# GRI Renewable Industries

## Sustainability Report 2023
### Executive Summary

GRI Renewable Industries

For yet another year, I would like to thank the professionals at GRI Renewable Industries for their work and dedication. Without them, the company's performance cannot be explained.

I would also like to thank our investors, shareholders, customers and suppliers for their commitment and long-term support, crucial to continue creating value for society as a whole.

**Jon Riberas**
Executive Chairman

**GRI** Renewable Industries

**Purpose**

D**o**ing**Well**
by**Doing** **Green**
**GRI** Renewable Industries 20**30**

**Vision**

A global leader and innovator in the manufacture of wind components, creating a more sustainable and emission-free future for all.

**Mision**

The mission of GRI Renewable Industries is to globally satisfy the needs of our customers by taking into account their business, the safety and security of our employees, and the respect for the environment.
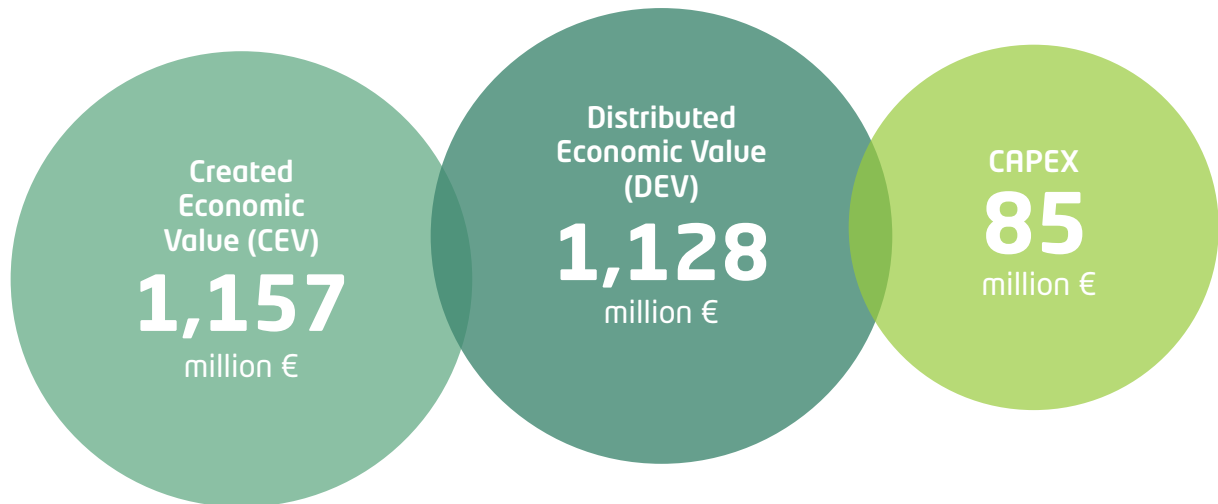
# GRI Renewable Industries

GRI Renewable Industries has been producing towers and flanges for the wind energy sector worldwide since 2008. It has 22 factories in 9 countries: USA, Brazil, Argentina, Spain, South Africa, Turkey, Poland, India and China. In 2023, it had revenues of about **1,200** million euros and over **5,500** employees.

The company has a strong **industrial culture** and is **always innovating** in every stage of designing, producing, assembling, distributing and installing towers and flanges for the wind energy sector. It offers solutions that suit each customer's needs with a dedication to excellence and ongoing improvement.

The management model incorporates sustainability, aiming for safety, health, quality, and care for people and the environment, with the hope of creating a more sustainable and emission-free future.

GRI Renewable Industries works to grow as a solid and responsible company, maintaining the values of **Honesty**, **Humility**, **Tenacity** and **Hard Work** that its founder set. Ethical and business values inspire the purpose *"Doing Well by Doing Green"*, conveying the conviction that only by acting correctly and consistently can we do things well.

