TRANSFORMING AND EVOLVING WITH VISION

Vitro®

2022 Integrated Annual Report

VITRO 2022 INTEGRATED ANNUAL REPORT

Transforming and evolving with vision

For Vitro, transformation is an essential way of adapting and moving forward in a constantly changing world. At the same time, this sustained evolution will allow us to thrive in the long term, both as a corporation and as a part of the community at large.

The sustainability approach that is embedded in our business strategy is an opportunity for our company to stand for ethics and integrity, to optimize its market position, enhance its efficiency and reduce its financial risks and social impact over the long term.

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WE ARE VITRO

Vitro is the leading glass manufacturer in North America and one of the largest in the world, with more than 110 years of experience in the industry.

MESSAGE TO OUR STAKEHOLDERS

GRI 2-22, 2-26

Given the extraordinary circumstances under which our company operated in 2022, it was clearly a year of significant progress. The growth we achieved reflects a recovery in some of our markets, the emphasis we placed on customer experience and, more importantly, the operating discipline we are known for.

During the year, we faced daunting challenges, operating in a volatile global financial and social environment marked by the lingering effects of the COVID-19 pandemic and the war between Russia and Ukraine, which disrupted the supply of inputs for ourselves and our customers and drove steep inflation in commodities and energy prices.

Despite these socioeconomic conditions, we were able to advance strongly on various fronts. We invested heavily in growing the architectural glass and container businesses; while the installation of additional capacity for high-technology solar control products and in the premium container segment, where we built an additional furnace, will begin to bear their first fruits toward the end of the first half of 2023.

We continued to expand through innovation projects in all of our businesses, and by the close of 2022, we had succeeded in strengthening in our financial position, which will support us as we continue seeking out growth opportunities for all our businesses.

MARKET CONDITIONS

LThe business strategy followed by Vitro and its subsidiaries is grounded in value creation. In 2022, we continued to prioritize projects and programs with an attractive return on investment and strict cost and expense controls.

In 2022, our Glass Containers and Architectural Glass divisions benefited from strong demand for our products, while demand for automotive glass remained depressed due to significant industry disruptions resulting from a shortage of labor in some regions of the United States and a lack of components.

The impact on the glass market, primarily in the automotive industry, remains a pressing concern for our company.

The greatest challenge to our team is quickly adapting to this new environment and pace of work while maintaining strict discipline in caring for our employees and customers.

BY ADVANCING FURTHER IN THE EXECUTION OF VITRO'S EXCELLENCE MODEL, WE SUBSTANTIALLY IMPROVED OUR PRODUCTIVITY AND OPERATIONS MANAGEMENT

FINANCIAL POSITION

We are pleased to note that after a couple of very difficult years as we dealt with the impact of the pandemic on our business, 2022 was a year of progress in which we recovered the company's financial strength. During the year, despite the huge challenge and impact of unexpected inflation, we were able to improve our EBIT generation by 37.1% and our EBITDA by 307.3%. We also succeeded in lowering our debt ratio from 3.1 to 2.2.

SUSTAINABLE DEVELOPMENT

We are committed to continuous improvement and determined to achieve our sustainability goals. In this effort, solid governance is crucial. In 2022, we decided to create a Sustainability Committee for our operations, resulting in a plan to ensure that Vitro can continue to deliver on its social commitment to the communities where we operate.

One example of this commitment was our response to a period of drought in various municipalities of Mexico in 2022. To help communities weather the effects of this natural phenomenon, Vitro contributed more than 1,101,149 m3 of water through the corresponding authorities. Some of this was distributed directly to our employees and their families through tanker trucks and jugs of drinking water. Furthermore, we invested around USD$100,000 to prepare a ground well and supply this resource to the city. Because we know this problem will continue to affect our neighbor communities, Vitro will contribute another 587,500 m3 of water in 2023.

We also began working together with the municipal government of San Pedro Garza Garcia in the state of Nuevo Leon to achieve LEED® for Cities certification. The aim is to improve quality of life for local residents through comprehensive sustainable planning, to make this the first municipality in Mexico to obtain this certification and become a sustainable city.

Vitro will be the only sponsor in this initiative, contributing the funds to cover the cost of consulting firms appointed by the municipality (Bioconstrucción y Energía Alternativa S.A. de C.V. and Three Consultoría Medioambiental S.A. de C.V.) to assemble, draft and complete preparation of the review documents, and manage the review process according to the requirements of the LEED for Cities program.

On another note, Vitro is also committed to conservation of bird species, particularly ecosystems surrounding the National Aviary in Pittsburgh PA. In 2022 we made a USD$25,000 contribution as well as an in-kind donation of raw glass, valued at approximately USD$40,000, to be installed in the renovated wetlands habitat. This space will require more than 6,000 square meters of bird-friendly AviProtek® glass made by our architectural glass division. This new kind of glass was designed to avoid bird collisions and maximize ultraviolet (UV) transmission with Starphire® glass, helping to maintain wildlife and plants throughout the year.

Additionally, in 2022 we invested more than USD$2,775,000 in 45 projects at the organization's manufacturing sites, helping to reduce energy and water consumption as well as atmospheric emissions and waste generation. Using the year 2018 as a baseline, our improvement projects and efficiency metrics in recent years have brought a reduction of more than 10% in our greenhouse gas emissions, and a 6% reduction in the energy intensity of our products.

Transformation to create value

We know we must always be evolving to maintain our competitive advantage in the industries where we participate, so we will continue to transform our culture of effective execution, while maturing and promoting our Vitro model of operating excellence, which involves world-class manufacturing and operating practices. We intend to use this model to build our competitive edge and our positioning in performance and efficiency, optimizing service and product quality.

Looking toward the future, we are optimistic and confident in our capacity to continue building value for our shareholders. We have strong positions and clear competitive advantages in the segments where we participate, in addition to a portfolio of growth opportunities that we will continue to explore and capture.

Now more than ever, we are confident that all of these efforts, our solid relationship with our loyal customers, the efforts of our employees, and particularly the support and trust of our shareholders, will allow us to discover the full potential of glass.

Adrián Sada González
Chairman of the Board of Directors

Adrián Sada Cueva
Chief Executive Officer

OUR STORY: TRANSFORMING OURSELVES TO GROW

Since our founding in 1882, Vitro has remained at the forefront of innovation in the glass industry, growing from one plant in Pittsburgh, Pennsylvania, to become the company we are today, constantly surpassing expectations and earning widespread recognition for innovative solutions that are used in some of the world's most essential industries.

1883

The company Pittsburgh Plate Glass (PPG) opened the first glass factory in the United States.

1909

Vidriera Monterrey, the first glass container plant, starts up operations in Monterrey, Nuevo León

1920

PPG becomes one of the first companies to successfully mass produce glass with a patented process.

1929

Vitro opens its first flat glass plant in Nuevo León.

1934

PPG creates Solex, the first tinted, heat-absorbing environmental glass

1960

Vitro begins making automotive glass.

1963

PPG becomes the first glass producer in the US to use the float glass process.

1968

The first float glass line starts up operation in Mexico.

1991

The Glass Museum opens its doors, with the aim of recording, preserving and promoting the history of glass.

1996

Vitro Colombia is created to produce and distribute automotive and architectural glass.

2007

One of the largest glass container plants in the world begins serving the needs of the CFT market.

2008

Vitro obtains "Socially Responsible Enterprise" distinction for the first time.

2016

Vitro, S.A.B. de C.V. acquires PPG Flat Glass, retaining the products, plants, people and proven processes that made the company an industry leader.

2017

Vitro completes the purchase of Pittsburgh Glass Works from LKQ Corporation, strengthening the company's automotive glass portfolio with cutting-edge technology and an automotive float glass plant in Meadville, Pennsylvania.

2019

Vitro celebrates 110 years as leader in the glass industry through its state-of-the-art products and processes, always striving for sustainable development for itself as a company, for its people and the communities where it operates.

VITRO IN FACTS AND FIGURES

GRI 2-1, 2-7, 201-1

With more than 110 years of experience in this industry, Vitro is one of the largest glass manufacturing companies in North America and one of the largest in the world. It offers quality products and reliable services to serve two segments of the market: glass containers and flat glass, used by millions of people every day. Vitro offers solutions to multiple markets like cosmetics, fragrances and pharmaceuticals, as well as architectural and automotive glass. It also supplies chemicals and raw materials, machinery and equipment for industrial use.

As a socially responsible company, Vitro has various initiatives within the framework of its Sustainability Model to positively influence economic, social and environmental aspects that affect or involve its stakeholders, through responsible corporate management.

US 2,352
BILLION IN SALES

37
countries where we are present

24
plants around the world

14,770
employees

OUR COMPANIES

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

ARCHITECTURAL

- Especialidades en Cristal, S.A. de C.V.
- Ilumimex, S.A. de C.V.
- Soluciones Vitro Plano, S.A. de C.V.
- Vidrio Plano de México, S.A. de C.V.
- Vitro Arquitectónico España, S.L.U. [1]
- Vitro Arquitectónico, S.A. de C.V.
- Vitro Flat Glass Canada Inc. [3]
- Vitro Flat Glass LLC. [2]
- Vitro Meadville Flat Glass LLC. [2]
- Vitro Panamá, S.A. [12]

AUTOMOTIVE

- Cristales Automotrices, S.A. de C.V.
- Cristales Inastillables de México, S.A. de C.V.
- Cristales y Servicios, S.A. de C.V.
- PGW Technik GmbH [4]
- Pittsburgh Glass Works Hong Kong, Limited [5]
- Pittsburgh Glass Works LLC. [2]
- Pittsburgh Glass Works, GmbH [4]
- Pittsburgh Glass Works, S.ar.l. [6]
- Pittsburgh Glass Works, Sp.z.o.o [7]
- Shandong PGW Jinjing Automotive Glass Co. Ltd [8]
- Vitemcoecuador, S.A. [9]
- Vitro Autoglass LLC. [2]
- Vitro Automotive Glass Canada Ltd [3]
- Vitro Automotriz UE, S.L.U. [1]
- Vitro Colombia, S.A.S. [10]
- Vitro Vidrio Automotriz, S.A. de C.V.
- Vitrocar, S.A. de C.V.

CONTAINERS

- Vidriera Toluca S.A. de C.V.
- Vitro Do Brasil Industria e Vidrio e Comercio, Ltda. [11]
- Vitro Empaques, S.L.U [1]
- Vitro Envases, S.A. de C.V.
- Vitro Packaging LLC. [2]

FAMA

- Fabricación de Maquinas S.A. de C.V.
- Vitro Automatización, S.A. de C.V.

CHEMICALS

- Industria del Álcali, S.A. de C.V.
- Industria del Álcali, UE, S.L.U (1)
- Vitro Chemicals, Fibers & Mining LLC. [2]

CORPORATIVES

- Aerovitro, S.A. de C.V.
- Vitro Vidriera Monterrey, S.A. de C.V.
- Vitro Assets Corp. [2]

[1] Companies in Spain
[2] Companies in the US
[3] Companies in Canada
[4] Companies in Germany
[5] Company in Hong Kong
[6] Company in Luxembourg
[7] Company in Poland
[8] Company I China
[9] Company in Ecuador
[10] Company in Colombia
[11] Company in Brazil
[12] Company in Panama

VITRO BRANDS

GRI 2-6

In a process of continuous evolution, our brands have positioned themselves among the best of many markets where we participate. To continue fortifying this portfolio, in 2022 we launched various initiatives, one of which was the VitroSphere® tool in our Architectural Glass division, a digital architectural glass simulator that allows the user to compare more than 20 Solarban® products under three different lighting conditions (times of day) and three types of view (interior and exterior) applied to five types of commercial buildings.

Vitro Vidrio Arquitectónico ▶ Vitromart Distribuidor Vidriero LAN ▶ Lumax® ▶ SOLARBAN® Solar Control Low-E Glass

Solarban ™
Solarban ™ 60
Solarban ™ 67
Solarban ™ 70 XL
Solarban ™ 72
Solarban ™ 90
Solarban ™ R100
Solarban ™ z50
Solarban ™ z75
Solarban ™
Solarban ™ Pacifica
Solarban ™ Solarblue
Solarban ™ Azuria

Solarcool ™ Solargray
Solarcool ™ Solarbronze
Vistacool ™
Vistacool ™ Pacifica
Vistacool ™ Azuria

CLEAR
Klare ™
Aquity ™
Starphire ™
Filtrasol ™
Filtraplus ™
Tintex ™

Tintex Plus ™
Solarblue ™
Vitrosol ™
Optigray ™
Azuria ™
Pacifica ™
Optiblue ™
Platia ™
Reflectasol ™
Blindex ™
Pyrosol ™
Pavia ™
Kolore ™

Vitro Vidrio Automotriz ▶ Vitrocar | VPM | VIT VITEMCO S.A. | CRINAMEX S.A. DE C.V. Seguridad

Vitro Envases

SUNDRY INDUSTRIES ▶ FAMA by Vitro ▶ ALCALI ▶ Sal Hada Desde 1965

GLOBAL PRESENCE

SALES BY DESTINATION 2022

- Argentina
- Australia
- Austria
- Belgium
- Brazil
- Canada
- Chile
- China
- Colombia
- Costa Rica
- Dominican Republic
- Ecuador
- El Salvador
- France
- Germany
- Guatemala
- Hong Kong
- Hungary
- India
- Ireland
- Israel
- Italy
- Japan
- Korea
- Malaysia
- Mexico
- Nicaragua
- Panama
- Peru
- Poland
- Puerto Rico
- Saudi Arabia
- Singapore
- Slovakia
- Spain
- Sweden
- Switzerland
- Thailand
- Trinidad and Tobago
- Turkey
- United Arab Emirates
- United Kingdom
- United States
- Uruguay

OUR LOCATIONS

- Brazil
- Canada
- China
- Colombia
- Ecuador
- Germany
- Luxembourg
- Mexico
- Panama
- Peru
- Poland
- Spain
- United States

FINANCIAL PERFORMANCE

GRI 2-22, 201-1

Vitro, S.A.B. de C.V. and Subsidiaries
Financial data highlights
(Figures in millions of U.S. dollars under IFRS unless otherwise

	US Dollars [1]		
	2022	2021	% change [2]
Income Statement			
Consolidated net sales	**$ 2,352**	$ 1,958	20.2
Domestic	**683**	614	11.2
Export	**344**	291	18.0
Offshore subsidiaries	**1,326**	1,052	26.0
Earnings before others (EBIT)	**86**	21	308.0
Net earnings	**17**	(107)	
Majority net loss	**18**	(107)	
Majority net loss per share [3]	**0.04**	(0.23)	
EBITDA [4]	**280**	204	37.1
Balance sheet			
Total assets	**2,558**	2,539	0.7
Total liabilities	**1,352**	1,339	1.0
Total shareholders' equity	**1,206**	1,200	0.5
Majority shareholders' equity	**1,206**	1,200	0.5
Financial Indicators			
Debt / EBITDA (times)	**2.7**	3.6	
Net debt / EBITDA (times) [6]	**2.2**	3.1	
Interest coverage (times)	**7.6**	7.8	
(EBITDA / total net interest expense)			
EBIT margin (%)	**4%**	1%	
EBITDA margin (%)	**12%**	10%	
Number of employees	**14,770**	14,598	1.2
Capex [5]	**$ 152**	$ 106	43.7

[1] The functional currency for the company since 2018 has been the U.S. dollar.
[2] Change from 2021 to 2022.
[3] Based on the weighted average number of shares outstanding.
[4] EBITDA = operating income before others, plus depreciation, amortization and employee pension fund obligations.
[5] Represents investment in fixed asset during the fiscal year, and therefore differs from investments presented under International Financial Reporting Standards (IFRS).
[6] Debt net of cash and equivalents.
Financial figures are presented in accordance with International Financial Reporting Standards (IFRS).

CONSOLIDATED NET SALES

Figures in millions of U.S. dollars

NET SALES FLAT GLASS

Figures in millions of U.S. dollars

NET SALES CONTAINERS

Figures in millions of U.S. dollars

NET SALES INORGANIC CHEMICALS

Figures in millions of U.S. dollars

OPERATING INCOME (BEFORE OTHER INCOME AND EXPENSE)

Figures in millions of U.S. dollars

CONSOLIDATED EBITDA

Figures in millions of U.S. dollars

CAPEX

Figures in millions of U.S. dollars

OUR PHILOSOPHY

GRI 2-23

These results can only be achieved with solid governance and with an approach to doing business according to the highest standards of integrity and honesty.

Nuestra Mission:

We redefine the power of collaboration to generate value and bring innovative glass solutions to our customers and communities.

Our Vision:

Together we will discover the full potential of glass to improve how we move, build and live in the future.

Our Values:

Customer centricity: Our customers are at the heart of everything we do.

Operating excellence: Always going beyond what is expected of us, with greater efficiency, confidence and quality.

Innovation: Bringing new ideas to processes and operations in order to continuously improve our results.

Our people: Joining our talents to grow and work together as a single entity.

Integrity: Always acting honestly and in keeping with our principles.

Sustainability: Creating the conditions to operate and grow in harmony with our environment and communities we serve.

CORPORATE GOVERNANCE

In line with our ethical principles and corporate values, we apply the highest standards of corporate governance and transparency in all economic, social, environmental and business matters.

OUR GOVERNANCE: LEADERSHIP IN EVOLUTION

GRI 2-9, 2-14, 2-16

In line with our ethical principles and corporate values, we apply the highest standards of corporate governance and transparency in all economic, social, environmental and business matters, ensuring that our company operates in an open, above-board manner and with full trust on the part of all its stakeholders. Vitro abides by all government and industry regulations, in order to meet the needs of our customers, communities and society at large.

Our Board of Directors has 12 members, 41.66% of which are independent. The Board is one of the bodies responsible for establishing and guaranteeing the execution of strategies, systems, policies and procedures for the company and the corporations it controls, and to ensure that everything is done according to responsible corporate management. The Board of Directors is supported by the Audit and Corporate Practices Committees and company management, the decisions and actions of which are reviewed and endorsed each year in the General Ordinary Shareholders' Meeting. Currently, the company has engaged the auditing firm of KPMG Cárdenas Dosal, S.C. (KPMG) as independent external auditor for fiscal years 2020, 2021 and 2022.

OUR BOARD OF DIRECTORS HAS 12 MEMBERS, 41.66% OF WHICH ARE INDEPENDENT.

GOVERNANCE STRUCTURE AND COMMITTEES

GRI: 2-9, 2-11

ADRIÁN SADA GONZÁLEZ (1944)
Member since 1984
Chairman of the Board of Directors
Chairman of the Chairmanship Committee. Board Member of Cydsa, Consejo Mexicano de Negocios (CMN) and Grupo de Industriales de Nuevo León.

ADRIÁN SADA CUEVA (1975)
Member since 2010
Chief Executive Officer
Board Member of Grupo Financiero Banorte, the Dallas Museum of Art, Nemak and ALFA. Former president of the Cámara de la Industria de Transformación (CAINTRA) Nuevo León. Member of Organización Vida Silvestre and the General Council of the Universidad de Monterrey.

ÁLVARO FERNÁNDEZ GARZA (1968)
Member since 2011
Chief Executive Officer of ALFA and member of the boards of directors of Cydsa, Grupo Aeroportuario del Pacífico, Grupo Citibanamex, and President of the University of Monterrey.

TOMÁS GONZÁLEZ SADA (1943)
Member sincee 1980
Chairman of the Board and Chief Executive Officer of Cydsa; 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), the 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 Fundación Martínez Sada, an organization that grants academic scholarships.

MARIO LABORÍN GÓMEZ (1952)
Member since 2010
President of ABC Holding and ABC Capital. Has been managing director of Bancomext, CEO of Nacional Financiera, CEO of Bancomer and President of its Brokerage Firm, and founding President 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, Transportación Marítima Mexicana, Bancomer, Bolsa Mexicana de Valores, Mexder, Indeval, Xignux, Megacable, Cydsa, Astrum México, Banco de México Nuevo León, Gruma, AXA Seguros, Goldman Sachs, Avanzia and Across.

DAVID MARTÍNEZ GUZMÁN (1957)
Member since2013
Chairman and Special Counsel for Fintech Advisory, Inc. and Board Member of ALFA, CEMEX, ICA Tenedora and Sabadell Banc (Spain).

RICARDO GUAJARDO TOUCHÉ (1948)
Member since 2013

Board Member of BBVA Bancomer, Bimbo, Grupo Aeroportuario del Sureste, and Coca-Cola FEMSA. He was a Member of the International Advisory Committee of the Federal Reserve Bank of New York. He has served in various executive positions in companies such as BBVA Bancomer, Valores de Monterrey, FEMSA and Grupo AXA.

GUILLERMO ORTIZ MARTÍNEZ (1948)
Member since 2010

Partner and Board Member of BTG Pactual, Chairman of the Per Jacobsson Foundation and Founder of Guillermo Ortiz y Asociados. Member of the Group of Thirty and of the Boards of Directors of Bombardier, Grupo Aeroportuario del Sureste, and Orbia. Has served as Chairman of the Board of the Bank for International Settlements, Governor of Banco de México and Minister of Finance and Public Credit for the Mexican federal government. At the International Monetary Fund, he chaired the External Panel for the Review of the Fund's Risk Management Framework and also served as Managing Director.

RICARDO MARTÍN BRINGAS (1960)
Member since 2007

Chairman of the Corporate Practices Committee.
Chief Executive Officer and Vice Chairman of the Board of Directors of Organización Soriana. Board Member of Teléfonos de México, Grupo Financiero Banamex, Consejo Mexicano de Negocios, Grupo de Empresarios de Nuevo León and Asociación Nacional de Tiendas de Autoservicio y Departamentales (ANTAD). Chairman of the Endowment for the Hospital Regional Materno Infantil.

JAIME RICO GARZA (1957)
Member since 2008

Chief Executive Officer and Chairman of the Board of Vitro Europa and Vitro Global (2002-2017), as well as Board Member of Vitro Cristalglass and Chief Executive Officer of Vitro Cristalglass (2007-2012).

JAIME SERRA PUCHE (1951)
Member since 1998

Chairman of SAI Derecho & Economía, Founder of Aklara (Electronic Auctions), and Centro de Arbitraje de México (CAM). Chairman of the Board of BBVA Bancomer and publicly traded companies Fondo México, Tenaris, and Vitro. He held several positions in the Mexican federal government (1986-1994) as Undersecretary of Revenue, Minister of Trade, and Minister of Finance. Currently, he is a member of the Yale University President's Council on International Activities and is a Trustee for the Trilateral Commission.

JOAQUÍN VARGAS GUAJARDO (1954)
Member since 2000

Chairman of the Audit Committee.
Chairman of the Board of Grupo MVS and of Grupo CMR. Board Member of Grupo Financiero Santander, Grupo Costamex, El Universal, Grupo Aeroportuario del Pacífico and Médica Sur. He has served as Chairman of National Chamber of Radio and Television Industry (2000-2001), Chairman of Mexican Restaurant Association (1985-1987) and Chairman of the Association of Restaurant Chain Directors (1989).

ALEJANDRO F. SÁNCHEZ MÚJICA (1954)
Secretary

Has served as Board Secretary since 2007.
He has been Legal Manager for Indeval, Chief Legal Officer for a division of Grupo Kuo, Corporate Counsel for Pulsar Internacional/Savia, Vice President and Chief Legal Officer of Vitro, and Senior Partner of the law firm Thompson & Knight, currently of Counsel at Holland & Knight. He has served on the board of various Mexican and foreign corporations and is currently a member of the Private Charitable Board for the State of Nuevo León. He has a law degree from the Escuela Libre de Derecho and master's degrees from the University of Texas at Austin.

VITRO BOARD OF DIRECTORS

Chairman
Lic. Adrián G. Sada González

Independent member
Lic. Joaquín Vargas Guajardo

Lic. Álvaro Fernández Garza

Ing. Tomás Roberto González Sada

Ing. Ricardo Guajardo Touché

Independent member
C.P. Mario Martín Laborín Gómez

Independent member
Lic. Ricardo Martín Bringas

Ing. David M. Martínez

Independent member
Dr. Guillermo Ortiz Martínez

Ing. Jaime Rico Garza

Lic. Adrián G. Sada Cueva

Independent member
Dr. Jaime José Serra Puche

Non-member Secretary
Lic. Alejandro Francisco Sánchez Mújica

VITRO AUDIT COMMITTEE

Chairman
Lic. Joaquín Vargas Guajardo

Independent member
Dr. Guillermo Ortiz Martínez

Independent member
Dr. Jaime José Serra Puche

Non-member financial expert
Lic. Jonathan Davis Arzac

Non-member Secretary
C.P. Claudio Luis Del Valle Cabello

VITRO CORPORATE PRACTICES COMMITTEE

Chairman
Lic. Ricardo Martín Bringas

Independent member
Lic. Joaquín Vargas Guajardo

Independent member
Dr. Guillermo Ortiz Martínez

Independent member
C.P. Mario Martín Laborín Gómez

Non-member Secretary
Lic. Alejandro Francisco Sánchez Mújica

CHAIRMANSHIP COMMITTEE

Chairman
Lic. Adrián Sada González

Lic. Adrián Sada Cueva

Secretary
C.P. Claudio L. Del Valle Cabello

FLAT GLASS

The Flat Glass business unit is a North American leader in the manufacture and processing of float glass for the construction and automotive industries, for the latter in both the original equipment and spare parts segments. In addition to making, processing, marketing, distributing and installing glass, the division leads the industry in developing added-value products through its technological research center, enabling it to meet the exacting demands of every customer.

FLAT GLASS

2022 SUMMARY

Operations in the Flat Glass division were complicated in 2022 by the persistent effects of the pandemic, an uncertain macroeconomic and social climate, and increasingly severe supply chain disruptions.

Combined with this, across-the-board inflation and restrictions on land and maritime logistics hampered the availability of transportation both for inputs and deliveries. But it was also a year in which our product prices recouped their value against inflation and we began innovation initiatives that we expect to bear fruit in the coming years.

One highlight of the year was that the Flat Glass division earned a number of new recognitions, a sign of our customers' confidence in the future of our company. Sales of architectural products rose, primarily due to increased demand for specialty glass and in commercial markets in the United States, and the generalized rise in prices in an inflationary environment. Sales to the automotive market swelled in response to rising demand for laminated and tempered glass from OEMs in Mexico, the United States and Europe, and also in part due to higher prices.

Architectural Glass

For the architectural glass business, 2022 was a fairly good year. Although there were some internal challenges like the availability of labor, which complicated the mix and introduction of new products, and the progress of operations in general. In a volatile climate marked primarily by rising inflation and increased foreign competition due to the peso's strength against the dollar, the business also felt the impact of a slowdown in sales to the construction industry.

In light of all this, the division deployed cost and expense control strategies to counter inflation, took a number of measures to reduce turnover and fill vacancies with the right people, focused on more profitable customers and segments, and encouraged innovation to secure a second engine of growth for the business in the medium and long term.

OUR PRODUCT PRICES RECOUPED THEIR VALUE AGAINST INFLATION AND WE INTRODUCED INNOVATION INITIATIVES.

WE IMPLEMENTED FIRST-CLASS PROJECTS TO IMPROVE OUR OPERATIONS AND DRIVE PROJECT AUTOMATION

Automotive Glass

In general, this business was affected by supply chain disruptions and failures, skyrocketing energy prices, inflation at 20-year highs, and a slump in automotive production.

To mitigate these effects, we took various actions that enabled us to post positive results, confirming the solidity of our Excellence Model and its consistent execution. We negotiated compensations with our customers to make up for inflation and instability in the delivery schedule, and improved our production flexibility to better manage our working capital.

We also implemented first-class projects to improve our operations and drive project automation.

MARKET CONDITIONS

Vitro Architectural Glass

Demand in the third quarter was solid in all our business lines in the main geographies despite global challenges, mainly the Architectural and Glass and Containers businesses.

Architectural glass sales were driven higher by strong demand, better average sales prices for our products in the specialty, commercial and residential markets in the United States, and especially increased sales of coated and value-added glass, offset in part by a slowdown in demand in Mexico's commercial and residential markets.

It was year of many challenges for architectural glass, with widespread inflation and logistics obstacles, particularly the significant rise and reduced availability of land and maritime transport. However, it was also a year in which our product prices rose at above the rate of inflation, and in which we made significant inroads in innovation, which we expect to bring results in the years ahead. We improved our product mix, focusing on boosting the share of added-value products, mainly in the commercial and specialty markets, while keeping a stable pace in other areas like the residential market.

Automotive Glass

The temporary shutdown of various industries forced some companies to slash output and others to divert production to markets where demand was stronger. This was the case with chip manufacturers, where orders outstripped capacity. As industries like automotive manufacturing resumed activity, disruptions in the semiconductor supply chain caused delays in our product deliveries.

Despite these difficulties, our continuing application of the Vitro Excellence Model is creating a standardized structure for all areas of operation. The benefits are evident in a 19% reduction in machine down time, more than USD$1.1 million in savings from sharing of best practices, and cost reductions.

SOLUTIONS THAT CREATE VALUE

Architectural Glass

We completed renovation of our most productive furnace at García, Nuevo León, with a total investment of around USD$40 million. Other secondary investments, like the expansion of the tempered glass and flat glass lines in the factory in that same region, which produce those products for export, improved the segment's productivity.

We also introduced a new tool for Architectural Glass customers in the United States called the VitroSphere®, a digital architectural glass simulator—proudly developed in Mexico—which enables users to compare more than 20 Solarban® products under three different lighting conditions (times of day) and three views (exterior and interior) on five types of commercial buildings.

This translates into more than 1,000 high-quality renders that enable architects, developers and designers to obtain inspiration for the next great project, and visualize how their facades or windows will look.

Automotive Glass

In 2022, the division began several multi-year programs to improve production efficiency, reduce manufacturing cost and increase product quality. These initiatives, which will run from 2023 to 2026, include various strategies. Up until now, we have invested USD$5.7 million, which has already generated annual savings of USD$3.9 million due to increased efficiency. For example, we continue to work together with FAMA to automate production lines using robotics.

WE COMPLETED RENOVATION OF OUR MOST PRODUCTIVE FURNACE AT GARCÍA, NUEVO LEÓN, FOR A TOTAL INVESTMENT OF AROUND USD$40 MILLION.

WE FOCUS ON OFFERING GLASS WITH HIGH ENERGY PERFORMANCE.

ADDED-VALUE PRODUCTS AND SERVICES

Architectural Glass

In our business, glass manufacturing goes beyond meeting the basic requirement of covering space. We are continually working to develop glass that offers not only aesthetic appeal but high energy performance through products that reduce heat while allowing natural light to pass. One such product is what is called low emissivity, or low-E, glass.

In 2022, the Architectural Glass division signed a cooperation agreement to make San Pedro Garza García, Nuevo León, a more sustainable city, with our support in obtaining “LEED for Cities” certification, improving quality of life for citizens through comprehensive sustainable planning. This would be the first city in Mexico to obtain this certification as a sustainable city. Vitro’s Architectural Glass division will be the sole sponsor in this initiative, contributing the funds to cover the cost of firms appointed by the municipality to assemble, draft and complete preparation of the review documents, and manage the review process according to the requirements of the program. 37% of CO2 emissions are related to buildings, and this project is highly important given the legislation that will arise from this whole certification effort, encouraging new standards to build more sustainable cities.

