current advances to the subsidiaries. Nevertheless, these advances have been overdue for less than a year. Non-current loans to subsidiaries are neither past due nor impaired.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's exposure to liquidity risk arises principally from its various payables, loans and borrowings.

The Group maintains a level of cash and cash equivalents and bank facilities deemed adequate by the management to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when they fall due.

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Liquidity risk (continued)

The table below summarises the maturity profile of the Group's financial liabilities as at the end of the reporting period based on the undiscounted contractual payments:

| 2012 | Carrying amount RM'million | Contractual interest/ Coupon rate | Contractual cash flows RM'million | Under 1 year RM'million | 1-2 years RM'million | 2-5 years RM'million | More than 5 years RM'million |
|---|---|---|---|---|---|---|---|
| **Group** | | | | | | | |
| *Non-derivative financial liabilities* | | | | | | | |
| Payables | 5,716.0 | 0% | 5,716.0 | 5,716.0 | 0 | 0 | 0 |
| Amounts due to associates | 697.9 | 0% | 677.0 | 697.9 | 0 | 0 | 0 |
| Borrowings | 23,071.8 | 0.8% to 15.0% | 31,978.9 | 2,318.1 | 1,786.4 | 6,194.4 | 21,680.0 |
| Other liabilities | 341.4 | 0% | 341.4 | 83.5 | 71.7 | 186.2 | 0 |
| | 29,827.1 | | 38,713.3 | 8,815.5 | 1,858.1 | 6,380.6 | 21,680.0 |
| *Derivative financial liabilities* | | | | | | | |
| Interest rate swap | 21.5 | 3.8% | 26.6 | 15.9 | 8.9 | 1.8 | 0 |
| | 29,848.6 | | 38,739.9 | 8,831.4 | 1,867.0 | 6,382.4 | 21,680.0 |

# Notes to the Financial Statements
– 31 August 2012



## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Liquidity risk (continued)

The table below summarises the maturity profile of the Company's financial liabilities as at the end of the reporting period based on the undiscounted contractual payments (continued):

| 2012 | Carrying amount RM'million | Contractual interest/ Coupon rate | Contractual cash flows RM'million | Under 1 year RM'million | 1-2 years RM'million | 2-5 years RM'million | More than 5 years RM'million |
|---|---|---|---|---|---|---|---|
| **Company** | | | | | | | |
| *Non-derivative financial liabilities* | | | | | | | |
| Payables | 3,478.9 | 0% | 3,478.9 | 3,478.9 | 0 | 0 | 0 |
| Amounts due to subsidiaries | 3,629.4 | 0.7% to 5.3% | 0 | 758.1 | 182.0 | 1,474.9 | 1,214.4 |
| Amounts due to associates | 697.9 | 0% | 677.0 | 697.9 | 0 | 0 | 0 |
| Borrowings | 11,494.9 | 0.8% to 15.0% | 16,274.2 | 1,135.6 | 973.3 | 2,521.0 | 11,644.3 |
| Other liabilities | 303.6 | 0% | 303.6 | 45.7 | 71.7 | 186.2 | 0 |
| | 19,604.7 | | 20,733.7 | 6,116.2 | 1,227.0 | 4,182.1 | 12,858.7 |
| *Derivative financial liabilities* | | | | | | | |
| Interest rate swap | 21.5 | 3.8% | 26.6 | 15.9 | 8.9 | 1.8 | 0 |
| | 19,626.2 | | 20,760.3 | 6,132.1 | 1,235.9 | 4,183.9 | 12,858.7 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Liquidity risk (continued)

The table below summarises the maturity profile of the Group's financial liabilities as at the end of the reporting period based on the undiscounted contractual payments (continued):

| 2011 | Carrying amount RM'million | Contractual interest/ coupon rate | Contractual cash flows RM'million | Under 1 year RM'million | 1-2 years RM'million | 2-5 years RM'million | More than 5 years RM'million |
|---|---|---|---|---|---|---|---|
| **Group** | | | | | | | |
| *Non-derivative financial liabilities* | | | | | | | |
| Payables | 5,527.0 | 0% | 5,527.0 | 5,527.0 | 0 | 0 | 0 |
| Amounts due to associates | 707.9 | 0% | 696.8 | 707.9 | 0 | 0 | 0 |
| Borrowings | 19,054.1 | 0.8% to 15.5% | 18,618.8 | 1,543.5 | 1,078.3 | 3,654.6 | 12,342.4 |
| Other liabilities | 435.9 | 0% | 435.9 | 55.6 | 106.2 | 274.1 | 0 |
| | 25,724.9 | | 25,278.5 | 7,834.0 | 1,184.5 | 3,928.7 | 12,342.4 |
| *Derivative financial liabilities* | | | | | | | |
| Interest rate swap | 44.1 | 3.8% | 40.9 | 19.0 | 13.1 | 7.3 | 1.5 |
| Forward exchange contracts (gross settled): | | | | | | | |
| Outflows | 0 | | 86.3 | 86.3 | 0 | 0 | 0 |
| Inflows | (1.5) | | (87.8) | (87.8) | 0 | 0 | 0 |
| | 25,767.5 | | 25,317.9 | 7,851.5 | 1,197.6 | 3,936.0 | 12,343.9 |

# Notes to the Financial Statements
– 31 August 2012



## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Liquidity risk (continued)

The table below summarises the maturity profile of the Company's financial liabilities as at the end of the reporting period based on the undiscounted contractual payments (continued):

| 2011 | Carrying amount RM'million | Contractual interest/ Coupon rate | Contractual cash flows RM'million | Under 1 year RM'million | 1-2 years RM'million | 2-5 years RM'million | More than 5 years RM'million |
|---|---|---|---|---|---|---|---|
| **Company** | | | | | | | |
| *Non-derivative financial liabilities* | | | | | | | |
| Payables | 3,541.2 | 0% | 3,541.2 | 3,541.2 | 0 | 0 | 0 |
| Amount due to subsidiaries | 4,076.4 | 0.5% to 5.3% | 0 | 1,608.6 | 176.2 | 1,351.2 | 940.4 |
| Amount due to associates | 707.9 | 0% | 696.9 | 707.9 | 0 | 0 | 0 |
| Borrowings | 12,174.2 | 0.8% to 8.3% | 12,064.5 | 824.5 | 637.4 | 1,462.2 | 9,140.4 |
| Other liabilities | 309.6 | 0% | 309.6 | 30.3 | 80.9 | 198.4 | 0 |
| | 20,809.3 | | 16,612.2 | 6,712.5 | 894.5 | 3,011.8 | 10,080.8 |
| *Derivative financial liabilities* | | | | | | | |
| Interest rate swap | 44.1 | 3.8% | 40.9 | 19.0 | 13.1 | 7.3 | 1.5 |
| Forward exchange contracts (gross settled): | | | | | | | |
| Outflows | 0 | | 86.3 | 86.3 | 0 | 0 | 0 |
| Inflows | (1.5) | | (87.8) | (87.8) | 0 | 0 | 0 |
| | 20,851.9 | | 16,651.6 | 6,730.0 | 907.6 | 3,019.1 | 10,082.3 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and other prices will affect the Group's financial position or cash flows.

(i) Foreign currency risk

The Group is exposed to foreign currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of Group entities. The currencies giving rise to this risk are primarily US Dollar (USD), Japanese Yen (JPY), European Dollar (EURO) and Pakistani Rupees (PKR).

*Risk management objectives, policies and processes for managing the risk*

The Group is required to hedge a minimum of 50.0% of TNB's known foreign currency exposure up to 12 months period. The Group uses forward exchange contracts and other financial derivatives to hedge its foreign currency risk. Most of the forward exchange contracts have maturities of less than three months.

