Integration
for Excellence

2017 Annual Report

CONTENT

Vitro's companies design, produce, process, distribute and market a wide range of glass products that are part of everyday life of millions of people worldwide.

Our Company

Vitro, The Glass Company, is one of the leading glass manufacturing companies in the world, whose industry-transcending experience and commitment throughout its 100-year history back the quality of its products and services.

Founded in 1909 in Monterrey, Mexico, the Company owns over 20 subsidiaries in the Americas and Europe that offer quality products and reliable services, meeting the needs of two business sectors: flat glass and glass containers. Vitro's companies design, produce, process, distribute and market a wide range of glass products that are part of the everyday life of millions of people worldwide.

Using cutting-edge technology and offering value-added products, Vitro offers solutions for multiple markets, such as the automotive and architectural industries, and cosmetics and pharmaceuticals.

The Company also provides chemical products and raw materials for use in the industries and/or markets for glass, detergents, water treatment, oil, roads and highway thawing, food for human consumption and the poultry and livestock segment.

Moreover, it manufactures molds, machinery and equipment, and provides engineering, automation, and special services. In addition, the Company holds a 49.7 percent stake in Empresas Comegua, S.A. in Central America

As a Socially Responsible Company, Vitro assumes its social commitment through Responsible Corporate Management, and works on diverse initiatives under the Vitro Sustainability Model framework to exert a positive influence, and contribute to economic, social and environmental development in benefit of its stakeholders and the environment.

THE VITRO PHILOSOPHY

With over a century of experience in the glass industry, Vitro stands on solid foundations and presents itself as a solid and integrated company, offering reliable state-of-the-art products and services for specialized markets. Vitro's values are the pillars that keep the Company on the path to profitability and value generation that leads to excellence in all areas.

MISSION

To provide the best glass products and services solutions to the industries in which we participate.

VISION

To improve our leadership in the business segments we operate and to be recognized as a leading innovation company in the industry.

VALUES

- **Innovation:** Enhance processes and operations with innovative ideas to consistently improve our results.
- **Team Work:** Unite our talents to work as a single force.
- **Operational Excellence:** Always exceed what is expected of us.
- **Customer Orientation:** Our customers are the focus of our business.
- **Integrity:** Always act with honesty and in adherence to our principles.

More than 100 years of industry experience.

Our Main Companies

VITRO, S.A.B. DE C.V.

CONTAINERS

Glass containers

- Vitro Packaging, LLC. (2)
- Servicios Integrales de Acabados

Machinery and Molds

- Machinery Manufacturing

Flat Glass

- Vitro Vidrio y Cristal

Architectural Sector

- Vitro Flat Glass, LLC [2]
- Vitro Flat Glass, Inc. [3]
- Viméxico
- Vidrio y Cristal del Noroeste
- Vidrio Plano de Mexicali
- Vidrio Plano de México
- Vidrio Plano de México LAN
- Vitro Flotado Cubiertas
- Value-added crystal products

Automotive Sector

- Vitro Automotive Glass, LLC [2] antes Vitro Flat Glass Holdings
- PGW Holdings, LLC [2]
- Pittsburgh Glass Works, LLC [2]
- Pittsburgh Glass Works GmbH [3]
- PGW Technik GmbH [3]
- Pittsburgh Glass Works Hong Kong Limited [4]
- Pittsburgh Glass Works, Sp.z o.o. [5]
- Pittsburgh Glass Works, S.à.r.l [6]
- Shandong PGW Jinjing Automotive Glass Co. [7]
- Vitro Automotriz
- Vitrocar
- Cristales Automotrices
- VVP Autoglass
- Vitro Colombia [1]
- Vitro Do Brasil Industria E Comercio
- Laminated and Tempered Crystal

Chemicals and Raw Materials

- Distribuidora Álcali
- Industria del Álcali
- Comercializadora Álcali
- Vitro Chemicals [2]

[1] Company with operations in Colombia
[2] Company with operations in the U.S.
[3] Company with operations in Canada
[3] Company with operations in Germany
[4] Company with operations in Hong Kong
[5] Company with operations in Poland
[6] Company with operations in Luxembourg
[7] Company with operations in China

Main destinations of our products

Mexico
United States
Colombia
Brazil
Peru
Canada
Guatemala
Belgium
Argentina
Germany
Switzerland
United Arab Emirates
Hungary
Australia
China
Ecuador
Venezuela
Puerto Rico
Costa Rica
South Korea
Israel
Chile
Egypt
Poland
Malaysia
Italy
Bolivia
Turkey
Spain
France
Lebanon
Panama
Cuba
United Kingdom
Singapore
Japan
Saudi Arabia
Vietnam
El Salvador
Romania
South Africa
Netherland Antilles
Portugal
Greece
Barbados
Belize
Bulgaria
Philippines
The Netherlands
India
Morocco
Uruguay
Thailand
Trinidad and Tobago
Qatar
Nicaragua
Jamaica
Dominican Republic

Our Facilities

Mexico
United States
Germany
China
Poland
Canada
Colombia
Brazil
Guatemala
Ecuador
Costa Rica
Peru
Venezuela
Luxembourg

Financial Highlights

Vitro, S.A.B. de C.V. y Subsidiarias
Financial highlights (Figures in hundred million pesos, exceptions noted, figures reported in USD are in nominal dollars under IFRS).

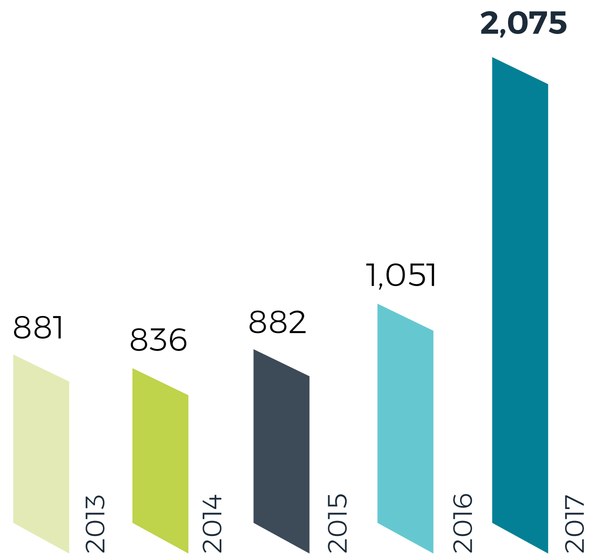
December 31

	USD (1) 2017	USD (1) 2016	% VARIATION (3)	$ PS (2) 2017	$ PS (2) 2016	% VARIATION (3)
INCOME STATEMENT						
CONSOLIDATED NET SALES	$ 2.075	$ 1,051	97.5	$ 38,948	$ 19,840	96.3
DOMESTIC	628	606	3.5	11,802	11,344	4.0
EXPORT	292	272	7.4	5,519	5,070	8.9
FOREIGN SUBSIDIARIES	1,156	173	569.9	21,627	3,426	531.3
OPERATING INCOME BEFORE OTHER EXPENSES (EBIT)	273	201	36.0	5,143	3,779	36.1
NET INCOME	194	189		3,669	3,566	
NET MAYORITY INCOME	194	192		3,668	3,618	
NET INCOME OF MAJORITY INTEREST PER SHARE (4)	0.40	0.40		7.64	7.49	
EBITDA (5)	393	259	51.7	7,412	4,890	51.6
BALANCE SHEET						
TOTAL ASSETS	2,675	2,204	21.4	52,605	45,431	15.8
TOTAL LIABILITIES	1,290	1,005	28.4	25,370	20,715	22.5
STOCKHOLDERS' EQUITY	1,385	1,199	15.5	27,235	24,716	10.2
STOCKHOLDERS' EQUITY OF MAJORITY INTEREST	1,384	1,198	15.5	27,216	24,698	10.2
FINANCIAL INDICATORS						
DEBT / EBITDA (TIMES)	1.8	2.0		1.8	2.2	
NET DEBT (7) / EBITDA (TIMES)	1.3	1.1		1.4	1.2	
INTEREST COVERAGE (TIMES) (EBITDA / TOTAL NET FINANCIAL EXPENSE)	8.4	22.9		8.4	21.6	
DEBT (8) / EBITDA (TIMES) (8)	1.7	1.6		1.8	1.7	
NET DEBT (8) / EBITDA (TIMES) (8)	1.3	1.1		1.3	1.2	
INTEREST COVERAGE (TIMES) (8) (EBITDA / TOTAL NET FINANCIAL EXPENSE)	10.1	11.7		10.1	11.7	
EBIT MARGIN (%)	13.2	19.1		13.2	19.0	
EBITDA MARGIN (%)	19.0	24.7		19.0	24.6	
EMPLOYEES	14,817	11,407	29.9	14,817	11,407	29.9
CAPITAL EXPENDITURE (6)	159	127	25.5	3,072	2,154	42.6

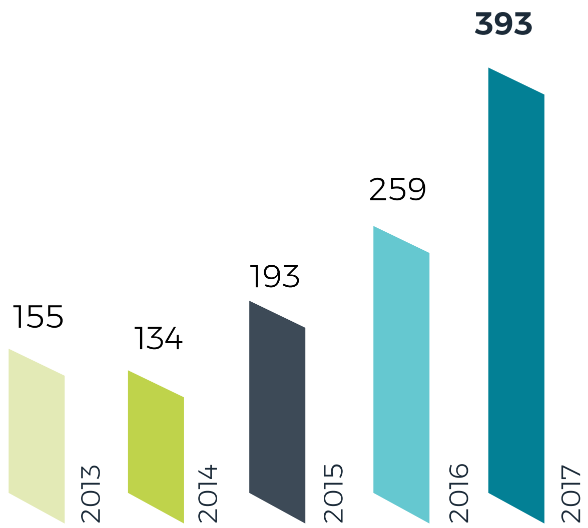
[1] Dollar figures reported are in nominal dollars; obtained from dividing each month's nominal pesos by the exchange rate at the end of the same month.
[2] Financial data is presented in nominal pesos
[3] Variation from 2016 to 2017.
[4] Based on the weighted average of outstanding shares.
[5] EBITDA = Earning before, interest, taxes plus depreciation and amortization, and provision for employee retirement obligations.
[6] Represents the capital expenditures carried out during the year; thus, it differs from investments presented in the cash flow.
[7] Debt net to cash and equivalents.
[8] Pro forma figures.

Financial statements were prepared according to International Financial Reporting Standards (IFRS).

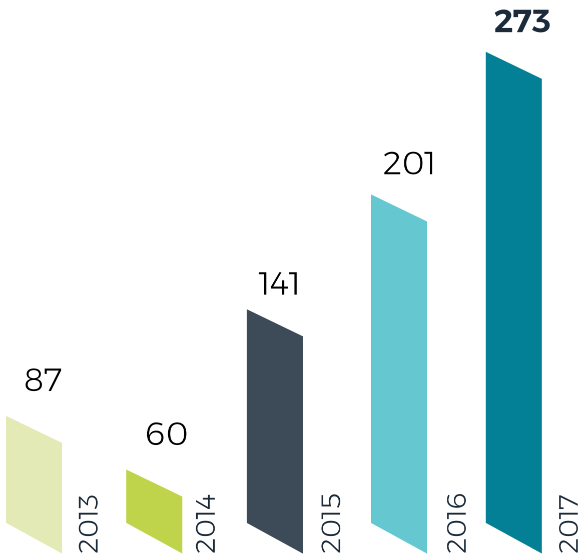
CONSOLIDATED NET SALES
(million dollars)



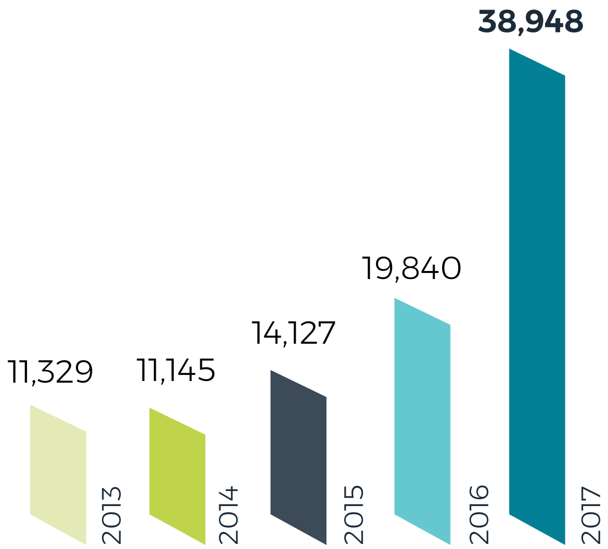
CONSOLIDATED EBITDA
(million dollars)



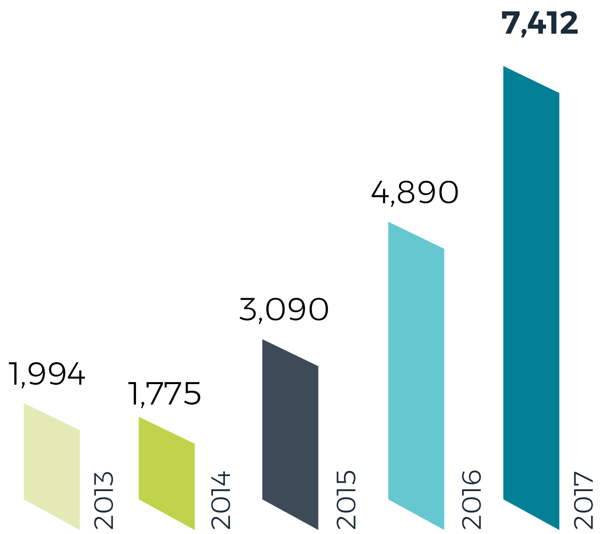
OPERATING INCOME BEFORE OTHER EXPENSES (EBITDA)
(million dollars)



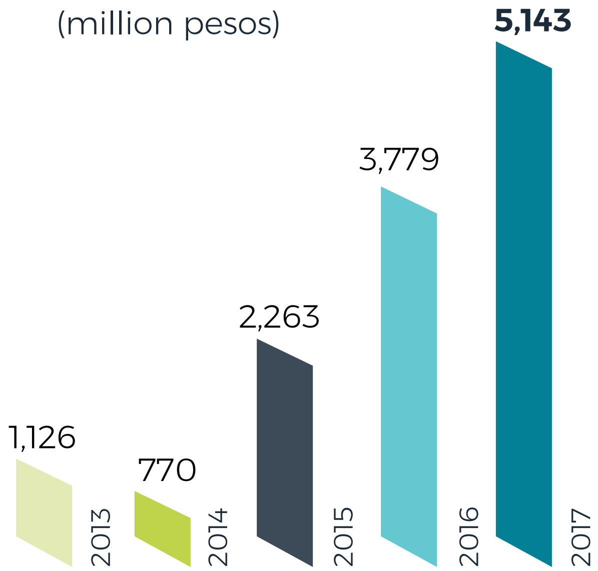
CONSOLIDATED NET SALES
(million pesos)



CONSOLIDATED EBITDA
(million pesos)



OPERATING INCOME BEFORE OTHER EXPENSES (EBITDA)
(million pesos)



Message from the Chairman of the Board of Directors

Dear Shareholders:

As we had expected, 2017 continued to be a challenging time for the economy of Mexico and other Latin American countries where we operate. Nevertheless, Vitro once again obtained excellent results due to its business strategy and the consolidation of the two business acquisitions in the last quarter of 2016 and the first quarter of 2017.

The Company's growth and consolidation plan has set a fixed and clear path towards a solid and profitable future, as shown by our share prices which in December 2017 closed at MXN$70.45 per share, an increase of 9.3 percent with respect to 2016. The incorporation to the already existing operations of the architectural and automotive glass businesses acquired in the last months also contributed to boosting Vitro's leading position in the glass industry in North America.

As reported at the time, in the third quarter of 2016 the Company acquired for US$755 million the assets of PPG's flat glass business, which after the acquisition became Vitro Architectural Glass, a market leader in Canada, the U.S. and Mexico.

Moreover, in March 2017 the Society concluded the process to acquiere Pittsburgh Glass Works for original equipment automotive glass, for US$310 million.

In December 2017, Vitro closed the year with US$180 million in cash and cash equivalents, resulting in a Debt Net/EBITDA ratio of 1.2 pro forma. This clearly shows commitment to a conservative debt profile together with a healthy generation of cash flow and a stable balance sheet.

Nowadays, our leverage level is the most solid in the industry thanks to the generation of cash flow in 2017. Last December the Company made an advance principal payment of US$60 million plus interest to the debt contracted with BBVA Bancomer in 2016 for US$230 million. It should be mentioned that the pre-payment was made without any impact on the investment plans of the Company.

Our sound decision-making and business strategy allow us to advance our goal of continuous improvement and strengthening of our financial status while lowering leverage level and maintaining a low debt profile.

MACROECONOMIC CONDITIONS

Since 2017, the United States and Canada have become ever more relevant in our operations due to the aforesaid recent acquisitions. In the United States, the economy in general continued to be strong, driven by the expectations of a tax reform which was finally passed at the end of the year. GNP (Gross National Product) grew by 2.2 percent, while the automotive industry underwent a slight fall in the second semester. Canada sustained a moderate growth of 1.9 percent, driven mainly by internal demand and non-oil exports.

In 2017, macroeconomic conditions continued to be weak, specifically in regions of Latin America where we have participation or an important commercial activity. Even when countries like Brazil showed a budding recovery in some sectors, its commercial and industrial activity has not managed to make a full recovery; growth continues to be moderate and accordingly, so is buying power.

Every company action, whether operational, human, environmental, or economic, is sustained by and aligned to the Vitro Sustainability Model, which promotes the sustainable development of the communities in which the Company is present.

Another example is Peru: after having achieved four percent growth in 2016, the impact from floods caused by the El Niño climate phenomenon as well as from corruption scandals in the previous term, investments and public works slowed down causing a weak growth by the end of 2017. For Ecuador and other Latin American countries, conditions were also unfavorable and movement of our products in the region became limited. These circumstances mainly affect our participation in the business of glass containers for cosmetics and perfumes.

Meanwhile, in Mexico there is a prevailing uncertainty in the face of the NAFTA re-negotiation, where the possibility of the United States terminating its participation in the agreement might represent a threat to the development of the country. However, it should be mentioned that our new strategic positioning with operational plants in all three NAFTA countries provides us with the necessary readiness and flexibility to react favorably in case of such a contingency.

Growth in Mexico was less than forecast by the Banco de México, with the GNP closing at 2.1 percent in 2017. The inflation rate reached 6.8 percent in contrast with 3.4 percent in 2016, with both indicators showing the anxiety and caution of investors and markets, and it is the reason why we have focused on maintaining and exploring opportunities that may arise to make up for a potential decrease in development.

The value of the Mexican peso against the U.S. dollar sustained a high volatility throughout the year. However, at years' end, it closed with an appreciation of 4.6 percent, year over year. Sales in U.S. dollars of the Company currently account for 70 percent, which gives us a natural cover from the volatility of exchange rate of the Mexican peso against the U.S. dollar.

EFFICIENT INTEGRATION, SOLID GROWTH

Despite the weak economic situation and even recession in some countries where we are present, Vitro has focused on tending to the variables that it can control and strengthening the Company's finances and operations.

Having a solid financial status and carrying out necessary operational adjustments through organic growth and integration of new businesses, are strong evidence of our path towards sustained growth and value generation.

The results of 2017 are the product of Vitro's own business plan. A thorough analysis of the performance of the architectural and automotive industries set the standard for seeking strategic investments in key businesses and for strengthening those already part of the Company.

The businesses acquired in 2016 and 2017, together with the ones already existing in Mexico, are today Vitro Architectural Glass and Vitro Automotive Glass respectively, which have positioned themselves as leading glass manufacturers and suppliers in North America.

In addition to a greater geographical coverage and the increase in capacity and sales achieved through the two acquisitions, Vitro has positioned itself as a leader in the research and technological development of sustainable cutting-edge products. An example of this commitment is Solarban® 90 architectural glass by Vitro, which received the R&D 100 Award from R&D Magazine for being the first glass product to use a four-layer silver coating to provide exceptional solar control performance while maintaining the aesthetic appeal of clear glass

Clear and profitable business plans, operational efficiency and excellence, high quality products and service, wide geographical coverage, vast knowledge and industry experience, as well as collaborator commitment and professionalism are some of Vitro's strengths.

The Company's plan for growth and strengthening has set a fixed and clear path towards a solid and profitable future.

SUSTAINABLE INTEGRAL DEVELOPMENT

Vitro's permanent concern for balancing operational and environmental and Community needs vouch for its century-long history as a company committed to social responsibility.

Every one of the Company's actions, whether operational, human, environmental and/or economic are based on and aligned with the Vitro Sustainability Model to promote sustainable development in the communities in which it operates.

Our good decision-making and business strategy allows us to continue to improve and bolster our financial status.

Since its inception, Vitro has been carrying out diverse programs aimed at promoting and improving the quality of life of its collaborators, families and the Community around it. Examples of this are the health and disease prevention drives that the companies regularly carry out, and the support and promotion of education through scholarships, training and FEAC (Formación Educativa, A.C.), which provides pre-school, elementary and secondary educational services.

Furthermore, the Company has implemented a glass recycling program in Mexico. In addition, it provides camping areas and cottages open to the public at the Vitro Park El Manzano, where environmental awareness programs are continuously promoted. Through OVIS (Organización Vida Silvestre, A.C.), the Company supports the preservation of the wild fauna and flora by means of scientific research programs for sustainable management of ecosystems and promotes environmental education projects.

More information about these programs and many other initiatives, recognitions and certifications on these matters may be consulted in the 2017 Sustainability Report.

CORPORATE GOVERNANCE

The Glass Company strictly adheres to the regulations and laws that govern a culture of legality and transparency, and has accordingly put in place additional mechanisms and procedures to ensure the best performance of the Company as a sustainable business.

The Board of Directors is the Company's main governance body. As such, it is responsible for defining and executing effective strategies, policies, and guidelines to ensure proper administration of the business and of the moral persons it oversees, as well as for ensuring that activity is carried out according to responsible corporate management.

Based on the current legislation and with the support of the CEO, the Board members define and maintain a sustainable long-term business model permanently focused on the Company's business needs, without neglecting the interests of its stakeholders.

Vitro's Board Members have an extensive experience and track record holding executive positions, which allows them to carry out functions within the standards of corporate governance. In 2017, The Board of Directors consisted of 12 members, of which 42 percent are independent, higher than required by Mexican law.

All decisions made and actions carried out by the Board of Directors and its Committees are approved by the General Annual Ordinary Shareholders' Meeting. Likewise, the Board of Directors, through the Corporate Practices Committee, assesses the performance of the Executive Committee, allowing for continuous evaluation of the responsibilities in its charge.

2018 OUTLOOK

The United States economy is expected to grow strong driven mainly by the recently passed tax reform, while Canada and Mexico will be facing the uncertainty from the re-negotiation of the North America Free Trade Agreement (NAFTA), which could have a moderate impact on their growth.

Expectations for 2018 in Latin America are uncertain, and Mexico is no exception. Although some countries are starting to come out from the slump, there are no signs of an upswing that could mark a fast recovery in Latin America.

Mexico has fully entered the cycle of presidential elections, which in parallel with the NAFTA negotiation rounds will be of great importance and repercussion to the country.

Expert financial analysts and politicians see a high likelihood that the foresaid events may imply volatility of the exchange market and a slowdown of investments, and consequently, the growth of the Mexican economy will remain similar to 2017.

Therefore, at Vitro we will remain vigilant to the development of events, to harness opportunities and face up to the challenges presented by the markets we serve, seeking always to maximize value for our shareholders.

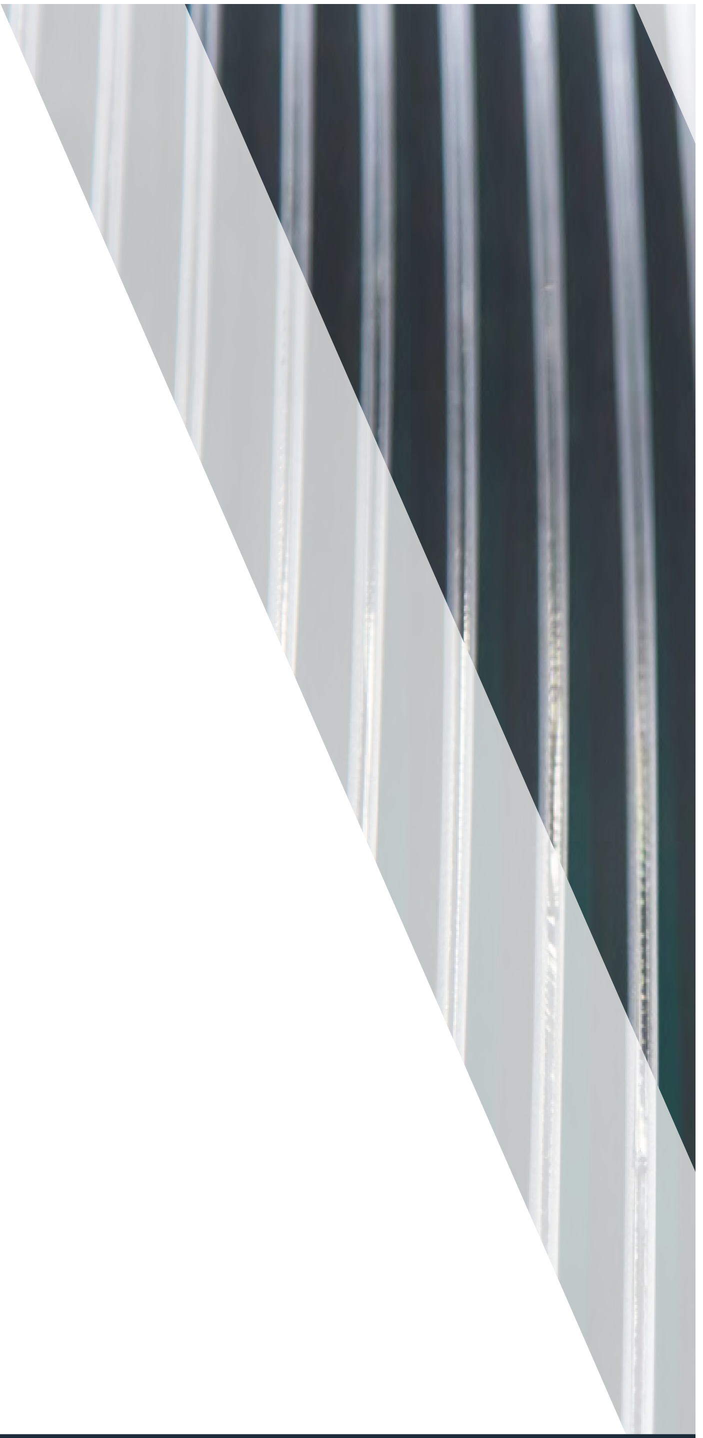
We are a consolidated company, integrated in our key businesses. The operational and financial discipline for managing the Company of recent years allows us to confirm to you that we will continue to create value for all our stakeholders, especially for you, our esteemed shareholders.

On behalf of the Board of Directors, we would like to express our gratitude for one more year of confidence and support as we renew our commitment to staying on the course that will guarantee Vitro's success

Adrián Sada González

Chairman of the Board of Directors

February 6, 2018



Message from the CEO

Dear shareholders:

2017 was a year of consolidation for Vitro with the coalescence of the recently-acquired businesses with those already existing. This not only added experience and capacity, but also the opportunity for maximizing synergies that allowed us to achieve excellent results through an EBITDA of US$393 million. This represents an increase of 51.7 percent with respect to the US$259 million of the previous year.

Despite a predominantly difficult environment in some regions and markets in which we participate, the inflationary increase, moderate growth of the Mexican economy and the anxiety caused in Mexico by the re-negotiation of the North America Free Trade Agreement (NAFTA), our 2017 results show that we are making the right decisions and achieving competitive advantages for efficient and effective integration.

The acquisitions of the architectural glass business in October 2016 and the automotive glass business in March 2017 were made thanks to the financial flexibility and the cash flow the Company manages since 2015.

In addition, last year saw the conclusion of organic growth previously reported, such as the calcium chloride plant of our chemicals business. In the Vitro Automotive Glass business, the curved glass manufacturing line for the original equipment sector started operations in May. Likewise, we finished the new plant for tempered and laminated glass products for the spare parts market, which started operations at the end of the first semester of 2017.

Moreover, in May 2017, the groundwork was laid for the Jumbo Magnetron Sputtering Vapor Deposition (MSVD) coater, expected to have the largest vacuum-hardening capacity in North America. With a total investment of US$61.5 million, the plant will be in Wichita Falls, Texas.

STRENGTH CONSOLIDATION; EFFICIENT INTEGRATION IN THE FACE OF GREAT CHALLENGES

After the acquisitions, the priority was to integrate the new businesses with those already existing in the shortest possible time to harness scale economies, maximize competitive advantages, and share best practices. The merger of the new businesses with our over 100 years in the industry bolstered strengths on both sides and generated an efficient incorporation which provided Vitro with the necessary tools to capitalize on growth opportunities and face up to the challenges posed.

However, the integration task is not over, since standardizing best practices and operational processes will require the implementation of systems that will take time to execute.

In 2017, the construction market in the United States, specifically the one demanding specialized value-added architectural glass, performed well. Together with sustained organic growth at the Mexico facilities resulted in favorable returns for the Vitro Architectural Glass business.

Nevertheless, these results were overshadowed by an unforeseen incident at our architectural glass facility in Carlisle, Pennsylvania in August which resulted in a total production shutdown. One of the two damaged furnaces went back into operation a few weeks later, although it maintained low productivity until the end of December. The second furnace was permanently shut down and will have to undergo the major maintenance that had been scheduled for 2019. It is expected to be back in full operation in 2019. The impact on 2017 results was US$14.4 million net, not considering non-generated EBIT for sales lost. Additional recovery amounts corresponding to 2017 are expected to be recovered in early 2018.