On another note, late in 2022 Vitro U.S. completed its contribution to restoring the historic Wetlands exhibit at Pittsburgh's National Aviary. Vitro donated more than 20,000 square feet of Starphire Ultra-Clear® glass, which is the clearest and most transparent float glass available, boasting visible light transmissivity (VLT) of 91 percent in a standard sheet ¼ of an inch (6 millimeters) thick. In a team with Walker Glass, this technology will help the Garden Room at the National Aviary to achieve its ambitious environmental goals.

Automotive Glass

Vitro's Automotive Glass business continues to meet the growing need for electric vehicles. The head-up display system (HUD) is one of technologies most in demand for this new type of vehicle, and Vitro today responds to some of the most exacting specifications for size, clarity, and distance of the virtual image. Vitro has also successfully launched a new high-efficiency electric-heated windshield, using latest-generation triple-silver coating supplied by the Architectural Glass division.

WE PARTICIPATED IN PROJECTS LIKE LEED FOR CITIES AND RESTORATION OF THE PITTSBURGH AVIARY.

2022 RESULTS

Consolidated net sales of Flat Glass in 2022 closed the year at USD$1.90 billion, 21.6% higher than the USD$1.57 billion reported in the previous year. Higher sales of architectural and automotive glass were strong factors in this advance (completar con explicación por negocio)

EBITDA in this business unit was up by 92.6%, rising from USD$97 million in 2022 to USD$187 million in 2022. Among the reasons for this result were (completar con explicación).

2023 OUTLOOK

Although the automotive industry was hardest hit, our results demonstrate the strength and resilience of the Vitro Excellence Model. As we dealt with global supply chain interruptions, inflation and other challenges, we maintained our focus on the customer and racked up another year of top-line growth that outpaced the economies we serve.

We expect the challenges of 2023 to be similar to those of this past year for the Flat Glass businesses, compounded by a global economic slowdown and fluctuations in the production of coated automotive glass. We are fully confident, however, that with our habitual operating discipline and successful execution of our Excellence Model, we will be able to defend our leadership and increase our share of new market segments, activating operating improvement plans.

Vitro is a recognized leader in the glass container industry, and we handle everything from the creative concept to the final product, resulting in designs that meet even the most rigorous expectations of our customers. Our glass containers are manufactured and certified according to the most exacting international standards, ensuring quality, innovation and sustainability in our processes.

GLASS CONTAINERS

GLASS CONTAINERS

2022 SUMMARY

2022 was a challenging year, but ultimately a good one, for the Container division. With the support and dedication of all employees, we met the goals we set for ourselves. Even as the market reopened after the pandemic lockdowns, driving a demand that exceeded our production capacity, we were able to respond and serve our customers, meeting their needs by taking a cooperative approach involving dialogue and teamwork. We continued to expand our main business, which is fragrance bottles, and grew in all the markets we serve, laying the foundations for making the Container division a key player in the premium liquors industry.

Maintaining a focused, motivated team under pressure from customers and suppliers is a difficult task. But we know that we must be able to adapt and react to changes in demand, costs, and logistics. To do this, we need new strategies for developing and training our employees. The biggest challenge for our team was quickly adapting to this new environment, maintaining firm discipline in protecting our personnel and customers, controlling costs and ensuring the health of the division. This meant reducing costs and expenses through savings to minimize the impact of inflation and becoming very flexible in responding to sudden changes in requirements.

2022 WAS A CHALLENGING YEAR, BUT A GOOD ONE, FOR THE CONTAINER DIVISION

Machine Manufacturing (FAMA)

In 2022, this division achieved its best financial results in the last six years with superior sales and a stronger commitment to our customers.

In the first half of the year, the logistics industry was hit by global disruptions from the war in Ukraine, the semiconductor shortage and supply chain bottlenecks, which also posed obstacles for FAMA. Problems of both inflation and deflation in global markets, higher prices and weak consumer demand made it more difficult to obtain loans and other types of financing.

Internal turnover was another issue for the division, last year reaching record levels of more than 40%, particularly in the automation business, which requires new work schemes. This business is still growing and integrating into FAMA's consolidated operations, posing new challenges in adapting service processes and schemes to internal processes.

MARKET CONDITIONS

Glass containers

In 2022, we made a substantial investment in the container business to meet rising demand from our customers. The biggest of these investments was building a fourth furnace, which will allow us to supply the fragrance and liquor industries, and will start up operation in the second quarter of 2023. We also modernized two production lines with new IS machines. To support the increase in container production, we also invested in decoration processes, acquiring two new automated automatic decoration machines and starting up another painting line. We purchased additional automatic inspection equipment, as well as an equipment for building molds. All of this required an investment of more than USD$55 million.

US$50

MILLION IN INVESTMENT REQUIRED TO BUILD THE FIRST LATEST-GENERATION COATING PLANT IN MEXICALI, BAJA CALIFORNIA.

Machine Manufacturing

Although this division faced the challenge of linking sales to the activities and cyclical nature of the capital goods industry, it was able to keep up with delivery times and control operating costs. It also succeeded in expanding capacities to industries outside of Vitro, capitalizing on the growth of the machinery business and building solid equipment capable of capturing demand for technical services, engineering, repair and spare parts for the IRS machinery market. Finally, it is creating a more agile, efficient and resilient supply chain by developing strategic suppliers and inventories.

SOLUTIONS THAT CREATE VALUE

Glass containers

In terms of geographic growth, we fortified operations in our glass decoration company in the Brazilian state of Bahia, which brings us closer to our customers through a higher quality and quantity and more flexible service. On the competitive front, although we have improved our return metrics, we still have a long way to go. In decoration, however, we surpassed our goals and achieved world-class performance. On the innovation side, we launched 58 new styles and 325 new finishes, and through the *Innova Diseño* competition, we introduced two new products for Jafra: a 60ml *Bloom*, the first sustainable fragrance by this company, and a 50ml *J-Sport Femme*, inspired by sportswomen looking for a practical solution, combining perfect ergonomics with a capped bottle.

We are preparing to organize our fifth competition in 2023. More than 21 ideas were created through Innspire, five of which stood out from the pack, and more than 130 innovators were recognized for their impressive ideas and intelligence. With this, we continue to work toward our goal of connecting students, customers, the industry and Vitro, to capture talent, foster innovation and recognize creativity in Mexico. In 2023, we intend to organize this contest again.

Machine Manufacturing

In achieving these results, the division followed various strategies.

Automated commercial standardization: Strengthening FAMA as a driver of technological innovation in the automated equipment processes and driving commercial growth by offering our capacities to customers in non-laboratory industries and products.

FAMA machine services: taking advantage of the growth in our machinery business, building a solid team that turns industry needs for engineering, repair, maintenance and spare parts services for the IS machinery market, into growth opportunities.

Commercial development and training: We formulated a commercial development plan to build the technical and commercial capacities necessary to serve our customers.

Technology-independent IS Machine: We completed implementation of our FAME technology, which we introduced 100% into the IS machine market.

Supply flexibility and strategic sourcing development: We worked on developing a more flexible, efficient and resilient supply chain by building strategic suppliers and inventories.

Service excellence: We improved quality and service with our internal and external customers by perfecting delivery times, communications and solutions.

2022 RESULTS

Glass Containers

Consolidated net sales for the Container division were up 20.2% as of December 31, 2022, totaling USD$271 million compared to USD$225 million in 2021, thanks to the performance of the glass container and machinery and equipment divisions. (complementar con explicación por negocio).

EBITDA for this business unit was USD$65 million, 20.3% more than the USD$54 million reported in 2021, attributed to successful application of the Vitro Excellence Model, which brought significant improvements in the productivity of the smoothing and finishing processes. Container loss in the operating process was also reduced, and all of this was achieved while maintaining a safe, positive work environment.

Some of the year's highlights were a 10% growth in the efficiency of Fragrance Furnace 1 over the previous year, a 6.2% increase in pack-to-cut for liquor bottles, a 2% growth in pack-to-melt for cosmetics, and an 0.3% increase in finish efficiency. We also reduced finishing losses by 6% and operational losses by 8.7% compared to the previous year. Finally, the accident rate was lowered by 40% compared to the year before.

The Quality of Life at Work indicator remained at a world-class level of 88% last year, based on the evaluation of more than 90% of the company's total personnel—a workforce of 3,000 employees.

Machine Manufacturing

Innovation and development are what drive our operations. We are continually bringing in new technologies to make our products, creating a competitive advantage in our customers' operations. Our consolidation of the Automation business is also important, and the results of our third-party client portfolio and this team's success underscore the strength and the path the company has taken, even though we know there is still a long way to go. Finally, FAMA is making a significant effort as a supplier to our packaging business, where it is a leading provider of inorganic growth strategy technology and is aiming to lead the market in specialty packaging.

2022 OUTLOOK

Glass containers

The year ahead looks to be a challenging one for our business, due to persistent uncertainty throughout most of the world, which will result in ongoing volatility, inflation and supply chain distortions.

For this reason, we will make it our first priority to protect our people and have the flexibility to respond to changes in our environment. We will also focus on meeting the needs of our customers and adapt to changes in demand.

In 2023, our goal will be to stabilize our service and be creative about containing and reducing costs. We intend to significantly improve operations and continue growing alongside our customers. We expect to reach full capacity in both smooth and decorated glass, including startup and operation of our new furnace

We also plan to continue our program of plant modernization, upgrading to new machines, expanding our production capacity of colored glass and improving finishing processes like hot stamping. All of this should make us stronger, add value to our products and processes and increase customer confidence and service.

Machine Manufacturing

FAMA has the goal of improving its service in 2023, focusing on increasing internal capacity to improve speed of service by investing in machining, smelting and manufacturing under projections. The IS machine market is shifting toward a dynamic of monitoring and post-sale service, where speed of response and prospecting will be key. The demand for specialized professionals in Nuevo León remains high, and competition for hiring is high, while raw materials prices are being propped up by tight supply and the global electronic component shortage. Glass demand is expected to grow worldwide in 2023, and the Middle East is seen as a region of opportunity for the company. In regulatory matters, changes in the Federal Labor Law are expected to drive up the cost of labor, and we are also anticipating tighter regulations on effluents, water and pollution by SEMARNAT and PROFEPA.

We intend to keep in place the financial and operating strategies we have implemented thus far, to continue reporting outstanding financial results for 2023 and beyond, maintaining our operating and commercial strategies to boost customer confidence in our products and operations.

CHEMICALS

The Chemicals division produces sodium carbonate, sodium bicarbonate, sodium chloride and calcium chloride for use in glassmaking, detergents, water treatment, pharmaceuticals, food, oil & gas industry operations, road deicing, and livestock farming, among other applications.

THE CHALLENGES FACED IN THIS DIVISION MOTIVATE US TO TIGHTEN OUR OPERATING DISCIPLINE.

2022 SUMMARY

The Chemicals division faced significant challenges in 2022, particularly due to high energy prices which we were unable to fully transfer to the market, significantly impacting our results. But the markets in which we participate in each business remained stable, so we were able to reach our planned sales goals.

MARKET CONDITIONS

Business continuity was hampered by lower-than-budgeted production volume, problems with critical equipment and fluctuating quality of raw materials, which resulted in an erratic pace of operation, marked by removals and high worker turnover and a pressing need for specialized staff in some departments. Disruptions in the supply chains of spare parts and raw materials, high energy costs (natural gas) and strong demand for customers combined with a shortage of products, motived us to step up efforts and tighten operating discipline.

SOLUCIONES QUE CREAN VALOR

We succeeded in lessening the impact of high energy costs through pricing measures, maintaining open communications and solid relations with our customers, mindful of the shortage of our product on the market. In this effort we have been working in close collaboration with the supply and operations department. As a result, we successfully retained all of our customers and laid a solid foundation for improvement in 2023.

Furthermore, in 2022 were recognized as reliable strategic supplier by our customer Zinc Nacional, a leading producer of zinc compounds like zinc oxide and zinc sulfate in the Americas.

In conjunction with Maerz, we worked on the design of a lime furnace specifically designed for the Solvay process. This is the first time this type of furnace has been used in the sodium carbonate production process since the project was launched, and it will provide for a more stable process, with higher yields, better energy consumption and fewer CO2 emissions to the atmosphere.

2022 RESULTS

Consolidated net sales for the Chemicals division in 2022 closed at USD$179 million, 6.1% higher than in 2021, when they totaled USD$169 million.

EBITDA for this business unit was down 46.8%, from USD$42 million in 2021 to USD$22 million in 2022.

We continued to successfully apply the Vitro Excellence Model to operate effectively and focus on equipment in various areas of the organization to exponentially improve our position through prompt inspection and timely replacement, personnel training and better sales of our products.

We focus on productivity, cooperation among the different areas of the organization and enhanced maintenance, with rigorous tracking and proper supply of parts to guarantee the efficacy of our processes.

2023 OUTLOOK

To improve our operating efficiency, we will invest USD$16 million in replacement equipment, columns and general facilities, and in sustainability-related actions.

Although we have seen consistent demand and better prices in the markets where we operate, we have also seen intense competition and a drop in shipments from China. Fortunately, our projections show a significant reduction in the cost of various inputs going forward.

We continue to work on closing out some pending environmental matters to mitigate regulatory risks. As for the availability of labor, we will continue to struggle with turnover but we are taking measures to reduce it and retain our personnel. We are not anticipating a shortage of any raw materials except for ammonia, a situation we are closely monitoring. In general, we expect to considerably improve this business's productivity and results to meet the expectations of our stakeholders.

WE EXPECT TO CONSIDERABLY IMPROVE THE BUSINESS'S PRODUCTIVITY AND RESULTS.

SUSTAINABILITY

Vitro is committed to environmental care, social impact and transparency. Beyond offering quality products and services, the company works on sustainability programs and strategies to build a better future for all.

2022 DATA HIGHLIGHTS

14,857
employees.

5,848
new hires.

Average of **46 work hours**/ employee invested in training.

55
Persons with auditory, motor or intellectual disability are part of the Vitro family.

78% of our operations were recognized for their excellent practices..

USD $17.4 million
invested in the Comprehensive Health and Safety System.

100%
of OEM product plants certified by ISO 14001:2015 standard.

We have helped protect **153,051 hectares** and **conserve 1,370 species** together with the Organización Vida Silvestre (OVIS) and Vitro's El Manzano Park.

Since 2018, Vitro has recycled more than **3 million metric tons of glass waste**, avoiding the emission of approximately **630,000 tCO_2e.**

91% of our employees say the company is committed to being a socially responsible enterprise.

More than **990 families benefited** from social development initiatives.

SUSTAINABILITY

GRI: 103-2, 102-2, 102-40, 102-47, 103-1

Sustainability Strategy

Vitro is committed to creating conditions for operating and growing in harmony with the environment and the communities we serve, in line with our corporate values. Our Sustainability Strategy guides us in generating social, environmental and economic value, so we can preserve the well-being of our people and stakeholders while maintaining facilities that respect and preserve the environment.

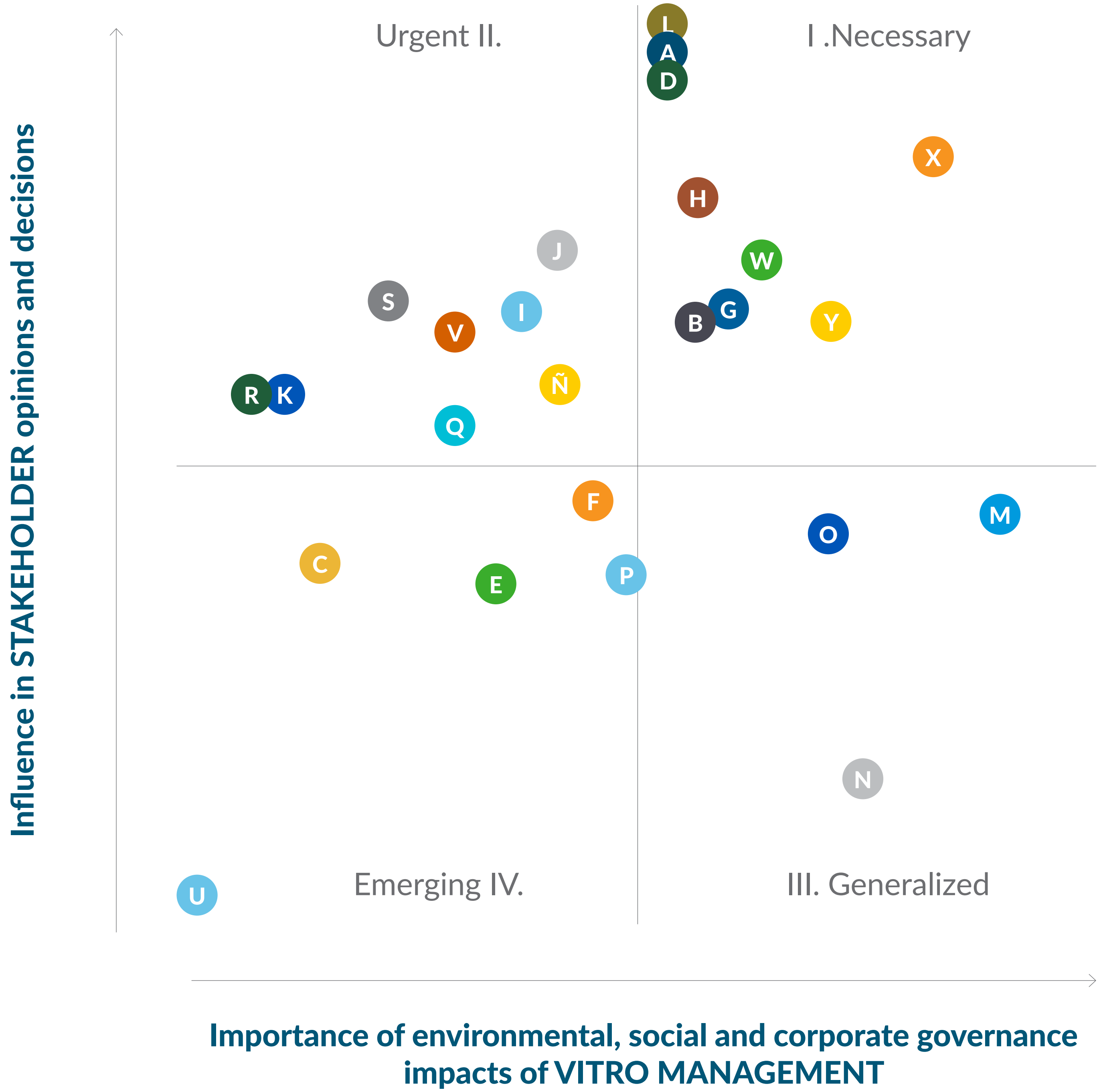
Materiality analysis

Vitro strives for profitable, sustainable growth in a changing business environment, identifying the issues most important to its stakeholders through a materiality analysis.

This list of issues provides a guide for creating strategies and initiatives that meet the highest standards of quality, safety and environmental care.

THE WAYS OF WORKING AND DOING BUSINESS HAVE CHANGED, BUT FOR VITRO, ACHIEVING PROFITABLE AND SUSTAINABLE GROWTH HAS ALWAYS BEEN A MATTER OF LASTING IMPORTANCE.

AXIS	KEY	ISSUE – BY COMBINED AXIS (X,Y)
I	X	Product quality and safety
I	W	Product, quality, processes, marketing, organizational and technological innovation
I	Y	Stakeholder reputation due to products and services offered
I	H	Climate change and emissions
I	G	Energy efficiency and renewable energy
I	L	Occupational safety and health
I	A	Ethics, transparency and anti-corruption
I	D	Legal compliance (national and international)
I	B	Risk management
II	J	Prevention of environmental impact
II	I	Circular economy (recycle, reuse and manage waste)
II	Ñ	Working conditions
II	V	Product value added; research and communication of benefits.
II	S	Positive impact on communities where the company operates.
II	Q	Identification of risks in the supply chain.
II	K	Water stewardship (use and discharges)
II	R	Sustainable sourcing
III	M	Human capital development
III	O	Diversity and inclusion
III	N	Talent recruitment and retention
IV	F	Strategy for positioning the Vitro brand
IV	P	Corporate culture and employee commitment
IV	E	Stakeholder engagement
IV	C	Corporate governance
IV	U	Volunteer activities
IV	T	Monetary and non-monetary donations



SUSTAINABILITY MODEL

Vitro's 360° sustainability model rests on six interrelated pillars that create value and reciprocal benefits for the company and its stakeholders.

We have aligned our sustainability strategy with the United Nations Sustainable Development Goals (SDG), and focus our initiatives and programs on the UN's 2030 Agenda, to support global and local growth and join worldwide efforts to fulfill the terms of the Paris Agreement. Besides the SDGs most closely related to our work, some projects also have an indirect impact on other of these goals, helping to improve the targets.

The United Nations designated 2022 the "International Year of Glass" (IYOG) , with the stated aim of raising awareness about the significant impact of this material throughout human history, and its continuing relevance for the future. It is impossible to imagine a world without glass, and the immense challenges of the future cannot be met without this material, which, more than any other, represents innovation and transformation.

The goal of the IYOG was to highlight the central role glass can play in achieving the seventeen SDGs mentioned in the UN's 2030 Agenda. The following is a selection of the SDGs identified by the initiative, along with those that Vitro has identified as being achievable through its Sustainability Model.

SDG-Sustainability Model Alignment

Based on our sustainability strategy and model, we identified our alignment with the UN Sustainable Development Goals (SDGs), channeling initiatives and projects toward the 2030 Agenda, in order to contribute to both local and global growth.

GOVERNANCE

Since our founding, we at Vitro have worked to ensure that our decisions and the way we do our jobs are consistent with our business philosophy. To fulfill this commitment, we follow solid corporate governance practices under a rigorous framework of policies, internal controls and ethical standards of corporate transparency, abiding by and following the laws, regulations and principles of each of the countries where we operate or do business. With this approach to governance and compliance, our company works to build solid foundations on which to ensure the sustainable development of and attention to all our stakeholders.

VITRO CODE OF ETHICS AND CONDUCT

GRI: 102-33, 205-1, 205-2, 205-3, 206-1, 307-1, 411-1, 416-2, 419-1.

At Vitro, we apply best ethical and transparency practices through our Code of Ethics and Conduct. This code defines our commitment to stakeholders and describes the way in which the Code is administered and applied. It extends to all of our employees, including the Board of Directors, suppliers, or anyone acting on behalf or in representation of Vitro. Each year all employees must take a course to reinforce their knowledge of the Code.

Learn more about our Code of Ethics and Conduct)

VITRO IS BUILDING SOLID FOUNDATIONS TO ENSURE THE SUSTAINABLE DEVELOPMENT OF AND ATTENTION TO ALL OUR STAKEHOLDERS.

Some of the key issues covered by the Code of Ethics and Conduct are:

Non-discrimination

Vitro offers equal opportunities to employment, training and professional advancement to all employees based solely on merit. Any discrimination in treatment or hiring on the basis of race, gender, age, religion or sexual preference, is strictly prohibited.

Ban on and Zero Tolerance for Bribery

We have a zero-tolerance policy on bribery or any activity that entails an undue advantage for the Company. Any suspicious activity may be reported through the Alert! Whistleblower system. The results of these reports and a breakdown by category can be viewed in the "Ethics" section of this report.

Conflicts of interest

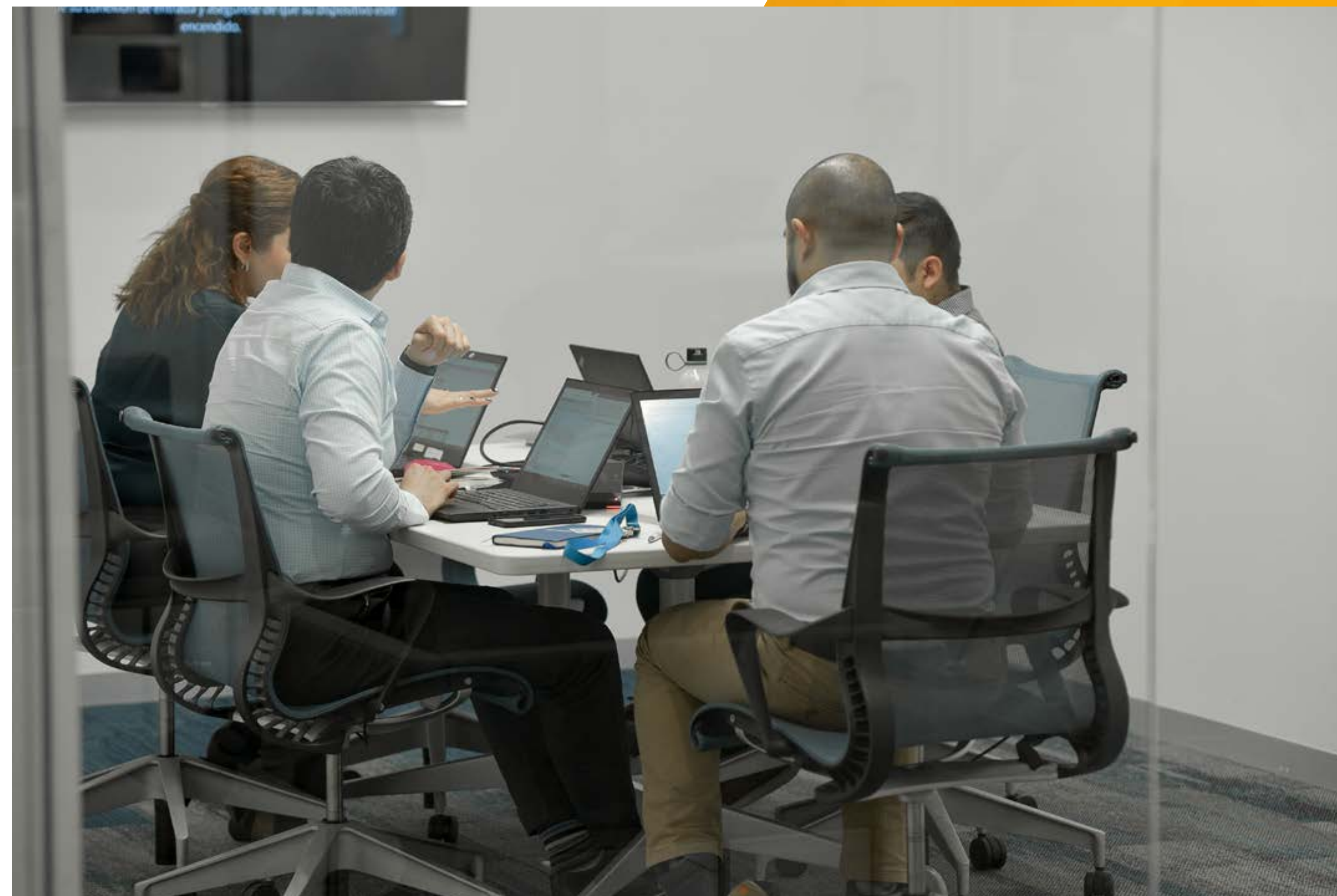
There are specific restrictions that apply to employees with outside businesses, like shareholders, clients or suppliers. We abide by the laws and regulations of every country where we operate; we were not subject to any administrative procedures that posed a significant risk in 2022.

Unfair competition

This company abides by all transparency laws, rules, standards and practices. The Code of Ethics and Conduct sets guidelines for compliance with antimonopoly laws and regulations on fair competition and fair and equal treatment for our suppliers.

Marketing communications

Regarding advertising campaigns and marketing messages, we ensure that all promotion and sales pitches are free of offensive and discriminatory messages or misinformation. In 2022 there were no cases of non-compliance with regulations on marketing advertising, promotion or sponsorship.



ANY SUSPICIOUS ACTIVITY CAN BE REPORTED ANONYMOUSLY THROUGH OUR ALERT! WHISTLEBLOWER SYSTEM.

Occupational Health and Safety

Vitro guarantees the safety and health of our human team and the communities around us, endeavoring to minimize our environmental impact. In 2022, 91% of our employees said the company was committed to their safety.

Environment

The Code of Ethics and Conduct requires us to comply with regulatory standards in every one of our operations. In 2022, we invested more than USD 2.77 million in 45 projects at various of the organization's manufacturing sites, contributing to an overall reduction in our energy and water consumption and the reduction of atmospheric emissions and waste generation. Details of these projects can be found in the "Planet" section of this report.

IN 2022, 91% OF EMPLOYEES SAID THE COMPANY WAS COMMITTED TO THEIR SAFETY.

ETHICS COMMITTEE

To keep track of ethical issues within the Company, we have a Corporate Ethics Committee and Regional Committees which address reports of material violations of this Code of Ethics and Conduct that occur throughout the organization, regardless of where they are located.

Ethics committee - 2022
1. Javier Arechavaleta (Legal) – Chairman
2. Jorge Rodela (Administration)
3. Elena Nogaledo (Planning and Talent Development)
4. Alfonso Gómez (Human Resources)
5. Rafael Colomé (Tax, audit and internal control)

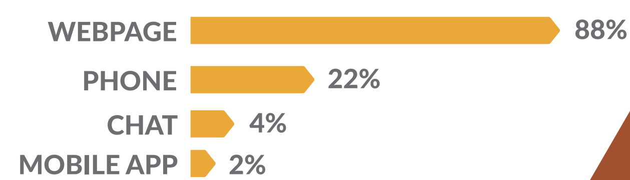
The Regional Committees are in charge of monitoring ethical matters in light of the specific legal and cultural characteristics of each zone, and are made up of people who represent various areas of our operations. The human resources, legal and finance areas are always represented on these committees.