*Exposure to foreign currency risk*

The currency exposure of financial assets and financial liabilities of the Group and Company that are not denominated in the functional currency of the respective companies is set out below.

| | USD RM'million | JPY RM'million | EURO RM'million | Others RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| **2012** | | | | |
| Financial assets | | | | |
| Receivables, deposits and prepayments | 13.2 | 0 | 0 | 311.3 |
| Deposits, bank and cash balances | 2.1 | 0.0 | 32.7 | 16.3 |
| Derivative financial instruments | 116.3 | 0 | 0 | 0 |
| | 131.6 | 0.0 | 32.7 | 327.6 |
| Financial liabilities | | | | |
| Borrowings | 2,876.8 | 5,221.2 | 0 | 23.1 |
| Derivative financial instruments | 21.5 | 0 | 0 | 0 |
| | 2,898.3 | 5,221.2 | 0 | 23.1 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(i) Foreign currency risk (continued)

| | USD RM'million | JPY RM'million | EURO RM'million | Others RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| **2011** | | | | |
| Financial assets | | | | |
| Receivables, deposits and prepayments | 10.5 | 0 | 0 | 257.0 |
| Deposits, bank and cash balances | 0 | 0 | 0 | 15.6 |
| Derivative financial instruments | 89.9 | 0 | 0 | 0 |
| Forward foreign currency | 0.3 | 1.2 | 0 | 0 |
| | 100.7 | 1.2 | 0 | 272.6 |
| Financial liabilities | | | | |
| Borrowings | 2,909.9 | 5,457.9 | 0 | 25.8 |
| Derivative financial instruments | 44.1 | 0 | 0 | 0 |
| | 2,954.0 | 5,457.9 | 0 | 25.8 |
| **Company** | | | | |
| **2012** | | | | |
| Financial assets | | | | |
| Amounts due from subsidiaries | **151.9** | **0** | **0** | **0** |
| Financial liabilities | | | | |
| Amounts due to subsidiaries | **0** | **0** | **0** | **0** |
| Borrowings | **1,301.5** | **4,177.3** | **0** | **0** |
| Derivative financial instruments | **21.5** | **0** | **0** | **0** |
| | **1,323.0** | **4,177.3** | **0** | **0** |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(i) Foreign currency risk (continued)

| | USD RM'million | JPY RM'million | EURO RM'million | Others RM'million |
|---|---|---|---|---|
| **Company** | | | | |
| **2011** | | | | |
| Financial assets | | | | |
| Amounts due from subsidiaries | 475.7 | 0 | 0 | 0.2 |
| Forward foreign currency | 0.3 | 1.2 | 0 | 0 |
| | 476.0 | 1.2 | 0 | 0.2 |
| Financial liabilities | | | | |
| Amounts due to subsidiaries | 33.5 | 0 | 0 | 0 |
| Borrowings | 1,239.0 | 4,318.1 | 0 | 0 |
| Derivative financial instruments | 44.1 | 0 | 0 | 0 |
| | 1,316.6 | 4,318.1 | 0 | 0 |

Currency risk sensitivities analysis

A 10.0% strengthening of the foreign currencies against MYR at the end of the reporting period would have increased/(decreased) pre-tax profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remained constant and ignores any impact of forecasted sale and purchases.

| | Profit or loss | |
|---|---|---|
| **Group** | **2012 RM'million** | **2011 RM'million** |
| USD | **(418.9)** | (130.6) |
| JPY | **(1,063.9)** | (792.4) |
| **Company** | | |
| USD | **(190.6)** | (79.6) |
| JPY | **(513.8)** | (431.8) |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(i) Foreign currency risk (continued)

A 10.0% weakening of the foreign currencies against MYR at the end of the reporting period would have had equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remained constant.

Nevertheless, foreign currency risk arises from Group entities which have a functional currency other than MYR is not material and hence, sensitivity analysis is not presented.

(ii) Interest rate risk

The Group's investment in fixed rate debt securities and its fixed rate borrowing are exposed to a risk of change in their fair value due to changes in interest rates. The Group's variable rate borrowings are exposed to a risk of change in cash flows due to changes in interest rates. Investment in equity securities and short-term receivables and payables are not significantly exposed to interest rate risk.

*Risk management objectives, policies and processes for managing the risk*

The Group has entered into interest rate swap with an outstanding notional contract amount of RM462.3 million (2011: RM616.6 million) in order to achieve an appropriate mix of fixed and floating rate exposure within the Group's policy. Such interest rate swaps have the economic effect of converting borrowings from floating rates to fixed rates. Generally, the group raises long-term borrowings at floating rates and swaps them into fixed rates that are lower than those available if the Group borrowed at fixed rates directly. Under the interest rate swaps, the Group agrees with other parties to exchange, at specified intervals (semi-annually), the difference between fixed contract rates and floating-rate interest amounts calculated by reference to the agreed notional amounts.

*Exposure to interest rate risk*

The interest rate profile of the Group's and the Company's significant interest-bearing financial instruments, based on carrying amounts as at the end of the reporting period were:

| | Group | | Company | |
|---|---|---|---|---|
| | **2012 RM'million** | **2011 RM'million** | **2012 RM'million** | **2011 RM'million** |
| Fixed rate instruments: | | | | |
| Financial assets | **495.2** | 552.6 | **1,030.9** | 1,674.4 |
| Financial liabilities | **22,617.3** | 18,437.4 | **11,494.9** | 11,338.3 |
| Floating rate instruments: | | | | |
| Financial assets | **0** | 0 | **46.1** | 475.7 |
| Financial liabilities | **454.5** | 616.6 | **0** | 0 |

A change of 100 basis point (bp) in interest rates of the financial liabilities at the end of the reporting period would have increased the finance cost to RM3.7 million (2011: RM5.3 million). However, this change has no impact to post-tax profit or loss as the floating instrument have been fixed via Interest rate swap. This analysis assumes that all other variables, in particular foreign currency rates, remained constant.

The financial assets are not sensitive to interest rate changes.

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(ii) Interest rate risk (continued)

The exposure of financial assets of the Group to interest rate risk are as follows:

| Group | Balances under Non-Islamic principles RM'million | Balances under Islamic principles RM'million | Total RM'million |
|---|---|---|---|
| **2012** | | | |
| Financial assets | | | |
| Unsecured loan stocks in associate | **15.9** | **0** | **15.9** |
| Investment in unquoted debt securities | **0** | **163.7** | **163.7** |
| Long term receivables | **419.2** | **0** | **419.2** |
| Trade and other receivables | **0** | **0** | **0** |
| Deposits, bank and cash balances | **2,233.4** | **5,558.6** | **7,792.0** |
| | **2,668.5** | **5,722.3** | **8,390.8** |
| **2011** | | | |
| Financial assets | | | |
| Unsecured loan stocks in associate | 21.1 | 0 | 21.1 |
| Investment in unquoted debt securities | 0 | 164.0 | 164.0 |
| Long term receivables | 333.4 | 0 | 333.4 |
| Trade and other receivables | 50.6 | 0 | 50.6 |
| Deposits, bank and cash balances | 1,438.7 | 1,460.4 | 2,899.1 |
| | 1,843.8 | 1,624.4 | 3,468.2 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(ii) Interest rate risk (continued)

The exposure of financial assets of the Company to interest rate risk are as follows: (continued)

| Company | Balances under Non-Islamic principles RM'million | Balances under Islamic principles RM'million | Total RM'million |
|---|---|---|---|
| **2012** | | | |
| Financial assets | | | |
| Unsecured loan stocks in associate | **15.9** | **0** | **15.9** |
| Investment in unquoted debt securities | **0** | **163.7** | **163.7** |
| Long term receivables | **806.1** | **0** | **806.1** |
| Trade and other receivables | **45.0** | **0** | **45.0** |
| Amounts due from subsidiaries | **46.1** | **0** | **46.1** |
| Deposits, bank and cash balances | **1,453.0** | **2,063.8** | **3,516.8** |
| | **2,366.1** | **2,227.5** | **4,593.6** |
| **2011** | | | |
| Financial assets | | | |
| Unsecured loan stocks in associate | 21.1 | 0 | 21.1 |
| Investment in unquoted debt securities | 0 | 164.0 | 164.0 |
| Long term receivables | 868.9 | 0 | 868.9 |
| Trade and other receivables | 50.6 | 0 | 50.6 |
| Amounts due from subsidiaries | 476.0 | 0 | 476.0 |
| Deposits, bank and cash balances | 733.5 | 1,460.4 | 2,193.9 |
| | 2,150.1 | 1,624.4 | 3,774.5 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(ii) Interest rate risk (continued)