To minimize the impact on customer demand, we resorted to supply through our other U.S. plants and, in some cases, third parties, prioritizing and ensuring that their needs and products were covered in the best way and the shortest possible time.

The effects of the shutdown at the Carlisle plant were countered by the flat glass business in Mexico and a best product mix in the architectural sector in 2017.

On the other hand, the Vitro Automotive Glass business achieved positive results despite a downturn in the second semester of 2017. Initial momentum was slowed down by the uncertainty over the new policies adopted by the United States and the pressure that its government is applying on the industry.

Every day the automotive industry is demanding increasingly more cutting-edge standard specifications. To adjust production capacity to current market demand and as part of a reorganization strategy in North America, the Company decided to close the plant in Creighton, Pennsylvania which did not have the technological facilities to cope with current industry demand. The plant will terminate its activities in June 2018.

Although the development of this market was not as expected, results were favorable thanks to the supply of platforms agreed upon in previous years at our plants in Mexico, as well as by the solid performance of the Mexican spare parts market which performed above expectations.

Regarding the chemical business, the calcium chloride plant performed below expectations due to zero growth in the petrochemical, thawing, and particle control segments, mainly for the exports market. On the other hand, certain operational problems arose in the carbonate and calcium lines which were promptly resolved to meet customer due time and proper course requirements.

In this sector, we had to face an important increase in costs, but despite the strong competition and the pressure for lowering prices, we managed to achieve an increase in sales of 10 percent with respect to the previous year, measured in pesos.

The Container business, on the other hand, faced a series of adverse circumstances. If conditions in Latin America did not favor performance of the cosmetics, fragrance and pharmaceutical sectors, financial uncertainty derived from the change of administrations in the United States government increased in most of the countries where our products are marketed. Consumption, as well as the production of our clients, became more prudent and conservative, decreasing inventories and observing strict control over costs and expenses. Some of our global clients decided to migrate their manufacturing plants from the United States to Europe. In addition, we started 2017 with repairs of furnace 3 at our facilities in Toluca in the State of Mexico. Despite this scenario, sales in the cosmetics, fragrance and pharmaceutical sectors achieved moderate growth.

In the case of *Fabricación de Máquinas* (FAMA) -the machinery, molds and equipment consolidated into the Container business- one of our main clients significantly reduced its purchases of machinery and molds, negatively affecting the results of this business.

SUM OF EFFORTS: POSITIVE RESULTS

The excellent performance of the combination of strengths and competitive advantages of Vitro's businesses derived in extraordinary results closing 2017 with Consolidated Net Sales of US$ 2,075 million, an improvement of 97.5 percent over the US$ 1,051 million achieved in 2016. Sales in Mexican pesos increased by 96.3 percent, totaling MXN$38,948 million.

Results in 2017 derived from various factors among which were the increase in U.S. dollars sales due mostly to the two new businesses, a larger and better architectural value-added product portfolio, and organic growth in the automotive sector as soon as platforms agreed in 2013 and 2014 were delivered. Additionally, the spare parts market had a significant advance with respect to 2016 with a 16 percent increase in sales in the report period.

Regarding Vitro Architectural Glass, the commercial segment maintained its positive trend of 2016 and experienced an important increase in construction in North America based on favorable climate conditions. On the other hand, the incident at our Carlisle plant caused the business to operate at maximum capacity. Moreover, organic growth of the Vitro Architectural Glass operations in Mexico also contributed significantly.

Total consolidated sales for Flat Glass were US$1,852 million, an increase of 131 percent with respect to US$802 million in 2016.

We started 2017 with repairs of furnace 3 at our facilities in Toluca in the State of Mexico

Vitro's containers were also recognized by the AMEE (Asociación Mexicana de Envase y Embalaje), and the Glass Packaging Institute

ORGANIC GROWTH AND OPERATIONAL PERFORMANCE

The organic growth and performance of all of our facilities provided the Company with the financial strength and flexibility it now has. The achievements are the product of a business plan designed according to the needs and trends of the industry we serve and participate in, always bearing in mind the unwavering commitment of Vitro's work team to living and putting into practice its values; a team that unites its talents to work as one sole force.

The Flat Glass business unit, which includes Vitro Architectural Glass and Vitro Automotive Glass, serving the glass segment for original equipment and the spare parts market, as well as the Industria del Álcali which supplies the chemical and raw materials sector, registered satisfactory results considering the unforeseen circumstances they faced.

Total consolidated sales for Flat Glass were US$1,852 million, an increase of 131 percent with respect to US$802 million in 2016. EBITDA for Flat Glass was US$-351million, an increase of 71.2 percent with respect to US$205 million in 2016.

These improvements derived from the recent acquisitions, as well as from organic growth in the original equipment and architectural glass business in Mexico, increased sales in value-added products, the entry of new original equipment platforms including glass for SUV and heavy-load vehicles, and organic growth of the chemical products business.

Total consolidated sales for Containers, including the Cosmetics, Fragrance and Pharmaceutical businesses, as well as Machinery Manufacturing (molds, machinery and equipment businesses), was US$216 million, representing a decrease of 9.8 percent with respect to US$240 million achieved in 2016. EBITDA for Containers totaled US$53 million with respect to US$59 million in 2016, a decrease of 10.8 percent.

The Containers business had to face adverse market conditions, despite an increase of 3.5 percent in the volume of sales by the piece in 2016. The increase was not enough to offset the negative results, derived among other things from the decision of several clients to migrate their production from the United States to Europe, and the reaction of companies attempting to cope with a weak economy by cutting costs, inventories, and consumption. FAMA results were also affected by the drastic decrease in demand from our main client Owens Illinois.

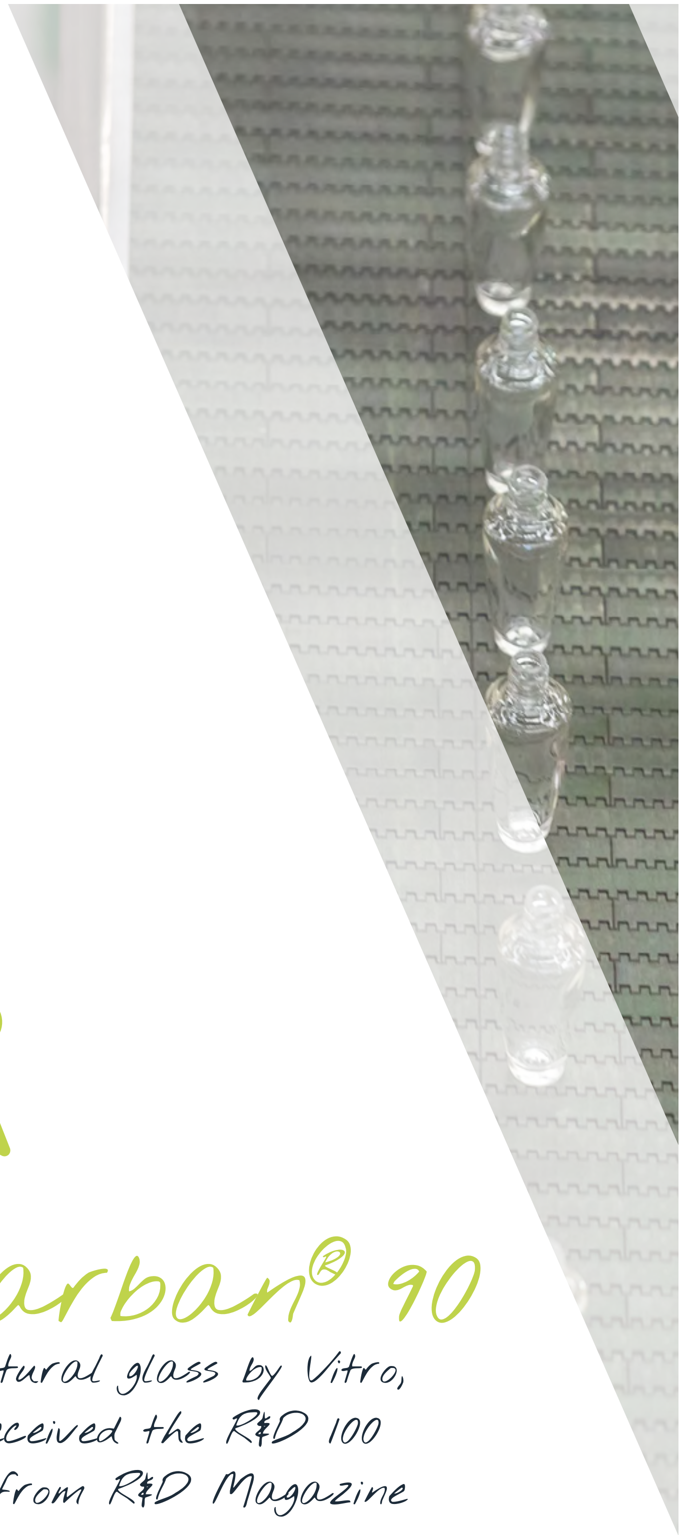
RESPONSIBILITY AND COMPREHENSIVE QUALITY

For more than a century, Vitro has been a company concerned about the needs of its collaborators and their families and the communities in which it operates, being an environmentally-aware corporate citizen, and generating economic and social welfare.

The Company is not only responsible for complying with the laws of the countries in which it operates as well as with industry-specific certifications, it also goes well beyond these requirements and voluntarily adheres to preservation and conservation environmental programs, as well as to recycling, health, educational, reforestation programs, and personal development programs, among others.

For the last ten years Vitro has been recognized with the ESR Badge by the *Centro Mexicano para la Filantropía (Cemefi)* and the *Alianza por la Responsabilidad Social Empresarial (AliaRSE)* granted to companies that satisfactorily meet established corporate social responsibility action models and patterns.

In addition, once more, the Company was selected as a Super Company at which everyone wants to work, ranking 15th in the more-than-3,000-employees cat-



Solarban® 90 architectural glass by Vitro, which received the R&D 100 Award from R&D Magazine egory. The Super Company ranking, a poll applied by *Expansión* jointly with TOP Companies, measures employee perception regarding their company and reviews and evaluates the policies, practices and procedures of the Company.

Vitro also holds the "Gilberto Rincón Gallardo" Inclusive Company Distinction awarded by the *Secretaría del Trabajo y Previsión Social (STPS)*. The distinction recognizes companies that apply good corporate practices and provide equal opportunities to individuals with disabilities, and which are governed by non-discrimination, inclusion, and development rules for all of its collaborators.

Vitro has implemented the Environmental Management System which includes combating global warming as part of its policy. The Greenhouse Gas Inventory report collects the data from emissions generated during the product manufacturing or distribution processes at the production units, and it is fundamental for mitigating emissions and reporting our environmental performance to the interested parties.

Our operational and administrative procedures are permanently in a continuous improvement program and we are responsible for complying with certifications and regulations that validate process quality and safety to ensure full satisfaction from our clients.

In 2018, we will continue to work on the implementation and standardization of systems for Vitro Architectural Glass and Vitro Automotive Glass

The quality, innovation and safety of the products offered by Vitro are backed by the recognitions that our clients, government associations and departments, as well as the news media grant our Company and its businesses.

An example of the above, is the R&D 10 Prize awarded by R&D magazine for the development of Solarban® 90 glass, the first product incorporating a fourth silver nanolayer, having nanoparticles which the product developers can manipulate to control its color reflectivity and solar performance.

Vitro's containers were also recognized by the AMEE (*Asociación Mexicana de Envase y Embalaje*), and the Glass Packaging Institute, among other recognitions.

Furthermore, Vitro Automotive Glass, besides fully complying with client and international certifications and audits, obtained the Recognition for Excellence from General Motors and was distinguished as Supplier of the Year.

There are many other programs and actions that our Company continuously implements. Details for this and other programs can be found in the Sustainable Development section of this report and in the Vitro Sustainability Report.

SUSTAINABLE GROWTH, THE WAY TO GO

The incorporation of the recently acquired businesses was a defining factor in the Company's results. Vitro has implemented a wide range of programs and processes in recent years across all of the businesses to cut costs, optimize resources, and build a culture of quality and continuous improvement. These efforts have also contributed to our success, and our more than 14,500 employees are committed to keeping the Company on the path to sustainable growth and excellence.

Today, besides enjoying a healthy financial and operational situation, the Company is fulfilling its vision of achieving a more solid strategic position. Sustained by a deep knowledge of the markets we serve, the Company's track record in the glass industry, and the combination of creative talent and advanced technological centers, Vitro is well-poised to achieve a leading position not only in North America, but worldwide.

Expectations for 2018 are for a year of contrasts. On one hand, the U.S. economy is expected to grow driven by the tax reform recently passed by that country's Congress and which will carry benefits for the companies in our region and for our exports from the United States.

On the other hand, uncertainty will prevail in Mexico due to the re-negotiation of NAFTA and the U.S. position of withdrawing from the agreement. Such conditions might cause growth to be moderate, investments and new projects to be made with extreme caution, and a constant volatility in the exchange rate of the Mexican peso against the U.S. dollar. In addition, most attention will be focused on the Presidential election process taking place in Mexico in July 2018.

In Latin America, according to expert analysts and specialized organizations, estimates are for moderate growth, although some countries in which we have commercial participation are starting to come out of the recession, slowly achieving reactivation of their economy and recovering consumer power.

At Vitro, we are considering all of the above, acknowledging that the outlook is challenging; however, we are sure that we have what it takes to overcome the challenges that may arise.

In 2018, we will continue to work on the implementation and standardization of systems for Vitro Architectural Glass and Vitro Automotive Glass, which will allow us to operate more efficiently to keep providing our clients products and services that meet their needs and the trends of the markets they serve.

We will continue to boost the presence of our Container business in Brazil and throughout the region through our commercial offices. We will harness the stability that the U.S. economy offers our markets through the development of innovative products and the exploration of new markets. Moreover, we will continue our participation in the Mexican sector with competitive prices and the quality and service for which Vitro is known.

In parallel to reinforcing our new businesses and planned organic growth, we will continue to assess viable market opportunities that arise to generate value for our shareholders and other stakeholders.

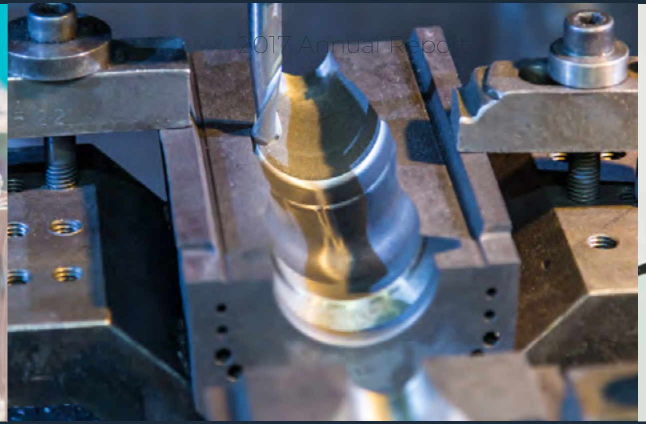
Dear shareholders, our goal of achieving a solid future is ever more certain. Our expansion and transformation business plan to reposition Vitro as a leading player in the glass industry is starting to bear fruit.

On behalf of those of us who work at Vitro, we would like to express our gratitude to every one of our stakeholders, and, to you, our esteemed shareholders, for your confidence and for supporting the decisions we make to continue with our goal of making Vitro the best option in every field.

Adrián Sada Cueva
Chief Executive Officer
February 6, 2018








BOARD OF DIRECTORS

Adrián Sada González (1944)

Member since 1984

Chairman of the Board of Directors

Chairman of the Chairmanship Committee Board

Member of Alfa, Cydsa, Consejo Mexicano de Negocios (CMN) and Grupo de Industriales de Nuevo León.

Álvaro Fernández Garza (1968)

Member since 2011

Chief Executive Officer and member of the boards of directors of ALFA, Cydsa and Grupo Aeroportuario del Pacífico, Grupo Citibanamex, the Museum of Contemporary Art of Monterrey (MARCO), and member of the Latin-American Council of the University of Georgetown. Mr. Fernández also is the President of the University of Monterrey.

Tomás González Sada (1943)

Member since 1980

Chairman of the Board and Chief Executive Officer of Cydsa, Mr. González is also Vice President of the Mexican Institute for Competitiveness (IMCO), Honorary Consul of Japan in Monterrey, Mexico. Additionally, he is a member of the Regional Council of the Bank of Mexico (Central Bank), Business Round Table (CMN), Grupo de Empresarios of Nuevo León and member of the Board of Trustees of Cáritas de Monterrey and Treasurer of the Foundation.

Mario Laborín Gómez (1952)

Member since 2010

President of ABC Holding, Mr. Laborín was previously managing director of Bancomext, Nacional Financiera, Bancomer and its Brokerage Firm, president of Casa de Bolsa and founding president/ chairman of Mexder, as well as co-founder and general director of Grupo Vector. He has served as a member of the boards of directors of TV Azteca, Cervecería Cuauhtémoc, Mexican Maritime Transportation, Bancomer, Mexican Stock Exchange, Mexder, Indeval, Xignux, Megacable, Cydsa, Astrum México, Banco de México Nuevo León, Gruma and AXA Seguros.

David Martínez Guzmán (1957)

Member since 2013

President and Special Counsel for Fintech Advisory, Inc. and member of the Board of Directors of ALFA, Sabadell Banc and CEMEX.

Ricardo Guajardo Touché (1948)

Member since 2013

Chairman of the board of Solfi and member of the boards of directors of BBVA Bancomer, Valores de Monterrey, Bimbo, Liverpool, ALFA, Grupo Aeroportuario del Sureste, Coppel and Coca-Cola FEMSA. Mr. Guajardo also was a member of the International Advisory Committee of the Federal Reserve Bank of New York. He has held various executive positions in companies such as BBVA Bancomer, Valores de Monterrey, FEMSA and Grupo AXA.

Guillermo Ortiz Martínez (1948)

Member since 2010

Chairman of the board of directors of BTG Pactual, Casa de Bolsa Mexico, Per Jacobsson foundation, as well as founder and chairman of Guillermo Ortiz y Asociados, Mr. Ortiz also is a member of the Group of Thirty and the boards of directors of Bombardier, Grupo Aeroportuario del Sureste, Mexichem and Weatherford International LTD. He has served as chairman of the board of the Bank for International Settlements, governor of the Bank of Mexico and secretary of Finance and Public Credit. He also has served as president of the External Review Panel of the Management of Risk Management of the International Monetary Fund and as executive director of the International Monetary Fund.

Ricardo Martín Bringas (1960)

Member since 2007

Chairman of the Corporate Practices Committee

Chief Executive Officer and a member of the board of directors of Organización Soriana, Mr. Martín also is a member of the boards of directors of Teléfonos de México, Grupo Financiero Banamex, MADISA, Mexican Council of Businessmen (CMN), Grupo de Empresarios de Nuevo León and the National Association of Self-Service and Department Stores (ANTAD). He also is chairman of the board of the Maternal and Child Regional Hospital.

Jaime Rico Garza (1957)

Member since 2008

Director and Chairman of the Board of Vitro Europa and Vitro Global, as well as member of the Board of Directors of Vitro Cristalglass and Director of Vitro Cristalgalss (2007-2012)

Adrian Sada Cueva (1975)

Member since 2010

Chief Executive Officer

Member of the Board of Directors of Empresas Comegua, Club Industrial de Monterrey, Grupo Financiero Banorte, Banco Mercantil del Norte, Universidad de Monterrey, Nemak and Minera Autlán. Member of the Board of Directors of the Cámara de la Industria de Transformación (CAINTRA) of Nuevo León.

Jaime Serra Puche (1951)

Member since 1998

President of SAI Consultores, Mr. Serra is founder of Aklara (Electronic Auctions), Arbitration Center of Mexico (CAM). He also is board Director of BBVA Bancomer and the following publicly listed companies: Mexico Fund, Tenaris, Vitro and Alpek. He served as an official of the Mexican Government as undersecretary of revenue, secretary of commerce and secretary of the treasury. He is co-chairs the President's Council on International Activities of Yale University, as well as a trustee of the Trilateral Commission.

Joaquín Vargas Guajardo (1954)

Member since 2000

Chairman of the Audit Committee

Chairman of the Board of Directors of Grupo MVS and Chairman of the Board of Directors of Grupo CMR. Member of the Board of Directors of Grupo Financiero Santander, Grupo Costamex, El Universal, Grupo Aeroportuario del Pacífico and Médica Sur. Has been Chairman of the Board of Directors of the Cámara Nacional de la Industria de Radio y Televisión (2000-2001), Chairman of the Asociación Mexicana de Restaurantes (1985-1987) and Chairman of the Asociación de Directores de Cadenas de Restaurantes (1989).

Alejandro F. Sánchez Mújica (1954)

Secretary of the Board since 2007

He has been the General Legal Manager of Indeval, General Counsel of a Division of Grupo Kuo, General Counsel of Pulsar Internacional / Savia, Vice President and General Counsel of Vitro and currently he is a Senior Counsel at the law firm of Thompson & Knight. He has been a member and Secretary of the Board of Directors of several Mexican and foreign corporations and currently he is a member of the Private Charity Board for the State of Nuevo León. Attorney at law from the Escuela Libre de Derecho and holds Masters Degrees from the University of Texas at Austin.

BOARD OF DIRECTORS COMMITTEES

AUDIT COMMITTEE

Chairman: Joaquín Vargas Guajardo *

Guillermo Ortiz Martínez *

Jaime Serra Puche *

Jonathan Davis Arzac**

Secretario: Claudio L. Del Valle Cabello ***

CORPORATE PRACTICES COMMITTEE

Chairman: Ricardo Martín Bringas *

Joaquín Vargas Guajardo*

Guillermo Ortiz Martínez *

Mario Martín Laborín Gómez*

Secretario: Alejandro F. Sánchez Mújica***

CHAIRMANSHIP COMMITTEE

Chairman: Adrián Sada González

Adrián Sada Cueva

Secretario: Claudio L. Del Valle Cabello ***

* Independent member
** Non-member Financial expert
*** Non-member Secretary

Flat Glass

The Vitro Flat Glass business unit is a leading global player in the manufacture and processing of float glass to serve the construction and automotive industries in the original equipment and spare parts segments. In addition to developing, processing, marketing, distributing and installing glass, it remains at the forefront in the development of value-added products through its Research and Development Center in Pittsburgh, Pennsylvania. It also produces sodium carbonate, sodium bicarbonate, sodium chloride, and calcium chloride that serve the glass, detergent, water treatment, pharmaceutical, food for human consumption, oil industry, road thawing and livestock segment markets, among others.

2017 Summary

Despite some internal and external challenges to the Flat Glass business unit, 2017 was an excellent year in financial and operational aspects. The combination of competitive advantages of the already existing Vitro businesses and the incorporation of recent acquisitions brought better results than the previous year.

VITRO ARCHITECTURAL GLASS, EFFECTIVE CONSOLIDATION

After the acquisition of PPG's Flat Glass business in October of 2016, Vitro Architectural Glass was strengthened by expanding its geographical coverage, increasing its production capacity and broadening its value-added product offering to the market, despite the incident at one of our float glass plants. At the close of the year financial results were satisfactory.

Moreover, after the integration of the businesses, Flat Glass not only increased its capacity, it also became one of the leading manufacturers of low-e glass and state-of-the-art coating technology. It currently has six plants with 10 float glas furnaces, four coaters and six manufacturing plants, as well as a one Research and Development Center for development of innovative products. In general, growth of the market and the economy in Mexico as well as in the U.S. and Canada was positive, helping to drive the flat glass sector.

In August, a fire at the Carlisle plant in Pennsylvania affected two furnaces, reducing the production of coated glass. This forced us to resort to our other plants and even third parties to meet the glass needs of clients. One of the furnaces was repaired quickly, enabling a stabilization in production toward the end of the year. However, repairs at the second furnace will continue into the second semester of 2018. Net impact on 2017 results was US $24 million net of an estimated insurance recovery of US $21.2 million. Additional 2017 amounts are expected to be recovered in early 2018.

Barring the incident at the Carlisle plant, operations at the other eight float glass furnaces was excellent and covered the needs and distribution of our clients.

The float glass business is highly competitive and international players seek to enter the North American market. The business is focused on providing a wide range of products to meet the needs of its clients that serve the residential, specialty and commercial construction markets.

VITRO AUTOMOTIVE GLASS, A COMBINATION OF STRENGTHS

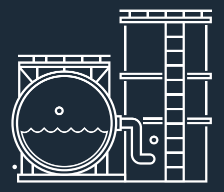
In 2017, the Pittsburgh Glass Works (PGW) business became a part of Vitro Automotive Glass, consolidating both businesses' great experience in automotive glass manufacturing. With this, Vitro enters the automotive market in Poland and Germany, focused on high-technology glass and other features required by an ever more demanding market. In this region, we are in constant communication with clients and assembly plants to increase and improve our business relations.

To date, we are still combining systems and procedures, harnessing synergies and standardizing pro-

Jennifer Eck

Human Resources Senior Director, for U.S. Vitro Automotive and ARG

"By joining two great legacies in automotive glass history, we also combined the talent and experience that together strengthen our Company."



Currently, Flat Glass has six plants and 10 float furnaces, four coaters and six manufacturing plants, as well as one Research and Development Center with cutting-edge technology.

Sales remained stable at Vitro Automotive Glass, and a cautious market market is expected in the light of the uncertainty of the final outcome of the NAFTA negotiations.

The new line of curved glass was rolled out with an annual production

3.5 million

units.

cesses. However, the transition process is happening quickly and efficiently.

Conditions for the industry proved to be challenging. Derived from the financial pressure and the uncertainty caused by the renegotiation of the North America Free Trade Agreement (NAFTA), particularly for assembly companies, the Original Equipment sector underwent a slowdown in the second semester of 2017. At Vitro Automotive Glass, sales remained stable, although the market is expected to behave cautiously due to the uncertainty from the NAFTA renegotiation.

The PGW acquisition included a 50 percent participation in the Cristales Laminados o Templados (CLT) automotive glass plant in Mexico that also included an option to acquire the remaining 50 percent derived from a control change which we exercised on June 1, 2017. This company generated an EBITDA of US$4 million pro forma.

Besides the excellent teamwork carried out to meet economic performance targets, we implemented action plans in the U.S. and Mexico that seek to optimize our manufacturing processes.

The merger also contributed to an increased global recognition for quality, strength and increased capabilities for Vitro Automotive Glass. As the market slows down, competition grows. However, our business has managed to meet client demand for higher quality standards and technological innovation requirements.

The planned organic growth concluded satisfactorily. The new curved glass line became operational in May, with an estimated annual production of 3.5 million pieces. The project for the expansion of a furnace for the spare parts market started last May, with the goal of increasing annual production to 550,000 more windshields and around 650,000 tempered pieces.

In addition, as part of the PGW acquisition, we participated in a 48.5 percent co-investment in our partner Shandong Jinjing Science & Technology Stock Co. Ltd. in China. At the end of 2017, we managed to reach an agreement through which we will have the option of acquiring additional capital up to 60 percent of this co-investment. We are certain that we have an ally in Jinjing and we will be working together to make this partnership a success in the future.

INDUSTRIA DEL ÁLCALI, SUM OF EFFORTS

For Industria del Álcali, the chemical product company, 2017 turned out to be a complicated year. While the market provided constant demand, a very competitive environment resulted in pressure to drive prices down in an effort from some competitors to avoid losing market share. This, combined with a significant rise in energy costs, resulted in strict cost-cutting programs and every segment doubling efforts.

In the Calcium Chloride segment, sales have yet to take off as expected due to the delay in the consolidation of energy reform in Mexico, and the instability shown by oil prices, one of the most important industries we serve. In the international market, we doubled the sales volume of Calcium Chloride, and in Mexico we maintained our participation in the different businesses.

In some sodium bicarbonate segments, particularly food and pharmaceutical, we had record sales, just as we did in the sodium chloride segment.

Annual sales of Industria del Álcali had a 10 percent growth reported in USD with respect to the previous year, driven primarily by the export markets.

FLAT GLASS: RESULTS OF AN EFFICIENT INTEGRATION

The integration of the businesses acquired in 2016 and 2017 in the architectural and automotive sector, combined with the excellent performance of the other Flat Glass businesses, made the previous period once again one of optimal results. Total Consolidated Sales for Flat Glass in 2017 closed at US$1,852 million, an increase of 131 percent with respect to US$802 million in 2016.

The operational performance of all Flat Glass companies experienced favorable organic growth in the original equipment automotive and architectural businesses. The entry of new platforms into automotive, sale of better value-added products in architectural and the improvement of sales in the chemicals segment, among other factors, allowed Flat Glass to achieve an EBITDA of US$351 million, which with respect to US$205 million in 2016 represented a 71 percent increase.

Strategic Actions

When there are challenges, there are also opportunities, therefore at Flat Glass we design and execute strategic executions that help to face challenges and to take advantage of favorable situations for our constant growth.

VITRO ARCHITECTURAL GLASS, COMPETITIVE ADVANTAGES

The strengthening of Vitro Architectural Glass after the integration helped to maximize its position in the market through better production distribution, better client service, and reduced transportation costs.

When the jumbo MSVD coater comes online later in 2018, Vitro Architectural Glass will have greater production flexibility and the ability to coat thicker glass more efficiently. The new coater will produce high-performing, energy-efficient low-emissivity (low-e) glasses in the larger sizes desired by today's building designers.

To compensate for the increase in costs, particularly in energy, and the extra expenses incurred in by purchasing third-party products derived from the Carlisle incident, we became cautious and strict in our cost and expense cutting programs, as well with resource optimization.

VITRO AUTOMOTIVE GLASS, ORGANIC GROWTH

The roll out of our new line of curved glass, and the expansion of the spare-parts market facilities with a plant for tempered and laminated products, both in Mexico, provided better positioning in the domestic and export market, opening improved growth possibilities.

The combination of new and existing business activity, cost-and-expense-reduction initiatives, focus on improving the quality of our products, and offering innovative and safe automotive windshields, among other factors, were some of the strategies implemented in the previous year.

