



# Our responsibility

Panariagroup  
commitment  
to sustainability





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to sustainability



**Change** is the process  
by which the **future** invades our lives.

*Alvin Toffler*

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Sustainability is a living,  
changing principle and  
the actions that it inspires change  
with it, turning our company  
into a better company.

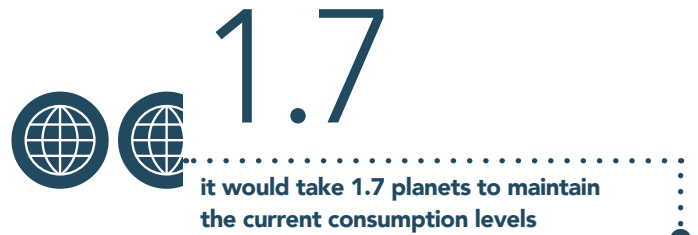
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**We shape** our buildings;  
thereafter they shape us.

*Winston Churchill*

# WE LIVE IN A RAPIDLY CHANGING WORLD

WE LIVE ON **A PLANET**  
THAT MUST BE PROTECTED  
AND TREATED WITH CARE



source: Global footprint network (Gfn) 2019

## WE NEED A **PARADIGM** SHIFT

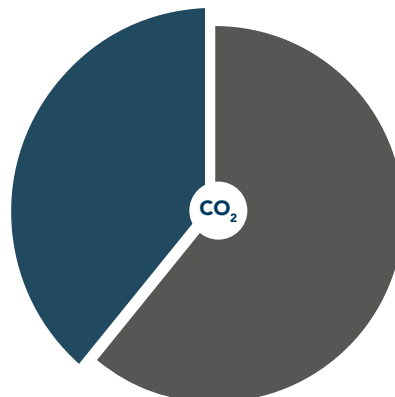
From 2030 designers will be more and more demanding with regards to materials and construction techniques based on their environmental impact. To **build sustainable buildings, the search for innovative materials** is fundamental.



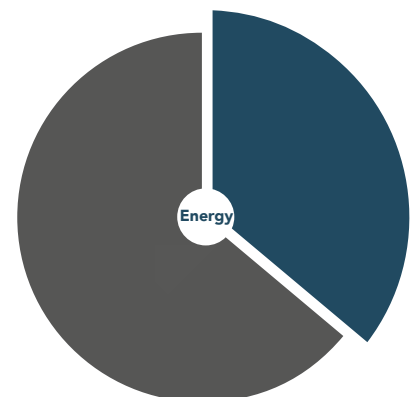
Following the goals set in 2030 Commitment promoted by AIA (American Institute of Architects)  
source: Global Alliance for Buildings & Construction 2018

## WE NEED **INNOVATIVE MATERIALS** AND NEW **TECHNIQUES**

The pace of global growth requires to **cut greenhouse gas emissions**  
and **consume less resources**.



● **39%** the share of energy-related CO<sub>2</sub> emissions by buildings and construction



● **36%** the share of global final energy use by buildings and construction

## WE NEED AWARENESS TO DEVELOP NEW WAYS OF BUILDING



Consumers are looking for a **new, sustainable way of living** that respects quality of life and the environment.



### ARCHITECTS AND DEVELOPERS

will need to know

chemical composition

production cycle  
specifications

performance

life cycle



### COMPANIES

will need to provide

detailed information

environmental certifications

products with known chemical composition

products without harmful substances to human health

## PRODUCTS AND MATERIALS

## WE NEED NEW WAYS OF PRODUCING



Consumers are looking for companies that are not only **excellent**, but **careful** and **responsible**.

A COMPANY IS CONSIDERED **SUSTAINABLE** IF...

95%

it pays attention to employees' rights

91%

it uses resources responsibly

90%

it manages the entire production chain

88%

it's transparent to customers

88%

it doesn't relocate activities abroad

## SUPPORT FOR INNOVATION

We have invested around **145 million euro** in innovation over the last 5 years.



## REDUCTION OF RAW MATERIAL CONSUMPTION

We **recover** our production waste **internally**.



## WASTE MANAGEMENT

**94.2%** of waste recovered along the production chain.



## LOW WATER IMPACT

Water consumption intensity **0.02 m<sup>3</sup> per m<sup>2</sup>**.



# OUR COMMITMENT

## HUMAN RESOURCES

**97%** of our employees have a **permanent contract**.







## CLOSE RELATIONSHIP WITH THE LOCAL AREA

More than 90% of our expenditure is made on **local suppliers**.