The exposure of financial liabilities of the Group to interest rate risk are as follows: (continued)

| Group | Balances under Non-Islamic principles RM'million | Balances under Islamic principles RM'million | Total RM'million |
|---|---|---|---|
| **2012** | | | |
| Financial liability | | | |
| Borrowings | **13,938.4** | **9,133.4** | **23,071.8** |
| | **13,938.4** | **9,133.4** | **23,071.8** |
| Total interest sensitivity gap | **(11,269.9)** | **(3,411.1)** | **(14,681.0)** |
| **2011** | | | |
| Financial liability | | | |
| Borrowings | 14,543.5 | 4,510.5 | 19,054.0 |
| | 14,543.5 | 4,510.5 | 19,054.0 |
| Total interest sensitivity gap | (12,699.7) | (2,886.1) | (15,585.8) |

Financial Statements

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(ii) Interest rate risk (continued)

The exposure of financial liabilities of the Company to interest rate risk are as follows: (continued)

| Company | Balances under Non-Islamic principles RM'million | Balances under Islamic principles RM'million | Total RM'million |
|---|---|---|---|
| **2012** | | | |
| Financial liabilities | | | |
| Borrowings | **9,308.6** | **2,186.3** | **11,494.9** |
| Amounts due to subsidiaries | **2,630.0** | **0** | **2,630.0** |
| | **11,938.6** | **2,186.3** | **14,124.9** |
| Total interest sensitivity gap | **(9,572.5)** | **41.2** | **(9,531.3)** |
| **2011** | | | |
| Financial liabilities | | | |
| Borrowings | 9,987.9 | 2,186.3 | 12,174.2 |
| Amounts due to subsidiaries | 2,644.0 | 0 | 2,644.0 |
| | 12,631.9 | 2,186.3 | 14,818.2 |
| Total interest sensitivity gap | (10,481.8) | (561.9) | (11,043.7) |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(ii) Interest rate risk (continued)

The table below summarises the effective weighted average interest rate as at 31 August 2012 and 31 August 2011 by major currencies for each class of financial assets and financial liabilities.

| Group | USD % | JPY % | EURO % | RM % | Others % |
|---|---|---|---|---|---|
| **2012** | | | | | |
| Financial assets | | | | | |
| Unsecured loan stocks in associate | **0** | **0** | **0** | **12.0** | **0** |
| Long term receivables | **0** | **0** | **0** | **4.0** | **0** |
| Trade and other receivables | **0** | **0** | **0** | **4.0** | **0** |
| Deposits, bank and cash balances | **0** | **0** | **0.2** | **3.6** | **0** |
| Financial liabilities | | | | | |
| Borrowings | **5.5** | **1.8** | **0** | **5.9** | **14.0** |
| **2011** | | | | | |
| Financial assets | | | | | |
| Unsecured loan stocks in associate | 0 | 0 | 0 | 12.0 | 0 |
| Long term receivables | 0 | 0 | 0 | 4.0 | 0 |
| Trade and other receivables | 0 | 0 | 0 | 4.0 | 0 |
| Deposits, bank and cash balances | 0 | 0 | 0 | 3.4 | 7.5 |
| Financial liability | | | | | |
| Borrowings | 5.3 | 2.0 | 0 | 6.6 | 15.5 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(ii) Interest rate risk (continued)

The table below summarises the effective weighted average interest rate as at 31 August 2012 and 31 August 2011 by major currencies for each class of financial asset and financial liabilities. (continued)

| Company | USD % | JPY % | EURO % | RM % | Others % |
|---|---|---|---|---|---|
| **2012** | | | | | |
| Financial assets | | | | | |
| Unsecured loan stocks in associate | **0** | **0** | **0** | **12.0** | **0** |
| Long term receivables | **0** | **0** | **0** | **11.2** | **0** |
| Trade and other receivables | **0** | **0** | **0** | **4.0** | **0** |
| Amounts due from subsidiaries | **3.0** | **0** | **0** | **5.0** | **0** |
| Deposits, bank and cash balances | **0** | **0** | **0** | **3.3** | **0** |
| Financial liabilities | | | | | |
| Amounts due to subsidiaries | **0** | **0** | **0** | **3.7** | **0** |
| Borrowings | **7.4** | **1.3** | **0** | **6.1** | **0** |
| **2011** | | | | | |
| Financial assets | | | | | |
| Unsecured loan stocks in associate | 0 | 0 | 0 | 12.0 | 0 |
| Long term receivables | 0 | 0 | 0 | 11.2 | 0 |
| Trade and other receivables | 0 | 0 | 0 | 4.0 | 0 |
| Amounts due from subsidiaries | 2.5 | 0 | 0 | 5.0 | 0 |
| Deposits, bank and cash balances | 0 | 0 | 0 | 3.4 | 0 |
| Financial liabilities | | | | | |
| Amounts due to subsidiaries | 0 | 0 | 0 | 4.5 | 0 |
| Borrowings | 7.7 | 1.5 | 0 | 6.2 | 0 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Market risk (continued)

(iii) Other price risk

Equity price risk arises from the Group's investment in equity securities.

*Risk management objectives, policies and processes for managing the risk*

Management of the Group monitors the equity investments on an individual basis by fund managers. Material investments within the portfolio are managed on an individual basis and all buy and sell decisions are approved by the Risk Management Committee of the Group.

The results and cash flows of the Group and Company is significantly independent of equity price change.

Fair value of financial instruments

The carrying amounts of cash and cash equivalents, short term receivables and payables and short term borrowings approximate their fair values and are equivalent to nominal values due to the relatively short term nature of these financial instruments.

The carrying amount of non-current financial assets and liabilities of the Group and Company at the reporting date approximated their fair value except as set out below:

| | 2012 | | 2011 | |
|---|---|---|---|---|
| | **Carrying amount RM'million** | **Fair value RM'million** | **Carrying amount RM'million** | **Fair value RM'million** |
| **Group** | | | | |
| Unsecured loan stocks in associate | **15.9** | **16.4** | 21.1 | 24.4 |
| Investment in unquoted debt securities | **163.7** | **347.6** | 164.0 | 388.5 |
| Long term receivables | **419.2** | **209.4** | 388.6 | 292.3 |
| Borrowings | **23,071.8** | **22,318.4** | 19,054.1 | 19,784.2 |
| **Company** | | | | |
| Unsecured loan stocks in associate | **15.9** | **16.4** | 21.1 | 24.4 |
| Investment in unquoted debt securities | **163.7** | **347.6** | 164.0 | 388.5 |
| Long term receivables | **1,184.6** | **1,095.5** | 1,356.7 | 1,208.9 |
| Borrowings | **11,494.9** | **12,252.9** | 12,174.2 | 12,815.5 |
| Amounts due to subsidiaries (non-current) | **2,383.4** | **2,858.2** | 2,467.8 | 2,752.2 |

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

Fair value of financial instruments (continued)

The following summarises the methods used in determining the fair value of financial instruments reflected in the above table:

(i) Investments in equity and debt securities

The fair values of financial assets that are quoted in an active market are determined by reference to their quoted closing price at the end of the reporting period. For investment in unquoted debt securities, fair value is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the end of the reporting period.

(ii) Financial instruments

The fair value of forward exchange contracts is based on their quoted price, if available. If a quoted price is not available, then fair value is estimated by the difference between the contractual forward price and the current forward price for the residual maturity of the contract.

The fair value of interest rate swaps and currency options are based on figures provided by calculating agents/ counterparties. Those figures except for currency options are tested for reasonableness by discounting estimated future cash flows based on the terms and maturity of each contract and using market interest rates for a similar instrument at the measurement date.

(iii) Loans and borrowings

Fair value, which is determined for disclosure purposes, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the end of the reporting period.

