

Sustainability Report 2020



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Letter from our CEO



For the Tecnoglass Group, 2020 was a year of innovation and transformation, where we demonstrated our resilience by adapting to new challenges, while fulfilling our commitments to our stakeholders.

Despite the defiance and uncertainties that came with the COVID-19 pandemic, we were able to complete important projects, restructure our processes in order for our operations to be carried out efficiently and responsibly, accomplishing expected programs and implementing new measures to respond to the unprecedented situation we were experiencing. We successfully continued our activities, always ensuring the safety and well-being of our workforce.

Without a doubt 2020 will always be remembered as a year that reminded us of the importance of family and that Tecnoglass is a family that addresses adversity with teamwork.

I am pleased to present our 2020 Sustainability Report, which shares some of the actions and programs in social, economic, environmental, and governance matters based on our sustainability strategy. We continue working on three fundamental pillars, which pursue the fulfillment of the Sustainable Development Goals (SDGs) as well as our commitment to the ten principles of the Global Compact: (i) Promoting Ethical and Responsible Continuous Growth; (ii) Leading Eco-efficiency and Innovation, and (iii) Enhancing our environment.

> **José Manuel Daes** CEO TECNOGLASS

COMPANY PROFILE

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About Us

Tecnoglass has more than 35 years of experience in the design, manufacture and installation of glass, aluminum facades and windows for the residential and commercial market. Since 1984, year of incorporation of the first company of Tecnoglass group, efforts have been directed to offer products with the highest quality and become today the best alternative for the production value-added glass, aluminum profiles and windows.

Tecnoglass is currently the parent company of 8 affiliates, 4 subsidiaries and one branch, with offices and commercial operations in Colombia, the United States, Peru, and Bolivia, being the United States the most relevant market for the Company. Tecnoglass has more than 1,100 active clients, including architects, building owners, general contractors, and window vendors in the construction market, located in more than 20 countries. Among the Company's outstanding projects are works such as the Park Groove and Paramount Miami Worldcenter buildings in Miami, Florida and the Hub 50 House in Boston, Massachusetts, which plan to become iconic projects in their cities.



About Us

The Company manages operations as a vertically integrated company, carrying out the processes of glass transformation, aluminum profile extrusion and finally assembly of window systems, from a modern industrial complex of more than 330,000 square meters, strategically located in Barranquilla, Colombia.

This allows Tecnoglass to offer high quality products that meet the needs of the market, with competitive prices and timely deliveries.

> ENERGIA SOLAR ESWINDOWS

Windows and facades with high specificity

TECHOGLASS



About Us

Vision

Our Vision is to be a worldwide leader with high quality products and solutions for a sustainable future, supported by highly trained and motivated employees.

Mission

Our Mission is to transform glass, extrude aluminum and fabricate window systems with superior manufacturing technology, considering a competitive product life cycle and fulfilling our stakeholders' interests.

Value Proposition: The Power of Quality.

Main Objectives

- Continued and sustainable growth.
- Maintain strong consolidated financial and operating results.
- Leverage Strength in core markets to diversify into new geographies with significant growth potential.
- Continued production of innovative, high quality and high value-added products
- Continue to build the full vertical integration strategy.

- Capitalize on secular market growth trends with architectural glass, windows and curtain walls.
- Achieve operational excellence and enhance asset effectiveness.
- Committed to environmental protection and the prevention of workplace accidents and occupational diseases.
- Create a great work environment, improving comfort and well-being while building an ethical culture.

Corporate Values

Our corporate values are responsibility, integrity, respect, and quality. These values aim to build a great work and business environment that allow us to develop our activities efficiently, obtaining results that add value to the Company.

These values are the basis of the Company's Code of Conduct, which outlines the behavior expected from each of the stakeholders: employees: directors, business partners, legal representatives, suppliers, contractors, customers, and any other person associated with the execution of the Company's corporate purpose. All stakeholders have access to our Code through the Company's web page. Annual training sessions are offered to divulge its contents and importance of compliance.

The latest version of our Code of Conduct was approved in 2017 by the Board of Directors of Tecnoglass Inc.

¡Together we build Tecnoglass!



Products & Trademarks

Tecnoglass offers a broad portfolio of products in the construction industry for commercial and residential projects, made to measure and in accordance with the specifications and standards required by the client and the applicable regulations, such as:



Tempered Glass: A safety glass four times stronger than conventional glass, which meets all the safety requirements stipulated by the construction industry. This glass is manufactured with heat treatment and state-of-the-art technology, achieving the least distortion possible and excellent optical quality.





Insulating Glass: Ideal for all type of projects, specially those that require temperature and noise control. This product is manufactured using two or three glass sheets, with aluminum profiles and air chambers filled with an inherent gas, thus producing a fully sealed unit with double sealing. Due to these properties, the insulating glass can decrease the rate of transfer of heat and noise inside buildings.



Silkscreen Glass: Offer architects a variety of options for beauty, originality, and functionality in a high-performing safety package. This technique consists of applying a coat of ceramic frit over the glass surface by means of a screen frame or rolls and then drying it with an infrared furnace before tempering.



Digital Print Glass: Provides a variety of possibilities for architectural design, opening the door to a spectrum of ceramic-tinted colors. This process allows printing on glass, achieving highly durable results, which even allow applying solar control coatings on the digital image.

Products & Trademarks



Low Emissivity Glass (Low-E): Offers efficient energy saving benefits to any architectural project, minimizing the amount of ultraviolet and infrared light that passes through the glass without compromising the amount of visible light transmittance. At Tecnoglass we offer a wide variety of coatings, both passive and solar control, which can be applied to clear or tinted glass.



TecnoBend: TecnoBEND is our curved glass technology which has the capability to temper Low-E curved glass in large dimensions, maintaining excellent optical quality and offering endless design possibilities for modern architecture. Our curved glass is ideal for façades, interior design and appliances. We have developed the perfect balance of temperature and processing time, resulting in a flawless product.



UltraView: UltraVIEW is fabricated through a gentle tempering process with the most advanced air cushion technology, where there is no contact with the surfaces of the glass panes as it uses ceramic air cushion instead of rollers, which leads to an even energy transfer into the glass. This technology is ideal to manufacture architectural glass with a new level of clarity and flatness; ideal for high end architectural applications.



Aluminum Products: We manufacture profiles with multiple specifications and colors using only top-of-the-line materials. Our in-house melting capacity is 2.200 tons. We use 7 presses, our biggest one with 2.800 tons of pressure, capable of extruding profiles up to 10.25" of width and 374" of length.



Windows and Doors: Our window systems offer multiple benefits such as hurricane resistance thermal break, security, and noise control. This product is available in numerous frames, including fixed, sliding, and casement. Our door systems have a variety of applications and uses that are compatible with our windows. We have a wide portfolio of sliding, swing, folding and automatic doors.

Products & Trademarks



Curtain Walls: Pre-assembled and pre-glazed systems that offer maximum resistance, durability, and efficiency in their design. These products have the most competitive quality, versatility, and performance characteristics for structural and thermal requirements, offering architects the best possible product on site. These architectural systems can be manufactured with various types of glass, such as laminated, insulating or with special coating for solar control.



Window Walls: Aluminum framed systems use primarily on mid and high-rise commercial and residential zbuildings. These products are prefabricated and can accommodate multiple conditions while saving installation time at the job site. These systems are laboratory tested to guarantee not only its resistance to water and air infiltration, but also its resistance to blast and hurricane impacts



Interior Partitions: Interior partitions for commercial and interior display cabinets incorporate a wide range of glass profiles, colors and finishes, as well as bathroom partitions, office cubicle dividers and cabinets. These products combine functionality, aesthetics and elegance, and are available in a wide range of structures and materials.

Our main brands are Tecnoglass, ESWindows and Alutions.

We operate under additional trademarks such as: "Alutions by Tecnoglass", "ECOMAX by ESWINDOWS", "Tecnobend", "ESWINDOWS Interiors", "ESW Windows and Walls", "Solartec by Tecnoglass", "Prestige by ESWINDOWS", "Eli by ESWINDOWS", "Alessia by ESWINDOWS" and "Componenti Architectural Specialties".

Company History



1994

Tecnoglass S.A.S is incorporated.



2007

Tecnoglass inagurates Alutions, a stateof-the-art aluminum extrusion plant, increasing its vertical integration.

2011

Tecnoglass Group, pioneers a window testing lab, the first in the industry.

2013

Begins trading as Tecnoglass Inc.



2014 PWC becomes Tecnoglass' auditor.





C.I. Energía Solar S.A.S E.S. Windows is incorporated.

2001-2004

1984

Facilities Enhancement

Four glass-laminating lines, two additional tempering furnaces are installed, and the Silk Screen line is enhanced with edge work machines.

Company History

2015

International sales surpass **65%**

After a **US \$45mm** investment, Tecnoglass inaugurates SolarTec a top-class manufacturing facility to produce high-spec Low-E insulating glass.



2016

Tecnoglass IPOs in the Colombian Stock Exchange (BVC)

Acquisition of ESWindows (formerly affilliated party) to further vertically integrate operations.

ESWINDOWS

2017

US \$210mm

5-year senior unsecured notes in the international debt capital markets.

GM&P



Acquisition providing further vertical integration and ability to instal in the U.S.

• Indirectly acquired Componenti

Opening of a new office in **Bolivia**

SOX Compliance

Tecnoglass remediates sole remaining material weakness and obtains full SOX Compliance.



2018

Corporate Governance Award

Tecnoglass receives the Corporate Governance Award given by The World Finance Magazine

2020 ond Refinancing

Bond Refinancing

New \$300mm Senior Secured Credit facility which with its improved pricing, will significantly reduce our capital cost.

ES Windowss California LLC is incorporated

Delisting from the Colombian Stock Exchange

Cancellation of registry before the SFC and BVC

2019

US \$35mm Equity issuance

US \$45mm

Joint Venture with Saint-Gobain for operations in Colombia and the construction of a new float glass plant near Tecnoglass' existing facilities.

ES Windows Peru S.A.C.

ES Windows Peru S.A.C is acquired by C.I. Energía Solar S.A.S. and Tecnoglass S.A.S.

ES Metals S.A.S.

Tecnoglass Inc. acquired 70% of ES Metals S.A.S.

Tecnoglass in numbers







4 COUNTRIES USD\$374.923.000

Colombia USA Bolivia Perú Revenues

15







USD\$97.794.000 USD\$24.185.000 EBITDA Net Income **37,1%** Gross Margin

The Company in 2020 had a year-on-year Ebitda growth of 5.9% compared to 2019.

Alliances and Strategic Growth

In 2020, the Company invested US\$9.9 million in an automated glass sorting system, which will increase capacity in two of the 10 production lines by about 160% (or 10% of total production capacity) while reducing process times. In addition, we made a US\$5.2 million investment to create an automated aluminum warehouse to reduce assembly times for curtain wall systems.

Both projects aim to generate efficiencies in the Company's processes, without sacrificing the jobs of our employees by relocating them to other areas where there is a greater demand for labor as production increases.

Aditionally, since January 1, 2020, ES Windows California LLC has become part of the group.
 This new company is exclusively in charge of product distribution in California, thus reaching new markets.



Governance Structure

General Shareholders' meeting	 The Company's highest organ. All shareholders are members.
Board of Directors	 The highest decision-making body of the company chosen by the general shareholders' meeting Has 7 members: 5 independent y 2 executives. It has 3 permanent committees made up of Board members.
Audit Committee	Its function is to approve and monitor: The integrity of the Financial Statements Auditors' independence ratings. The performance of independent auditors The company's compliance with legal requirements. This committee is also responsible for approving relevant related party transactions.
Nominating Committee	Complies with the responsibilities of the Board related to the determination of the number of members, the operation and the needs of the Board, including, among others, the recruitment and retention of Board members, and the composition and structure of the committee.
Compensation Committee	 Fulfills the responsibilities of the Board related to the compensation of the Company's executive director and other senior executives. Manages compensation and incentive plans Issues the Report of the Compensation Committee included in the Company's annual report, the applicable rules and regulations require it.
Directors	They are elected by a majority vote of the independent members of the Board of Directors for the period deemed necessary. Chief Executive Officer (CEO) Chief Operating Officer (COO) Chief Financial Officer (CFO)
General Counsel and Corporate Secretary	Supports the directors and Board members in promoting the highest standards of corporate governance and facilitates the effective functioning of the Board and its committees.