## ENERGY SAVING

Our **energy consumption index is 0.139 GJ for m<sup>2</sup>** of tiles, using increasingly more renewable energy.



## ECO-FRIENDLY PACKAGING

Increasing use of **recycled packaging materials**.



## PRODUCTS FOR QUALITY OF LIFE

We develop sustainable materials (laminated porcelain stoneware) for **healthy and protected spaces** (Protect antibacterial technology).



## EMISSION REDUCTION

**9 tCO<sub>2</sub>e for 1000 m<sup>2</sup>** of tiles, **197 tCO<sub>2</sub>e avoided** over the course of the year<sup>1</sup>, equal to the absorption of **almost 6,000 trees**

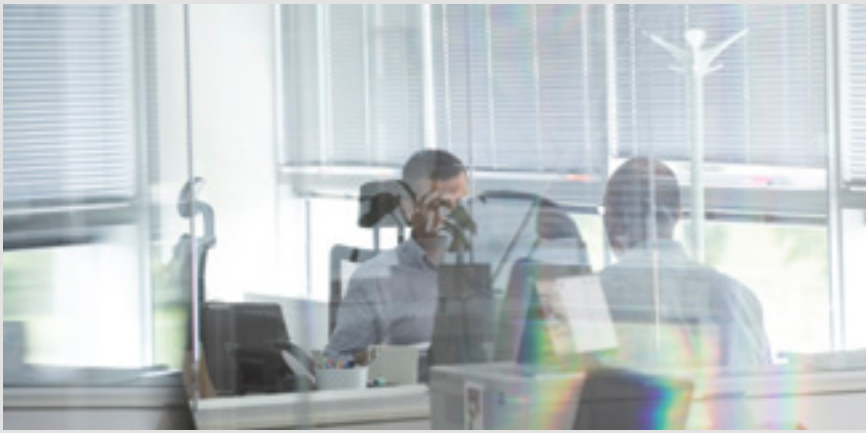
1. In 2019, through the photovoltaic systems installed at the Fiorano Modenese, Finale Emilia and Sassuolo plants, the Group avoided 197 tCO<sub>2</sub>e, calculated with Location-based methodology, a 3% increase compared to 2018. To calculate the equivalent number of trees, the potential absorption of a tree (such as a tall tree species) was considered to be between 20 and 50 kgCO<sub>2</sub>/year (Source: [www.reteclima.it](http://www.reteclima.it)).



Investing  
in quality  
**of life**

Our ceramic excellence combines **beauty, quality** and **sustainability**. That's why we have always invested in product innovation to **improve the quality of life**.





**CONTINUOUS INVESTMENTS  
IN INNOVATION**

144.5mln euro

invested from 2015 to 2019





Our daily commitment to **reducing our environmental impact** is **critical to our success**. We aim to live in harmony with the environment. The material and energy that we require return to the environment in the form of respect.



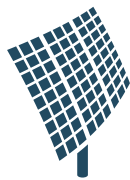
## LOWER EMISSIONS, MORE ENERGY SAVING



The Group's strongly focuses on **monitoring** and minimising environmental impact, particularly in relation to **energy consumption** and **emissions**.

only **9** tCO<sub>2</sub>

were emitted per 1,000 m<sup>2</sup> of tiles



thanks to the  
photovoltaic systems



in 2019 were avoided

**197** tCO<sub>2</sub>



equal to the  
environmental impact of

**6,000** trees





## TOTAL RECOVERY OF PRODUCTION WASTE AND LOWER CONSUMPTION OF RAW MATERIALS

Attention to environmental performance concerns all phases of the production cycle, including waste management.

100% RECOVERED WASTE



## CAREFUL WASTE MANAGEMENT



94.2%

of waste is recovered  
(not sent for disposal)



## ENVIRONMENTALLY FRIENDLY PACKAGING

We pay great attention to the **reduction of environmental impacts** of our packagings, investing in **efficiency** and use of **recycled material**.



almost **80%**  
of recycled plastic for industrial use

and **70%**  
of recycled paper and cardboard used

In 2019 we introduced new automatic boxing machines to **halve cardboard use**.