(iv) Interest rates used to determine fair value

The interest rates used to discount estimated cash flows, when applicable, ranges between 0.72% to 21.30% (2011: 0.49% to 21.30%).

The table below analyses financial instruments carried at fair value, by valuation method.

The different levels have been defined as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3: Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

## 46 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Financial risk management (continued)

The following table presents the Group's and Company's assets and liabilities that are measured at fair value at 31 August 2012.

| | Level 1 RM'million | Level 2 RM'million | Level 3 RM'million | Total RM'million |
|---|---|---|---|---|
| **Group** | | | | |
| Financial assets at fair value through profit and loss | 9.1 | 0 | 0 | 9.1 |
| Derivatives | 0 | 116.3 | 0 | 116.3 |
| Available-for-sale financial assets | 0 | 38.0 | 0 | 38.0 |
| Total assets | 9.1 | 154.3 | 0 | 163.4 |
| Derivatives | 0 | 21.5 | 0 | 21.5 |
| Total liabilities | 0 | 21.5 | 0 | 21.5 |
| **Company** | | | | |
| Financial assets at fair value through profit and loss | 9.1 | 0 | 0 | 9.1 |
| Available-for-sale financial assets | 0 | 38.0 | 0 | 38.0 |
| Total assets | 9.1 | 38.0 | 0 | 47.1 |
| Derivatives | 0 | 21.5 | 0 | 21.5 |
| Total liabilities | 0 | 21.5 | 0 | 21.5 |

The unrealised gains/(losses) have been recognised in other operating expenses in profit or loss.

Although the Group believes that its estimates of fair value are appropriate, the use of different methodologies or assumptions could lead to different measurements of fair value.

The favourable and unfavourable effects of using reasonably possible alternative assumptions have been calculated by recalibrating the model values using expected cash flows and risk-adjusted discount rate based on the probability weighted average of the Group's ranges of possible outcomes.

## 47 CAPITAL RISK MANAGEMENT

The Group's and Company's main objective of capital management is to safeguard the Group's and Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders. The Group and Company will also strive to maintain an optimal capital structure to reduce the cost of capital.

For the purpose of sustaining or changing the capital structure, the Group and Company may adjust the amount of dividends paid to shareholders, issue new shares or return capital to shareholders.

In order to be consistent with industry norms, the Group and Company monitors its capital structure on the basis of the gearing ratio. This ratio is calculated as total borrowings divided by capital employed. Total borrowings include non-current and current borrowings as shown in the consolidated statement of financial position. Capital employed is the summation of total equity and total borrowings.

The gearing ratios as at 31 August were as follows:

| | Group | | Company | |
|---|---|---|---|---|
| | **2012** | **2011 (Restated)** | **2012** | **2011 (Restated)** |
| | **RM'million** | **RM'million** | **RM'million** | **RM'million** |
| Total borrowings | **23,114.9** | 19,108.9 | **11,494.9** | 12,174.2 |
| Total equity | **36,398.3** | 32,229.4 | **32,437.8** | 29,326.1 |
| Total capital employed | **59,513.2** | 51,338.3 | **43,932.7** | 41,500.3 |
| Gearing ratios | **0.39** | 0.37 | **0.26** | 0.29 |

The gearing ratio as at 31 August 2012 was relatively consistent to prior year.

## 48 CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENT

The Group and Company have adopted IC 4 "Determining Whether an Arrangement Contains a Lease", which prescribes that the determination of whether an arrangement is or contains a lease shall be based on the substance of the arrangement. It requires an assessment of whether the fulfilment of the arrangement is dependent on the use of specific assets and the arrangement conveys a right to use such assets. The adoption of IC 4 has resulted in certain contractual arrangements on electricity supply and power purchase of the Company and the Group's subsidiaries being accounted for as finance or operating leases. In prior financial years, these arrangements were accounted for as normal sale and purchase contracts.

The change in accounting policy has been applied retrospectively with comparative figures restated accordingly.

| | At 31 August 2011 | | | At 1 September 2010 | | |
|---|---|---|---|---|---|---|
| | Previously reported as at 31.8.2011 RM'million | Effect of adoption of IC 4 RM'million | Restated as at 31.8.2011 RM'million | Previously reported as at 1.9.2010 RM'million | Effect of adoption of IC 4 RM'million | Restated as at 1.9.2010 RM'million |
| **Consolidated statements of changes in equity** | | | | | | |
| **Group** | | | | | | |
| Retained profits | 19,701.5 | 1,817.3 | 21,518.8 | 20,020.6 | 1,351.4 | 21,372.0 |
| Non-controlling interests | 91.6 | 140.4 | 232.0 | 42.9 | 148.3 | 191.2 |
| **Company** | | | | | | |
| Retained profits | 18,630.5 | (134.9) | 18,495.6 | 19,030.5 | (294.6) | 18,735.9 |

In addition, during the financial year, the Group made certain reclassifications to the comparatives to conform to current year presentation in the financial statements, providing more relevant information about the effects of the transaction on the Group's financial position.

# Notes to the Financial Statements
– 31 August 2012



## 48 CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONTINUED)

Changes in accounting policies and reclassifications

The change in accounting policy and reclassifications had resulted in the changes in financial position and results as set out below:

| | Balances as at 31 August 2011 | | | |
|---|---|---|---|---|
| **Group** | **Previously reported as at 31.8.2011 RM'million** | **Effect of adoption of IC 4 RM'million** | **Change in classification RM'million** | **Restated as at 31.8.2011 RM'million** |
| Non-current assets | | | | |
| Property, plant and equipment | 60,569.5 | 1,291.9 | 0 | 61,861.4 |
| Prepaid leases | 0 | 3,161.0 | 0 | 3,161.0 |
| Current liabilities | | | | |
| Payables | (5,585.6) | 0 | 14.2 | (5,571.4) |
| Finance lease obligation | 0 | (34.9) | (14.2) | (49.1) |
| Non-current liabilities | | | | |
| Deferred tax liabilities | (7,155.1) | (697.1) | 0 | (7,852.2) |
| Finance lease obligation | 0 | (1,293.7) | (40.6) | (1,334.3) |
| Other liabilities | (481.1) | (469.5) | 40.6 | (910.0) |
| **Company** | | | | |
| Non-current assets | | | | |
| Property, plant and equipment | 50,501.2 | 9,981.8 | 0 | 60,483.0 |
| Investment in subsidiaries | 4,451.8 | 0 | (535.5) | 3,916.3 |
| Long term receivables | 821.2 | 0 | 267.1 | 1,088.3 |
| Prepaid leases | 0 | 2,930.3 | 0 | 2,930.3 |
| Current assets | | | | |
| Amount due from subsidiaries | 2,178.8 | 0 | 268.4 | 2,447.2 |
| Current liabilities | | | | |
| Finance lease obligation | 0 | (384.8) | 0 | (384.8) |
| Non-current liabilities | | | | |
| Deferred tax liabilities | (6,175.5) | 45.0 | 0 | (6,130.5) |
| Finance lease obligation | 0 | (12,565.5) | 0 | (12,565.5) |
| Other liabilities | (354.8) | (141.7) | 0 | (496.5) |

## 48 CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONTINUED)

Changes in accounting policies and reclassifications (continued)