## Economic impact



Created Economic Value (CEV)
**1,157**
million €

Distributed Economic Value (DEV)
**1,128**
million €

CAPEX
**85**
million €

# Global presence

**Global perimeter /** Perimeter of the Sustainability Report

**9**/8
Countries

**22**/18
Wind industrial components
manufacturing facilities

**+5,500**/4,933
Employees

## Towers Texas

Texas, USA

## Towers Brazil

Pernambuco, Brazil

## Flanges Brazil

Pernambuco, Brazil

## GRI Calviño Towers Argentina

Buenos Aires, Argentina

## Headquarters

Madrid, Spain

## Flanges Iraeta

Guipúzcoa, Spain

## Towers Pontevedra*

Pontevedra, Spain

## Towers Galicia

O Carballiño. Spain

## Towers Sevilla

Sevilla, Spain

## Reducel

Zaragoza, Spain

*Not included in the scope of the Sustainability Report.

## Baltic Towers*



🌀 Polonia

## Towers Turkey I



🌀 Bandırma, Turkey

## Towers Turkey II*



🌀 Bandırma, Turkey

## Towers
## South Africa



🌀 Ciudad del Cabo
South Africa

## Towers India I



🌀 Maharashtra, India

## Towers India II



🌀 Ananthavaram, India

## Flanges China I
## (SIHI I)



⊜ Shandong province

## Flanges China II
## (SIHI II)



⊜ Shandong province

## Flanges China III
## (SIHI III)



⊜ Shandong province

## Steel Mill



⊜ Shandong province

## Flanges China IV
## (SIHI IV)



⊜ Shandong province

## Flanges China V
## (SIHI V)



⊜ Shandong province

## Jionning
## &Qilu*



⊜ Shandong province

## Grinding Balls*



⊜ Shandong province

# Solutions

GRI Renewable Industries' solutions, mainly towers and flanges for the wind industry, offer a comprehensive service to meet the needs of customers in each market.

## GRI Towers

This division is responsible for the manufacture of towers for the main wind energy OEMS. It has **10 plants** in operation: nine for onshore towers in the United States, Brazil, Argentina, Spain (Galicia and Seville), Turkey I and II, India I and II and South Africa; as well as an offshore factory in Spain (Seville).

## GRI Flanges

Its activity is the manufacture of flanges used to join the sections of wind towers. It has **7 factories** in operation in Brazil, Spain and China.

## Components of the Nacelle

At **Reducel's** factory in Zaragoza, Spain, several essential components for wind turbines are produced. Among these are the **Yaw Rings**, which have the function of joining the Nacelle to the Tower. In addition, **Pitch Plates** are manufactured, which are located between the Hub and the blades of the wind turbines and play a crucial role in the structure and operation of the wind turbines. Another important component produced at Reducel are the **Bearing Covers**, which are responsible for the retention and sealing of the turbine's Main Bearings, thus guaranteeing their correct operation and safety.

# Growth

In accordance with the 2023/2026 Strategic Plan, GRI Renewable Industries has driven business growth along three lines:

## Onshore

In 2023, the construction and commissioning of a new factory in Turkey (**GRI Towers Turkey II)** was completed.

## Offshore

Agreements have been signed for the construction of a factory in **Poland (Gdansk)** for offshore wind towers, which is scheduled to start operations in mid-2025.

On the other hand, investments in **GRI Towers Seville** have been maintained in 2023 to adapt the factory to the demand for offshore towers and increase the current production capacity.

## Diversification

In 2023, GRI Renewable Industries has acquired a majority stake in **Reducel**, one of Europe's leading manufacturers of components for **offshore** and **onshore wind turbines**.

# ESG Impacts

GRI Renewable Industries contributes to the development of the wind energy sector, which is key to the decarbonisation of electricity generation and the change of economic model towards a more sustainable future. The company is committed to creating long-term value in line with the United Nations Sustainable Development Goals.

## Value creation and sustainable management model

Our value creation and sustainable management model is based on relationships of trust with all stakeholders and is structured around three pillars: **Environmental, Social and Corporate Governance (ESG).** The aim is to enhance the positive impacts on customers, industry, the environment and society as a whole and to take advantage of the opportunities for growth that this global framework offers us.