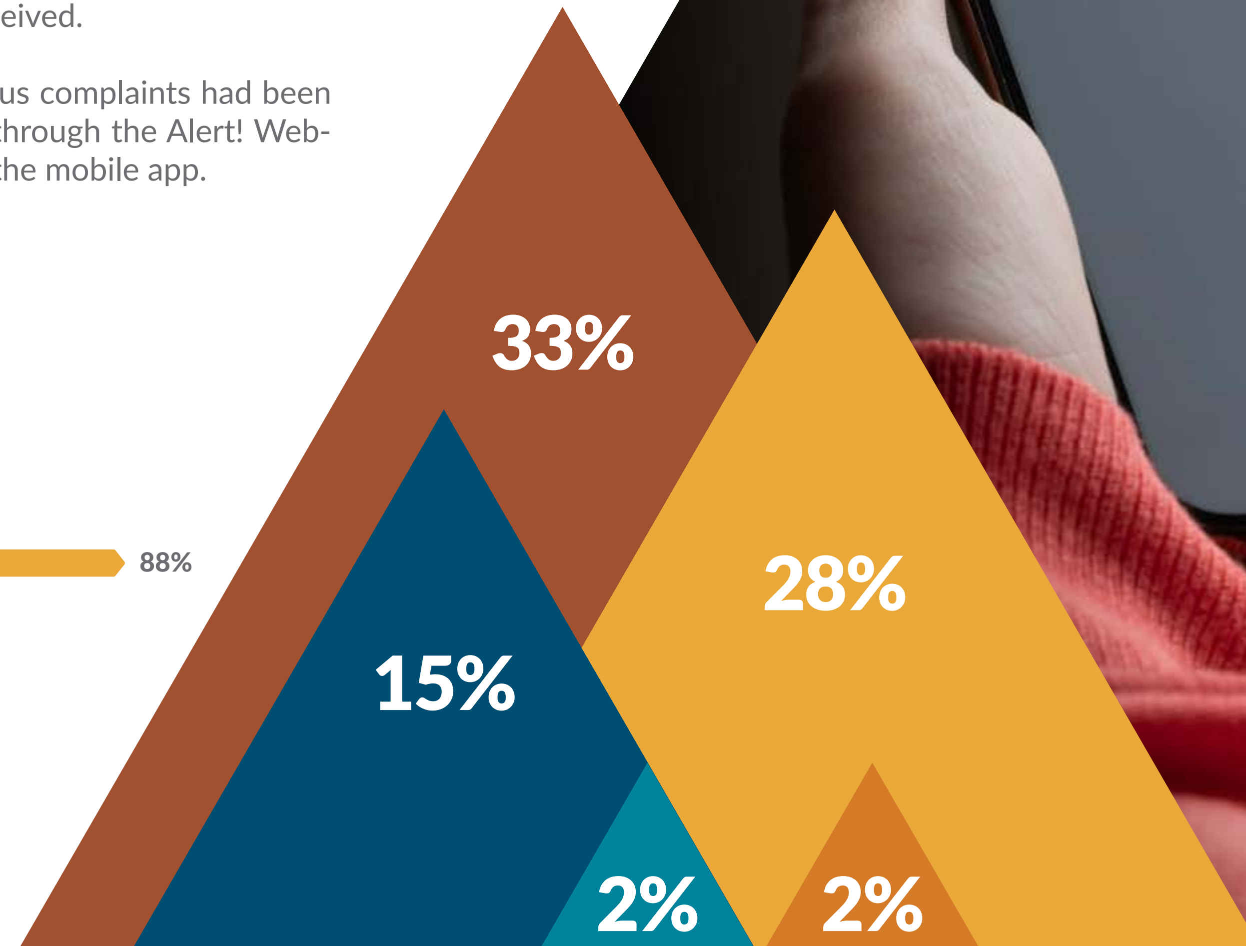
THE ALERT! PLATFORM ALLOWS ANYONE TO ANONYMOUSLY FILE REPORTS OR COMPLAINTS OF CONDUCT THAT GOES AGAINST VITRO'S VALUES OR CODE OF ETHICS.

Alert! Whistleblower system

Vitro has an anonymous whistleblower system called Alert! administered by Navex Global / EthicsGlobal , which allows any person to freely file complaints or reports of actions that are out of keeping with Vitro values or ethics. It can be accessed 24 hours a day and in various languages and the Ethics Committee privately handles each of the reports received.

As of December 31, 2022, 46 anonymous complaints had been received. Of these, 33 were submitted through the Alert! Webpage, 10 by phone, 2 by chat and 1 via the mobile app.





LAST YEAR, NO SIGNIFICANT FAILURE OF REGULATORY COMPLIANCE WAS REPORTED THAT MIGHT AFFECT THE COMPANY.

Regulatory Compliance

Vitro keeps up to date and on the alert for external threats and opportunities that might affect the company, as well as changes in government and industry regulations. Our Compliance department is in charge of detecting these changes to avoid falling afoul of the law.

Our Code of Ethics and Conduct establishes that the company and its employees must remain up to date on various legal provisions on matters such as the use of minerals from zones in conflict, imports and exports, safety and the environment, personal data protection, and others. Last year no significant failure of regulatory compliance was reported that might affect the company.

US

Vitro's most valuable asset is its people. Today, the 14,857 employees that make up our human team are our highest priority. We have been assiduous about encouraging their full development and offering a safe and healthy workplace so that Vitro can be the best option for work, and we can build value together.

OUR PEOPLE

GRI: 102-41, 201-3, 401-2, 401-3, 403-1, 403-4, 407-1, 408-1, 409-1, 412-1

The driving force in Vitro's success is its people. Today, the 14,857 employees that make up our human team are a crucial priority, so we work on encouraging their full development and offering a safe and healthy workplace in order to remain an excellent option for work, and can build value together. Every year we conduct what is called an engagement survey, in which we assess, among other issues, the level of our employees' commitment and satisfaction with the material issues of our organization. These results are used as feedback that strengthens the organization. It also allows us to define a plan that incorporate, among other issues, family activities, sporting events, and health and wellness.

89% OF OUR EMPLOYEES ARE PROUD TO WORK AT THE COMPANY, AND 85% WOULD RECOMMEND VITRO AS A GREAT PLACE TO WORK, ACCORDING TO THE ENGAGEMENT SURVEY.

BUSINESS	TOTAL EMPLOYEES
ARCHITECTURAL GLASS	3,549
AUTOMOTIVE GLASS	6,322
HEADQUARTERS	421
CONTAINERS	3,224
MACHINE MANUFACTURING	421
CHEMICALS	920
	14,857

The following table shows the number of employees by type of position and gender:

Position	Male	Female	Total
Executives	181	16	197
Employees	1.567	529	2,096
Operating	8,881	2,500	11,381
Interns	31	66	97
Grand Total	**10,660**	**3,111**	**13,771**

By region, our workforce breaks down as follows:

2022 TOTAL EMPLOYEES % BY REGION

INCLUSION AND DIVERSITY

At the end of 2022, 55 people with auditory, motor or intellectual disabilities were working with us, in various of our companies. In 2022, our Container division received NMX-R-025-SCFI-2015 certification for Labor Equality and Non-Discrimination. Vitro also employs senior citizens, who make up 2% of its total workforce.

Age Group-2022	Number of employees	Percentage 2022
18-30	4,647	31%
31-50	7,488	50%
51-60	2,447	16%
61+	275	2%
Total	**14,857**	**100%**

FOR MORE THAN 112 YEARS, VITRO HAS PRIORITIZED OFFERING ITS EMPLOYEES A HEALTHY, SAFE, CLEAN AND ORDERLY WORKPLACE.

90% OF EMPLOYEES SAY THE COMPANY TREATS ALL ITS PEOPLE WITH RESPECT, ACCORDING TO THE ENGAGEMENT SURVEY.

INVESTMENT IN THE COMPREHENSIVE HEALTH AND SAFETY SYSTEM IN 2022 WAS USD 17.40 MILLION.

OCCUPATIONAL SAFETY AND HEALTH

Vitro has endeavored to provide its employees a healthy, safe, clean and orderly workplace for more than 112 years. The Comprehensive Health and Safety System (CHSS) establishes policies and procedures that track, control and regulate indicators that measure the physical safety of people and workspaces.

We evaluate the level of risk in materials, equipment and machinery, as well as in the physical spaces, creating prevention and maintenance solutions that minimize the possibility of harm.

Employees are a fundamental part of the CHSS, and by involving them through safety chats, hotlines, surveys and risk analysis, they provide feedback on the system in order to improve it.

THE ENGAGEMENT SURVEY REVEALED THAT 91% OF OUR EMPLOYEES FEEL THAT THE COMPANY IS COMMITTED TO SAFETY, AND 88% SAY THAT VITRO IS A SAFE PLACE TO WORK.

TRAINING AND DEVELOPMENT

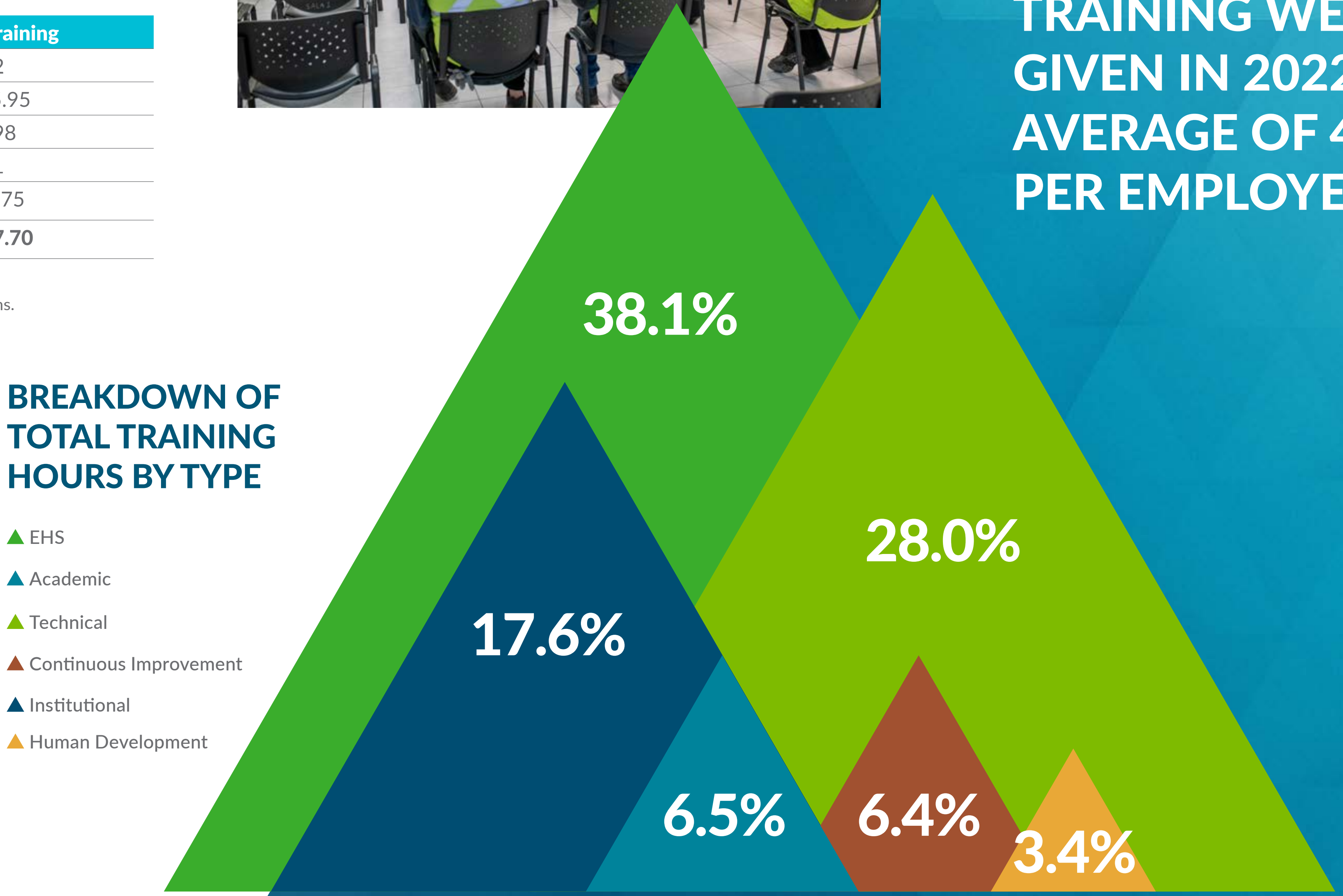
Vitro's efficacy is not limited to its machinery and equipment. We have proven time and again that our people are a key factor in the success of our business. That is why the comprehensive advancement of our employees is crucial, and why we have an ongoing program of training, education and specialization for their professional growth. The plan is designed according to the duties and description of each job, with the idea of building specific skills.

Job category	Hours of training
Executives	8542
Employees	102655.95
Operating	525398
Interns	2311
Outside/external/contractors	38520.75
	677,427.70

Note: US operations do not report figures by gender due to legal regulations.

A TOTAL OF 677,428 WORK-HOURS OF TRAINING WERE GIVEN IN 2022, AN AVERAGE OF 46 HOURS PER EMPLOYEE.

BREAKDOWN OF TOTAL TRAINING HOURS BY TYPE



ACCORDING TO THE RESULTS OF OUR SURVEY, 82% OF EMPLOYEES SAY THE COMPANY PROVIDES THEM WITH TRAINING AND DEVELOPMENT TOOLS TO DO THEIR JOBS; 86% SAY THEY HAVE THE TRAINING NECESSARY TO DO THEIR JOBS EFFECTIVELY.

EMPLOYEE EVALUATIONS

In our organization, we assess and reward the development, commitment and effort of our employees through precise measurement tools like the Individual Performance Planning and Analysis (IPPA) system, which determines the extent to which each employee is meeting their individual performance goals. Every year, employees decide, together with their supervisors, on the goals to achieve, which must be aligned with the business strategy, to ensure that each of us is working toward the general goals of the organization.

Job Category	Women	Men	Total
Executives	16	181	197
Employees	529	1567	2096
		TOTAL	2293

*Note: IPPA performance evaluations are applied only to administrative personnel. Employees in operating areas are rated by efficiency metrics and business results.

According to the survey results, 82% of employees believe the company offers them tools for training and development, and 86% say they have the training needed to do their job effectively. Additionally, employees who are nearing retirement participate in the Retirement Program, in which they receive information each year about planning for this phase of their life, including a manual addressing matters such as the company's retirement policy.

VITRO ALSO OFFERS EMPLOYEE BENEFITS THAT EXTEND TO OUR FAMILY MEMBERS IN AREAS SUCH AS HEALTH, ECONOMICS, EDUCATION, PERSONAL AND FAMILY DEVELOPMENT PROGRAMS, AND OTHERS.

LABOR PRACTICES AND QUALITY OF LIFE

Vitro adheres faithfully to the business principles contained in the Declaration of the International Labor Organization and the UN Universal Declaration on Human Rights, ensuring that physical and working conditions in each of our companies are consistent with the principles enumerated in those declarations. Our Code of Ethics and Conduct is grounded in our commitment to respect and enforce human rights in every one of our workplaces, and we recognize the importance and universality of these rights. We offer equal job opportunities based solely on merit, aptitudes for the position, and vocation, and any act of discrimination is strictly prohibited. We abide by the labor laws of each country where we operate. Our people have the right to free association, privacy, and collective bargaining. In the countries where collective bargaining agreements exist, our employees are free to participate in them. We take measures to ensure that we are not complicit in any form of forced or child labor or human trafficking.

Vitro also offers benefits that extend to our employees' family members, including health, economics, education, personal and family development programs, and others. We provide at least the minimum benefits required by law, and exceed them through compensation initiatives and special recognitions.

IN 2022, 81% OF THOSE SURVEYED SAID THEY WERE SATISFIED WITH THE BENEFITS THEY RECEIVE FROM THE COMPANY.

VITRO INITIATIVES

Vitro's engagement survey evaluates our employees' commitment and satisfaction with their working conditions and how they perceive their leaders' interest in their welfare. In 2022, 81% of those surveyed said they were satisfied with the benefits they receive from the company, and 84% said that the company's executives were genuinely interested in the welfare of the employees. Vitro also has specific initiatives to protect our employees' physical and emotional health:

Wellness Program: Its goal is to improve the overall health of people who work at Vitro through policies and workplaces that favor healthy habits like physical activity and healthy eating, minimizing risks.

Emotional Wellness Unit: Offers comprehensive professional services to Vitro employees, contributing to their well-being, quality of life and psychological development.

Recognition of people retiring from Vitro: We express our gratitude for people who will soon be leaving our organization at retirement. As part of this process, our entire work team attends a special event to wish them well in the next phase of their life.

Measures to retain employees with disabilities: Activities aimed at learning what the disabled feel and think about their work so that we can create initiatives their quality of life at work.

PLANET

Our company is committed to sustainable, responsible growth in harmony with the environment and the communities where we operate. To this end, we have a policy on Safety, Health, Environment, and Energy, which sets guidelines for ensuring our activities and operations are sustainable and do not negatively affect the environment. With this, we generate benefits both for our company and for society at large.

PLANET

CIRCULAR ECONOMY

Vitro understands the importance of sustainably managing all the resources we use in our processes, products and services. We have an environmental management system in line with current laws and regulations. We also encourage the reuse and recycling of material in all phases of our daily activities, including production, packing, transport and other activities, in order to create a circular economy that maximizes the use of available resources.

Glass recycling

In our manufacturing processes, we make the most of glass's qualities as a 100% recyclable material, using glass waste, or cullet, from our own processes and from companies that collect it, to reduce our consumption of energy and improve process efficiency. Since 2018, Vitro has used more than 3 million metric tons of cullet, avoiding the emission of approximately 630,000 tCo_2e.

630,000 tCO_2E AVOIDED ARE EQUIVALENT TO:

The emissions produced by 70.8 million liters of gasoline

Or

The emissions from the energy consumption of 79,357 homes in a year

Or

The emissions captured by 745,564 hectares of forest.

*Data from the Environmental Protection Agency (EPA).

THE GLASS WASTE RECYCLING PROCESS HAS MONETIZED MORE THAN 3 MILLION METRIC TONS OF CULLET, WHICH HAD A POSITIVE IMPACT ON ENVIRONMENTAL SUSTAINABILITY BY AVOIDING THE EMISSION OF MORE THAN 630,000 METRIC TONS OF CARBON DIOXIDE EQUIVALENT.

IN 2022, 89% OF THE WASTE WE GENERATED WAS SENT TO SOME TYPE OF RECOVERY OR RECYCLING PROCESS.

Other recycled materials

The company has implemented various actions and strategies to reuse or avoid the use of material for packaging and for containers. We have agreements with certain clients that permit the reuse of packaging materials. When it is necessary to use new material, we estimate that 3 in 10 of our products are packed in paper or corrugated cardboard, and 1 in 5 of the paper and cardboard containers are made with 100% recycled material.

Comprehensive Waste Management

Our comprehensive waste management program focuses on correct separation of waste and detection of areas of opportunity to recycle materials. This program includes training and evaluations to certify the final disposal of the materials used. We classify waste as hazardous or non-hazardous; only 1% of the waste we generated in 2022 was hazardous.

ENERGY EFFICIENCY

For Vitro, responsible production and consumption are priorities for protecting our planet. Through our Energy Management System, we have programs for reducing the impact of our operations and the amount of energy we consume. We use natural gas, electricity, steam and fossil fuels as energy sources in our processes.

In the past year, the National Commission for Energy Efficiency recognized Vitro for its Voluntary Energy Efficiency Agreement (VEEA), citing its measures for reducing energy intensity and increasing energy efficiency.

We reduced our energy consumption by almost 10% between the base year of 2018 and the reporting year of 2022. We also achieved an energy intensity rating of 7.7% and, in keeping with the targets for renewable energies in the regions where we operate, in 2022, 18% of the electrical energy we used, or 3% of all the energy consumed at Vitro, came from renewable sources.

IN 2022, 18% OF THE ELECTRICAL ENERGY WE USED CAME FROM RENEWABLE SOURCES.

WATER

In 2022, Vitro continued to fulfill its social commitment to the communities where we are present, aware of the difficulties they faced during a period of drought that afflicted various municipalities of Mexico during the year.

To help communities weather the effects of this natural phenomenon, Vitro contributed more than 1,101,149 m3 of water through the corresponding authorities. Some of this was distributed directly to our employees and their families through tanker trucks and jugs of drinking water.

Furthermore, we decided to invest around USD 100,000 to prepare a ground well and supply this resource to the city. Because we know this problem will continue to affect our neighbor communities, Vitro will contribute another 587,500 m3 of water in 2023.

VITRO CONTRIBUTED MORE THAN 1.1 MILLION CUBIC METERS OF WATER TO COMMUNITIES AFFECTED BY THE DROUGHT THAT HIT VARIOUS STATES OF MEXICO IN 2022.

EMISSIONS AND CLIMATE CHANGE

In support of the SDG "Climate action," Vitro participates in various environmental assessments and certifications of its responsible use of resources and renewable energy. We submit regularly to voluntary audits and assessments to guarantee that we follow environmental laws and can continually improve our processes without affecting the environment. In 2022, our emission of scope 1 greenhouse gases and compounds accounted for 61% of our total emissions, while our scope 2 emissions made up the other 39%.

Using 2018 as the base year, our efficiency improvement projects and metrics in recent years have enabled us to reduce our greenhouse gas emissions by more than 13%, and the energy intensity of our products by 8%.

In keeping with the various regulations on preventing climate change, a number of our facilities participated in SEMARNAT's pilot emissions trading program in Mexico, as well as the cap-and-trade program of the California Air Resources Board. In 2022, Vitro was one of the manufacturing establishments required by the General Law on Climate Change to undergo an inspection, and our company received a positive ruling by the accredited certification agencies that verify and validate GHG emissions.

89%

OF OUR EMPLOYEES ARE AWARE OF THE COMPANY'S ENVIRONMENTAL COMMITMENT, ACCORDING TO THE ENGAGEMENT SURVEY.

IN 2022, WE INVESTED MORE THAN USD 2.7 MILLION IN PROJECTS WITH ENVIRONMENTAL BENEFITS.

VITRO INITIATIVES

In 2022, we invested more than USD 2,775,000 in 45 projects at various of our organization's manufacturing sites, which helped reduce overall energy and water consumption as well as our atmospheric emissions and waste generation. Adding together the benefits of our projects over the past five years, we have succeeded in avoiding the emission of more than 60,000 tCO_2e and 280,000 m3 of water.

INNOVATION AND CONTINUOUS IMPROVEMENT

The SDG "Industry, innovation and infrastructure" aims at supporting economic growth and social value creation through resilient infrastructure, sustainable industrialization and innovation. Sustainable industrialization can contribute to reducing poverty in the most vulnerable communities, but this must be done in a planned and orderly fashion, to avoid further burdening people and the planet. Since 2019, we have applied an Excellence Model in all our companies, to encourage the creation and standardization of best practices and to turn each of them into a center for excellence.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

INNOVATION AND CONTINUOUS IMPROVEMENT

VITRO EXCELLENCE MODEL

At Vitro, we pursue operating excellence to exceed expectations with the highest efficiency, reliability and quality. Since 2019, we have applied an Excellence Model in all our companies, to encourage the creation and standardization of best practices and to turn each of them into a center of excellence, to remain a highly competitive company in all markets where we participate, and to promote sustainable growth.

In 2021 we focused on seven key systems, a scope we expanded to ten systems in 2022. The first seven were Visual Management and the 5 S system, Standard Treatment Workflows, Training and Qualification, Daily Management, Environment, Health & Safety, Problem Solving, and Total Productive Maintenance. Last year we added Business Planning, Engagement & Control, and Process Automation.

VITRO IS CONCERNED ABOUT OPERATING EFFICIENCY AND SOCIAL RESPONSIBILITY TOWARD STAKEHOLDERS, WHICH IS WHY WE MAKE OUR PRODUCTS WITH CUTTING-EDGE TECHNOLOGY.

As part of our continuous improvement process, we conducted cross-audits of our plants, with the support of an external consultant and the leaders of each business. The goal of these evaluations was to develop a consistent standard of excellence applied to day-to-day work, identify and transfer best practices and improve overall performance. Once the visits were over, reports were drawn up and discussed, and based on this feedback, action plans were designed that will help us move ahead more quickly and standardize best practices.

Since introducing the Excellence Model in 2019, we have gradually increased the level of maturity, evolving from implantation to standardization. In 2022, a number of our operations were recognized for best excellence practices:

- 3 plants recognized for beginning the pursuit of a high-yield maturity rating.
- 18 plants recognized with Silver Level, indicating a pursuit of standardization maturity.
- 6 plants implementing the model and generating value.

BENEFITS OF THE EXCELLENCE MODEL

1. Fosters a strong commitment to quality and process continuity
2. Ability to identify high-impact opportunities and promote change management
3. Strong alignment, coaching and collaboration among all the business units
4. Introduction of excellence systems and tools
5. Effective evaluations and proactive feedback
6. Promotion of an organization-wide culture of excellence.

BY 2022, AROUND 78% OF OUR OPERATIONS WERE RECOGNIZED FOR THEIR EXCELLENCE PRACTICES.

SINCE INTRODUCING THE EXCELLENCE MODEL IN 2019, WE HAVE GRADUALLY INCREASED THE LEVEL OF MATURITY, EVOLVING FROM IMPLANTATION TO STANDARDIZATION.

INNOVATION CULTURE

The Company promotes a culture of innovation to ensure employees' comprehensive advancement, stimulating people's creative capacities through contests and innovation programs.

Innspire Program

Innspire is an innovation program at our Container division that encourages continuous improvement and process efficiency by incorporating valuable proposals from our employees to bring about transformations in their work areas and in our plants.

More than 21 ideas were put forth in 2022, 5 of which had a particularly positive impact. More than 130 innovators were recognized for ideas that generated benefits and savings for the company.

Innova Design Contest

The **Innova Design** contest produced two new product ideas in 2022 that are worth mentioning.

In February 2022, one of the winning entries was featured in the launch of the 60ml "you Bloom" by Jafra, the first sustainable fragrance by this company. The product consists of PCR bottle, a cap and packing box made with biodegradable material, making it ideal for Mother's Day campaigns.

On January 1, Jafra also launched a 50ml J-Sport Femme, inspired by sportswomen who value functionality. The product is a perfect combination of ergonomics with a capped bottle, making it practical and easy to use.

This annual contest for the development of containers for direct sale, intended to promote innovation and recognize creativity in Mexico, will be held for the fifth time in 2023. Registration will begin in January and the awards ceremony will be held in May. The call for entries was published in social media in November 2022. Its aim is to continue strengthening ties between students, clients, the industry and Vitro. The context also provides an opportunity to attract talent and encourage collaboration among various sectors.

IN 2022, 21 IDEAS WERE PRODUCED IN THE INNSPIRE CONTEST, 5 OF WHICH WERE DISTINGUISHED FOR THEIR IMPACT, AND MORE THAN 130 INNOVATORS WERE RECOGNIZED

VITRO BEGAN WORKING TOGETHER WITH THE MUNICIPAL GOVERNMENT OF SAN PEDRO GARZA GARCÍA, NUEVO LEÓN, TOWARD OBTAINING LEED® FOR CITIES SUSTAINABLE CERTIFICATION.

Innovation in Community

Vitro has joined forces with the municipal government of San Pedro Garza Garcia in the state of Nuevo Leon to achieve LEED® for Cities certification.

The aim is to improve quality of life for local residents through comprehensive sustainable planning, and to help San Pedro Garza García become the first municipality in Mexico to obtain this certification.

Vitro will be the only sponsor in this initiative, contributing the funds to cover the cost of consulting firms appointed by the municipality to assemble, draft and complete preparation of the review documents, and manage the review process according to the requirements of the LEED for Cities program.

Innovation in Education

Vitro Automotriz and Tec Milenio signed an agreement to work together on training and developing Production and Process Engineers. The agreement involves creation of a degree program in Industrial Engineering with a Specialization in Automotive Glass Manufacture, the first class of which will begin studying in January 2023. It will also establish Vitro Automotive Glass University. Through this initiative, Vitro's Automotive Glass division proves its commitment to the advancement of its employees and the excellence of its processes and products. Currently, more than 50 engineers are registered for the Vitro Automotive Glass Process Course, designed in collaboration with Tec Milenio.

COMMUNITY

For more than 100 years, Vitro has been proving its commitment to operating and growing sustainably, providing its employees and the communities where it operates with healthy and safe spaces for work and leisure. Through health and wellness plans and initiatives, environmental care, and support for the community and vulnerable groups, we make sure we are having a lasting positive impact and promoting comprehensive development. We understand that we are part of a society, and to help it advance and grow we need to work together with stakeholders. This is the best way to create benefits and build value for all.

4 QUALITY EDUCATION
11 SUSTAINABLE CITIES AND COMMUNITIES
3 GOOD HEALTH AND WELL-BEING

COMMUNITY

91% OF VITRO EMPLOYEES SEE THE COMPANY AS SOCIALLY RESPONSIBLE.

Vitro works hard for the well-being of its employees and their families. In 2022 we carried out a number of initiatives in partnership with our strategic allies, such as:

MÉXICO

ASOCIACIÓN NACIONAL PRO SUPERACIÓN PERSONAL WOMEN'S PROGRAM

We worked with ANSPAC's Women's Program to encourage the comprehensive development of the individual, based on the conviction that only by developing their full human potential can women build a new and better world, for their families and for their communities. Between January and May, 18 women from the cities of Monterrey and Toluca graduated from the 5-year program of studies. The next academic cycle began in September 2022, with 18 women enrolled at the basic level and 12 at the advanced level of Grupo Vitro ANSPAC García, now returning to in-person classes.

In 2023, the opening of the FAMA campus will resume and the Vitro Anspac Youth Program will begin.

ENGLISH FOR KIDS

This is an online program of Saturday classes for the children of our employees, offered through the Teams Platform. It promotes safe learning while respecting public health protocols during the pandemic, allowing children to study without exposing themselves to contagion. The program benefited 98 families.

SCHOLARSHIPS

Vitro grants financial aid for various academic levels and provides employee training to help workers and their families with their education. In the year 2022, around 180 employees benefited from the program.

FUNDACIÓN GOCASA

In December 2022, the company began an alliance with Fundación GOCASA in Villas del Álcali to help inhabits in an around this area to complete their high school education. Vitro participated by offering scholarships and stipends to cover the cost of the study guides and corresponding exams.

FEAC

The schools of Formación Educativa, A.C. (FEAC) were founded as primary schools for the children of Vitro employees, and although today all four of them also accept children from the general public, they guarantee Vitro employees that their children have access to an excellent education. All together there are 1,120 students enrolled in the schools, with 507 new students enrolling in 2022 and 309 graduating.

Glass Museum

The Glass Museum, which has been open for 30 years, celebrates the history of glass in Mexico through its extensive collections. Visitors have an opportunity to view European glass from the 16th to the 19th centuries, examples of Mexico's "pulque glass," and the first examples of artisanal and industrial glass in Mexico, along with various pieces by pioneering Mexican glassmakers from the late 19th and early 20th century.

Last year the museum welcomed 3,489 visitors in person and another 374 virtual museumgoers. Five camps were held for the general public and Vitro employees' children. We also gave out 1,361 drawing and activity kits to our employees' families so they could have fun at home. Finally, the museum hosted an in-person school visit and three mosaic workshops for museum visitors.

SUMMARY OF INITIATIVES

GLOBAL INITIATIVES FOR THE COMMUNITY.

In Colombia, seven social commitment initiatives were held with local communities, including a campaign called “Costume Donation” in which employees and their children donated costumes for disadvantaged children in Chía. Surgical fabric costumes were given out to children who didn’t receive a costume. A donation was also made to the Región de Chía Home for the Elderly, along with support for the Community Action Committee and village authorities of the Vereda Samaria region, for activities in October and December. In Poland, Vitro supported Ukraine during the war by providing transportation to families of workers in that country, collecting food supplies and funds to help people affected by the war. In the United States, Vitro carried out several initiatives, including donation of fresh produce to 412 food rescue delivery sites and participation in the Adopt a Highway program, assuming responsibility for Guys Run Road in collaboration with the Pennsylvania Department of Transportation.

MORE THAN 990 PEOPLE WERE BENEFITED AND MORE THAN MXN 5 MILLION WERE INVESTED IN COMMUNITY INITIATIVES.

HABITAT

Vitro has made habitat one of the pillars of its sustainability model, in line with the UN Sustainable Development Goal "Life on Land." The company remains committed to growing in harmony with the environment and the communities where it is present.

15 LIFE ON LAND

HÁBITAT

OVIS

In 1996, Vitro was instrumental in the founding and promotion of the nonprofit organization Organización Vida Silvestre, A.C. (OVIS), dedicated to the preservation of the world's wildlife species. Since then, our company has worked closely with OVIS to support sustainable coexistence with endangered species of flora and fauna.

As a result of this synergy, we have been able to carry out significant conservation initiatives in various ecosystems of Mexico, protecting priority species to preserve our country's natural wealth. Currently, OVIS administers and conserves 152,466 hectares of protected natural areas, including private reserves in the states of Baja California Sur, Sonora, Nuevo León and Tamaulipas, as well as ecological buffer zones in the states of Nayarit, San Luis Potosí and Chihuahua.