INDUSTRIA DEL ÁLCALI, COMPETITIVENESS IN THE FACE OF CHALLENGES

Seeking to expand and diversify our client portfolio, in 2017 we obtained five new clients in the Mexican market, as well as four more from the Oil & Gas export segment, compensating for the decline in the important road thawing sector. In addition, we obtained a client in the mining sector.

Cost and expense reduction programs were other initiatives that contributed to mitigating the impact of the intense competition and the increase in energy costs.

Quality and innovation,

EXCELLENCE DIFFERENTIATORS

Vitro has held an important leading position in North America and the rest of the world for more than one hundred years, due to the quality of its products and services. The Company stays at the forefront of innovative product design and development to meet the needs of its clients. It also improves its processes and operations with new ideas for continuous and consistent improvement.

VITRO ARCHITECTURAL GLASS, ADDED VALUE

To date, Vitro Architectural Glass holds over 500 patents and has earned a reputation for innovation and reliability of its products. Through its research and development centers and specialists, the Company continuously sets and exceeds glass industry standards in color neutrality, and optical and spectral performance.

The broad range of glass types means architects have more design options from specialized brands, such as Solarban®, Sungate®, Starphire®, Solarcool®, Hercu-lite® and Vitroluz®, among others.

In 2017, Vitro Architectural Glass launched its first four-layer silver-coated glass under the Solarban® 90 brand, renowned for being a high-performance solar control glass. Its silver coating, gives the glass a low emissivity and a great look, which allow architects to meet the requirements for greater sizes, without any loss in aesthetics.

In 2008, the business unit was the first manufacturer of float glass in North America to ensure its glass complied with the Cradle to Cradle Certified™ designation. To obtain certification, products undergo an independent evaluation that measures the impact of their product life cycle on human health and the environment.

The characteristics and features of Vitro Architectural Glass products make it easier for architectural design professionals to obtain LEED project Certification, (Leadership in Energy & Environmental Design) in nine LEED v4 credit categories, the most recent system version for grading sustainable buildings.

In addition, the business unit is the first North American manufacturer to publish environmental public declarations (EPD) for its flat and processed glass products. These documents provide specific data about the impact of the product lifecycle on the environment and may be used as credentials for LEED® certification, and for any other ecological building certification.

VITRO AUTOMOTIVE GLASS, QUALITY THAT GENERATES TRUST

Vitro Automotive Glass produces quality automotive glass that has earned the loyalty and trust of its clients. In 2017, the business obtained a broad range of certifications and recognitions:

Fernando Treviño
Vicepresident of Industria del Álcali

"In a competitive environment, the strategies for the chemical business will continue to be focused on maintaining our market share, continuing organic growth and exploring new market niches."

We satisfy the needs of architects, who nowadays seek sustainable cutting-edge products.

Yu Jiao
Fellow, Research and Development Center

"The Research and Development Center collaborates every day with manufacturing and market organizations, seeking to develop innovative solutions to allow us to position ourselves at the forefront of the glass industry. Our goal is to consolidate one team, one company, as the driving force to make Vitro the best technology-driven glass company in the world."

- The Aguascalientes, Mexico plant and the Sroda Slaska plant in Poland, both received IATF (International Automotive Task Force) certification, the ISO 9001 standard for quality management in the automotive sector.

- The company plant at Evart, Michigan, obtained approval for the BIQS (Build in Quality Supply Based) audit, a specific General Motors requirement. The plant was also recognized as Supplier of the Year.

- The Crinamex plant in the State of Mexico was recognized for Excellence by General Motors.

The certifications and recognitions Vitro Automotive Glass receives constitute an incentive to keep generating products that comply with the standards and include features that will further add greater value to the vehicles. Some of these products are:

- **Triple-silver-layer** coating glass

- **HUD (Head's Up Display)** is a device that is placed on the windshield or on a separate screen and displays key data such as speed, navigation instructions, and safety distances, among other data. This technology is produced at the following plants: Crinamex and Vitro Flex in Mexico, Elkin in the U.S., and Poland for various Mercedes Benz, BMW, Cadillac and Lincoln models.

- **Press technology**, which is used for high-precision windshield curving. The plants that manufacture this glass are Crinamex and Vitro Flex in México, and the plant in China.

- **WeatherMaster® Windshields** use a conducting layer called MSVD that allows them to generate heat when an electric current is applied to it. It is mainly used when the windshield is covered with snow or frost.

- **Sungate®** is a type of windshield with reflecting/infrared glass that provides thermal comfort. This class of glass emphasizes aesthetics.

Paolo Cavallari
Senior VP & GM, OEM Vitro Automotive Glass

"The automotive industry is ever more competitive and demanding of innovative alternatives. Together, we have the capacity to create the glass demand for the cars of today and the future."

Some of the clients for whom we manufacture automotive crystals in 2017 were:

- Daimler (Mercedes Benz)
- Ford
- Mazda (through Webasto)
- Lincoln (through Webasto)
- FCA/Mopar
- Honda
- Toyota

INDUSTRIA DEL ÁLCALI, QUALITY CERTIFICATION

The chemical business maintained its ISO 9001:2008, ISO 14000:2004, and FSCC 22000 safety certifications, the Integral Responsibility Management System (SARI) certification verified by the ANIQ (Chemical Industry National Association), the U.S. Kosher certification, and additionally the SMETA (Sedex Member Ethical Trade Audit) certification required by PepsiCo, which reviews Good Practices on Corporate Ethics, and also includes topics about health, safety, workplace and environmental standards.

With the design in 2017 of the new image for the Sal Hada brand, inroads were made into some markets in

Vitro Automotive Glass produces quality automotive glass that has earned the loyalty and trust of its clients

Northeastern Mexico. The image for Pixie Salt was also created, in an effort to introduce salt in a box container in the U.S. Additionally, a project for BSP Bicarbonate in small containers for HEB was carried out, and we expect the project to be approved by the company to enable us to service that segment. Furthermore, recognitions were made by clients such as Mega Alimentos and El Pequeño Curtidor.

2018 OUTLOOK

Mexico, the United States and Canada, all countries in which we have a strong presence, are in the midst of the renegotiation of the North America Free Trade Agreement (NAFTA), thus, certain commercial decisions are still not clearly defined. The automotive, construction and oil industries, to mention some in which we play an important role as suppliers, have slowed down their growth and investments.

The economy of countries in Latin America is slowly coming out of recession, therefore, we will make special emphasis on maintaining our presence in those countries and will try to take advantage of all possible opportunities that may arise. In 2018, Mexico will hold presidential elections suggesting that many sectors will be focused on their outcome.

VITRO ARCHITECTURAL GLASS

Perspectives for Vitro Architectural Glass remain favorable since the dynamics of the construction sector continues to show excellent growth. The housing market is showing a strong demand as millennials continue to acquire property over the next ten years.

The rising use of extra-large glass for “taking the exterior to the interior” is a design trend that offers a greater demand for larger windows. In addition, preference for floor-to-ceiling glass in commercial buildings is ever increasing, meaning a fantastic opportunity of growth for our architectural products.

Investment on coatings and extra-large coated glass, places us in an excellent position to continue capturing participation since we have the capacity, products and the technology to satisfy market demand.

The rising use of extra-large glass for "taking the exterior to the interior" is a design trend that offers a greater demand for larger windows. In addition, preference for floor-to-ceiling glass in commercial buildings is steadily increasing.

VITRO AUTOMOTIVE GLASS

The integration of the business acquired in March 2017 makes us an important player in the automotive glass industry in NAFTA, with 35 percent share of the market. In 2018, we will capitalize the union of our

Janeth Dávila
Quality Coordinator of Industria del Álcali

“At Vitro, we meet the highest quality, environmental, health and safety standards, being certified by ISO and Responsible Care. Our chemical plants for the food industry meet the GFSI-recognized FSSC 22000 standard. These standards position us as a reliable, sustainable and productive international organization.”

The cost-reduction programs were other initiatives that helped to alleviate the impact from the rise in energy costs and stiff competition.

strengths, and will operate as one business to maintain the Company's position in an ever more strict and competitive environment. We will harness the advantages for growing our market share, offered by our presence in Europe and China.

The roll-out of our curved glass line, and the new furnace for the spare-parts market, both part of our organic growth in Mexico, boost our capacity for production and development of complex-glass capacity to meet the demands of our clients.

Both the growing trend for electric cars and the drive pushing the development of autonomous vehicles herald a future unprecedented in demand for technology and research.

Looking forward, commitment to operational excellence of all our facilities, cost management, as well as quality and value-added performance through innovative technology will be our differentiating factors.

INDUSTRIA DEL ÁLCALI

The outlook in the short term is ever more aggressive for those companies that are willing to enter a price war to gain markets and clients. Furthermore, we foresee higher demands and specifications by the clients, as well as an increase in the cost of energy, packaging and transportation.

However, at Industria del Álcali, we foresee an increasing demand for Calcium Chloride, a product that services the thawing segment, and which in previous years was depressed due to moderate winters. In addition, we expect the other segments to keep growing.

The Flat Glass business has shown its market strength and that it has the right strategies to face challenges in 2018.

Baldomero Gardea de la Fuente
Senior Vice President of Europe and China

"With the latest acquisitions and our competitive advantages, Vitro is now poised to compete in the global market and seize the moment to grow strategically in Europe and China."

Containers

Vitro's containers are supported by over 100 years of experience. With state-of-the-art technology, strict quality controls, safety and hygiene, the Containers business unit produces highly sophisticated and aesthetic products for the cosmetic, fragrances and toiletries industry, as well as for the pharmaceutical segment. In addition, it manufactures machinery, equipment and molds for the Glass Container industry providing engineering, automation and equipment services.

2017 Summary

2017 turned out to be a complicated year for the Containers business unit. The conditions of the market it serves, a weak economy in countries for its products, as well as internal issues all made for a challenging year. However, the strategies implemented contributed to minimize the effects.

CONTAINERS FOR COSMETICS, FRAGRANCES AND PHARMACEUTICALS (CFP), STRENGTHENED IN THE FACE OF CHALLENGES

Different external factors affected the performance of some of the segments that serve the CFP business, among them: market uncertainty awaiting the decisions of the new government in the United States regarding economic and commercial matters, the spike of inflation in Mexico, the rise of energy costs, worldwide excess capacity and weather phenomena, among others.

Internally, we started the year repairing furnace number 3, which reduced its production in January of the previous year. Moreover, volume was impacted by the migration of manufacturing of three of our main clients from the United States to Europe.

Besides the consequences from the rise in energy costs and inflation, a weak Mexican economy also affected sales of our business, since companies cut costs and inventories and rationalize consumption. In addition, consumer purchasing power was also weakened.

Markets experienced a mixed performance, as several Latin American countries, among them Mexico, Colombia, Argentina and Peru had to undergo exchange volatility of their currencies, choosing to favor purchasing in local currency which in turn caused marginal growth.

On the other hand, Brazil started a recovery that brought with it favorable market behavior and good growth. In the United States, the market also grew, helping to drive demand for our products and compensate for the products that migrated to Europe.

Yet, beyond the challenges that arose, the Containers business harnessed competitive advantages that kept us at the forefront of new product development, while exploring new market niches and carrying out resource and competitiveness optimization programs.

MACHINERY MANUFACTURING, REDEFINING THE BUSINESS

In 2017, we made investments for updating technology and increasing our manufacturing capacity in the molds area, to position FAMA at a competitive market level. Moreover, we implemented technological improvements to allow our machines to manufacture glass containers and position FAMA as a highly competitive and reliable market supplier.

FAMA's products are specialized and have a long-life cycle, so our strategies are aimed at increasing our client portfolio in all segments, thus generating new businesses.

Our one hundred year track record in the industry consists of strategic actions aptly executed, and a work team that believes that commitment to Vitro's values and to continuous improvement are essential to the Company.

Luis Enrique Campos
Product Manager, CFT

"We provide the best experience for our clients through an integral quality service, ranging from concept to development of new products."

Luis Zertuche
Head of Sales and Marketing of FAMA

"At FAMA we work intensively at making our name as a cutting-edge technology machinery and equipment manufacturer, transcending borders and seeking new partners in Mexico, the United States, Argentina, Chile, Central America, India and Europe."

Containers: 2017 Results

The weak macroeconomic and local conditions, uncertainty and caution in the investment market, and clients in both the CFP business as well as in FAMA, caused unfavorable results in 2017. At the end of the period, Total Consolidated Sales of the Containers Business Unit was for US$216 million, a decrease of 9.8 percent with respect to US$240 million in 2016.

In 2017, EBITDA of the Containers business unit was US$53 million, with respect to US$59 million in 2016, a decrease of 10.8 percent.

Unfavorable results were derived from a mixed-product effect and a low demand for molds, spare parts, machinery and equipment at FAMA, which compared to the previous year significantly decreased, in addition to moderate market conditions in the segment for fragrance containers.

Machinery Manufacturing was a business that used to serve mainly subsidiaries of the Company. However, since 2016 it started its transformation and redefinition process to make its products and services known to an open market and reposition its image.

The Company needs making itself known as an independent business, so it set out to create its own identity and slogan as FAMA in the printed and audiovisual media, and even by word of mouth.

As part of its commercial strategy, the Company created a web page that includes a description of the products and services it provides, as well as its track record and experience in the development of machinery, molds and equipment for the glass industry.

In the previous year, several circumstances affected FAMA's results: decrease in investments at O-I (Owens, Illinois), one of our main clients, currency exchange volatility of the Mexican peso vs. U.S. dollar energy costs, specifically electricity, raw material costs, and the difficulty to have potential clients view us as suppliers of machinery, mold and equipment, not as an internal business unit of a competitor.

Strategic actions

Our one hundred year track record in the industry consists of strategic actions aptly executed, and a work team that believes that commitment to Vitro's values and to continuous improvement are essential to the Company.

CONTAINERS FOR COSMETICS, FRAGRANCES AND PHARMACEUTICALS, CONTINUOUS IMPROVEMENT

The strategies for sustainable growth, established by the Containers for Cosmetics, Fragrances and Pharmaceuticals business unit are:

- **Volume Generation:** The goal is to increase sales through new products and related segments, and seek new market niches.

- **Competitiveness:** Increase productivity of our processes, and reduce costs and waste. Make a work culture out of best practices and optimize resources.

Eduardo Armas
Operations Head for the Cosmetics Containers Business

"Thanks to our constant effort for continuous improvement, we managed to increase productivity and efficiency of the smoothing and finishing processes, producing more than 80 new moldings in world-class development time."

FAMA works actively to bring in new clients: last year it opened doors at AbInBev, Sivesa, Fevisa, Emhart, and Cristal Chile.

Vitro's glass containers for cosmetics, fragrances and pharmaceuticals have been widely recognized and awarded.

- **Innovation:** Simplify processes, automatize and generate innovative products that differentiate us from the competition.

- **Geographical growth:** Expand Vitro's presence into new geographical territories through commercial offices in strategic regions.

Aligned with the above, the Company started two new IS (Individual Sector) machines and an annealing lehr. The finishing area began the process of automatic decal and three annealing lehrs.

In the period, we managed to improve productivity and efficiency in the finishing process, and we reduced piece inventory by 13 percent. In addition, more than 80 new moldings were manufactured in world-class development time. New products accounted for 34 percent of total sector sales.

FAMA, INDEPENDENCE TO GROW

The strategies by FAMA to define itself as a specialized and experienced company in machinery, equipment and mold development and other services, while achieving profitability and value generation targets are:

- **Commercial:** 2017 was the first year that we worked with a complete commercial structure. The website http://fama.com.mx/ was finalized. We made product and service catalogs, and after more than 20 years of not doing so, we participated again in the Glassman Latin America and Glassman Europe fairs.

- **Transforming FAMA:** The culture change process continued internally. The goal is to focus on Customer service, meeting their needs and anticipating their expectations.

- **Consolidation of other businesses:** We broadened our range of products and services to offer engineering, automation, and robotics services, as well as inspection equipment.

- **Operational excellence:** We aim for more efficient operations through process change, investment in new machines, layout modifications and implementation of operational tools.

- **Chain of supply:** We implemented a plan for supplier development and plan strategic inventories to improve our quality and service.

- **Research and development:** In 2017, we worked hard on the FAMA Technological Independence project, with the goal to eliminate technological third-party dependence. In addition, a new cutting-edge technology full service machine was

engineered at the Cosmos plant of our own glass container business unit.

- **Strategic alliances:** Besides the technological Independence project, we continued the search for strategic alliances with industry leaders.

FAMA works intensely on getting new clients. Last year it opened the doors at AbInBev, Sivesa, Fevisa, Emhart, and Cristal Chile, to mention a few prospects. In addition, it generated new clients for molds, machinery, smelting, glass handling and engineering services. The Company is currently discovering new markets in the United States, Argentina, Chile, Central America, as well as in India and Europe.

The business consolidation strategy aims at diversification of its line of products and services, since it has a strong participation in the demand for robotics, tools, smelting and machinery from new clients.

Our work team is convinced that practicing Vitro's values and striving for continuous improvement are essential to the Company.

Quality and Innovation,

EXCELLENCE DIFFERENTIATORS

Containers for Cosmetics, Fragrances and Pharmaceuticals, distinguishing quality

The quality and design creativity of Vitro's glass containers for cosmetics, fragrances and pharmaceuticals have merited recognitions and awards in numerous occasions. The excellence of its production processes has been certified by its clients as well as by expert organizations of the glass container industry.

With over 30 years of recognizing best design, innovation and development of containers in Mexico, once again the Mexican Association for Containers and Packaging (AMEE) distinguished 18 containers made by Vitro for its clients.

Moreover, the Josie Maran Argan Oil Oleos 15 ml container from PKG Group was awarded the 2017 Clear Choice Award by the Glass Packaging Institute.

To reach out to the Community, Vitro organized the First Perfume Container Design Contest, with the participation of design and architecture students from 26 of the most important universities in Mexico.

The aspects evaluated by the jury were: concept execution, innovation, creativity, graphic design aesthetics and finishing, integration of glass and its components, sales attractiveness, ergonomics and user-friendliness.

To guarantee safety, quality and reliability of the containers processes, the Company complies with all industry rules and certifications, as well as with client-required audits.

Furthermore, the business was ISO-9000 re-certified with zero non-conformance findings and was also re-certified as Clean Industry by the PROFEPA (Procuraduría Federal de Protección al Ambiente).

In 2017, the Containers business unit created the Glass University, with the objective of providing comprehensive development for its collaborators, through training and the combination of knowledge and skills and enabling adequate post assignments. The university is authorized to issue certificates with curricular value, backed by the *Secretaría de Educación Pública* and the *Secretaría del Trabajo*.

FAMA, CONFIDENCE FOR OUR CLIENTS

In the previous cycle, FAMA renewed its ISO-9000 certification, as well as the certification of the BASC (Business Alliance for Secure Commerce) y C-TPAT (Customs-Trade Partnership Against Terrorism) programs, which promote secure international trade and provide product-handling certainty for clients.

2018 OUTLOOK

2018 will be challenging, as diverse factors such as the presidential elections in Mexico, Colombia and Brazil, all countries in which we have important presence, the NAFTA renegotiation process, and tax policies in the United States, among other factors, will make the year a complicated one.

CONTAINERS FOR COSMETICS, FRAGRANCE AND PHARMACEUTICALS

Regardless of the challenges expected, at Containers we trust in our operational and human strengths, teamwork and focus on profitability as the key to success in 2018.

Internal efforts will be aimed at improving productivity, while we continue with programs to reduce costs, expenses and waste, and making more efficient use of resources.

In Brazil, we will continue to grow at a steady pace as the country recovers from a long recession, a juncture which opens an opportunity to serve clients in the region, through our warehouse and commercial office in the state of Bahia. We are working in accordance to the recovery of the market to increase our presence in the country through organic growth.

Upgrading and modernization of the facilities will be another priority, and we will gradually renovate and automatize operational and management processes. Aware that new product development represents competitive advantage for our business, we will persist on creating and designing ever more original and attractive containers.

FAMA products are longer life-cycle, and specialized, therefore our strategies are aimed at increasing our client portfolio across all segments to create new businesses.

Internal efforts will focus on improving productivity, and we will continue our programs for cutting costs and expenses and reducing waste.

In 2017, the Containers business unit created the Glass University, with the objective of providing comprehensive development for its collaborators, through training and the combination of knowledge and skills, as a means for achieving adequate job matching.

FAMA

With respect to Machinery Manufacturing, we will continue with the conversion process of the Company as well as with the search for new glass industry clients, without neglecting those unrelated to glass who may require our services.

The entry of two new businesses to Vitro represents another opportunity to show that our range of products and services can cover their needs for machinery, robotics, tools, and furnace repair and maintenance.

We will work hard to position the FAMA Brand by promoting our website and keeping it updated, as well as and by participating in glass industry-related fairs and exhibitions.

As we have always done, we will strive for operational excellence. A culture of service will also be fundamental in our daily work and shall make special emphasis on research and development projects.

At the Containers business unit, we are convinced that opportunities do not happen by themselves, we must look for them and exploit them using our skills, industry experience, and above all with the commitment and support of our collaborators to achieve excellence.

Sustainable Development

At Vitro, we know that achieving sustained growth and ensuring the continuity and success of the Company in the long-term requires the integration of all our actions and activities. Our interest goes well beyond financial aspects; we look for balance in every field of our activities, thus Sustainable Development becomes an integral part of way of doing business, by adding economic, environmental and social value to our surroundings.

Based on the Vitro Sustainability Model, in 2017 we founded all our actions on the Integral Competitiveness, Human Attitude and Environment axes, all within the framework of Responsible Corporate Management.

Integral Competitiveness

To Vitro, 2017 was a year of expansion, integration and consolidation. Having work teams all around the world allows us to harness everyone's strengths, achieving Integral Competitiveness in any of the regions in which we serve local markets. Based on profitable and sustainable strategic planning, our Company is committed to offering innovative and reliable products and services, stemming from continuous improvement end efficiency processes.

We are aware that to achieve our goals, it is important to work collaboratively. Based on the Vitro Sustainability Model, we have identified our groups of internal and external stakeholders, thus ensuring work with not only internal teams, but also with all interested parties. Our goal is to make an open dialog and a relationship of trust a critical component of our operations.

Always exceeding what is expected of us is one of our values. Aware of the importance of being a global company and of the challenges posed by the economic and political situation we face, all our exporting plants are certified by specialized programs in charge of regulating and ensuring their international commercial activity, for our clients' confidence and peace of mind.

Our commitment to sustainability is reflected in the adherence to different practices for the evaluation of actions and procedures. We participate in processes to diagnose sustainability as part of the chain of value of our clients. An example of this is the rating assigned by EcoVadis to Vitro as an Advanced Supplier. Moreover, to comply with the excellence required in performance of our responsibilities, we answer evaluations regarding minerals which may originate in conflict zones, as well as other questionnaires such as the NQC for Vitro Automotive Glass and Cradle to Cradle™ for Vitro Architectural Glass, among others, obtaining satisfactory marks and motivating them to maintain the best practices at all levels.

We strive to extend our leadership to our value chain, carrying out supplier evaluations to help them achieve best practices and find the best opportunities for sustainable operation. A practical example of this is the Carbon Footprint Management Program, through which we select more than 40 of our suppliers and encourage them to implement practices to measure their Greenhouse Gas Emissions, to extend Vitro's Integral Competitiveness.

Another value chain practice was to open dialog with suppliers to encourage the incorporation of different sustainable practices into their processes.

The focus of our business is our clients; thus, our goal is to satisfy their demands with a broad range of products and services that are aligned with continuous improvement and permanent strategic planning. Such an effort is backed by the recognition of numerous clients, who visit periodically and evaluate us to certify or recertify our processes, and verify that they meet established standards by qualified entities, or even those developed by themselves.

We are pleased to report that our external stakeholders certify our operational and management processes. In 2017 we received different recognitions, distinctions and certifications that back the quality of our products, services and administrative procedures.

As a transformation company, we participate in the elaboration of final products. Some of the buildings in which we have participated as internationally recognized suppliers are:

Our goal is to maintain open dialog and trust relationships as a critical part of our operations.

Our commitment to sustainability is reflected by our strict adherence to different practices of evaluation of procedures and actions.

We are pleased to report that our external stakeholders certify our Company's operational and administrative processes.

Rob Struble
Branding and Communication Manager, U.S. Architectural Glass

"Expansion and integration of the architectural business allowed us to continue development of products that adapt to new market demand."

- Three buildings certified by Living Building Challenge. This project management tool recognizes leading sustainable construction projects.

- Vitro's products were used in the construction of buildings certified as Zero Energy by the Living Building Challenge; among them is Eden Hall Commons, the NASA Sustainability Base, the Hanna Gabriel Wells (HGW) corporate headquarters, among others.

- More than 20 buildings are classified as LEED Platinum. LEED (Leadership in Energy and Environmental Design) certification ensures that buildings are constructed following sustainability requirements. The system is backed by the U.S. Green Building Council.

With the growth we have experienced in recent years, our main challenge is the integration and evolution of all business units, while maintaining the values that define us as the Glass Company. To achieve it, in 2018 we will be consistent with our values, and we will strengthen and develop in an integral manner all client relationships and value chain.

We currently have over 250 collaborators participating in the Wellness Program.

HUMAN ATTITUDE

In 2017, over 14,000 of our Collaborators in 14 countries, helped to build the future that we at Vitro envision for ourselves. Aligned with the Human Attitude axis, we are aware of the importance of maintaining constructive relations with both the internal and external community. For this reason, all company actions are always aimed at contributing to professional, personal and community development.

Our culture and values motivate us to continue implementing strategies and projects to achieve comprehensive growth of our collaborators, through actions such as performance evaluation, activities for professional and personal development, life quality in the workplace, family integration, health, and inclusion of vulnerable groups.

Vitro's success is due to the commitment of its collaborators, who every day give their best to achieve excellent results. We firmly believe that training is the key to the best performance of our collabora-

Homero Navarro

HR Sr. Director for the Cosmetics Containers Business

"The creation of the Glass University is one more example of Vitro's commitment to collaborator training: we will continue to drive their development within a global environment."

tors and for preparing them for future responsibilities. One of the main initiatives in 2017 was the Vitro University, which launched its pilot program with six careers and one specialization at the School of Maintenance at our facilities in the container plant.

The 2017 pilot group was made up of 182 collaborators and was made possible by a strategic alliance with institutions, such as the el *CONALEP (Colegio Nacional de Educación Profesional Técnica), INLAC (Instituto Latinoamericano de la Calidad)* and *CAST (Centro de Asistencia y Servicios Tecnológicos)*. The University model offers on site, online, and mixed modes.

In line with this commitment, we created the Employee Champion Program, which functions along three action axes: Health through the Wellness Program and the initiatives in synergy with ANSPAC *(Asociación Nacional Pro Superación Personal, A.C.)*; vulnerable group inclusion with the *Uniendo Talentos* Program, and active community participation through our Volunteer program.

The Health axis has more than 250 collaborators enrolled in the Wellness Program, which focuses on reducing the metabolic syndrome rate among our collaborators. Diagnostic evaluations are periodically applied to our collaborators, as well as coaching programs, motivational talks, and performance evaluations. In addition, outside Mexico, collaborators have general health programs.

At the end of last year, more than

MXN$11 millions

was contributed to health and education institutions.

In synergy with ANSPAC, we strive to support and complement the work life of our collaborators. Thus, a program has been created to impart training and talks about diverse aspects to wives of our collaborators. This year, we concluded the first program cycle with the graduation of 80 women at our Mexico facilities.

Another initiative for comprehensive growth is the Uniting Talents Program (*Programa Uniendo Talentos*), focused on opening doors for the talent of vulnerable groups. For two years, we have been working on the description and analysis of positions, to provide equal opportunities by generating adequate cultural and work conditions, as well as physical adaptations. Last year, the result was a pilot group of 20 hearing-impaired persons working in our container plant. We intend to go forward, working for the cultural transformation of our society.

The commitment of our Collaborators with the Community and the environment is a tangible one; proof of it are the efforts of the Volunteer program: *Naturalmente Vitro*. This year, we celebrate 10 years of what started as an internal initiative and became the NOW Alliance for Reforestation Program, which has more than 26 promoter partners. Thanks to the participation of more than 3,500 of our Vitro collaborators in Mexico and Colombia, in ten years we have achieved the adoption and reforestation of of 77,000 trees.

We continued with the support for the *Formación Educativa, A.C. (FEAC)* program, with educational services for pre-school to middle school children. We also continued with university courses and several alliances for technical school. It is also important to highlight, the Perfume Container Design Contest launched at our container plant, which drew more than 100 contestant teams from 26 universities nationwide. This was an initiative to support and strengthen the skills and capacities of higher education students.

Vitro supports a variety Community causes. One example is the donations approved every year by the Corporate Practices Committee for Non-Government Organizations (NGO). At the end of the previous year, more than MXN$11 million were contributed to health and education institutions.

Unfortunately, in September Mexico was hit by a series of earthquakes. The solidarity and Human

We maintain a Permanent Recycling Program in Mexico through which we receive over 97,000 tons of glass from more than 100 suppliers.

To reduce energy consumption and minimize Greenhouse Effect Emissions, every year we carry out our carbon dioxide emissions inventory scopes 1 and 2.

Attitude of the Vitro team was reflected in the *Un Peso de Ayuda* (One peso in help) campaign: for every peso contributed by our people, Vitro doubled the amount. Resources raised were for more than MXN$3 million, which were assigned to the reconstruction of the homes of our affected collaborators, and for support to the Red Cross.

The Glass Museum is a cultural sample that permanently displays the three dimensions of glass production as a human activity: History, Art and Science. The museum has been recognized by the *Instituto Mexicano de Ejecutivos de Finanzas*, by *Cáritas* of Monterrey, A.B.P., by the *Asociación Amistad de Monterrey, A.C.* and by the *Secretaría de Educación Pública*, among other organizations

In 2017, the Glass Museum hosted more than 5,000 visitors, with four percent being company visitors. The museum's purpose is to promote the benefits of glass to its visitors, especially students, who represent almost 60 percent of the museum's visitors. Moreover, to make access more affordable to individuals from any economic status, the museum gave out 37 percent of its entrance tickets for free. For more information about the museum's cultural activities, go to http://www.museodelvidrio.com.