The change in accounting policy and reclassifications had resulted in the changes in financial position and results as set out below: (continued)

| | Balances as at 1 September 2010 | | | |
|---|---|---|---|---|
| **Group** | **Previously reported as at 1.9.2010 RM'million** | **Effect of adoption of IC 4 RM'million** | **Change in classifi-cation RM'million** | **Restated as at 1.9.2010 RM'million** |
| Non-current assets | | | | |
| Prepaid leases | 0 | 2,606.1 | 0 | 2,606.1 |
| Current liabilities | | | | |
| Finance lease obligation | 0 | 0 | (2.6) | (2.6) |
| Non-current liabilities | | | | |
| Deferred tax liabilities | (7,270.8) | (545.1) | 0 | (7,815.9) |
| Other liabilities | (536.4) | (561.3) | 66.1 | (1,031.6) |
| Finance lease obligation | 0 | 0 | (63.5) | (63.5) |
| **Company** | | | | |
| Non-current assets | | | | |
| Property, plant and equipment | 49,489.2 | 10,539.6 | 0 | 60,028.8 |
| Investment in subsidiaries | 3,978.9 | 0 | (535.5) | 3,443.4 |
| Long term receivables | 616.2 | 0 | 535.5 | 1,151.7 |
| Prepaid leases | 0 | 2,380.0 | 0 | 2,380.0 |
| Current liabilities | | | | |
| Finance lease obligation | 0 | (163.0) | 0 | (163.0) |
| Non-current liabilities | | | | |
| Deferred tax liabilities | (6,302.6) | 98.3 | 0 | (6,204.3) |
| Finance lease obligation | 0 | (12,950.3) | 0 | (12,950.3) |
| Other liabilities | (368.0) | (199.2) | 0 | (567.2) |

# Notes to the Financial Statements
– 31 August 2012



## 48 CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONTINUED)

Changes in accounting policies and reclassifications (continued)

The change in accounting policy and reclassifications had resulted in the changes in income statements and results as set out below:

| | For the financial year ended 31 August 2011 | | |
|---|---|---|---|
| **Consolidated income statements** | **As previously reported as at 31.8.2011 RM'million** | **Effect of adoption of IC 4 RM'million** | **As restated as at 31.8.2011 RM'million** |
| **Group** | | | |
| Revenue | 32,206.9 | 34.3 | 32,241.2 |
| Operating expenses | (31,582.8) | 626.4 | (30,956.4) |
| Finance cost | (827.8) | (50.7) | (878.5) |
| Deferred taxation | 90.0 | (152.0) | (62.0) |
| Non-controlling interests | 7.0 | (7.9) | (0.9) |
| **Company** | | | |
| Operating expenses | (30,109.6) | 1,330.3 | (28,779.3) |
| Finance cost | (594.2) | (1,117.3) | (1,711.5) |
| Deferred taxation | 16.5 | (53.3) | (36.8) |

## 48 CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONTINUED)

Changes in accounting policies and reclassifications (continued)

The impact of the adoption of IC 4 to the financial position and results for the financial year ended 31 August 2012 is set out below:

| Consolidated Statements of Financial Position<br>Group | Increase/(Decrease) to balances as at 31 August 2012 RM'million |
|---|---|
| Property, plant and equipment | (62.5) |
| Prepaid leases | 628.3 |
| Other liabilities | 36.1 |
| Deferred tax liabilities | 150.7 |
| Finance lease obligation: | |
| – Non-current liabilities | 17.5 |
| – Current liabilities | 4.7 |
| **Company** | |
| Property, plant and equipment | (557.8) |
| Prepaid leases | 608.8 |
| Other liabilities | 6.2 |
| Deferred tax liabilities | 107.4 |
| Finance lease obligation: | |
| – Non-current liabilities | (671.6) |
| – Current liabilities | 286.8 |

## 48 CHANGES IN ACCOUNTING POLICIES AND PRIOR YEAR ADJUSTMENTS (CONTINUED)

Changes in accounting policies and reclassifications (continued)

The impact of the adoption of IC 4 to the income statements and results for the financial year ended 31 August 2012 is set out below:

| **Consolidated Income Statements** | **Increase/(Decrease) for the financial year ended 31 August 2012** |
|---|---|
| **Group** | **RM'million** |
| Revenue | **(29.9)** |
| Operating expenses | **(654.8)** |
| Finance cost | **117.4** |
| Deferred taxation | **150.7** |
| Non-controlling interests | **13.0** |
| **Company** | |
| Operating expenses | **(1,473.0)** |
| Finance cost | **1,043.4** |
| Deferred taxation | **107.4** |

The adoption of IC 4 did not result in any cash impact to the financial year ended 31 August 2011 and 31 August 2012.

# Supplementary Information Disclosed

## Pursuant to Bursa Malaysia Securities Berhad Listing Requirements



The following analysis of realised and unrealised profits or losses at the legal entity level is prepared in accordance with Guidance on Special Matter No. 1, Determination of Realised and Unrealised Profits or Losses in the Context of Disclosure Pursuant to Bursa Malaysia Securities Berhad Listing Requirements, as issued by the Malaysian Institute of Accountants.

Total retained profits of Tenaga Nasional Berhad:

| | Group | | Company | |
|---|---|---|---|---|
| | 2012 | 2011 (Restated) | 2012 | 2011 (Restated) |
| | RM'million | RM'million | RM'million | RM'million |
| Retained profits | | | | |
| – Realised | **29,472.8** | 26,186.9 | **27,013.0** | 23,694.6 |
| – Unrealised | | | | |
| | **(7,299.5)** | (6,836.9) | **(5,657.8)** | (5,199.0) |
| Total share of retained profits from jointly controlled entities: | | | | |
| – Realised | | | | |
| | **(10.2)** | (10.1) | **0** | 0 |
| Total share of retained profits from associates: | | | | |
| – Realised | **225.0** | 270.8 | **0** | 0 |
| – Unrealised | **(115.5)** | (103.6) | **0** | 0 |
| Consolidation adjustment | **3,185.3** | 2,011.7 | **0** | 0 |
| Total retained profits | **25,457.9** | 21,518.8 | **21,355.2** | 18,495.6 |

The disclosure of realised and unrealised profits above is solely for compliance with the directive issued by the Bursa Malaysia Securities Berhad and should not be used for any other purpose.

# Statement by Directors

Pursuant to Section 169 (15) of the Companies Act, 1965

We, Tan Sri Leo Moggie and Datuk Wira Ir. Azman Mohd, two of the Directors of Tenaga Nasional Berhad, do hereby state that, in the opinion of the Directors, the financial statements set out on pages 224 to 363 are drawn up so as to give a true and fair view of the state of affairs of the Group and of the Company as at 31 August 2012 and of the results and the cash flows of the Group and of the Company for the financial year ended on that date in accordance with the MASB Approved Accounting Standards in Malaysia for Entities Other than Private Entities and the provisions of the Companies Act, 1965.

The supplementary information set out on page 364 have been prepared in accordance with the Guidance on Special Matter No.1, Determination of Realised and Unrealised Profits or Losses in the Context of Disclosure Pursuant to Bursa Malaysia Securities Berhad Listing Requirements, as issued by the Malaysian Institute of Accountants.

Signed on behalf of the Board of Directors, in accordance with their resolution dated 31 October 2012.

**TAN SRI LEO MOGGIE**
CHAIRMAN

**DATUK WIRA IR. AZMAN MOHD**
PRESIDENT/CHIEF EXECUTIVE OFFICER

# Statutory Declaration

Pursuant to Section 169 (16) of the Companies Act, 1965

I, Fazlur-Rahman Zainuddin, the person primarily responsible for the financial management of Tenaga Nasional Berhad, do solemnly and sincerely declare that the financial statements set out on pages 224 to 363 are, in my opinion, correct and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Statutory Declarations Act, 1960.

**FAZLUR-RAHMAN ZAINUDDIN**

Subscribed and solemnly declared by the above named Fazlur-Rahman Zainuddin at Kuala Lumpur, Malaysia on 31 October 2012, before me.

PESURUHJAYA SUMPAH
No. W 338
Jaafar bin Jusoh
MALAYSIA

COMMISSIONER FOR OATHS

# Independent Auditors' Report

to the Members of Tenaga Nasional Berhad
(Incorporated in Malaysia) (Company No. 200866-W)

## REPORT ON THE FINANCIAL STATEMENTS

We have audited the financial statements of Tenaga Nasional Berhad on pages 224 to 363 which comprise the consolidated statements of financial position as at 31 August 2012 of the Group and of the Company, and the consolidated statements of income, comprehensive income, changes in equity and cash flows of the Group and of the Company for the financial year then ended, and a summary of significant accounting policies and other explanatory notes, as set out on Notes 1 to 48.