Delegation

Tecnoglass has in place a Delegation of Authority Manual approved by the Board of Directors, which aims to establish the levels of authority, delegation and approval of transactions that are carried out in our companies for the development of the corporate purpose set forth for each one. The Manual establishes the levels of authority based on the employee structure of the group's companies and the delegation is determined taking into account the functionality and nature of the processes, such as the supply of goods and services, financial operations, human resources and product quality.

Stakeholders

Assertive communication with all of our stakeholders is most relevant matter for the Company. Therefore, the Company strives to have effective communication channels to ensure valueadded offers that respond to the expectations of each stakeholder.

Shareholders: All Company information is available on the Company's website or specific information can be requested through the General Counsel, Corporate Secretary and CFO.

Employees: There are different communication channels such as the work committee and the hotline, to which they have access by telephone or via the platform 24 hours a day, seven days a week. Open channels of communications with Human Resources which, is the area responsible for their direct care.

Clients: Our Customer Service hotline and virtual platform is easuly accesible for all clientes.

NGO'S and Others: Direct communication channels by e-mail
 and telephone lines.



Ш

Suppliers: The direct communication channel is through our procurement department.

State: With all government entities we have traditional communication channels such as email, physical correspondence, telephone line and virtual platforms. We timely respond to any request or requirement



TECHOGLE

Community: Through community leaders and the Tecnoglass Eswindows Foundation Director.

All of the company's communication channels allow for continuous and direct dialogue with each of the members of the different stakeholders.

Associations & Aggregations

Some of the companies which are part of the goup are members of the following associations:



Colombian Council for Sustainable Construction ("CCCS"), an organization that seeks to support innovation and development of new products, materials and solutions that raise the level of sustainability of all uses of new and existing buildings and of cities in general.



Colombian Federation of Logistics Agents in International Trade ("FITAC"), a permanent and non profit association, which brings together the most important sectors in the foreign trade chain.



National Association of Foreign international Trade ("ANALDEX"), an association that encourages and strengthens the national export activity and supports the design and execution of short, medium and long-term export policies.



Colombian Institute of Technical Standards and Certification ("ICONTEC"), entity that is responsible for promoting standardization, certification, metrology and quality management in Colombia.



Colombian Association of Glazed Systems, (ACOLVISE) entity that proposes, promotes and supports programs and services that favorably influence the state of the Colombian market for glazed systems, in the protection of the user and the environment.



hitectural American Architectural Manufacturers Association (AAMA).



The Aluminum Extruders Council (AEC) is an international trade association dedicated to promoting the effective use of aluminum extrusion in North America.

Certifications & Acknowledgements

PROMOTING CONTINUOUS, ETHICAL AND RESPONSIBLE GROWTH:





Tecnoglass S.A.S. and C.I. Energía Solar S.A.S. E.S. Windows have certified their quality management system based on the international standard ISO 9001.

Tecnoglass has been SOX compliant since 2017. SOX stands for the Sarbanes-Oxley Act that seeks to protect shareholders and the general public against accounting errors and fraudulent practices in companies, and to improve the accuracy of corporate disclosures.



Tecnoglass S.A.S. and C.I. Energía Solar S.A.S. E.S. Windows are authorized as Authorized Economic Operator Exporter in the security and facilitation category.



Eswindows LLC is certified as TIER 3, which is the highest standard possible, with the C-TPAT Importer Program granted by the U.S. Customs and Border Protection.



Tecnoglass S.A.S. obtained the international certification of glass manufacturing and installation with Vitro inspection to manufacture products until 2021.

Certifications & Acknowledgements

LEADING ECO-EFFICIENCY AND INNOVATION:





The companies C.I. Energía Solar S.A.S. E.S. Windows and Tecnoglass S.A.S. maintained the certification of their Environmental Management System based on the ISO 14001 standard.

The Aqueduct, Sewage and Sanitation Company of Barranquilla – Triple A, in 2016 and 2017 granted a recognition to C.I. Energía Solar S.A.S., ESWindows due to its good practices in the management of hazardous residue. In December 2016 we obtained the Triple A Award in the category of large generators.



HP Inc. Colombia recognized C.I. Energía Solar S.A.S. E.S. Windows his participation in HP Planet Partners, HP Lasert Jet Original Toner Return and Recycling Program that supports the Omacha Foundation, a non-profit, non-governmental organization created to study, research and conserve aquatic fauna and ecosystems and terrestrial in Colombia.

ENHANCING OUR ENVIRONMENT:



Tecnoglass S.A.S. and C.I. Energía Solar S.A.S. E.S. Windows have certified their occupational health and safety management system based on the international standard ISO 45001.



Our brigade has been recognized by the Occupational Risk Manager Seguros Bolívar at the 8th Brigade Meeting.

SUSTAINABILITY STRATEGY

Sustainability Strategy

Our Sustainability Strategy contains the Company's guidelines to offer value propositions to its stakeholders that meet their needs and expectations. This strategy provides the necessary parameters to address our main impacts, consolidate new standards and achieve the proposed objectives. The Sustainability Strategy is integrated with the Company's policies, corporate strategies, mission, vision, and corporate values.

OurSustainabilityStrategyisbasedonthreepillarsthatinvolveeconomic,social,environmental, and corporate governance aspects, which in turn contain specific commitments that aim to ensure that all the processes and activities are carried out in a sustainable manner.



Tecnoglass Inc. Sustainability Strategy

PROMOTING CONTINUOUS, ETHICAL AND RESPONSIBLE GROWTH

Promoting continuous, ethical and responsible growth

The Company strives for continuous business growth by offering efficient, innovative, and high-quality products that add value and satisfy the needs and expectations of its customers, thus guaranteeing the consolidation of the brand.

We seek to conduct all activities in an ethical, integrated, and transparent manner, which is why we adopt leading international practices in corporate governance and comprehensive risk management, allowing for transparent decision-making and accountability. In addition, we have effective communication channels with each of our stakeholders.



Commitments associated with the pillar promoting continuous, ethical and responsible growth.

4.1 Ethics and Compliance Program

Principle **10**

Area: Anti-corruption

Businesses should work against corruption in all its forms, including extortion and bribery.



Adopt best corporate governance practices that facilite decision making and accountability.



^D Conduct our business with integrity, ethical and transparency.

- Annually, the Company prepares an Ethics and Compliance Program to establish the activities to be developed during the year to prevent and manage the risks of corruption, fraud, money laundering, and financing of terrorism. The mentioned program is articulated with the risk matrix and the internal procedures of the areas in charge of identifying, analyzing and evaluating risks for the implementation of controls to mitigate them. This matrix includes all national and international standards.
- The Ethics and Compliance Program is complemented by the guidelines established in the Code of Conduct, the Compliance Manual, the Internal Work Manual, and other corporate policies. Employees have annual training sessions not only to communicate the guidelines and directives contained in the Code of Conduct and Compliance Manual but also to encourage them to act with integrity and, fostering a culture of zero tolerance for fraud, corruption, money laundering, financing of terrorism, or any other unethical act.
- The Company has several confidential reporting channels through which employees, managers, officers, and collaborators can communicate or consult any situation contrary to the guidelines contained in the Compliance Manual, the Code of Conduct. In order to guarantee the anonymity of the reporter, the cases are treated confidentially, without retaliation, and the reported facts are additionally verified.
- Currently, Tecnoglass is adapting its system of self-control and risk management of money laundering and terrorist financing ("SAGRLAFT") to a self-control system and comprehensive risk management of money laundering, terrorist financing and financing, and proliferation of weapons of mass destruction (SAGRILAFT), under the latest amendments to Chapter X of the Basic Legal Circular of the Superintendence of Companies of Colombia.

2020 Outstanding achievements

- We trained **100%** of the new employees on ethics and compliance strategies, making them aware of the controls for the integral management of AML and Terrorism Financing, Corruption and Fraud risks.
- We trained 75% of our employees, which corresponds to 4,096 people on the Compliance Manual and the Code of Conduct.



- We virtually trained **100%** of the area heads and ethics leaders on SAGRLAFT and the Ethics and Compliance Program.
- We encourage employee participation in contests and awareness campaigns on corporate values and prevention of fraud, corruption, money laundering and terrorist financing (LAFT) and corruption.
- We decreased the reports submitted through the Confidential Reporting Hotline and increased the number of inquiries, compared to 2019, thanks to the Ethics and Compliance Program.
- We did not receive any reports on money laundering and financing of terrorism (LAFT).

2020 Outstanding achievements

- We disclose to **100%** of our employees and suppliers the guidelines established for the receipt and delivery of gifts and hospitality, in accordance with the Compliance Manual.
- We encouraged **100%** of our employees to live our corporate values at home and indicated the guidelines to be followed to avoid risks of fraud, corruption, money laundering and terrorist financing during the Covid-19 pandemic.

Iniciatives 2021 - 2022

- Adapt the system of self-monitoring and risk management of money laundering and financing of terrorism ("SAGRLAFT") to a system of self-monitoring and comprehensive risk management of money laundering, financing of terrorism and financing and proliferation of weapons of mass destruction (SAGRILAFT).
- Encourage employees to adhere to and live the corporate values, developing a corporate culture as a pillar for the prevention of LAFT, fraud and corruption risks.
- To have a cyclical training process that allows us to reach all our stakeholders, in order to continuously socialize ethics and compliance policies, promoting positive change, transparency, sustainability and inclusion.
- To achieve that through the hotline of confidential report we receive more consultations than complaints.

4.2 Supply Chain

Strengthen risk management as strategic factor for the organization.

Our commitment to risk prevention in international trade is evidenced in the adoption of security standards under international norms.

We voluntarily adhered to the C-TPAT Importer in the United States and Authorized Economic Operator in Colombia programs, which allows us to have a solid and secure supply chain, acting preventively and mitigating threats.



Supply Chain

The adoption of these requirements generates confidence with the control authorities and gives us a competitive advantage for our customers. To achieve excellent levels of safety, companies carry out continuous improvement of their processes and implement controls to ensure that:

- Our business partners are not involved in illegal activities or have a criminal record that could pose a risk to the company.
- Our cargo units (containers) are not violated by the intrusion of illicit substances or any other contaminating element.
- We control the access of personnel, vehicles and packages entering or leaving the company through identification.
- We perform traceability to the cargo and truthful information of our operations.



- We provide security to facilities by identifying critical areas and implementing measures to control access to them.
- Our information systems are secure and properly used.
- We develop training programs for all personnel according to their functions



Exports and Imports



Tecnoglass Inc. Exports and Imports

Exports

Tecnoglass USD \$ 63.817.177,62

Containers : 1305

C.I. Energía Solar USD \$ 178.648.076,74

Containers: 3607

Imports

Tecnoglass

USD \$ 75.644.278,64

C.I. Energía Solar USD \$ 21.103.593,80

Containers: 1129

Containers: 307

Supply Chain Security Impacts, Risks and Opportunities

With the implementation of security standards in international trade, the company is committed to prevent and detect illicit activities promptly; given Colombia's national security situation, we are aware that maintaining a proactive attitude towards risk strengthens our operational management.

Concerning the opportunities identified, the company is continuously working on the systematization procedures. With the support of the IT department, platforms have been implemented to manage the traceability of information for import and export activities, improving communication between the different areas. In addition, continuous training of employees helps to apply best practices and mitigate risks.

2020 Outstanding achievements

Supply Chain Security



We maintained the authorization as Authorized Economic Operator for exporters in the security and facilitation category for the companies Tecnoglass S.A.S. and C.I. Energía Solar S.A.S. E.S. Windows.

We achieved optimal results of the audits carried out by the control authorities in Colombia for the validation of the requirements of the Authorized Economic Operator Importer program for the company CI Energía Solar SAS ES Windows. At the beginning of the year 2021 we received the resolution of authorization as AEO Importer.



We implemented the new minimum-security criteria of the C-TPAT Importer Program for Eswindows LLC.

We updated the physical security study of the plants to prevent and detect vulnerabilities in the facilities and improve the established security schemes.

2020 Outstanding achievements

We train personnel with the objective of strengthening supply chain security, including the following:

- Induction of **100%** of new employees on supply chain security policies, guidelines, and risk management.
- Container inspection and sealing training for personnel involved in export and import cargo handling activities.
- We continue to strengthen the physical security area with technological means and through continuous training of private security personnel.