Convinced of the importance of permanent dialog and multi-channel communication, in 2017 we worked to bolster relations by opening the social@vitro.com institutional account, which received more than 150 requests for diverse information from the Company. Another information channel was our Sustainability bulletin: *Reflector*, with which we share information about the sustainability initiatives of our Company.

We are determined to make a difference in all our operations, as well as in the communities in which we operate. Thanks to the integration of the new Vitro Architectural Glass and Vitro Automotive Glass plants, we are sure that the Human Attitude of all our collaborators is reflected in the efforts to make a positive impact on our internal and external stakeholders.

ENVIRONMENT

With the growth of assets, our commitment with the environment also grew. All of our facilities comply well beyond the requirements established by current environmental law, and operate under the highest quality standards. We strive to be a transformation company by making our processes more efficient and clean.

To comply with this responsibility, we have worked on policies that will guarantee that product and service processes make efficient energy use, while assuming the responsibility of protecting our collaborators, clients, public, and the environment; the Safety, Health, Environmental and Energy Policy was a result of this.

We are the only company in Latin America to recycle automotive windshields. We plan to replicate our innovative system in Mexicali in 2018.

Some of our operational strategies are:

- **Industria del Álcali** reduced water extraction, use and disposition, thanks to the project for a new water processing plant and leakage reduction. In 2018 a project for electricity generation and the reuse of high-pressure steam in processes will be reviewed

- **In Vitro Automotive Glass**, the Evart plant switched to LED lighting, achieving energy savings of more than US$100,000 and a decrease of 1260 tons of carbon dioxide emissions. In the current year, emphasis is made on recycling, reuse and waste reduction at landfills.

- **Vitro Architectural Glass** produces around 18 million square meters of low emissivity glass which reduces energy consumption of buildings. In 2018, investment on greater energy-efficient glass furnaces is planned.

To reduce energy consumption and minimize Greenhouse Effect Emissions, every year we make an inventory of carbon dioxide emissions of scopes 1 and 2. This way, we measure the impact of our operations in Mexico, Colombia and Brazil. With the acquisition of new businesses, we will standardize our processes for accurate measurement of emissions and thus identify goals, opportunities and risks related to climate change. In 2017, we verified the 2015 emissions together with the *Asociación de Normalización y Certificación*, A.C. (ANCE). For more information about these reports go to: **http://www.vitro.com/es/sustentabilidad/reportes**

This year, we participated answering the Value Chain category of the Carbon Disclosure Project (CDP) questionnaire, getting a C- rating. Our efforts are aimed at the integration of all results of our facilities.

Technological improvement of processes, products and services, our policies, emission reports and all other actions in favor of the environment, move us to voluntarily obtain the Clean Industry certification granted by the *Procuraduría Federal de Protección al Ambiente (PROFEPA).*

We support initiatives such as the *El Manzano* Vitro Park, which received over 64,000 visitors, 23 percent of them collaborators, their families or Vitro friends. The park covers 585 hectares and is a space that promotes a culture of environmental care through spaces for healthy coexistence. Furthermore, it is protecting the natural habitat of natural fauna such as deer, black bear and squirrel, as well as flora such as pine, oak and apple trees. For more information about the park, please go to **http://www.vitroparqueelmanzano.com.**

The *Vida Silvestre (Wild Life), A.C. Organization (OVIS)* is one of our strategic alliances for planet care. In 2017 we helped in the conservation of 83,000 hectares, through presence in natural reserves in the states of California Sur, Campeche, Nuevo León, Tamaulipas and Sonora. These natural reserves protect over 1,300 wild species. For more information, go to **http://www.ovis.org.mx.**

Glass does not generate waste during its manufacturing process; recycling or reuse of post-industrial glass contributes to the high-quality standards for which we are known. It allows us to reduce the amount of raw materials used, since for every ton of

Liz Vargas
Legal Compliance Coordinator

"We have ISO 14001:2004 certified plants; some are undergoing a re-certification process under the ISO14001-2015 standard, which certifies our operations, and recognizes practices regarding water, air, soil, environmental impact and risk, and waste management ."

recycled glass, 1.2 tons of raw material are saved. In addition, significant energy savings are achieved, as furnace temperatures are lower when recycling glass.

We are aware that glass recycling and reprocessing is a way to increase efficiency of our operational processes. For this reason, we keep a permanent Recycling Program in Mexico, by which we receive more than 97,000 tons of glass from more than 100 suppliers; the goal for 2017 was exceeded by 7 percent. Moreover, we are the only company in Latin America that recycles automotive windshields. Thanks to our innovative system, we plan to replicate this project in Mexicali in 2018. In parallel, facilities outside Mexico are working on reusing post-industrial glass that is returned by our client, or from production waste.

We will continue seeking to create value through efficient integration of our operations, and the firm determination of achieving company profitability and sustainability..

RESPONSIBLE CORPORATE MANAGEMENT

Since its beginnings, Vitro has adopted a position of transparency, equality and accountability to its shareholders, board members, collaborators and other groups of interest.

In 2017, together with OVIS, we supported the conservation of 83,000 hectares through our presence in natural reserves in the states of Baja California Sur, Campeche, Nuevo León, Tamaulipas and Sonora, Mexico.

We support initiatives such as Vitro *Parque el Manzano*, which had over 64,000 visitors; 23 percent of them, our Collaborators, their families or Vitro's friends.

The responsibility to our shareholders is made evident through Responsible Corporate Management. In 2017, 42 percent of the Board of Directors were independent directors. This rate is higher than required by Mexican legislation and the process to qualify as an independent director is stricter than required by the Mexican Securities Market Law (Ley del Mercado de Valores de México).

The Board of Directors is responsible for defining the rules, regulations and procedures that govern our organization. The priority in 2017 was to continue with the process of global integration of our work teams, striving for operational practices that comply well beyond what is established by national and international standards, focusing on the long term and on compliance, with the commitments and expectations of all our stakeholders.

We are sure that for business continuity and correct operational integration, it is necessary to have sound ethical and legal foundations. Thus, we have reviewed and renewed policies at both the institutional and plant level. We keep working on the upgrading of our Code of Ethics to standardize and prioritize the practices necessary for all our collaborators.

With the expansion and potential for growth of our Company, we are convinced that information must follow transparent practices. We expect an improvement in our results in the following year because of the key strategies and initiatives we shall be implementing. We have a positive outlook on the business, and the perception of our clients is favorable now that we are functioning as a global company.

These are some of our 2017 results and initiatives that reflect our commitment with the generation of economic, social and environmental value, considering the expectations of our stakeholders. For detailed information about Vitro's sustainability actions and activities, please refer to the 2017 Sustainability Report available in May 2018 at **www.vitro.com.**

Mónica Chapa
Corporate Legal Counsel

"This year, we are continuing with the integration of all our operations and aim to maintain the highest administrative institutional and transparency standards to achieve excellence in Corporate Governance".

Financial and Operational Analysis

In 2017, Vitro was aware of the factors that affected the performance of companies and countries. Although global economies in general remained stable, they also experienced uncertainty, due mainly to the political changes in the United States and the renegotiation of the North America Free Trade Agreement. These and other factors caused some reservations and caution among investors.

On one hand, manufacturing continued its recovery due to low capital costs. This has in turn driven other economies, such as the Mexican economy, which is highly dependent on the manufacturing sector. The automotive sector on the other hand, was affected by the uncertainty caused by the NAFTA negotiations.

The automotive sector on the other hand, was affected by the uncertainty caused by the NAFTA negotiations.

All the above kept the macroeconomic environment expectant. Furthermore, despite the exchange market pressures, the Mexican peso had an appreciation of 4.6 percent against the US dollar at the close of 2017.

In this context, both the global and the US GNP maintained a growth like that of the previous year.

GNP GROWTH	2014	2015	2016	2017
MEXICO	2.8%	3.3%	2.9%	2.1%
UNITED STATES	2.6%	2.9%	1.5%	2.3%
GLOBAL	3.4%	3.2%	3.2%	3.7%

In Mexico, however, despite the complicated macroeconomic conditions and its dependence of oil revenues, according to data published by the *Secretaría de Hacienda y Crédito Público (SHCP)* in its General Criteria for Economic Policy, GNP growth was 2.1 percent, at the level of the last two years.

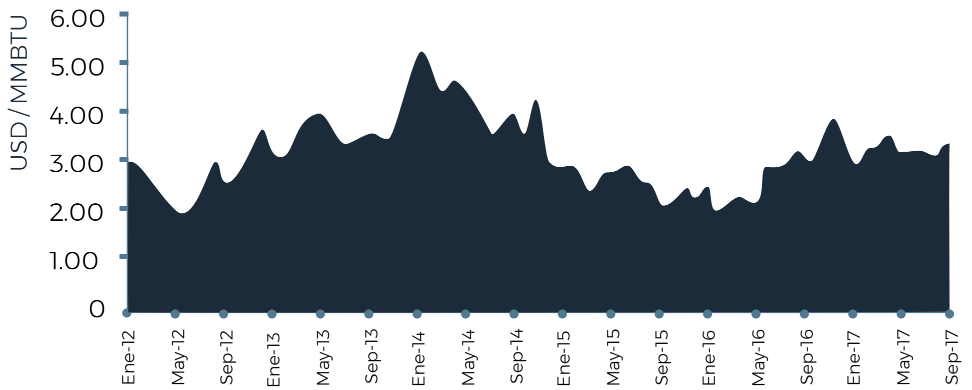
	2014	2015	2016	2017
Mexico - Consumer Inflation Rate (Based on the Consumer Price Index, percent)	4.1%	2.1%	3.4%	6.8%
USA - Consumer Inflation Rate (Based on the Consumer Price Index, percent)	0.8%	0.7%	2.1%	2.1%
Inflation Difference Rate USA/Mexico	3.3%	1.4%	1.3%	4.7%
Devaluation (Appreciation) Mexican Peso	12.7%	17.0%	19.5%	-4.6%

On December 31, 2017, the Mexican peso closed at MXN$19.66 per dollar, with respect to MXN$20.62 pesos per dollar at the close of 2016. This fluctuation in the exchange resulted in an annual appreciation of 4.6 percent. On the other hand, the annual average depreciated by 0.9 percent, registering an average exchange rate of MXN$18.88 pesos per dollar in 2017, against MXN$18.72 pesos per dollar in 2016.

The performance of the exchange rate of the Mexican peso was affected by several factors which caused the fluctuation; the main ones were, market concerns about the policies adopted by the U.S. government regarding NAFTA, the modification of immigration policy, and the volatility of natural gas prices.

Natural gas prices continued an upward trend since the early months of 2016, which increased in the last quarter of 2016 and the first quarter of 2017. This increase is mainly caused by pressures due to low production in Mexico, and a significant increase in gas imports from the United States, which ended in an increase in its price.

NATURAL GAS



Although this trend was reverted in the second quarter of the year, the harsh winter weather in December raised the price of natural gas to US$3.31 per million BTUs (MMBTU) at the close of 2017, which represented an increase of 13 percent with respect to the close of 2016. Monthly average price in 2017 remained at US$3.28 per million BTUs (MMBTU) against US$2.49 per million BTUs (MMBTU) in 2016.

CONSOLIDATED OPERATIONAL RESULTS

The amounts in this section are shown in nominal dollars, obtained from dividing nominal pesos for each cycle, by the Exchange rate published by the Banco de México at the end of every period. Financial information for 2013, 2014, 2015, 2016 and 2017 is reported according to the International Financial Reporting Standards (IFRS).

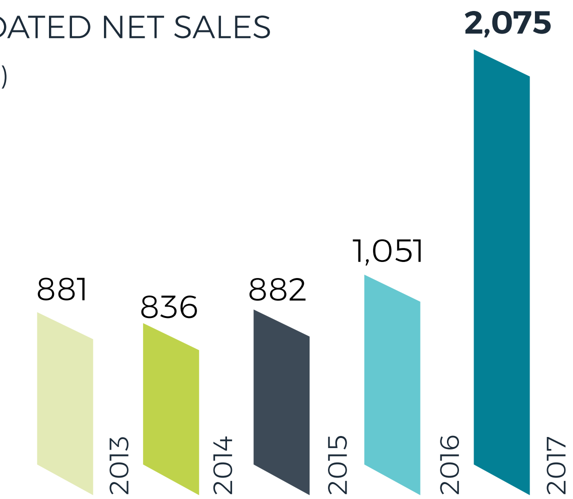
After the incorporation of Vitro Automotive Glass (formerly PGW), the Company has included indicators for this division in the Flat Glass business, starting in the second quarter of 2017.

SALES

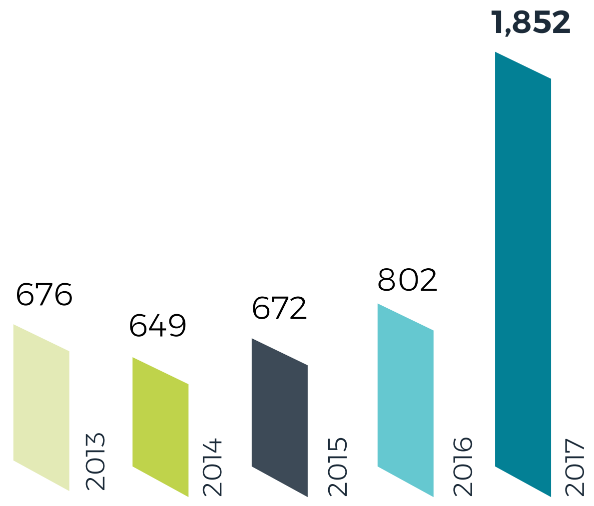
For the year ending on December 31, 2017, consolidated net sales were US$2,075 million compared to US$1,051 million in 2016, which represents an increase of 97.5 percent due to the consolidation of the recently-acquired Vitro Architectural Glass businesses, which contributed only in the fourth quarter of 2016, as well as to Vitro Automotive Glass acquired in March 2017. In pesos, our consolidated sales increased by 96.3 percent, due to the appreciation of the Mexican peso by 4.6 percent against the dollar.

CONSOLIDATED NET SALES

(million USD)



CONSOLIDATED NET SALES
(million USD)



FLAT GLASS

In 2017, sales of the Flat Glass business unit increased by 131 percent, driven mainly by the integration of the Vitro Architectural Glass and Vitro Automotive Glass business in the United States. In the case of Vitro Architectural Glass, sales increased by 97 percent, which would have been higher had an incident not occurred at our Carlisle float glass furnace, where production was stopped in the middle of the third quarter and for the rest of the year.

Furthermore, the incorporation of the Vitro Automotive Glass business in the United States, the organic growth of our original equipment automotive business in Mexico, and the expansion in the capacity of the spare-parts market in our country, reflected a growth of 245 percent altogether. Moreover, sales of the Industria del Álcali business grew by nine percent in dollars, mainly due to its sodium carbonate and calcium chloride exports.

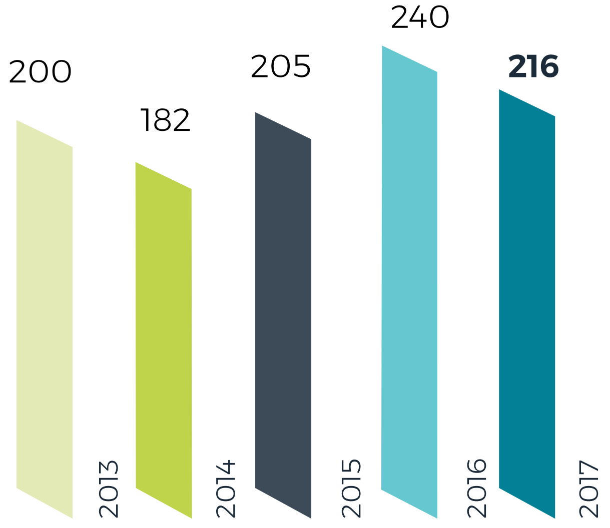
CONTAINERS

For the Containers business, 2017 was one of challenges and contrasts. Sales decreased by 9.8 percent from US$240 million in 2016 to US$216 million in 2017.

On one hand, sales of Containers for Fragrances and Cosmetics performed well in the domestic market, which despite the high inflation in Mexico and limited demand of these products, achieved a growth of seven percent with respect to 2016. In addition, perfume the export segment in the United States and South America, achieved a stable four percent growth driven mainly by Brazil's recovery.

These results were negatively affected by the 20 percent decrease in our FAMA Machinery and Equipment business, mainly due to the decrease in investment of our main strategic client Owens Illinois, as well as to the caution in investments that have been postponed in the wake of the NAFTA negotiations and the upcoming elections.

CONSOLIDATED NET SALES
(million USD)



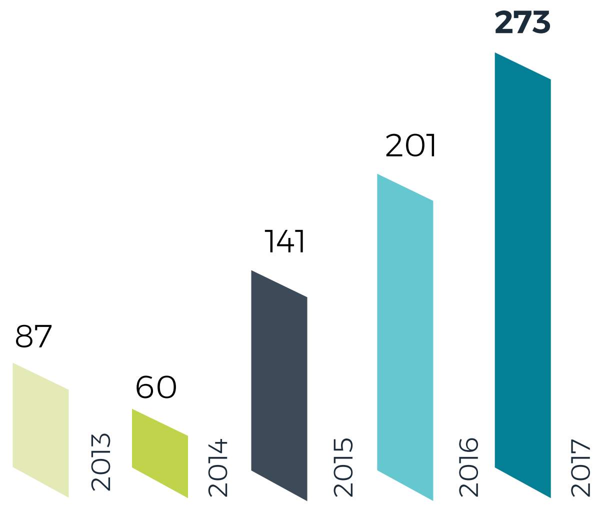
EARNINGS BEFORE INTEREST AND TAXES (EBIT) AND EARNINGS BEFORE INTEREST, TAXES, DEPRECIATION AND AMORTIZATION (EBITDA)

Sales EBITDA margin was 19 percent derived from among other factors, the acquisition of the automotive business in the United States, a more competitive industry with lower margins than those in 2016 of 27 percent in sales.

In the architectural business, the production shutdown of our two furnaces, one of them for a longer period in our U.S. operations, forced us to redistribute our production and prioritize our orders, which led to an increase in distribution costs and third-party finished product supply, restricting our growth in the second semester of the year. Despite this, access to the sale of high-performance value-added products and our geographical position in North America helped the good results of the business.

In the automotive sector, positions in light of the NAFTA negotiations led to a cautious demand for automotive glass in North America and caused some our clients' capacity to move from Mexico to the United States. Despite this, our domestic market managed to contract new platforms, improving its product mix, and achieving sustained organic growth in the spare-parts market.

CONSOLIDATED NET SALES
(million USD)



Lastly, the acquisition of our businesses in the United States, extraordinary costs for the implementation of back-office systems, transportation of executives, marketing, and design, among others, were not attributable to the regular operations of our businesses.

Notwithstanding, Consolidated Operation Income increased by 46 percent, going from US$201 million in 2016, to US$273 million in the year of the report. 2017 consolidated EBITDA increased from 51.7 percent with respect to 2016, going from US$259 million to US$ 393 million in 2017.

NET FINANCIAL COST

Net Financial Cost of the Company was US$38 million in 2017, compared with the Financial Net Product of US$26 million in 2016. This effect was mainly due to the increase in interest expenditures, resulting from financing of the recent acquisitions in the United States, and lower exchange gains than in 2016.

TAXES

During 2017, Vitro reported income taxes for US$68 million, an effective rate of 26 percent. The fiscal burden is 136 percent greater than that reported in 2016 for US$29 million, mainly due to deferred taxes in 2017 and amortization of tax losses in 2016.

CONSOLIDATED NET INCOME

At the end of the year, from the decrease in margin of the second semester, caused by the effects of the Carlisle incident, an increase in interest expenditures from financing of our recent acquisitions, and a greater tax burden than in 2016, the Company reported a Consolidated Net Income of US$194 million, compared to US$189 million reported in 2016, an increase of three percent.

CAPITAL EXPENDITURES

Capital expenditures made by the Company in 2017 were for US$159 million, of which 84 percent were investments in the Flat Glass business unit and 16 percent in the Containers business unit and corporate companies.

Of the total investments in Flat Glass, 58 percent was allocated to the architectural market, mainly for a large coater in the U.S., and to increase the capacity of the Mexicali, Mexico furnace. Moreover, the automotive business represented 38 percent, assigned to the curved glass line for original equipment, creation of the Spare-Parts Market in Mexico, the substitution of molds and machinery, as well as to the original equipment market in the United States.

Investments made by the Containers business were assigned to the replacement and roll out of two container machines, the creation of a finishing line, and the substitution of a tempering furnace, as well as to projects of the machinery center, and automation and control equipment.

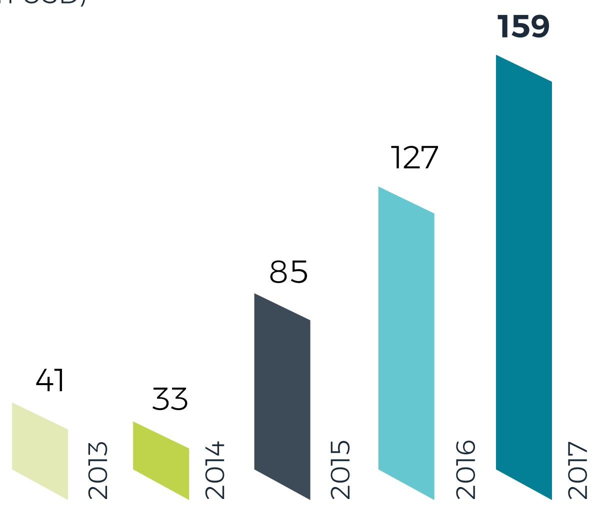
CONSOLIDATED FINANCIAL POSITION

As of December 31, 2017, the Company's total debt was US$689 million mainly due to the acquisition of the Architectural and Automotive businesses in the United States. Cash and cash equivalents were US$180 million at the end of the year, compared to a cash balance of US$240 million in 2016.

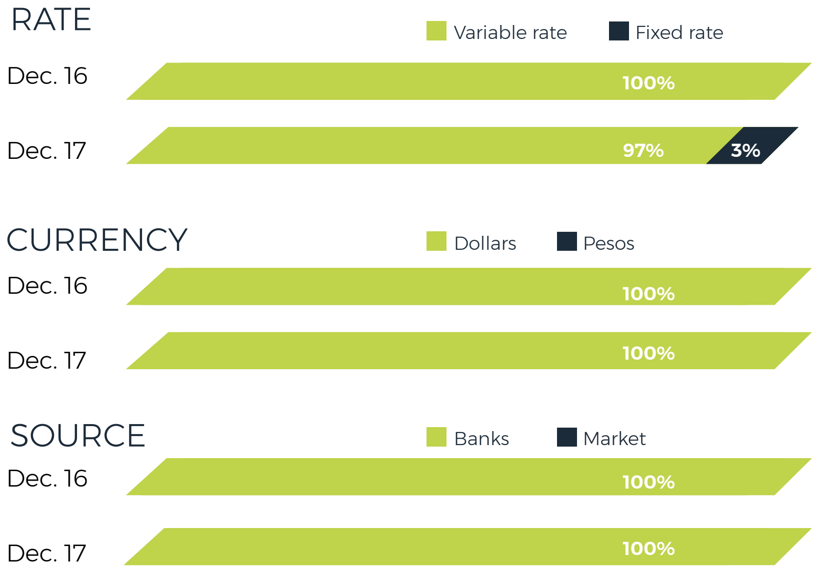
On December 1, 2017, Vitro made a debt pre-payment of US$60 million plus interest, against the debt contracted with BBVA Bancomer for US$230 million, reducing debt maturity date to June 2023.

This pre-payment was made possible by efficient cash flow management and is consistent with the Company's commitment to healthy finances and a leverage rate below 2.

CAPITAL EXPENDITURES
(million USD)



PERFIL DE DEUDA



STOCK PERFORMANCE

In 2017, the Company's share capital (VITROA) in the Mexican Stock Exchange (BMV), continued to reflect market confidence in the initiatives that led Vitro to position itself as a world-class player. These initiatives resulted in a leading position of Vitro in the businesses in which it participates in North America, as well as in a solid and flexible financial position that has allowed it to continue growing and increasing value for its shareholders.

The price of Vitro's shares at the end of 2017 was MXN$70.45 per share with a return on investment of 9.3 percent compared to the end of 2016, and the following behavior

2017

BMV Shares (Pesos)

	Mín.	Máx.
First Quarter	62.00	**75.76**
Second Quarter	70.16	**78.70**
Third Quarter	74.51	**80.86**
Fourth Quarter	66.00	**78.29**

Relevant Events

Vitro announces a pre-payment of $USD 60 million to the debt contracted with BBVA Bancomer for $USD230 million.

NOVEMBER 29, 2017

Vitro notified BBVA Bancomer of its intention of making an advanced principal pre-payment of $USD 60 million plus accrued interest, against the debt for $USD230 million, contracted by Vitro with that banking institution on December 18, 2016.

Vitro acquires representative capital stock

OCTOBER 31, 2017

On October 31, 2017, Vitro acquired a total of 2,330,000 shares representative of its capital stock.

The acquired shares represent 0.5 percent of its outstanding shares.

Unusual movements in the negotiation of representative shares for capital stock of Vitro, S.A.B. de C.V.

OCTOBER 18, 2017

Mr. Adrián Sada González made a market acquisition of 733,333 Vitro shares.

In addition, Mr. Adrián Sada Cueva, acquired 733,333 Vitro shares.

These acquisitions were made indirectly through companies under full control of Messrs. Sada.

Ms. Claudia Yarte de Fernández also acquired 733,000 Vitro shares. Ms. Yarte de Fernández is the wife of Mr. Álvaro Fernández Garza, member of the Company's Board of Directors.

Vitro announces an interruption at its Carlisle, Pennsylvania flat glass plant.

AUGUST 21, 2017

The Company reported a glass leak in one of its furnaces at the Carlisle, Pennsylvania plant in the U.S. No personnel injuries were reported; however, for security reasons and to minimize additional damage, it was decided to temporarily shut down production of both furnaces.

Vitro Holds Annual Ordinary General Shareholders' Meeting

MARCH 30, 2017

Vitro held its Annual Ordinary General Shareholders' Meeting, where shareholders approved the CEO's report. Moreover, the Meeting also approved annual reports from the Audit Committee, Social Practices Committee and the Board of Directors, for the year ending on last December 31st.

The meeting also approved the payment of a cash dividend of USD$0.051746343 per share, to be applied from the balance of the retained earnings account in the Society's Financial Statements, in the year ending on December 31, 2016. Moreover, it was agreed to ratify all Board Members, as well as its President and Secretary for the 2017 period. Thus, Vitro retains five independent directors, who represent 41.66 percent of its total, remaining above the minimum required by the Mexican Stock Exchange Law.

Vitro Completes the Acquisition of PGW'S Automotive Glass for Original Equipment Business

MARCH 1, 2017

Vitro completed the acquisition of Pittsburgh Glass Works (PGW) Automotive Glass for Original Equipment business from LKQ Corp. This acquisition completes the agreement announced last December for US$ 310 million, free of cash and debt, subject to customary post-closing adjustments for this type of transactions.

This acquisition, added to the purchase of the PPG flat glass business completed last October, expands Vitro's presence with float glass manufacturing facilities and consolidates the Company as the leading glass manufacturer in North America.

Other Relevant Events

We celebrate a decade of being *Naturally Vitro*

SEPTEMBER 15, 2017

More than 10 years since the start of Naturally Vitro, the Company is celebrating with 77,479 trees planted in 32 cities throughout Latin America and over more than 3500 volunteers, who year after year commit their enthusiasm to make possible this environmental initiative.

In this way Vitro confirms its commitment to contributing to the economic development of its environment, and to the social responsibility with the communities in which it does business.

Vitro completes a decade being recognized as a Socially Responsible Company

APRIL 21, 2017

2017 marked the tenth consecutive occasion the Company receives the recognition from the Centro Mexicano para la Filantropía – CEMEFI (Mexican Philanthropy Center). To earn the distinction, the CEMEFI asked companies to submit evidence to back their projects and policies on five indicators: social responsibility management, corporate life quality, corporate ethics, community outreach, and environmental preservation.

The award ceremony took place on May 2-4 during the 9th Latin American Meeting of Socially Responsible Companies based in Mexico City.

Vitro steadfastly advances towards a sustainable future

JUNE 27, 2017

The Company reported its sustainability advances, including programs, actions, recognitions, and goals regarding ethics, the environment, quality of life and community outreach.

Among the most important advances in 2016 are:

- Nine years continuously recognized as a Socially Responsible Company
- 100 percent of Collaborators trained on Ethics code
- Six quality-certified plants under TS16949 e ISO 9001
- 11,407 direct jobs at the end of 2016
- More than 300 education, health and social development programs
- 96,841 tons of recycled glass
- 76,437 GJ consumption of energy from renewable sources
- 69,455 trees planted through the Naturally Vitro Volunteer program

Management's Financial Responsibility

One of the responsibilities of the Management team is to prepare the Company's financial statements and the additional financial information included in this Report. This responsibility includes ensuring that these financial statements and their notes are prepared in strict compliance with current International Financial Reporting Standards ("IFRS").

The Company has a sufficient administrative and computing structure to provide reasonable assurance that the accounting and financial records substantially reflect the transactions derived from its operations. Furthermore, the Audit and Internal Control areas validate on a recurring basis the proper use of assets, thus avoiding material impairment of the Company's assets

To verify that internal control is sufficient and appropriate to the circumstances, the Company has policies and procedures established and communicated within the organization, and its correct application is frequently validated through auditing programs to all relevant business cycles.