## Strategic pillar

GRI Renewable Industries has integrated Sustainability as one of the **7 pillars of its Strategic Plan 2023/26**, providing guidelines to drive the growth of industrial activity. The company works on 4 lines of action: **environmental impact, labour relations and human rights, ethics and supply chain.**

Corporate Identity and Communication

Efficiency

Growth and New Projects

Innovation

People

Sustainability

Health and Safety

7

1

2

3

4

5

6

**Strategic Plan 2023·2026**
**GRI** Renewable Industries

| Material issues | Performance |
|---|---|

**ENVIRONMENTAL**

| | |
|---|---|
| **Carbon Neutral Strategy** | • Energy consumption **921 GWh**<br>• Scope 1 and 2 emissions **282 kt $CO_2$ eq**<br>• Electricity consumption from renewable origin **7%** |
| **Circular Economy** | • Steel 2023 sourcing mix. Percentage of recycled material: **37%**. |
| **Environmental Management** | • ISO 14,001 certified factories: **100%** |

**SOCIAL**

| | |
|---|---|
| **Health and safety** | • Plants with ISO 45,001: **83%**<br>• Employees covered on ISO 45,001: **93%**<br>• New certified factory: **GRI South Africa**<br>• Frequency rate: **-11%** |
| **Talent management and flexibility** | • New **Succes Factors** platform for performance evaluation<br>• New Corporate **Working Conditions** Policy<br>• Training hours **+7%**. Hours per employee **40** |
| **Human Rights in the Supply Chain** | • New sustainability certification of suppliers |
| **Customers** | • Customer Satisfaction Index: **91%** |
| **Innovation** | • MES (Manufacturing Execution System):<br>Implemented in **Turkey** and **Galicia**. |

**GOVERNANCE**

| | |
|---|---|
| **Ethics compliance risks** | • **423** visits to the Ethics Channel (+18%). |
| **Risks** | • Assessing the vulnerability of assets to the **physical impacts of climate change** |
| **Human rights policy** | • New **Human Rights** Policy |
| **Cibersecurity** | • **"Digitalisation and Sustainability"** workshops, through which more than 600 employees have been trained. |

# Natural Capital and Biodiversity

GRI aims to protect the natural capital, biodiversity and cultural heritage of the places where it works. For this purpose, and among other actions, it has been doing reforestations since 2016, as part of the **"one tower one tree"** initiative, where it commits to planting a tree for each tower it produces.

Trees enhance soil and environmental quality, attract new animal species, offer a climatic shelter because of the capacity of forests to moderate extreme heat events, and act as a natural CO2 reservoir.

In 2023, the initiative evolves towards the **GRI Forest**, with the aim of carrying out these reforestations in each of the factories as part of a corporate volunteering programme, where employees can dedicate a day to reforestation activities that contribute to the growth of the GRI Forest.

The planting of the **GRI Forest** responds to the company's **Doing Well by Doing Green** values, contributing directly to **SDG 13**: Take urgent action to combat climate change and its impacts and **SDG 15**: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.

The GRI Forest grew by **7** reforestation projects in 2023, thanks to the factories of: **Forjas de Iraeta**, **Seville**, **India** (Kolhopur and Nellore), **Brazil, Turkey** and the **Madrid** offices; planting **2,350** new trees in the GRI Forest.

## GRI Forest
## Make it grow.

Accumulated
**18,855 trees**
absorbing
**251** $tCO_2$/year

## Reforestations 2016-2023

| Year | Manufactured towers | Planted trees | Ton $CO_2$ avoided |
|------|---------------------|---------------|---------------------|
| 2016 | 1,277 | 1,250 | 38.1 |
| 2017 | 987 | 1,700 | 15.2 |
| 2018 | 768 | 2,710 | 13.1 |
| 2019 | 1,375 | 2,000 | 16.7 |
| 2020 | 1,674 | 2,645 | 31.1 |
| 2021 | 1,595 | 1,800 | 11.4 |
| 2022 | 1,777 | 2,000 | 21.2 |
| 2023 | 1,992 | 4,750 | 103.8 |

# Responsible environmental management

Environmental care is essential and fundamental for GRI Renewable Industries and its business strategy. The company has two main goals to change its processes: decarbonisation and circularity. This helps it use resources (energy, materials, etc.) efficiently and lower its environmental impact.