2021 - 2022 Initiatives

- To obtain the authorization as Authorized Economic Operator Importer in the category of security and facilitation for the company Tecnoglass SAS.
- Maintain the authorizations as Authorized Economic Exporter Operator in the revalidation process carried out by the control authorities in Colombia.
- Continue implementing technological tools for the security management of export containers.

Supplier Management



Build relationships of trust and mechanisms of communication with our stakeholders.

Tecnoglass recognizes that the proper management of its suppliers of products and services is obtained through the correct implementation of policies that integrate the company's commitment to compliance with quality standards, the environment, safety in the supply chain, and occupational health and safety.

In the search for operational excellence, there are communication channels that provide feedback on supplier management and inform policies, also information from suppliers is periodically requested to evaluate risks and ensure that purchasing management flows effectively.

2020 Outstanding achievements

- We updated our policies and procedures for vendor registration and updating business partners. Likewise, we updated our risk level analysis to focus our knowledge and validation visits to suppliers and customers to prevent risks to the supply chain.
- We maintained commercial relations with 2210 suppliers, of which 395 were vendor registration in 2020. 72% of suppliers are in Colombia, 23% in the United States and 5% in other countries.



2021 - 2022 Initiatives

 Continue with the implementation of a platform for managing the processes of engaging with and updating suppliers abroad. Our Quality Management System ("QMS") has enabled the Company to continuously evaluate and improve our products and the way we manufacture them to offer our customers the excellent quality for which we are known. It also allows us to constantly evaluate our progress and contributes to further internal development and product positioning in the construction sector. It has also helped to make internal communication channels more fluid and efficient.

As a result of the pandemic caused by Covid-19, there are constant changes in the internal and external factors of the Company, which affect the expected results. Therefore, the processes are continuously evaluated to determine the strategies and mechanisms to be applied to guarantee the correct operation of the production processes.

Impacts, risks and opportunities in the Quality Management System

Risks associated in the quality management system, their impact and its opportunities have been duly identified in the company's risk matrix, adopting appropriate controls to address them in accordance to the Company's risk appetite

Hence, below are some of controls adopted by the Company:

- Rapid growth in infrastructure and production capacity to counteract the accelerated growth of the market and the high demands of the clients in terms of delivery.
- Complementary training strategies with external entities such as SENA to obtain a high qualification and technical training of intellectual capital, mitigating this risk.

Impacts, risks and opportunities in the Quality Management System

- We designed a process of non-conformities to provide customer service and meet their needs and expectations.
- We verify the quality standards of raw materials and supplies furnished by our vendors and plan ahead the purchase of materials and equipment to have availability of these.

The Company has identified opportunities in the implementation and use of technology for the systematization of processes. For this reason, the quality area, together with the IT Department area, has developed web applications to systematize routine activities and streamline the execution of processes. Likewise, reengineering has strengthened communication, reduced reprocesses, and increased performance. The challenge is to continue in the constant search for improvements to add value to the different processes.


High Quality, Innovative Products



Adapt our offer and operation to new markets.



Consolidate and protect our brand.

The Company is a leader in the construction industry and is one of the principal exporters in Colombia for providing innovative, efficient, and high-quality products that meet the needs and expectations of our stakeholders. Currently, we have positioned ourselves in the most demanding international markets thanks to the continuous innovation in products and manufacturing processes, investment in infrastructure and new technologies, the quality of products and services, and the human talent we have in Tecnoglass.

2020 Outstanding achievements

Product Certifications



We obtained the IGCC (Insulating Glass Certification Council) certification for two new references (5348 and 5349) of insulating products manufactured at Tecnoglass S.A.S.



NTC 1578:2011: Product seal for safety glass used in construction, approved by ICONTEC.

NTC 2409:1994: Product seal for extruded aluminum alloy profiles, approved by ICONTEC.



ANSI Z97.1-2015, CPSC 16 CFR 1201, CAN/CGSB 12.1-2017: Laminated and tempered safety glass, approved by Safety Glazing Certification Council "SGCC".



ASTM E2190: Insulating glass meeting all guidelines and requirements for IGCC[®] / IGMA[®] certification approved by the Insulating Glass Certification Council and the Insulating Glass Manufactures Alliance "IGCC".

Product Certifications

₩ VitroCertified Vitro Certified International Manufacturer

Trademark license granted by Vitro for pre-selected projects and to produce certain MSVD coated products at the Solartec plant.

kura*ray*

Good handling of SentryGlas, Butacite and Trosifol products awarded by Kuraray for compliance with all requirements.



CAP (Certified applicator program) PPG Industries certifies the highest level of coating application.



NFRC (National Fenestration Rating Council) Energy Efficient Products.

NOA (Notice of Acceptance) Fenestration products for all areas of Florida, including hurricane zones.



FBC (Florida Building Code) Hurricane protection products

Process Improvement

To ensure that new products meet quality standards, we constantly improve our processes, highlighting the following actions:

- We comply with the audit programs of the Quality Management System and implemented the reccomendations resulting in the closure of the findings.
- We are accompanied by quality inspectors throughout the production chain who inspect the production process and the finished product piece by piece according to established quality criteria.

Glass and Aluminum Plant

Activities carried out at the aluminum plant:

- We guarantee the quality of extruded aluminum for product manufacturing through management indicators, structured quality plans, conformity criteria, and technical standards.
- We performed chemical and mechanical analysis tests on our manufactured products to guarantee its mechanical properties.
- Start-up of a paint laboratory to strengthen quality control of incoming raw materials and in-house paint batches to reduce downtime during the production processes and reduce costs associated with internal nonconformities and correct batches received with color deviations.
- We improved the organization and storage of the product with the installation and commissioning of the automatic warehouse with a storage capacity of **600 tons**. With an area of 1099 m2 and six docks for loading and unloading of the material, high precision positioning by bar code, and a power of 103 KW with 440VAC power supply. The electrical system under IEC standards.
- We improved the design of the chip collection systems in the extrusion presses to avoid the spread of chips in the environment and improve non-conformities due to extrusion streaks.
- We implemented technological tools to optimize resources in the production plant, such as:
 - Digitalization of the inspection report and treatment of nonconformities by means of an electronic table as a tool for inspectors.
 - We improved the logistics process of the dispatch and travel management area by implementing bar code reading technology with PDA of materials through web applications.

Glass and Aluminum Plant

Activities developed in the glass plant:

- We implemented state-of-the-art equipment for the control and quality assurance of the glass during the production process of the Sorting plant, which allows us to have a high standard of inspection and quality of the processed glass.
- We performed product quality audits to validate compliance with international standards.
- We implemented technological tools to optimize the review of quality specifications.
- We updated product quality plans and procedures to optimize resources on production lines.

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Window System Plant

- We implemented the electrostatic paint booth for the production plant of the company CI Energía Solar S.A.S. E.S. Windows to reduce downtime during the production process and reduce costs associated with aluminum nonconformities. This initiative that we started the previous year, has achieved its purpose. In 2020, 83,574 kg of non-conforming aluminum generated during the production process were recovered.
- Systematization of the handling of aluminum and glass nonconformities, involving the areas of Systems, Production, and Management, to obtain real-time and reliable information to create opportunities for improvement, generating the following advantages:
 - Increased productivity by reducing information search times.
 - Filtered information for guick and concise analysis.
 - At the end of each work shift information is automatically received by e-mail.
 - We reduced paper use and achieved annual savings of \$20,000,000.

Window System Plant

- We developed specific audits to the production process as a validation tool that allows decision making based on the current situation, identifying opportunities for improvement, productivity increase, optimization of material and human resources.
- Reduction of 63% of the non-compliant glass indicator and 43% of the non-compliant aluminum indicator in the fenestration manufacturing process, compared to 2019.
- Increased productivity of the quality laboratory by 70%, reflected in an increase in units tested, from testing 3077 units in 2019 to 5,251 units in 2020.
- We continued with the execution of activities aimed at maintaining our high-quality standards:
 - Socialization of glossary of terms related to the production line that facilitate the worker's learning.
 - We carried out the revision of accessories under technical standards and structured quality plans.
 - Software for scraps consumption, in order to optimize the aluminum in the cutting process.
 - Ticketing platform for touch-up requests, with the objective of better planning, greater control and traceability of the recovered aluminum.
 - Digitalization of the registration process and treatment of non-conformities.
 - Improvement of the Nova quality software to optimize the traceability and control of the manufactured units, taking into account the requirements of the manufacturing of products for the North American market.

Window System Plant

Training:

We train our collaborators focusing on technical skills, highlighting the following training:

- Staff training based on lessons learned and technical concepts
- Training in participation and consultation
- Knowledge of metric unit conversion and metrology.
- Basic knowledge in the interpretation of production drawings.
- Knowledge in silicone application
- Knowledge of the process map of the production plant.
- Technical and functional knowledge of the Organization's products.
- Training in the fundamentals of extrusion in the aluminum plant.
- Quality Champions League campaign for the reduction of product nonconformities

2021 - 2022 Initiatives

- Maintain management system and product certifications.
- Manufacture new products with quality standards and certifications.
- The initiatives to be developed in the aluminum plant of Tecnoglass SAS are described below:
 - Promote the Information Systems Analysis and Development Technologist course and the Management and Logistics Technologist course in a virtual mode in strategic alliance with SENA.

2021 - 2022 Initiatives

- Standardization of mechanical behavior parameters of the assemblies made in the Thermal Break process.
- Improvement of the ventilation systems in the extrusion presses for the profile cooling process and optimization of the profile cold cutting process.
- Semi-automation of the profile packaging process through the acquisition of packaging machines to reduce handling and improve production times.
- Expansion of control capacity to the dimensional measurement process with the purchase of new equipment.
- Strengthening of leadership skills in supervisory personnel through theoretical and practical training.
- Strengthen cost control of paint raw material inventory through the implementation of PDA technologies and QR codes supported by web applications.

The initiatives to be developed in the glass plant of Tecnoglass SAS are described below:

 Installation of scanner for finished laminates and thermoacoustic product inspection to meet the requirements of our customers and product.

Communication Strategies



Build trusting relationships and communication mechanisms with our stakeholders.

2020 Outstanding achievements

External Communication

We executed a structured communications plan through various platforms; delivering relevant information about the Company and our products to different audiences and stakeholders while strengthening our relationship with the top global media companies. We elaborated and executed different communication and marketing strategies in line with the Company's objectives and specially designed for each audience.

We use digital platforms such as LinkedIn, Twitter, Instagram, Facebook, Google Ads, DV, emails, mobiles, among others, and traditional channels such as television, radio, and press, as well as the development of different communication tools for the sales department. and traditional channels such as television, radio and press, as well as the development of different communication tools for the sales department of different communication tools for the sales the development of different communication tools for the sales department.

• Enhancement of brand awareness in traditional and online media by the design and execution of marketing and communication strategies.

Management of free-press content publication, through press releases and interviews with spokespersons, increasing brand positioning and credibility nationwide.

Generation of segmented digital marketing campaigns in the U.S. to increase brand recognition and attract new clients for the residential market. Through these campaigns we were able to increase by 60% the number of quotes received through the website for single-family homes.

We developed strategies in different media to publicize the Foundation's initiatives during the Covid-19 pandemic, to encourage other companies to support communities in these difficult times. Through the foundation, we were able to provide timely and successful assistance to the vulnerable population of the city of Barranquilla. We managed to position the company as a supportive organization in the region and in Colombia, under the campaign #DeEstaSalimosJuntos.

External Communication

• We addressed **100%** of our customers' concerns, complaints, doubts and service requests through our Help Desk and Service Ticket Platform.

Internal Communication

• We implemented communication plans to raise awareness of the importance of following biosafety and social distancing protocols inside and outside the workplace, together with Human Resources and Occupational Health and Safety departments, through digital and internal channes.

2021 - 2022 Initiatives

External Communication

- Enhance our presence in digital channels to increase our brand awarenes in the U.S. and Colombian markets.
- Generate new marketing and advertising campaigns in Florida, focused on the residential market.
- Develop segmented digital marketing campaigns that respond to a commercial objective and translate into new customers and sales for the company, for the residential and commercial market.

Internal Communication

- Structure an internal communications plan, through new platforms that allow us to reach all company employees more effectively.
- Continue with the development of internal communication campaigns, aligned to the needs of the different areas of the company.