Pursuant to the aforementioned, and in accordance with the General Provisions applicable to securities issuers and other securities market participants, Fourth Title, Article 33, Section I, Paragraph a), Item 3, regarding information that must be provided to the National Banking and Securities Commission, to Stock Exchanges and to investors, we inform the following of the Company:

VITRO, S.A.B. DE C.V.

The undersigned expressly declare that, within the scope of our respective functions, we prepared the information relating to the issuer contained in the annual financial statements, which, to the best of our knowledge, reasonably reflects its situation. Moreover, we state that we have no knowledge of material information that has been omitted or falsified in these financial statements or that they contain information that could mislead investors.

The Company's financial statements were audited by Galaz, Yamazaki, Ruiz Urquiza, S.C., a member of Deloitte Touche Tohmatsu, independent public accountants. Their audit was carried out in accordance with International Audit Standards. For more details about this Report, this document includes the complete external auditors' report.

The Audit Committee of our Board of Directors, among other functions, ensures that the Administration complies with the applicable regulations for the proper registration and disclosure of the transactions it executes. The Audit Committee meets regularly with the Administration, as well as with internal and external auditors. This Committee selects, authorizes the compensation and supervises the work of the firm that audits our financial statements. In addition, said Committee is the only one with capacity to authorize the appointment of the independent auditor for any service different or supplementary to the auditing duties.

The external and internal auditors have free and complete access to the Auditing Committee, and they meet to discuss their duties, scope, internal controls and issues related to financial reporting.

Adrián G. Sada Cueva
Chief Executive Officer

Claudio L. Del Valle Cabello
Chief Financial and Administrative Officer

Consolidated Financial Statements

As of December 31, 2016 and 2017 and for the Years Ended
December 31, 2016 and 2017, and Independent Auditors' Report
Dated February 6, 2018

Independent Auditors' Report

To the Board of Directors and Stockholders of Vitro, S.A.B. de C.V. and Subsidiaries

Opinion

We have audited the consolidated financial statements of Vitro, S. A. B. de C. V. and Subsidiaries (the "Company"), which comprise the consolidated statements of financial position as of December 31, 2017 and 2016, the consolidated statements of profit or loss and other comprehensive income, changes in stockholders' equity, and cash flows for the years then ended, and the notes to the consolidated financial statements that include a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2017 and 2016, and their consolidated financial performance and their consolidated cash flows, for the years then ended in accordance with International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board.

Basis for Opinion

We conducted our audits in accordance with International Standards on Auditing (ISA). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of Consolidated Financial Statements* section of our report. We are independent from the Company in accordance with the International Ethics Standards Board for Accountants' *Code of Ethics for professional Accountants (IESBA Ethics Code)* and with the Ethics Code issued by the Mexican Institute of Public Accountants (*IMCP Ethics Code*), and we have fulfilled our other ethical responsibilities in accordance with the IESBA and IMCP Ethics Code. We consider that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were more important in our audit of the current period consolidated financial statements. These matters have been addressed in the context of our audit of the consolidated financial statements as a whole and in the disclosure of our opinion thereon, and we do not express a separate opinion on those audit matters. We have determined that the matters described below are the key audit matters to be disclosed in our report.

Business Acquisition

As mentioned in Note 2, on December 18, 2016, the Company entered into a contract to acquire the automotive glass business for the original equipment of Pittsburg Glass Works LLC for US$310 million. This acquisition was funded with its own resources by US$80 million and a loan by US$230 (Note 2b). On March 1, 2017, the Company successfully closed this transaction. After this, seven automotive glass manufacturing plants and two satellite plants were incorporated to the Group. Also, two float glass ovens in the United States and one automotive glass plant in Poland and a co-investment located in North America and China were incorporated.

In 2016, the Company acquired the net assets of the Flat Glass and Coating Business from PPG Industries, Inc., PPG Canada, Inc. and PPG Industries Ohio, Inc.

Due to the significance of this transaction and its effects in the consolidated financial statements, our audit tests consisted of:

i) Ensuring the correct approval of this acquisition from the Company's governing bodies.
ii) Verifying the fulfillment of the obligations set forth in the corresponding purchase agreement.
iii) Determining the preliminary purchase price allocation and valuation of the corresponding intangible assets, involving specialists to support us in assessing the assumptions and methodology used by the Company.
iv) Involving specialists to review the conclusion of the intangible assets valuation derived from the PPG business acquisition in 2016.

The results from our audit procedures described above were reasonable and we did not identify exceptions.

Asset Impairment Analysis

As described in Note 4 m) to the consolidated financial statements, the Company reviews on an annual basis the carrying amount of long-lived assets in use to determine whether they are impaired, as they might not be recoverable through their value in use. The impairment analysis involves analyzing assumptions affected by future expectations of the results of the Company's operations; accordingly, our audit procedures included:

i) Evaluating the methodology applied to determine the value in use.
ii) Challenging the assumptions used in the projected cash flows with reference to historical data and market expectations.
iii) Assessing in an independent manner the discount rate used in the impairment model.
iv) Challenging the sensitivity analyses prepared by the Company.
v) Involving our specialists to support us in the assessment of the assumptions and methodology used by the Company.

The results from our audit procedures described above were reasonable and we did not identify exceptions.

Deferred Taxes

As described in Note 4 p) to the consolidated financial statements, the Company recognizes deferred income taxes on differences between carrying amounts and the tax basis of assets and liabilities, and benefits from tax-loss carryforwards. IFRS requires that the carrying amount of deferred tax assets be reduced to the probable amount the expected taxable income will allow for the utilization of the related asset. The recoverability test was significant for our audit due to the complexity of the evaluation process and because they are based on premises affected by the future expectations of the operation results.

Our audit procedures to assess management's estimate regarding the probability of recovering their deferred tax assets included:

i) Analyzing the trends of the tax results generated by each subsidiary.
ii) Reviewing the financial and tax projections to determine whether generating taxable income in the future will allow for the utilization of tax losses before their expiration.
iii) Involving a tax expert to assess the assumptions and methodologies used by the Company.

The Company's disclosures on the amounts that give rise to the deferred taxes balance are included in Note 23 to the consolidated financial statements.

The results from our audit procedures described above were reasonable and we did not identify exceptions.

Other Information

Management is responsible for the other information, which comprises information included in the annual report (but does not include the consolidated financial statements or our audit report). It is expected that the annual report will be available for our reading after the date of this audit report.

Our opinion of the consolidated financial statements will not cover the other information and we will not express any form of assurance about it.

In connection with our audit of the consolidated financial statements, our responsibility will be to read the other information, when available, and when we do so, to consider whether the other information contained therein is materially inconsistent with the consolidated financial statements or with our knowledge obtained during the audit, or it appears to contain a material error. If based on the work that we have done, we conclude that there is a material error in the other information, we would have to report that fact.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with IFRS, and for the internal control that management determines necessary for the preparation of consolidated financial statements that are free from material misstatements, due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to this fact and using going concern basis of accounting. Unless management either intends to liquidate the Company or to cease its operations, or there is no realistic alternative but to do so.

Those charged with governance of the Company are responsible for overseeing the Company's consolidated financial reporting process.

Auditors' Responsibilities Relating to the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or altogether, they could reasonably be expected to influence the economic decisions that users take on the basis of these consolidated financial statements.

As part of an audit in accordance with ISA, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

– Identify and asses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or circumvention of internal control.

– Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in relation of the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

– Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.

– Conclude on the appropriateness of management´s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern

– Evaluate the overall presentation, structure and content of the consolidated financial statements, including disclosed information, and whether the consolidated financial statements represent the relevant transactions and events in a manner that achieves reasonable presentation.

– Obtain sufficient and appropriate in relation to the financial information of the entities or business activities impacting the Parent Company to express our opinion on the consolidated financial statements. We are responsible for the management, oversight and performance of the audit of the Parent Company. We are responsible for our opinion on the audit.

We inform to those charged with the Company's governance in relation to, among other matters, the scope and the moment to perform the planned audit procedures and the significant findings of the audit, as well as any significant deficiencies in internal control that we identified during the audit.

We also provide to those charged with the Company's governance a statement on our fulfillment of the ethical requirements related to independence, and we have informed to them about all relationships and other matters that may, on a reasonable manner, be expected to affect our independence, and where applicable, the related safeguards.

Among the matters that have been subject of communications with those charged with the Company's governance, we determined that they have been of the greatest significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in this audit report unless legal or regulatory requirements prohibit public disclosure of the matter or, in extremely rare circumstances, we determine that a matter should not been reported in our report because it can reasonably be expected that the adverse consequences thereof would exceed the benefits of public interest of the same.

Galaz, Yamazaki, Ruiz Urquiza, S. C.
Member of Deloitte Touche Tohmatsu Limited

Fernando Nogueda Conde, C. P. A.
Monterrey, N.L. February 6, 2018

Vitro, S.A.B. de C.V. and Subsidiaries

Consolidated Statements of Financial Position

As of December 31, 2016 and 2017

(Millions of Mexican pesos)

	Note	December 31, 2016	December 31, 2017	Translation into millions of U.S. dollars December 31, 2017
Assets				
Cash and cash equivalents	17	$ 4,958	$ 3,549	US$ 180
Trade accounts receivable, net	6, 17	4,181	5,806	295
Recoverable taxes	17	265	583	30
Derivate financial instruments	17	–	43	2
Other current assets	5	607	861	44
Inventories, net	7	3,654	6,607	336
Current assets		13,665	17,449	887
Investment in associated companies	8	1,761	1,779	91
Investment properties	10	359	373	19
Lands and buildings, net	9	6,633	7,775	396
Machinery and equipment, net	9	9,098	12,477	635
Investments in process	9	1,617	2,819	143
Deferred income taxes	23	4,102	2,701	137
Employee benefits	16	765	178	9
Goodwill	12	963	1,189	60
Intangibles and other long-term assets, net	13	6,468	5,865	298
Long-term assets		31,766	35,156	1,788
Total assets		$ 45,431	$ 52,605	US$ 2,675

	Note	December 31, 2016	December 31, 2017	Translation into millions of U.S. dollars December 31, 2017
Liabilities				
Short-term maturity of long-term debt	14, 17	$ 30	$ 94	US$ 5
Trade accounts payable	17	2,402	4,543	231
Accrued expenses and provisions	15, 17	1,438	1,351	69
Derivative financial instruments	17	–	63	3
Other short-term liabilities	5, 17	1,844	1,669	84
Short-term liability		5,714	7,720	392
Long-term debt	14	10,555	13,463	685
Deconsolidation income tax		3,439	2,897	147
Deferred income taxes	23	941	957	49
Other liabilities		66	333	17
Long-term liability		15,001	17,650	898
Total liabilities		20,715	25,370	1,290
Stockholders' equity				
Capital stock	19	4,687	4,687	238
Repurchased shares		(3)	(199)	(10)
Additional paid-in capital		4,415	4,415	225
Other comprehensive income	19	1,760	1,276	65
Accumulated earnings	19	13,839	17,037	866
Controlling interest		24,698	27,216	1,384
Non-controlling interest	19	18	19	1
Stockholders' equity		24,716	27,235	1,385
Liabilities and Stockholders' equity		$ 45,431	$ 52,605	US$ 2,675

See accompanying notes to consolidated financial statements.

Adrián Sada Cueva
Chief Executive Officer

Claudio L. Del Valle Cabello
Chief Administrative and Financial Officer

Vitro, S.A.B. de C.V. and Subsidiaries

Consolidated Statements of Profit or Loss and Other Comprehensive Income

For the years ended December 31, 2016 and 2017
(Millions of Mexican pesos, except the amounts per share)

	Note		Year ended December 31, 2016		2017		Translation into millions of U.S. dollars, except the amounts per share 2017
Continuing operations:							
Net sales		$	19,840	$	38,948	US$	1,981
Cost of sales			12,675		27,101		1,378
Gross profit			7,165		11,847		603
Administrative expenses			1,566		3,222		164
Distribution and sale expenses			1,820		3,482		177
Income before other expenses, net			3,779		5,143		262
Other expenses (income), net	21		295		(374)		(19)
Operating income			3,484		5,517		281
Financial income (cost), net	22		476		(706)		(36)
Equity in income of associated companies	8		102		115		6
Income before income taxes			4,062		4,926		251
Income taxes expense	23		496		1,257		64
Income of the year		$	3,566	$	3,669	US$	187
Items that will not be reclassified to profit or loss:							
Actuarial remeasurements of the defined benefit obligation, net of taxes	16	$	583	$	(283)	US$	(14)
Total items that will not be reclassified to profit or loss		$	583	$	(283)	US$	(14)

	Note		Year ended December 31, 2016		2017		Translation into millions of U.S. dollars, except the amounts per share 2017
Items that can be reclassified to profit or loss:							
Differences from cumulative translation adjustments	19	$	1,116	$	(201)	US$	(11)
Total items that can be reclassified to profit or loss			1,116		(201)		(11)
Total other components of comprehensive income			1,699		(484)		(25)
Total comprehensive income of the year		$	5,265	$	3,185	US$	162
Total income (loss) of the year attributable to:							
Controlling interest	19	$	3,618	$	3,668	US$	187
Non-controlling interest	19		(52)		1		–
Total income of the year		$	3,566	$	3,669	US$	187
Total comprehensive income of the year attributable to:							
Controlling interest	19	$	5,220	$	3,184	US$	162
Non-controlling interest	19		45		1		–
Total comprehensive income of the year		$	5,265	$	3,185	US$	162
Earnings per common share arising from continuing operations and discontinued operations:							
Basic and diluted earnings per share		$	7.49	$	7.60	US$	0.39

See accompanying notes to consolidated financial statements.

Vitro, S.A.B. de C.V. and Subsidiaries

Consolidated Statements of Cash Flows

For the years ended December 31, 2016 and 2017
(Millions of Mexican pesos)

	Note		Year ended December 31, 2016		2017		Translation into millions of U.S. dollars 2017
Cash flows in operating activities:							
Income before income taxes		$	4,062	$	4,926	US$	251
Adjustments for:							
Depreciation and amortization	9, 13		1,025		2,122		108
Results on sale of assets			11		46		2
Loss from impairment of long-lived assets	9c, 22		136		143		7
Reversal of impairment loss	21		–		(73)		(4)
Financial products	22		(51)		(12)		
Equity in income of associated companies	8		(102)		(115)		(5)
Derivative financial instruments	22		11		(37)		(2)
Foreign exchange loss (gain) and other			216		(425)		(22)
Interest payable	22		261		927		46
			5,569		7,502		381
Changes in working capital:							
Trade accounts receivable			(26)		185		9
Inventories			288		(740)		(38)
Suppliers			183		357		18
Other short-term operating assets and liabilities			169		(683)		(35)
Employee benefits			(317)		(237)		(12)
			297		(1,118)		(58)
Income taxes			(283)		(828)		(42)
Cash flows provided by operating activities			5,583		5,556		281

	Note		Year ended December 31, 2016		2017		Translation into millions of U.S. dollars 2017
Cash flows in investing activities:							
Purchase of machinery and equipment	9		(2,154)		(3,072)		(156)
Sale of property, machinery and			78		1		–
Business acquisition, net of acquired cash	11		(14,311)		(5,534)		(281)
Intangibles and other assets			(217)		(70)		(4)
Interest collected	22		54		12		1
Cash flows used in investing activities			(16,550)		(8,663)		(440)
Cash flows in financing activities:							
Long-term loans obtained			9,689		4,323		220
Payment of loans			(44)		(1,141)		(58)
Interest paid			(164)		(691)		(35)
Dividends paid			(384)		(474)		(24)
Repurchase of own shares			–		(196)		(10)
Debt issuance costs	14		(54)		(28)		(1)
Derivative financial instruments			(144)		(6)		–
Purchase of minority interest	19g		(309)		–		–
Cash flows provided by financing activities			8,590		1,787		92
Net decrease in cash and cash equivalents:			(2,377)		(1,320)		(67)
Cash and cash equivalents as of January 1,			7,137		4,958		252
Effect of exchange fluctuations			198		(89)		(5)
Cash and cash equivalents as of December 31,	17	$	4,958	$	3,549	US$	180

See accompanying notes to consolidated financial statements.

Vitro, S.A.B. de C.V. and Subsidiaries

Consolidated Statements of Changes in Stockholders' Equity

For the years ended December 31, 2016 and 2017
(Millions of Mexican pesos)

	Capital stock	Repurchased shares and additional paid-in capital	Cumulative translation adjustments	Actuarial re measurements	Accumulated earnings	Controlling interest	Non-controlling interest	Total stockholders' equity
Balance as of January 1, 2016	$ 4,687	$ 3,242	$ 184	$ (26)	$ 10,605	$ 18,692	$ 1,452	$ 20,144
Dividends declared (Note 19c)	–	–	–	–	(384)	(384)	–	(384)
Purchase of non-controlling interest (Note 19h)	–	1,170	–	–	–	1,170	(1,479)	(309)
Comprehensive income:	–	–	1,019	583	–	1,602	97	1,699
Other components of comprehensive income of the year	–	–	–	–	3,618	3,618	(52)	3,566
Net consolidated income of the year	–	–	1,019	583	3,618	5,220	45	5,265
Comprehensive income of the year	4,687	4,412	1,203	557	13,839	24,698	18	24,716
Balances as of December 31, 2016								
Dividends declared (Note 19c)	–	–	–	–	(470)	(470)	–	(470)
Repurchase of own shares (Note 19d)	–	(196)	–	–	–	(196)	–	(196)
Comprehensive income (loss):	–	–	–	–	–	–	–	–
Other components of comprehensive loss of the year	–	–	(201)	(283)	–	(484)	–	(484)
Net consolidated income of the year	–	–	–	–	3,668	3,668	1	3,669
Comprehensive (loss) income of the year	–	–	(201)	(283)	3,668	3,184	1	3,185
Balances as of December 31, 2017	$ 4,687	4,216	$ 1,002	$ 274	$ 17,037	$ 27,216	$ 19	$ 27,235

See accompanying notes to consolidated financial statements.

Vitro, S.A.B. de C.V. and Subsidiaries

Notes to consolidated financial statements

As of December 31, 2016 and 2017
(Millions of Mexican pesos)

1. The Company's activity

Vitro, S.A.B. de C.V. ("Vitro" and jointly with its subsidiaries the "Company") is a holding company which together with its subsidiaries are mainly engaged in the manufacture and commercialization of glass products for local and foreign markets, to mainly satisfy the needs of two types of business: flat glass and glass containers. The Company processes, distributes and commercializes a broad range of glass containers for flat glass goods for architectural and automotive use and cosmetics and pharmaceutical markets; similarly, the Company is engaged in the manufacture of Soda Ash and other related by products, equipment and capital goods for industrial use. Vitro's corporate offices are located at Avenida Ricardo Margáin Zozaya No. 400, Colonia Valle del Campestre, San Pedro Garza García, Nuevo León, México, 66265.

2. Significant events

2017

a) **Closure of the acquisition of PGW´s Automotive Glass Business for Original Equipment**

On December 18, 2016, Vitro entered into a definitive agreement to acquire the glass automotive business for original equipment from Pittsburgh Glass Works LLC ("PGW") for US $310, funded with US$80 from own resources and a credit agreement for US $230 (Notes 2b and 11). On March 1, 2017, the Company successfully completed this transaction. With this acquisition, seven automotive glass manufacturing plants and two satellite plants were added, as well as two float glass furnaces in the USA, one automotive glass plant in Poland, and participation in two joint arrangements located in North America and China.

To date, the Company´s management supported by independent experts, has allocated the purchase price to the fair value of the net assets acquired, as well as in the determination of goodwill; even though IFRS allows the modification of the initially determined values during the year after the purchase, the management considers that the possible modifications would not be material.

b) **Signing of credit agreement**

On December 18, 2016, Vitro entered into a credit agreement with BBVA Bancomer, S.A., Institución de Banca Múltiple, Grupo Financiero BBVA Bancomer (BBVA Bancomer) for US$230, maturing in 2023 and accruing variable interest at London interbank offered rate ("LIBOR") plus an applicable margin according to its consolidated leverage ratio as shown below:

Consolidated leverage ratio	Applicable Margin
Greater than or equal to 2.5 times and less than 3.0 times	400 basis points
Greater than or equal to 2.0 times and less than 2.5 times	375 basis points
Greater than or equal to 1.5 times less than 2.0 times	350 basis points
Less than 1.5 times	325 basis points

These resources were used to the pay part of the purchase price of PGW´s Automotive Glass Business for Original Equipment (Notes 2a and 14).

On December 1, 2017, Vitro paid in advance US$60, plus accrued interests, to its US$230 debt contracted with BBVA Bancomer. This payment was applied in reverse order to its amortization plan, thus reducing the term of the debt.

c) Dividends declared

At an ordinary General Stockholders´ meeting held on March 30, 2017, the stockholders agreed to declare and pay dividends at a rate of US$0.0517 per share (Note 19c)

d) Acquisition of Cristal Laminado o Templado, S.A. de C.V. Business

On May 30, 2017, Vitro obtained control of the associate company Cristal Laminado o Templado, S.A. de C.V. (CLT) through the acquisition of the remaining 50% capital stock representative shares for an amount of US$7.55 paid in cash. The initial participation in this company was part of the joint arrangements acquired in the purchase of PGW.

To date, the Company´s management supported by independent experts, has allocated the purchase price to fair values to the net assets acquired, as well as in the determination of goodwill; even though IFRS allows the modification of the initially determined values during the year after the purchase, the management considers that the possible modifications would not be material.

e) Incident in Carlisle plant.

On August 21, 2017, operations at the Carlisle, Pennsylvania, USA plant were affected as a result of a glass leak in one of the two furnaces; due to the damages suffered by this event, the affected furnace will not be operating until the second semester 2018. The product supply will be covered with the furnace that did not suffer major damages as well as by other plants in Vitro´s system and purchase of product from competitors. The insurance policies that the Company has, cover this type of losses in relation to physical damage to real estate, machinery and equipment, as well as the business interruption. As of December 31, 2017, the Company and its advisors were negotiating with the insurance company the economic recovery of this incident. The impact for the losses suffered at that date was US$34; the net recoveries were US$19.

2016

f) Dividends declared

At an Ordinary General Stockholders' Meeting held on April 11, 2016, the stockholders agreed to declare and pay dividends at a rate of US$0.0455 per share (Note 19c).

g) Acquisition of PPG's Flat Glass Business

On July 20, 2016, Vitro entered into a sale and purchase agreement with PPG Inc. ("PPG"), the latter engaging to sell its Flat Glass Business to Vitro and/or its subsidiaries at a price of approximately US$750 less existing debt and working capital adjustments (note 11). The acquisition incorporated four manufacturing plants with five furnaces, and four flat glass coaters in the United States, a research and development center of flat glass, and four distribution and fabrication facilities in Canada. The sale price was settled throughout a third-party credit agreement (Note 2i) and Vitro's own resources.

On October 1, 2016, Vitro successfully concluded the acquisition of the Flat Glass Business from PPG. Vitro also announced the expansion of its coating production capability with the construction of a jumbo MSVD glass coater, which will be constructed at an existing location of the newly acquired business. MSVD coaters are utilized to produce high-performing, energy-efficient low-emissivity (Low-E) glass.

To date, the Company's management, supported by independent experts, has performed the purchase price allocation to the fair value of the net assets acquired, as well as the goodwill calculation. The Company's management considers that any potential modifications would not be material.

h) Purchase of minority interest

On August 18, 2017, Vitro and its minority partner Pilkington entered into a sale and purchase agreement of the shareholding interest that the latter had on Vitro's Flat Glass Business at a purchase price settled in US$16.

i) Signing of credit agreement

On September 23, 2016, Vitro entered into a credit agreement with Banco Inbursa, S.A., Institución de Banca Múltiple, Grupo Financiero Inbursa for the amount of US$500, which accrues variable interest at a rate based on the London Interbank Offered Rate ("LIBOR") + 4.15%, maturing in 2023. These resources were used for the payment of part of the purchase price of PPG's Flat Glass Business (Note 2g and 14).

3. Basis of preparation and consolidation

a) **Basis of preparation**

The consolidated financial statements as of December 31, 2016 and 2017 and for the years then ended, were prepared based on International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB").

The accompanying consolidated financial statements were prepared based on historical costs, which includes the disclosure of the deemed cost, except for certain financial instruments which are recorded based on their amortized cost or fair value, and investment properties which are recorded at fair value. The historical cost is generally based on the fair value of the consideration granted in exchange for the assets.

i. New IFRS's issued but not yet effective

New IFRS and revised not adopted

The Company has not applied the following new and revised IFRS that have been issued, but that are not yet effective for periods beginning January 1, 2017.

- IFRS 9, Financial Instruments [1]
- IFRS 15, Revenues from contracts with customers [1]
- IFRS 16, Leases [2]
- IFRIC 22, Foreign Currency Transactions and Advance Consideration [1]
- IFRIC 23, Uncertainty over Income Tax Treatments

[1] Effective for annual periods beginning on January 1, 2018
[2] Effective for annual periods beginning on January 1, 2019

IFRS 9, Financial Instruments

IFRS 9, *Financial Instruments*, issued on July 2014, is the replacement of IAS 39, "Financial Instruments: Recognition and Measurement". This standard includes requirements for recognition and measurement, impairment, derecognition and general hedge accounting. This version supersedes all previous versions and is mandatorily effective for periods beginning on or after January 1, 2018, with early adoption being permitted. IFRS 9 (2014) does not replace the requirements for portfolio fair value hedge accounting for interest rate risk since this face of the project was separated from the IFRS 9 project.

IFRS 9 (2014) is a complete standard that includes the requirements previously issued and the additional amendments to introduce a new expected loss impairment model and limited changes to the classification and measurement requirements for financial assets. More specifically, the new impairment model is based on expected credit losses rather than incurred losses, and will apply to debt instruments measured at amortized cost or FVTOCI, lease receivables, contract assets and certain written loan commitments and financial guarantee contracts. Regarding the new measurement category of FVTOCI, it will apply for debt instruments held within a business model whose objective is achieved both by collecting contractual cash flows and selling financial assets.

As for the new measurement category fair value measurement through other comprehensive income, it will be applied to debt instruments within a business model whose objectives are accomplished by the collection of contractual cash flows and the sale of financial assets.

The Company carried out an exercise to measure the impact of the prospective implementation of IFRS 9 which became effective on January 1, 2018.

The financial instruments, internal processes for its administration and the accounting treatment were evaluated according to the three chapters of standard:

1. Classification and measurement of financial assets and liabilities
2. Financial instruments impairment
3. Hedge accounting

The Company´s financial assets within the scope include investments in securities, accounts receivable, and financial instruments designated as hedge. The results of the analysis are as follows:

Classification and measurement of financial assets and liabilities	No changes anticipated in the classification and measurement. The Company´s financial assets are managed under a business model whose objective is to recover contractual cash flows on an unpaid balance or principal on previously agreed dates. Therefore, its classification and subsequent measurement continues to be amortized cost.
Accounts receivable impairment	A change is anticipated in the internal doubtful accounts management process; the foregoing, as a consequence of the new expected credit losses model which requires the recognition of a loss allowance at the receivable inception. The results of the exercise under the new model did not show an increase on the doubtful receivable allowance.
Hedge accounting	There are qualitative changes in the documentation of hedging relationships. The Company has confirmed that its current hedging relationships will qualify as hedges in the adoption of IFRS 9, therefore, it does not anticipate the elimination of any hedging relationship.

Considering the above, the standard implementation will not significant impact the Company´s activities, internal processes, contractual obligations or its current financial situation.

IFRS 15, Revenue from Contracts with Customers

IFRS 15, *Revenue from Contracts with Customers*, was issued on May 2014 and applies to annual reporting periods beginning on or after January 1, 2018, earlier application is permitted. Under this standard, revenue recognition is based on control, i.e., it uses the notion of control to determine when a good or service is transferred to the client.

The standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. In applying the revenue model to contracts within its scope, an entity will: 1) Identify the contract(s) with a customer; 2) Identify the performance obligations in the contract; 3) Determine the transaction price; 4) Allocate the transaction price to the performance obligations in the contract; 5) Recognize revenue when (or as) the entity satisfies a performance obligation. Likewise, the disclosures required in the financial statements, both annual and intermediate are increased.

Additionally, the IASB issued clarifications to IFRS to address (1) the identification of performance obligations, (2) the principal-vs-agent considerations, and (3) licensing. The modifications also provide certain facilities for the transition of modified contracts and terminated contracts. Some specific provisions of the amendments are: (i) Identification of performance obligations - It is clarified that the purpose of evaluating a promise to transfer goods or services to a client is to determine whether the nature of the promise, in the context of the contract, is the transfer of each of those goods or services individually or, in exchange, the transfer of an element or elements where the promised goods or services are the inputs; (ii) Principal-vs-Agent Considerations - Extension of the application guide; (iii) Licenses - Clarification that if the promise of an entity to grant a license of its intellectual property should be recognized as an income at a point in time or over time based on whether the licensor's ongoing activities affect significantly the investigation period; (iv) Transition facilities - Two additional practical files (optional). The clarifications to IFRS 15 are effective for annual periods beginning on or after January 1, 2018, which is the same effective date for IFRS 15. The Company will take these clarifications into account as part of the evaluation to adopt IFRS 15 on January 1, 2018

The Company has evaluated the impacts derived from the adoption of this standard as of December 31, 2017, and based on the facts and existing circumstances as of date, anticipates that it will not have a significant impact on its consolidated financial statements.

IFRS 16, Leases

IFRS 16, *Leases*, was issued on January 2016 and supersedes IAS 17, *Leases*, and related interpretations. The new standard brings most leases on-balance sheet for lessees under a single model, eliminating the distinction between operating and finance leases. Lessor accounting, however, remains largely unchanged and the distinction between operating and finance leases is retained. IFRS 16 is effective for periods beginning on or after January 1, 2019, with earlier adoption permitted if IFRS 15, *Revenue from Contracts with Customers*, has also been applied.