### Directors' Responsibility for the Financial Statements

The Directors of the Company are responsible for the preparation of financial statements that give a true and fair view in accordance with MASB Approved Accounting Standards in Malaysia for Entities Other than Private Entities and the Companies Act, 1965, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with approved standards on auditing in Malaysia. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgement, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation of financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Directors, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the financial statements have been properly drawn up in accordance with MASB Approved Accounting Standards in Malaysia for Entities Other than Private Entities and the Companies Act, 1965 so as to give a true and fair view of the financial position of the Group and of the Company as of 31 August 2012 and of their financial performance and cash flows for the financial year then ended.

## REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

In accordance with the requirements of the Companies Act, 1965 in Malaysia, we also report the following:

(a) In our opinion, the accounting and other records and the registers required by the Act to be kept by the Company and its subsidiaries of which we have acted as auditors have been properly kept in accordance with the provisions of the Act.

(b) We have considered the financial statements and the auditors' reports of all the subsidiaries of which we have not acted as auditors, which are indicated in Note 14 to the financial statements.

(c) We are satisfied that the financial statements of the subsidiaries that have been consolidated with the Company's financial statements are in form and content appropriate and proper for the purposes of the preparation of the financial statements of the Group and we have received satisfactory information and explanations required by us for those purposes.

(d) The audit reports on the financial statements of the subsidiaries did not contain any qualification or any adverse comment made under Section 174(3) of the Act.

# Independent Auditors' Report

to the Members of Tenaga Nasional Berhad (Incorporated in Malaysia) (Company No. 200866-W)



## OTHER REPORTING RESPONSIBILITIES

The supplementary information set out on page 364 is disclosed to meet the requirement of Bursa Malaysia Securities Berhad and is not part of the financial statements. The Directors are responsible for the preparation of the supplementary information in accordance with Guidance on Special Matter No. 1, Determination of Realised and Unrealised Profits or Losses in the Context of Disclosure Pursuant to Bursa Malaysia Securities Berhad Listing Requirements, as issued by the Malaysian Institute of Accountants ("MIA Guidance") and the directive of Bursa Malaysia Securities Berhad. In our opinion, the supplementary information is prepared, in all material respects, in accordance with the MIA Guidance and the directive of Bursa Malaysia Securities Berhad.

## OTHER MATTERS

This report is made solely to the members of the Company, as a body, in accordance with Section 174 of the Companies Act, 1965 in Malaysia and for no other purpose. We do not assume responsibility to any other person for the content of this report.

PricewaterhouseCoopers

**PRICEWATERHOUSECOOPERS**
(No. AF: 1146)
Chartered Accountants

**NURUL A'IN BINTI ABDUL LATIF**
(No. 2910/02/13(J))
Chartered Accountant

Kuala Lumpur
31 October 2012

# Analysis of Shareholdings

as at 15 October 2012

## SHARE CAPITAL

| | | |
|---|---|---|
| Authorised Share Capital | : | 10,000,000,000 ordinary shares of RM1.00 each<br>One (1) Special Rights Redeemable Preference Share of RM1.00<br>1,000 Class A Redeemable Preference Shares of RM1.00 each<br>500 Class B Redeemable Preference Shares of RM1.00 each |
| Issued and Fully Paid-Up Share Capital | : | 5,509,832,109 ordinary shares of RM1.00 each<br>One (1) Special Rights Redeemable Preference Share of RM1.00 |
| Voting Right | : | One (1) voting right for one (1) ordinary share |

## ANALYSIS OF SHAREHOLDINGS

| Size of Shareholdings | No. of Shareholders | % of Shareholders | No. of Shares | % of Issued Share Capital |
|---|---|---|---|---|
| Less than 100 | 1,477 | 4.09 | 54,789 | 0.00 |
| 100 – 1,000 | 5,355 | 14.81 | 3,794,453 | 0.07 |
| 1,001 – 10,000 | 25,783 | 71.31 | 75,048,351 | 1.36 |
| 10,001 – 100,000 | 2,714 | 7.51 | 69,518,735 | 1.26 |
| 100,001 to less than 5% of Issued Shares | 822 | 2.27 | 2,133,849,770 | 38.73 |
| 5% and above of Issued Shares | 3 | 0.01 | 3,227,566,011 | 58.58 |
| **Total** | **36,154** | **100.00** | **5,509,832,109** | **100.00** |

## DIRECTORS' SHAREHOLDINGS

| | | No. of Shares | |
|---|---|---|---|
| No. | Name of Directors | Direct/Indirect Interest | % |
| 1. | Tan Sri Leo Moggie | – | – |
| 2. | Datuk Wira Ir. Azman bin Mohd<br>– Tasec Nominees (Tempatan) Sdn. Bhd. | 4,375 | 0.00 |
| 3. | Datuk Nozirah binti Bahari | – | – |
| 4. | Tan Sri Dato' Hari Narayanan a/l Govindasamy | – | – |
| 5. | Dato' Zainal Abidin bin Putih | 1,562 | 0.00 |
| 6. | Dato' Mohammad Zainal bin Shaari | – | – |
| 7. | Dato' Fuad bin Jaafar | 78,125 | 0.00 |
| 8. | Tan Sri Dato' Seri Siti Norma binti Yaakob | 1,562 | 0.00 |
| 9. | Dato' Abd Manaf bin Hashim | – | – |
| 10. | Datuk Chung Hon Cheong | – | – |
| 11. | Puan Suria binti Ab Rahman<br>(Alternate Director to Dato' Mohammad Zainal bin Shaari) | – | – |

# Analysis of Shareholdings
as at 15 October 2012



## SUBSTANTIAL SHAREHOLDERS

| No. | Name of Substantial Shareholders | No. of Shares | % |
|---|---|---|---|
| 1. | Khazanah Nasional Berhad | 1,939,655,861 | 35.20 |
| 2. | Employees Provident Fund Board<br>– 1,875,000 shares held in its own name<br>– 703,066,182 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 21,108,562 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 16,941,100 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 7,688,375 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 4,614,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 4,500,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 4,100,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 3,911,800 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 2,300,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 2,250,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 1,600,000 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd.<br>– 1,178,200 shares held through Citigroup Nominees (Tempatan) Sdn. Bhd. | 775,133,219 | 14.07 |
| 3. | Amanahraya Trustees Berhad<br>Skim Amanah Saham Bumiputera | 584,843,968 | 10.61 |

## 30 LARGEST SHAREHOLDERS

| No. | Name of Shareholders | No. of Shares | % |
|---|---|---|---|
| 1. | Khazanah Nasional Berhad | 1,939,655,861 | 35.20 |
| 2. | Citigroup Nominees (Tempatan) Sdn. Bhd.<br>Employees Provident Fund Board | 703,066,182 | 12.76 |
| 3. | Amanahraya Trustees Berhad<br>Skim Amanah Saham Bumiputera | 584,843,968 | 10.61 |
| 4. | Lembaga Tabung Haji | 208,615,968 | 3.79 |
| 5. | Kumpulan Wang Persaraan (Diperbadankan) | 205,230,325 | 3.72 |
| 6. | Cartaban Nominees (Asing) Sdn. Bhd.<br>Exempt An for State Street Bank & Trust Company (West CLT OD67) | 88,242,931 | 1.60 |
| 7. | Amanahraya Trustees Berhad<br>Amanah Saham Malaysia | 85,500,000 | 1.55 |
| 8. | Amanahraya Trustees Berhad<br>Amanah Saham Wawasan 2020 | 71,340,325 | 1.30 |
| 9. | HSBC Nominees (Asing) Sdn. Bhd.<br>BBH and Co Boston for Vanguard Emerging Markets Stock Index Fund | 54,755,707 | 0.99 |
| 10. | Citigroup Nominees (Tempatan) Sdn. Bhd.<br>Exempt An for Eastspring Investments Berhad | 53,202,868 | 0.97 |
| 11. | Maybank Nominees (Tempatan) Sdn. Bhd.<br>Maybank Trustees Berhad for Public Ittikal Fund (N14011970240) | 51,154,000 | 0.93 |