Leading Eco-Efficiency and Innovation

To prevent, mitigate and compensate the environmental impacts of the business, the Company has designed and implemented strategies aimed to the efficient use of materials and resources and the development of environmentally friendly technologies. Additionally, it responsibly manages the value chain and the life cycle of the products. All this to offer our stakeholders innovative and high-quality products that are environmentally friendly and energy-efficient.



Commitments associated with the pillar Leading eco-efficiency and innovation

5.1 Environmental Management System



Area: Environment

Businesses should support a precautionary approach to environmental challenges.



Prevent, mitigate and compensate environmental impacts of the business



Responsible management of the value 🛃 📣 chain and the product cycle

The company has implemented its Environmental Management System ("EMS") under the international standards established by ISO 14001 through an organized structure. This methodology allows us to define responsibilities, develop practices and establish procedures in all processes to optimize resources to determine and achieve a responsible environmental policy.



Impacts, risks and opportunities in the Environmental System

the In Company's Environmental Management System, we have identified the Covid-19 contingency, establishing controls to reduce the risk assessment based on the guidelines of the Ministry of Health and the initiatives taken by the Covid Committee, which is an interdisciplinary team that ensures the correct and timely compliance of the required measures. The Company has identified, evaluated, and implemented the necessary controls for all management risks and opportunities inherent to the processes. This need to be addressed to ensure that the EMS can achieve the expected results, increase desirable effects, prevent and reduce undesirable effects and achieve improvements.



The main risks, from the environmental point of view, are focused on the inadequate classification of waste, the increase in the generation of hazardous waste, chemical spill, increase in the consumption of a natural resource and, loss of certification of the wastewater management system. All these risks are managed through controls and their effectiveness is evaluated with our isks and opportunities matrix.

Implementing controls to manage risks, compliance meet indicators and strategies in the processes, have been favorable, such as innovation in products and services, opening of new markets, improvement of productivity, use of resources for an effective planning of the organization's activities, optimization of production processes, keeping personnel updated and trained in the tasks of their position.

The environmental impacts that could be caused as a result of our industrial processes are air pollution, soil pollution, resource depletion, abnormal or emergency conditions. However, due to the operational controls that we have designed and executed, such as preventive maintenance, daily consumption controls, emergency plans, training, documented procedures, monitoring in water and air, etc., we have been able to mitigate its impact, obtaining as a final result in most cases a non-significant valuation.

The organization has always complied with all environmental regulations and legislation, thanks to the controls execution through our legal compliance matrices, which allows us to timely monitor and process all permits and notify the competent environmental authorities of all that is required.

5.2 Efficient consumption and water saving

The water used in the production and administrative processes is drinkable, this is supplied by the company Triple A S.A. E.S.P. and it is treated in our facilities through reverse osmosis and ion exchange equipment. Once used, it is treated in a wastewater plant for subsequent dumping into the Triple A sewer. The following diagram describes the process



Inverse Osmosis Process and Ion Exchange Equipment

One of the main objectives of the Environmental Management System is to optimize the rational use of water in the production process. In that sense, the following strategies have been implemented: raising awareness about water-saving through information on the pipes, training of personnel on the use of valves and efficient water use, data collection on invoicing per square ft produced, preparation of a map showing the location of all meters controlled by the Company, daily water quality protocol, daily data collection of meter readings for all machines and preparation of a comparative analysis concerning the amount of glass produced (m2 or ton) and review of new projects to determine whether they can work with rejection water, weekly calibration of the testers for measuring quality parameters, among others.

Those activities are reported in the environmental management programs FO-GI-A08. Taking into account the above, the Company allocates technical and financial resources focused on the efficient use of the resource to maintain the indicator of the amount of water consumed.

In order to reduce the impacts and risks associated with water resources, the environmental management area works along with the production, maintenance, quality, and SST areas to identify, report and correct on time any anomalies that may arise in the management of the resource, such as leaks, improper use of valves, damage to equipment and accessories that affect the operation of the processes.

Management of impacts related to water discharges

Wastewater generated in the Company's industrial processes is treated in our wastewater treatment plants and then discharged into the sewage system of the public utility company.

In compliance with the discharge parameters established in Resolution 0615 of 2015, we perform physical, chemical, and microbiological monitoring with a laboratory accredited by IDEAM, the results are sent to the environmental authority for the granting and monitoring of the permit, which are valid until September 2022 according to Resolution 0938 of May 3rd, 2019.



Water Consumption

The production processes are the ones that represent the highest water consumption in the Company, accounting for approximately 70% and 80% of the consumption billed by the supplier. In 2020, the administrative personnel worked from home most of the year because of the pandemic. However, the manufacturing plant worked, as usual, maintaining the average water consumption.

To monitor and analyze the trend in water consumption, we set as an indicator the amount of water consumed versus tons of glass produced (m3 of water consumed/tons produced). The stipulated consumption goal is 6 m3/ton, which we have met in recent years.



2020 Outstanding achievements

- We maintained water consumption in production at **5.5 m3/ton,** complying with the indicator.
- We implemented a new wastewater treatment system DTPD12, which allows the recirculation of **100%** of the wastewater generated in the FOREL line, thus avoiding dumping.
- We reused **100%** of the reject water from demineralization in the reverse osmosis equipment, which represents **100%** of the incoming water we receive from the supplier.

- Due to the Covid-19 contingency, we installed **7 hand-washing basins** in different strategic points of the plant and access areas, taking advantage of the concentrated water flow generated in the reverse osmosis systems, thus not affecting the water consumption supplied by Triple A.
- We expanded the water storage capacity for the Solartec plant, enabling an 80m3 subway tank that was out of service and installed the entire hydraulic network that guarantees the supply of the resource.
- We continuously train production personnel on the proper handling of valves, which allows us to optimize washer consumption.
- We treated **35,266 kg** of waste water contaminated with Xylol with an authorized manager in compliance with the provisions of Decree 1076 of 2015.
- We obtained a favorable concept from EPA Barranquilla Verde through resolutions 3029 and 3031 of November 20, 2020 for water discharge.
- We performed inspections and preventive maintenance of water sources.
- We conducted virtual campaigns and delivered flyers on the correct use of water fountains and toilets.



• We performed drinking water quality studies and tests.

Water Day Campaign

On March 22nd, we commemorated Water Day by carrying out an awarenessraising activity at the employees' work stations with the support of Triple A. We remembered the importance of this vital element and how we can take care of the resource from our daily activities and be multipliers in our homes. In addition, valuable advice was given on responsible waste management.



Training

- Scheduled face-to-face trainings were postponed due to the global pandemic (Covid-19).
- We trained production personnel on the handling of the valves, taking into account the color code of the piping used in the plant.
- We carried out the "Every drop counts" campaign in the offices and plant. We distributed it virtually through corporate mail, the background of computer screens. In addition, we posted billboards in the plants.



Internal Communication Water Day Campaign

Correct use of water and energy resources

- We conduct energy saving campaigns to raise awareness among operating personnel about the importance of saving energy in their daily work, as well as preventive and corrective maintenance of hydraulic installations.
- We carry out campaigns to raise awareness and monitor water consumption, communicating how, with small actions, we contribute to the care of the environment and generate benefits for today's humanity and future generations



2021 - 2022 Initiatives

- Maintained the production water consumption indicator below 6 m3/ton.
- Continued with water saving campaigns and training in the workplace to ensure efficient water management.
- Achieved the goal contained in the Water Savings Program (85%).

5.3 Photovoltaic Power Generation



Area: Environment

Businesses should encourage initiatives that promote greater environmental responsibility.



Encourange the energy efficiency of the operation and the products



Position an innovation and quality approach within all of the Company`s processes

In the search for innovative alternatives that contribute to the optimization and cost reduction of energy resources, the photovoltaic energy process began in 2017 in alliance with Panasonic through its subsidiaries in Latin America.

From March 2017 to date, 15,237 solar panels have been installed on the roofs of the Colombian manufacturing plants to generate reliable and clean energy in the long term in all the Company's plants, reducing the consumption of electrical energy from the grid and optimizing economic resources and assets of the organization.

At the beginning of 2020, there was a fire at the Sorting plant that incinerated solar panels, affecting 512kwp of installed capacity and damaging electrical grids. The impact on energy production was mitigated with gas-fired power generation at the plant.



- During 2020 and even with the challenges brought by Covid-19, the Company was able to rebuild the plant in **37 days,** guaranteeing the continuance of operations and production, fulfilling our commitments with clients.
- We generated clean energy from the start-up of the **19,555 mwh** photovoltaic generation plant and reduced **7400 Tn** of CO2 emitted to the environment and **USD\$1.8mm** in savings.
- We reduced electric energy consumption by 8,150 MWh/year equivalent to 71,000 MBT/year of natural gas with the operation of two 800 TR absorption chillers, which represents a reduction of 4350 tons of CO2 per year.

We recovered waste heat from two Cummins engines that generate energy with **3,750 Kw** natural gas and produce **800 TR** with two absorption chillers that are used in the production process for the manufacture of coated glass and the anodizing of aluminum profiles.



Photovoltaic Generation (Mwh)



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2021 - 2022 Initiatives

Execute the other stages of photovoltaic generation until reaching 12 Mwp installed.

5.4 Waste Management and Utilization

Principle | Area: Environment

Businesses should encourage the development and diffusion of environmentally friendly technologies.



Promote the efficient use of materials and technologies, respectful with the environment

In the company we are committed to the management and use of waste, so we make an adequate disposal of these, reuse and / or recycle them to reincorporate them into the economic production cycle in an environmentally efficient manner.

To ensure proper waste management, we have the following controls:

- Usable waste is separated at the source and disposed of in bins according to the color code established by the Ministry of the Environment, and then delivered to external managers for recycling.
- Non-hazardous waste is sorted and subsequently recycled through external waste managers.
- Hazardous waste is treated through an authorized manager to whom we exercise controls to ensure final disposal or use. We always request the final disposal certificate.
- Waste disposed of in safety cells with encapsulation includes biosanitary waste, polysulfide waste, silicone, oily water, waste contaminated with paints and solvents.
- Used oils, batteries and waste electrical and electronic equipment (WEEE) are wastes that can be used for additional purposes.

Container and Packaging Environmental Management Plan (PGAREE)

The Company within its internal policies shares a strong environmental commitment, which promotes and encourages the sustainable use of natural resources in the development of its products, generating, in addition to economic dynamism, socio-environmental awareness among its customers and stakeholders. Tecnoglass submitted to the Ministry of Environment and the ANLA the Environmental Management Plan for Containers and Packaging (PGAREE), to take advantage of those waste containers and packaging of paper, glass, plastic and metal.

The Company presented a collective PGAREE in which two companies of the group participate, due to the ease of coordinating and establishing with its customers, suppliers and the organizational scheme the necessary obligations for the correct implementation of the PGAREE. Leading the PGAREE in a collective way will allow many counterparts to integrate harmoniously to the environmental protection dynamics that the Company has currently established under its internal management processes, and that without a doubt, the PGAREE being certified and having validity before the environmental authorities can translate into an added value for them. In addition, they could be integrated into our environmental management indicators.



Waste Management





During 2020, the percentage of recovery was slightly reduced in relation to the two previous years due to the Covid-19 pandemic that affected the logistics of recyclable waste recovery for certain periods; however, it is important to highlight that we reduced hazardous waste by **22.8%** due to the implementation of identification and proper classification strategies, which reflects a positive environmental impact in environmental and economic matters.



The following is specific data on waste disposal:

- We collected **4.6 tons of used oil** and use all of it as industrial fuel.
- We sent **3,108 kg of used batteries** to Mac Johnson's post-consumer program, increasing the percentage of used batteries recycled by 7.1% compared to the previous year.
- We recycled 800 kg of waste electrical and electronic equipment (WEEE).
- We recovered **6,486 tons of cullet.**



- We delivered for recycling to specialized organizations: 177 tons of plastic, 324 tons of scrap metal, 25 tons of paper and 205 tons of cardboard for re-incorporation in the aluminum profile manufacturing process.
- We coordinated the return of post-consumer waste such as toners, cartridges, WEEE ("HP Planet Partners Program"), batteries ("Baterias Mac"), batteries ("Pilas con el Ambiente Program").
- We reused tired as slopes in the cells of the sanitary landfill, which were previously disposed of as ordinary waste.