## Circular Economy

Steel is the most recycled material in the world, being used in the production of all new steel. The recyclability of steel is present throughout GRI's value chain, with two processes where it is particularly visible. At the beginning of our activity is the steel procurement process. All steels have a part of recycled material in their composition, depending on the manufacturing route (mostly blast furnace or electric furnace) the amount of recycled material. **The estimated % of recycled material in steel purchases in 2023 was 37%.** 100% of the metallic waste produced in the processes is recycled, i.e. it is reintroduced into the steel production process. This waste is called pre-recycled scrap. **In 2023, more than 247 kt of steel scrap was produced.**
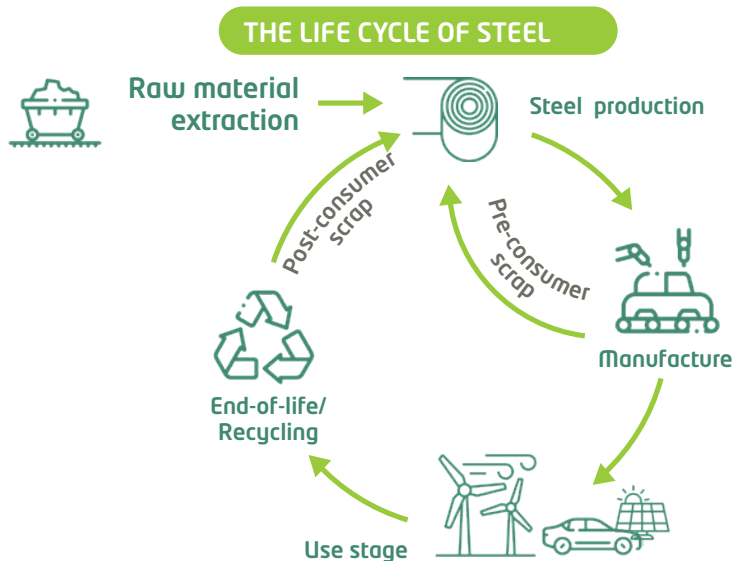
## Non-hazardous waste

The total waste generated in 2023 was **251 kt**. The majority (98%) was metal scrap and the remaining 2% was welding **flux, blasting powder and packaging of different materials: plastic, wood, paper/cardboard and tablex**. In addition, more than 99% of the non-hazardous waste is **recyclable** (steel, aluminium, wood, paper, recyclable plastic and construction materials).
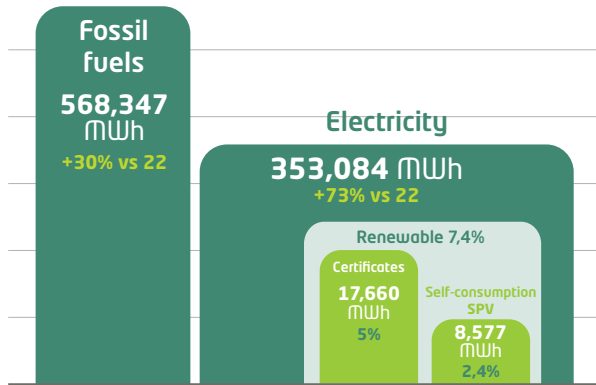
## Hazardous waste

A total of **438 t** were produced, mostly from **contaminated packaging and paint sludge**, where the latter is recyclable.

100% of the management and disposal of this waste is carried out by authorised managers and transporters within each country.
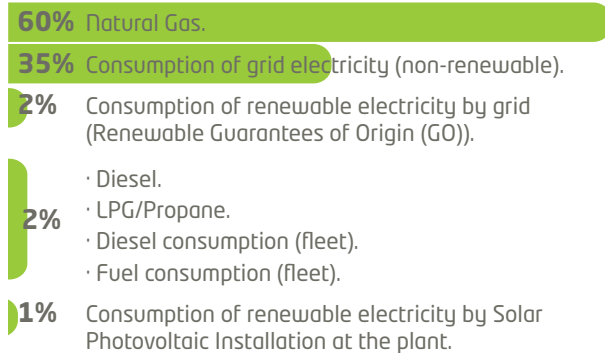


THE LIFE CYCLE OF STEEL

Raw material extraction → Steel production → Manufacture → Use stage → End-of-life/Recycling

Post-consumer scrap

Pre-consumer scrap

# Energy

Keeping track of and lowering the amount of energy used are essential components in the operations of GRI Renewable Industries.