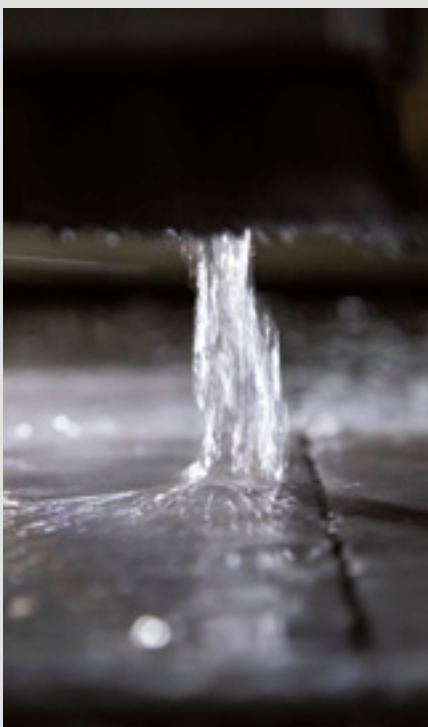
### TRADITIONAL MACHINES



### NEW MACHINES

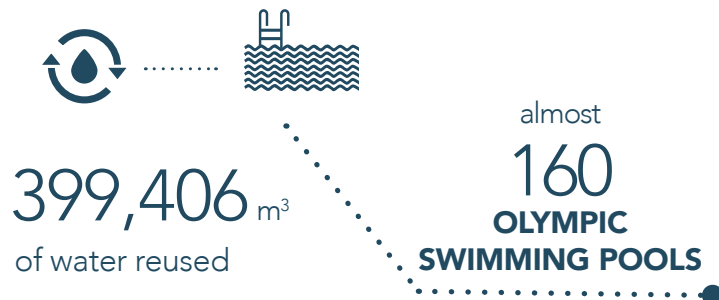


up to -50% of  
cardboard used



### NO WATER WASTAGE

100% of process water is reused,  
with consequent **very limited intensity**  
**on material production.**





People and local  
communities  
**at the centre**

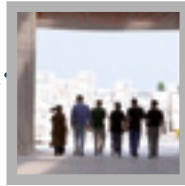
**People**, their well-being,  
their growth and their  
professional development  
are **key to** Panariagroup's **success**.



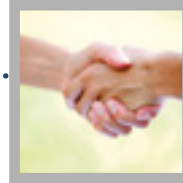




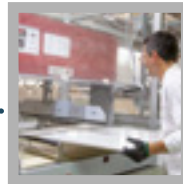
OUR  
CORPORATE  
CULTURE



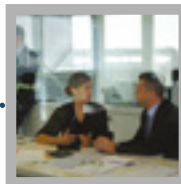
attracts the best talents



recognises and rewards  
performance



improves employees' skills



contributes to professional  
and personal satisfaction

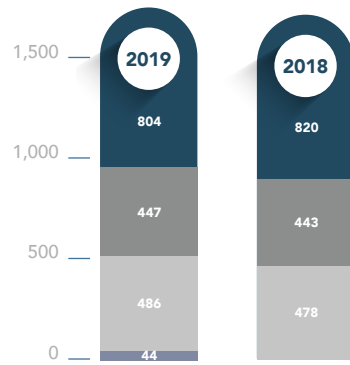


## GROUP EMPLOYEES

AS OF 12/31

Net gain of 40 new hires compared to the previous year

- Italy
- Portugal
- USA
- India



as of 31<sup>st</sup> December

# 1,781

employees



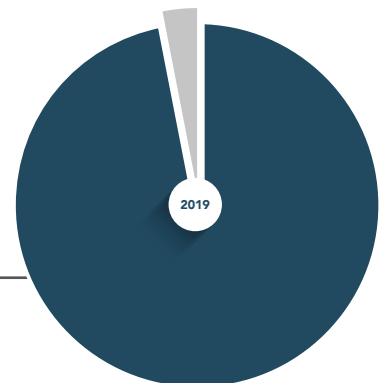
## GROUP EMPLOYEES

BY CONTRACT TYPE AS OF 12/31/19

Permanent contracts guarantee employees more **stability** and greater opportunities for professional growth.

97% Permanent contracts

3% Fixed-term contracts





We believe in collective bargaining as a means of building strong and **long lasting relationship** with our employees.



70%

employees covered by collective bargaining agreements

## INVESTING ON TRAINING

Every year, the Group's companies analyse **training needs** and provide activities on health and safety issues, in addition to those necessary for employees' specific needs.

## RELATIONS WITH LOCAL COMMUNITIES

For Panariagroup, sustainability also encompasses relations with local communities.