Through ongoing maintenance and restoration efforts in each of these preserves, priority ecosystems are kept in good condition—from forests of pipe cactus and pastures to extensive mangroves and pine forests, conserving and in some cases increasing populations of threatened or endangered species, like the thick-billed parrot, golden eagle, Mexican grey wolf, bighorn sheep, black bear and Mexican prairie dog, among others.

All told, OVIS has helped to conserve 1,370 species of flora and fauna, 11 of them endangered, 10 endemic, 39 protected, 44 threatened and 11 classified as rare under Official Mexican standard NOM-059-SEMARNAT-2010, Environmental Protection of Mexican Native Species of Wildlife-Risk Categories and Specifications for Inclusion, Exclusion or Change – List of species at risk

Species	Category
Golden Eagle	Threatened
Thick-billed parrot	Endangered
Maroon-fronted parrot	Endangered
Maroon-fronted parrot	Endangered
Mexican Grey Wolf	Probably extinct in the wild
Black bear	Endangered
Mexican prairie dog	Endangered
Black-tailed prairie dog	Threatened

OVIS HELPED CONSERVE MORE THAN 153,000 HECTARES OF PROTECTED NATURAL AREA.

NATIONAL AVIARY IN PITTSBURGH, PENNSYLVANIA

As part of its commitment to protecting biodiversity, in 2022 Vitro supported the conservation of bird ecosystems, specifically those of the National Aviary in Pittsburgh, Pennsylvania, with a donation of USD 25,000. We also made an in-kind donation of raw glass, valued at approximately USD 40,000, to be installed in the renovated wetlands habitat. This space has been equipped with more than 6,000 square meters of bird-friendly glass, designed to avoid bird collisions and maximize ultraviolet (UV) transmission with Starphire® glass, helping to maintain wildlife and plants throughout the year.

VITRO EL MANZANO PARK

Vitro's El Manzano Park is another clear example of the company's commitment to protecting the environment. The park is a 585-hectare natural protected woodland area, part of the Cumbres de Monterrey National Park, that is home to numerous species of flora and fauna. The park has recreational and leisure areas for its employees and their families to enjoy, and is also open to members of the general public. In 2022, 51,422 people visited the park.

At the park, visitors are inducted into the culture of environmental care through thematic brochures, and park personnel continually monitor flora and fauna, with procedures for detecting tree diseases and avoiding the invasion of exogenous animal species that might be harmful to the ecosystem.

ACTIVITIES IN 2022

With the involvement of Vitro security staff and various municipal, state and federal government agencies, we helped control a large wildfire in the zone, which slightly affected 110 hectares of the park, although the mature forest suffered only minimal damage.

In coordination with the Glass Museum, we organized a camp for the children of Vitro employees, attended by 34 kids. There was also a reforestation program carried out at La Huerta de los Patos, part of El Manzano Park, in collaboration with Arca Embotelladora and PRONATURA, in which 5,000 endemic pine trees were planted.

Finally, we allocated a budget of MXN6.9 million for the maintenance of flora, fauna and park facilities, in order to care for the environment and ensure an optimum experience for visitors, including preventive and corrective maintenance to keep electrical networks, water networks, bathrooms, internet and radio communication in good working order and keep up with masonry and painting work, among other aspects.

MEMBERSHIP IN ORGANIZATIONS AND ASSOCIATIONS

US and Canada	Latin America and the Caribbean
Cosmetic Industry Buyers and Suppliers – CIBS	Asociación de Empresas de Ahorro de Energía en la Edificación ALENER
Blair County Chamber of Commerce	Asociación de Vidrieros de Nuevo León
Building Envelope Campaign – BEC	Asociación Mexicana de Ayuda a Niños con Cáncer del Estado de México (AMANC)
Center for Automotive Research – CAR	Asociación Mexicana de la Industria Salinera, A.C. AMISAC
Corporate Associate, Façade Tectonics Institute – FTI	Asociación Mexicana de Ventanas y Cerramientos, A.C. AMEVEC
Fenestration Canada	Asociación Nacional de la Industria Química ANIQ
Fenestration Glazing Industry Alliance – FGIA	Asociación Nacional Pro Superación Personal, A.C.
Glass Manufacturing Industry Council – GMIC	Cámara Nacional de la Industria la Transformación CAINTRA
International Living Future Institute Products Hub – ILFI	Campus Universitario Siglo XXI
Insulating Glass Certification Council Board of Governors – IGCC	Centro de Educación Básica para el Adulto
Living Building Challenge Red List of materials – LBC	Cluster de Vivienda y Desarrollo Urbano Sustentable
Motor & Equipment Manufacturers Association / Original Equipment Supplier Association – MEMA/OESA	Federación de Trabajadores de Sindicatos Autónomos
National Fenestration Rating Council – NFRC	Confederación Patronal de México COPARMEX
Pennsylvania Chamber of Commerce	Fideicomiso para el Ahorro de la Energía Eléctrica FIDE
Safety Glazing Certification Council – SGCC	Fundación GOCASA
The United States – Mexico Chamber of Commerce	Industriales Regiomontanos del Poniente, A.C. IRPAC
Wichita Falls Chamber of Commerce	Instituto de Estudios Superiores de Jocotitlán
	Instituto Tecnológico y de Estudios Superiores de Monterrey
	Primaria Mariano Riva Palacios y Primaria Derechos Humanos
	Secretaría del Trabajo y Previsión Social
	Servicio Nacional de Aprendizaje (Colombia) SENA
	Sistema Nacional para el Desarrollo Integral de las Familias
	Sustentabilidad para México, A.C. SUMe
	Tecnológico de Estudios Superiores de Tianguistenco
	Universidad Autónoma de Nuevo León
	Unión Industrial del Estado de México -UNIDEM
	Universidad del Valle de México
	Universidad UniverMilenium

INFORMACIÓN FINANCIERA

FINANCIAL AND OPERATING ANALYSIS

FINANCIAL AND OPERATING ANALYSIS

The global economy continued to face strong challenges in 2022, mainly from the effects of Russia's invasion of Ukraine and persistent and growing inflationary pressures.

The Russia-Ukraine conflict knocked the world's economy off balance by triggering an energy crisis in Europe, raising the cost of living and significantly dampening global economic activity. The prices of natural gas in Europe have been rising since 2021 as Russia cut back deliveries, increasing the likelihood of an energy shortage in the winters ahead. The conflict pressed food and other commodity prices higher on global markets, imposing further challenges throughout the world.

Inflationary pressures arising mainly from supply chain disruptions and higher energy prices prompted a swift tightening of global monetary and financial conditions, proving themselves a major source of concern for policymakers. To avoid allowing inflation to become entrenched, central banks swiftly raised benchmark policy rates, causing a considerable restriction of global financial conditions in 2022. Interest rate rose sharply, resulting in similar price increases in all asset classes, including stocks, and resulting in heavy unrealized losses in financial institutions' bond portfolios. The effects of this monetary policy tightening are becoming evident in parts of the banking industry, including regional banks in the United States.

Another factor affecting the global climate in 2022 was a new round of temporary shutdowns due to COVID-19, especially in China, where a contraction in the second quarter of 2022 dragged down global activity. The temporary closure of businesses and factories in response to a new outbreak of COVID-19 in Shanghai and other places weakened demand and reduced capacity utilization in that country, affecting international production and consumption, because lower demand means fewer exports for foreign suppliers.

All of these elements directly affected manufacturing processes around the world, including the manufacture of flat glass, glass containers and inorganic chemicals. The rise in energy prices and the inflationary climate had a direct impact on commodity prices, including natural gas, and drove up transportation and labor costs as well.

The peso/dollar exchange rate closed on December 31, 2022 at MXN$19.4715 per dollar, compared to MXN$20.4672 per dollar at the close of 2021.

During the year, the monthly closing exchange rate hovered in a range of 19.3965-20.6352 pesos per dollar. Compared to 2021, the Mexican peso grew stronger against the dollar, with a monthly average exchange rate of MXN 20.1137, compared to MXN 20.2830 in 2021.

CONSOLIDATED OPERATING RESULTS

The amounts presented in this section are expressed in nominal U.S. dollars. In 2018 the company changed its functional currency to the US dollar, in keeping with regulatory provisions contained in International Accounting Standard 21 (IAS 21) "Effects of Changes in Foreign Exchange Rates," since this currently better reflects Vitro's current economic climate and form of operation.

SALES

Consolidated net sales for the fiscal year ended December 31, 2022 were USD 2.35 billion, compared to USD 1.96 billion in 2021, an increase of 20.1 percent.

Consolidated net sales	
Year	USD million
2015	882
2016	1,051
2017	2,075
2018	2,238
2019	2,180
2020	1,768
2021	1,958
2022	2,352

FLAT GLASS

Sales in the Flat Glass division in 2022 grew 21.6 percent year-over-year, to USD 1.90 billion from USD 1.57 billion in 2021. Sales by this division benefited mainly from the reopening of business by the Architectural and Automotive Glass divisions.

Sales in the Architectural Glass business improved from 2021 to 2022, due to better performance in the specialties and commercial market in Mexico and the United States, a better mix of price/product, and higher glass prices in both Mexico and the United States due to inflationary pressures and limited production capacity in the market. Sales by this business suffered a temporary effect from the reduced availability of glass relating to repairs at a float glass furnace in García, Mexico (VF2), which started up operations and stabilized production in April 2022. Sales to the US residential market were relatively steady between 2021 and 2022, while in Mexico, the Architectural Glass business reported higher sales due mainly to the upward influence of inflation on prices, offset by lower demand in the commercial, residential and industrial markets.

In the Automotive Division, revenues rose in 2022 due to increased sales of sheet glass for the original equipment market and tempered glass for the spare parts market. The original equipment market continues to feel the effect of supply chain disruptions, which have hampered vehicle production and operating continuity and called demand projections into question. Inflationary pressures, mainly from energy prices, commodities and labor, remain heavy in this sector. Given the new cost conditions, we will continue to seek out improvements in our performance and prices so that we can achieve the results we project from this business.

Flat Glass Sales	
Year	USD million
2015	518
2016	659
2017	1,695
2018	1,839
2019	1,786
2020	1,426
2021	1,566
2022	1,904

CONTAINERS

The Container division, which includes glass containers for the cosmetics, fragrances, liquor and toiletries (CFT) segment and the machine manufacturing business (FAMA), reported a 20.2 percent rise in sales, with revenues totaling US271 million in 2022, compared to USD 225 million in 2021.

CFT sales grew in year-over-year terms, basically due to higher sales volume in the cosmetics and fragrances segments in Mexico and the United States and Europe, an increase in demand for premium liquor bottles in Mexico and the United States, which resulted in a better price/product mix, and an across-the-board increase in our product prices to keep up with global inflation pressures.

FAMA sales improved from 2021 to 2022, mostly due to a reactivation of capex by our clients, as well as investments in processes in the Architectural Glass and Container businesses, including maintenance, repairs and expansion.

Container sales	
Year	USD million
2015	206
2016	240
2017	216
2018	235
2019	218
2020	185
2020	225
2021	271

CHEMICALS

Sales by the Inorganic Chemicals Business in 2022 rose 6.1 percent year-over-year, primarily in Mexico, due to higher demand for sodium carbonate used to make glass and detergents; for sodium bicarbonate for the food and fishery market; for sodium chloride (salt) in the soda-chlorine segment, with a more product available for sale, offset by lower sales of calcium chloride—due to reduced availability—and limited shipments that slowed sales for the export de-icing industry and to the natural gas drilling and extraction industry. Sales in the Chemicals division benefited from an increased availability of our products, mainly sodium carbonate, sodium bicarbonate and sodium chloride.

Chemical Sales	
Year	USD million
2015	155
2016	146
2017	159
2018	168
2019	176
2020	158
2021	169
2022	179

EARNINGS BEFORE OTHER INCOME AND TAXES (EBIT) AND EBITDA

EBITDA for the year 2022 was 37.1 percent higher than in 2021, due primarily to higher sales volume and an increase in the average price of our products, a better price/product mix and operating efficiency at our plants, offset in part by an increase in the average price of natural gas and higher costs for transportation, labor, raw materials and packaging.

The margin of EBITDA to sales was 11.9 percent in 2022, higher than the EBITDA margin of 2021.

The flat glass segment reported higher EBITDA in 2022 than in 2021, mainly due to a higher volume of value-added product sold in the architectural glass business to the commercial and specialties market in the United states, a better product mix, and higher sales in the automotive business, partially offset by an increase in the price of natural gas, electricity, transportation and shipping, and labor. EBITDA was also negatively affected by a deterioration of operating efficiency in the automotive business, the result of supply chain disruptions and unreliable projections against actual production, which forced our plants to absorb the excess overhead.

The containers business unit, including CFT and FAMA, reported an increase in EBITDA in 2022 over 2021, mainly because of higher sales of value-added products in the glass containers business, thanks to a more favorable price product mix and efficient operation at close to 100% capacity, partially offset by an increase in the cost of natural gas, transportation and packaging.

EBITDA in the Chemicals business dropped between 2021 and 2022, chiefly due to an increase in the price of coke and ammonia, higher packaging material costs, and an increase in the cost of transportation and shipping, partially offset by the increased availability of our products.

Year	Earnings before other income and taxes (EBIT) USD million	Consolidated EBITDA USD million	% of sales
2015	141	193	22%
2016	201	259	25%
2017	273	393	19%
2018	245	365	16%
2019	155	300	14%
2020	76	227	13%
2021	21	204	10%
2022	86	280	12%

NET FINANCIAL COST

The Company reported a net financial cost of USD 54 million in 2022, compared to a net financial cost of USD 69 million in 2021. Most of the impact on net financial cost in 2021 came from higher interest expenses, including a higher real interest rate paid on unhedged floating rate loans, the costs associated with increasing the securitization program and the effect of updates and back charges relating to an income tax payment stipulated in a conclusive settlement with the Mexican tax authorities relating to previous years' obligations, offset in part by a reduction in financial expenses through the use of interest rate hedges on our long-term bank debt which tempered the impact of a rise in the benchmark Libor rate.

TAXES

In 2022, Vitro reported income tax of USD 27 million.

NET FISCAL-YEAR EARNINGS

Vitro reported a consolidated net profit of USD 17 million for the year, turning around from a loss of USD 106 million the year before.

CASH FLOW

Free cash flow in 2022 totaled $26 million compared to a negative $130 million in 2021, primarily due to higher EBITDA, a recovery in working capital investment, and refunds of VAT tax accumulated in previous quarters, offset by higher capex investment and income taxes.

INVESTMENTS IN CAPEX

The company invested USD 151 million in fixed assets in 2022. The Flat Glass division invested USD 55 million in Architectural Glass, USD 35 million in the Automotive Glass business and USD 4 million in Inorganic Chemicals. The Container division invested USD 53 million in CFT and USD 2 million in FAMA. The remainder went to general corporate purposes.

CONSOLIDATED FINANCIAL POSITION

As of December 31, 2022, the company had a cash balance of USD 123 million, compared to USD 141 million at the close of the previous quarter of the year. The reduction in the cash balance was due primarily to payment of a short-term loan of USD 30 million, capex investments in the quarter, and payment of a cash dividend of USD 10 million.

Total debt closed December 31, 2022 at USD 743 million, made up of dollar-denominated long-term debt that included a bilateral loan of USD 170 million, a note for USD 180 million, a bilateral loan of USD 150 million, a bilateral loan of USD 75 million, USD 10 million of a bilateral line of credit for up to USD 70 million, USD 48.1 million in leasing liabilities usage rights, and short-term debt including leasing and the amount drawn on revolving working capital credit lines.

The debt/EBITDA ratio closed 2022 at 2.7x, with a net debt to EBITDA ratio of 2.2x.

STOCK PERFORMANCE (MXN PER SHARE)

The price of the shares representing the Company's capital stock (VITROA) on the Mexican Stock Exchange (BMV) closed 2022 at MXN 22.00 per share, compared to MXN 24.15 per share at the end of 2021.

Quarter	Low	High
I	19.69	26.12
II	21.8	27.4
III	18.49	22.15
IV	16.3	22.15

MATERIAL EVENTS

Unusual movements in the trading of securities representing the capital stock of Vitro, S.A.B. de C.V.

San Pedro Garza García, Nuevo León, March 31, 2022.- Vitro, S.A.B. de C.V. (BMV: VITROA), a leading North American glass manufacturer, informs the investing public that the movements in trading of the securities identified with ticker symbol VITROA during the week are attributed to conditions inherent to the market.

At the moment, the Company has no forthcoming material event or additional information to communicate. In the event that complementary information emerges at some subsequent date it will be disclosed on the same day or on the business day immediately following, at the latest, by this same medium, and as established by the regulatory framework.

Vitro announces the signing of a Credit Agreement for USD 70 million

San Pedro Garza García, Nuevo León, April 13, 2022.- Vitro, S.A.B. de C.V. (BMV: VITROA), a leading North American glass manufacturer, hereinafter "Vitro" or "the Company," informs the investing public that it signed a credit agreement today with BBVA México in the amount of USD 70 million, at a term of 5 years. The proceeds will be used to finance the new furnace for its container division, located at the plant in Toluca, Mexico State.

The credit agreement was signed by Vitro's subsidiary Vitro Envases, S.A. de C.V., with Vitro and some of its subsidiaries in Mexico and abroad acting as guarantors.

Vitro successfully launches a program to sell accounts receivable

San Pedro Garza García, Nuevo León, May 18, 2022.- Vitro, S.A.B. de C.V. (BMV: VITROA), a leading North American glass manufacturer, hereinafter "Vitro" or "the Company," announces the successful launch of a program to sell off-balance accounts receivable. The transaction includes accounts receivable originated by certain Vitro subsidiaries in the United States, Mexico and Canada, in three different currencies: US dollars, Mexican pesos and Canadian dollars. The program has a duration of 3 years and will allow for the securitization of up to USD 100 million. In this transaction, Finacity acted as structuring agent and will be responsible for the administration and regular reporting on the program.

The initial proceeds of the program will be used to repay portion of the short-term debt, and the remainder will be kept in cash to provide the Company with more financial flexibility and liquidity.

CONSOLIDATED FINANCIAL STATEMENTS

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

Consolidated financial statements as of December 31, 2022 and 2021 and for the years then ended, and Independent Auditors' Report dated March 14, 2023.

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

Independent Auditors' Report and Consolidated Financial Statements for the years ended on December 31, 2022 and 2021.

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INDEPENDENT AUDITORS' REPORT

TO THE BOARD OF DIRECTORS AND STOCKHOLDERS VITRO, S.A.B. DE C.V.

(Thousands of U.S. dollars)

OPINION

We have audited the consolidated financial statements of Vitro, S.A.B. de C.V. and subsidiaries (the "Group"), which comprise the consolidated statements of financial position as of December 31, 2022 and 2021, the consolidated statements of profit or loss and other comprehensive income, changes in stockholders´ equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly in all material respects, the consolidated financial position of Vitro, S.A.B. de C.V. and subsidiaries, as of December 31, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended, in accordance with International Financial Reporting Standards (IFRS).

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditors' responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Mexico, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe 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 of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

TESTING OF IMPAIRMENT ANALYSIS OF LONG-LIVED ASSETS

See notes 10, 12 and 13 of the consolidated financial statements.

KEY AUDIT MATTER

Property, machinery and equipment, intangible assets and other assets with a defined useful life in addition to goodwill (long-lived assets) for $1,456,891 represents 57% of total consolidated assets, of which $531,373 (includes net operating assets for $179,914) corresponds to the Cash Generating Unit (CGU) of the Automotive Business.

Management tests long-lived assets for impairment when there are triggering events and in case of goodwill at least once a year at year end. Several key assumptions are used in the determination of estimated value in use, including estimates of future sales amounts and prices, operating costs and the discount rate.

We have identified the impairment testing of long-lived assets of the CGU of the Automotive Business as a key audit matter due to the complexity and the significant judgment required in determining the estimated value in use.

HOW THE KEY AUDIT MATTER WAS ADDRESSED IN OUR AUDIT

Our audit procedures for this key audit matter included the following, among others:

- Involving our own valuation specialists to assist us in evaluating the appropriateness of the discount rates applied and comparing it to available public information of comparable companies.
- Evaluating the assumptions applied to key inputs such as long-term growth rates expected for the CGU of the Automotive Business determined by the Group.
- Performing our own sensitivity analysis, which included assessing the effect of reasonably-likely reductions in forecast cash flows, to evaluate the estimated impact on the estimated value in use of the CGU of the Automotive Business.
- Evaluating the adequacy of the disclosures in the consolidated financial statements.

OTHER INFORMATION

Management is responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended December 31, 2022, to be filed with the National Banking and Securities Commission (Comision Nacional Bancaria y de Valores) and the Mexican Stock Exchange (Bolsa Mexicana de Valores), (the "Annual Report") but does not include the consolidated financial statements and our auditors' report thereon. The Annual Report is expected to be made available to us after the date of this auditors' report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the Annual Report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

Those charged with governance are responsible for overseeing the Group's financial reporting process.

AUDITORS´ RESPONSIBILITIES FOR 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 ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

- Identify and assess 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 the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by 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 Group's ability to continue as a going concern.
- If we conclude that a material uncertainty exists, then 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 Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most 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 our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication

KPMG Cárdenas Dosal S. C.

R. Sergio López Lara
Monterrey, N.L., México, March 14, 2023.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As of December 31, 2022 and 2021
(Thousands of U.S. dollar)

	Notes		2022		2021
Assets					
Cash and cash equivalents	17	$	**122,699**	$	110,122
Trade accounts receivable, net	6 and 17		**61,854**		212,864
Recoverable taxes			**22,406**		8,096
Recoverable value added tax			**32,975**		46,478
Other current assets	5		**111,464**		33,805
Inventories, net	7		**480,288**		458,129
Current assets			**831,686**		869,494
Investment in associated companies	8		**38,585**		22,642
Investment properties	9		**29,947**		20,147
Property, plant and equipment, net	10		**1,139,799**		1,143,029
Right of use assets, net	11		**47,768**		58,865
Goodwill	12		**56,496**		57,703
Derivative financial instruments	17		**21,402**		-
Intangible and other assets, net	13		**242,677**		256,148
Deferred income taxes	22		**149,865**		111,294
Long-term assets			**1,726,539**		1,669,828
Total assets		**$**	**2,558,225**	**$**	**2,539,322**

See accompanying notes to consolidated financial statements.

Adrián Sada Cueva
Director General Ejecutivo

Claudio L. Del Valle Cabello
Director de Administración y finanzas

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As of December 31, 2022 and 2021
(Thousands of U.S. dollars)

	Notes		2022		2021
Liabilities					
Short-term debt	14	$	**113,700**	$	101,672
Short-term maturity of long-term debt	14		**2,544**		573,798
Interest payable	17		**1,742**		584
Short-term maturity of lease liability	11		**18,746**		17,851
Trade accounts payable	17		**271,320**		270,188
Accrued expenses and provisions	15 and 17		**59,228**		48,039
Income tax payable	22		**639**		21,121
Deconsolidation income tax	22		**10,855**		19,225
Other short-term liabilities	5 and 17		**110,661**		90,134
Short-term liabilities			**589,435**		1,142,612
Long-term debt	14		**586,003**		7,221
Long-term lease liability	11		**22,352**		32,792
Deconsolidation income tax	22 and 5		**-**		9,578
Deferred income taxes	22		**9,787**		15,678
Other long-term liabilities	5		**12,770**		9,134
Derivative financial instruments	17		**-**		13,011
Employee benefits	16		**131,962**		108,891
Long-term liabilities			**762,874**		196,305
Total liabilities			**1,352,309**		1,338,917
Stockholders' equity					
Capital stock	18		**378,860**		378,860
Repurchased shares	18		**(32,621)**		(32,621)
Additional paid-in capital			**344,037**		344,037
Other comprehensive loss	18		**(21,822)**		(19,842)
Retained earnings	18		**537,099**		529,235
Controlling interest			**1,205,553**		1,199,669
Non-controlling interest	18		**363**		736
Stockholders' equity			**1,205,916**		1,200,405
Total liabilities and stockholders' equity		**$**	**2,558,225**	**$**	**2,539,322**

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the years ended December 31, 2022 and 2021
(Thousands of U.S. dollars, except the amounts of earnings per share)

	Notes		2022		2021
Net sales	24	$	**2,352,362**	$	1,957,568
Cost of sales	23		**1,831,815**		1,561,562
Gross profit			**520,547**		396,006
Administrative expenses	23		**139,598**		130,471
Distribution and sale expenses	23		**294,679**		244,388
Income before other expenses, net			**86,270**		21,147
Other (income)	20 a)		**(20,628)**		-
Other expenses	20 b)		**6,829**		30,041
Operating income (loss)			**100,069**		(8,894)
Financial cost, net:					
Financial income	21 a)		**(11,333)**		(2,647)
Financial cost	21 b)		**65,744**		71,217
Total financial cost			**54,411**		68,570
Share in net income of associated companies	8		**(883)**		(4,580)
Income (loss) before income taxes			**44,775**		(82,044)
Income taxes	22		**27,391**		24,854
Income (loss) of the year		**$**	**17,384**	**$**	**(106,898)**
Other comprehensive (loss) income:					
Items that will not be reclassified to profit or loss:					
Actuarial remeasurements of the defined benefit obligation, net of deferred taxes	16 and 18	$	**(17,078)**	$	4,209
Total items that will not be reclassified to profit or loss		$	**(17,078)**	$	4,209

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the years ended December 31, 2022 and 2021
(Thousands of U.S. dollars, except the amounts of earnings per share)

	Notas		2022		2021
Items that can be reclassified to profit or loss:					
Profit in fair value of hedging financial instruments, net of deferred taxes	17 and 18	$	**20,098**	**$**	21,846
Effect of foreign currency translation	18		**(4,893)**		(1,655)
Total items that can be reclassified to profit or loss			**15,205**		20,191
Total other comprehensive (loss) income			**(1,873)**		24,400
Total comprehensive income (loss) of the year		**$**	**15,511**	**$**	**(82,498)**
Total income (loss) of the year attributable to:					
Controlling interest	18	**$**	**17,864**	$	(106,601)
Non-controlling interest	18		**(480)**		(297)
Total income (loss) of the year		**$**	**17,384**	**$**	**(106,898)**
Total comprehensive income (loss) of the year attributable to:					
Controlling interest	18	**$**	**15,884**	$	(82,290)
Non-controlling interest	18		**(373)**		(208)
Total comprehensive income (loss) of the year		**$**	**15,511**	**$**	**(82,498)**
Earnings per common share:					
Basic and diluted income (loss) per share	18	**$**	**0.0380**	$	(0.2261)

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, 2022 and 2021
(Thousands of U.S. dollars)

	Notes	2022	2021
Cash flows in operating activities:			
Net income (loss)		$ **17,384**	$ (106,898)
Adjustments for:			
Depreciation and amortization	10,11,13 and 23	**145,749**	147,776
Impairment loss	23	**41,746**	50,000
(Gain) loss on sale of assets	10 and 20	**(10,580)**	9,711
Increase in fair value of investment properties	9 and 20	**(10,048)**	-
Share in net income of associated companies	8	**883**	4,580
Income taxes	22	**27,391**	24,854
Inventory obsolescence reserve	7	**6,065**	5,216
Financial income	21 a)	**(1,701)**	(2,647)
Derivative financial instruments	17 and 21 b)	**(1,341)**	19,177
Effect of foreign exchange variations and others		**(2,781)**	8,416
Financial costs	21 b)	**65,744**	44,809
		278,511	204,994
Changes in working capital:			
Trade accounts receivable, net		**176,671**	(38,095)
Inventories		**(28,102)**	(81,700)
Trade accounts payable		**(1,526)**	31,940
Other operating assets		**(62,070)**	(9,020)
Other operating liabilities		**24,444**	(27,201)
Employee benefits		**(11,466)**	(40,737)
Income taxes paid		**(101,842)**	(65,080)
Net cash flows generated by (used in) operating activities		$ **274,620**	$ (24,899)

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, 2022 and 2021
(Thousands of U.S. dollars)

	Notes		2021		2020
Cash flows in investing activities:					
Purchase of property, plant and equipment		**$**	**(154,337)**	$	(96,777)
Proceeds from sale of property, plant and equipment and investment properties			**14,368**		16,316
Prepayment for land purchase			**(6,896)**		6,896
Investment in joint venture			**(19,069)**		(2,000)
Purchase of intangible assets			**(8,285)**		(4,096)
Other assets			**(12,332)**		(3,231)
Interest collected			**273**		2,373
Net cash flows used in investing activities			**(186,278)**		(80,519)
Cash flows in financing activities:					
Acquisition of new debt	14		**464,028**		364,200
Payment of loans	14		**(444,701)**		(545,407)
Lease payments	11		**(21,384)**		(18,272)
Interest paid			**(57,126)**		(34,663)
Dividends paid	18		**(10,000)**		(16,938)
Repurchase of own shares	18		**-**		(5,072)
Debt raising cost	14		**(526)**		(1,542)
Derivative financial instruments			**(4,124)**		(8,681)
Net cash flows used in financing activities			**(73,833)**		(266,375)
Net increase (decrease) in cash and cash equivalents:			**14,509**		(371,793)
Cash and cash equivalents as of January 1,			**110,122**		483,909
Effect of foreign exchange variations			**(1,932)**		(1,994)
Cash and cash equivalents as of December 31,		**$**	**122,699**	**$**	**110,122**

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

For the years ended December 31, 2022 and 2021
(Thousands of U.S. dollars)

	Capital stock	Repurchased shares	Additional paid-in capital	Other com-prehensive income	Retained earnings	Controlling interest	Non-controlling interest	Total stockholders' equity
Balances as of December 31, 2020	**$ 378,860**	**$ (27,549)**	**$ 344,037**	**$ (44,153)**	**$ 652,774**	**$ 1,303,969**	**$ 944**	**$ 1,304,913**
Transactions with Company's stockholders:								
Repurchased shares (Note 18d)	-	(5,072)	-	-	-	(5,072)	-	(5,072)
Dividends paid (Note 18c)	-		-	-	(16,938)	(16,938)	-	(16,938)
Comprehensive income:								
Other comprehensive income (Note 18h)	-	-	-	24,311	-	24,311	89	24,400
Net loss	-	-	-	-	(106,601)	(106,601)	(297)	(106,898)
Comprehensive loss	-	-	-	24,311	(106,601)	(82,290)	(208)	(82,498)
Balances as of December 31, 2021	**$ 378,860**	**$ (32,621)**	**$ 344,037**	**$ (19,842)**	**$ 529,235**	**$ 1,199,669**	**$ 736**	**$ 1,200,405**
Transactions with Company's stockholders:								
Dividends paid (Note 18e)	-	-	-	-	(10,000)	(10,000)	-	(10,000)
Comprehensive income:								
Other comprehensive income (Note 18h)	-	-	-	(1,980)	-	(1,980)	107	(1,873)
Net income	-	-	-	-	17,864	17,864	(480)	17,384
Comprehensive income	-	-	-	(1,980)	17,864	15,884	(373)	15,511
Balances as of December 31, 2022	**$ 378,860**	**$ (32,621)**	**$ 344,037**	**$ (21,822)**	**$ 537,099**	**$ 1,205,553**	**$ 363**	**$ 1,205,916**

See accompanying notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2022 and 2021
(Amounts in thousands of U.S. dollars)

1. THE COMPANY'S ACTIVITY

Vitro, S.A.B. de C.V. ("Vitro", together with its subsidiaries the "Company" or "the Group") is a holding and operating company whose subsidiaries are engaged in serving diverse markets, including flat glass for the construction and automotive industries, as well as glass containers for the cosmetics, fragrances, pharmaceutical and liquor markets. In addition, Vitro and its subsidiaries are engaged in the manufacture of machinery, equipment and capital goods for industrial use, the manufacture of inorganic chemical products as well as energy commercialization. Vitro's corporate offices are located at Avenida Ricardo Margain Zozaya No. 400, Colonia Valle del Campestre, San Pedro Garza Garcia, Nuevo León, Mexico.