## Energy consumption
## 921,430 MWh (+43% vs. 22)

**Fossil fuels**
568,347 MWh
+30% vs 22

**Electricity**
353,084 MWh
+73% vs 22

Renewable 7,4%

Certificates
17,660 MWh
5%

Self-consumption SPV
8,577 MWh
2,4%

## Energy consumption by origin %

**60%** Natural Gas.

**35%** Consumption of grid electricity (non-renewable).

**2%** Consumption of renewable electricity by grid (Renewable Guarantees of Origin (GO)).

**2%**
· Diesel.
· LPG/Propane.
· Diesel consumption (fleet).
· Fuel consumption (fleet).

**1%** Consumption of renewable electricity by Solar Photovoltaic Installation at the plant.

# Emissions

## Absolute emissions

GHG emissions progress.

**282,029 tCO$_2$ eq** (-71% vs. 22)

🌢 **SCOPE 1**
105,126 tCO$_2$eq
(+30% vs. 2022)

⚡ **SCOPE 2**
176,903 tCO$_2$eq
(+110% vs. 2022)

🌢 **SCOPE 1**
**37%**

⚡ **SCOPE 2**
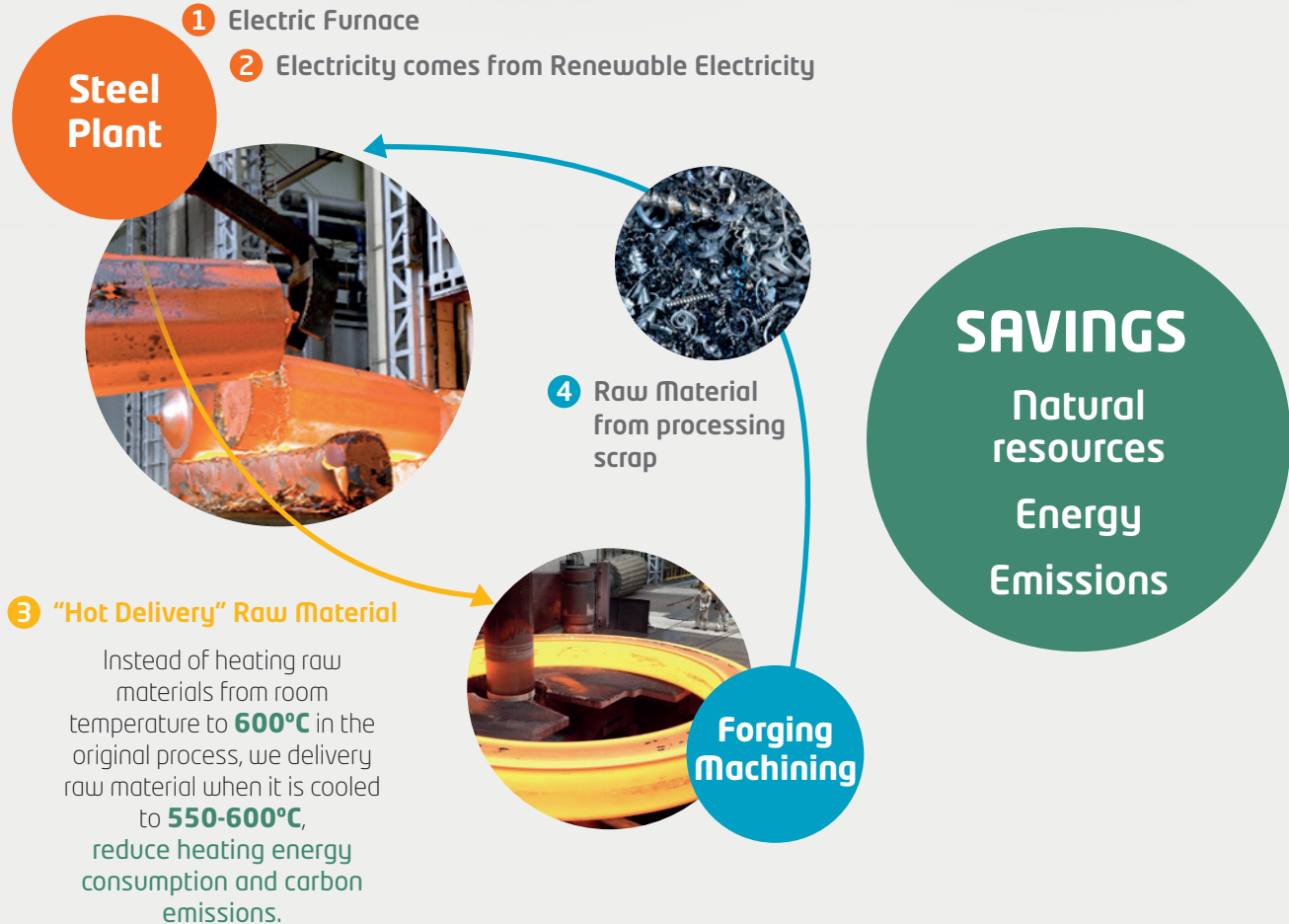**63%**