Campaigns & Training

- We conducted a campaign for operating personnel to separate waste at the source in the production lines with the support of Triple A.
- We disseminated communication pieces and carried out socialization activities on World Environment Day, Recycling Day, Earth Day and Tree Day.
- Face-to-face trainings scheduled for 2021 were postponed due to the global pandemic (Covid-19).





Socialization Activities

World Environment Day

This campaign was carried out to commemorate the day and remember the invaluable contribution we can make in caring for our planet and how small activities can have a significant impact. In addition, the space was used to reinforce the relevance of hand washing in our daily routine.

New Color Code Campaign

The new unified color code issued by the Ministry of the Environment was implemented in order to promote a culture of waste separation among citizens and businesses. In addition, it was explained how the migration would be done for the use of new colors in the plant and in the building.



Disposal of used masks and gloves Campaign

The proper way to dispose of used masks and gloves in the midst of the Covid-19 pandemic was disseminated through corporate mailings and at work stations.

DISPOSICION DE MASCARILLAS Y GUANTES



Las mascarillas y guantes usados debes depositarlos en las canecas rojas, debido a que es un residuo peligroso biosanitario que requiere de un tratamiento de incineración como disposición final. Es compromiso de todos realizar la separación adecuada de los residuos.

ENERGIA SOLAR

TECNOGLASS

Hand Washing Campaign

The recommendations to be taken into account for proper hand washing to prevent the spread of Covid-19 were disseminated through corporate mailings and at work stations.



Cleaning and Disinfection of Surfaces

At each work station, production personnel were made aware of the importance of cleaning and disinfecting surfaces and were given tips on how to do it effectively.

Cork Recycling Campaign

This campaign was carried out to reduce the amount of cork waste generated in production and to reduce the cost of cork consumption in each line.

Chemical Risk Management

This campaign communicated the classification and labeling of disinfectant chemicals used for the prevention of Covid-19 and recommendations for cleaning surfaces.

5s Program

This campaign was carried out through a playful activity with Kimberly Clark©. The objective was to make all personnel aware of the importance of working in order and cleanliness in their work stations.

6R Campaign

This campaign was carried out with the purpose of promoting the culture of recycling and care of the planet to strengthen the activities of order and cleanliness in the workplaces and thus promote the maximum use of resources generating a minimum impact on the environment.

2021 - 2022 Initiatives

- Implementation and training of the new color code for the classification of solid waste based on the provisions of the Colombian Ministry of the Environment.
- Maintain the focus on the use, separation and classification of waste at the source to reduce the volume of non-usable and hazardous waste produced by the different areas of the company.
- Continue implementing the actions and strategies stipulated in the Packaging and Packaging Environmental Management Plan (PGAREE).

5.5 Atmospheric Emissions

The Company by resolution 2483 of November 21, 2018 issued by Barranquilla Verde has atmospheric emissions permitspermit, which has historically been renewed without any setbacks.



2020 Outstanding achievements

- Acceptance of the evaluation report of atmospheric emissions from fixed sources by the control authority and compliance with additional obligations.
- Issuance of a favorable opinion on the monitoring of the atmospheric emissions permit.
- We obtained the registration of forest products through Resolution 1332 of July 24, 2020 issued by Barranquilla Verde.
- We updated before the ICA the registration of authorized operator for the application of the ISPM15 treatment and placement of the ISPM15 seal, ISPM 15 code CO-08013 .

Leading Eco-Efficiency and Innovation

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Mangrove Planting

In 2020 we joined the national initiative #SembrarNosUne to recover the areas most affected by deforestation, and together with the Corporación Autónoma Regional del Atlántico, which is the relevant environmental authority, we planted 2,500 mangroves in the Ciénaga de Mallorquín, rehabilitating the coverage of this ecosystem.



Fumigation of Export Containers with electrostatic fogging

Our environmental commitment invites us to implement new methods of fumigation of export containers that are more environmentally friendly, while still complying with the indispensable requirement of pest control for international trade. For this reason, since February 2020 we have replaced the fumigation of containers with phosphine with electrostatic fogging, which offers advantages in the process because it does not leave residues, is not reactive and allows effective control against pests.

With this innovative system, we have a positive impact on the environment because the fumigation of containers is carried out without toxic gas emissions. In addition, it facilitates the opening protocols in port when required by the control authorities. In this way, stand-by times are reduced and, above all, the health of workers is protected.

5.6 Process Technologies



Promote the efficient use of materials and technologies, respectful with the environment.

The Company, in its quest for the responsible use of natural resources, has developed several technological projects to reduce paper consumption and achieve greater efficiency in its processes.

The IT Department has been the leader in the execution of these projects, which not only eliminate the use of paper, but also integrate processes, improve internal communications and make information available in digital format.

2020 Outstanding achievements

Paperless Project

- We continued with the implementation of the ESOFT software that allows the end user to make his quotation and visualize his window in 3d. 48% of retail orders can start their production process without any human intervention.
- Network connectivity in all ESW1 and ESW2 warehouses allows the integration of the production lines and together with a web application allows to know in real time the tons of aluminum that are cut in the production plants.
- We continued with the implementation of the Laserfiche platform, a workflow for the delivery of personal protective equipment and supplies.
- We continue with the implementation in Laserfiche of a workflow for taking evidence of import containers.
- We continued with the design of the mobile application for the dispatch and loading of export containers.

Process Optimization at the window manufacturing plant

- We continued with the implementation of the Robotic Process Automation (RPA) system for the billing process, reducing billing times, man-hour costs and human error.
- We continued with the implementation of the Robotic Process Automation (RPA) system for the aluminum supply process, reducing waiting times by the Engineering area for aluminum purchase orders, since the robot operates 24/7. It performs inventory transfers, service transfers and purchase orders.
- We implemented the new quotation system for the Retail market. This allows our distributors to quote the Company's window systems, entering areas and quantities, and allows to visualize the selected system in 3D.



- We have integrated ESOFT and our Fussion Production Orders system so that **48%** of the orders entered by ESOFT do not require retyping and the production process begins without human intervention.
- We optimized the Tecnosoft 2.0 information system in order to improve the information and production processes of the glass and aluminum plants.

Glass and Aluminum non-conformity control platform

During the production process of windows, doors and façades construction, inspection activities are carried out to guarantee their quality assurance. During this process, it is likely that materials that do not meet the quality standards required by our customers and by the international certifications that the Company must comply with are declared "Non-conforming". Given the strong vertical integration that exists between group companies, it is essential that the business units that supply glass and aluminum know in real time if a "Non-conformity" has occurred, so that they can supply the conforming material without causing delays in production and non-compliance with the delivery times agreed with customers.

The company implemented a computer application to control, monitor and manage each of the glass and aluminum non-conformities that occur in the production process. The application has a mobile interface that allows the plant operator or quality supervisor to report the non-conformity online, and for the warehouses involved (glass warehouse / aluminum warehouse) to have 24/7 visibility of the reported events, so that they in turn report it to the business units involved.

This application was developed hand-in-hand by the engineering, quality control and the glass and aluminum warehouses.

The following results have been achieved with this platform:

- Elimination of **100%** of the use of paper in the nonconformity control process, as it is currently carried out digitally.
- Real-time reporting of glass and aluminum nonconformities.
- Decrease in the time of replacement of compliant material by the business units that supply it.
- Generation of daily statistics of process traceability, which is forwarded to management.
- Generation of statistics associated with the production lines, which allows identifying where more nonconformities are generated, the types of systems most susceptible to these. This allows the business units to implement actions to improve the production of their product.

Optimization of the Aluminum supply process

To ensure that the production process can start in a timely manner, the necessary materials (glass, aluminum and accessories) must be managed in such a way that production is not delayed due to the timely enlistment of these materials. The aluminum supply process has a degree of complexity due to the volume of incoming orders from the different markets, the amount of aluminum extrusions, the amount of finishes involved, the inventory stocks and their purchase management.

The Company made a series of improvements to the computer applications involved in the aluminum sourcing process and to the robot in charge of the sourcing task. In addition, a series of reports were built to provide the necessary visibility of the operation.

With the improvements in the tool, the following results have been achieved:

- Time reduction in the aluminum supply process.
- Availability of aluminum for the production processes.
- Reduction of aluminum waste (SCRAP) from 8% to 5%, optimizing the Company's costs.
- Elimination of **100%** of paper consumption in the aluminum supply process.



Aluminum Scrap Control

The aluminum cutting process generates a waste of excess material for each profile cut and this is returned weighed for subsequent smelting. Initially, all the aluminum waste generated in the plant was weighed daily, keeping a totalized control. The production and maintenance areas led the implementation of an application and the installation of digital scales in each cutting center.

This project has achieved the following results:

- To have an individualized aluminum waste control per cutting center.
- Recording of the weight of surplus material for each aluminum stock associated with a production run.
- Identification of the production line, the market and the system that generates the most waste.
- Identification of bad practices in cutting, lack of personnel training and production lines that generate more or less scrap in order to implement actions.

2021 - 2022 Initiatives

- Over the next two years, we expect to complete the projects to make 100% of the manufacturing process digital (Zero Paper).
- Develop a web and mobile application that reports production progress (cutting, die, assembly, packaging, finished product).
- Implement Robotic Process Automation in other critical processes of the value chain.
- To achieve that 90% of the orders do not require redirection. Currently the design department is building in the system all the assemblies and manufacturing details of all the systems commercialized in the ESWINDOWS Retail market.
- Digitally integrate the information of the companies Tecno INC, Tecno LLC, Tecno RF, GM&P and ESMetals.
- Design, develop and implement the application to feed the process map of the companies Tecnoglass S.A.S. and C.I. Energía Solar S.A.S. E.S. Windows.
5.7 Automation and Innovation

Sorting Plant

In 2020, the Company completed the construction of the Sorting plant in which it installed an automatic laminated glass production line. This is a distinctive product for our Company because it has transformed the industry due to its durability, high performance and multi-functional benefits such as safety, noise control, solar control performance, ultraviolet ray reflection, hurricane and earthquake resistance. In addition, we offer a product that exceeds industry quality standards.

This is a unique project in Latin America with which we improve productivity by processing 70 tons of raw glass daily into laminated glass, as opposed to the 23 tons of glass that are produced in the traditional system. Another relevant aspect is that the machines are powered by the 2.4mwp installed in photovoltaic generation, which saves energy and reduces CO2 particles emitted into the environment, making this project environmentally friendly.

Additionally, in the Sorting plant we have the latest technology equipment (Scanners) for the control and quality assurance of the glass during the production process, which allows us to have a high standard of inspection and quality of the processed glass. Soon we will install another scanner for the inspection of the finished product in laminated and thermo-acoustic, all this focused on satisfying the needs and requirements of our customers.



Sorting Plant

At the beginning of the year 2020, there was a fire at the Sorting Plant that was quickly controlled by the fire department, leaving no injuries or deaths, only material damage. Thirty-seven days after the incident occurred, production continued without inconveniences, thanks to the plan of action prepared with delivery goals and times and the coordination with suppliers replace equipment. In addition. to insurance companies were involved in the entire process. The reconstruction was an arduous task in which the employees played a significant role in ensuring that production at the plant was resumed quickly and satisfactorily.

During the reconstruction, production was not affected because the Company during 2019 made an investment in excess capacity, therefore, we were able to adapt production to other lines without breaching any order from our customers. In Tecnoglass we always try to have an adequate level of excess capacity to mitigate operational risks.



2020 Outstanding achievements

Production of **70 Tn/day** of glass with approximately 30% less energy consumption.

2021 - 2022 Initiatives

 Expansion of installed capacity with the start-up of another sorting plant.

Alutions Plant

Aluminum Automatic Warehouse with 350 skid positions

This project aims to centralize and automate the storage process of aluminum profiles, while protecting this material from external agents.

Aluminum profiles are classified according to customer orders, identified with a bar code and electronically located according to the order number and project reference. This increases productivity and reduces damage to the material.

The warehouse is 14 meters high and has 350 positions and a storage capacity of 600 tons.



2020 Outstanding achievements

- We optimized spaces with the warehouse that occupies only an area of 1,100 M2, leaving free the aisles of the entire plant where it was previously stored.
- We reduced non-conformities due to material handling by 90%.
- We reduced the risk of accidents by **85%** by freeing up space in the aisles and centralizing everything in a single warehouse.