2. SIGNIFICANT EVENTS

2022

a) Credit agreement

On April 13, 2022, the Company entered into a credit agreement with BBVA for an amount of $70,000 with a five-year maturity, the proceeds have been allocated to the construction of a new container furnace at its plant located in Toluca, Estado de México, in order to offset the increase in demand for glass containers in the segments in which Vitro participates (See Note 14).

b) Dividends paid

At the General Ordinary Meeting held on November 15, 2022, the Stockholders agreed to declare and pay a dividend at the rate of $0.0212 per share (see Note 18e), the payment was made on November 25, 2022.

2021

a) Restructuring

The Board of Directors resolved favorably on a proposal for Vitro's businesses to adopt a new flexible corporate structure that allows them to have access to more competitive capital markets and allows them to take advantage of better business opportunities by industry, either through strategical mergers and acquisitions, co-investments, or through injections of capital and debt (hereinafter referred to as the "New Corporate Structure").

The adoption of this New Corporate Structure, whose implementation was approved by the Shareholders' Meeting on July 1, 2020, has begun through the mechanism and operations described below:

i. Creation of four new subsidiaries with residence in Spain that are wholly owned by Vitro S.A.B. de C.V., with the purpose that each one of them, respectively, holds the shareholding of the subsidiaries that operate the businesses of automotive glass, architectural glass, glass containers and inorganic chemical products, as appropriate (hereinafter referred to as the " Newly Created Subsidiaries").

ii. Direct transfer by Vitro, S.A.B. of C.V. in favor of the respective Newly Created Subsidiaries, of the shares or partnership interests of the subsidiaries resident in Mexico and abroad that are directly related to the operation of the automotive glass, architectural glass, glass container and chemical products business, as appropriate.

iii. Transfer of a financial structure for each business by Vitro in favor of the Newly Created Subsidiaries and/or one or more of the companies subject to the transfer, so that each of them has its own assets and liabilities related to the automotive glass, architectural glass, glass container and chemical product businesses, as applicable, and

iv. Transfer or grant of temporary use or a mix of the previous, by Vitro and some of its subsidiaries in favor of the Newly Created Subsidiaries and/or one or more of the companies subject to transfer, of certain assets that are directly related to the operation of the architectural glass, automotive glass, glass container and inorganic chemical products businesses, as applicable.

The implementation of the New Corporate Structure has no impact on the operations with our customers, suppliers, employees and other stakeholders. The effective date of this implementation was January 1, 2021.

As a result of such restructuring, the segment note presented in note 24 was updated to the new form of management and the information for 2020 was restructured accordingly.

b) Dividends paid

In the Ordinary General Meeting held on April 20, 2021, the shareholders agreed to declare and pay dividends at the rate of $0.0357 per share (see Note 18c), the payment was made on April 29, 2021.

c) Debt prepayment

On January 4, 2021, Vitro made a voluntary prepayment of $180,000 to its syndicated loan, in order to reduce interest payments (see Note 14).

d) Debt refinancing

On February 27, 2021, Vitro entered into financing through a bilateral credit agreement with BBVA for up to $150,000 for the purpose of paying existing debt (see Note 14).

e) Debt prepayment

On February 2, 2021, Vitro made a voluntary partial prepayment of $140,000 to the syndicated loan in order to reduce interest payments and lengthening its average life while maintaining a solid financial structure (see Note 14).

f) Debt refinancing

On February 26, 2021, Vitro entered into financing through a bilateral credit agreement with ING Bank N.V. for $75,000 for the purpose of paying the existing debt (see Note 14).

g) Debt prepayment

On March 1, 2021, Vitro made a voluntary prepayment of $84,000 to the syndicated loan, in order to fully pay the balance of the syndicated loan and complete the refinancing of the debt (see Note 14).

3. BASIS OF PREPARATION AND CONSOLIDATION

A) BASIS OF PREPARATION

The consolidated financial statements as of December 31, 2022 and 2021, and for the years then ended, have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements have been prepared on a historical cost basis, which includes the revaluation of the assumed cost, except for certain financial instruments which are recorded at fair value and investment properties which are recorded at fair value. Generally, historical cost is based on the fair value of the consideration given in exchange for the assets.

i. New standards adopted during the period of 2022

- Onerous Contracts - Cost of fulfilling a contract (Amendments to IAS 37)
- Property, plant and equipment: Proceeds before intended use (Amendments to IAS 16)
- Reference to the Conceptual Framework (Amendments to IFRS 3)

The implementation of these new standards and amendments did not have a material impact on the Company's consolidated financial statements.

ii. New standards not adopted

As of the date of these consolidated financial statements, the Company has not adopted the following new and revised IFRS Standards, that have been issued but are not yet effective:

- Classification of liabilities as current and non-current (Amendments to IAS 1) [1]
- IFRS 17 - Insurance contracts [1]
- Disclosure of accounting policies (Amendments to IAS 1 and IFRS 2) [1]
- Definition of accounting estimates (Amendments to IAS 8) [1]
- Deferred taxes related to assets and liabilities arising from a single transaction (Amendment to IAS 12) [1]

[1] *Effective for annual periods beginning on or after January 1, 2023.*

Management does not expect the adoption of the aforementioned new standards and amendments to have a significant impact on the Company's consolidated financial statements in future periods.

B) BASIS OF CONSOLIDATION OF FINANCIAL STATEMENTS

The financial statements include those of Vitro and its subsidiaries in which it has control. Control is obtained when the Company: 1) has power over an entity, 2) is exposed to, or has rights to, variable returns from its participation in the investment, and 3) has the ability to affect such returns through the exercise of its power. Power is the actual ability to direct the relevant activities of an entity. Intercompany balances and transactions have been eliminated in these consolidated financial statements. Investments in associates and other unconsolidated investments in which significant influence is held are valued by the equity method and at acquisition cost, respectively (Note 8).

As of December 31, 2022, the main entities controlled by Vitro and its shareholding are as follows:

FLAT GLASS	Vitro Arquitectónico España, S.L.U.[1]	100.00%		
	Vitro Automotriz UE, S.L.U.[1]	100.00%		
	Cristales Automotrices, S.A. de C.V.	51.00%		
	Cristales y Servicios, S.A. de C.V.	51.00%		
CHEMICALS	Industria del Álcali, UE, S.L.U.(1)	100.00%		
CONTAINERS	Vitro Empaques, S.L.U.[1]	100.00%	Vitro Vidriera Monterrey, S.A. de C.V.	100.00%
	Fabricación de Maquinas S.A. de C.V.	100.00%	Vitro Automatización, S.A. de C.V.	100.00%
CORPORATE	Aerovitro, S.A. de C.V.	100.00%		

[1] Spanish companies

The proportion of voting rights held by the Company in entities over which it exercises control is equal to its equity interest.

C) FUNCTIONAL AND PRESENTATION CURRENCY

The functional and presemtation currencies of the main countries in which Vitro has operations are as follows:

			Tipo de cambio de cierre al 31 de diciembre de		Tipo de cambio promedio al 31 de diciembre de	
Country	Presentation Curency	Functional Currency	2022	2021	2022	2021
EUA	U.S. Dollar	U.S. Dollar	$ 1.0000	$ 1.0000	$ 1.0000	$ 1.0000
Mexico	Peso	Peso	$ 0.0514	$ 0.0489	$ 0.0510	$ 0.0479
Canada	Canadian Dollar	Canadian Dollar	$ 0.7377	$ 0.7915	$ 0.7378	$ 0.7856
Colombia	Colombian Peso	Colombian Peso	$ 0.0002	$ 0.0003	$ 0.0002	$ 0.0003
Poland	Polish Zloty	Polish Zloty	$ 0.2278	$ 0.2481	$ 0.2241	$ 0.2449

The presentation currency is dollars of the United States of America. In these financial statements and the notes thereto, when reference is made to dollars or "$", it refers to amounts rounded to thousands of dollars of the United States of America; likewise, when reference is made to "Ps.", it refers to Mexican pesos.

D) USE OF ESTIMATES AND JUDGMENTS

The preparation of consolidated financial statements in conformity with IFRS requires the Company's administration to make certain estimates and use certain judgments to measure certain items in the financial statements and to make the disclosures required therein. The Company's administration, applying professional judgment, believes that the estimates and judgments used were appropriate in the circumstances; however, actual results may differ from those estimates.

Estimates and related judgments are reviewed on an ongoing basis. Changes to accounting estimates are recognized in the period in which the estimate is changed if the change affects only that period; or the current period and future periods if the revision affects both current and future periods.

The critical accounting judgments and key sources of uncertainty in applying estimates made at the date of the consolidated financial statements that have a significant risk of resulting in an adjustment to the carrying amounts of assets and liabilities during the next financial period are as follows:

A. Judgments

i. Going concern

As a result of the permanence of COVID-19 in the world, the Company has been taking sanitary measures and to mitigate the spread of this virus, social isolation, support for employees who have tested positive, restrictions on visits to our work centers, surveillance and monitoring of personnel have been maintained.

Due to the pandemic and other factors, there were complications in the supply chain in all regions of the automotive sector in which the Company participates, the shortage of raw materials, high prices of steel and plastic resins, and the lack of semiconductors, among other factors, have caused constant stoppages in plants of our OEM customers in the U.S. and Mexico, to mitigate this effect, some production lines were temporarily closed, trying to balance production and inventory generation.

Operating costs and expenses 2022 amounted to $2,266,092 which decreased by 3% with respect to total sales compared to 2021 when they amounted to $1,936,421 The decrease is due to a greater control of the prices of electricity and gas, among others.

ii. Functional Currency
To determine the functional currency of the subsidiaries, Administration evaluates the economic environment in which it primarily generates and disburses cash. For this purpose, factors related to sales, costs, sources of financing and cash flows generated by the operation are considered.

iii. Estimated lease term
The Company participates in lease contracts that do not have a defined mandatory term, a defined renewal period (if they contain a renewal clause), or automatic annual renewals; therefore, to measure the lease liability, the Company estimates the term of the contracts considering its contractual rights and limitations, its business plan, as well as management's intentions for the use of the underlying asset. Additionally, the Company considers the early termination clauses of its contracts and the probability of exercising them, as part of its estimate of the lease term.

B. Estimates

iv. Evaluations to determine the recoverability of accounts receivable.
The Company makes an allowance for doubtful accounts based on the expected loss model required by IFRS 9, and additionally takes into consideration factors such as the financial and operating situation of customers, the condition of past due accounts, as well as the economic conditions of the country in which they operate.

v. Assessments to determine obsolescence and slow-moving of inventories
The Company makes an estimate for obsolete and/or slow-moving inventories, considering its internal control process and operating and market factors of its products. This estimate is reviewed periodically and is determined considering the turnover and consumption of raw materials, work in process and finished products, which are affected by changes in production processes and changes in market conditions in which the Company operates.

vi. Evaluations to determine the recoverability of deferred tax assets
As part of the Company's tax analysis, the projected tax result is determined annually based on judgments and estimates of future operations, to conclude on the probability of recoverability of deferred tax assets.

vii. Useful lives of intangible assets and property, plant and equipment.
The useful lives of both intangible assets and property, plant and equipment are used to determine the amortization and depreciation of assets and are defined according to the analysis of internal and external specialists. The useful lives are reviewed periodically at least once a year and are based on the current condition of the 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 estimated useful lives, the carrying value of the assets is affected prospectively, as well as the amortization or depreciation expense, as appropriate.

viii. Impairment of long-lived assets
The carrying value of long-lived assets is reviewed for impairment if situations or changes in circumstances indicate that it is not recoverable. If there are indications of impairment, a review is performed to determine whether the carrying amount exceeds its recoverable amount and is impaired.

ix. Employee retirement benefits
The assumptions and estimates are established in conjunction with independent actuaries. These assumptions include demographic assumptions, discount rates and expected increases in compensation, future tenure, and the change in the value of plan assets, among others. Although the assumptions used are considered to be appropriate, a change in these assumptions could affect the value of the employee benefit liabilities and the results of the period in which they occur.

x. Estimated discount rate to calculate the lease liability
The Company estimates the discount rate to be used in the determination of the lease liability based on the incremental borrowing rate ("IBR") using a three-level model: (i) reference rate, (ii) credit risk component and (iii) adjustment for characteristics of the underlying asset. In this model, management also considers its policies and practices for obtaining financing, mainly considering the type of asset, the currency in which the contract is agreed and the term of the contract.

xi. Contingencies
Due to their nature, contingencies can only be resolved when one or more future events occur or do not occur, or one or more uncertain events that are not entirely within the Company's control. The assessment of such contingencies requires significant judgment and estimation of the possible outcome of those future events. The Company assesses the probability of loss from litigation and contingencies in accordance with estimates made by its legal advisors. These estimates are reconsidered periodically.

e) Cost and expense classification

The costs and expenses presented in the statement of comprehensive income were classified according to their function.

4. SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies of the Company are as follows:

A) 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 Company 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 U.S. dollars (the 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 for revenues, costs and expenses, as they are deemed representative of the existing conditions at the transaction date. Translation adjustments resulting from this process are recorded in other 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.
- 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.

B) 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 in the other current assets line item. Any cash equivalent whose use has been restricted is classified as restricted cash.

C) FINANCIAL INSTRUMENTS

Financial assets and liabilities are initially recognized and 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

The Company subsequently classifies and measures its financial assets based on the Company's business model to manage its financial assets, as well as the characteristics of the contractual cash flows of those assets. In this way, financial assets can be classified at amortized cost and effective interest method, at fair value through other comprehensive income, and at fair value through profit or loss.

All financial assets are recognized and written off at the trade date, whereby a purchase or sale of a financial asset is under an agreement with terms thar require the delivery of the asset within a period that is generally established by the corresponding market, and is 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 and liabilities are offset, and the net balance is presented in the consolidated statement of financial position when, and only when, the Company has a legal right to offset the corresponding balances and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

i. Financial assets at amortized cost

Financial assets at amortized cost are those that i) are kept within a business model whose objective is to maintain such assets to obtain the contractual cash flows and ii) the contractual conditions of the financial asset give rise, on specified dates, to cash flows that are only payments of the principal and interest on the amount of the outstanding principal.

The amortized cost of a financial asset is the amount at which the financial asset is measured at initial recognition less principal reimbursements, plus accumulated amortization using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss. The gross carrying amount of a financial asset is the amortized cost of a financial asset before adjusting any allowance for losses.

ii. Financial assets at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income are those whose business model is based on obtaining contractual cash flows and selling financial assets, in addition to their contractual conditions giving rise, on specified dates, to cash flows, which are only payments of the principal and interest on the amount of outstanding principal.

iii. Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are those that do not comply with the characteristics to be measured at amortized cost or at fair value through other comprehensive income, since: i) they have a business model different from those that seek to obtain contractual cash flows or obtain contractual cash flows and sell the financial assets, or, ii) the cash flows they generate are not only payments of the principal and interest on the amount of the outstanding principal.

The Company's model is to maintain financial assets to collect contractual flows. There is a segment of accounts receivable that are subject to a transfer of collection rights (with no recourse) through the use of financial factoring. The purpose of these operations is to accelerate the collection of the nominal amount documented in certain accounts receivable generated by the supply of goods and in some clients chosen by the financial counterparty (see Note 6) and thus optimizing the Company's cash flows. The scheme is that of a financial factoring without recourse and under the delegated collection modality (it is Vitro who receives the cash flows associated with this collection and immediately pays the financial counterparty), through which the collection rights of certain invoices to chosen clients, who once it accepts them, the collection rights are contractually transferred under the Financial Factoring contract, thus replacing the issuer (Vitro's operating subsidiaries) of the billing and receiving the nominal amount of accepted invoices, less a financial discount. It should be noted that the risks (mainly that of non-collection) and benefits of these operations are transferred to a structured entity, which is controlled by a third party, remaining as a free commission agent to receive payments of these accounts receivable. For accounting purposes, these particular operations and for the eligible portfolio, follow a trading business model; however, they are recognized at the nominal value of the invoices and, since the recovery periods are short, such value is similar to the fair value at the moment of initial recognition and the moment that elapses, between the issuance of the eligible invoices and the acceptance by Santander. It is until the moment in which the acceptance by Santander is perfected under the Financial Factoring contract, when Vitro temporarily recognizes a collection right towards this (settlement account) and simultaneously affects as financial expense, the amount that Santander adjusts by providing liquidity prior to collection, until it recognizes the settlement of the account receivable at its adjusted value for financial cost, proceeding to remove the collection right towards Santander from the Company's financial position. Although subsequently, Vitro and in order to maintain the commercial relationship with these clients, whose invoices were subject to the Financial Factoring scheme, continues to act as the collector on the U.S. and Canadian side, while the Mexican side a trust was created with Actinver acting as the receiver of the collection, when these nominal funds arrive, they are immediately turned over to the financial counterparty.

Derecognition of financial assets

The Company derecognizes a financial asset when:

– the contractual rights to the cash flows of the financial asset expire; or

– it transfers the rights to receive the contractual cash flows in a transaction where:

- all the risks and rewards of ownership of the financial asset are substantially transferred; or

- the Company does not substantially transfer or retain all the risks and rewards of ownership and does not retain control of the financial asset.

The Company enters into transactions whereby it transfers assets previously recognized in its statement of financial position; in these cases, the transferred assets are derecognized.

Impairment of financial assets

As of December 31, 2022 and 2021, the Company recognizes an allowance for impairment of financial assets on an expected credit loss approach, such as trade receivables and sundry debtors. The credit losses expected in these financial assets are estimated using a calculation model based on the historical experience of credit losses of the Company, adjusted to the factors that are specific to the debtors, the general economic conditions, and an evaluation of both of the current management and the conditions existing at the date of the report, including the time value of the money, when appropriate.

The measurement of expected credit losses is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above. For exposure at default, for financial assets, this is represented by the gross carrying amount of the assets at the reporting date; for financial guarantee contracts, the exposure includes the amount stated at the reporting date, together with any additional amounts expected to be obtained in the future per default date determined based on historical trend, the Company's understanding of the specific financial needs of the debtors, and other relevant forward-looking information.

The Company adopted a simplified model for calculating expected losses, through which it recognizes the expected credit losses during the lifetime of the account receivable. The model consists of determining the average write-off of accounts receivable for each customer, which is defined as the default threshold. The Company then determines the average value of accounts receivable for the last twelve months that have exceeded the default threshold, which is used as the basis for the calculation. The percentage to be applied to this base amount is the percentage that represents the average of the accounts receivable that exceeds the default threshold divided by the average sales of the last twelve months. This methodology imposes a provision on the initial recognition of the accounts receivable in order to determine the impairment of accounts receivable. For certain categories of financial assets such as trade accounts receivable, assets that have been subjected to impairment tests and that have not suffered individually, are included in such assessment on a collective basis. Before the objective evidence that an accounts receivable portfolio could be impaired, the Company's past experience with regards to collection, an increase in the number of overdue payments in the portfolio that exceed the average credit period, as well as observable changes in international and local economic conditions that correlate with the default in payments could be included.

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or when it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred, or in which the Company neither transfers nor retains substantially all the risks and rewards of ownership and does not retain control over the financial assets.

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 directly 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.

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit- impaired includes observable data about the following events:

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

- Significant financial difficulty of the issuer or the borrower.
- A breach of contract such as a default or past due event.
- The lenders of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, grant the borrower a concession that the lender would not otherwise consider.
- It is increasingly likely that the debtor will go into bankruptcy or some other financial reorganization.
- The extinction of a functional market for the financial asset due to its financial difficulties.

Financial liabilities

Financial liabilities at fair value with changes through profit or loss.

Financial liabilities are classified at fair value through profit or loss when the financial liability is (i) contingent consideration from an acquirer in a business combination, (ii) held for trading or (iii) designated as fair value through profit or loss.

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

- It is acquired mainly in order to repurchase it in the near future; or
- It is part of an identified financial instrument 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 held for trading purchasing or contingent consideration of an acquirer in a business combination may be designated as fair value through profit or loss on initial recognition if:

- Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- The financial liability is part of a company of financial assets or liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the group is provided internally on that basis; or
- It is part of an agreement that includes one or more embedded derivative instruments, and IFRS 9 allows the entire combined contract to be designated as fair value through profit or loss.

Financial liabilities at fair value through profit or loss are recorded at fair value, with any gain or loss arising on remeasurement recognized in the statement of comprehensive income.

Financial liabilities measured at amortized cost

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 rate 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. The difference between the carrying amount of the financial liability written off and the consideration paid and payable is recognized in profit or loss.

When the Company exchanges with the existing lender one debt instrument for another one with substantially different terms, such exchange is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, the Company accounts for substantial modification of terms of an existing liability or part of it as an extinguishment of the original financial liability and the recognition of a new liability. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective rate is at least 10 percent different from the discounted present value of the remaining cash flows of the original financial liability. If the modification is not substantial, the difference between: (1) the carrying amount of the liability prior to the modification; and (2) the present value of the cash flows subsequent to the modification should be recognized in profit or loss as an extinguishment gain or loss, within other income or expenses.

The costs for obtaining and issuing a new debt are capitalized within the consolidated statement of financial position, except for those costs associated with debt settlement, provided that both debts are with the same creditor.

If a debt is settled, the capitalized costs associated with such debt are canceled by recording them in profit or loss on the settlement date.

D) 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 selling price estimated during the regular course of business, less estimated termination costs and selling 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.

E) ASSETS HELD FOR SALE

Long-term assets are classified as held 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, once classified as assets held for sale, these assets are no longer depreciated. They are presented in the consolidated statements of financial position in the short term, according to the realization plans, and they are recorded at the lesser of their carrying amount or fair value less costs of sale.

F) INVESTMENT IN ASSOCIATED COMPANIES AND OTHER INVESTMENTS

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 companies are included in the Company's consolidated financial statements using the equity method. Under this method, an investment in an associated company is recognized in the consolidated statements of financial position at cost. 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 in the 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.

The results, assets and liabilities of other investments are included in the Company's consolidated financial statements at acquisition cost. Other investments are analyzed when there are indications of impairment, in which case the recovery value of such other investments is compared to the book value.

G) PROPERTY, PLANT AND EQUIPMENT

Land and 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 annually 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 a 50
Machinery and equipment	3 a 30

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

Gains and losses on the sale of land and buildings, machinery and equipment are determined by comparing the proceeds from the sale with the carrying amount of the item and are recognized net within other (income) and expenses, in income.

Investments in process are recorded at cost less any impairment loss recognized. The cost of assets constructed by the Company include cost for constructing the asset, 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 and the conditions necessary for operation are met.

H) VINVESTMENT PROPERTIES

Investment properties are those held to obtain rents and increase in value (including investment properties under 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.

I) LEASES

The Company evaluates whether a contract is or contains a lease agreement, at the beginning of the contract term. A lease is defined as a contract in which the right to control the use of an identified asset is granted, for a specific term, in exchange for a benefit. The Company recognizes a right-of-use asset and a corresponding lease liability, with respect to all lease contracts in which it operates as a lessee, except in the following cases: short-term leases (defined as leases with a term of lease less than 12 months); leases of low-value assets (defined as leases of assets with an individual market value of less than $ 7.5 (seven thousand five hundred dollars)); and lease contracts whose payments are variable (without any contractually defined fixed payment). For these contracts that exclude the recognition of a right-of-use asset and a lease liability, the Company recognizes rent payments as an operating expense in a straight line during the term of the lease.

The right-of-use asset is measured at cost and consists of of lease payments discounted at present value; direct costs to obtain a lease; advance lease payments; and the obligations of dismantling or removal of assets. The Company depreciates the right-of-use asset during the shortest period of the lease term and the useful life of the underlying asset, beginning on the start date of the lease; in this sense, when a purchase option in the lease is likely to be exercised, the right-of-use asset depreciates in its useful life. The right-of-use asset is tested for impairment when there are indications, in accordance with the long-lived asset impairment accounting policy.

The lease liability is measured in its initial recognition by discounting at present value the minimum future payments according to a term, using a discount rate that represents the cost of obtaining financing for an amount equivalent to the value of the contract, for the acquisition of the underlying asset, in the same currency and for a term similar to the corresponding contract (incremental loan rate). When the contract payments contain non-lease components (services), the Company has chosen, for some asset classes, not to separate them and measure all payments as a single lease component; however, for the rest of the asset classes, the Company measures the lease liability only considering the payments of components that are leases, while the services implicit in the payments are recognized directly in profit or loss as operating expenses.

In determining the term of the lease, the Company considers the mandatory term, including the likelihood of exercising any right to extend the term and/or an early exit.

Subsequently, the lease liability is measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and reducing the carrying amount to reflect the rental payments made.

When there are changes to the lease payments for inflation, the Company remeasures the lease liability from the date on which the new payments are known, without reconsidering the discount rate. However, if the changes are related to the term of the contract or to the exercise of a purchase option, the Company re-evaluates the discount rate in the liability remeasurement. Any increase or decrease in the value of the lease liability after this remeasurement is recognized by increasing or decreasing to the same extent, as the case may be, the value of the right-of-use asset.

Finally, the lease liability is written off at the time the Company settles all the contract's payments. When the Company determines that it is likely that it will exert an early exit from the contract that merits a cash outlay, such consideration is part of the remeasurement of the liability quoted in the preceding paragraph; however, in those cases in which the early termination does not imply a cash outlay, the Company cancels the lease liability and the corresponding right-of-use asset, immediately recognizing the difference between them in the consolidated statement of profit or loss.

In addition, the Company does not have any significant lease agreements in which it acts as lessor. During the year, the Company did not receive any rental concessions that required special treatment.

During the fiscal years 2022 and 2021 due to COVID-19, there were no changes in agreements that implied a change in relation to the requirements of the standard and its clarifications or amendments issued in 2022.

J) 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 loan costs 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 to be used in qualifying assets, is deducted from costs for loans eligible for capitalization. All other borrowing costs are recognized in profit or loss in the period they are incurred.

K) INTANGIBLE ASSETS

Intangible assets with finite and indefinite 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. 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 indefinite useful lives are not amortized and are annually subject to impairment tests.

L) 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 the 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 goodwill purposes cannot be reversed in a subsequent period.

Upon disposal of a subsidiary, the amount attributable to 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 carrying amounts 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 a reasonable and consistent basis of distribution can be identified, 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. 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. Value in use calculations require the Company to determine the future cash flows generated by the cash generating units and an appropriate discount rate to calculate the present value thereof. The Company uses cash flow projections of revenues using estimates of market conditions, future pricing of its products and production and sales volumes. Likewise, for discount rate and perpetuity growth purposes, indicators of market risk premiums and long-term growth expectations in the markets in which the Company operates are used.

The Company estimates a pre-tax discount rate for goodwill impairment testing purposes that reflects current assessments of the time value of money and the risks specific 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 were to make an investment decision on an equivalent asset in terms of cash flow generation, timing and risk profile.

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

When an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, such that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for that asset (or cash-generating unit) in prior years, except for goodwill.

External and internal indicators are subject to annual evaluation.

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. In addition, to perform this type of transactions an authorization from the Board of Directors is required.

The Company recognizes all derivative financial instruments in the consolidated 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 flows. 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 Company designates certain derivatives as hedging instruments in respect to rate risk cash flow hedges.

At the inception of the hedge relationship, the Company documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Company documents whether the hedging instrument is effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk, which is when the hedging relationships meet all of the following hedge effectiveness requirements:

- there is an economic relationship between the hedged item and the hedging instrument;
- the effect of credit risk does not dominate the value changes resulting from that economic relationship; and
- the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Company actually hedges and the quantity of the hedging instrument that the Company actually uses to hedge that quantity of the hedged item.

If a hedging relationship ceases to meet the hedge effectiveness requirement, but the risk management objective for that designated hedging relationship remains the same, the Company adjusts the hedge ratio (i.e. rebalances the hedge) so that it meets the qualifying criteria again.

The Company designates the full change in the fair value as the hedging instrument for all of its hedging relationships involving forward contracts.

The Company shall cease to apply the specific policy of assessing the economic relationship between the hedged item and the hedging instrument (i) to a hedged item or hedging instrument when the uncertainty arising from the reform of the reference interest rate is no longer present with respect to the timing, and the amount of cash flows based on the interest rate of the respective item or instrument or (ii) when the hedging relationship is discontinued. For its highly probable assessment of the hedged item, the Company will no longer apply the specific policy when the uncertainty arising from the reform of the reference interest rate on the timing and amount of future cash flows based on the interest rate of the hedged item is no longer present, or when the hedging relationship is discontinued.

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 at present value when the discount effect is material. Provisions are classified as current or non-current based on 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 TAXES

Income taxes for the year include the current and deferred income tax. Current taxes and deferred taxes are recognized in profit or loss, except when they are related to a business combination, or items recognized directly in stockholders' equity, or in other comprehensive income (loss).

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 asset and liability 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 income 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 income taxes for taxable temporary differences arising from the initial recognition of goodwill are not recognized. Deferred income 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 income tax assets and liabilities are offset only if there is a legally enforceable right to offset current income 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, and current tax assets and liabilities are intended to settled on a net basis or their tax assets and liabilities are simultaneously materialized.

A deferred income tax 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 income tax assets are reviewed at the reporting date and are reduced to the extent that the realization of the corresponding tax benefit is no longer likely.

Management periodically evaluates positions exercised in tax returns with respect to situations where applicable law is subject to interpretation. Provisions are recognized when appropriate based on the amounts expected to be paid to the tax authorities. Deferred income tax assets are recognized only when it is probable that future taxable profit will be available against which deductions for temporary differences can be used.

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 fair value of the plan assets is 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. When the benefits are earned, the expense is recognized in profit or loss.

The Company recognizes actuarial remeasurements derived from defined benefit plans in the other comprehensive income (loss) 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. The period cost of these benefits is recognized in profit or loss using the same criteria as 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, they are discounted at the present value.

iii. Short-term benefits
Short-term employee benefit obligations are measured on an undiscounted basis 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", FOR ITS ACRONYM IN SPANISH)

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

S) REVENUE RECOGNITION

Revenue from the sale of products in the course of normal operations is recognized at the fair value of the consideration received or receivable, net of returns, commercial discounts and volume discounts.

For revenue recognition of contracts with customers, a comprehensive model is used for the accounting of revenues from contracts with customers, which introduces a five-step approach to revenue recognition: (1) contract identification; (2) identify performance obligations in the contract; (3) determine the price of the transaction; (4) allocate the transaction price to each performance obligation in the contract; and (5) recognize revenues when the entity satisfies the performance obligation.

The Company has signed contracts with its most representative customers, in which sales price lists, agreed currency, purchase volumes, cash discounts and volumes are agreed, for customers who do not have a contract, purchase orders are defined as contracts where the same characteristics mentioned above are defined.