Under IFRS 16 a lessee recognizes a right-of-use asset and a lease liability. The right-of-use asset is treated similarly to other non-financial assets and depreciated accordingly and the liability accrues interest. This will typically produce a front-loaded expense profile (whereas operating leases under IAS 17 would typically have had straight-line expenses) as an assumed linear depreciation of the right-of-use asset and the decreasing interest on the liability will lead to an overall decrease of expense over the reporting period.

The lease liability is initially measured at the present value of the lease payments payable over the lease term, discounted at the rate implicit in the lease if that can be readily determined. If that rate cannot be readily determined, the lessee shall use their incremental borrowing rate.

However, a lessee may elect to account for lease payments as an expense on a straight-line basis over the lease term for leases with a lease term of 12 months or less and containing no purchase options (this election is made by class of underlying asset); and leases where the underlying asset has a low value when new, such as personal computers or small items of office furniture (this election can be made on a lease-by-lease basis).

IFRS 16 establishes different transitional provisions, including retrospective application or the modified retrospective application where the comparative period is not restated.

The Company´s management is in process of determining the potential impacts that will be derived in its consolidated financial statements by the adoption of this standard; however, it is not possible to provide a reasonable estimate of the effect of IFRS 16 until a detailed review is completed.

IFRIC 22, Foreign Currency Transactions and Advance Consideration Interpretation

This interpretation seeks to clarify the accounting transactions that include the advanced collection or payment in a foreign currency. The interpretations are being issued to reduce the differences in practice related to exchange rate used when an entity reports transactions that are denominated in a foreign currency, in accordance with IAS 21, in circumstances in which the consideration is received or paid before the asset, expense or income is recognized. It is effective for periods of annual reports that begins after January 1, 2018, although early adoption is permitted.

The application of these modifications will not have a significant impact on the Company´s consolidated financial statements.

IFRIC 23, Uncertainty Over Income Tax Treatments

This interpretation seeks to clarify the recognition and measurement criteria established in IAS 12, *Income Taxes*, when there are uncertain tax positions. Uncertain tax positions are those tax positions where there is uncertainty about whether the competent tax authority will accept the tax positions under the current tax laws. In such cases, the entity recognizes and measures its asset or liability for current or deferred taxes applying the requirements of IAS 12 base on tax profits (losses), tax bases, unused tax losses, unused tax credits, and tax rates determined by applying this interpretation.

The Company will apply IFRIC 23 for annual reporting periods beginning on or after January 1, 2019. Early application is permitted and the event must be disclosed. In its initial application, it is applied retrospectively under IAS 8 requirements, modifying comparative periods or retrospectively with the accumulated effect of its initial application as an adjustment in the initial balance of retained earnings, without modifying comparative periods.

The Company´s management is in process of determining the potential impacts derived from the adoption of this standard in the consolidated financial statements.

ii. The Company adopted the following IFRS and IFRS´ interpretations on the consolidated financial statements which are mandatory and came into force from the exercises that began on or after January 1, 2017:

– Amendments to IAS 7, Statement of Cash Flow (Disclosure initiative)
– Amendments to IAS 12, Income Taxes

Amendments to IAS 7, Statement of Cash Flows (disclosure initiative)

The amendments require a company to provide disclosures that allow users of the financial statements to evaluate changes in liabilities derived from financing activities, including changes in cash and cash equivalents.

The Company´s liabilities derived from financial activities consist of loans (Note 14), the application of the amendments has not caused an impact on the Company´s consolidated financial statement.

Amendments to IAS 12, Income Taxes

The Company has applied this modification for the first time in the current year. The amendments clarify how an entity should evaluate whether it will have sufficient future taxable profits against which deductible temporary differences may apply.

The application of these amendments has not caused an impact on the Company´s consolidated financial statement, as it evaluates the adequacy of future taxable income in a manner consistent with these amendments.

b) **Basis of consolidation of financial statements**

The consolidated financial statements include those of Vitro, S.A.B. de C. V. and its subsidiaries on which it has control. Control is achieved when the Company: 1) has the power over the entity; 2) it is exposed, or has rights to variable returns from its involvement with the investee; and 3) has the ability to use its power to affect its returns. Power is the actual ability to direct relevant activities of an entity. Intercompany balances and transactions have been eliminated in these consolidated financial statements. Investments in unconsolidated associates where there is material influence are accounted for using the equity method (Note 8).

As of December 31, 2016 and 2017, the main entities, controlled by Vitro are as follows:

FLAT GLASS	Viméxico, S.A. de C.V.	100.00%
	Vidrio y Cristal del Noroeste, S.A. de C.V. (6)	100.00%
	Comercializadora Álcali, S.A. de C.V.	100.00%
	Distribuidora Álcali, S.A. de C.V.	100.00%
	Vitro Flotado Cubiertas, S.A. de C.V. (6)	100.00%
	Vidrio Plano de México, S.A. de C.V.	100.00%
	Vitro Flat Glass, LLC. (2)	100.00%
	Vitro Flat Glass Canadá, Inc. (3)	100.00%
	Pittsburgh Glass Works, LLC (2)	100.00%
	Cristales Automotrices, S.A. de C.V.	51.00%
	Productos de Valor Agregado en Cristal, S.A. de C.V.	100.00%
	Industria del Álcali, S.A. de C.V.	100.00%
	Vitro Colombia, S.A.S. (1)	100.00%
	Vitro Automotriz, S.A. de C.V.	100.00%
	Vitro Vidrio y Cristal, S.A. de C.V. (6)	100.00%
	PGW Holdings, LLC (2)	100.00%
	Pittsburgh Glass Works, Sarl (4)	100.00%
	Pittsburgh Glass Works, Sp.z.o.o. (5)	100.00%
CONTAINERS	Fabricación de Máquinas, S.A. de C.V.	100.00%
	Vidriera Monterrey, S.A. de C.V.	100.00%
	Vidriera Guadalajara, S.A. de C.V.	100.00%
	Vidriera Los Reyes, S.A. de C.V.	100.00%
	Vidriera Toluca, S.A. de C.V.	100.00%
CORPORATE	Vitro FIN, S.A.P.I., de C.V.	100.00%
	Aerovitro, S.A. de C.V.	100.00%
	Vitro Assets Corp. (2)	100.00%

(1) Company with operations in Colombia.
(2) Company with operations in USA.
(3) Company with operations in Canada.
(4) Companies with operations in Luxembourg.
(5) Company with operations in Poland.
(6) Merged company in Viméxico, S.A. de C.V. on August 31, 2017.

The Company’s proportion of voting rights in entities on which it has control is similar to its shareholding.

c) Functional and reporting currency

The accompanying consolidated financial statements are presented in Mexican pesos ("Mx. peso").

The recording and functional currencies of foreign and Mexican transactions are as follows:

		Closing exchange rate as of December 31,		Average exchange rate as of December 31,	
Country	Recording and functional currency	2016	**2017**	2016	**2017**
Mexico	Mx. peso	1.0000	1.0000	1.0000	1.0000
USA	U.S. dollar	20.6194	19.6629	18.7193	18.8806
Canada	Canadian dollar	15.3736	15.6869	14.1562	14.5645
Switzerland	Swiss franc	20.2934	20.1722	18.9529	19.2618
Colombia	Colombian peso	0.0069	0.0066	0.0062	0.0064
Poland	Polish zloty	4.9387	5.6629	4.7479	5.0623
Luxembuorg	Euro	21.8005	23.6061	20.7159	21.4873
Hong Kong	Hong Kong dollar	2.6650	2.5167	2.4209	2.4222

In addition, only for the ease of the user, the consolidated financial statements for the year ended December 31, 2017 were translated into U.S. dollars at the exchange rate of $19.6629 Mx. pesos per U.S. dollar, determined by Banco de México to be used on December 31, 2017. This arithmetical translation should not be considered as a statement that the amounts expressed in Mx. pesos can be translated into U.S. dollars at that or any other exchange rate.

When these consolidated financial statements and notes thereto refer to Mexican pesos or "$", they refer to millions of Mexican pesos, and when they refer to U.S. dollars or "US$," they refer to millions of United States of America dollars.

d) Use of estimates and judgments

The accompanying consolidated financial statements have been prepared in conformity with IFRS, which require that management make certain estimates and use certain assumptions that affect the amounts reported in the financial statements and their related disclosures. The Company's management, upon applying professional judgment, considers that estimates made and assumptions used were adequate under the circumstances; however, actual results may differ from such estimates.

The related estimates and assumptions are reviewed continuously. Changes to accounting estimates are recognized in the period in which the estimate is changed if the change affects solely that period, or the current period and future periods if the review affects both current and future periods.

Critical accounting judgments and key uncertainty sources, when applying the estimates performed as of the date of the consolidated financial statements, and that have a significant risk of resulting in an adjustment to the carrying amount of assets and liabilities during the following financial period are as follows:

i. Evaluations to determine the recoverability of accounts receivable

The Company performs an allowance for doubtful accounts, considering its internal control process and factors such as the customers' financial and operating situation, and the economic conditions of the country. Such allowance is reviewed periodically and the condition of accounts due is determined considering terms and conditions set forth in the agreements.

ii. Evaluations to determine obsolete and slow-moving inventories

The Company performs a reserve for obsolete and/or slow-moving inventories, considering its internal control process and operating and market factors of its products. This reserve is reviewed periodically and is determined considering the turnover and consumption of raw materials, work-in-process and finished goods, which are affected by changes in production process and by changes in the market conditions in which the Company operates.

iii. Evaluations to determine recoverability of deferred tax assets

As part of the tax analysis carried out by the Company, the projected tax result is determined annually based on the judgments and estimates of future transactions to conclude on the likelihood of recoverability of deferred tax assets.

iv. Useful lives of intangible assets and land and buildings and machinery and equipment

Useful lives of intangible assets and of land and buildings and machinery and equipment are used to determine the amortization and depreciation of assets and are defined according to the analysis by internal and external specialists. Useful lives are periodically reviewed, at least once a year, and are based on the current conditions of assets and the estimate of the period during which they will continue to generate economic benefits to the Company. If there are changes in the estimate of useful lives, the carrying amount of assets is affected prospectively, as well as the amortization or depreciation expense, as applicable.

v. Impairment of long-lived assets

The carrying amount of long-lived assets is reviewed for impairment in case that situations or changes in the circumstances indicate that it is not recoverable. If there are impairment indicators, a review is carried out to determine whether the carrying amount exceeds is recoverability value and whether it is impaired. In the impairment evaluation, assets are grouped in the cash generating unit to which they belong. The recoverable amount of the cash generating unit is calculated as the present value of future cash flows that the assets are expected to produce. There will be impairment if the recoverable value is less than the carrying amount.

The Company defines the cash generating units and also estimates the periodicity and cash flows that it should generate. Subsequent changes in grouping cash generating units, or changes in the assumptions underlying the estimate of cash flows or the discount rate, could impact the carrying amounts of the respective assets.

The value-in-use calculations require the Company to determine future cash flows generated by cash generating units and an appropriate discount rate to calculate the present value thereof. The Company uses income cash flows projections using market condition estimates, future pricing determination of its products and volumes of production and sales. In addition, for the purposes of the discount and perpetuity growth rate, the Company uses market risk premium indicators and long-term growth expectations in the market it operates.

The Company estimates a discount rate before taxes for the purposes of the goodwill impairment test, which reflects current evaluations of the time value of money and the specific risks to the asset for which estimates of future cash flows have not been adjusted. The discount rate estimated by the Company is based on the weighted average cost of capital of similar entities. In addition, the discount rate estimated by the Company reflects the return that investors would require if they had to take an investment decision on an equivalent asset in generation of cash flows, time and risk profile.

The Company annually reviews the circumstances that give rise to an impairment loss to determine whether such circumstances have changed or have generated reversal conditions. If affirmative, the recoverable value is calculated and, if applicable, the reversal of the impairment previously recognized.

Internal and external indicators are subject to evaluation annually.

vi. Employee benefits from retirement

The Company uses assumptions to determine the best estimate for these benefits. Assumptions and estimates are established in conjunction with independent actuaries. These assumptions include demographic hypothesis, discount rates and expected increases in remunerations and future permanence, among others. Although the assumptions are deemed appropriate, a change in such assumptions could affect the value of the employee benefit liability and the results of the period in which it occurs.

vii. Functional currency

In order to determine the functional currency of the Company, management evaluates the economic environment in which primarily generates and expends cash. Therefore, factors related to sales, costs, funding sources and cash flows generated from operations are considered.

viii. Contingencies

Due to their nature, contingencies can solely be solved when they occur, or one or more future events or one or more uncertain events that are not entirely controlled by the Company do not occur. The evaluation of such contingencies significantly requires exercising judgments and estimates on the possible result of such future events. The Company evaluates the possibility of losing lawsuits and contingencies according to estimates carried out by its legal advisors. These estimates are reconsidered periodically.

ix. Business combinations or assets acquisition

Vitro's management applies professional judgment to determine if the acquisition of a group of assets constitutes a business combination. Such determination may have a significant impact on how acquired assets and assumed liabilities are accounted for, both at initial recognition and in subsequent periods.

Based on its professional judgment, Vitro's management considers that PPG's Flat Glass Business and PGW´s Automotive Glass for Original Equipment Business acquisitions qualified as a business combination to be accounted under IFRS 3, Business Combinations, requirements, whereby purchase method is applied, identifying acquired assets and assumed liabilities, measured at fair value.

e) Classification of costs and expenses
Costs and expenses presented in the consolidated statements of profit or loss and other comprehensive income were classified according to their function.

4. Summary of significant accounting policies

The significant accounting policies of the Company are as follows:

a) Recognition of the effects of inflation
The Company recognizes the effects of inflation in hyperinflationary economies where there are economic characteristics such as: a) the interest rates, wages and prices are linked to a price index, b) the population does not consider monetary amounts in terms of the local currency, but it does so in terms of a relatively stable foreign currency, c) the accumulated inflation rate of the past three years approximates or exceeds 100%, among others. These features are not restrictive to the analysis made by the Company to determine if the economy in which it operates is considered hyperinflationary.

The Company did not recognize inflationary effects for the years ended December 31, 2016 and 2017, given that economic conditions in which it operates do not represent those of a hyperinflationary economy.

b) Foreign currency

The individual financial statements of each of the Company's subsidiaries are prepared in the currency of the primary economic environment in which the subsidiary operates (its functional currency). To consolidate the financial statements of foreign subsidiaries, they are translated from the functional currency into the reporting currency. The financial statements are translated into Mexican pesos (reporting currency), considering the following methodology:

- The transactions where the recording and functional currency is the same, translate their financial statements using the following exchange rates: (i) the closing exchange rate for assets and liabilities and (ii) the weighted average historical exchange rate for revenues, costs and expenses, as they are deemed representative of the existing conditions at the transactions date. Translation adjustments resulting from this process are recorded in other components of comprehensive income (loss). The adjustments related to goodwill and fair value generated from the acquisition of a foreign transaction are deemed assets and liabilities of such transaction and are translated at the exchange rate in effect at yearend.
- Non-monetary items recorded at fair value denominated in foreign currency, are reconverted to the exchange rates in effect at the date the fair value was determined. Non-monetary items calculated in terms of historical cost, in foreign currency, are not reconverted.
- Foreign currency transactions are recorded at the exchange rate in effect at the applicable translation date. Monetary assets and liabilities denominated in foreign currency are stated at the exchange rate in effect at the balance sheet date. Exchange fluctuations are recorded in the consolidated statements of profit or loss and other comprehensive income.

c) Cash and cash equivalents

Cash and cash equivalents consist mainly of bank deposits in checking accounts and short-term investments in securities, highly liquid and easily convertible into cash in a period no longer than three months. Cash is stated at nominal value and cash equivalents are valued at fair value. Any cash equivalent which liquidity is longer than three months is presented on the other current assets line item. Any cash equivalent that cannot be disposed of is classified as restricted cash.

d) Financial instruments

Financial assets and liabilities are measured at fair value. The costs of the transaction that are directly attributable to the acquisition or issuance of a financial asset or liability (different from financial assets and liabilities recognized at fair value through profit or loss) are added to or deducted from the fair value of the financial assets and liabilities at their initial recognition. The costs of the transaction directly attributable to the acquisition of financial assets or liabilities that are recognized at fair value through profit or loss are recognized immediately in the income or loss of the year.

Financial assets

All financial assets are recognized and written off at the trade date, where a purchase or sale of a financial asset is under an agreement, which terms require the delivery of the asset within a term that is generally established by the corresponding market, and are initially valued at fair value, plus the transaction costs, except for those financial assets classified as at fair value with changes through profit or loss, which are initially valued at fair value, without including the transaction costs.

Financial assets are classified within the following specific categories: "financial assets valued at fair value through profit or loss," "financial assets held to maturity," "loans and accounts receivable," "financial assets available for sale" and "other". The classification depends on the nature and purpose of the financial assets and is determined upon initial recognition.

Financial assets and liabilities are offset and the net amount is presented in the statement of financial situation when, and solely when, the Company has the legal right to offset the amounts and intends to either settle on a net basis, or realize the asset and settle the liability simultaneously.

i. Financial assets valued at fair value through profit or loss

A financial asset is presented at fair value through profit or loss if it is classified as held for trading purposes or if it is designated as such at its initial recognition. Financial assets are designated at fair value through profit or loss if the Company manages such investments and make purchase and sale decisions based on their fair value and according to the Company's investment or risk management. In the initial recognition, the costs attributable to the transaction are recognized in profit or loss as incurred. Financial assets at fair value through profit or loss are valued at fair value, and changes in fair value are recognized in profit or loss.

ii. Financial assets held to maturity

If the Company intends and is able to hold to maturity debt instruments that are traded in an active market, then such financial assets are classified as held to maturity. Financial assets held to maturity are initially recognized at fair value plus costs directly attributable to the transaction. Subsequent to the initial recognition, the financial assets held to maturity are valued at amortized cost using the effective interest method, less impairment losses.

iii. Loans and accounts receivable

Loans and accounts receivable are financial assets with fixed or determined payments, which are not traded in an active market. Such assets are initially recognized at fair value plus costs directly attributable to the transaction. Subsequent to the initial recognition, the loans and accounts receivable are measured at amortized cost using the effective interest method, less impairment losses. Interest income is recognized applying the effective interest rate, except for short-term accounts receivable, in case interest recognition is insignificant.

iv. Financial assets available for sale

Financial assets available for sale are non-derivative financial assets designated as held for sale and that are not classified in any of the aforementioned categories, such as equity instruments and certain debt instruments. Such assets are initially recognized at fair value plus the costs directly attributable to the transaction. After the initial recognition, they are valued at fair value and changes other than impairment losses or exchange differences in equity instruments available for sale are recognized in comprehensive income within stockholders' equity. When an investment is written off or it is impaired, the accumulated loss or gain of the comprehensive income account is transferred to profit or loss.

v. *Capital investments*

Investment in equity instruments that are not traded in any stock exchange are valued mainly using valuation techniques such as analysis of discounted cash flows, option price setting models and comparisons to other transactions and instruments that are substantially equal. In cases where fair value cannot be measured reliably, investments are recorded at cost less impairment losses.

Impairment of financial assets

Financial assets other than the financial assets valued at fair value through profit or loss are subject to impairment tests at the end of each reporting period. Financial assets are deemed impaired when there is objective evidence that, as a consequence of one or more events occurring after the initial recognition of the financial asset, the estimated future cash flows of the financial asset have been affected.

For traded equity instruments classified as held for sale, a significant or extended fall of the fair value of values below their cost is deemed objective impairment evidence.

For all the other financial assets, the objective impairment evidence could include:

- Significant financial difficulties of the issuer or counterpart,
- Default on payment of interest or principal, or
- It is probable that the borrower will go bankrupt or have a financial reorganization.

For certain categories of financial assets, such as trade accounts receivable, the assets that have been subject to impairment tests and have not been impaired individually, are included in the impairment evaluation on a collective basis. Within the objective evidence that an account receivable portfolio could be impaired, the Company's past experience with respect to collection, an increase in the number of late payments that exceed the average loan period, and the changes observed in the international and local economic conditions correlated to the default on payments, could be included.

For financial assets recorded at amortized cost, the amount of impairment loss recognized is the difference between the carrying amount of the asset and the present value of future collections, discounted at the original effective interest rate of the financial asset. The carrying amount of the financial asset is reduced for the impairment loss for all financial assets, except for trade accounts receivable, where the carrying amount is reduced through an account for allowance doubtful accounts. When a doubtful account is deemed uncollectible, it is eliminated against the allowance. The subsequent recovery of the previously eliminated amounts is converted to credits against the allowance. Changes in the carrying amount of the allowance account are recognized in profit or loss.

When a financial asset deemed held for sale is impaired, the accumulated gains or losses previously recognized in other comprehensive income are reclassified to current earnings. Except for equity instruments held for sale, if in a subsequent period, the amount of impairment loss is decreased and such decrease can be objectively related to an event occurring after the recognition of the impairment, the previously recognized impairment loss is reversed through profit or loss to the extent the carrying amount of the investment at the date the impairment was reversed does not exceed the amortized cost that would result if the impairment had not been recognized.

With respect to equity instruments held for sale, impairment losses previously recognized in profit or loss are not reversed through them. Any increase in the fair value after the recognition of the impairment loss is recognized in other comprehensive income.

Financial liabilities

Financial liabilities at fair value with changes through profit or loss

A financial liability at fair value with changes through profit or loss is a financial liability classified as held for trade purposes or is designated as at fair value with changes through profit or loss.

A financial liability is classified as held for trade purposes if:

- It is acquired mainly in order to repurchase it in the near future; or
- It is part of an identified financial instruments portfolio managed jointly, and for which there is evidence of a recent pattern of taking short-term profits; or
- It is a derivative that has not been designated as a hedging instrument or does not meet the conditions to be effective.

A financial liability that is not a financial liability held for trade purposes could be designated as a financial liability at fair value with changes through profit or loss at the initial recognition time if:

- Thereby any inconsistency in the valuation or in the recognition that otherwise would arise from its valuation on different basis is significantly eliminated or reduced; or
- The return from financial liabilities or a group of assets and financial liabilities are managed and assessed based on their fair value, according to an investment or risk management strategy that the entity has documented, and information is internally provided on that group, based on its value; or
- It is part of an agreement that includes one or more embedded derivative instruments, and IAS 39, "Financial Instruments: Recognition and Measurement", allows that the entire hybrid agreement (asset or liability) is designated as at fair value with changes through profit or loss.

Financial liabilities at fair value with changes through profit or loss are recorded at fair value, recognizing any gain or loss arising from the remeasurements in the consolidated statements of profit or loss and other comprehensive income.

Other financial liabilities

Other financial liabilities, including loans, are initially valued at fair value, net of costs of the transaction, and are subsequently valued at amortized cost using the effective interest method, and interest expenses are recognized on an effective return base.

The effective interest rate method is a method for the calculation of the amortized cost of a financial liability and of the assignment of the financial expense along the period concerned. The effective interest rate is the rate that exactly discounts the estimated cash payments along the expected life of the financial liability (or, where adequate, in a shorter period) which represents the net amount in books of the financial liability at its initial recognition.

Derecognition of financial liabilities

The Company writes off financial liabilities if, and solely if, the obligations are met, cancelled or expired.

e) Inventories

Inventories are valued at the average purchase price or average production cost, provided they do not exceed the net realizable value. Cost of sales is determined applying these averages upon sale.

Net realizable value is the sale value estimated during the regular course of business, less estimated termination costs and sale costs.

The Company uses the absorption cost system to determine the cost of inventories of production-in-progress and finished goods, which includes both direct costs and those indirect costs and expenses related to production processes.

f) Assets available for sale

Long-term assets are classified as available for sale if their carrying amount will be recovered through a sale transaction and not though their continuous use. This condition is deemed met solely when the sale is highly probable and the asset (or group of assets for sale) is available for immediate sale in its current condition. They are presented in the consolidated statements of financial position as short term, according to the realization plans, and they are recorded at the lessor of their carrying amount or fair value less costs of sale.

g) Investment in associated companies

An associated company is a company in which the Company has significant influence. Significant influence is the power to participate in the definition of financial and operating policies of an entity, but it does not have control or joint control on such policies.

The results, assets and liabilities of the associated company are incorporated in the Company's consolidated financial statements under the equity method, except when the investment is classified as available for sale, in which case its value is recognized according to subsection g) above. Under the equity method, an investment in an associated company is recognized in the consolidated statements of financial position at cost and is adjusted through the recognition of its comprehensive income or loss in proportion to the Company's shareholding in such associated company. When the comprehensive loss of an investment in an associated company exceeds the Company's equity in its capital, the Company discontinues the recognition of such losses. Additional losses are recognized up to the amount of the Company's obligations and legal commitments for its equity such associated company.

Any excess of acquisition cost of the Company's equity in an associated company on the net fair value of identifiable assets, liabilities and contingent liabilities of such associated company is recognized as goodwill, which is included at the carrying amount of such investment. Any excess of net fair value of the identifiable assets, liabilities and contingent liabilities on the acquisition cost of an associated company is recognized in current earnings.

h) Lands and buildings, machinery and equipment

Lands, buildings, machinery and equipment held for use in production for rendering services or for administrative purposes are recognized in the consolidated statement of financial position at historical costs, less accumulated depreciation or accumulated impairment losses.

Depreciation is recorded in earnings and is calculated using the straight-line method based on the remaining useful lives of the assets, which are reviewed every year jointly with the residual values, and the effect of any change in the recorded estimate is recognized on a prospective basis. The assets related to finance leases are depreciated in the shorter period between the lease and their useful lives, unless it is reasonably certain that the Company will obtain the ownership at the end of the lease period.

The estimated useful lives for the main classes of fixed assets that correspond to current and comparative periods are as follows:

	Years
Buildings	15 to 50
Machinery and equipment	3 to 30

When components of a building, machinery and/or equipment have different useful lives, they are recorded as separate items (significant components) of buildings, machinery and equipment.

Gains or losses from the sale of a land, building, machinery and equipment item are determined comparing the gain or loss obtained from the sale to the carrying amount of such item; such gain or loss is recognized net within other (income) expenses in the consolidated statements of profit or loss and other comprehensive income.

Investments in process are recorded at cost less any impairment loss recognized. The cost of assets constructed by the own entity include the cost of materials and direct labor, any other cost directly attributable to the process of making to asset be suitable for the use foreseen, as well as the cost for dismantling, removing items, restoring the place where they are located, and the costs for capitalized loans, according to the Company's policy. The depreciation of these assets, as in other properties, commences when the assets are ready for use in the place and conditions necessary to be able to operate in the way intended by the Company's management.

i) Investment properties

Investment properties are those held to obtain rents and increase in value (including investment properties in construction for such purposes) and are initially valued at acquisition cost, including the costs incurred in the related transactions. After the initial recognition, investment properties are valued at fair value. The fair value of the investment properties is determined annually through appraisals performed by an expert appraiser, who uses different valuation techniques such as observable markets, amortized costs, among others. Gains or losses arising from changes in the fair value of the investment properties are included in other (income) expenses in the consolidated statements of profit or loss and other comprehensive income in the period in which they arise.

An investment property is eliminated upon disposal or when it is permanently retired from use and no future economic benefits are expected from the disposal. Any gain or loss arising from derecognition of the property (calculated as the difference between net income from disposal and the carrying amount of the asset) is recognized in earnings in the consolidated statements of comprehensive income in the period in which the property is derecognized.

j) Leases

Leases are classified as finance leases when the terms of the lease substantially transfer to the lessee all the risks and benefits inherent to the property. All the other leases are classified as operating leases.

Assets under finance leases are recognized as assets at fair value at the beginning of the lease, or at present value of the minimum lease payments, the least. The liability corresponding to the lessor is included in the consolidated statements of financial situation as part of long-term debt.

Lease payments are distributed between the financial costs and the reduction of the lease obligation so as to achieve a constant rate on the remaining balance of the liability. Financial expenses are expensed directly, unless they are directly attributable to qualifying assets, in which case are capitalized in accordance with the Company's policy for costs on loans.

Payments for operating lease rents are expenses using the straight-line method during the lease term, unless another systematic sharing basis results more representative to reflect more adequately the pattern of lease benefits to the user.

The Company does not maintain significant leases acting as a lessor.

k) Borrowing costs

The costs for loans directly attributable to the acquisition, construction or production of qualifying assets, which are assets that require a substantial period until they are ready to use, are added to the cost of those assets. Capitalization of costs for loan ceases at the time that the assets are available for use. Exchange rate fluctuations arising from the procurement of funds in foreign currency are capitalized to the extent that they are deemed adjustment to the interest cost. The income obtained from the temporary investment of specific loans outstanding to be used in qualifying assets, is deducted for costs for loans eligible for capitalization. All other borrowing costs are recognized in earnings in the period they are incurred.

l) Intangible assets

Intangible assets with finite and infinite lives

Intangible assets that are acquired by the Company, and which have finite useful lives, are recorded at cost less accumulated amortization and accumulated impairment losses; they are mainly included in the cost of software for administrative use. The estimated useful lives and amortization method are reviewed at the end of each year, and the effect of any change in the recorded estimate is recognized prospectively.

Intangible assets with infinite useful lives does not amortize and are annually subject to impairment test.

Goodwill

Goodwill arises from a business combination and is recognized as an asset at the date control is acquired (acquisition date). Goodwill is the excess of the consideration transferred on the fair value at the acquisition date of the identifiable assets acquired and liabilities assumed. When the fair value of the identifiable net assets of the acquired exceeds the sum of the consideration transferred, the amount of such excess is recognized in the consolidated statement of comprehensive income as a gain on purchase. Goodwill is not amortized and is subject to annual impairment tests.

For purposes of the evaluation of the impairment, goodwill is assigned to each of the cash generating units for which the Company expects to obtain benefits. If the recoverable amount of the cash-generating unit is less than the amount in books of the unit, the impairment loss is allocated first in order to reduce the amount in books of the goodwill allocated to the unit and then to the other assets of the unit, proportionally, on the basis of the amount in books of each asset in the unit. Impairment loss recognized for the purposes of the goodwill cannot be reversed in a subsequent period.