We increase operational efficiency and inventory reliability.

2021 - 2022 Initiatives

 Structure the way to deliver the material in color blocks to reduce production times.

Window System Plant

Aluminum Automatic Warehouse with 2500 skid or positions

The purpose of this aluminum warehouse, like the one at the Alution plant, is to store aluminum profiles in a centralized and classified manner and to protect them from external agents. This warehouse is larger, measuring 20 meters and has 2,500 positions.



2020 Outstanding achievements

- We optimized the space of the aluminum warehouse operation area from 3,200 M2 to 1,200 M2, the remaining space was used to increase the capacity of the production lines.
- We reduced non-conformities due to aluminum handling from 2,000 kilograms to 220 kilograms.
- We have reduced the accident rate; on average there used to be 2 to 3 work accidents per week; today we have a **record of 0 accidents.**
- We increase operational efficiency and inventory reliability.

2021 - 2022 Initiatives

- Maintain the accident rate at 0%.
- To have a 100% reliable inventory.
- Improve equipment and tools to make the operation more efficient and reduce 100kilos of nonconformities per handling in the warehouse.

ENHANCING OUR ENVIRONMENT

Enhancing our Environment

Our goal with this pillar is to significantly impact all company's stakeholders by encouraging personal leadership, integral growth, and training our employees to form qualified interdisciplinary teams.

Additionally, we provide adequate and accident-free work environments by implementing occupational health and safety programs, encouraging good labor practices, respect, and promotion of human rights. Outwardly, together with the Tecnoglass ESWindows Foundation, we design programs, actions, and strategies to generate value for the surrounding communities



Commitments associated with the pillar Enhancing our Environment

6.1 Human Talent Management

Principle

Area: Human Rights

Companies must support and respect the protection of globally recognized human rights, in their area of influence.



Promote and adopt the best labor and Human Rights





Build and develop a comprehensive teamwork with innovating mentality

We are committed every day to provide job opportunities and contribute to the comprehensive growth and professional and personal development of each of our employees. We are a big family that joins efforts to achieve the goals and objectives we have set for ourselves.



Communication Channels

We implemented a corporate portal called through Talentum which employees can process requests for certifications, employment letters, make reservations at the casino, among other activities.

We continue to use mass communication channels such as e-mail. the Human Resources newsletter, and physical bulletin boards to disseminate information of interest. In addition, employees have continuous and direct contact with the human resources area, which allows us to provide timely, accurate, and complete information.



continued with We the Competencies 270 program, a tool for developing leadership and people management, identifying

opportunities for self-perceived improvements and those perceived by team members, and raising awareness of good behaviors in stress management and the work environment. We made a diagnosis from the information obtained and provided support to leaders in those areas where stress risk management is higher.

Work Environment Improvement Plan

Management

As a result of this process, it has become evident that the leaders have incorporated knowledge and behaviors into their competencies and have created a leadership style based on emotions that generate a healthy and safe work environment.



Employment Generation

Every day, the Company provides more employment opportunities to the population, contributing to its growth and improvement in the quality of life and the reduction of the unemployment rate.

Despite the contingency caused by the Covid-19 pandemic, the Company, committed to the welfare of its employees, kept their jobs and provided new job opportunities. In addition, it supported its employees emotionally and financially during the mandatory quarantine period.

Job Distribution 2020			
Distribution	2020	%	
Administratives	1307	23%	
Workers (Plant)	4276	77%	
Total	5583	100%	



Employment Generation

Hiring Statistics by Job Level and Gender Administratives				
Job Level	Male	Female		
Board of Directors	6	1		
Executive Officers	3	0		
SeniorLevelManagement	11	1		
Middle Management	96	36		
Workers (administrative)	763	323		
Apprentices	47	20		
Total Total Employees % Share	926 1307 71%	381 1307 29%		



Working Committee

We continue with the management of the Decent Productive Work Committee, which is an open channel for employees to express their concerns, needs and, the improvements to be made, obtaining a prompt response to provide a decent work environment.

In 2020, **100%** of the requests submitted to the Committee, were dealt with effectively. In compliance with these requests, we provided psychological support, training to improve occupational safety, interpersonal relationships, and family dynamics, guaranteeing confidentiality.

Collaborators Benefits

In the Company, we consider that together with the work team we form a big family and that is why we care about their welfare and that of their families ensuring to maintain an emotional balance for them and their core. The Human Management area with the Tecnoglass ESWindows Foundation leads several programs for their benefit.

In 2020, we implemented the food casino service for our employees, in which we offer top quality food and a balanced diet, this benefit is available to all employees of the different plants and administrative staff.

The following are some of the programs that benefit direct employees and those on assignment, both administrative and operational:

- Covid-19 Mission Program
- Food Casino
- Life insurance policy
- Prepaid medical assistance
- Birth assistance
- Undergraduate and graduate employee study grants
- Scholarships for children of employees

- Housing assistance
- Bus service (in 2020 we doubled the number of vehicles to avoid overcrowding and the spread of the Covid-19 infection.)
- Parental leave
- Pediatrician appointments
- Sports support for internal and external championships

Covid-19 Mission Program

As a result of the Covid-19 pandemic, the Covid Mission Program was implemented, which allowed the installation of a medical center with specialized health professionals, where immediate care and top-quality medicines are provided to all employees who contract the virus, improving your health and thus preventing the spread of the virus.

In addition, we open our doors to the Johnson & Johson vaccine trial, for all employees that voluntarily wished to participate.



Conflict Resolution

In the Company we have a Coexistence Committee that holds quarterly meetings, the current members were elected in 2020. The Committee continues to work for the benefit of workers to improve their working conditions and achieve a healthy coexistence, to achieve this purpose it adopts the corresponding measures and strategies.

No Discrimination

There were no cases of discrimination in the Company during 2020. To maintain these results, we continue working on the implementation of the strategies established by the Coexistence Committee.

Although we don't have a policy or program of integration and non-discrimination, we are open to hiring people with disabilities, young people seeking their first job, and any group of people who feel vulnerable or at risk of exclusion. In the Company, we have people with disabilities in positions where they can develop them according to their condition, and that allows them an integral development. We also have young people in their first job. contributing to their professional growth.

Additionally, we have employees who are residents of Barrio Las Flores and its surroundings who are part of our stakeholders. We also have immigrant workers, which confirms that any person has the right to a job without distinctions or discrimination.

Training and Education

One of the Company's established policies is to hire operational personnel with little or no experience to train and educate them and thus contribute to their professional growth.

Despite the limitations presented due to the pandemic, we were able to carry out the training directed by SENA, taking advantage of technological tools and adapting to virtuality. All these efforts, to have a qualified workforce that develops competencies.

> In 2020, we completed the technical training in DOLCA "Distribution of Logistics Operations in the Supply Chain" to the logistics and dispatch area. Also, we started the technologic training in Industrial Processes for employees in the production area. In addition, at the end of the year, we launched a new technical training course in Logistics Management for the employees of the Logistics area of the aluminum plant.

Training and Education

- We train employees on soft skills and identification of leadership and teamwork features, and how to implement them in personal relationships, in the workplace, and with clients, all to promote a better work environment.
- We train our *Continous Improvement Engineers* on the fundamentals of occupational health and safety management system.
- We train plant employees on the biosecurity measures to be implemented in their workplaces with the support of the HSE area.



2021 - 2022 Initiatives

- Enhance the Talentum Corporate Portal for employees to be alble to update their data and have access to authorized apps (Technosoft, Fusion, SAP, among others), manuals, programs, and Company policies; make queries on payslips, general report on withdrawals and income, information on staffing and personnel studies, among others.
- Continue to follow up on the issues presented in the different committees.
- Perform a statistic of complaints and their resolution to create a work and training plan aligned to the specific needs of the employees, and therefore reduce complaints and nonconformities.
- Develop and define a strategy to provide psychological support to employees and conduct training to improve interpersonal relationships at work and home.
- Continue to conduct training to promote the well-being of employees, reinforcing soft skills related to working and creating new strategies to improve the work environment.
- Resume the Glass School program that could not be executed in 2020 due to the pandemic.
- Continue with technical and technological training for employees in alliance with SENA, and grant certificates of competence to applicable workers.
- Continue to comply with biosecurity measures at workstations to prevent the spread of Covid-19.

6.2 Occupational Health and Safety



Achieve an accident-free labor environment, supported by culture of health and safety.

The Occupational Safety and Health Management System (OSHMS) is more than a set of legal requirements; it is a commitment by senior management and employees to create healthy and safe workplaces based on standards, procedures and guidelines to prevent occupational accidents and illnesses. In accordance with Colombian law and the requirements established in international standards, the Company implements, maintains, and continuously improves its OSHMS.

Committed to optimizing health and safety working conditions, management and occupational health and safety leaders have determined strategies, objectives and actions aimed at reducing accidents, preventing illnesses and improving safety-oriented behavior.

The implementation of the OSHMS has an impact on the Company's administrative and operational activities that directly and indirectly impacts workers, contractors, customers, shareholders, visitors and the community in general. The objectives, strategies and actions regarding safety, health and environment have achieved positive results in the organization.



Occupational Health and Safety

When the Covid-19 Health Emergency was declared, it was necessary to adjust the Company's OSHMS to ensure the well-being and health of employees, following the steps below:

- Evaluate the impact of Covid-19 on the Company.
- Identify the hazards and assess the risks arising from the virus (biological and psychosocial risks due to mandatory isolation).
- Adapt prevention and control measures to mitigate the risk of contagion.
- Maintain facilities and workstations in adequate hygienic conditions.
- Train employees on prevention and communicate OSHMS adjustments due to the current crisis.



The outbreak of Covid-19 has affected many companies around the world and for us it has been a new challenge not only in the economic field, but also in the way of protecting and safeguarding the lives of our collaborators. This risks associated to Covid-19 have to be immersed into our OSHMS to ensure normal course of operations, guaranteeing the health and safety of our workforce.



Impacts, risks and opportunities in the occupational health and safety management system

The Company has established and implemented the Hazard Identification, Risk Assessment and Control procedure for the continuous identification of hazards, assessment of OSH risks and determination of necessary controls, which is documented and kept up to date in the Hazard Identification, Risk Assessment and Control Matrix". The evaluation of other risks and opportunities is documented in the integrated management system risk matrix.

The leader of each process together with the Environmental Manager, the Environmental Coordinator, the OSH Manager and the Quality Manager identify each of the risks and opportunities associated with their activities, taking into account the analysis of the Company's context. Through the following methods, which are not the only ones:

- Brainstorming
- Reactive method: Consists of analyzing events that have already occurred, whether internal or external, based on historical data/data analysis.
- Experience of process leaders.

For each of the risks identified, the causes and consequences of the same are determined, as a risk may have several causes, then the controls are evaluated and established by choosing the most significant one. Each risk is linked to the process to which it is applicable. In relation to the opportunities, the first step is the identification of them, followed by the evaluation, and based on the latter, the techniques or methods are determined to approach the analysis in detail for its use.





Coronavirus Prevention and Control (COVID-19)

Due to the Covid-19 pandemic in 2020, the Company, committed to the welfare of its employees, invested financial, human and technological resources for the prevention and control of the coronavirus in the development of operational activities.

We elaborated and implemented the Biosafety Protocol in accordance with the stipulations of the National Government for the industrial sector, determining all the sanitary measures for prevention and mitigation and the actions.



- We implemented a program for the prevention and care of Covid-19 that consists of:
 - Training on Covid-19 to 100% of employees
 - Disinfection booths at the plant entrances
 - Thermographic cameras at the entrances to detect temperature
 - Contracting of more bus routes to maintain the distancing
 - Demarcation and signaling to emphasize issues such as distancing, use of masks and hand washing,
 - Provision of face masks to employees as part of their personal protective equipment, which meet the minimum biosafety criteria.



- We implemented a program for the prevention and care of Covid-19 that consists of:
 - Workplace surface cleaning and disinfection programs using spray pumps
 - Reorganization of of job areas and shifts.
 - Performance of rapid antigen and PCR tests.
 - Alternation by area to avoid overcrowding at work stations.
 - Isolation of workers with symptoms associated with Covid-19.



