For the benefit of humankind KOEN is striving to create a better future

Ethical management and social responsibility

By establishing a system to encourage integrity and ethical management, enacting ethical regulations, including ethical charter, rules, and code of conduct, that all employees voluntarily abide by, KOEN has been taking a leading role in the ethical management of government-owned enterprises.
Especially, as the fourth company in Korea, KOEN signed on the UN Global Compact in 2006. In addition, in order to unveil and eradicate potential corruption caused by third persons, KOEN also introduced the ombudsman system and encouraged integrity.
This has led to the establishment and sustaining of a transparent management system. Meanwhile, in an effort to fulfill its corporate social responsibility, KOEN also has spared no effort to support the local society in power plant area. Boosting local economy, conducting skill training program, and promoting various other education programs for local residents, KOEN has endeavored to support the local society in various ways.

AAA-Grade of KoBEX 5M for 10 consecutive years


Activities of "Cheongbaekri Forum," a club promoting integrity

Fair Player Club Summit


Founding ceremony for the Ocean protectors

Leading shared growth of large and small-medium enterprises

KOEN has paved the way for shared growth and co-existence of large enterprises and small-medium sized enterprises(SME) by introducing various programs customized for SMEs. It enabled SMEs to actively participate in and benefit from the government's policy for shared growth. Such supporting programs are as follows;

- **Technology development & support** - Technology transfer, joint R&D, in-field technology develop-ment, conditional purchases, demonstrative R&D support, R&D incubating, etc.
- **Management innovation** - Cultivation of KWC-30 and KLC-50, cultivation of medium core companies, support on manage-ment solutions, partner loan for shared growth, acquisition of certification for industrial property & international standards, Sangsaeng supporters (for start-ups), support on establishment of smart factories, etc.
- **Development of new purchase & sales route** - Export agent (G-TOPS), professional trade shows, export road shows, research on international markets, production of PR materials, exhibition halls for SMBs, model export projects, support on global marketings, etc.
- **HR & Education** - Support for HR cultivation in SMBs, academic training & education programs for SMBs, export mentoring by KOTRA, support in job finding by 'job concert', Naeil mutual aid project, etc.


Permanent exhibition hall on SMEs for Global Buyers


Conference on shared growth

Maintaining core technologies in energy industry and nurturing talents

In the midst of rapidly changing business circumstances, in order to enhance its competitiveness in the market, KOEN operates groups of experts specialized in the top 10 core technologies, such as combustion technology, diagnostic maintenance system, technologies for renewable energy and other new business areas closely related to energy industry. In addition, its desire to elevate technological capability into the global level has prompted KOEN to draw mid and long-term road maps coupled with detailed action plans which lead to nurturing core values and technical development in a more systematic way.
New graduate school programs for master's and doctorate degrees have been established as investment in and cultivation of human resources via academia-industry cooperation, in universities like Pusan, Keimyong, Hanyang, and Yeonsei.


Specialist group workshop


Academic cooperation activities

World-class technological prowess and operation know-how allows KOEN to sharpen its competitiveness in global market

KOEN operates a total of five power plants in various regions of Korea, including Yeongheung, Samcheonpo, Bundang, Yeongdong (Yeongdong Eco), and Yeosu. With its total installed capacity of 10,344 MW accounting for 8.9% of nation's total installed capacity, KOEN stably supplies 12.8% of the nation's total electricity generation. In the meantime, through technological power accumulated over the past 50 years and development of new growth engines, KOEN puts its best efforts to become an energy company highly recognized by the public and to enhance its competitiveness for new businesses and major challenges in future.