Upon disposal of a subsidiary, the amount attributable to the goodwill is included in the determination of the profit or loss on the disposal.

m) **Impairment of tangible and intangible assets**
The Company reviews the book values of its tangible and intangible assets to determine if there is any indicator that those assets have suffered any impairment loss. If there is any indicator, the recoverable amount of the asset is calculated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash generating unit to which such asset belongs. When you can identify a reasonable and consistent basis of distribution, corporate assets are also assigned to the individual cash generating units, or otherwise, are assigned to the smallest group of cash generating units for which a reasonable and sound distribution base can be identified. The intangible assets that have an indefinite useful life are subject to impairment tests at least annually, and whenever there is an indicator that the asset may have been impaired.

The recoverable amount is the higher between the fair value less cost to sell it and the value in use. In assessing value in use, estimated future cash flows are discounted at their present value using a discount rate before taxes that reflects the current market assessment with respect to the time value of money and the specific risks of the asset for which future cash flows estimates have not been adjusted.

If it is estimated that the recoverable amount of an asset (or cash-generating unit) is less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. Impairment losses are recognized in earnings.

When an impairment loss is reversed subsequently, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, in such a way that the increased carrying amount does not exceed the carrying amount that would have been determined if an impairment loss had not been recognized for such asset (or cash-generating unit) in prior years.

n) **Derivative financial instruments and hedging operations**
The Company's activities expose it to a variety of financial risks, including: foreign exchange risk, interest rates and price risk, such as generic goods, mainly that of natural gas.

The Company's policy is to contract derivative financial instruments ("DFI's") in order to mitigate and cover the exposure to which it is exposed, given its productive and financial transactions. The Company designates these instruments either as fair value hedges, cash flow hedges or hedges of a net investment in a foreign operation.

There is a Risk Committee which is responsible for enforcing risk management policies, as well as for monitoring the proper use of financial instruments contracted by the Company. The Committee is composed by several of the Company's officials. Additionally, to perform this type of transactions an authorization from the Board of Director is required.

The Company recognizes all derivative financial instruments in the statement of financial position at fair value, regardless of the intention of its holding. In the case of hedging derivatives, the accounting treatment depends on whether the hedging is of fair value or cash flow. DFI's negotiations may include considerations agreements, in which case, the resulting amounts are presented on a net basis.

The fair value of financial instruments is determined by recognized market prices and when instruments are not traded in a market; it is determined by technical valuation models recognized in the financial field using inputs such as price, interest rate and exchange rate curves, which are obtained from different sources of reliable information.

When derivatives are contracted in order to cover risks and comply with all the hedge accounting requirements, their designations are documented describing the purpose, features, accounting recognition and how the measurement of effectiveness will be carried out.

The designated hedging derivative recognizes changes in fair value as follows: (1) in fair value, the fluctuations both of the derivative and the hedged item are valued against profit or loss, (2) in cash flows, they are temporarily recognized in comprehensive income and are reclassified to profit or loss when the hedged item affects them, (3) when the hedge is an investment in a foreign subsidiary, the effective portion is recognized in comprehensive income (loss) as part of an adjustment for conversion. The ineffective portion of the change in fair value is recognized in the profit or loss of the period, within the net financial cost if it is a derivative financial instrument and, if it is not, it is recognized in comprehensive income (loss) until the investment is sold or transferred.

Derivative financial instruments, which the Company maintains, have not been designated as a hedge for accounting purposes. The fluctuation in the fair value of these derivative financial instruments is recognized in current earnings within net financial cost.

As detailed in subsection b) herein, the Company applies hedge accounting to foreign currency differences arising between the foreign currency for its foreign transactions and the holding entity's functional currency, regardless of whether the net investment is held directly or through a sub-holding.

o) **Provisions**
Provisions are recognized for current obligations that arise from a past event, that will probably result in the use of economic resources, and that can be reasonably estimated. For the purpose of accounting records, provisions are discounted to present value when the discount effect is material. Provisions are classified as current or non-current according to the estimated time period to meet the obligations that are covered. When the recovery of a third of some or all the economic benefits required to settle a provision is expected, an account receivable is recognized as an asset, if it is virtually certain that the payment will be received and the amount of the account receivable can be valued reliably.

p) **Income tax**
Current taxes and deferred taxes are recognized in earnings, except when they are related to a business combination, or items recognized directly in stockholders' equity, or in the comprehensive income account.

Current income tax is the tax expected to be paid or received. The income tax payable in the fiscal year is determined according to the legal and tax requirements, applying tax rates enacted or substantially enacted as of the report date, and any adjustment to the tax payable with respect to prior years.

Deferred income tax is recorded using the assets and liabilities method, which compares the accounting and tax values of the Company's assets and liabilities and deferred taxes are recognized with respect to the temporary differences between such values. No deferred taxes are recognized for the following temporary differences: the initial recognition of assets and liabilities in a transaction other than a business acquisition and that does not affect the accounting or tax result, and differences related to investments in subsidiaries and joint ventures to the extent it is probable that they will not be reversed in a foreseeable future. In addition, deferred taxes for taxable temporary differences arising from the initial recognition of goodwill are not recognized. Deferred taxes are calculated using rates that are expected to apply to temporary differences when they are reversed, based on enacted laws or which have been substantially enacted at the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax assets and liabilities, and they correspond to the income tax levied by the same tax authority and to the same tax entity, or on different tax entities, but intend to settle the current tax assets and liabilities caused on a net basis or their tax assets and liabilities are simultaneously materialized.

A deferred asset is recognized for tax loss carryforwards, tax credits and deductible temporary differences, to the extent that it is probable that there is taxable income to which they can be applied. Deferred assets are reviewed at the reporting date and are reduced to the extent the realization of the corresponding tax benefit is no longer likely.

q) Employee benefits

i. *Defined benefit plans*

Pension plans

A defined benefit plan is a benefit plan at the end of a labor relationship different from one of defined contributions. The Company's net obligations with respect to the defined-benefit pension plans are calculated separately for each plan, estimating the amount of future benefit accrued by employees in return for their services in ongoing and past periods; that benefit is discounted to determine its present value, and the costs for the services that have not been recognized and the fair value of the plan assets are deducted. The discount rate is the yield at the reporting date of the government bonds that have maturity dates approximate to the maturities of the Company's obligations which are denominated in the same currency in which benefits are expected to be paid. The calculation is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a benefit for the Company, the recognized asset is limited to the net total of unrecognized past service costs and the present value of the economic benefits available in the form of future refunds from the plan or reductions in future contributions to the plan plus the plan assets. To calculate the present value of the economic benefits, the minimum funding requirements applicable to the Company's plan are considered. An economic benefit is available to the Company if it can be realized during the life of the plan, or upon settlement of the plan obligations.

When the benefits of a plan are improved, the portion of the improved benefits relating to past services by employees is recognized in profit or loss using the straight-line method over the average period until it acquires the right to the benefits. In so far as the right of benefits takes place, the expense is recognized in profit or loss.

The Company recognizes actuarial remeasurements derived from defined benefit plans in the comprehensive income account, in the period in which they occur, and they are never recycled to profit or loss.

Medical post-employment benefits

The Company grants medical benefits to retired employees at the end of the employment relationship. The right to access these benefits usually depends on whether the employees have worked up to the retirement age and have completed certain minimum service years. Net periodic cost of these benefits is recognized in profit or loss using the same criteria for those described for pension plans.

ii. *Termination benefits*

Termination benefits are recognized as an expense when the Company commitment can be evidenced, without real possibility of reversing, with a detailed formal plan either to terminate employment before the normal retirement date, or else, to provide benefits for termination as a result of an offer that is made to encourage voluntary retirement. The benefits from termination in cases of voluntary retirement are recognized as an expense, solely if the Company has made an offer of voluntary retirement, the offer is likely to be accepted, and the number of acceptances can be estimated reliably. If the benefits are payable no later than 12 months after the reporting period, then they are discounted at present value.

iii. *Short-term benefits*

Short-term employee benefit obligations are not discounted and are expensed as services are rendered.

A liability is recognized for the amount expected to be paid under short-term cash bonus plans if the Company has a legal or assumed obligation to pay these amounts as a result of past services provided by the employee and the obligation can be estimated reliably.

r) Statutory employee profit sharing (“PTU”)

PTU is recognized in the earnings of the fiscal year in which it is incurred and is presented within operating income.

s) **Revenue recognition**
Revenues and related costs are recognized in the period in which: i) the risks and rewards are transferred to customers, which generally coincides with the delivery of products to customers in satisfaction of orders; ii) there is no ownership or effective control on the goods sold; iii) revenues and related costs can be measured reliably and iv) the economic benefits to the Company are probable.

t) **Financial income and costs**
Financial income includes income interest on invested funds, changes in the fair value of financial assets at fair value through profit or loss, and exchange gains. Interest income is recognized in income as earned, using the effective interest method.

Financing costs include interest expenses on loans, effect of the discount by the passage of time on provisions, exchange losses, changes in the fair value of financial assets at fair value through profit or loss and impairment losses recognized on financial assets. The borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset, are recognized in earnings using the effective interest method.

Exchange gains and losses are reported on a net basis.

u) **Earnings per share**
The Company presents information about basic and diluted earnings per share ("EPS") corresponding to its common stock. The basic EPS is calculated by dividing the earning or loss attributable to stockholders that hold Company's common stock by the weighted average outstanding common stock during the period, adjusted for the own shares held. The diluted EPS are calculated by adjusting the earning or loss attributable to stockholders that hold common shares and the weighted average number of outstanding shares, adjusted for the own shares held, for the effect of the dilution potential of all common shares, which include convertible instruments and options on shares granted to employees. During the fiscal years ended December 31, 2016 and 2017, the Company has no dilutive effects.

5. Other current assets and other short-term liabilities

The balances of other current assets as of December 31, 2016 and 2017 are as follows:

		December 31,		
		2016		**2017**
Sundry debtors	$	434	$	588
Prepayments		134		213
Prepayment of inventories		14		35
Assets held for sale		25		25
Total other current assets	$	607	$	861

The balances of other short – term liabilities as of December 31, 2016 and 2017 are as follows:

		December 31,		
		2016		**2017**
Taxes payable	$	856	$	848
Sundry creditors		853		611
Contributions payable		135		210
Total other short-term liabilities	$	1,844	$	1,669

6. Trade accounts receivable

Trade accounts receivable consists of the following:

		December 31,		
		2016		**2017**
Customers	$	4,373	$	6,012
Less allowance for doubtful accounts		(192)		(206)
Total trade accounts receivable	$	4,181	$	5,806

7. Inventories

Inventories consist of the following:

		December 31,		
		2016		**2017**
Work in process and finished goods	$	2,319	$	4,123
Raw materials		686		1,106
Packing material		37		50
Spare parts		395		1,062
Refractories		2		16
Inventory-in-transit and others		215		250
Total inventories	$	3,654	$	6,607

Due to inventory obsolescence and slow movement, as of December 31, 2016 and 2017, inventories are reduced to their net realizable value by $175 and $118, respectively; this reserve mainly decreases the finished goods, refractories and raw materials line items.

8. Investment in associated companies

The Company has an investment in Empresas Comegua, S.A. and subsidiaries ("Comegua"), an entity engaged in the production of glass containers, and whose operations are held primarily in Guatemala, Nicaragua and Costa Rica. The amount of this investment as of December 31, 2016 and 2017 is $1,761 and $1,758, respectively; furthermore, the shareholding of the Company is 49.72% at both dates. As for December 31, 2017, it maintains another investment in Shandong PGW Jinjing Glass Co. LTD for $21.

The condensed statements of financial position and condensed statements of profit or loss of Comegua as of December 31, 2016 and 2017 and for the years then ended are:

		December 31,		
Condensed statements of financial position:		2016		**2017**
Assets				
Current assets	$	1,959	$	1,945
Long-term assets		3,813		3,735
Total assets	$	5,772	$	5,680
Liabilities				
Current liabilities	$	1,085	$	1,110
Non-current liabilities		1,145		1,033
Total liabilities	$	2,230	$	2,143

		Year ended December 31,		
Condensed statements of profit or loss:		2016		**2017**
Net sales	$	3,626	$	3,722
Costs and expenses		(3,367)		(3,444)
Income taxes		(54)		(74)
Net and comprehensive income	$	205	$	204
Company's equity	$	102	$	102

Financial information for the years ended December 31, 2016 and 2017 are as follows:

		Year ended December 31,		
		2016		**2017**
EBIT	$	335	$	326
Non-cash items		383		411
EBITDA	$	718	$	737
Current ratio		1.79		1.75
Debt ratio		1.33		1.17
EBITDA to interest expense ratio		9.85		14.45
Debt to total liabilities plus total equity ratio		0.18		0.16

9. Land and buildings, machinery and equipment and investments in process

Below is a summary of the composition of these items:

		December 31,		
		2016		**2017**
Land	$	3,076	$	3,342
Buildings		8,206		9,471
Accumulated depreciation		(4,649)		(5,038)
		6,633		7,775
Machinery and equipment		22,009		26,152
Accumulated depreciation		(12,911)		(13,675)
		9,098		12,477
Investments in process		1,617		2,819
Total	$	17,348	$	23,071

Cost or valuation	Land	Buildings	Machinery and equipment	Investments in process	Final balance
Balance as of January 1, 2016	$ 2,670	$ 6,653	$ 16,676	$ 929	$ 26,928
Additions	58	134	1,409	572	2,173
Disposals	–	(106)	(1,093)	–	(1,199)
Business acquisition (Note 11)	322	1,414	4,685	89	6,510
Translation adjustment	26	111	332	27	496
Balance as of December 31, 2016	3,076	8,206	22,009	1,617	34,908
Additions	1	182	2,229	885	3,297
Disposals	(18)	(29)	(1,047)	(1)	(1,095)
Impairment	–	–	(143)	–	(143)
Business acquisition (Note 11)	293	1,140	3,268	294	4,995
Translation adjustment	(10)	(28)	(164)	24	(178)
Balance as of December 31, 2017	$ 3,342	$ 9,471	$ 26,152	$ 2,819	$ 41,784

Accumulated depreciation and impairment	Land	Buildings	Machinery and equipment	Investments in process	Final balance
Balance as of January 1, 2016	$ –	$ 4,536	$ 13,011	$ –	$ 17,547
Depreciation of the year	–	176	735	–	911
Reversal of impairment loss	–	–	136	–	136
Disposals	–	(79)	(1,025)	–	(1,104)
Translation adjustment	–	16	54	–	70
Balance as of December 31, 2016	–	4,649	12,911	–	17,560
Depreciation of the year	–	316	1,386	–	1,702
Disposals	–	–	(934)	–	(934)
Business acquisitions (Note 11)	–	69	293	–	362
Translation adjustment	–	4	19	–	23
Balance as of December 31, 2017	$ –	$ 5,038	$ 13,675	$ –	$ 18,713

a) Capitalized borrowing cost

During December 31, 2016 and 2017, the Company did not capitalize any interest on loans.

b) Transactions that did not require cash flows

During 2016 and 2017, no investments were contracted as finance leases, nor other investments in fixed assets that did not require a cash disbursement.

c) Impairment

During fiscal year 2016, the Company reviewed the recoverable amount of its productive fixed assets throughout the analysis of the value in use of its cash generating units. Such analysis resulted in the recognition of a reversal of the impairment recognized over certain assets in Flat Glass segment for $136.

On 2017, derived from the incident at Carlisle plant (Note 2e), the Company had to impair some of the damaged assets for an amount of $143; Additionally, in the Container segment, certain assets in permanent disuse were deteriorated in an amount of $4.

The impairment impacts were recognized on Other expenses, net for the years ended December 31, 2016 and 2017.

10. Investment properties

As of December 31, 2016 and 2017, the investment properties amount to $359 and $373, respectively; such assets are mainly composed of lands and buildings. The fair value of investment properties was calculated based on Level 2 of the fair value hierarchy (Note 17 iv).

11. Business acquisition

PPG's Flat Glass Business

On July 20, 2016, Vitro entered into a sale and purchase agreement with PPG, the latter engaging to sell its Flat Glass Business in favor of Vitro and/or its subsidiaries. This acquisition concluded successfully on October 1, 2016 ("acquisition date"), incorporating four manufacturing plants with five furnaces in the United States, a research and development center of flat glass, and four distribution and fabrication facilities in Canada. The acquisition of Flat Glass and Glass Coating business was originally for the amount of $14,311, being decreased by $162 for a net of $14,149.

As of December 31, 2016, the Company had an account receivable with PPG for $212 derived from the adjustments to working capital, of which $162 were collected on 2017, as mentioned on the previous paragraph, cancelling the remaining $50 against goodwill.

During 2017, the study carried out by independent experts that allowed the definitive recording of the distribution of the purchase price to the fair values of the assets and liabilities acquired from PPG was concluded.

Fair value of acquired assets and assumed liabilities, as a result of this business acquisition, are as follows:

	Preliminary values	Fair value adjustments	Final values
Trade accounts receivable, net	$ 1,579	–	$ 1,579
Inventories	1,548	–	1,548
Property, plant and equipment, net	6,510	(88)	6,422
Intangibles	5,846	(93)	5,753
Trade accounts payable	(1,110)	–	(1,110)
Debt	(317)	–	(317)
Deferred income taxes	(1)	–	(1)
Employee benefits	(659)	–	(659)
Other items, net	14	(185)	(171)
Goodwill	901	204	1,105
Consideration paid	$ 14,311	$ (162)	$ 14,149

As a result of the transaction, goodwill amounts to $1,105 as of December 31, 2017, which was allocated to Flat Glass segment. Contributing factors on goodwill recognition include obtaining operational synergies among productive plants, exchange of best practices, and shared use of new technologies, among others. Goodwill associated to this business combination is deductible for income taxes purposes.

Contributing revenues, by the net acquired assets of the Flat Glass Business included in the consolidated statement of profit and loss from the acquisition date to December 31, 2016, amounted to $3,110, and a net income of $127. If the acquisition had happened on January 1, 2016, revenues would have increased by $10,745, and net income of the year by $653.

Automotive Glass Business for Original Equipment

On December 18, 2016, Vitro entered into a definitive agreement to acquire the Automotive Glass Business for Original Equipment from Pittsburgh Glass Works LLC ("PGW") for US$310, funded with US$80 from own resources and a bank loan for US$230. With this agreement, Vitro acquired seven automotive glass manufacturing plants and two satellite plants, in addition to two float glass furnaces in the USA, one automotive glass plant in Poland, and participation in two joint arrangements located in North America and China. On March 1, 2017, the Company successfully concluded the acquisition.

The fair values of the assets acquired and liabilities assumed as a result of this acquisition are the following:

Cash and cash equivalents	$ 296
Clients and other accounts receivable	1,922
Inventories	2,213
Property, plant and equipment, net	4,337
Intangibles	278
Investment in associates	222
Supplier and other accounts payable	(2,208)
Debt	(182)
Deferred income taxes	(32)
Employee benefits	(637)
Other items, net	56
Goodwill	52
Paid consideration	$ 6,317

To date, the Company´s management supported by independent experts, has allocated the purchase price to fair values to the net assets acquired, as well as in the determination of goodwill; even though IFRS allows the modification of the initially determined values during the year after the purchase, management considers that the possible modifications would not be material.

The contributed revenues by the acquired assets of the Automotive Glass Business for Original Equipment included in the consolidated income statement from the acquisition date to December 31, 2017 amounted to $10,741 and a net profit of $224. If the acquisition had occurred on January 1, 2017, the revenues would have amounted to approximately $12,982 and the net profit to $198.

Control of the associate company Cristal Laminado o Templado S.A. de C.V.

On May 30, 2017, Vitro obtained control of the associate company Cristal Laminado o Templado, S.A. de C.V. (CLT) through the acquisition of the remaining 50% capital stock representatative shares for an amount of US$7.55 paid in cash. The initial participation in this company was part of the joint arrangements acquired in the purchase of PGW.

Fair value of acquired assets and assumed liabilities, as a result of this business acquisition, are as follows:

Current assets	$	303
Non-current assets		286
Current liabilities		(161)
Total		428
Amount of participation acquired		214
Gain on purchase		(73)
Paid consideration	$	141

To date, the Company´s management supported by independent experts, has allocated the purchase price to fair values to the net assets acquired, as well as in the determination of goodwill; even though IFRS allows the modification of the initially determined values during the year after the purchase, the management considers that the possible modifications would not be material.

The revenues contributed by the acquired assets of CLT included in the consolidated income statement from the acquisition date until December 31, 2017 amounted $379 and a net profit of $7. If the acquisition had occurred on January 1, 2017, the revenues would have amounted $677 and the net benefit to $45.

12. Goodwill

Goodwill balance as of December 31, 2017 consist of the following:

		2016		**2017**
Balance as of January 1, 2017	$	–	$	963
Business acquisition (Note 11)		901		52
PPG adjustment		–		204
Translation adjustment		62		(30)
Balance as of December 31, 2017	$	963	$	1,189

Goodwill has arisen as a result of the PPG's Flat Glass Business acquisition and PGW´s Automotive Glass Business for Original Equipment (Note 11), which segment information is presented in the Flat Glass segment (Note 24). Recoverable amount of goodwill is determined based on its value in use, which uses projected cash flows based on a financial budget authorized and approved by the Board of Directors; such budget covers a five-year period. Value in use was determined using a post-tax discount rate with perpetuity of 8.93% and 7.98%, respectively in 2016 and 2017.

13. Intangibles and other assets

a) **Intangible balances as of December 31, 2016 and 2017, consist of the following:**

	December 31,			
		2016		**2017**
Software	$	57	$	318
Trademarks and intellectual property		2,207		2,042
Customer relationships		3,765		3,297
Total	$	6,029	$	5,657

Accumulated amortization		Software		Trademarks and intellectual property		Customer relationships		Total
Balance as of January 1, 2016	$	661	$	–	$	–	$	661
Business acquisition (Note 11)		24		2,232		3,590		5,846
Translation adjustment		–		–		225		225
Balance as of December 31, 2016		685		2,232		3,815		6,732
Additions		83		–		–		83
Business acquisition (Note 11)		278		–		(93)		185
Translation adjustment		(6)		–		(197)		(203)
Balance as of December 31, 2017	$	1,040	$	2,232	$	3,525	$	6,797

Accumulated amortization		Software		Trademarks and intellectual property		Customer relationships		Total
Balance as of January 1, 2016	$	610	$	–	$	–	$	610
Amortization of the year		18		25		50		93
Balance as of December 31, 2016		628		25		50		703
Amortization of the year		79		165		176		420
Translation adjustment		15		–		2		17
Balance as of December 31, 2017	$	722	$	190	$	228	$	1,140

Amortization of intangible assets was calculated using useful lives of 15 and 20 years for trademarks and intellectual property, and customer relationships, respectively.

b) Other long-term assets as of December 31, 2016 and 2017 are as follows:

	December 31,			
		2016		**2017**
Advances to suppliers of fixed assets	$	362	$	65
Other		77		143
	$	439	$	208

14. Long-term debt

Long-term debt consists of the following:

	December 31,			
		2016		**2017**
Foreign subsidiaries (payables in U.S. dollars				
Finance lease with a fixed interest rate between 2.4% and 9.5%, maturing in 2018 and 2025.	$	329	$	442
Unsecured debt and variable interest rate of LIBOR + 4.15% maturing at 2023 (Notes 2i and 11).		10,310		9,831
Unsecured debt and variable interest rate of LIBOR plus an applicable margin according to the consolidated leverage ratio, maturing in 2023 (Notes 2b and 11).		–		3,343
Debt issuance costs		(54)		(59)
Total long-term debt		10,585		13,557
Less short-term maturities		30		94
Long-term debt, excluding current maturities	$	10,555	$	13,463

Signing of credit agreement

On September 23, 2016, Vitro entered into a credit agreement with Banco Inbursa, S.A., Institución de Banca Múltiple, Grupo Financiero Inbursa for the amount of US$500 which accrue interest at LIBOR + 4.15%, maturing in 2023. These resources were used for the payment of part of the purchase price of PPG's Flat Glass Business (Note 11).

On December 18, 2016, Vitro entered into a credir agreement with BBVA Bancomer, S.A., Institución de Banca Múltiple, Grupo Financiero BBVA Bancomer (BBVA Bancomer) for US$230, maturing in 2023 and accruing variable interest at LIBOR plus an applicable margin according to its consolidated leverage ratio as shown below:

Consolidated Leverage Ratio	Applicable Margin
Greater than or equal to 2.5 times and less than 3.0 times	400 basis points
Greater than or equal to 2.0 times and less than 2.5 times	375 basis points
Greater than or equal to 1.5 times less than 2.0 times	350 basis points
Less than 1.5 times	325 basis points

The applicable rate as for December 31, 2017 was LIBOR+350 basis points.

These resources were used to the pay part of the purchase price of PGW´s Automotive Glass Business for Original Equipment (Notes 2a and 14).

On December 1, 2017, Vitro paid in advance US$60, plus accrued interests, to its US$230 debt contracted with BBVA Bancomer. This payment was applied in reverse order to its amortization plan, thus reducing the term of the debt.

15. Accrued expenses and provisions

As December 31, 2016 and 2017, accrued expenses and provisions were as follows:

	December 31,			
		2016		**2017**
Wages and benefits payable	$	402	$	556
Services and other accounts payable		236		413
Other expenses payable		800		382
Total	$	1,438	$	1,351

16. Employee benefits

Employee benefits recognized in consolidated statements of financial position, by country, are as follows:

	December 31, 2016	December 31, 2017
Mexico	$ (1,279)	$ (1,509)
USA	536	1,357
Canada	(25)	(29)
Other	3	3
Net projected assets	$ (765)	$ (178)

A description of types of post-employment benefits granted by the Company are as follows:

Defined benefits plan

The Company has a defined benefits pension plan covering Mexican staff which consists of a single payment or a monthly pension, calculated based on the sum of a basic pension, an additional factor by seniority and an additional factor for income equal to or less than the maximum limit used for the Mexican Social Security Institute.

The Company's plan in Mexico also covers seniority premiums which consist of a lump sum payment of 12 day's wage for each year worked, calculated using the most recent salary, not to exceed twice the legal minimum wage established by law. The related liability and annual cost of such benefits are calculated with the assistance of an independent actuary on the basis of formulas defined in the plans using the projected unit credit method.

Additionally, in the USA and Canada, the Company grants retirement plans to key personnel, as well as a post-employment medical benefits plan, mainly.

Employee benefits retirement plans valuation is based on service years, current age, and estimated remuneration at retirement date. The main subsidiaries of the Company had constituted and funded irrevocable trusts designated to retirement benefit payments. The Company is not exposed to unusual risks related to the plan assets.

Financial information related to employee benefits is as follows:

	December 31, 2016	December 31, 2017
Net projected (assets) liability for:		
Pension plans	$ (952)	$ (388)
Post-employment medical benefits	187	210
Total net projected assets	$ (765)	$ (178)
Amount recognized in profit and loss for:		
Pension plans	$ 46	$ 74
Post-employment medical benefits	4	17
Total recognized in profit and loss	$ 50	$ 91
Amount recognized in comprehensive income for:		
Pension plans	$ 689	$ (331)
Post-employment medical benefits	16	(15)
Total recognized in comprehensive income	$ 705	$ (346)

The present values for defined benefit obligations, as well for the assigned plan assets to such obligations are as follows:

	Mexico	USA	Canada	Other	Total
December 31, 2016:					
Defined benefit obligations	$ 3,858	$ 2,379	$ 130	$ 3	$ 6,370
Plan assets	(5,137)	(1,843)	(155)	–	(7,135)
Net projected (assets) liability	$ (1,279)	$ 536	$ (25)	$ 3	$ (765)
December 31, 2017:					
Defined benefit obligations	$ 3,991	$ 3,679	$ 132	$ 3	$ 7,805
Plan assets	(5,500)	(2,322)	(161)	–	(7,983)
Net projected (assets) liability	$ (1,509)	$ 1,357	$ (29)	$ 3	$ (178)

Movements in defined benefit obligations during the year are as follows:

	Year ended December 31,			
		2016		**2017**
Defined benefit obligations as of January 1, 2017	$	3,945	$	6,370
Business acquisition (Note 11)		2,530		1,011
Service cost		76		144
Interest cost		274		393
Actuarial re measurements		(187)		500
Benefits paid		(402)		(472)
Translation adjustment		137		(139)
Other		(3)		(2)
Defined benefit obligations as of December 31, 2017	$	6,370	$	7,805

Changes in the fair value of the plan assets are as follows:

	Year ended December 31,			
		2016		**2017**
Fair value of the plan assets as of January 1, 2017	$	4,373	$	7,135
Business acquisition (Note 11)		1,871		391
Expected yield		300		446
Actuarial re measurements		518		154
Company (reimbursements) contributions		(40)		35
Benefits paid		(3)		(57)
Translation adjustment		116		(121)
Fair value of the plan assets as of December 31, 2017	$	7,135	$	7,983

As of December 31, 2016 and 2017, the main actuarial hypotheses used were as follows:

	December 31,	
	2016	**2017**
Discount rate		
Mexico	7.50%	7.50%
Vitro Flat Glass, LLC (USA)	4.13%	3.62%
Pittsburgh Glass Works, LLC (USA)	–	3.75%
Canada	3.96%	3.90%
Salary increase rate		
Mexico	4.00%	4.00%
Vitro Flat Glass, LLC (USA)	2.50%	2.50%
Pittsburgh Glass Works, LLC (USA)	–	3.00%
Canada	3.00%	3.00%

The average duration of defined benefit obligations is approximately 10 years.

The following table shows future cash flows for benefits expected to be paid in the following ten years:

Payments expected in the years:		Amount
2018	$	861
2019		450
2020		477
2021		497
2022		505
2023 to 2027		2,659
	$	5,449

These amounts are based on current data and reflect future services expected, as the case may be. Benefit payments are based on the assumptions that inactive participants retire at 65 years old, and other actuarial hypothesis, that they do it along a 10-year period.