- We installed a medical unit called "MISIÓN COVID" for the management and evaluation of cases with respiratory and flu symptoms and those symptoms associated with Covid 19, to detect the disease early in employees and prevent their health condition from becoming complicated, and to mitigate contagion within the company. For the implementation of this program:
 - Three doctors, three nurses and two occupational health and safety professionals were hired.
 - Patient care protocols were designed.
 - Medications were subsidized for employees when prescribed directly by the doctors.
 - The rapid antigen tests were purchased
 - Agreements were made with laboratories for the performance of PCR tests.
- At the beginning of the Covid Mission, all workers were screened with rapid Covid-19 antigen tests to determine the epidemiological screening strategies by work zones, followed by screening by departments and work areas.

Covid Mission Advantages

- Prompt and timely care of suspected cases of Covid-19.
- Minimization of severe cases of Covid-19 by early treatment.
- Timely management of isolation and epidemiological fences for rapid arrest of Covid-19 cases in the company.
- Controlled work areas minimizing contagion from detention and care.
- Opportune diagnosis and prescription of medication for treatment at home.
- Telemedicine follow-up of workers isolated by Covid ensuring rapid intervention to avoid severity of symptoms.
- Strengthens and complements the actions of the biosafety protocols.

Occupational Health and Safety Management System

- We obtained the ISO 45001:2018 Certification for the OSHMS at C.I. Energía Solar S.A.S. E.S. Windows.
- We automated the administrative management of the Risk and Emergency Management Plan through the PARE (Platform for Risk and Emergency Management) technological platform.
- We continue to implement technological platforms in occupational health and safety processes or activities with the aim of improving performance. We highlight: Laserfiche, Helpdesk, Talentum, SerCAE, Nova and others supplied by the ARL such as El Profe, ADN test for risk analysis, ABC for behavioral observation and the platform for Risk and Emergency Management.

- We continued to implement strategies for the prevention of occupational accidents and illnesses and achieved the objectives of the OSHMS with the support and allocation of resources from suppliers, ARL, EPS, contractors and temporary service companies.
- We continued with the predictive safety test with the support of the ARL, whose objective is to identify workers with unsafe behavior tendencies before entering the workplace, and we provide support to improve safe behavior.
- We continue with the program for the prevention of accidents caused by exposure to mechanical risk, with the support of professionals to improve hand tools, hazard line control strategies, machine safety, PPE homologation and improvements in unsafe conditions in machines and tools.
- We strengthened the fatigue and sleep program with prevention strategies and psychological support to improve the factors that lead to accidents at night.
- We continued with Project A, which consists of a set of strategies aimed at changing the risk behavior of workers in order to prevent injuries and/or occupational diseases. Through this strategy, 42 safety leaders were trained, who develop behavioral observation roles in their areas of competence, obtaining significant results in the reduction of the accident rate.

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Management

Programs

Occupational Health

The company has suppliers that provide occupational examination services in accordance with the law and in accordance with the occupational program where the positions are described and the medical evaluations and diagnostic aids are determined taking into account the risks and hazards identified for the development of the different positions or occupations.

For the control of these suppliers, the Company designates financial, technical and human resources to perform audits of its Quality System and sufficiency reviews in accordance with the organization's Audit Program.

On the other hand, the Company has a network of health professionals (Physiotherapists, Psychologists, Occupational Doctors, Occupational Therapists, Nutritionists, and doctors and nurses for prevention and care of Covid-19, etc.) to implement and maintain the Epidemiological Surveillance Programs PVE, which among others aims to contribute to the identification and control of hazards and risk minimization.

The following programs are available for non-work related medical and health care services:

Cardiovascular risk

This is a cardiovascular epidemiological surveillance program that consists of determining the exposed population by calculating cardiovascular risk (blood pressure, weight, height, abdominal circumference, BMI, history), identifying those at risk and referring them to the EPS, providing workers with training and tools to maintain healthy lifestyles and thus reduce the conditions that can trigger cardiovascular risk and prolong their life expectancy so that they can be productive for their family, society and company.

Psychosocial risk non-work related

This program evaluates the current state of the Company in relation to the intervention of psychosocial risk factors. It evaluates intralaboral, extralaboral and individual factors of employees, identifying risk conditions and protection of the aforementioned factors.

Participation and Consultation

The Company establishes mechanisms for employee participation and consultation by providing resources, time and training for employees at all levels of the organization; these activities minimize obstacles and barriers such as language, literacy and allow timely access to clear, understandable and relevant information on established policies. The Company has several communication mechanisms, including e-mail, COPASST, NOVA application, publications through televisions, bulletin boards, socialization at work stations, among other mechanisms that allow keeping workers informed or receiving information related to Occupational Safety and Health

In 2020 we took advantage of the use of whatsapp, with which we were able to increase 40% of participation and consultation goals, improving the effectiveness of self-reporting of unsafe conditions.

In these participation and consultation mechanisms, **100% of the employees** are represented, including the following:

Mutual Aid Committee

This committee is made up of the areas responsible for the emergency preparedness and response plans of the neighboring companies in the Las Flores sector, and the Company's OSH leaders participate on behalf of the Company. The purpose of this committee is to identify resources for risk prevention and emergency control in the company's environment, as well as participation in drills.

Joint Occupational Health and Safety Committee (COPASST)

The committee is made up of representatives of the workers and the employer, with their respective alternates.

Labor Coexistence Committee

The committee is made up of representatives of the employees and the employer, with their respective alternates.

Road Safety Committee

It is made up of employees who, due to their role within the Company, have an impact on compliance with the strategic road safety plan.

Safety Leaders Committee

Composed of process coordinators in charge of reporting safety conditions and behavioral observations.

Change Management Committee

This committee led by the head of OSH and representatives of COPASST in company with the leaders participate in changes that impact OSH such as changes in technology, work methods, new processes or projects, infrastructure, facilities and equipment.

Research Committee

This committee is made up of the heads of area, the SST representative and the COPASST representative. Its purpose is to investigate the facts, causes and situations that have generated incidents and accidents at work, and implement corrective measures to eliminate or minimize risk conditions and prevent recurrence.

Participation Level					
Commitee	Managers	Administrative	Operations		
Decent and Productive Decent Work Committee	3	5	8		
COPASST	0	15	9		
Coexistence Committee	1	10	6		

Enhancing Our Environment

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Accident Rate

C.I. Energía Solar S.A.S. E.S. Windows

The accident rate refers to the number of qualified accidents. For the OSHMS this indicator is very relevant because by identifying the causes that originate them can adapt and modify the objectives, goals, management programs and training activities. The above in order to mitigate risks in accordance with the provisions of the regulations and the operational needs of the companies. The results are presented below.

The accident rate in 2020 was **2.11** of the total number of direct and temporary employees; compared to the previous year, there was a **28%** reduction. There were no workers who died as a result of a work-related accident. The average annual number of man-hours worked was **7,878,000 HHT.**



Accident Rate



12.00

10,00

8.00

6,00

4,00

2.00

0.00

Anual Accident Rate C.I. Energía Solar S.A.S. E.S. Windows



Tecnoglass S.A.S.

The accident rate in 2020 was **2.7** of the total number of direct and temporary employees; compared to the previous year, there was a **19% reduction**. No employees died as a result of occupational accidents. The average annual number of manhours worked was **6,757,119 HHT.**

Emergency Preparedness and Response Plans

The prevention, preparedness and emergency response plans established by the company seek to reduce vulnerability to hazards by establishing the necessary measures to guarantee the integrity of the people directly or indirectly involved and the reduction of costs due to damage to facilities, machinery and/or equipment.

In order to strengthen our response capacity, we carried out the following activities during 2020:

- We actively participated in the GAM Las Flores Mutual Aid Committee where action plans were established in relation to external risk emergency care.
- We carried out an emergency drill with the fire department of the Las Flores station, putting into practice the standard operating plan for a roof fire caused by a short in solar panels.
- We increased by **20%** our our brigade participants in the plant.
- We carried out emergency brigade training on topics such as first aid, fire extinguisher handling, rescue and fire fighting techniques and management of patients with covid-19 symptoms.



Training and Education

The scope of the Training Program in occupational health and safety is for all levels of the organization. Platforms such as *El Profe* provided by ARL Seguros Bolívar, strategic alliances with SENA, training provided by ARL Seguros Bolívar professionals, training centers, induction and reinduction processes, among others, are used. The following trainings stand out:

- Basics of ISO 45001.
- Active breaks in the administrative and operational areas.
- Publication of chemical compatibility matrix in the different areas of the plant.
- Training on biosafety issues.
- Cleaning and disinfection of surfaces.
- Covid-19 prevention.
- Overhead crane operator course.
- Retraining Advanced safe work at heights
- Training with carpentry personnel on the correct use of pneumatic guns.
- PPE height equipment inspector training.
- Training in the use of rescue equipment for our brigade group and personnel in general.
- Hazard line management training.
- Basic and Advanced Brigade Retraining
- Safe operation of drills.
- operation of antis.

- Manual lifting and handling of loads.
- Course of 50 and 20 hours on SG-SST.
- Electrical hazard.
- Confined space safety.
- Prevention of psychoactive substance use.
- Industrial noise prevention.
- Induction and Reinduction in Occupational Health and Safety.
- Daily safety talks on the use of PPE, hand care, self-reporting of conditions in the workplace, danger line and awareness of the use and care of emergency stops, and covering of glass figurines, among others.
- Training of 20 new brigades, which increases our group of brigadistas in the plant by 20%.
- Emergency brigade training on topics such as first aid, fire extinguisher handling, rescue and firefighting techniques, and management of patients with Covid-19 symptoms.
- Safe handling of sharp tools

2021 - 2022 Initiatives

Window Manufacturing Plant

- Implement the Mechanical Risk School Strategy in order to strengthen personnel competencies to reduce the frequency of mechanical risk accidents and increase quality and safety standards in the correct and safe use of machinery, equipment and tools.
- Articulate the Quality of Life Program with the Promotion and Prevention strategies of the Cardiovascular Risk Program and the Nutrition and Health Strategy administered by La Vianda Casino.
- Strengthen the Occupational Hygiene Program in order to coordinate the Health and Safety Programs with the Epidemiological Surveillance Programs.
- Certify, through Labor Competencies issued by SENA, bridge crane operators.
- Systematize the administrative management of the components: personal protective equipment (PPE), substandard acts and conditions and preventive medicine in order to streamline the flow of information, improve planning, programming, data recording, reporting and closure of associated findings.

Glass and Aluminum Plant

- Continue mentoring for Project A observer leaders, focused on changing workers' risk behavior in order to prevent occupational injuries and/ or illnesses.
- Disseminate the ARO standards in critical areas.
- Provide comprehensive training to area managers on occupational health and safety issues.
- Implement strategies to increase participation in OSH self-reporting.
- Manage the implementation of shirts for the prevention of cutting.

2021 - 2022 Initiatives

Glass and Aluminum Plant

- Provide training in safe glass handling.
- Implement prevention strategies for mechanical risk "Hazard line control management".
- Perform safety inspections on machinery to safety critical equipment.
- Provide specific training on critical equipment such as electric stevedore, suction cup, pneumatic gun.
- To implement a strategy for the design of anthropometric profiles for the management of musculoskeletal risk.
- Conduct behavioral inspections focused on musculoskeletal risk.
- Follow-up of the contractor's road safety plan.
- Use an application to carry out the planned inspections.
- Competency-based training for bridge crane operators by SENA.
- Provide business continuity training.
- Accompany and train the Las Flores fire department.
- Acquire fire prevention equipment, emergency lights, firewall, explosion-proof lamps.
- Increase the brigade members by 15%.
- Plan of internal audits by OSH process and management programs.

Activities

- Alcohol prevention campaign.
- Hand washing campaign.
- Emergency brigade training.
- Emergency drill.
- Activities with COPASST.
- Strategic road safety plan training.
- Healthy lifestyles program.
- Covid-19 prevention campaign.
- Safety campaign and hazard line management".



6.3 Human Rights and Labor Standards

Area: Human Rights

Principle

Area: Human Rights

Companies must ensure that they do not act as accomplices to human rights abuses.



Promote and adopt best labor and human rights practices.

2020 Outstanding achievements

- We have zero "O" cases of workplace harassment or conflict presented to the Coexistence Committee, the competent body to hear them and establish preventive and corrective measures for workplace harassment.
- We conducted workshops to manage family dynamics and strengthen the intra-workplace social support network.
- We reinforce through communication pieces the experience of the Company's corporate values.