Actively carrying out new businesses in domestic and overseas market for creation of future growth engines

- **Overseas Projects** - Based on rich experience and know-how in con-struction, operation and maintenance of world-class power plants, KOEN has been consistently carrying out various overseas businesses including commissioning consulting service for thermal power plants (coal-fired, gas combined cycle), construction and operation of hydro power plants as well as renewa-ble power facilities (solar, wind)


Aerial View of Hydroelectric Power Plant in Gulpur, Pakistan


Upper Trishuli-1 Hydroelectric Power Plant in Nepal

* Test operation in Tufanbeyli, Turkey
* Hydro Power Plants in Gulpur(102MW), Pakistan / Upper Trishully(216 MW), Nepal
* Photovoltaic power in Bulgaria(41.62MW), Wind power in USA(120MW)

Furthermore, for stable procurement of resources and energy supply, KOEN has also invested in Indonesia Adaro coal mine and Australia Moolaben.

- **Domestic projects** - KOEN is carrying out various domestic projects including Goseong Green Power, Gangneung Eco Power, Ansan combined cycle power, Yeosu integrated energy complex, fly ash recycling projects, and etc.


Integrated energy supply facilities in Yeosu


Fly ash recycling project

Advancing toward a leading energy company in renewable energy sector

As the first of its kind, KOEN has developed marine small hydro power facility in Samcheonpo power station by using discharged cooling water, and expanded it to Yeongheung power station. In addition, following 1MWp scale of photovoltaic power facility set up in Yeonghueng, various renewable energy facilities have been added to KOEN's power stations in Samcheonpo, Yeongdong, Yeosu, and Bundang. It includes a 300kW scale of fuel cell in Bundang which has been expanded to 15 MW scale in June, 2018, on top of that, KOEN has also set up a 46MW large-scale wind power complex in Yeongheung power station.
KOEN plays a leading role in renewable energy sector in the country as well as in overseas, proven by its numerous renewable energy projects successfully completed, such as roof-top photovoltaic power facility in Tangjung Plant of Samsung Eletronics Co., photovoltaic power facilitiy in Gumi Sewage Treatment Plant of Topsun Co., photovoltaic power facilities in shut-down salt fields and roads, land wind power facility in Yeongam, photovoltaic power facility in Bulgaria, and wind power facility in US.
Meanwhile, given the target to expand its renewable energy capacity upto 35% of total installed generation capacity by 2025 and to fulfill RPS(Renewable Portfolio Standard) under government policy, KOEN is putting its all efforts in developing and carrying out additional renewable energy projects. As it is, KOEN is striving to become a leading renewable energy company in global market as well as in Korea.


Samcheonpo marine small hydroelectric power plant


Yeongheung photovoltaic power plant

Korea South-East Power Co.

Clean & Smart Energy Leader

KOREA SOUTH-EAST POWER CO.

Striving for core values - creating values, innovative mind, challenging spirit, social contribution

Clean & Smart Energy Leader – KOEN

Korea South-East Power Co., Ltd, having 'KOEN' for its new brand name, was established on April 2, 2001, by being branched off from Korea Electric Power Corporation(KEPCO) under the government's power industry restructuring policy.
With a mission "through economical and stable energy supply, spearheads sustainable future growth for growing of the nation and well-being of the citizens", it endeavors to realize its grand vision to become 'Clean & Smart Energy Leader'.

Company overview

[As of Jun, 2018]

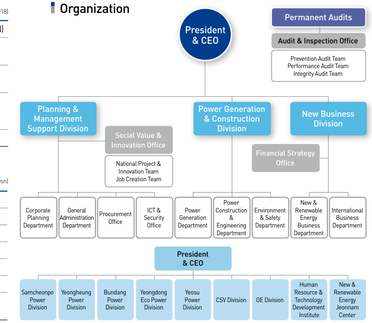
Company name	Korea South-East Power Co Ltd (KOEN)
Address of Headquarter Office	32 Sadeul-ro, 123 beon-gil, Jinju-si, Gyeongsangnam-do, Korea
Number of employees	2,450
Major business	Development of electric power resources, power plants and other related facilities
Production item	Electricity

Financial summary

[As of Mar, 2018 / in million won]