The Company's most important performance obligations are not separable and are met at one point in time; therefore, the customer cannot be partially satisfied, generally, in these contracts, there is more than one performance obligation and they are treated as an integral and non-separable service.

In the contracts and purchase orders, the selling prices for the performance obligations identified are agreed, as well as discounts, if applicable.

The Company recognizes revenue when the performance obligation with its customers is satisfied, i.e. when control of the goods is transferred to the customer, which is given at the moment of delivery of the promised goods to the customer in accordance with the agreed terms and conditions.

In the case of payments related to obtaining contracts, these are capitalized and amortized over the duration of the contract. If an advance payment is received, it is recorded as an advance payment from customers and if it is to be made over a period of more than one year, it is reclassified to long-term.

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, Exchange gains and the related employee benefit effects of both the defined benefit obligation and the plan assets. Interest income is recognized in income as earned, using the effective interest method.

Financial 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. Foreign 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 the 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.

For the years ended December 31, 2022 and 2021, the Company has no dilutive effects.

V) REPURCHASE OF SHARES

When capital stock recognized as stockholders’ equity is repurchased, the amount of the consideration paid, which includes directly attributable costs, net of taxes, is recognized as a reduction to stockholders’ equity. Shares that are repurchased are classified as treasury shares and are presented as a deduction from stockholders’ equity. When treasury shares are subsequently sold or reissued, the amount received is recognized as an increase in stockholders’ equity, and the surplus or deficit resulting from the transaction is transferred to retained earnings. Finally, when treasury shares are cancelled, an increase is recognized in “Retained earnings,” a decrease in “Stockholders’ equity” equivalent to the par value of the cancelled shares, and the surplus or deficit from the cancellation, with respect to the previous repurchase, is recognized in “Additional paid-in capital.”

W) SEGMENT INFORMATION

Operating segments are defined as the components of an enterprise engaged in the production and sale of goods and services that are subject to risks and rewards that are different from those associated with other business segments.

The Company’s subsidiaries are grouped according to the business segments in which they operate. For internal and organizational purposes, each business carries out the management and supervision of all the activities of the respective business, which refer to production, distribution and marketing of its products. Consequently, the Company’s management internally evaluates the results and performance of each business for decision-making purposes. Following this approach, in day-to-day operations, economic resources are allocated on an operating basis of each business.

Transactions between segments are determined on the basis of prices comparable to those that would be used with or between independent parties in comparable transactions at market value.

X) FAIR VALUE DETERMINATION

Several of the Company’s accounting policies and disclosures require the determination of the fair value of both financial and non-financial assets and liabilities. Fair values for measurement and disclosure purposes have been determined based on the methods mentioned in subsequent paragraphs; where appropriate, further information about the assumptions made in determining the specific fair values of that asset or liability is disclosed in the notes to the consolidated financial statements.

The levels that cover 1 to 3, based on the degree to which the fair value of the financial instruments 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 techniques and method of calculation are disclosed in Note 9 for investment properties and Note 17 for derivatives and debt disclosure.

5. OTHER CURRENT ASSETS AND OTHER SHORT AND LONG-TERM LIABILITIES

The balances of other current assets as of December 31, 2022 and 2021 are as follows:

	December 31,	
	2022	2021
Sundry debtors	$ 15,854	$ 18,787
Other accounts receivables [1]	75,996	-
Related parties (note 19)	1,494	3,141
Prepayments	6,467	5,115
Prepayment of inventories	4,097	2,726
Assets held for sale	4,819	2,692
Derivative financial instruments (note 17)	2,737	1,344
Total	**$ 111,464**	**$ 33,805**

[1] *Corresponds to the note receivable from Vitro RFA LLC. derived from the portfolio sale program (Note 6 and 19).*

The balances of other short–term liabilities as of December 31, 2022 and 2021 are as follows:

	December 31,	
	2022	2021
Sundry creditors	$ 78,619	$ 69,842
Taxes payable	22,070	16,509
Derivate financial instruments	9,972	3,783
Total	**$ 110,661**	**$ 90,134**

The balances of other long-term liabilities as of December 31, 2022 and 2021 are as follows:

	December 31,	
	2022	2021
Provision for compensations	$ 6,492	$ 2,878
Other liabilities	6,278	6,256
Total	**$ 12,770**	**$ 9,134**

6. TRADE ACCOUNTS RECEIVABLE, NET

Trade accounts receivable consists of the following:

	December 31,	
	2022	2021
Trade accounts receivable	$ 68,127	$ 224,996
Less allowance for doubtful accounts	(6,273)	(12,132)
Total	**$ 61,854**	**$ 212,864**

On December 23, 2019, Vitro entered into an agreement to initiate a non-recourse portfolio sale program with Banco Santander, S.A. for 3 years, which is extendable for an additional year; the amount of such program is up to $ 110,000. As of December 31, 2021, the amount of the portfolio sold amounted to $66,643. Since the Company considers this transaction as an advanced payment, the cash flows related are recorded in the consolidated statement of cash flows within the changes of trade receivables.

On May 18, 2022, Vitro entered into an agreement to initiate a portfolio sale program with PNC Bank, National Association and Finacity Asset Management LLC with maturity in 2025, the amount of such program was up to $100,000, subsequently on November 28 an increase to the program of an additional $175,000 was entered into. As of December 31, 2022, the amount of the portfolio sold amounted to $265,790. Since the Company considers this operation as an anticipated collection, the cash flows related to this transaction are recorded in the consolidated statement of cash flows within the changes of trade receivables.

The following is an analysis of the aging of trade receivable balances as of December 31, 2022 and 2021:

	Current	30 days	31 to 60 days	Over 60 days
2022	$ 36,318	$ 31,076	$ 733	´-
2021	$ 174.441	$ 31,229	$ 2,504	$ 16.822

	2022	2021
Opening balance	$ 12,132	$ 9,787
Increase of the year	20,469	38,456
Applications	(26,328)	(36,111)
Final balance of the year	**$ 6,273**	**$ 12,132**

7. INVENTORIES, NET

Inventories consist of the following:

	December 31, 2022		December 31, 2021	
Finished goods	$	233,677	$	227,507
Work in process		53,915		48,971
Raw materials		92,290		82,538
Spare parts		65,699		61,564
Others		34,707		37,549
Total	**$**	**480,288**	**$**	**458,129**

Inventories as of December 31, 2022 and 2021 are reduced to their net realizable value due to the obsolescence and slow-moving reserve in the amount of $21,349 and $12,645, respectively; this reserve mainly decreases the balances presented in the finished good, spare part and raw material lines.

In 2022 and 2021, inventories in the amount of $667,311 and $589,322 , respectively, were recognized as an expense and included in cost of sales for those periods.

8. INVESTMENT IN ASSOCIATED COMPANIES

- Investments in associates

	% Holding	December 31, 2022	December 31, 2021
Shandong PGW Jinjing Automotive Glass Co. Ltd.[a]	50.00	13,127	15,502

[a] *Investment in Shandong PGW Jinjiang Glass Co, LTD, a company engaged in the production of automotive glass.*

- Other investments

	% Holding	December 31, 2022		December 31, 2021	
Servicio Superior Ejecutivo, S.A. de C.V.[b]	50.00	$	6,393	$	7,140
Vitro RFA, LLC.	100.00		17,919		-
Others	25.00		1,146		-
Total		**$**	**25,458**	**$**	**7,140**

[b] *Joint venture held in April 2019, the entity is dedicated to air transportation of passengers.*

9. INVESTMENT PROPERTIES

As of December 31, 2022 and 2021, the balance of the investment properties is $29,947 and $20,147, respectively; these assets are mainly made up of land and buildings. The fair value of the investment properties was determined by independent and external property appraisers, who have appropriate recognized professional qualifications and recent on-site experience.

The fair value of investment properties was calculated based on Level 2 of the fair value hierarchy (Note 17iv).

Valuation technique	Significant unobservable inputs	Interrelationship between keyunobservable inputs and fair value
The commercial values of land in similar locations and dimensions were used. The price per square meter of this land was weighted.	- Location of similar land (address) - Land dimensions	Estimated fair value would increase (decrease) if: The replacement value would vary if the average square meter in the area were to decrease or increase if the square meter were to increase.

10. PROPERTY, PLANT AND EQUIPMENT, NET

A summary of this balance is as follows:

	December 31, 2022		December 31, 2021	
Land	$	161,271	$	165,831
Buildings		493,789		490,582
Accumulated depreciation		(317,057)		(304,787)
Impairment of buildings		(14,330)		(7,793)
		323,673		343,833
Machinery and equipment		1,666,168		1,533,831
Accumulated depreciation		(960,767)		(877,713)
Impairment of machinery and equipment		(69,911)		(35,929)
		635,490		620,189
Investments in process		*180,636*		179,007
Total	**$**	**1,139,799**	**$**	**1,143,029**

Cost or valuation	Land	Buildings	Machinery and equipment	Investments in process	Total
Balances as of January 1, 2021	$ 159,958	$ 510,978	$ 1,567,024	$ 123,880	$ 2,361,840
Additions	8,544	478	40,945	55,916	105,883
Disposals	(2,683)	(18,686)	(68,803)	-	(90,172)
Translation effect	12	(2,188)	(5,335)	(789)	(8,300)
Balance as of December 31, 2021	**$ 165,831**	**$ 490,582**	**$ 1,533,831**	**$ 179,007**	**$ 2,369,251**
Additions	$ 191	$ 7,990	$ 138,438	$ 5,514	$ 152,133
Disposals	(4,510)	(2,909)	(3,222)	-	(10,641)
Reclassifications	-	-	-	(3,769)	(3,769)
Translation effect	(241)	(1,874)	(2,879)	(116)	(5,110)
Balance as of December 31, 2022	**$ 161,271**	**$ 493,789**	**$ 1,666,168**	**$ 180,636**	**$ 2,501,864**

Accumulated depreciation and impairment	Buildings	Machinery and equipment	Investments in process	Total
Balances as of January 1, 2021	$ 301,208	$ 851,708	$ -	$ 1,152,916
Depreciation of the year	16,772	87,772	-	104,544
Impairment	7,793	35,929	-	43,722
Disposals	(12,198)	(58,031)	-	(70,229)
Translation effect	(995)	(3,736)	-	(4,731)
Balance as of December 31, 2021	$ 312,580	$ 913,642	$ -	$ 1,226,222
Depreciation of the year	$ 14,871	$ 85,420	$ -	$ 100,291
Impairment	6,537	33,982		40,519
Disposals	(2,300)	(2,945)	-	(5,245)
Translation effect	(301)	579	-	278
Balance as of December 31, 2022	**$ 331,387**	**$ 1,030,678**	**$ -**	**$ 1,362,065**

a) Capitalized borrowing cost

As of December 31, 2022 and 2021, the Company did not have assets that qualify for interest capitalization in the investments in process line item.

B) INVESTMENTS IN PROGRESS

As of December 31, 2022, they are mainly related to the investment of a new float furnace at Containers and a jumbo cutter at Architectonic. To complete the mentioned projects, additional cash flows of $54,000 are expected to be invested. The previously mentioned projects are expected to start operations during 2023 and early 2024.

C) IMPAIRMENT LOSS

The Company tested the value in use of its assets and derived from the situation and uncertainty of the automotive industry at December 31, 2022 and 2021, an impairment loss of $40,519 and $43,722 was recognized in property, plant and equipment belonging to such industry, which was recorded against cost of sales. The assumptions used for the impairment calculation are the same as those mentioned in note 12.

D) STANDARD COST

Depreciation is part of the standard cost of finished goods inventory.

11. RIGHT OF USE ASSET, NET AND LEASE LIABILITY

The following is a summary of the right-of-use assets and the lease liability:

	Building	Machinery and equipment	Transport equipment	Other	Total
Opening balance as of January 1, 2021	$ 15,505	$ 48,588	$ 2,865	$ 1,051	$ 68,009
Additions/ disposals	7,012	1,333	3,091	(580)	10,856
Depreciation expense of the year	(6,737)	(9,714)	(3,438)	(111)	(20,000)
Final balance as of December 31, 2021	$ 15,780	$ 40,207	$ 2,518	$ 360	$ 58,865
Additions/ disposals	4,822	2,856	4,159	2	11,839
Depreciation expense of the year	(7,071)	(11,913)	(3,818)	(134)	(22,936)
Final balance as of December 31, 2022	**$ 13,531**	**$ 31,150**	**$ 2,859**	**$ 228**	**$ 47,768**

a) Amounts recognized in consolidated statement of profit or loss

	2022	2021
Depreciation expense of right of use asset	$ 22,936	$ 20,000
Interest expense on lease liabilities	2,850	2,665
Expense related to low value asset leases	7,551	7,235

b) As of December 31, 2022 and 2021, the total cash outflow for leases amounts to $24,234 and $20,937, respectively.

The changes in the lease liability that derive from financing activities in accordance with the cash flow are as follows:

Balance as of January 1, 2021	$ 58,059
Interest expense on lease liabilities	2,665
Additions	10,856
Lease payments	(20,937)
Balance as of December 31, 2021	$ 50,643
Interest expense on lease liabilities	2,850
Additions	11,839
Lease payments	(24,234)
Balance as of December 31, 2022	**$ 41,098**

Total future minimum lease payments are analyzed as follows:

	December 31, 2022
Contractual obligations	48,348
Interests to be accrued	7,250
Obligations at present value	41,098
- Less than 1 year	18,746
- More than one year	*22,352*

Interest rates used as of December 31, 2022 and 2021 are as follows:

	December 31, 2022		
	Term in months	Pesos Interest rate	Dollars Interest rate
Buildings	36-120	11.61 –12.43%	6.95 -7.52%
Machinery and equipment	24-120	11.76–12.93%	4.76 -7.54%
Transport equipment	24-120	11.14-12.68%	6.94 -7.52%
Others	24-36	12.43-12.93%	7.52 -7.54%

	December 31, 2022		
	Term in months	Pesos Interest rate	Dollars Interest rate
Buildings	36-120	9.72–10.10%	3.68 -4.60%
Machinery and equipment	24-120	9.61–9.90%	3.49 -4.06%
Transport equipment	24-120	9.70-10.10%	3.61 -4.60%
Others	24-36	9.52-9.92%	3.41 -4.12%

The Company does not face a significant liquidity risk with respect to lease liabilities. Lease liabilities are monitored through the Company's treasury.

12. GOODWILL

Goodwill balances as of December 31, 2022 and 2021 consist of the following:

	2022	2021
Balance as of January 1,	$ 57,703	$ 62,139
Impairment of goodwill	-	(4,582)
Translation effect	(1,207)	146
Balance as of December 31,	**$ 56,496**	**$ 57,703**

Goodwill was generated as a result of the acquisition of PPG's Flat Glass and Coatings Business and PGW's Original Equipment Automotive Glass Business, segment information for which is presented in Note 24. The recoverable amount of goodwill is determined based on its value in use, which uses projected cash flows based on the financial budget authorized and approved by the Board of Directors; this budget covers a period of five years. Value in use was determined using an after-tax discount rate calculated in perpetuity of 7.8% and 6.7% in 2022 and 2021, respectively. The growth rate in the automotive industry for the year 2023 is estimated at around 7.2% and for 2024 and onwards an average of 2.7%. The growth rate in the architectural industry for the United States of America market (Cash Generating Unit "CGU" that concentrates goodwill and other significant intangible assets) in 2023 is estimated at around 0.06% and by 2024 and in forward by an average of 3.9%, it should be noted that a perpetuity rate of 2%. The source of this data was obtained from specialized industry reports as well as public and observable market data.

As of December 31, 2021 the Company recognized an impairment loss to goodwill assigned to the cash-generating unit of the automotive industry in the amount of $4,582, which was recorded in other expenses.

13. INTANGIBLES AND OTHER ASSETS, NET

a) As of December 31, 2022 and 2021, intangible assets consist of the following:

	December 31, 2022	December 31, 2021
Software	$ 21,962	$ 20,629
Trademarks and intellectual property	72,376	80,715
Customer relationships	119,750	129,492
Others	11,352	6,469
Total	**$ 225,440**	**$ 237,305**

Cost or valuation	Software	Trademarks and intellectual property	Customer relationships	Others	Total
Balance as of January 1, 2021	$ 66,066	$ 130,590	$ 179,151	$ 3,791	$ 379,598
Additions	2,404	-	-	1,692	4,096
Reclassification	155	-	-	1,281	1,436
Translation effect	(71)	(25)	43	-	(53)
Balance as of December 31, 2021	**$ 68,554**	**$ 130,565**	**$ 179,194**	**$ 6,764**	**$ 385,077**
Additions	6,804	-	-	1,481	8,285
Reclassification	-	-	-	3,769	3,769
Translation effect	64	105	(353)	-	(184)
Balance as of December 31, 2022	**$ 75,422**	**$ 130,670**	**$ 178,841**	**$ 12,014**	**$ 396,947**

Accumulated amortization	Software	Trademarks and intellectual property	Customer relationships	Others	Total
Balance as of January 1, 2021	$ 42,693	$ 39,903	$ 40,142	$ 98	$ 122,836
Amortization of the year	4,133	9,412	9,490	197	23,232
Impairment	1,164	532	-	-	1,696
Translation effect	(65)	3	70	-	8
Balance as of December 31, 2021	**$ 47,925**	**$ 49,850**	**$ 49,702**	**$ 295**	**$ 147,772**
Amortization of the year	$ 4,246	$ 8,429	$ 9,480	$ 367	$ 22,522
Impairment	1,227	-	-	-	1,227
Translation effect	62	15	(91)	-	(14)
Balance as of December 31, 2022	**$ 53,460**	**$ 58,294**	**$ 59,091**	**$ 662**	**$ 171,507**

Amortization of intangible assets was calculated using useful lives of 15 years for trademarks and intellectual property, 20 years for customer relationships and 5 years for software.

As of December 31, 2022 and 2021, the Company carried out its tests of the value in use of its assets and due to the situation and uncertainty of the automotive industry, an impairment loss of $1,227 and $1,696, respectively, lodged in the intangible assets belonging to such industry was recognized, which was recorded in the cost of sales. The assumptions used to calculate brand impairment are the same as those mentioned in note 12.

b) Other assets balances as of December 31, 2022 and 2021 are composed as follows:

	December 31, 2022	December 31, 2021
Costs for obtaining contracts	$ 7,137	$ 9,117
Others	10,100	9,726
	$ 17,237	**$ 18,843**

14. DEBT

As of December 31, 2022 and 2021 short-term debt consists of the following:

	Interest rate	Currency		2022		2021
Revolving credit	Libor + 1.80%	Dollar	$	11,200	$	11,200
Short-term line	Libor + 1.80%	Dollar		-		52,972
Revolving credit	Libor + 1.70%	Dollar		47,500		37,500
Revolving credit	Libor + 1.80%	Dollar		35,000		-
Revolving credit	SOFR + 2.15%	Dollar		20,000		-
			$	**113,700**	**$**	**101,672**

As of December 31, 2022 and 2021, long-term debt consists of the following:

	Interest rate	Currency	Maturity date		2022		2021
Leases	2.4% a 9.5%	Dollar	2023 - 2025	$	6,997	$	9,698
Bilateral credit	Libor + 2.20%	Dollar	2026		170,000		170,000
Bilateral credit	Libor + 2.12%	Dollar	2026		150,000		150,000
Purchase agreement	Serie A: 2.80%	Dollar	2026		130,000		130,000
Sale of notes	Serie B: 3.43%	Dollar	2030		50,000		50,000
Bilateral credit	Líbor + 2.125%	Dollar	2026		75,000		75,000
Bilateral credit	Libor + 2.40%	Dollar	2027		10,000		-
Debt issuance costs					(3,450)		(3,679)
Total long-term debt					588,547		581,019
Less short-term maturities					(2,544)		(573,798)
Long term debt, excluding current maturities				**$**	**586,003**	**$**	**7,221**

Bank loans include certain obligations (covenants), as well as maintain certain financial ratios. As of December 31, 2021, due to the interpretation of the accounting standard IAS 1, the long-term debt as of December 31, 2021 in the amount of $571,321 was reclassified to short-term.

2022 DEBT TRANSACTIONS

During the first quarter, the Company reclassified debt from short-term to long-term in the amount of $571,321 since the Company obtained the necessary waivers from the creditor institutions in due time and form in accordance with the legal and contractual framework agreed with the creditor banks. In the same manner and time, the amending agreements were made to adjust the stockholders' equity covenant for at least the 12 months of 2022 to ensure future compliance.

On April 13, 2022 the Company entered into a loan agreement with BBVA for an amount of $70,000 with maturity in 5 years. As of December 31, 2022, $10,000 has been withdrawn.

2021 DEBT TRANSACTIONS

On January 4, 2021, a voluntary partial prepayment of $180,000 was made to the syndicated loan in order to reduce interest payments and maintain a financial structure in accordance with what was established by the Company's risk committee, this was done with the resources obtained by the execution of the Note Purchase Agreement with The Prudential Insurance Company of America, entered into on December 30, 2020. Derived from the interest rate hedge that was executed on this loan, with the prepayment an excess hedge was generated with an effect of a charge to financial cost in the amount of $10,315 and a charge to financial cost for the amortization of capitalized costs in the amount of $953 that were recognized in January 2021 and considering the tax effects of the operation.

On February 2, 2021, a voluntary partial prepayment of $140,000 was made to the syndicated loan in order to reduce interest payments and extend its average life. The prepayment was made with the resources obtained from the execution of the Bilateral Credit Agreement with BBVA Mexico announced on January 27, 2021 for an amount of $150,000. Derived from the interest rate hedge that was executed, with the prepayment an excess hedge was generated with an effect of a charge to the financial cost for an amount of $5,982 and a charge to the financial cost for the amortization of capitalized costs for an amount of $717 that were recognized in February 2021 and considering the tax effects of the operation. In addition, on February 26, 2021, the Company acquired a loan for $75,000 with ING Bank, these resources were used for the prepayment of the syndicated loan.

On March 1, 2021, the prepayment of the debt was made under the syndicated loan for $84,000. The aforementioned payment was made with part of the resources obtained by the loans mentioned in the previous paragraph.

Reconciliation between relevant changes in debt and cash flows from financing activities:

		2022		2021
Initial balances	$	682,691	$	864,614
Acquisition of loans		464,028		364,200
Loan payments		(444,701)		(545,407)
Payment of commissions and other expenses		(526)		(1,542)
Amortization of expenses		755		1,986
Exchange fluctuation		-		(1,160)
Final balances	**$**	**702,247**	**$**	**682,691**

15. ACCRUED EXPENSES AND PROVISIONS

As of December 31, 2022 and 2021, accrued expenses payable were as follows:

		December 31,		
		2022		2021
Wages and benefits payable	$	36,263	$	27,171
Services and other accounts payable		1,637		1,352
Other expenses payable		21,328		19,516
Total	**$**	**59,228**	**$**	**48,039**

16. EMPLOYEE BENEFITS

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

		December 31,		
		2022		2021
Mexico	$	86,540	$	45,836
USA		49,384		66,566
Canada		(4,061)		(3,639)
Others		99		128
Total net defined liability (asset)	**$**	**131,962**	**$**	**108,891**

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 lump sum payment or a monthly pension calculated based on the sum of a basic pension, an additional seniority factor 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 costs of such benefits are calculated by an independent actuary, based on formulas defined in the plans, using the projected unit credit method.

In addition, 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 have constituted funds for the payment of retirement benefit payments through irrevocable trusts. The Company is not exposed to unusual risks related to the plan assets.

Financial information related to employee benefits is as follows:

		December 31,		
		2022		2021
Net defined liabilities (assets) for:				
Pension plans	$	112,221	$	79,822
Post-employment medical benefits		19,741		29,069
Total net defined liabilities	**$**	**131,962**	**$**	**108,891**
Amount recognized in profit and loss for:				
Pension plans	$	10,717	$	10,165
Post-employment medical benefits		1,127		(14,468)
Total recognized in profit and loss	**$**	**11,844**	**$**	**(4,303)**
Amount recognized in comprehensive income, before taxes, for				
Pension plans	$	40,634	$	(658)
Post-employment medical benefits		(8,149)		(1,375)
Total recognized in comprehensive income	**$**	**32,485**	**$**	**(2,033)**

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

	Mexico	USA	Canada	Others	Total
December 31, 2022:					
Defined benefit obligations	$ 233,112	$ 123,609	$ 5,775	$ 99	$ 362,595
Plan assets	(146,572)	(74,225)	(9,836)	-	(230,633)
Net defined (asset) liability	**$ 86,540**	**49,384**	**$ (4,061)**	**$ 99**	**$ 131,962**
December 31, 2021:					
Defined benefit obligations	$ 203,022	$ 170,593	$ 7,737	$ 128	$ 381,480
Plan assets	(157,186)	(104,027)	(11,376)	-	(272,589)
Net defined (asset) liability	**$ 45,836**	**$ 66,566**	**$ (3,639)**	**$ 128**	**$ 108,891**

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

	Year ended December 31,	
	2022	2021
Defined benefit obligations as of January 1,	$ 381,480	$ 444,967
Service cost	5,592	(10,568)
Interest cost	19,007	17,656
Actuarial remeasurements	(18,140)	(16,139)
Benefits paid	(36,036)	(48,075)
Translation effect	10,721	(6,327)
Others	(29)	(34)
Defined benefit obligations	**$ 362,595**	**$ 381,480**

As of December 31, 2021, the cost of the service period for the year includes a benefit of $14,604 as a result of a modification in the employee benefit plan of a subsidiary. As of January 1, 2022, medical coverage is provided for retirees and covered spouses or dependents up to age 65 under a PPO plan. Beginning at age 65, retirees and covered spouses will receive monthly contributions of $100 that can go toward a health care plan premium or other health care expenses.

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

	Year ended December 31,	
	2022	2021
Fair value of the plan assets as of January 1,	$ 272,589	$ 291,589
Actual yield	13,986	12,621
Actuarial remeasurements	(50,625)	(14,106)
Company contributions	2,605	11,958
Benefits paid	(14,107)	(23,634)
Administrative expense	(1,230)	(1,230)
Translation effect	7,415	(4,609)
Fair value of the plan assets	**$ 230,633**	**$ 272,589**

As of December 31, 2022 and 2021, the main actuarial hypotheses used were as follows:

	December 31,	
	2022	2021
Discount rate		
Mexico	9.25%	7.75%
United States of America		
Vitro Flat Glass	5.14%	2.64%
Pittsburgh Glass Works	5.07%	2.40%
Canada	5.06%	3.19%
Salary increase rate		
Mexico	4.00 a 7.00%	4.25%
United States of America		
Vitro Flat Glass	N/A	N/A
Pittsburgh Glass Works	N/A	N/A
Canada	N/A	N/A

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
2023	$ 64,273
2024	34,429
2025	35,351
2026	37,144
2027 and thereafter	191,398
	$ 362,595

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, 2022 and 2021 are as follows:

	Actual yield rate		Fair value of plan assets	
	2022	2021	2022	2021
Equity instruments	(10.61%)	(4%)	$ 145,674	$ 170,698
Debt instruments	(7.41%)	2.10%	84,959	101,891
			$ 230,633	$ 272,589

As of December 31, 2022 and 2021, plan assets include 54,201,598 shares of Vitro, whose fair values amount to $61,240 and $63,829, respectively. The Company is not exposed to unusual risks related to plan assets.

The Company, within its U.S. subsidiaries, has assets invested as follows: cash 2%, fixed income assets 46%, and equity assets ranging 52%.

The determination of defined benefit obligations is carried out using actuarial assumptions, such as the discount rate and salary increases. The sensitivity analysis shown below was developed based on the reasonableness of possible changes with respect to the actuarial assumptions as of December 31, 2022, holding all other assumptions constant; however, it may not represent actual changes in the defined benefit obligations, since the actuarial assumptions are correlated and are unlikely to change in isolation.

The amounts included in the following table represent increase or (decrease) in the defined benefit obligation, as the case may be.

	Liability
Increase in discount rate of 0.50%	$ (11,412)
Decrease in discount rate of 0.50%	12,750

17. FINANCIAL INSTRUMENTS

The carrying amounts of financial instruments and their fair values are presented below:

	December 31, 2022		December 31, 2021	
	Fair value	Carrying amount	Fair value	Carrying amount
Financial assets				
Cash and cash equivalents	$ 122,699	$ 122,699	$ 110,122	$ 110,122
Financial assets measured at amortized cost				
Accounts receivable and other current assets	161,471	161,471	246,924	246,924
Financial assets at fair value through profit or loss				
Derivative financial instruments	2,737	2,737	1,344	1,344
Financial assets at fair value through OCI				
Hedging derivative financial instruments	21,402	21,402	-	-
Financial liabilities				
Financial liabilities at amortized cost				
Debt and interest payable	665,957	703,989	720,300	683,275
Lease liability	48,348	41,098	59,019	50,643
Trades payable and other liabilities	349,939	349,939	340,030	340,030
Financial liabilities at fair value through profit or loss				
Derivative financial instruments	9,972	9,972	3,783	3,783
Financial liabilities at fair value through OCI				
Hedging derivative financial instruments	-	-	13,011	13,011

The following tables show the valuation techniques used to measure Level 2 fair values for financial instruments measured at fair value in the statement of financial position, as well as the inputs used. The corresponding valuation processes are described below.

Type	Valuation technique	Relationship between observed information and fair value
Derivative financial instruments SWAPS (Level 2)	The fair value is determined by calculating the difference between the net present value of the asset and liability portion. To calculate the net present value of each portion, the future cash flows are first calculated according to the the projection curve of the underlying analyzed (interest rate, gas molecule, etc.). These cash flows are subsequently discounted at present value with an interest rate (curve), which is in accordance with the currency of such cash flows.	For positions where a fixed price is paid, a decrease in the price of the underlying asset expects the derivative to decrease. If a fixed price is received, the value increases.
Derivative financial instruments – call options. (Level 2)	The fair value is determined by calculating the net present value of the expected difference between the future value of the underlying (interest rate, gas molecule, etc.) and the value agreed at inception, plus a premium based on the time remaining at the expiration of such option. To calculate the net present value, the expected value of the option at maturity is first calculated according to the corresponding underlying using models such as the Black-Scholes. Such cash flows are subsequently discounted at present value with an interest rate (curve), which is in accordance with the currency of such cash flows.	For call option positions, with a decrease in the price of the underlying asset (interest rate, gas molecule, etc.) the derivative is expected to decrease. For put options, the value increases. Options will be assets or liabilities depending on whether they were bought or sold.
Debt (Level 2)	The fair value of the debt is determined using interest rate curves and discounting future cash flows using yield rates of high credit institutions.	The fair value of the debt is inversely related to the hedging of its derivative financial instruments.

The Company is exposed to market risks (interest rate risk, commodity price 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

LThe Company is exposed to the risk of changes in interest rates mainly for the loans mentioned in note 14.

A benchmark interest rate reform has been underway globally. The reform seeks to replace some interbank offered rates (IBOR) with alternative quasi-risk-free interest rates (the “IBOR reform”). The Group has IBOR exposures on its financial instruments that will be replaced or reformed as part of these market initiatives.

The Group’s main IBOR exposure as of December 31, 2022 is indexed to USD LIBOR. The alternative reference rate for USD LIBOR is SOFR. As of December 31, 2022, it is not yet clear when the announcement will take place that will set a date for the end of publication of USD LIBOR. However, the Group has completed the process of implementing the appropriate support provisions for all exposures indexed to USD LIBOR by the end of 2023.