The Group also actively contributes to the growth of local communities through the **selection of local suppliers** as well as participation, donations and sponsorships relating to the development and **improvement of local conditions**.





Eccellence  
and **product**  
**innovation**

We've always made ceramic: a totally recyclable and durable product that comes from **natural raw materials** and respects the environment thanks to the reduced impact of the production cycles.



# CERAMICS IDENTIKIT

## COMPOSITION

a mix of natural raw materials.

## FEATURES

non-deformable, frost resistant and chemical agents resistant, hypoallergenic and odourless, totally recyclable.

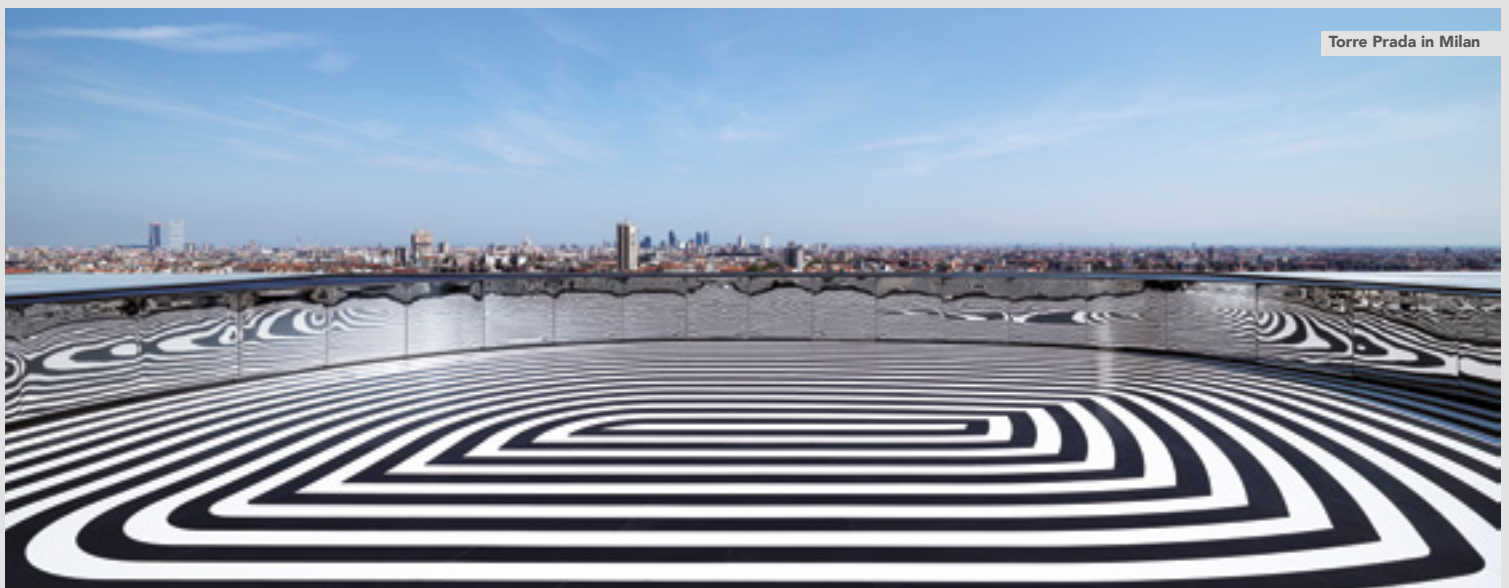
## DISTINGUISHING MARKS

it respects the environment starting with the raw materials and low impact production cycles.

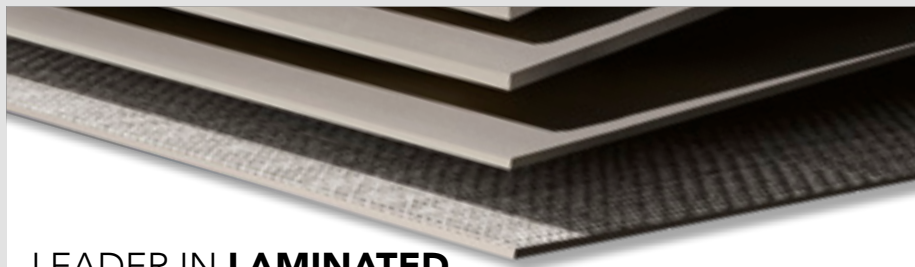
## LIFE CYCLE

life cycle is estimated to last longer 50 years.