# GHG emissions progress
## 2023 vs 2022

**71% increase in emissions**

- Direct emissions rise by 30% mainly because of the SIHI V plant, which is operating for its first full year. Also, with a lower effect, there is a growth in production at the other SIHI plants and the Steel Manufacturing activity.

- The electric furnace at the Steel Manufacturing plant causes emissions from electricity use to rise by 110%.

# "Green Cycle" Industry
## GRI Flanges China V

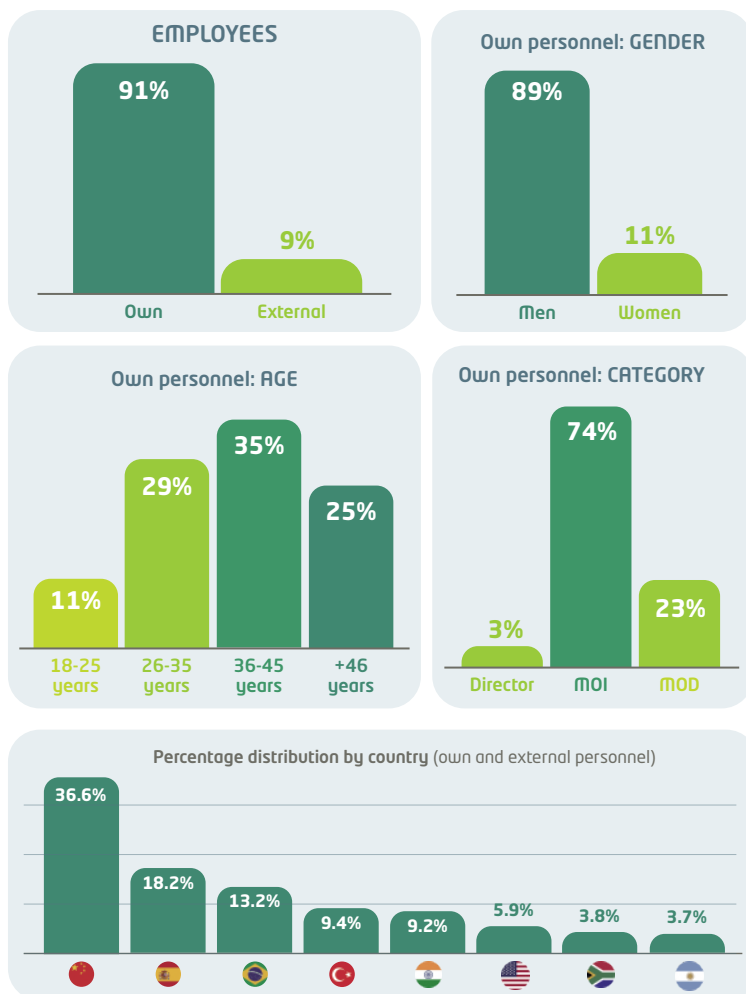### Green Loop Development Mode

**Steel Plant**

**1** Electric Furnace

**2** Electricity comes from Renewable Electricity

**4** Raw Material from processing scrap

**3** "Hot Delivery" Raw Material

Instead of heating raw materials from room temperature to **600ºC** in the original process, we delivery raw material when it is cooled to **550-600ºC**, reduce heating energy consumption and carbon emissions.