Risk management monitors and manages the Group’s transition to alternative rates. Risk management assesses the extent to which contracts reference IBOR cash flows, whether such contracts will need to be changed as a result of IBOR reform, and how to manage communication about IBOR reform with counterparties.

Risk management reports to the Company’s steering committee on a quarterly basis and collaborates with other functions as needed. Provides periodic reports to management on interest rate risk and the risks arising from the IBOR reform.

As of December 31, 2022 and 2021, various contracts were entered into to exchange cash flows of so-called Interest Rate Swaps in order to mitigate the risk due to the variability of the interest rate paid on liabilities contracted in dollars.

During 2022, commodity swaps and commodity options were designated as hedges to mitigate the risk of natural gas price variability due to the consumption of its normal operations.

These types of operations represent hedging mechanisms to seek to fix the interest rate of financial obligations and to fix the price of natural gas. These operations, in accordance with accounting regulations, are considered as hedging operations. For accounting purposes, the Company has designated such Rate Swaps under the cash flow hedge model to cover a portion of the interest payment of the debt in USD. In addition, during 2022, commodity swaps and commodity options were designated under the cash flow hedging model to hedge a portion of the natural gas consumption.

As of December 31, 2022, the Company has an interest rate swap excess of $124,779 which has a market value of $925, which affects the comprehensive financing result.

As of December 31, 2022, the position in the derivative financial instrument is summarized below:

Bank	ING[1]	BBVA	BBVA[2]	ING y Macquarie
Notional	75,000	75,000	170,000	9,571
Notional currency	USD	USD	USD	MMBTU's
Item on the financial statement where the hedging instrument is presented	Derivative financial instruments	Derivative financial instruments	Derivative financial instruments	Derivative financial instruments
Delivery rate	1.69%	1.82%	1.68%	5.33 USD
Receipt rate	Libor 1M	Libor 1M	Libor 1M	Henry Hub
Fair value as of December 31, 2021	5,237	5,271	10,893	(6,362)
Maturity	January-26	February-26	June-25	December-23
Change in fair value to measure the ineffectiveness of the hedged instrument	7,220	5.238	10,689	(6,362)
Amount recognized in other comprehensive income	7,220	7,403	10,893	(6,235)
Ineffectiveness recognized in statement of profit or loss [3]	1,259	1,101	-	3,648
Reclassification of other comprehensive income to statement of profit or loss [4]	-	-	-	3,708
Carrying value of hedged item (Exposure)	150,000	75,000	170,000	19,153
Currency carrying value	USD	USD	USD	MMBTU's
Change in fair value to measure the ineffectiveness of the hedged instrument	(7,326)	(7,080)	(14,805)	6,235
Hedging ratio	50%	100%	100%	50%
Effectiveness Test	99.87%	107%	115%	100%

[1] Corresponds to an interest rate swap contracted by Vitro, S.A.B. with ING which is replicated to two subsidiaries.
[2] In June 2020, Vitro renegotiated its interest rate swap with BBVA in order to align it to the new debt used to prepay in advance the syndicated loan that was hedged.
[3] The ineffectiveness recognized is originated by the initial value of the instrument, since it is an off-market hedge.
[4] The reclassifications made for commodity derivatives are related to the amortization of the accumulated value in ORI of a derivative that had an unwind and the amortization of the time value of the contracted options.
[5] In June 2020 Vitro renegotiated its interest rate swap with BBVA in order to align it to the new debt used to prepay in advance the syndicated loan that was hedged.

As of December 31, 2022, the position in the derivative financial instrument is summarized below:

Bank	ING[3]	BBVA	BBVA[2]
Notional	75,000	75,000	170,000
Notional currency	Dollar	Dollar	Dollar
Financial statement line item where the hedge instrument is presented	Derivative financial instruments	Derivative financial instruments	Derivative financial instruments
Delivery rate	1.69%	1.82%	1.68%
Receipt rate	Libor 1M	Libor 1M	Libor 1M
Fair value as of December 31, 2021	(1,650)	(1,709)	(3,483)
Maturity	January 26	February 26	June 25
Change in fair value to measure the ineffectiveness of the hedged instrument	(1,650)	(1,754)	(3,544)
Amount recognized in other comprehensive income (2)	1,133	1,155	(3,483)
Ineffectiveness recognized in statement of profit or loss	459	369	-
Reclassification of other comprehensive income to statement of profit or loss	-	-	-
Carrying value of hedged item (Exposure)	150,000	75,000	170,000
Currency carrying value	Dollar	Dollar	Dollar
Change in fair value to measure the ineffectiveness of the hedged instrument	1,228	1,724	3,494
Hedging ratio	50%	100%	100%
Effectiveness Test	100%	106%	100%[1]

[1] The coverage, despite being 100% of the notional, shows a percentage of ineffectiveness and a portion to be recognized in the income statement as ineffectiveness.
[2] In June 2020, Vitro renegotiated its interest rate swap with BBVA in order to align it to the new debt used to prepay in advance the syndicated loan that was covered.
[3] Corresponds to an interest rate swap contracted by Vitro, S.A.B. with ING which is replicated to two subsidiaries.

As of December 31, 2022, 26% of borrowings are denominated at a fixed rate and 74% of borrowings are denominated at a variable rate (see Note 14).

Management assesses whether the hedging relationship meets the effectiveness criteria at the inception of the hedging relationship, on an ongoing basis at each reporting date and upon a significant change in circumstances affecting the hedging requirements.

Sensitivity analysis to interest rate risk

The Company performed a sensitivity analysis considering an increase or decrease of 0.5% in the value of the LIBOR rate, and its effects on the results of the year as of December 31, 2022.

The percentage used to analyze the sensitivity to exchange rate risk is the scenario that represents management's assessment of the reasonableness of possible variations in this reference rate, since it is a market rate with low or no volatility. As a result of the analysis, the effect of a possible increase or decrease in the interest rate would have had an impact on the profit or loss of the year of $1,918 as expense or income, respectively.

Foreign exchange risk applicable to foreign subsidiaries

A foreign subsidiary is a subsidiary that has a functional currency other than the U.S. dollar. Vitro's foreign subsidiaries maintain their assets and liabilities and carry out their operations mainly in Mexican pesos, Canadian dollars, euros, reales, soles, zlotys and Colombian pesos, in a market and business environment in the same currency. The Company's management considers assets and liabilities denominated in foreign currencies to be insignificant; therefore, the foreign exchange risk for these subsidiaries is almost nil.

As mentioned in Note 14, the Company's debt is denominated in U.S. dollars; therefore, there is no foreign exchange risk.

Foreign exchange risk applicable to subsidiaries located in Mexico.

Vitro's Mexican subsidiaries that maintain a U.S. dollar functional currency and that carry out transactions and maintain balances in pesos or in a foreign currency other than the peso, are exposed to the risk of exchange rate variations. This exposure to risk may result from changes in economic conditions, monetary and/or tax policies, the liquidity of global markets, local and international political events, among others.

The most significant foreign currency of Mexican subsidiaries is the Mexican peso; the carrying amount of financial assets and liabilities denominated in Mexican pesos at the end of the period is as follows:

	December 31,			
		2022		2021
Financial assets	$Ps.s	1,039,621,228	$Ps.s	1,142,512,028
Financial liabilities		(1,834,334,267)		(1,889,151,152)
Net financial asset position		**(794,713,039)**		**(746,639,124)**

Financial assets in Mexican pesos are mainly comprised of cash and other accounts receivable, while financial liabilities are mainly comprised of short-term bank debt, suppliers and sundry creditors, all of which are denominated in Mexican pesos. As of December 31, 2022 and 2021, the Company considers assets and liabilities denominated in foreign currencies other than the Mexican peso to be immaterial.

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

	December 31,			
		2022		2021
Exchange rate:				
Pesos per dollar at year-end	$Ps.	19.4715	$Ps.	20.4672
Pesos per average dollar during the year	$Ps.	20.1137	$Ps.	20.2830

As of March 14, 2023, the issuance date of the consolidated financial statements, the exchange rate of the peso against the U.S. dollar was $Ps. 18.4083.

Foreign currency sensitivity analysis

The sensitivity analysis carried out by the Company considers a strengthening or weakening by 10% of the U.S. dollar against the Mexican peso and their effects on the results of fiscal years 2022 and 2021. 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 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 of $825 and $740 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 a 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. In addition, 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, 2022, the maximum exposure to credit risk is $308,309. 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 of credit risk, since consolidated sales and accounts receivable from a single customer did not exceed 10% of total sales, at the segment level there is a concentration in the container and flat glass division as indicated in Note 24.

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.

The contractual maturities of the debt as of December 31, 2021, including the related interest, are as follows:

	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years
Fixed rate debt [1]	$ 8,565	$ 14,455	$ 137,070	$ 55,145
Variable rate debt [1]	142,738	81,472	370,626	-
Leases	22,240	12,330	11,809	1,969
Trade accounts payable and other liabilities	349,939	-	-	-
	$ 523,482	**$ 108,257**	**$ 519,505**	**$ 57,114**

As of December 31, 2021, the Company has available cash of $122,669.

[1] *Maturities are considered with the original form of payments.*

IV. FAIR VALUE OF FINANCIAL INSTRUMENTS

The fair value of financial instruments that are presented above 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 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.

V. OTHER MARKET PRICE RISKS

In the ordinary business course, the Company has contracted calls and swaps and other derivate financial instruments (DFI) 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%. During 2022 the percentage covered was 44%. 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 the years presented 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 profit or loss within net financial cost, except in the year 2022 for gas financial instruments, which from that year onwards are recorded as economic and accounting hedges.

The following table shows the active positions and their characteristics for the year ended December 31, 2021:

Type of instrument	Type of underlying	Annual notional in MMBTUs	Average price	Initial date	Maturity date	Fair Value
Embedded	Electricity	85,617	$49-186	30-dec-22	30-nov-23	(1,641)

The effects on profit or loss for the years ended December 31, 2022 and 2021 related to the DFIs described above are described in Note 21.

18. CAPITAL AND RESERVES

CAPITAL MANAGEMENT

The Company's objective in 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 an adequate balance in its funding sources. In order to maintain this structure, the Company carries out various actions such as efficiently managing working capital, adjusting dividend payments in accordance with free cash flow generation, cancellation and/or issuance of new shares and/or debt, or investment or divestment of assets.

The Company, through the Board of Directors, evaluates the cost and risks associated with its capital structure on an ongoing basis. This evaluation is made primarily based on the ratios of indebtedness, debt to EBITDA (Earnings Before Interest and Income Taxes) flow for the last 12 months, and interest coverage. EBITDA is not a performance measure defined by IFRS. The debt ratio represents the ratio of net debt to EBITDA cash flow; EBITDA is calculated based on income before other income and expenses and adding the virtual items reflected in the statement of comprehensive income, within cost of sales and operating expenses, mainly depreciation, amortization and seniority premium and pension plan reserves; finally, interest coverage is calculated by dividing EBITDA by interest expense for the last twelve months of the period analyzed. Vitro has a long-term objective of maintaining the financial indebtedness ratio within a range of 1.5 to 3.0 times and interest coverage greater than 5 times. As of December 31, 2022, the results of the calculation of each of the aforementioned financial ratios were 2.22 times for the indebtedness ratio and 10 times for the interest coverage ratio.

COMMON STOCK STRUCTURE

a) As of December 31, 2022 and 2021, the Company's capital stock amounts to 470,027,224 common shares, fully subscribed and paid, and with no 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 the General Ordinary Stockholders' Meeting held on April 20, 2021, the following was approved:

- Decrete and payment of dividends at the rate of $0.0357 per share.

d) In 2021, the Company repurchased 4,100,003 shares in the amount of $5,072.

e) At the General Ordinary Stockholders' Meeting held on November 15, 2022, the following was approved:

- Decrete and payment of dividends at the rate of $0.0212 per share.

f) As of December 31, 2022 and 2021, the Company holds 13,544,505 own shares in treasury.

g) The distribution of stockholders' equity, except for the restated amounts of contributed capital stock and tax earnings withheld, will give rise to income tax on dividends payable by the Company at the rate in effect when the distribution is made. The tax paid on such distribution may be credited against the income tax of the year in which the tax on dividends is paid and in the following two years, against the tax of the year and the provisional payments thereof.

The balances of the controlling interest in the tax accounts in stockholders' equity, corresponding to the Company's capital contribution account and net tax-income account amount to as of December 31, 2022, are $592,976 and $3,396,493, and $523,261 and $3,008,201 as of December 31, 2021, respectively.

h) Other components of comprehensive income

Effect of translation of foreign transactions

The movement for the period is recorded when translating the consolidated financial statements from the functional currency to the reporting currency. During fiscal years 2022 and 2021, there are no other extraordinary movements affecting the cumulative translation adjustment recognized in stockholders' equity.

Actuarial remeasurements

Actuarial remeasurements are recognized as other components of comprehensive income. During December 31, 2022 and 2021, 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.

Hedging derivative financial instruments

The effective portion of valuation gains or losses on derivative financial instruments designated as cash flow hedges is recognized in other comprehensive income, net of income taxes.

Below is an analysis of the movements of the other comprehensive income accounts of the controlling interest:

		Effect of foreign currency translation		Hedging derivative financial instruments		Actuarial remeasurements		Total other comprehensive income
Balance as of December 31, 2020	$	123,947		(23,381)		(144,719)		(44,153)
Comprehensive income movement		(1,744)		21,846		4,209		24,311
Balance as of December 31, 2021	$	122,203	$	(1,535)	$	(140,510)	$	(19,842)
Comprehensive income movement		(5,000)		20,098		(17,078)		(1,980)
Balance as of December 31, 2022	**$**	**117,203**	**$**	**18,563**	**$**	**(157,588)**	**$**	**(21,822)**

i) Non-controlling interest is as follows:

	December 31,			
		2022		2021
Capital stock	$	790	$	683
Retained earnings		(427)		53
	$	**363**	**$**	**736**

j) Basic and diluted earnings 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,			
		2022		2021
Income (loss) earnings from continuing operations attributable to controlling interest	$	17,864	$	(106,601)
Weighted average of common shares for calculation of basic and diluted earnings per share		470,027,224		471,431,335
Income (loss) per share from continuing operations	**$**	**0.0380**	**$**	**(0.2261)**

The Company had no dilution effects affecting common stock averages for purposes of these calculations. The decrease in basic earnings per share and earnings per share was primarily due to the decrease in income for the year compared to the prior year.

k) As of December 31, 2022 and 2021, the total outstanding shares are analyzed as follows:

	2022	2021
Shares at the beginning of the year	470,027,224	474,127,227
Repurchase of shares	-	4,100,003
Shares at the end of the year	**470,027,224**	**470,027,224**

19. RELATED PARTIES

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

a) Purchase of food coupons. - The Company purchases food coupons for its staff from a self-service store, of which one of our board members is a stockholder. For the years ended December 31, 2022 and 2021, the amount of those purchases was $7,042 and $5,462, respectively.

b) Compensation to management's key personnel. - For the years ended December 31, 2022 and 2021, the total compensation for the services provided by our board members and directors was approximately $8,510 and $7,997, respectively. This amount includes fees, wages, variable compensation and retirement bonuses. This item is analyzed as follows:

	2022	2021
Fixed compensation	90 %	78 %
Variable compensation	10 %	22 %

c) Accounts receivable. – The Company has a receivable from Shandong PGW Jinjing Automotive Glass Co. Ltd. for the yeard ended as of December 31, 2021 the total amount was $3,141.

d) Transactions with Shandong PGW Jinjing Automotive Glass Co. Ltd.- The Company has transactions with Shandong PGW Jinjing Automotive Glass Co. Ltd. for the twelve-month periods ended December 31, 2022 and 2021. In purchases the total amount was $1,534 and $6,954, respectively, and in accounts payable the total amount was $742 and $97, respectively.

e) Operations with Vitro RFA, LLC. - As of December 31, 2022, the Company had a short-term balance receivable of $75,996, an account payable of $22,351 in sundry creditors (See note 5 and 13), additionally the Company made contributions of $17,919. The financial expense amounted to $8,534.

20. OTHER EXPENSES (INCOME), NET

The analysis of other (income) expenses is as follows:

a) Other (income):

	Year ended December 31,			
		2022		2021
Gain on sale and write-off of assets	$	(10,580)	$	-
Increase in fair value of investment property		(10,048)		-
Other		-		-
Total	**$**	**(20,628)**	**$**	**-**

b) Other expenses:

		2022		2021
Loss on sale and write-off of assets	$	-	$	9,711
Reorganization expenses		278		11,399
Asset write-off due to plant closure		-		-
Impairment loss of goodwill		-		4,582
Other expenses		6,551		4,349
Total	**$**	**6,829**	**$**	**30,041**

21. FINANCIAL COST, NET

Below is a breakdown of the most significant items that compose financial cost:

a) Financial income:

	Year ended December 31,			
		2022		2021
Financial products	$	(1,701)	$	(2,647)
Exchange gain		(8,291)		-
Derivative financial transactions		(1,341)		-
Total	**$**	**(11,333)**	**$**	**(2,647)**

b) Financial cost

		2022		2021
Interest expenses	$	33,290	$	24,852
Restatement of taxes on tax consolidation		1,246		2,788
Derivative financial transactions		-		19,177
Interest expense on leases		2,850		2,665
Exchange loss		-		7,231
Financial result, net of employee benefits		5,021		5,035
Other financial expenses		23,337		9,469
Total	**$**	**65,744**	**$**	**71,217**

22. INCOME TAXES

Income taxes recognized in profit or loss are analyzed as follows:

	Year ended December 31,			
		2022		2021
Current income taxes	$	31,661	$	45,905
Prior years' income taxes (note 25) [1]		23,003		-
Deferred income taxes		(27,273)		(21,051)
Total	**$**	**27,391**	**$**	**24,854**

[1] *During the year 2022, the Tax Administration System ("SAT", for its acronym in Spanish) continued with the review process of prior years, reaching an agreement with the Company to settle differences in criteria of the year under review, the amount required from the authority for the differences in criteria mentioned above was self-corrected by the company recording the corresponding tax as well as the updates and surcharges, the latter incorporated as financial expense of the year.*

The reconciliation between the Company's income tax rate and the actual rate, expressed as a percentage of income before income taxes, is analyzed as follows:

	Year ended December 31,	
	2022	2021
Expected expense (benefit)	13,433	(24,613)
Effects of inflation	(2,754)	(8,861)
Valuation allowance (reversal) for tax losses	(550)	142
Non-deductible expenses and others	7,418	10,470
Restructure	-	5,658
Derecognition of deferred tax assets, net	-	30,024
Rate difference for Companies outside of Mexico	(2,708)	8,255
Exchange fluctuation without tax effects	(10,451)	3,779
Others	-	-
Prior years' income taxes	23,003	-
Income tax expense	**27,391**	**24,854**

The movements of the deferred taxes balance in the fiscal year are as follows:

	Year ended December 31,			
		2022		2021
Opening balance	$	95,616	$	74,715
Deferred tax applied to income		27,273		21,051
Actuarial remeasurements		14,917		2,177
Derivative financial transactions		(377)		(8,323)
Translation effects		2,649		5,996
Ending balance	**$**	**140,078**	**$**	**95,616**

The main temporary differences that gave rise to deferred income taxes in the consolidated statements of financial position are analyzed as follows:

		2022		2021
Accounts receivable	$	3,541	$	5,054
Employee benefits		46,997		36,266
Tax losses		24,494		24,192
Intangible assets		24,659		27,047
Fixed assets		23,964		(1,782)
Derivative financial instruments		1,136		905
Inventories		3,862		2,996
Others		21,212		16,616
Deferred income tax asset	$	149,865	$	111,294

		2022		2021
Accounts receivable	$	-	$	(4)
Employee benefits		(2,274)		(101)
Tax losses		-		(1,632)
Fixed assets		8,588		9,574
Derivative financial instruments		1,212		354
Advance payment to suppliers		467		194
Others		1,794		7,293
Deferred income tax liability	$	9,787	$	15,678

As of December 31, 2022, the Company and its subsidiaries have tax-loss carryforwards of $489,728, which have the right to be applied to future income and expire as follows:

Expiration in:		Losses of Mexican companies	Losses of foreign companies
2023	$	44	-
2024		56	-
2027		259	-
2029		35	8,057
2030		604	28,418
2031		54,676	3,275
2031 and thereafter		27,559	366,745
Total	**$**	**83,233**	**406,495**

In the determination of deferred income tax, as of December 31, 2022, the effects of tax-loss carryforwards from Mexican companies of $1,581 were included, which were not recognized as assets because there is not a high probability that they can be recovered.

In addition, tax-loss carryforwards of $406,495 were not recognized in the foreign entities. Management believes that it is probable that such losses will be recoverable in subsequent years; however, during 2022, it has decided to reserve the net deferred tax assets of foreign entities in the United States of America.

The income taxes recognized in other components of comprehensive income are analyzed as follows:

	Year ended December 31,			
		2022		2021
Effect of derivative financial transactions	$	(377)	$	(8,323)
Actuarial remeasurement of benefit plan		14,917		2,177
Total income taxes recognized in other comprehensive income	**$**	**14,540**	**$**	**(6,146)**

Through 2013, the Company consolidated its tax results from its operations in Mexico. Subsequently and in accordance with the tax reform, the Company has the obligation to pay the deferred tax determined at that date, which will be paid in accordance with the transitory provisions of the new Law. In 2022, the Company paid $17,948 and as of December 31, 2022, the tax consolidation income tax amounts to $10,855 in the short term.

As of January 1, 2021, Vitro entities headquartered in the United States of America were restructured creating four taxpayers: 1) Vitro Assets Corp. with Vitro Flat Glass, LLC (companies under tax consolidation) as its sole subsidiary; 2) Vitro Packaging, LLC; 3) Vitro Chemicals, Fibers and Mining, LLC and 4) Pittsburgh Glassworks, LLC with Vitro Autoglass LLC and Vitro Meadville Flat Glass, LLC as its subsidiaries. Prior to this restructuring, the aforementioned companies consolidated their fiscal results. During 2022 these entities maintained their structure, except for the sale between related parties of Vitro Meadville Flat Glass, LLC, which was divested by Pittsburgh Glass Works, LLC and acquired by Vitro Assets Corp on November 16, 2022.

23. COSTS AND EXPENSES

The main items comprising costs and general expenses as of December 31, 2022 and 2021 are as follows:

	2022			
		Cost of sales	Administration expenses	Distribution and sale expenses
Cost of inventory sales	$	667,311	-	-
Salaries, wages and benefits		392,884	64,435	38,107
Freights		36,038	47	215,987
Depreciation and amortization		123,357	16,854	5,538
Impairment		41,746	-	-
Maintenance		94,376	2,473	1,858
Energy		114,420	1,262	664
Others		361,683	54,527	32,525
Total	**$**	**1,831,815**	**139,598**	**294,679**

	2021			
		Cost of sales	Administration expenses	Distribution and sale expenses
Cost of inventory sales	$	589,322	-	-
Salaries, wages and benefits		317,917	65,723	37,617
Freights		34,591	92	171,048
Depreciation and amortization		125,479	17,200	5,097
Impairment		45,418	-	-
Maintenance		70,554	2,221	1,430
Energy		82,477	794	564
Others		295,804	44,441	28,632
Total	**$**	**1,561,562**	**130,471**	**244,388**

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 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 three operating segments to be reported: Flat Glass, Chemicals 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.
Chemicals	Inorganic chemicals products.
Containers	Glass containers, precision components, as well as machinery and molds for the glass industry.

As 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) The following tables present certain information by segment as of December 31, 2022 and 2021:

Year ended December 31, 2022

	Flat glass	Chemicals	Containers	Subtotal	Others and eliminations	Consolidated
Consolidated sales	$ 1,903,941	$ 179,458	$ 270,911	$ 2,354,310	$ (1,948)	$ 2,352,362
Sales to other segments	441	149	6,660	7,250	(7,250)	-
Net sales to third parties	1,903,500	179,308	264,251	2,347,059	5,303	2,352,362
Net income (loss) before other expenses	22,199	15,564	41,903	79,666	6,604	86,270
Interest income	3,623	6,104	14,035	23,762	(22,061)	1,701
Financial expenses	62,839	9,560	22,745	95,144	(29,400)	65,744
Net income (loss) before income taxes	(38,230)	19,145	2,992	(16,093)	60,868	44,775
Income taxes	311	4,536	5,054	9,901	17,490	27,391
Depreciation and amortization	119,037	6,186	21,487	146,710	(961)	145,749
Investment in fixed assets	93,287	3,377	53,405	150,069	2,064	152,133
Impairment loss	41,746	-	-	41,746	-	41,746

Due to the decreases in volume of the original equipment automotive market and given the uncertainty of this industry, the Company tested the recovery value of the assets of the automotive CGU that belongs to the flat glass segment, concluding in the recognition of an impairment loss in 2022 for an amount of $41,746 which was allocated as follows: property, plant and equipment $40,519, intangible assets $1,227 and goodwill $4,582, and in 2021 for an amount of $50,000 which was allocated as follows: property, plant and equipment $43,722, intangible assets $1,696 and goodwill $4,582.

As of December 31, 2022, net sales to third parties of the Flat Glass and Containers segments are composed as follows:

		Flat glass
Architectural business	$	1,056,894
Automotive business		929,854
Eliminations		(83,248)
Total flat glass sales	**$**	**1,903,500**

		Containers
Pharmaceutical, perfume and medical container business	$	249,245
Machine, mold and spare part business		45,603
Eliminations		(30,597)
Total containers sales	**$**	**264,251**

The chemicals segment does not present sub-segment sales that have to be eliminated internally.

Year ended December 31, 2021

	Flat glass	Chemicals	Containers	Subtotal	Others and eliminations	Consolidated
Consolidated sales	$ 1,565,875	$ 169,083	$ 225,469	$ 1,960,427	$ (2,859)	$ 1,957,568
Sales to other segments	315	1,577	5,836	7,728	(7,728)	-
Net sales to third parties	1,565,560	167,506	219,633	1,952,699	4,869	1,957,568
Net income (loss) before other expenses	(57,850)	35,370	31,357	8,877	12,270	21,147
Interest income	6,416	4,844	16,192	27,452	(24,805)	2,647
Financial expenses	65,179	7,636	16,962	89,777	(18,560)	71,217
Net income (loss) before income taxes	(144,901)	31,286	28,719	(84,896)	2,852	(82,044)
Income taxes	(25,994)	10,726	8,453	(6,815)	31,669	24,854
Depreciation and amortization	121,839	5,905	20,668	148,412	(636)	147,776
Investment in fixed assets	70,943	5,253	18,047	94,243	11,640	105,883
Impairment loss	50,000	-	-	50,000	-	50,000

As of December 31, 2021, net sales to third parties of the Flat Glass and Containers segments are composed as follows:

		Flat glass
Architectural business	$	929,299
Automotive business		778,702
Eliminations		(142,441)
Total flat glass sales	**$**	**1,565,560**

		Containers
Pharmaceutical, perfume and medical container business	$	204,853
Machine, mold and spare part business		30,479
Eliminations		(15,699)
Total containers sales	**$**	**219,633**

The chemicals segment does not present sub-segment sales that have to be eliminated internally.

As of December 31, 2022, assets and liabilities by segment are as follows:

	Flat glass	Chemicals	Containers	Subtotal	Others and eliminations	Consolidated
Total asset	2,437,062	326,512	700,906	3,464,480	(906,255)	2,558,225
Total liabilities	1,255,520	175,728	436,352	1,867,600	(515,291)	1,352,309

As of December 31, 2021, assets and liabilities by segment are as follows:

	Flat glass	Chemicals	Containers	Subtotal	Others and eliminations	Conso-lidated
Total asset	2,376,912	311,935	654,169	3,343,016	(803,694)	2,539,322
Total liabilities	1,206,420	173,286	415,753	1,795,459	(456,542)	1,338,917

b) Information related to main customers

The consolidated net sales of the Company's glass container segment had two instances of concentration, the amount of which exceeded 10% for the year ended December 31, 2022 and 2021.

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, 2022 and 2021.

c) Geographical information

Certain geographical information regarding the Company's transactions is summarized as follows:

	Year ended December 31,			
		2022		2021
Net sales to customers [(1)] in:				
Abroad, mainly in the USA	$	1,669,286	$	1,343,289
Mexico		683,076		614,279

[(1)] *According to the country where the Company is located.*

Geographic information on land and buildings, machinery and equipment, and investments in process is summarized as follows:

	December 31,			
		2022		2021
Lands and buildings, machinery and equipment and investments in process:				
Abroad, mainly in the USA	$	401,723	$	501,622
Mexico		738,076		641,407

The other non-current assets other than monetary items are summarized as follows:

	December 31,			
		2022		2021
Intangible asset, including goodwill:				
Abroad, mainly in the USA	$	261,254	$	281,940
Mexico		20,682		13,068

25. CONTINGENCIES

The Tax Administration Service ("SAT", for its acronym in Spanish) notified to Distribuida del Álcali S.A de C.V. subsidiary of Vitro, the beginning of the exercise of its review rights in relation to compliance with the obligations of the company as a direct subject, as well as withholder and jointly responsible in matters of income tax corresponding to the fiscal year of 2015. As a follow-up of the review in process, during the months of April to June 2022, technical sessions and worktables were held with the authority, which led in July 2022 to a self-correction agreement which concluded in the payment of $23,003 (See note 22) on July 27, 2022. Until December 31, 2022, through its team of experts, Vitro has determined that the registration of a provision has not been required, since the probability of loss is considered less than probable. Our experts estimate that Vitro has sufficient elements to obtain a favorable resolution of the remaining items noted from the authority. However, until all the instances are finalized in this procedure, Vitro cannot guarantee the definitive favorable resolution.

In accordance with the legislation in which the Company operates, the companies that carry out transactions with related parties are subject to tax limitations and obligations regarding the determination of the agreed prices, since these must be comparable to those that would be used with or between independent parties in comparable transactions. In the event that the tax authorities review the prices and reject the amounts determined, they may require, in addition to the collection of the corresponding taxes and accessories (restatement and surcharges), fines on the omitted taxes.

The Company is involved in several lawsuits and claims, derived from the normal course of its operations, which are not expected to have a material effect on its financial position and future results.

26. SUBSEQUENT EVENTS

WITHDRAWAL FROM CREDIT LINES

On January 26, 2023, the Company withdrew $20,000 of its credit line with Banorte maturing in April 2027, and on February 2, 2023 it withdrew $20,000 of the same credit maturing in November 2025, additionally, on January 9, 2023, it withdrew $30,000 of its short-term credit line with HSBC, maturing in 3 months.

27. AUTHORIZATION TO ISSUE THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements and notes of the Company as of December 31, 2022 and for the year ended on that date, were authorized for issuance by the Board of Directors on March 14, 2023, under the responsibility of Mr. Adrián G. Sada Cueva, Executive General Director, and C.P. Claudio L. Del Valle Cabello, General Director of Administration and Finance.

These consolidated financial statements are subject to the approval of the Company's Board of Directors, as well as approval at the ordinary stockholders' meeting, where they may be modified, based on provisions set forth in the Mexican General Corporate Law.

GRI INDEX

Vitro has prepared this 2022 Sustainability report in accordance with the GRI Standards for the period 1 January to 31 December 2022.