Architects and designers are looking for **the best solutions with strict environmental standards**. Panariagroup answers to **new market requests** with excellent products, protagonists of projects all around the world.



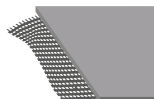
Producing **innovative ceramics** has a deep significance. It is like taking something old and **inventing its future every day.**



## LEADER IN LAMINATED PORCELAIN STONEWARE

The Group is leader in the production of **laminated porcelain stoneware**, a revolutionary product that we have focused on **for over 10 years**, leading to record sales all over the world and constant innovation capable of reinterpreting and evolving this technology for increasingly ambitious projects.

## SUPERIOR QUALITY THIN CERAMIC SLABS

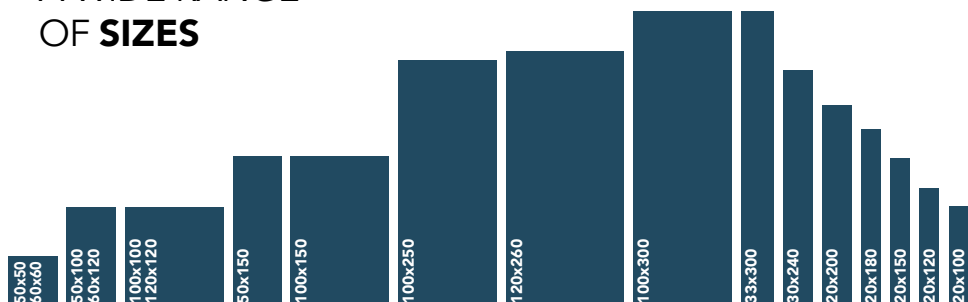


ULTRA-THIN AND ULTRA-RESISTANT WITH FIBREGLASS MESH REINFORCEMENT

THIN AND RESISTANT



### A WIDE RANGE OF SIZES



## LAMINATED PORCELAIN STONEWARE

- 65% the consumption of raw material
- 30% the consumption of water
- 30% the consumption of energy
- 30% CO<sub>2</sub> emissions in atmosphere
- 66% pollution cause by transport

The data refers to a 3,5 mm thick product when compared to a 10 mm thick porcelain stoneware tile

# P R ( ) T E C T

The exclusive Panariagroup technology for antimicrobial floor and wall coverings with the highest performance. To live healthily, safe and secure.

Being able to offer very high-quality antibacterial materials is crucial for responding to **ever more selective specifications** and for meeting end consumers' growing demand for **health-oriented products**. Our leading antibacterial technology guarantees a constant and unalterable protection that improves people's lifestyles..



The technology based on **silver ions**, which is permanently integrated in the tile at the time of firing, blocks the metabolism of bacteria, eliminating them and preventing their proliferation.

Consequently:

- tiles are more hygienic and easier to clean;
- the technology also eliminates what you cannot see;
- less bacteria, less odours.

## A CERTIFIED QUALITY

Panariagroup's production processes and products have obtained **the most important international certifications**, including the most advanced certifications for sustainable architecture.

In 2019, all of the Panariagroup's collections obtained the **GREENGUARD GOLD** certification, i.e. the UL standard with the strictest VOC emission limits, guaranteeing that they are as healthy as possible for the people who use and live in these environments. They can therefore be used in locations such as schools and health facilities, attended by sensitive individuals such as children and the elderly. **GREENGUARD GOLD** is a widely recognised certification required by sustainable building programmes and design and construction regulations around the world, such as LEED (international) and BREEAM (UK).



We continuously reaffirm  
our clear and strong commitment  
over the years  
with new and ambitious goals.

We aim to create  
aesthetically superior  
and highly sustainable products:  
products designed to improve  
the quality of life.

Emilio Mussini  
President of Panariagroup

A handwritten signature in white ink, appearing to read "Emilio Mussini".