# Analysis of Shareholdings
as at 15 October 2012



## 30 LARGEST SHAREHOLDERS (CONTINUED)

| No. | Name of Shareholders | No. of Shares | % |
|---|---|---|---|
| 12. | Maybank Nominees (Tempatan) Sdn. Bhd.<br>Maybank Trustees Berhad for Public Regular Savings Fund (N14011940100) | 40,149,575 | 0.73 |
| 13. | Malaysia Nominees (Tempatan) Sendirian Berhad<br>Great Eastern Life Assurance (Malaysia) Berhad (PAR 1) | 39,906,525 | 0.72 |
| 14. | AMSEC Nominees (Tempatan) Sdn. Bhd.<br>AmTrustee Berhad for CIMB Islamic Dali Equity Growth Fund (UT-CIMB-DALI) | 38,366,700 | 0.70 |
| 15. | Cartaban Nominees (Asing) Sdn. Bhd.<br>Government of Singapore Investment Corporation Pte Ltd for Government of Singapore (C) | 34,477,118 | 0.63 |
| 16. | HSBC Nominees (Asing) Sdn. Bhd.<br>Exempt An for JPMorgan Chase Bank, National Association (U.A.E.) | 29,564,693 | 0.54 |
| 17. | Amanahraya Trustees Berhad<br>Amanah Saham Didik | 27,305,737 | 0.50 |
| 18. | Amanahraya Trustees Berhad<br>AS 1Malaysia | 26,547,700 | 0.48 |
| 19. | Cartaban Nominees (Tempatan) Sdn. Bhd.<br>Petroliam Nasional Berhad (Strategic Inv) | 21,738,625 | 0.39 |
| 20. | Citigroup Nominees (Tempatan) Sdn. Bhd.<br>Employees Provident Fund Board (Nomura) | 21,108,562 | 0.38 |
| 21. | HSBC Nominees (Asing) Sdn. Bhd.<br>Exempt An for JPMorgan Chase Bank, National Association (U.S.A.) | 19,375,810 | 0.35 |
| 22. | Amanahraya Trustees Berhad<br>Public Islamic Dividend Fund | 17,396,875 | 0.32 |
| 23. | Citigroup Nominees (Tempatan) Sdn. Bhd.<br>Employees Provident Fund Board (CIMB PRIN) | 16,941,100 | 0.31 |
| 24. | Pertubuhan Keselamatan Sosial | 15,569,500 | 0.28 |
| 25. | Amanahraya Trustees Berhad<br>Public Islamic Select Enterprises Fund | 15,557,400 | 0.28 |
| 26. | Cartaban Nominees (Asing) Sdn. Bhd.<br>BBH (LUX) SCA for Fidelity Funds Asean | 14,921,975 | 0.27 |
| 27. | HSBC Nominees (Asing) Sdn. Bhd.<br>Exempt An for the Bank of New York Mellon (Mellon Acct) | 14,670,978 | 0.27 |
| 28. | Amanahraya Trustees Berhad<br>Public Growth Fund | 14,385,000 | 0.26 |
| 29. | Citigroup Nominees (Tempatan) Sdn. Bhd.<br>Exempt An for American International Assurance Berhad | 13,274,050 | 0.24 |
| 30. | Amanahraya Trustees Berhad<br>Public Islamic Sector Select Fund | 12,969,550 | 0.24 |
| | **Total** | **4,479,835,608** | **81.31** |

# Net Book Value of Land & Buildings

| Property List | LAND | | | | | | | | | BUILDINGS | | | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Leasehold | | | Freehold | | | Total | | | | | | |
| Group | No. of Lots (1) | Area (sq M) (2) | NBV (RM'000) (3) | No. of Lots (4) | Area (sq M) (5) | NBV (RM'000) (6) | No. of Lots (1+4) | Area (sq M) (2+5) | NBV (RM'000) (3+6) | No. (10) | Built-Up Area (sq M) (11) | Total NBV (RM'000) (12) | (13) |
| **Location** | | | | | | | | | | | | | |
| Perlis | 56 | 98,310 | 2,227 | 57 | 57,124 | 3,449 | 113 | 155,434 | 5,676 | 86 | 10,583 | 66,843 | Power Stations, |
| Kedah | 287 | 895,807 | 14,931 | 429 | 553,895 | 30,866 | 716 | 1,449,702 | 45,797 | 370 | 100,388 | 243,300 | Rural Power Stations, |
| Pulau Pinang | 193 | 679,177 | 67,884 | 487 | 631,110 | 55,571 | 680 | 1,310,287 | 123,455 | 324 | 38,596 | 449,346 | Mini Hydros, |
| Perak | 678 | 4,375,025 | 127,629 | 430 | 3,505,883 | 91,734 | 1,108 | 7,880,908 | 219,363 | 818 | 237,480 | 860,110 | Jetties, Dams |
| Selangor | 794 | 8,082,590 | 373,175 | 759 | 2,322,041 | 220,250 | 1,553 | 10,404,631 | 593,425 | 1,394 | 251,983 | 2,603,520 | Main Intake Substations, |
| W. Persekutuan | 375 | 281,794 | 72,445 | 453 | 1,214,662 | 143,208 | 828 | 1,496,456 | 215,653 | 570 | 211,231 | 1,128,219 | Distribution Substations, |
| Putrajaya/ Cyberjaya | 3 | 588,490 | 13,908 | 4 | 1,554 | 657 | 7 | 590,044 | 14,565 | 60 | 8,580 | 36,628 | Residential Houses, Apartments, |
| N. Sembilan | 274 | 2,870,756 | 16,749 | 255 | 702,149 | 40,435 | 529 | 3,572,905 | 57,184 | 249 | 146,921 | 549,533 | Holiday Bungalows, |
| Melaka | 324 | 434,353 | 23,335 | 295 | 110,539 | 22,873 | 619 | 544,892 | 46,208 | 150 | 90,842 | 111,929 | Office Buildings, |
| Johor | 939 | 3,327,640 | 104,402 | 742 | 859,706 | 49,192 | 1,681 | 4,187,346 | 153,594 | 565 | 127,156 | 912,279 | Warehouses, |
| Pahang | 328 | 1,302,354 | 22,296 | 275 | 244,453 | 13,274 | 603 | 1,546,807 | 35,570 | 606 | 97,421 | 519,604 | Store & Workshops |
| Terengganu | 348 | 2,069,733 | 30,433 | 87 | 25,134,156 | 43,150 | 435 | 27,203,889 | 73,583 | 318 | 68,019 | 313,735 | |
| Kelantan | 343 | 1,243,536 | 9,806 | 282 | 449,303 | 21,553 | 625 | 1,692,839 | 31,359 | 308 | 400,113 | 863,195 | |
| Sabah | 83 | 6,261,621 | 12,388 | 62 | 4,501,754 | 32,464 | 145 | 10,763,375 | 44,852 | 418 | 132,600 | 308,082 | |
| Pakistan | 1 | 38,141 | 121 | 1 | 790,344 | 1,681 | 2 | 828,485 | 1,802 | 1 | 12,713 | 791 | |
| **TOTAL** | **5,026** | **32,549,327** | **891,729** | **4,618** | **41,078,673** | **770,357** | **9,644** | **73,628,000** | **1,662,086** | **6,237** | **1,934,626** | **8,967,114** | |

# Group Directory



### KUALA LUMPUR

**Pengurus Besar (Kuala Lumpur)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Tingkat 11, Wisma TNB Jalan Kepong
Peti Surat 11050
50990 Kuala Lumpur
Tel : 03-6250 6020
D/L : 03-6250 6301
Fax : 03-6250 6500

### PUTRAJAYA & CYBERJAYA

**Pengurus Besar (Putrajaya & Cyberjaya)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Blok 4802-0-7, Jalan Perdana
CBD Perdana
63000 Cyberjaya
Tel : 03-8886 6888
Fax : 03-8886 6933