Assets	9,851,333
Debt	4,645,115
Capital	5,206,218
Debt ratio	89.2%
Revenue	1,655,574
Net profit	205,876
Credit ratings	Moody's: Aa2 / S&P : AA

Organization



Vision 2025

Stably supplying economical electricity of good quality, and spearheads sustainable future growth for growing of the nation and well-being of the citizens

VISION	Clean & Smart Energy Leader Energy leader creating future with technology		
KOEN WAY	Real;ationship	Add;vanced	Deep;erence
STRATEGY DIRECTION	Leading the new & renewable energy business	Stronger competitiveness in eco-friendly power generation business	
STRATEGIC OBJECTIVES	Ratio of new & renewable energy generation up to 25%	More than 50% of the entire project is joint projects on new & renewable energy	Total revenue 950 million KRW (Business profit rate 9%) / Reduction in greenhouse gas and air pollutant (57% of total emission in 2017)
STRATEGY DIRECTION	Advancement of social value centered management system		
STRATEGIC OBJECTIVES	BP & above for EPRI technology evaluation level	Inclusion to World Class in DJSI	

CLEAN & SMART ENERGY LEADER KOEN

Plants in operation

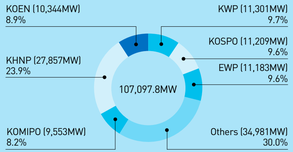
[As of Jan. 2018]

Load type	Site	Used fuels	Installed capacity	Remarks
Base load	Samcheonpo	Bituminous	3,240MW	9,188.6 (88.8%)
	Yeongheung	Bituminous	5,080MW	
	Yeosu	Bituminous	668.6MW	
	Yeongdong	Anthracites	200MW	
Peak load	Bundang	LNG	922.1MW	922.1(8.9%)
Renewable	Biomass (Yeongdong #1) Yeongheung wind power, small hydro power, etc.	-	233.8MW	233.7(2.3%)
Total			10,344MW	10,344(100%)

Market share of Korean Gencos

[Facility capacity: as of Jan. 2018 / Power generation: as of Dec. 2017]

Classification	KOEN	KHNP	KOMIPO	KWP	KOSPO	EWP	Others	Total
Installed capacity(MW)	10,344	27,857	9,553	11,301	11,209	11,183	34,981	116,428 MW
Share (%)	8.9	23.9	8.2	9.7	9.6	9.6	30.0	
Generated capacity(Gwh)	70,632	155,407	52,954	47,936	49,014	51,103	126,859	553,905 Gwh
Share (%)	12.8	28.1	9.6	8.7	8.8	9.2	22.8	



Overview of Power Plants

Clean power plant caring for environment and human

Samcheonpo Power Division

Samcheonpo Power Division is the first 500MW coal-fire power plant in large scale thermal power plant complex in southern Korea, with total capacity of 3,240 MW. In order to protect the environment and produce energy at low price, the plant not only focuses on developing environmental friendly combustion technology but it has also installed and operates the cutting edge environmental facilities for desulfurization and denitrification.
Especially, it operates a refinery plant for recycling of bottom ash produced in the process of generating electricity. And it spares no efforts to develop renewable energy facilities including the first photovoltaic power facility set up in Korea. As these efforts have been recognized, Samcheonpo power station has received the Grand Prize in Environment Management Awards, showing its leading role in the nation for environment-friendly management system.
Plus, by developing and operating a small hydro power plant(4,740kW), the first of its kind in the world using discharged cooling water, it also leads the government's policy for low carbon green growth through development of new green energy.