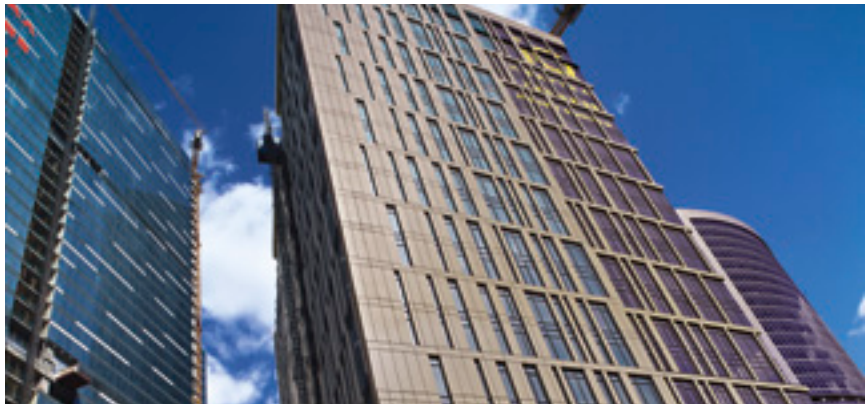
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A commitment that we certify and formalise every year  
in our Sustainability Report in which we illustrate  
our strategy and our decisions

To read our complete Sustainability Report

**panariagroup.it**









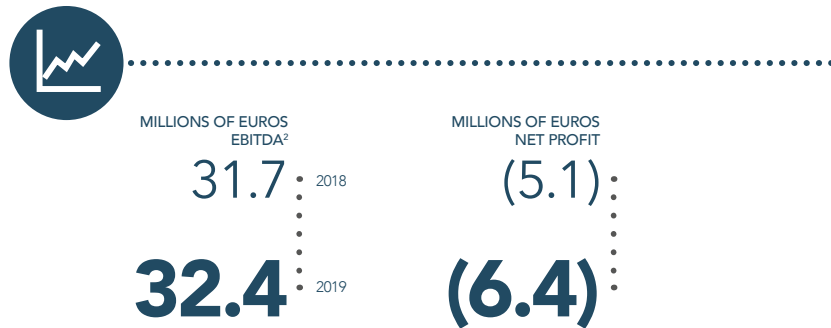
Results  
**and targets**

# GROUP PROFILE

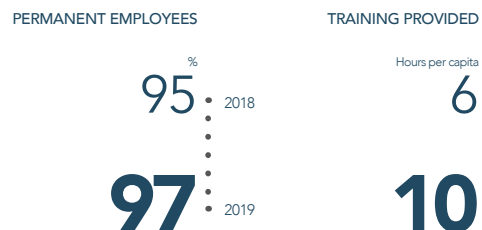
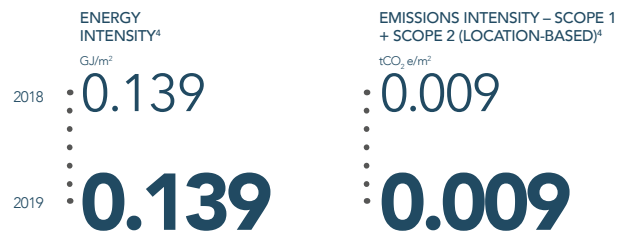
Panariagroup is one of the leading producers of ceramic tiles for floor and wall coverings.



## HIGHLIGHTS 2019



## ENVIRONMENTAL.....



2. As a result of the process of adjustment to the new IFRS 16 – Leases accounting standards (retroactive application using the “full retrospective” method), as of 1 January 2019, the 2018 figures for EBITDA, net profit and net working capital have been restated with respect to those published in the previous Sustainability Report. For the previously published data, see the 2018 Sustainability Report, published in the Sustainability section on [www.panariagroup.it](http://www.panariagroup.it).

3. Net of leasing liabilities.

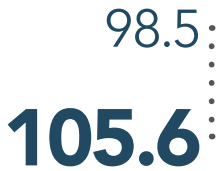
4. The intensity values are calculated based on the m<sup>2</sup> of tiles produced during the year, which amounted to 22,751,785 m<sup>2</sup> in 2019 and 22,486,526 m<sup>2</sup> in 2018.

5. The data relating to the Health and Safety of contractors only include the category of staff leasing workers and not other types of external staff who work at the Panariagroup Group’s sites and/or under the Panariagroup Group’s control, in view of their significance and of the availability of this data over which the Panariagroup does not exercise direct control.