2021 - 2022 Initiatives

- Promote campaigns that encourage respect for human rights and duties and peaceful coexistence.
- Raise awareness among workers to report any situation that violates human rights.

Principle

- We have zero "0" unionized employees due to the high levels of job satisfaction of our employees healthy work environment and the communication channels we provide them with.
- We continue with the Decent Work Committee, which evaluates the needs of our employees in relation to routes, facilities, social and personal relations.



- We have zero "0" reports or complaints related to forced or compulsory labor.
- We allow workers to carry out their activities freely, encouraging responsible and efficient work.

- Principle **5**
- All our employees are of legal age and from the beginning of the personnel selection process we guarantee that we will not hire minors.



- We have 0 incidents of discrimination reported by employees.
 - We have employees with disabilities, we promote the integral development and social inclusion of people who need it most, as in the case of hiring personnel from Las Flores (a vulnerable neighboring area). We also hire employees with little or no experience, developing their skills and abilities, in order to build with them a dignified life project.
 - We guarantee non-discrimination in the selection process, always choosing the person who meets the profile of the position regardless of sex, religion, political ideology or any other aspect that tends to promote discrimination.
 - We guarantee growth opportunities within the Company.

Initiatives 2021 - 2022



 Design an improvement plan to build, renew and promote a better work environment, always guaranteeing the principle of confidentiality

Principle

 Disseminate the Human Rights policy that includes our commitment to eliminate all forms of forced or compulsory labor.

Principle 5

 Enact and disseminate the Human Rights policy that includes our commitment to effectively abolish child labor.

 Disclose the Human Rights policy that includes our commitment to abolish discrimination practices in employment and occupation.



6.4 Tecnoglass ESWindows Foundation

The company, together with the Tecnoglass ESWindows Foundation, creates and supports projects that have a positive impact on stakeholders. The Foundation is a non-profit entity that bases its actions on four axes: Hand in Hand with the Communities, Education for Progress, Integral Social Intervention and Promoting Culture and Sports.


Hand in Hand with the Communities



Generate value in the communities of the area of influence.

During 2020, the Tecnoglass Eswindows Foundation, due to the global crisis unleashed by the Covid-19 pandemic, developed a collaborative management strategy to extend a helping hand to the families in Barranquilla affected by this difficult situation, and likewise, we developed health and wellness campaigns with the objective of bringing a message of hope and solidarity to these people who needed it most.

For several months, the Tecnoglass ESWindows Foundation worked on its **#DeEstaSalimosJuntos** campaign, focused mainly on providing food security, health and welfare to the most vulnerable families in Barranquilla and Atlántico, while supporting producers in the region through the purchase of food, without intermediaries, to deliver to the communities.

2020 Outstanding achievements

In 2020, we implemented the following actions to combat the difficulties brought about by Covid-19 in the different communities:

Food Aids Campaign

Food delivery had a completely humanitarian approach. We adopted the 3 neighborhoods surrounding the Company: Las Flores, La Playa and Siape, and during 5 consecutive weeks we delivered **38 thousand door-to-door food aids** with essential products of the family basket.



Enhancing Our Environment

Growers' Campaign

We purchased directly from growers **2,200 tons** of food such as cassava, yams, green bananas, potatoes, among others, to be delivered to **50 neighborhoods in Barranquilla** and municipalities of the Atlántico.

In this way, we supported the growers so that they would not lose their crops and we provided food to the people who needed us most during the isolation period.



Solidarity Pantries

In order to strengthen the families' food pantries, we created the "Solidarity Pantries", a model of food donation with products such as rice, oil, corn on the cob, cassava, fish, paprika, eggs, among others. This activity was carried out in 4 neighborhoods of the city (Las Flores, Pinar del Río, San Felipe and El Bosque) and we were able to impact more than **1,200 families**).



Prevention and Self-Care Campaign

With these days we seek to create awareness in the communities about the correct use of masks and biosecurity measures to deal with Covid-19 and mitigate the spread of the virus in these communities, which is why we carried out educational days for 5 consecutive weeks in more than **40 neighborhoods** of the city, delivering **200 thousand washable masks** house to house, and reminding adults, youth and children about the importance of the correct use of masks, hand washing and physical distancing.



Tasajera

Due to the tragedy that struck Tasajera, Magdalena in July 2020, we extended the borders to this township to bring food and mouth covers to the affected community. We supported the local economy by buying more than **2 tons of fish** directly from the fishermen of that region, and in total we delivered 10,000 fish mugs and **1,000 markets to the families.**



2021 - 2022 Initiatives

- To continue with the education and delivery of face masks in the different neighborhoods of the city and the department, in order to raise awareness among the population about the importance of the proper use of face masks, constant hand washing and physical distancing.
- Continue with the "Despensas Solidarias" in those neighborhoods that most need food support, and in this way, continue to impact many families, providing peace of mind during this time of economic recovery.
- Continue developing programs and projects that contribute to the well-being of the communities.

Social Intervention

The progress of civil society and the most vulnerable communities is one of our priorities. That is why we design strategies and actions to carry out comprehensive social intervention programs.

Volunteering

The Tecnoglass ESWindows Foundation has a group of volunteers composed of employees of the business group, who seek to contribute to the development of the most vulnerable communities, through various activities that are established within its strategic axes.

In 2020 we joined the national initiative **#SembrarNosUne** to recover the areas most affected by deforestation, and together with the Corporación Autónoma Regional del Atlántico we planted **2,500 mangroves in the Ciénaga de Mallorquín,** seeking to rehabilitate the coverage of this ecosystem.



Wheelchairs Program

In alliance with W Radio in Bogota, and with public-private entities in the city of Barranquilla, during 2020 we delivered **53 wheelchairs for lowincome people.**



Home Improvement Program

The Home Improvement program of the Tecnoglass ESWindows Foundation, recognizes employees with great trajectory and commitment to the Company, through economic support to improve or buy their own home. During 2020 we delivered **24 benefits.**



2021 - 2022 Initiatives

- Strengthen the corporate volunteer program in order to raise awareness and inspire employees to build, in the midst of difficult contexts, actions that can contribute to the less fortunate.
- Continue with the delivery of wheelchairs through the W and in alliance with public-private entities to people with disabilities strata 1, 2 and 3.
- Resume the catechesis workshops, in alliance with the Caminos de María Foundation, aimed at the children and youth of the Monsignor Víctor Tamayo Boarding School. This project began in 2018, and has had very good results in more than 100 children and young people, strengthening the spiritual and personal part.

Education for Progress

Education is fundamental for the progress of regions and communities. Since our inception, we have been implementing educational support programs aimed at employees, children of employees and students who stand out for their academic performance, recognizing their commitment and supporting them with access to quality education.

Scholarship Program Merit Scholarship Educational Sponsorship



2020 Outstanding achievements

- In 2020, **212 students benefited** from the Scholarships and Merit Scholarships program. We currently have excellent scholarship recipients in different graduate, undergraduate and technical careers in various universities in Colombia. This program seeks to provide access to quality education to young people and adults who stand out for their commitment and academic performance.
- In addition, we sponsored 55 children and young people from low-income families in primary and secondary schools.

2021 - 2022 Initiatives

• Continue with the scholarship program, with the objective of contributing to the personal and professional growth of adults and young people, through access to quality higher education, in order to create a more inclusive and equitable society.

Culture and Sports



2020 Outstanding achievements

Champions Window

In 2020 we inaugurated the Ventana de Campeones, a monument built in tribute to the Club Deportivo Popular Junior F.C. of Barranquilla that has become a landmark in the city. Located in a traffic circle, this symbol offers a new place where families can enjoy the outdoors while learning a little more about the local team, always complying with biosecurity protocols.

2021 - 2022 Initiatives

• We will encourage the use of this space as a symbol of the city for all visitors who wish to spend some family time in compliance with all biosafety protocols.



GLOBAL COMPACT PROGRESS COMMUNICATION

Global Compact Progress Communication

Committed to the principles of the Global Compact and the Sustainable Development Goals adopted by the United Nations, we present below how they are aligned with our sustainability strategies and initiatives.

Global Compact Principle	Sustainable Development Goals	Strategy Pilar	Initiatives
Principle 1: Companies must supportand respect the protection of Globally recognized human rights, in their area of influence.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Enhancing Our Environment	 Generate quality job opportunities. Promote and adopt the best labor and human rights practices. Form and develop an integral work team with an innovative mindset. Achieve an accident-free labor environment, supported by a culture of health and safety.
Principle 2: Companies must ensure that they do not act as accomplices to human rights violations.	16 PEACE JUSTICE AND STRONG INSTITUTIONS	Enhancing Our Environment	 Promote and adopt the best labor and human rights practices.
Principle 3: Companies must respect freedom of association and the effective recognition of the right to collective negotiation.	GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH 10 REDUCED INEQUALITIES	Enhancing Our Environment	 Generate quality job opportunities. Promote and adopt the best labor and human rights practices.
Principle 4: Companies must support the elimination of all form of forced or coerced labor.	GENDER 8 DECENT WORK AND ECONOMIC GROWTH 10 REDUCED Image: Constraint of the second sec	Enhancing Our Environment	 Generate quality job opportunities. Promote and adopt the best labor and human rights practices.
Principle 5: Companies must support the effective abolishment n of child labor.	GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH 10 REDUCED INEQUALITIES Image: Constraint of the second se	Enhancing Our Environment	 Promote and adopt the best labor and human rights practices.

Global Compact Progress Communication

Global Compact Principle	Sustainable Development Goals	Strategy Pilar	Initiatives
Principle 6: Companies must support the abolishment of discrimination practices in respect to employment and occupation.	5 GENDER EQUALITY 5 EQUALITY 5 EQUALITY	Enhancing Our Environment	 Generate quality job opportunities. Promote and adopt the best labor and human rights practices.
 Principle 7: Companies must support a prudent approach with respect to environmental challenges.	6 CLEAN WATER AND SANITATION TO TO TO TO TO TO TO TO TO TO TO TO TO	Leading eco-efficiency and innovation.	 Prevent, mitigate and compensate environmental impacts of the business. Responsibly manage the value chain and product life cycle.
Principle 8: Companies must encourage initiatives that promote greater environmental responsibility.	6 CLEAN WATER AND SANITATION TOTAL CONSIMUTION AND PRODUCTION	Leading eco-efficiency and innovation.	 Encourage energy efficiency of the operation and the products. Position an innovation and quality approach in all the company's processes.
Principle 9: Companies must promote the development and diffusion of environmentally friendly technologies.	6 CLEAN WATER AND SANITATION TOTAL AND PRODUCTION AND PRODUCTION	Leading eco-efficiency and innovation.	 Promote the efficient use of materials and technologies respectful with the environment.
Principle 10: Companies must work against all forms of corruption including extortion and bribery.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Promoting continuous, ethical and responsible growth.	 Conduct our business with integrity, ethics and transparency. Adopt best corporate governance practices that facilitate decision-making and accountability.

GLOBAL REPORTING INITIATIVE

Global Reporting Initiative

Tecnoglass Inc. has decided to report its progress through management indicators established by the organization, likewise we have implemented principles and indicators of the Global Reporting Initiative (GRI) which are described below:

GRI Standards	Description
Introduction	
102-14	Letter from our CEO
102-1, 102-3, 102-4, 102-5 y 102-16	About us
102-2, 102-6, 102-9	Products and Brands
102-7	Tecnoglass in numbers
102-9	Supply Chain
102-13	Associations and associations
102-18, 102-22, 102-23,	
102-24, 102-26, 102-27,	Governance structure
102-28	
102-19, 102-20	Delegation
102-21, 102-40	Stakeholders

Promoting continuous, ethical and responsible growth

102-16, 205-2, 205-3	Ethics and Compliance Program
102-13, 102-15, 204-1	Supply Chain Security

Leading Eco-Efficiency and Innovation

102-15, 307-1, 303-1, 303-2, 306-2	Environmental Management System
302-1	Photovoltaic power generation
102-2	Automation and innovation
301-2, 306-2	Waste management and utilization
301-2	Process Technologies

Enhancing our Environment

404-2	Human Talent Management	
403-1, 403-3, 403-4, 403-5, 403-6,	Occupational Health and Safety	
403-7, 403-9		
413-1	Hand in Hand with Communities, Social	
	Intervention, Education for Progress and Culture and	
	Sports.	

The Power of Quality

TECHOGLASS