- **Site area:** 2,210,000㎡
- **Construction completion:** Unit 1: Aug 16, 1983 Unit 2: Feb 28, 1984 / Unit 3: Apr 30, 1993 / Unit 4: Mar 31, 1994 / Unit 5: Jul 1, 1997 / Unit 6: Jan 1, 1998
- **Capacity:** 3,240MW

World-class, high-tech, eco-friendly power plant

Yeongheung Power Division

Known for its 800MW-class coal-fired unit introduced for the first time in Korea, Yeongheung division plays a critical role for stably supplying electricity to metropolitan area where itself consumes 23% of national gross electricity produced.
Yeoungheung division is also well known for its highly efficient and advanced environmental facilities. Despite the strict environmental regulations, Yeongheung power station is being operated hardly creating any pollution. Meanwhile, by setting up photovoltaic power facility(8MW), marine hydro power facility(12.6MW), wind power facilities(44MW), Yeoungheung is also growing into a hub for renewable energy business.
As part of its effort to fulfill corporate social responsibility, Yeongheung division designed and built Energy Park, a cultural and information hall opened in 2007. At the Energy Park, through various activities students could learn about electric energy, also local residents could enjoy various cultural events including movie, musical performances, etc. It has not only become tourist attraction but it has certainly become the pride of local area.

- **Site area:** 5,958,153㎡
- **Construction completion:** Unit 1: July 12, 2004 Unit 2: November 30, 2004 / Unit 3: June 1, 2008 / Unit 4: December 1, 2008 / Unit 5: June 10, 2014 / Unit 6: November 5, 2014
- **Capacity:** 5,080MW

Park-like plant in the city

Bundang Power Division

Being located in a highly populated residential area, Bundang power station operates gas combined cycle units with using clean and safe fuel, LNG, to provide electricity and heat to metropolitan areas while it hardly produces any air pollutants. The division continues its effort to make comfortable and eco-friendly park of a power station by enhancing environmental facility and noise control, as well as keeping utmost safety in workplaces.
Meanwhile, starting with 300kW fuel cells first installed in 2006, Bundang power station has been expanding fuel cell facilities by adding 3MW fuel cells in 2013, a 6MW plant in 2016, and a 6MW plant in 2018 as 2nd, 3rd, and 5th phase of the construction project, followed by a 17MW plant and an 8MW plant as 4th and 6th phase. In addition, it has also set up renewable energy facility such as 50 kW photovoltaic power facility.
Based on its management policy, 'basic and principles, communication and consideration, value creation', Bundang division endeavors to create a promising society caring for people's well-being and happiness.

- **Site area:** 215,016㎡
- **Construction completion:** Phase 1: Sep 16, 1993 / Phase 2: Mar 31, 1997
- **Capacity:** 922MW

The Eco Power Plant for The Environment and The Local Community

Yeongdong Eco Power Division

Since the establishment of its 1st power plant unit in 1972 and the 2nd unit in 1979, Yeongdong Eco Power Division has more than 40 years of history and tradition. Yeongdong Eco Power leads the economic growth in Gangwon Area by mixing the local coal to its fuel.
The 1st unit adopted wood pellet as its environmental friendly fuel for the first time in Korea, as a way to provide stable and eco-friendly power generation for the region with its continuing effort for improving environmental facilities. Yeongdong Eco Power Division is striving to operate the plant in clean and environment-friendly way.
Also, Yeongdong Eco Power Division is making an effort to co-exist with the local community by taking social responsibility with sharing activities.

- **Site area:** 1,359,018㎡
- **Construction completion:** Unit 1: May 23, 1973 / June 30, 2017 (Completion of fuel conversion to wood pellets) Unit 2: October 31, 1979
- **Capacity:** 325MW

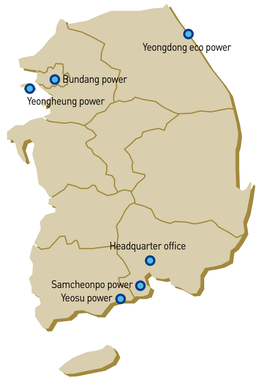
Boosting Competitiveness of National Industrial Complex

Yeosu Power Division

Initially constructed as oil-fueled power plant in 1997, Yeosu Power Division has converted its facilities to fluidized-bed power plant that consumes affordable and more diverse fuels, in order to respond to the changing environment of power generation and operate the facility more efficiently.
The unit2(300MW) converted its oil-fueled facilities to fluidized-bed boilers(328.6M) in September 2011, and added Oil-fueled unit1(200MW) in August 2016, for the reliable power distribution in the surrounding area and Yeosu National Industrial Complex.
Yeosu Power Division also leads green management as the safe and eco-friendly power station, by reducing greenhouse gases with eco-friendly mixed fuels and developing new & renewable energy. The effort was rewarded by Green Management Award by the prime minister in 2016, Leader of Recycling Companies Award by the president in 2013, as well as the Safety Management Awards in 2014 and KOSHA/OHSAS 18001 certificates.