## ECONOMIC

MILLIONS OF EUROS  
NET FINANCIAL POSITION<sup>3</sup>



MILLIONS OF EUROS  
NET WORKING CAPITAL



MILLIONS OF EUROS  
INVESTMENTS



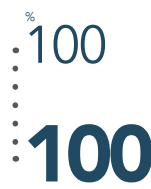
EMISSIONS INTENSITY – SCOPE  
1 + SCOPE 2 (MARKET-BASED)<sup>4</sup>



EMISSIONS AVOIDED –  
LOCATION BASED



RAW WASTE RECYCLED IN THE  
PRODUCTION PROCESS



## SOCIAL

RECORDABLE WORKPLACE  
ACCIDENT RATE –  
EMPLOYEES



RECORDABLE WORKPLACE  
ACCIDENT RATE –  
CONTRACTORS<sup>5</sup>



COMMUNITY SUPPORT  
Thousands of euros



# SUSTAINABILITY GOALS

Panariagroup aims to improve its impact on society in economic, social and environmental terms; for this reason, specific sustainability objectives that will be implemented are announced every year. These objectives represent **a commitment that the Group makes towards its stakeholders.**



## BUSINESS ISSUES

### GOALS DECLARED IN NFS18

### TARGET PROGRESS

Industry 4.0: adherence to digitization incentives (Article 3 of Legislative Decree no. 145 of 23 December 2013, as replaced by Article 1, paragraph 35 of the 2015 Stability Law and amended in the 2017 Budget Law).

2018

Investments were made for the purchase of new machinery. The interconnection of the facilities, a fundamental prerequisite for certifying investment in the "Industry 4.0" program, is planned for 2020 and will determine the achievement of the fiscal target.



Extension of the covered area of the Fiorano Modenese (Italy) plant for the expansion and optimisation of large format slab production.

2019

Work has started and is expected to be completed by 2020.



Installation of new facilities at the Italian Business Unit, in particular no. 1 sorting line at the Toano plant, no. 1 sorting line and no. 1 drying room at the Fiorano plant.

2018

Sorting lines for the Toano and Fiorano plants have been installed. The construction of the drying room at the Fiorano plant is subject to site expansion work.



Installation and launch of a dry-grinding line in the Finale Emilia plant, enabling recovery of powders during the milling of the mix and a consequent reduction in the production of waste (sludge) compared to when using a wet system.

2019

The goal has been achieved.



Installation and launch of a dry-grinding and polishing line in the Aveiro plant, enabling recovery of powders during the milling of the mix and a consequent reduction in the production of waste (sludge) compared to when using a wet system.

2019

Goal postponed to 2020.





## QUALITY AND ENVIRONMENT

### GOALS DECLARED IN NFS18

### TARGET      PROGRESS

Total replacement of fluorescent neon lights with installation of LED and magnetic induction lighting systems at the Toano plant (Italy) to significantly reduce electricity consumption.

2018

Goal will be completed in 2020.



Partial replacement of fluorescent neon lights and installation of LED and magnetic induction lighting systems in the Ilhavo and Aveiro (Portugal) plants to obtain significant electricity reductions.

2019

Goal suspended due to an internal assessment of an organizational nature that led to the choice of different priorities.



Complete removal of asbestos roofing at the Fiorano Modenese (Italy) site and replacement with eco-friendly materials.

2019

The goal has been achieved.



Introduction of automatic washing systems for the glaze application machines to reduce water consumption at all the Italian plants.

2019

The goal has been achieved.



Installation of soundproofing systems in the grinding department at the production sites in Portugal and the USA.

2019

The goal has been achieved.



Work on dust extraction systems to reduce airborne silica in the Lawrenceburg (USA) plant.

2019

The goal has been achieved.



Partial renovation of roofing in all of the Group's plants, using eco-friendly materials.

2019

Goal will be completed in 2020.



Campaign to replace lead-acid batteries with lithium batteries, which have a longer life and are less polluting, for automatic vehicles for handling finished products.

2019

Goal will be completed in 2020.



Progressive elimination of lamination from communication tools.

2019

The goal has been achieved.





## HUMAN RESOURCES

### GOALS DECLARED IN NFS18

TARGET      PROGRESS

Creation of a reward system for employees who distinguish themselves in activities related to environmental protection (an "ecological merit award") in all Business Units.

2019

An "ecological merit award" has been created in the Italian Business Unit. An extension of the foreign Business Units is planned over the next two years.



Improvement of activities to listen to staff in the Italian and US Business Units (e.g. climate analysis, etc.).

2019

An initiative to listen to staff has been created at the Italian business Unit. An extension of the foreign Business Units is planned over the next two years.



Modification and extension of the drinking water distribution service for employees in the Italian Business Unit.

2019

The goal has been achieved.



Structured training plan for the sales force in the Italian Business Unit.

2019

The goal has been achieved.



Improvement of communication channel with employees, through dedicated software in the Italian Business Unit.