### NEGERI SEMBILAN

**Pengurus Besar Negeri (Negeri Sembilan)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Aras 5, Wisma TNB Jalan Dato' Bandar Tunggal
70990 Seremban
Tel : 06-768 3400/06-767 9075
Fax : 06-764 4271

### NEGERI MELAKA

**Pengurus Besar Negeri (Melaka)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Aras M, Jalan Banda Kaba
Karung Berkunci 1005
75990 Melaka
Tel : 06-282 8544
Fax : 06-282 6460

### NEGERI JOHOR

**Pengurus Besar Negeri (Johor)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Tingkat 14, Wisma TNB Jalan Yahya Awal
80100 Johor Bahru
Tel : 07-219 2000
Fax : 07-223 1425

### NEGERI PAHANG

**Pengurus Besar Negeri (Pahang)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Aras 13, Wisma TNB
Lot 14, Seksyen 19 Jalan Gambut
25000 Kuantan
Tel : 09-515 5555
D/L : 09-515 5556
Fax : 09-515 5656

### NEGERI TERENGGANU

**Pengurus Besar Negeri (Terengganu)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Jalan Cherong Lanjut
20673 Kuala Terengganu
Tel : 09-622 3401
D/L : 09-622 3022
Fax : 09-624 3896

### NEGERI KELANTAN

**Pengurus Besar Negeri (Kelantan)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Aras 5, Wisma TNB Jalan Tok Hakim
15000 Kota Bharu
Tel : 09-745 1100
D/L : 09-744 5477
Fax : 09-744 9161

### NEGERI PERLIS

**Pengurus Besar Negeri (Perlis)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Bulatan Jubli Emas
01000 Kangar
Tel : 04-976 0021/22/23
D/L : 04-9767 470
Fax : 04-976 1921

### NEGERI KEDAH

**Pengurus Besar Negeri (Kedah)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Aras 8, Wisma TNB
No. 887, Jalan Sultan Badlishah
05990 Alor Star
Tel : 04-733 3737
D/L : 04-735 8808
Fax : 04-733 0591

### NEGERI PULAU PINANG

**Pengurus Besar Negeri (Pulau Pinang)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Tingkat 17, Wisma TNB
No. 30, Jalan Anson
10400 Pulau Pinang
Tel : 04-222 4000
Fax : 04-227 3110

### NEGERI PERAK

**Pengurus Besar Negeri (Perak)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Tingkat 2, Wisma TNB Jalan Lahat
30200 Ipoh
Tel : 05-208 8000
D/L : 05-254 7475
Fax : 05-254 5199

### NEGERI SELANGOR

**Pengurus Besar Negeri (Selangor)**
Bahagian Pembahagian
Tenaga Nasional Berhad
Aras 7, Menara MRCB
No. 2, Jalan Majlis 14/10
Seksyen 14
40000 Shah Alam
Tel : 03-5522 4000
Fax : 03-5522 4181

KEEPING THE LIGHTS ON

TENAGA NASIONAL BERHAD
(200866-W)

# Proxy Form

| Number of Ordinary Share(s) held | |
|---|---|
| CDS Account No. | |

I/We, ____________________________________________ NRIC No./Passport No./Co. No. ________________________
(FULL NAME IN CAPITAL LETTERS)

of ______________________________________________________________________________________________
(FULL ADDRESS)

being a Member/Members of Tenaga Nasional Berhad, hereby appoint:

| | Name/NRIC No. | No. of shares | Percentage (%) | |
|---|---|---|---|---|
| Proxy 1 | ____________ | ____________ | ____________ | or failing him/her |
| Proxy 2 | ____________ | ____________ | ____________ | or failing him/her |
| | | TOTAL | ____________ | |

the Chairman of the Meeting, as my/our proxy, to attend and vote for me/us and on my/our behalf at the 22ND ANNUAL GENERAL MEETING of TENAGA NASIONAL BERHAD to be held at Dewan Serbaguna, Kompleks Sukan TNB, Jalan Pantai Baru, 59200 Kuala Lumpur on **Tuesday, 18 December 2012** at **10.00 a.m.** and/or at any adjournment thereof.

My/Our proxy is to vote as indicated below:

| ORDINARY BUSINESS | | | FOR | AGAINST |
|---|---|---|---|---|
| 1. | **ORDINARY RESOLUTION 1** | To receive the Audited Financial Statements for the Financial Year ended 31 August 2012 and the Reports of the Directors and Auditors thereon | | |
| 2. | **ORDINARY RESOLUTION 2** | Declaration of Dividend | | |
| 3. | **ORDINARY RESOLUTION 3** | Approval for Payment of Directors' Fees | | |
| | Re-election of the following Directors who retire in accordance with Article 135 of the Company's Articles of Association: | | | |
| 4. | **ORDINARY RESOLUTION 4** | Dato' Fuad bin Jaafar | | |
| 5. | **ORDINARY RESOLUTION 5** | Dato' Abd Manaf bin Hashim | | |
| 6. | **ORDINARY RESOLUTION 6** | Datuk Wira Ir. Azman bin Mohd | | |
| | Re-appointment of the following Directors who retire in accordance with Section 129 (6) of the Companies Act, 1965: | | | |
| 7. | **ORDINARY RESOLUTION 7** | Tan Sri Leo Moggie | | |
| 8. | **ORDINARY RESOLUTION 8** | Tan Sri Dato' Seri Siti Norma binti Yaakob | | |
| 9. | **ORDINARY RESOLUTION 9** | Re-appointment of Messrs PricewaterhouseCoopers as Auditors | | |
| **SPECIAL BUSINESS** | | | | |
| 10. | **ORDINARY RESOLUTION 10** | Authority to Directors for the Issuance of Shares pursuant to ESOS II | | |
| 11. | **ORDINARY RESOLUTION 11** | Proposed Offer and Grant of Options to Datuk Wira Ir. Azman bin Mohd | | |
| 12. | **ORDINARY RESOLUTION 12** | Proposed Renewal of Share Buy-Back Authority | | |
| 13. | **SPECIAL RESOLUTION 1** | Proposed Amendments to the Articles of Association of the Company | | |

(Please indicate with an "X" in the appropriate space how you wish your vote to be cast. If you do not indicate how you wish your proxy to vote on any resolution, the proxy shall vote as he thinks fit, or at his discretion, abstain from voting.)

Dated this ________ day of __________, 2012.

______________________________
Signature of Shareholder(s) or Common Seal

**NOTES:**

1. Any member entitled to attend and vote at this Meeting is entitled to appoint a proxy to attend and vote in his stead. A proxy may but need not be a member of the Company and the provisions of Section 149(1)(b) of the Companies Act, 1965 shall not apply to the Company.
2. The instrument appointing a proxy shall be in writing under the hand of the appointer or of his attorney duly appointed under a power of attorney. Where the instrument appointing a proxy is executed by a corporation, it shall be executed either under its common seal or under the hand of any officer or attorney duly appointed under a power of attorney.
3. A member shall not be entitled to appoint more than two (2) proxies to attend and vote at the Meeting. Where a member appoints two (2) proxies, the appointment shall be invalid unless the proportion of the shareholdings to be represented by each proxy is specified.
4. A corporation which is a member, may by resolution of its Directors or other governing body authorise such person as it thinks fit to act as its representative at the Meeting, in accordance with Article 107(6) of the Company's Articles of Association.
5. Only members registered in the Record of Depositors as at 11 December 2012 shall be eligible to attend the Meeting or appoint proxy to attend and vote on their behalf.
6. The instrument appointing a proxy must be deposited at Symphony Share Registrars Sdn. Bhd., Level 6, Symphony House, Pusat Dagangan Dana 1, Jalan PJU 1A/46, 47301 Petaling Jaya, Selangor Darul Ehsan not less than forty-eight (48) hours before the time set for the Meeting.

STAMP

**Symphony Share Registrars Sdn. Bhd.**
Level 6, Symphony House
Pusat Dagangan Dana 1
Jalan PJU 1A/46
47301 Petaling Jaya
Selangor Darul Ehsan