- **Site area:** 309,173.5㎡
- **Construction completion:** Unit 1: August 31, 2016 / Unit 2: Sep 28, 2011
- **Capacity:** 668.6MW

Location of power stations



History

2001

Apr 2, 2001 Business commenced, inauguration of 1st President & CEO(Yoon, Hang-sun)
May 24, 2001 Announcement of company's principles and vision
Dec 12, 2001 Announcement of ethical rules, code of conducts

2002~2003

Dec 23, 2002 Received Certificate of Safety Health Management(KOSHA 18001)
Apr 10, 2003 Received credit rating of A3 from Moody's
Sep 3, 2003 Received Presidential Award in Kyunghyang Electricity & Energy Awards.

2004~2005

Apr 2, 2004 Inauguration of 2nd President & CEO(Park, Hee-gab)
Dec 23, 2004 Commercial operation of Yeonghueng Units 1 & 2
Apr 1, 2005 Yeongheung division received Grand Prize in Industrial Safety Management Awards
Sep 29, 2005 Received Prime Minister Prize in National Productivity Awards

2006~2007

Feb 27, 2006 Signing on UN Global Compact
Apr 3, 2007 Inauguration of 3rd President & CEO(Kwak, Young-wook)
Oct 11, 2007 Received Presidential Award in National Innovation Competition
Nov 23, 2007 Won Presidential Award in National Quality Management Convention

2008~2009

Oct 29, 2008 Inauguration of 4th President & CEO(Jang, Do-Soo)
Nov 26, 2008 Received Grand Prize in Social Contribution Awards
Jun 4, 2009 Commercial operation of Yeonghueng Unit 3 & 4

2010~2011

Sep 7, 2010 Received Grand Prize in National Value Engineering Contest
Dec 23, 2010 Received Gold Tower Order of Industrial Service Merit, Grand Prize,
Presidential Award in National Quality Management Awards
Jul 20, 2011 First operation of Yeongheung wind farm
Dec 16, 2011 Construction commencement for new headquarter building in Jinju

2012~2013

Feb 27, 2012 Construction completion of photovoltaic power complex(42 MW) in Bulgaria
Jun 13, 2012 Achieved 'A' grade in management assessment 2011 by Korean government
Jun 18, 2013 Achieved 'A' grade in management assessment 2012 by Korean government
Sep 23, 2013 Inauguration of 5th President & CEO(Heo, Yup)

2014~2015

Mar 27, 2014 Opening of new headquarter building in Jinju, Gyeongnam Innovative City
Jun 10, 2014 Commercial operation of Yeonghueng Unit 5
Nov 5, 2014 Commercial operation of Yeonghueng Unit 6
Apr 21, 2015 Selected as Outstanding Public Enterprise for Korean Government 3.0 Assessment

2016~2017

Jan 4, 2016 Declared vision & brand management
Sep 29, 2016 Tamra Offshore Wind Power Plant in Jeju initiated power generation
Nov 17, 2016 Inauguration of 6th President & CEO(Jang, Je-won)
Feb 15, 2017 KOEN (KOSEPI won KEMG (Korea Ethical Management Grandprix)
Dec 14, 2017 Received Grand Prize in Korea Education & Donation Awards

2018

Feb 13, 2018 Inauguration of 7th President & CEO(Lyu, Hyang-reol)
Apr 23, 2018 Selected as The best and innovative governmental organization