Cont	Description	Response or reference
2. GENERAL DISCLOSURES		
2-1	Organizational Details	**Legal Name:** Vitro, S.A.B. de C.V. **Legal form:** Sociedad Anónima Bursátil de Capital Variable **Location of Headquarters:** Monterrey, Nuevo León, Mexico **Countries of operation:** Global Presence - page 13
2-3	Reporting period, frequency and contact point	**Reporting period of sustainability and financial report:** The information presented in this report covers the period from January 1 to December 31, 2022 **Publication date of the report or reported information:** This report was published on 05/01/2024. **Contact point for questions about the report:** Sandra R. Rabbé González Corporate Social Responsibility and Sustainability Comments about the content of this report may be sent to: social@vitro.com or presented at corporate headquarters: Av. Ricardo Margáin #400, Col. Valle del Campestre, San Pedro Garza García, Nuevo León C.P. 66265, Mexico For more information, visit: www.vitro.com
2-4	Restatements of information	There is no restatement of information in this report compared to previous periods.
2-5	External assurance	**Assurance Letter:** Assurance Letter - Page xxx **Description of assurance standards used and limitations:** Assurance Letter - Page xxx
2-6	Activities, value chain and other business relationships	Flat Glass - Page 22 Containers - Page 29 Chemicals - Page 35 Global Presence - Page 13 Vitro Brands - Page 12
2-7	Employees	**Our people** - page 51 **Total employees:** 14,857 Mexico: 79.1% of employees W: 2,618 | M: 9,129 | T: 11,747 US and Canada: 17.2% of employees W: 560 | M: 1,990 | T: 2,550 Europe and Asia: 2.0% of employees W: 116 | M: 181 | T: 297 Central and South America and Caribbean: 1.8% of employees W: 48 | M: 215 | T:263 **Employees with permanent contracts:** Mexico: 73% of employees work under permanent contract W: 2,348 | M: 8,559 | T: 10,907 US and Canada: 17% of employees work under permanent contract W: 560 | M: 1,990 | T: 2,550 Europe and Asia: 2% of employees work under permanent contract W: 116 | M: 181 |T: 297 Central and South America and Caribbean: 1.8% of employees work under permanent contract W:48 | M:215 | T:263

Cont	Description	Response or reference
2. GENERAL DISCLOSURES		
2-7	Employees	**Employees with temporary contracts:** El 100% of employees with temporary contracts work in Mexico Mexico: W: 270 | M: 570 | T: 840 **Full time employees:** Mexico: 79.1% of all employees work full time in Mexico W: 2,618 | M: 9,129 | T: 11,747 US and Canada: 17.2% of all employees work full time in US and Canada W: 560 | M: 1,990 | T: 2,550 Europe and Asia: 2.0% of all employees work full time in Europe and Asia W: 116 | M: 181 | T: 297 Central and South America and Caribbean: 1.8% of all employees work full time in Central and South America and Caribbean W: 48 | M: 215 | T:263 These data were obtained by a headcount of personnel. There was no significant change in the number of Vitro employees compared to the previous period.
2-8	Workers who are not employees	**Most common contractual relations:** Outsourcing agencies - Temporary Workers - Full Time **Most common type of work:** Factory operators, production support, cleaning, security These data were obtained by a headcount of personnel. There was no significant change in the number of Vitro employees compared to the previous period.
2-9	Governance structure and composition	Corporate Governance - Page 17
2-15	Conflicts of interest	Vitro Code of Ethics and Conduct - Page 46
2-16	Communication of critical concerns	Vitro Code of Ethics and Conduct - Page 46 Ethics Committee - Page 49 No significant critical concerns were communicated to the highest governance body in 2022.
2-22	Statement on sustainability strategy	Letter to Stakeholders - Page 05
2-23	Policy commitments	Vitro Code of Ethics and Conduct - Page 46 Regulatory Compliance - Page 50 **Guidelines on respect for human rights:** Vitro is committed to respecting and enforcing human rights, and we recognize their importance and their universality. We comply with the laws of each country where we operate and are present, and abide by international standards in this area, and we know that human rights are inherent, inalienable, indivisible and interdependent. **Link to Vitro Code of Ethics and Conduct:** https://www.vitro.com/media/4350/codigo-de-etica-vitro.pdf
2-26	Mechanisms for seeking advice and raising concerns	**Mechanisms for seeking advice on ethical concerns:** Ethics Committee Process - Page 49 **Process for raising concerns about the organization's business conduct:** Whistleblower hotline - Page 49
2-27	Compliance with laws and regulations	In the period from January to December 2022, there were no administrative procedures brought against the company or opened that might be considered a significant risk to the business.
2-28	Membership associations	Membership in organizations and associations - Page 80
2-30	Collective bargaining agreements	100% of our employees are covered by collective bargaining agreements where the laws so require.
3. MATERIAL TOPICS		
3-1	Process to determine material topics	Materiality Analysis - Page 43
3-2	List of material topics	Materiality Analysis - Page 43

Cont	Description	Response or reference
201. ECONOMIC PERFORMANCE		
201-1	Direct economic value generated and distributed	Consolidated Financial Statements - Page 82
201-3	Defined benefit and other retirement plans	Labor Practices and Quality of Life - Page 58 At Vitro, all employees receive the wages and benefits established by law, along with incentives in keeping with their performance.
205. ANTICORRUPTION		
205-1	Operations assessed for risks related to corruption	Vitro Code of Ethics and Conduct - Page 46 Regulatory Compliance - Page 50 Alert! Whistleblower Hotline - Page 49
205-2	Communication and training about anti-corruption policies and procedures	Vitro Code of Ethics and Conduct - Page 46
205-3	Confirmed incidents of corruption and actions taken	Alert! Whistleblower Hotline - Page 49 In 2022 there were no material or significant instances of legal non-compliance that might affect the ordinary course of business of the Company or its subsidiaries.
206. ANTI-COMPETITIVE BEHAVIOR		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Vitro Code of Ethics and Conduct - Page 46 In 2022 there were no material or significant instances of legal non-compliance that might affect the ordinary course of business of the Company or its subsidiaries.
301. MATERIALS		
301-2	Recycled inputs used	Circular Economy - Page 61
301-3	Reclaimed products and their packaging materials	Circular Economy - Page 61
302. ENERGY		
302-1	Energy consumption within the organization	Energy Efficiency - Page 63 The factors used to calculate this consumption are taken from the 2022 list of fuels and caloric power produced by SENER-CONUEE and the EPA Emission Factors Hub
302-3	Energy intensity	Energy Efficiency - Page 63 Energy intensity was 7.7.
302-4	Reduction of energy consumption	Energy Efficiency - Page 63 Energy consumption increased 1.2% over 2021 but was reduced by 8.4% against the base year of 2018.
302-5	Reductions in energy requirements of products and services	Energy Efficiency - Page 63
303. WATER AND EFFLUENTS		
303-3	Water withdrawal	(see table below)

	Megaliters
Total water withdrawal from all areas in megaliters, and a breakdown of this total by the following sources, if applicable:	7,692.9
Surface water	0
Ground water	5490.7
Sea water	0
Produced water	1613.4
Third-party water	3502.46

Cont	Description	Response or reference
303. WATER AND EFFLUENTS		
303-3	Water withdrawal	**Megaliters** Total water withdrawal from all areas with water stress in megaliters, and a breakdown of this total by the following sources, if applicable: 6235.7 — 6,235.7 Surface water — 0 Ground water — 5240 Seawater — 0 Produced water 0 — 0 Third-party water — 2,585.3 1,601 wastewater and 938.8 municipal water *Water stress areas determined using WRI Aqueduct Methodology. Methodology applied starting 2019.
303-4	Water discharges	**Megaliters** Total water discharge to all areas — 2,449.6 Total water discharge to all areas with water stress in megaliters, and a breakdown of this total by the following categories: — 1,379.1
303-5	Water consumption	**Megaliters** Total water consumption from all areas — 5,243.3 Total water consumption from all areas with water stress: — 4,856.6
304. BIODIVERSITY		
304-3	Habitats protected or restored	Habitat - Page 76
305. EMISSIONS		
305-1	Direct (Scope 1) GHG emissions	Emissions and Climate Change - Page 65 Scope 1 Emissions: 1,289,588.69 tCO2e The base year for the calculation is 2018; Scope 1 emissions reported in that year were 1,321,814.48 tCO2e
305-2	Indirect (Scope 2) GHG emissions from power generation	Emissions and Climate Change - Page 65 Scope 2 Emissions: 847,208.90 tCO2e The base year for the calculation is 2018; Scope 2 emissions reported in that year were 1,094,070.41 tCO2e
305-3	Other indirect GHG emissions (Scope 3)	Emissions and Climate Change - Page 65 Scope 3 emissions: 821.6 tCO2e This calculation includes only business travel.
305-4	GHG emission intensity	Emissions and Climate Change - Page 65 Carbon footprint intensity: 0.61 tCO2e per metric ton of equivalent product (including S1 and S2 emissions)
305-5	Reduction of GHG emissions	Emissions and Climate Change - Page 65 In 2022, our GHG emissions intensity declined by 0.33% from 2022 and by 12.6% from 2018.
305-6	Emissions of ozone-depleting substances (ODS)	No emissions of substances that might damage the ozone layer (Mtons CFC-11e) were detected in our operations in 2022.

Cont	Description	Response or reference
306. WASTE		
306-2	Management of significant waste- related impacts	Circular economy - Page 61
306-3	Waste generated	Circular economy - Page 61 Total waste generated: 161,292.0 metric tons
306-4	Waste diverted from disposal	89% of waste were sent to recycling or other recovery processes
306-5	Waste directed to disposal	10.9% of waste was sent for confinement
401. EMPLOYMENT		
401-1	New employee hires and employee turnover	**New Hires** **Mexico:** 18-30 | F: 788 M: 2,439 T: 3,227 31-50| F: 540 M: 1.160 T: 1,700 >51 | F: 15 M: 116 T: 131 T: 5,058 **US and Canada:** 18-30 | W: 95 M: 273 8 T: 368 31-50| W: 65 M: 206 T: 271 >51 | W: 24 M: 64 T: 88 T: 727 **Europe and Asia:** 18-30 | W: 1 M: 4 T: 5 31-50| W: 0 M: 2 T: 2 >51 | W: 0 M: 0 T: 0 T: 7 **LATAM:** 18-30 | W: 13 M: 39 T: 52 31-50| W: 4 M: 29 T: 33 >51 | W: 0 M: 0 T: 0 T: 85 **Employee turnover** **Mexico:** 2,172 **US and Canada:** 709 **LATAM:** 9 **Total:** 2,890

Cont	Description	Response or reference
401. EMPLOYMENT		
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Labor Practices and Quality of Life - Page 58 Some of the benefits we offer are: life insurance, sanitary assistance, coverage for temporary and permanent disability, parental leave, and retirement reserve
401-3	Parental leave	All employees are entitled to parental leave in keeping with the regulations governing each country in which we operate
402. LABOR-MANAGEMENT RELATIONS		
402-1	Minimum notice periods regarding operational changes	All the periods of prior notice of organizational change established in our collective bargaining contracts are respected fully. These agreements also include an assurance of physical safety protection through the review and regular provision of personal protection equipment.
403. OCCUPATIONAL HEALTH AND SAFETY		
403-1	Occupational health and safety management system	Occupational Safety and Health – Page 55 Legal requirements of the occupational health and safety management system: Vitro's EHS system is executed in accordance with the applicable laws in the countries where it operates. This includes the following instruments: STPS, SSA,SEMANRNAT, CNA, SENER, etc.. U.S. OSHA, U.S. EPA, Texas Commission Environmental Quality (TCEQ), California OSHA (CalOSHA), California EPA (CalEPA), Oregon OSHA, Oregon Dept of Environmental Quality. Pennsylvania Dept. of Environmental Protection (PaDEP), Canadian Providential Safety and Environment. US Federal Agencies and Regulations: • US OSHA 29 CFR Part 1910 General Industry Safety • US EPA Title 40 Protection of Environment • US DHS 6 CFR Party 27 Chemical Facility Anti-Terrorism Standards Program • European Agency for Safety and Health and Work • Republic of Poland Labor Code Section X • European Union Environmental Standards State Agencies: • OH EPA • NC DER and NC DEQ • PA DEP and PA DOL • KY DEP and KY OSH • MI DEQ • MO EPA Recognized risk management and/or management system standards/guidelines: Behavioral Feedback, Awareness-Building and Training, Unsafe Condition Inspections, Accident Investigation/Analysis, EHS Alert Notifications, Lessons Learned / EHS Alerts, Risk Analysis/Operating Controls, Internal and Corporate Audits, Management Meetings, EHS Metrics by Leader, Health and Ergonomics Scope of the occupational health and safety management system: The standards extend to all Vitro plants and all personnel working in those plants.

Cont	Description	Response or reference
403. OCCUPATIONAL HEALTH AND SAFETY		
403-2	Hazard identification, risk assessment, and incident investigation	Occupational Safety and Health – Page 55 **Processes used to identify work-related hazards:** We have a risk analysis methodology as well as unsafe condition inspections through Gemba walks involving various plant leaders. We also have a process for behavioral observation and feedback, intended to promote safe behavior and eliminate unsafe acts, both based on effective feedback by leaders. **How the results are used:** We have indicators at the plant level and by leader, which are reviewed each month. These indicators reflect the performance of each plant/leader regarding compliance with the EHS standards assigned to them. Training sessions are scheduled to increase the level of awareness in EHS topics among workers and leaders, as well as worker's knowledge of their job operations. Each plant has internal audit programs conducted by the head of EHS at that site as well as Corporate Auditors **Processes for workers to report work-related hazards:** Workers may notify the company of hazardous situations through various channels. 1. Safety talks with their supervisors 2. Vitro hotline (anonymous) 3. Annual engagement survey (anonymous) 4. Risk analysis involving workers. **Policies and processes for workers to remove themselves from work situations that they believe could cause injury or ill health:** Personnel are encouraged to refuse to work: If they do not know how to do a job, if they have not been trained, or if they observe an uncontrolled hazard or risk. STOP AND ASK YOUR SUPERVISOR. **Processes used to investigate work-related incidents:** EHS standards include accident investigation, which uses the "5 Why's" methodology to identify root causes and decide on courses of action. This is recorded in Intelex software. The same software tracks implementation of corrective action.
403-3	Occupational health services	Medical departments in each plant participate in risk analysis in order to identify risks to health; they also play an important role in implementation and follow-up on worker health programs, as well as work micro-environment studies.
403-4	Worker participation, consultation, and communication on occupational health and safety	**Description of the processes for worker participation and consultation in the development, implementation, and evaluation of the occupational health and safety management system:** Workers may notify the company of hazardous situations through various channels. 1. Safety talks with their supervisors 2. Vitro hotline (anonymous) 3. Annual engagement survey (anonymous) 4. Risk analysis involving workers. **Joint management-worker health and safety committees:** Each plant has a health and safety committee which participates in accident investigations, inspects working conditions, participates in safety promotion events, etc. Most of Vitro's Architectural Glass plants hold weekly meetings with plant managers in which employees can share their EHS concerns; some sites involve employees in EHS leadership team meetings. Some sites have employee safety groups such as medical/emergency response teams, human yield defense groups, safety committees, etc. Weekly EHS review meetings are held with site leadership teams. Documented monthly meetings of EHS teams or safety committees will begin or resume at all sites in 2023. EHS teams or safety committees include a combination of salaries and hourly employees.

Cont	Description	Response or reference
403. OCCUPATIONAL HEALTH AND SAFETY		
403-5	Worker training on occupational health and safety	Training and Development – Page 56 Employee safety and health training was provided in 5-minute chats, classroom training in critical issues and awareness-building for employees in EHS matters. Some topics covered are: - Hazards/Risks and the Line of Fire - Glass Handling – Automotive/Architectural - Pedestrians and Moving Equipment/Lifting/Loading - Handling of SGA Chemical Products - Mechanical Risks and Safety Devices - LOTO - Slips/Trips/Falls vs Order and Cleanliness 38.1% of training hours in 2022 were related to Environment, Safety and Health issues
403-6	Promotion of worker health	**Worker access to medical and health services to address major non-work-related health risks:** Among Vitro's health programs are medical campaigns at plants where they receive various prevention services and programs, such as cholesterol, nutrition, diabetes, prostate cancer, vasectomy, oral health, breast cancer, high blood pressure, and others.
403-9	Work-related injuries	**Number of fatalities:** Zero **Number and rate of high-consequence work-related injuries (excluding fatalities):** 60 incapacitating accidents, accident rate/100 employees = 0.42 **Number and rate of recordable work-related injuries: 683 total accidents;** Accident rate/100 employees = 4.82 **Main types of work-related injury:** Finger lacerations and fractures **For all workers who are not employees but whose work and/or workplace is controlled by the organization:** **Number of work-related fatalities:** One contractor **Method for determining work-related hazards that pose a risk of high-consequence injury:** We have a risk analysis methodology as well as unsafe condition inspections through Gemba walks involving various plant leaders. **Hazards that have caused or contributed to high-consequence injuries during the reporting period:** Glass, moving machinery, tools, forklifts **Actions taken or planned to eliminate these hazards and minimize risks using the hierarchy of controls:** Implementation of engineering controls to eradicate the probability of human error. Administrative controls (training, work procedures, checklists, signage, task observation, etc.) EPP Assignment/Improvement. **Calculation of rates:** Vitro uses the Accident index, which measures the frequency and gravity of accidents. This metric extends to all people employed by Vitro. **Additional information:** We have a software called Intelex, which administers information on accident investigations, action plans, behavioral observation/feedback, reporting of unsafe conditions, risk analysis action plants, etc. The Accident rate is calculated using Excel worksheets, which are prepared each month, along with other relevant indicators.
403-10	Work-related ill health	**Number of fatalities as a result of work-related ill health:** zero. **Number of cases of recordable work-related ill health:** zero. **For all workers who are not employees but whose work and/or workplace is controlled by the organization:** Number of fatalities as a result of work-related ill health: zero **How work-related hazards that pose a risk of ill health have been determined:** We have a risk analysis methodology as well as unsafe condition inspections through Gemba walks involving various plant leaders. **Actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls:** Implementation of engineering controls to eradicate the probability of human error. Administrative controls (training, work procedures, checklists, signage, task observation, etc.) EPP Assignment/Improvement.
404. TRAINING AND EDUCATION		
404-1	Average hours of training per year per employee	Training and Development - Page 56
404-2	Programs for upgrading employee skills and transition assistance programs	Training and Development - Page 56
404-3	Percentage of employees receiving regular performance and career development reviews	Training and Development - Page 56

Cont	Description	Response or reference
405. DIVERSITY AND EQUAL OPPORTUNITY		
405-1	Diversity of governance bodies and employees	Governance Structure and Committees - Page 19 Us - Page 51 Inclusion and Diversity - Page 54
406. NON-DISCRIMINATION		
406-1	Incidents of discrimination and corrective actions taken	Vitro Code of Ethics and Conduct - Page 46 Inclusion and Diversity - Page 54 Labor Practices and Quality of Life - Page 58 Whistleblower Hotline - Page 49 In 2022 there were no material or significant instances of legal non-compliance that might affect the ordinary course of business for the company and its subsidiaries as a result of discrimination. Number of confirmed cases of discrimination during the period of this report: Zero.
407. FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Regulatory Compliance – Page 50 Labor Practices and Quality of Life – Page 58 No operations or suppliers have been identified in which workers' right to freedom of association or collective bargaining may have been infringed or which pose a significant risk of doing so in any of the operations within the company's value chain. Internally, Vitro has a Code of Ethics and Conduct explaining workers' rights and regulatory compliance regarding freedom of association. For suppliers, we have supplier quality manuals, self-evaluations with evidence and on-site audits to verify workers' status.
408. CHILD LABOR		
408-1	Operations and suppliers at significant risk for incidents of child labor	Regulatory Compliance – Page 50 Labor Practices and Quality of Life – Page 58 No operations or suppliers have been identified in which child labor is employed or which pose a significant risk of child labor or the exposure of young workers to hazardous jobs. Internally, 100% of Vitro operations have Selection and Recruitment Policies prohibiting child labor in every country where we operate. For suppliers, we have supplier quality manuals, self-evaluations with evidence and on-site audits to verify workers' status.
409. FORCED OR COMPULSORY LABOR		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Regulatory Compliance – Page 50 Labor Practices and Quality of Life – Page 58 No operations or suppliers have been identified in which slave labor is employed or which pose a significant risk of slave labor or other forms of compulsory labor. Internally, 100% of Vitro operations have Selection and Recruitment Policies prohibiting slave labor in every country where we operate. For suppliers, we have supplier quality manuals, self-evaluations with evidence and on-site audits to verify workers' status.
410. SECURITY PRACTICES		
410-1	Security personnel trained in human rights policies or procedures	In 2022, 94% of our security staff received formal training in specific human rights policies and procedures of the organization and their application to security. This percentage includes all personnel employed by Vitro.
411. RIGHTS OF INDIGENOUS PEOPLES		
411-1	Incidents of violations involving rights of indigenous peoples	Regulatory Compliance - Page 50 There were no material or significant incidents of non-compliance with the law in 2022 that might have affected the ordinary course of Company business or that of its subsidiaries as a result of violations of the rights of indigenous peoples. **Total number of confirmed cases of discrimination during the period of this report:** Zero.
413. LOCAL COMMUNITY		
413-1	Operations with local community engagement, impact assessments, and development programs	Vitro Community - Page 72

Cont	Description	Response or reference
416. CUSTOMER HEALTH AND SAFETY		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Vitro Code of Ethics and Conduct - Page 46 Regulatory Compliance - Page 50 In 2022 there were no material or significant instances of legal noncompliance that might affect the ordinary course of business for the company or its subsidiaries in connection with such issues.
417. MARKETING AND LABELING		
417-1	Requirements for product and service information and labeling	**Inorganic Chemicals Business** Salts for human consumption produced by our Inorganic Chemicals division follow specific labeling regulations and comply with various Official Mexican Standards that establish labeling requirements for table salt, and which control the use and consumption of iodized salt in order for consumers to make informed decisions. We ensure that our products comply with the highest quality standards, including ISO-9001 and FSSC 22000 certification and the Comprehensive Responsibility Management System (SARI) of the National Chemical Industry Association. **Flat Glass** For the applicable products, we abide by regulations like EU REACH, EU RoHS, RMI Responsible Minerals Initiative and California Prop65. **Architectural Glass** Our Architectural Glass division voluntarily monitors end products through the Living Building Challenge Red List and Cradle to Cradle Material Health certification.
417-2	Incidents of non-compliance concerning product and service information and labeling	**Incidents of non-compliance with regulations resulting in a fine or penalty:** zero **Incidents of non-compliance with regulations resulting in a warning:** 3 **Incidents of non-compliance with voluntary codes:** zero **Total number of cases:** 3
417-3	Incidents of non-compliance concerning marketing communications	In 2022 there were no material or significant instances of legal noncompliance that might affect the ordinary course of business for the company or its subsidiaries in connection with marketing communications.
418. CUSTOMER PRIVACY		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	In 2022, there were no identified claims of violations of customer privacy or loss of customer data. Users of the websites of Vitro and its subsidiaries are entitled to exercise their ARCO rights (Access, Rectification, Cancellation and Opposition) by directly sending their request to the person responsible at the e-mail protecciondedatos@vitro.com For more information about Vitro's Privacy Notice, visit the corporate website at vitro.com/es/aviso-de-privacidad

INFORMATION FOR SHAREHOLDERS

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STOCK MARKET

Bolsa Mexicana de Valores (BMV)
Ticker Symbol
VITROA

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Dividend policy

The declaration, amount and payment of dividends are decided upon by a majority of shareholders with voting rights, in the General Ordinary Shareholders' Meeting. This decision is generally based on a recommendation from the Board of Directors. The terms and conditions for payment of the dividends declared by the corresponding Shareholders' meeting are generally proposed by the Board of Directors, whose objective in terms of dividends is to maintain a healthy financial structure that allows the Company to consistently pay dividends.

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

Limited assurance report for selected sustainability information included in the Integrated Annual Report for the year ended December 31, 2022

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Independent Practitioner's Limited Assurance Report for selected sustainability information of Vitro, S.A.B de C.V.

Information Subject to the Assurance Engagement

We have been engaged by Vitro, S.A.B de C.V. ("Vitro" or the "Entity") to perform a limited assurance engagement on selected sustainability information included in the Integrated Annual Report for the year ended December 31, 2022.

Our work was performed by an independent, multidisciplinary team including assurance professionals and sustainability specialists.

Our limited assurance engagement was performed solely in respect of the selected sustainability information included in Appendix A. Our assurance report does not extend to information from previous periods or other information included in the Integrated Annual Report 2022, including other information related to such report that may contain images, audio or videos.

Criteria used for the preparation of the information subject to the assurance engagement ("Criteria")

The selected sustainability information included in Appendix A has been prepared and presented in accordance with the guidelines of the Global Reporting Initiative (*"GRI"*).

Vitro's Responsibility for selected sustainability information

Vitro is responsible for the preparation of the selected sustainability information in accordance with *GRI*. This responsibility includes the design, implementation and execution of internal controls over the relevant information for the preparation of the selected information that is free from material misstatement, whether due to fraud or error.

Inherent limitations to the Assurance Engagement

Selected sustainability information is subject to inherent uncertainty due to the use of non-financial information, which is subject to greater inherent limitations than financial information, given the nature of the methods used to determine, calculate, sample, or estimate such information. In preparing the selected information, the Entity makes qualitative interpretations about the relevance, materiality and accuracy of the information that are subject to assumptions and judgments.

Deloitte.

Our Independence and Quality Control

We have complied with the independence and ethical requirements of the *Code of Ethics for Public Accountants* issued by the *International Ethics Standard Board for Accountants* (IESBA), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.

The Firm applies *International Standard on Quality Management 1 (ISQM 1)* and, accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on selected sustainability information for the year ended December 31, 2022, based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000- *Assurance Engagements other than audits or reviews of historical financial information* ("ISAE 3000"), issued by the International Auditing and Assurance Standards Board (IAASB). That standard requires that we plan and perform this engagement to obtain limited assurance about whether the selected sustainability information is free from material misstatement.

A limited assurance engagement undertaken in accordance with ISAE 3000 involves assessing the suitability in the circumstances of Vitro's use of GRI as the basis for the preparation of the selected sustainability information, assessing the risks of material misstatement of the selected sustainability information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the selected sustainability information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluation of the appropriateness of quantification methods, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above, we:

- Performed inquiries, through which we obtained an understanding of the Entity's internal policies related to the selected sustainability information.

- Performed inquiries, through which we obtained an understanding of Vitro's control environment and information systems relevant to the preparation of selected sustainability information but did not evaluate the design of specific control activities, obtain evidence about their implementation or test operating effectiveness.

- Evaluated whether Vitro's methods for developing estimates are appropriate and had been consistently applied in the preparation of the selected sustainability information.

- Performed substantive tests on the selected sustainability information referred in this report, to corroborate that the data has been adequately measured, recorded, compiled, and reported through:

    - Inspection;
    - Observation;
    - Confirmation;
    - Re-calculations;

- Comparison of the contents presented by the management with what is established in the section of criteria of this report.

The procedures performed in a limited assurance engagement vary in nature and opportunity from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether Vitro's selected sustainability information has been prepared, in all material respects, in accordance with the guidelines provided by *GRI*.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Limited Assurance Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the selected sustainability information for the year ended December 31, 2022, was not prepared, in all material aspects, in accordance with the Criteria section of this report.

Restriction on Use and Distribution

Our report is intended solely for the management of Vitro, S.A.B de C.V., in accordance with the terms of our engagement letter and should not be used by, or distributed to any other party.

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

C.P.C. David Solano Zúñiga
Mexico City, Mexico
December 26, 2023

Appendix A

The following include the GRI non-financial metrics, in scope of the limited assurance engagement, determined by Vitro's Management.

GRI Description	Metrics
2-26 - Mechanisms for seeking advice and raising concerns	Qualitative review of mechanisms for seeking advice and raising concerns*. *The scope was limited to Mexico
205-3 - Confirmed incidents of corruption and actions taken	Qualitative and quantitative review of the total number and nature of confirmed corruption cases*. - Cero cases of confirmed corruption cases. *The scope was limited to Mexico
301-2 - Recycled input materials used	Total recycling of 140,772.16 tons, broken down as follows: - Glass: 131,617.21 tons - Hazardous waste: 78.70 tons - Mixed waste: 171.19 tons - Other non-hazardous waste: 148.46 tons - Paper: 314.40 tons - Cardboard: 1,636.14 tons - Plastic: 1,693.24 tons - Scrap metal: 2,481.12 tons - Wood: 2,631.70 tons *The scope was limited to the United States, Colombia, Poland and Mexico.
302-1 – Energy consumption within the organization	Total energy consumption of 25,943,670.73* GJ from renewable and non-renewable sources. *The scope was limited to the United States, Colombia, Poland and Mexico.
305-1 - Direct (Scope 1) GHG emissions	Emissions of 1,289,588.69* tCO2e from fuel consumption. *The scope was limited to the United States, Colombia, Poland and Mexico.
305-2 - Energy indirect (Scope 2) GHG emissions	Emissions of 847,208.90* tCO2e from electricity consumption. *The scope was limited to the United States, Colombia, Poland and Mexico.
401-1 - New employee hires and employee turnover	- 5,058 new employees hires, of which: 5 were executives, 649 were employees, 4,341 were operating and 63 were interns.* - 27% of new employees hires were women and 73% were men.* - 2,890 employees' turnover. * The scope was limited only to new employees hires in Mexico.
403-1 - Occupational health and safety management system	- Qualitative review of information in relation to the Entity's risk management system*. *The scope was limited to Mexico
403-2 - Hazard identification, risk assessment, and incident investigation	- Qualitative review of information in relation to the processes used to identify occupational hazards and periodically evaluate risks, as well as processes used to investigate workplace incidents*. *The scope was limited to Mexico
403-3 - Occupational health services	- Qualitative review of information in relation to the functions of occupational health services that contributes to the identification and elimination/minimization of risks*. *The scope was limited to Mexico
403-4 - Worker participation, consultation, and communication on occupational health and safety	- Qualitative review of information in relation to the processes of participation and consultation of workers for the development, application and evaluation of the occupational health and safety management system*. *The scope was limited to Mexico
403-5 - Worker training on occupational health and safety	- Qualitative review of information in relation to training courses for workers on health and safety at work*. *The scope was limited to Mexico

404-1 - Average hours of training per year per employee*	- 422,375 total training hours*. * The scope of the review was limited only to the validation of the total training hours per year per employee in Mexico, excluding the Automotriz Shatteproof, Arquitectónico VPM, Arquitectónico PVA and Arquitectónico LAN sites.
404-3 - Percentage of employees receiving regular performance and career development reviews	- 2, 293 collaborators received periodic evaluations on performance and professional development.* - 8.59% were executives. o 16 women representing 0.70% of the total o 181 men representing 7.89% of the total - 91.41% were employees. o 529 women representing 23.07% of the total o 1,567 men representing 68.34% of the total * Performance evaluations through the Individual Performance Planning and Analysis (IPPA) system are applied only to administrative personnel. Employees in operating areas are rated by efficiency metrics and business results. The scope of the review was limited to administrative personnel only.

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