The categories of the plan assets as of December 31, 2016 and 2017 are as follows:

	Actual yield rate		Fair value of plan assets	
	2016	**2017**	2016	**2017**
Equity instruments	$ 25.67%	$ 11.01%	$ 3,967	$ 4,807
Debt instruments	10.08%	4.24%	3,168	3,176
			$ 7,135	$ 7,983

As of December 31, 2016 and 2017, plan assets include 50,572,999 and 54,152,791 Vitro's shares, respectively, whose fair values amount to $3,259 and $3,815, respectively. As of December 31, 2017, plan assets also include accounts receivables with PPG for $850 and $623, which are classified as debt instruments. The Company is not exposed to unusual risks related to the plan assets.

The determination of the defined benefits obligation is carried out using actuarial hypotheses such as discount rates and wage increases. The sensitivity analysis shown below was developed based on the reasonableness of possible changes with respect to the actuarial hypotheses as of December 31, 2017, maintaining the other used hypotheses constant, however, it may not represent actual changes in defined benefit obligations since actuarial assumptions are correlated with each other and are unlikely to change in isolation.

The amounts included in the following table represent increase or (decrease) in the net projected liability, as the case may be.

	Liability
Increase in discount rate of 0.50%	$ (775)
Decrease in discount rate of 0.50%	1,427

17. Financial instruments

The Company has identified the following financial instruments:

	December 31,	
	2016	**2017**
Financial assets		
Cash and cash equivalents	$ 4,958	$ 3,549
Accounts receivable and other financial assets	4,889	6,978
Derivative financial instruments	–	43
Financial liabilities		
Measured at amortized cost	19,734	24,081

The Company is exposed to market risks (interest rate risk and foreign exchange risk), credit risk and liquidity risk, which are managed in a centralized manner. The Board of Directors establishes and monitors the policies and procedures to measure and manage these risks, which are described below.

i. *Market risk*

Market risk is the risk of changes in market prices, such as exchange rates, interest rates, commodities and equity instruments. The objective of market risk management is to manage and control exposures to market risks within acceptable parameters, at the same time that yields are optimized.

Interest rate risk

As of December 31, 2016 and 2017, the Company had assumed debt obligations which accrued interest primarily at a variable rate based on LIBOR. Interest rate risk maintained by the Company is considered as low, since 97% of total debt is subject to interest rates referenced to markets historically with low or no volatility, furthermore, is denominated in U.S. dollars in a business environment in the same currency, without any exchange risk.

Sensitivity analysis to interest rate risk

The Company carried out a sensitivity analysis putting into consideration an increase or decrease by 0.5% in the LIBOR rate value, and its effects over the results for the year ended December 31, 2017. The percentage used to analyze interest risk sensitivity is the scenario that represent management's assessment on the reasonableness of potential deviations in the reference rate, being a market rate with low or no volatility. As a result, the effects of a potential increase or decrease in interest rate would have had an impact in profit or loss for $67 as an expense or income, respectively.

Foreign exchange risk applicable to foreign subsidiaries

Vitro's foreign subsidiaries maintain its assets and liabilities, and carry out their activities mainly in U.S. dollars, in a market and a business environment in the same currency, thus the Company's management considers that the exposure to exchange rate fluctuations for these subsidiaries is almost null. Additionally, the Company considers that the assets and liabilities denominated in other foreign currencies other than U.S. dollar are not material.

Foreign exchange risk applicable to Mexican subsidiaries

Vitro's Mexican subsidiaries carry out their activities and maintain balances in foreign currencies, which expose them to exchange rate fluctuations. Such exchange risk exposure may arise from changes in economic conditions, monetary or fiscal policies, global market's liquidity, foreign or local political events, among others.

As mentioned in Note 14, debt maintained by the Company is denominated in U.S. dollars; however, almost all of it is contracted by Vitro's subsidiaries abroad. The exchange fluctuation from debt contracted abroad and the rest of the investment in such subsidiaries are recorded directly in stockholders' equity as translation adjustments.

The financial assets and liabilities denominated in millions of U.S. dollars as of December 31, 2016 and 2017 are as follows:

		December 31,		
		2016		**2017**
Current assets	US$	348	US$	393
Non-current assets		1		1
Current liabilities		(202)		(308)
Non-current liabilities		(515)		(692)
Net (long) short position	US$	(368)	US$	(606)

As of December 31, 2016 and 2017, the Company considers the assets and liabilities denominated in other foreign currencies other than U.S. dollar are not material.

The exchange rates of the Mexican peso with respect to the U.S. dollar, used to prepare these consolidated financial statements, were as follows:

		U.S. dollar
December 31, 2016	$	20.6194
December 31, 2017		19.6629

As of February 6, 2018, date of issuance of the consolidated financial statements, the exchange rate of the Mexican peso with respect to the U.S. dollar was $18.7009.

Sensitivity analysis to foreign exchange risk

The sensitivity analysis carried out by the Company considers a strengthening or weakening by 1% of the U.S. dollar against the Mexican peso and their effects on the results of the fiscal year 2017. The percentage used to analyze the sensitivity to foreign exchange risk is the scenario that represents the Management's evaluation of the fairness of possible variations in the currency exchange rate. As a result of the analysis, the effect of possible strengthening or weakening of the U.S. dollar against the Mexican peso would have had an impact on profit or loss for $3 as income or expense, respectively.

ii. *Credit risk*

Credit risk refers to the risk that a customer or counterpart breaches its contractual obligations resulting in financial loss to the Company and arises mainly from trade accounts receivable and investments in the Company's securities.

Trade accounts receivable and other accounts receivable

The Company continuously performs credit evaluations to its clients and adjusts the limits of credit based on the credit history and current creditworthiness. Also, it monitors the collections and payments from customers, and has an allowance for doubtful accounts based on historical experience and on some specific aspect that has been identified. While these allowances for doubtful accounts have historically been within the Company's expectations and within the established allowance, there is no guarantee that it will continue to have the same level of allowances for doubtful accounts that it has had in the past. An important variation in the experience of the Company's allowances for doubtful accounts could have a significant impact on the consolidated results of operations and therefore on the consolidated financial position.

The Company's exposure to credit risk is affected mainly by the individual characteristics of each customer. However, the Company's management also believes the demographics of its customer base, which includes the risk of non-compliance of the industry and country in which customers operate, as these factors can influence the credit risk, particularly in deteriorated economic circumstances.

As of December 31, 2017, the maximum exposure to credit risk is $5,806. In addition, the Company has guarantees on certain balances of trade accounts receivable whose performance does not fully meet Management's expectations.

The Company has no concentration credit risk, as consolidated sales to a single customer were not superior to 10% with respect to total sales.

Below is the classification of trade accounts receivable overdue and impaired, according to their age at the date of the report:

	December 31, 2016		December 31, 2017	
Balance	Gross	Impaired	Gross	Impaired
0 to 90 days	$ 635	$ –	$ 698	$ –
Over 90 days	204	192	219	206
	$ 839	$ 192	$ 917	$ 206

iii. *Liquidity risk*

Liquidity risk represents the possibility that the Company has difficulties to comply with its obligations associated with its financial liabilities that are settled by delivering cash or another financial asset.

The Company's approach to manage its liquidity risk is to ensure, to the extent possible, always having enough liquidity to meet its obligations when they fall due, without affecting the performance of the business or damage the image and reputation of Vitro.

The Company's Board of Directors is responsible for establishing an appropriate framework of liquidity risk management according to the Company's needs. The Company manages its liquidity risk by maintaining bank reserves and through a constant monitoring of cash flows.

In previous years, the Company's main source of liquidity has been predominantly cash generated from operating activities in each one of the business units and sale of certain assets. In addition, the Company has designated certain assets as available for sale, which also support the reduction of this risk.

Following are the contractual maturities of the debt as of December 31, 2017 and the related interest:

	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
Maturities at fixed interest rates				
In U.S. dollars	$ 129	$ 258	$ 213	$ 11
Maturities at variable interest rates				
In U.S. dollars	773	8,038	8,060	
Total financial liabilities	$ 902	$ 8,296	$ 8,273	$ 11

The amount shown in the table above were calculated according to the following procedure: a) repayments of principal in foreign currency were translated into Mexican pesos at the exchange rate in effect at the reporting date; and b) interest payments were calculated using the interest rate in effect at the same date and were translated into Mexican pesos using the exchange rate referred to above, as applicable.

As of December 31, 2017, the Company has available cash and cash equivalents for $3,549, and has access to unused working capital credit line for approximately US$30.

iv. *Fair value of financial instruments*

The fair value of financial instruments that are presented below has been determined by the Company using the information available in the market or other valuation techniques which require judgment to develop and interpret the estimates of fair values. It also uses assumptions that are based on market conditions existing at each of the balance sheet dates. Consequently, the estimated amounts presented are not necessarily indicative of the amounts that the Company could realize in a current market exchange.

The levels that cover 1 to 3, based on the degree to which the financial instruments fair value is observed, are:

- Level 1 are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 are those derived from indicators other than quoted prices included within Level 1, but which include indicators that are observable for an asset or liability, either directly to prices quoted or indirectly; i.e. derived from these prices; and
- Level 3 are those derived from valuation techniques that include indicators for assets and liabilities, which are not based on observable market information (non-observable indicators).

The Company's amounts of cash and cash equivalents, as well as accounts receivable and payable to third parties and related parties, and the current portion of bank loans and long-term debt approach their fair value, as they have short term maturities. The Company's long-term debt is recorded at amortized cost and consists of debt that bears interest at fixed and variable rates which are related to market indicators. To obtain and disclose the fair value of long-term debt, different sources and methodologies are used such as: market quotation prices or quotations of agents for similar instruments; other valuation techniques for the cases of those liabilities that have no price in the market and is not feasible to find quotes of agents for similar instruments.

Below are the fair values of the debt, together with the carrying amount that are shown in the consolidated statement of financial position:

	December 31, 2016		December 31, 2017	
	Carrying amount	Fair value	**Carrying amount**	**Fair value**
Debt (recorded at amortized cost):				
Debt and bank loans	$ 10,585	$ 10,585	$ **13,557**	$ **14,850**

The debt assumed by the Company, presented in the previous table, occurred at the end of fiscal year 2016, and therefore it is new long-term debt, reason why the Company's management considers that its fair value as of December 31, 2016 is similar to its carrying amount. During the fiscal years ended December 31, 2016 and 2017, there were no transfers between Level 1 and 2 inputs.

v. *Other market price risks*

In the ordinary business course, the Company has contracted calls and swaps and other derivate instruments in order to mitigate and hedge its exposure to natural gas and electricity price fluctuations. The estimated percentage of fuel consumption covered has varied from 10% to 100%. The percentage of covered consumption and the covered prices varied constantly according to market conditions based on the needs of the Company and the use of alternative fuels within their production processes.

The derivate financial instruments that the Company held during 2016 and 2017 were calls and swaps, which were acquired due to the need to economically cover the fluctuation price of natural gas and electricity used by some of the Company´s plants. Those DFIs, were not designated as a hedge for accounting purposes, therefore, fluctuations in fair value are recognized in current earnings within net financial cost.

The following table shows the active positions and their characteristics for the years ended December 31, 2016 and 2017:

Type of Instrument	Type of Underlying	Annual Notional in MMBTUs	Average Price	Initial Date	Maturity Date
Call	Natural Gas	90,000	US$ 3.55	08-Sep-17	26-Sep-18
Call	Natural Gas	90,000	US$ 3.50	21-Nov-17	27-Nov-18
Call	Natural Gas	90,000	US$ 3.50	09-Ago-17	26-Jul-18
Swap	Natural Gas	4,046,413	US$ 2.974	27-Oct-17	31-Dec-19

Type of Instrument	Type of Underlying	Annual Notional in MWHs	Average Price	Initial Date	Maturity Date
Swap	Electricity	613,200	US$ 24 -32.7	01-Jan-18	31-Dec-18

The effects of the aforementioned DFI's in profit and loss of fiscal years ended December 31, 2016 and 2017 are described in Note 22.

18. Commitments

The Company entered into various operating lease agreements relating mainly to the lease of warehouses and equipment which represented charges to the profit or loss of 2016 and 2017 for $257 and $375, respectively. Certain lease agreements have purchase and/or renewal options at market value at the end of their term, which exercise is not certain at the reporting date.

The estimated future obligations derived from these agreements are as follows:

	Amount
2018	$ 81
2019	41
2020	24
2021	20
2022	18
2023 and thereafter	66

Power purchase

In October 2000, some of the Vitro subsidiaries with plants around the states of Nuevo León and Estado de México entered into a power-purchase agreement for 15 years, for approximately 45 Megawatts of electricity and 1.3 million tons of water steam per year, with Tractebel Energía de Monterrey, S. de R.L. de C.V. whereby the supply started in April 2003. This supply contract contains energy purchase obligations for approximately 45 Megawatts of electricity and 1.3 million tons of steam per year, with Tractebel Energía de Monterrey, S. de R.L. de C.V.

Likewise, in August 2015, some of the Vitro subsidiaries, with plants around Monterrey, and Estado de México, entered into a power-purchase agreement for 15 years with the same counterparty, whose supply begins in February 2018, which could be terminated by either party once elapsed half of its validity. This agreement contains power purchase obligations for approximately 69 Megawatts of electricity and 1.3 million tons of water steam per year, and is subject to certain conditions established in the covenant.

Once the agreement´s has entered into force, also are Vitro's operations within Wholesale Power Market in Mexico; thus, Vitro could, if it suits its' interests, place on sale in such market totally or partially any amount of power associated with this agreement.

19. Capital and reserves

Capital management

The Company's objective on managing its capital structure is to safeguard its ability to continue as a going concern, and at the same time maximize the return to its stockholders through a proper balance in their funding sources. In order to maintain this structure, the Company carries out various actions such as: efficiently managing working capital, adjusting the dividends paid to stockholders according to free cash flows generated, cancelling and/or issuing new shares and/or debt, or the investment or disinvestment in assets.

The Company, through the Board of Directors, permanently assesses the cost and risks associated with its capital structure. This assessment is primarily based on the proportions of debt, debt to EBITDA of the past 12 months, and interest coverage. The proportion of debt represents the debt ratio to total assets; the EBITDA is calculated based on the income before other income and expenses and adding the virtual items reflected in the statement of comprehensive income, within the cost of sales and operating expenses, mainly depreciations, amortizations and the seniority premium and pension plan reserves. Lastly, the interest coverage is calculated by dividing the EBITDA by the interest expense of the last twelve months interest expense of the analyzed period. Vitro has a long-term goal of maintaining debt financial ratio within a 1.5 and 2.0 times span for indebtedness ratio, less than 3 times for debt to EBITDA, and greater than 5 times for interest coverage. As of December 31, 2017, the results of the calculation of each one of the aforementioned financial ratios were of 0.26 for indebtedness ratio, 1.75 times for debt to EBITDA, 1.29 times for the net debt ratio of cash to EBITDA and 8.42 times for interest coverage ratio. If twelve months were considered in EBITDA for the acquired companies, the results of the calculation of each of the financial ratios would have been 1.71 times for the debt to EBITDA ratio, 1.26 times for effective net debt to EBITDA ratio and 10.25 times for interest coverage ratio.

Common stock structure

a) As of December 31, 2016 and 2017, the Company's capital stock amounts to 483,571,429 common shares, fully subscribed and paid, and without par value.

b) Retained earnings include the statutory legal reserve. The General Corporate Law requires that at least 5% of net income of the year be transferred to the legal reserve until the reserve equals 20% of capital stock at par value (historical pesos). The legal reserve may be capitalized but may not be distributed unless the entity is dissolved. The legal reserve must be replenished if it is reduced for any reason.

c) At an Ordinary General Stockholders' Meeting held on April 11, 2017, the stockholders agreed to declare and pay dividends at a rate of US$0.0455 per share. Likewise, at an Ordinary General Stockholders' Meeting held on March 30, 2017, the stockholders agreed to declare and pay dividends at a rate of US$0.0517 per share.

d) At an Ordinary General Stockholders' Meeting held on March 30, 2017 the repurchase of own shares was approved for a maximum $500. During 2017, the Company repurchased 2,774,280 shares for an amount of $196.

e) As for December 31, 2016 and 2017 the Company held 3,219,780 of own shares.

f) Stockholders' equity, except for restated paid-in capital and tax retained earnings will be subject to income tax payable by the Company at the rate in effect upon distribution. Any tax paid on such distribution may be credited against annual and estimated income tax of the year in which the tax on dividends is paid and the following two fiscal years.

Balances of the controlling interests in the tax accounts of the stockholders' equity corresponding to the capital contribution account and the net taxable income account amounted to $46,812 and $20,084 as of December 31, 2016, and $48,385 and $20,169 as of December 31, 2017, respectively.

g) Other components of comprehensive income

Cumulative translation adjustments

The movement of the period is recorded when translating the financial statements from the functional currency to the reporting currency. During the period 2016 and 2017, there were no extraordinary movements affecting the cumulative balance of the translation adjustment recognized within the stockholders' equity.

Actuarial remeasurements

Actuarial remeasurements are recognized as other components of comprehensive income. During December 31, 2016 and 2017, the actuarial remeasurements correspond solely to variations in actuarial assumptions for both the labor liability and the plan assets, and are presented net of income taxes.

Following is an analysis of the movements of the other comprehensive income accounts of the controlling interests:

		Cumulative translation adjustments		Actuarial remeasurements		Total other comprehensive income
Balance as of January 1, 2016	$	184	$	(26)	$	158
Comprehensive income movement		1,019		583		1,602
Balance as of December 31, 2016		1,203		557		1,760
Comprehensive income movement		(201)		(283)		(484)
Balance as of December 31, 2017	$	1,002	$	274	$	1,276

h) **Non-controlling interest is as follows:**

	December 31,			
		2016		**2017**
Capital stock	$	12	$	12
Retained earnings		6		7
	$	18	$	19

On August 18, 2016, Vitro and its minority partner Pilkington entered into a sale and purchase agreement of the participation that the latter had on Vitro's the flat glass business at a purchase price settled in US$16.

i) **Basic and diluted earnings (loss) per share**

The earnings and number of common shares used for the calculation of the basic and diluted earnings per share are as follows:

	Year ended December 31,			
		2016		**2017**
Earnings from continuing operations attributable to controlling interest	$	3,618	$	3,668
Weighted average of common shares for calculation of basic and diluted earnings per share		483,125,929		482,702,587
Earnings per share from continuing operations	$	7.49	$	7.60

As of December 31, 2016 and 2017, basic and diluted earnings per share amount to the same figure as there were no dilution effects affecting the average of common shares for such calculations during the years then ended.

20. Related parties

Transactions with related parties, carried out in the ordinary course of business, were as follows:

a) **Products sold.-** The Company held operations for sales of services, technical advisory, and sales of spare parts and finished goods with Comegua, an associated company; these operations amounted to approximately $39 and $51, for the years ended December 31, 2016 and 2017, respectively.

b) **Purchase of food coupons.-** The Company purchases food coupons for its staff from a self-service store, of which one of our advisors is a stockholder. For the years ended December 31, 2016 and 2017, the amount of those purchases was $90 and $97, respectively.

c) **Compensation to management's key personnel.-** For the years ended December 31, 2016 and 2017, the total compensation for the services provided by our advisors and directors was approximately $113 and $197, respectively. This amount includes fees, wages, variable compensation and retirement bonuses. The variation between both years is mainly due to the incorporation of executives from the acquired companies.

21. Other expenses (income), net

The analysis of other expenses (income), net is as follows:

	Year ended December 31,			
		2016		**2017**
Impairment of long-lived assets (Note 9c)	$	136	$	143
Results on sale and cancelation of assets		71		46
Reorganization expenses		16		91
Bargain purchase (Note 11)		–		(73)
Other expenses (income), net		72		(581)
Total	$	295	$	(374)

22. Financial income (cost), net

Below is a breakdown of the most significant items that compose financial income (cost):

	Year ended December 31,	
	2016	**2017**
Interest expenses	$ (129)	$ (707)
Financial products	51	12
Restatement of taxes on tax consolidation	(132)	(240)
Derivative financial transactions	(11)	37
Exchange gain (loss), net	703	172
Employee benefits interest expense, net	34	97
Other financial expenses, net	(40)	(77)
Total	$ 476	$ (706)

23. Income taxes

Income taxes recognized in earnings are analyzed as follows

	Year ended December 31,	
	2016	**2017**
Current income taxes	$ 125	$ (50)
Deferred income taxes	371	1,307
Total	$ 496	$ 1,257

The reconciliation between the Company's actual income tax rate and that established in the Law, expressed as a percentage of income before income taxes, is analyzed as follows:

	Year ended December 31,	
	2016	**2017**
Actual rate	12%	26%
Foreign companies	1	(1)
Inflation	5	7
USA rate change	–	(1)
Valuation allowance for tax losses	15	(2)
USA loss carryback [1]	–	3
Nondeductible expenses and others	(3)	(2)
Rate established in the Law	30%	30%

[1] During 2017, some subsidiaries in the USA generated tax losses, which, according to local tax legislation, can be carried back and amortized against the income taxes paid in previous years, in this case 2016; the recognized effect was a benefit of US $8.1, recorded as a decrease in the current tax for the year.

The movements of the deferred tax asset balance in the fiscal year are as follows:

	Year ended December 31,	
	2016	**2017**
Opening balance	$ 3,609	$ 3,161
Income tax applied to income	(371)	(1,307)
Business acquisition (note 11)	(1)	(43)
Actuarial re measurements	(143)	(64)
Effect of hedges and restatement	67	(3)
	$ 3,161	$ 1,744

The main temporary differences that gave rise to deferred income taxes in the consolidated statements of financial position are analyzed as follows:

	December 31,			
		2016		**2017**
Accounts receivable	$	130	$	132
Employee benefits		139		103
Tax losses carryforwards		2,735		1,578
Intangible assets		899		844
Fixed assets		219		54
Derivative financial instruments		35		36
Inventories		69		58
Other		(124)		(104)
Deferred income tax asset	$	4,102	$	2,701
Accounts receivable	$	(100)	$	(77)
Employee benefits		72		154
Tax losses carryforwards		(80)		(151)
Fixed assets		656		663
Derivative financial instruments		35		35
Other		358		333
Deferred income tax liability	$	941	$	957

As of December 31, 2017, the Company has tax loss carryforwards of $9,128, which have the right to be applied to future income and expire as follows:

Expiration in:		Amount
2018	$	530
2019		209
2020		234
2021		838
2022		144
2023		1,657
2024		1,285
2025		491
2026		1,122
2027 and thereafter		2,066
	$	8,576

In the determination of deferred income tax, according to the preceding subsections, the effects of tax loss carryforwards of $1,185 and $1,215 were included; for subsidiaries in Mexico and abroad, respectively, which were not recognized as assets because there is not a high probability that they can be recovered.

The income taxes recognized in other components of comprehensive income are analyzed as follows:

	Year ended December 31,			
		2016		**2017**
Hedging of foreign operations and restatement effect	$	12	$	–
Actuarial re measurements of benefits plan		(143)		(64)
Total income taxes recognized in other components of comprehensive income	$	(131)	$	(64)

24. Operating segments

An operating segment is a Company's component that is engaged in business activities for which it can earn income and incur expenses, including income and expenses relating to transactions with any of the other components of the Company. All the operation results of the operating segments are reviewed periodically by the Company's management to make decisions on the resources that must be distributed to the segment and assess their performance.

Transactions between segments are determined based on comparable prices to those that would be used with or between independent parties in comparable transactions.

The accounting, administrative and operating policies are the same as those described by Vitro. The Company evaluates the performance of its segments based on operating income. Sales and transfers between segments are recorded in each segment as if they were made to third parties; i.e. at market prices.

The segments reporting in Vitro are strategic business units that offer different products. These segments are managed separately; each requires its own system of production, technology, and marketing and distribution strategies. Each market serves to different customer bases.

The Company has two operating segments to be reported: Flat Glass and Glass Containers. The primary products of each one of the segments are:

Segment	Primary products
Flat glass	Flat glass for the construction and automotive industries, and carbonate and sodium bicarbonate.
Glass containers	Glass containers, precision components, as well as machinery and molds for the glass industry.

The holding, corporate and other companies are not classified as an operating segment according to IFRS 8, "Operating segments", they are classified in the "Others" column.

a) **Following certain information is presented by segments:**

Year ended December 31, 2016	Flat Glass	Glass Containers	Subtotal	Others and eliminations	Consolidated
Total sales	$ 15,205	$ 4,491	$ 19,696	$ 144	$ 19,840
Sales to other segments	6	17	23	(23)	–
Consolidated net sales	15,199	4,474	19,673	167	19,840
Income before other (expenses) income, net	2,960	882	3,842	(63)	3,779
Interest income	1,513	821	2,334	(2,283)	51
Interest expense	936	1,791	2,727	(2,466)	261
Equity in income of associates	–	102	102	–	102
Income (loss) before income taxes	2,921	1,489	4,410	(348)	4,062
Income taxes	664	555	1,219	(723)	496
Depreciation and amortization	771	198	969	56	1,025
Investment in fixed assets	1,561	509	2,070	84	2,154
Loss from impairment of long-lived assets	136	–	136	–	136

As of December 31, 2016	Flat Glass	Glass Containers	Subtotal	Others and eliminations	Consolidated
Investment in associated	$ 1,979	$ 22,191	$ 24,170	$ (22,409)	$ 1,761
Goodwill	963	–	963	–	963
Total assets	63,813	51,112	114,925	(69,494)	45,431
Total liabilities	30,550	40,559	71,109	(50,394)	20,715

Year ended December 31, 2017	Flat Glass	Glass Containers	Subtotal	Others and eliminations	Consolidated
Total sales	$ 34,750	$ 4,092	$ 38,842	$ 106	$ 38,948
Sales to other segments	13	19	32	(32)	–
Consolidated net sales	34,737	4,073	38,810	138	38,948
Income before other (expenses) income, net	4,651	759	5,410	(267)	5,143
Interest income	1,407	414	1,821	(1,810)	12
Interest expense	1,162	1,937	3,099	(2,172)	927
Equity in income of associates	13	102	115	–	115
Income (loss) before income taxes	5,643	(941)	4,702	224	4,926
Income taxes	960	103	1,064	193	1,257
Depreciation and amortization	1,866	216	2,082	40	2,122
Investment in fixed assets	2,560	455	3,015	57	3,072
Loss from impairment of long-lived assets	139	4	143	–	143

As of December 31, 2017	Flat Glass	Glass Containers	Subtotal	Others and eliminations	Consolidated
Investment in associated	$ 834	$ 23,935	$ 24,769	$ (22,990)	$ 1,779
Goodwill	1,189	–	1,189	–	1,189
Total assets	77,939	53,921	131,860	(79,255)	52,605
Total liabilities	37,130	45,039	82,169	(56,799)	25,370

b) Information related to main customers

Consolidated net sales conducted by the Company to a single customer in the glass containers segment presented two cases of concentration, whose amounts were higher than 10% for the years ended December 31, 2016 and 2017.

In addition, in the flat glass segment, there is a single case of concentration of sales to a single customer, whose amounts were greater than 10% for the fiscal year ended December 31, 2016 and 2017.

c) Geographical information

Certain geographical information regarding the Company's transactions is summarized as follows:

	Year ended December 31,	
	2016	**2017**
Net sales to customers [(1)] in:		
Mexico	$ 11,344	$ 11,802
Abroad, mainly to the USA	8,496	27,146

[(1)] According to the country where the Company is located.

The geographic information of land and buildings, machinery and equipment, and investments in process is summarized as follows:

	December 31,	
	2016	**2017**
Lands and buildings, machinery and equipment and investments in process:		
Mexico	$ 10,395	$ 11,437
Abroad, mainly in the USA	6,953	11,634

The other non-current assets other than monetary items are summarized as follows:

	December 31,	
	2016	**2017**
Intangible asset, including goodwill:		
Mexico	$ 38	$ 139
Abroad, mainly in the USA	6,962	6,759

25. Authorization to issue the financial statements

On February 6, 2018, the issuance of the accompanying consolidated financial statements and notes thereto was authorized by Adrián Sada Cueva, Chief Executive Officer, and Claudio L. Del Valle Cabello, Chief Administrative and Financial Officer.

These consolidated financial statements are subject to the approval at the ordinary stockholders' meeting, where they may be modified, based on provisions set forth in the Mexican General Corporate Law.

Information for Shareholders

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STOCK MARKET

Bolsa Mexicana de Valores (BMV)
Ticker Symbol
VITROA

Dividend Policy

The declaration, amount and payment of dividends, are determined by the majority of shareholders entitled to vote at the Ordinary General Shareholders' Meeting. This decision is generally based on the recommendation of the Board of Directors. The terms and conditions for dividend payment, declared by the relevant Ordinary General Shareholders' Meeting, are generally proposed by the Board of Directors, whose purpose regarding dividends is to maintain a sound financial structure that allows the Company to pay dividends consistently.

This annual report refers to various brands, which are the property of their respective owners, for the sole purpose of informing the performance of Vitro's industrial and commercial activities to its shareholders and the general public, to comply with legal requirements applicable to companies that are listed on stock markets. This annual report may contain certain forward-looking statements and information related to Vitro, S.A.B. de C.V. ("Vitro" or "The Company") and its subsidiaries, which reflect Vitro's current outlook and/or expectations regarding its performance, business and future events. Forward-looking statements include, without limitation, any statement that may predict, project, indicate or imply future results or events, performance or achievements, and may contain such words as "believe", "anticipate", "expect", "estimate", "could", " foresee", "potential", "could be", and other words and phrases of similar meaning. Such statements are subject to several risks, uncertainties and assumptions. We caution you, that a number of important factors could cause actual results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in this document. In no event shall Vitro or any of its subsidiaries, affiliates, shareholders, executives, general managers, agents or employees be liable to third parties (including investors) for any investment, business decision of any type or action taken contingent on the information or statements contained within this document, or any consequential, special or similar damage. This document and its contents are proprietary information, and may not be reproduced or disseminated, complete or partially, without Vitro's prior written consent.