2019

Goal will be completed in 2020.



## SUPPLY CHAIN

### GOALS DECLARED IN NFS18

TARGET      PROGRESS

Introduction of a standardized system to assess new suppliers on the basis of social and environmental criteria, as well as criteria related to human and workers' rights.

2019

The goal has been achieved.



Development of an Impact Assessment and Risk Analysis of social and environmental impact in the supply chain.

2020

Goal confirmed for 2020.







## GOVERNANCE

### GOALS DECLARED IN NFS18

### TARGET      PROGRESS

Improvement of the access control system at the Italian Business Unit's sites, through installation of dedicated IT supports.

2018

The first part of the work has been carried out and is scheduled to continue in 2020.



Installation of a SAP information system to manage all of the Portuguese Business Unit's processes.

2019

The goal has been achieved.



Adaptation to the Italian legislation introducing obligatory "electronic invoicing".

2019

The goal has been achieved.



First-time adoption of the IFRS 16 Accounting Standard in relation to lease and rental contracts.

2019

The goal has been achieved.



# NEW GOALS

To confirm its commitment to the advancement of a business model that integrates economic, social and environmental responsibility in all the activities and in all the aspects regarding the Group, Panariagroup, following on from the previous year, has defined **new sustainability objectives**, listed below.



## BUSINESS ISSUES

### TARGET 2020

- Installation of an innovative technology ("continuous line") in the Finale Emilia (Italy) plant with expected objectives compared to traditional lines of higher productivity, reduced electricity and gas consumption and expansion of the range of sizes that can be produced.
- Installation of a new atomizer in the Finale Emilia (Italy) plant, featuring greater energy efficiency.
- Industry 4.0: installation of a system of plant supervision and interconnection with the production lines in the plants of Finale Emilia and Toano (Italy), Aveiro and Ílhavo (Portugal).
- Purchase of new internal handling machines (LGVs) at the Fiorano Modenese plant (Italy), with improved plant utilization, an increase in internally processed material and a consequent reduction in transport to external suppliers and savings in processing costs.
- Installation of new load compensators for the kilns in the Fiorano Modenese (Italy) plant, enabling increased filling of the kilns and consequent higher productivity and reduction of electricity and gas consumption.
- Installation and launch of a dry-grinding and polishing line in the Lawrenceburg (USA) plant, enabling recovery of powders during the milling of the mix and a consequent reduction in the production of waste (sludge) compared to when using a wet system.
- Installation of a mill to recover fired waste in the Lawrenceburg (USA) plant, with an increase in recoverable fired waste in the mix (up to 8%), reduced raw material consumption, and increased productivity and energy performance of the continuous mill.
- Replacement of compressors at the Lawrenceburg plant (USA) with new, more energy efficient models.

## TARGET 2020

Implementation of at least one of the three projects awarded as part of the 2019 "Sustainability Award" in the Italian Business Unit.

Implementation of improvement initiatives linked to the results of staff listening activities carried out in 2019 in the Italian Business Unit.

Creation of Scholarships dedicated to the children of employees in the Italian Business Unit.

Creation of a Solidarity Fund in the Italian Business Unit, with voluntary donations from employees for a specific charitable project.

Establishment of a "Sustainability Award" in the Portuguese Business Unit through an ideas competition open to the staff of Gres Panaria Portugal.

Staff listening initiative in the Portuguese Business Unit, in line with the methods adopted by the Group.



QUALITY AND ENVIRONMENT

## TARGET 2020

Industry 4.0: achievement of CE line certifications in the plants in Finale Emilia and Toano (Italy).

Inclusion of hybrid cars in the Italian Business Unit's Car Policy.

Replacement of 50% of the Portuguese Business Unit's car fleet with hybrid cars.

Optimisation of the filter dust recovery and treatment system in the Fiorano Modenese plant.

Certification of the new MAXA (NSF) large slab line, which is intended for the furnishing accessories segment and designed to be suitable for food contact.



SUPPLY CHAIN

## TARGET 2020

Introduction of a standardized system to assess new suppliers on the basis of social and environmental criteria, as well as criteria related to human and workers' rights in the Portuguese Business Unit.

Development of an Impact Assessment and Risk Analysis of social and environmental impact in the supply chain in the Portuguese Business Unit.



HUMAN RESOURCES

## TARGET 2020

Development of stakeholder engagement for customers in the Italian Business Unit.



CUSTOMERS

**PANARIA**group®