**Forging Machining**

## SAVINGS

Natural resources

Energy

Emissions

## People Employee Journey

The People Employee Journey model puts employees at the center, and it considers their whole journey in the company: from how they are attracted to join, to how they leave. The model is managed by the SuccessFactors tool, which makes information consistent and helps with decision-making.

The majority of the professionals have permanent and full-time jobs. Only 4% of employees are from outside the area. In 2023, there have been 1,544 new hires, with a turnover rate of 23% on average.

# Headcount

## EMPLOYEES

| Own | External |
|-----|----------|
| 91% | 9% |

## Own personnel: GENDER

| Men | Women |
|-----|-------|
| 89% | 11% |

## Own personnel: AGE

| 18-25 years | 26-35 years | 36-45 years | +46 years |
|-------------|-------------|-------------|-----------|
| 11% | 29% | 35% | 25% |

## Own personnel: CATEGORY

| Director | MOI | MOD |
|----------|-----|-----|
| 3% | 74% | 23% |

**Percentage distribution by country** (own and external personnel)

| 36.6% | 18.2% | 13.2% | 9.4% | 9.2% | 5.9% | 3.8% | 3.7% |
|-------|-------|-------|------|------|------|------|------|

# Health and safety

GRI Renewable Industries cares about the health and safety of its workers. In 2023, the frequency rate of lost-time accidents went down by **11% compared** to 2022. The company got **ISO 45001** certification for **88% of its plants** - including the new certification of GRI Towers South Africa - covering 93% of its staff, with the goal of reaching 100% by 2024.

The IPRL, a system for managing safety and health that has been in use since 2016, evaluates performance using 89 factors. Even though some indices worsened slightly in 2023, **four sites performed excellently**.

The company delivered 33,438 hours of training to its own staff and 985 hours to external staff. The Be Safe! programme increased its communication to promote health and safety awareness through the corporate website, intranet and other digital channels.

To drive the digitalisation of professionals and evolve the workplace towards a more efficient model, the company has developed the Digital Workplace programme.

By 2023, mobile phone technology has improved and Teams meeting rooms have evolved.Office 365 was fully adopted and trained, enabling collaboration and document management in SharePoint. Moreover, Power Platform governance was set up, creating low-code applications that streamline business processes, such as Front Line Workers projects and artificial intelligence applications.



**Sala T Teams**

**1** Corporate mobile telephony

**2** Teams Meeting Rooms

**3** Share Point

**4** Power Platform

**5** Artificial Intelligence
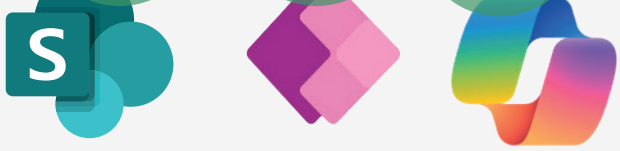
# Customers

## Quality

Quality is a key factor for GRI Renewable Industries in all its interactions with its customers. The way to measure quality from the customers' perspective is the **Customer Satisfaction Index**, which is computed for each customer. In 2023, there is a 2-point improvement compared to 2022, with a **score of 91%**.

| Customer | 2023 Average Score | 2022 Average Score |
|---|---|---|
| Vestas | 87% | 94% |
| GE | 94% | 91% |
| SIEMENS Gamesa RENEWABLE ENERGY | 86% | 83% |
| NORDEX | 97% | 90% |
| JSW | 90% | NA |
| ReNew | 93% | 90% |
| SENVION | 86% | NA |
| ENVISION | 95% | NA |

## Innovation

Sustainability and customer needs are the drivers of innovation at the company. The company has two centres for innovation: GRI Tower Turkey and the Elcano Innovation and University Training Centre (Seville, Spain). The R&D&I team consists of 30 professionals from Spain, Turkey and India.

The main innovation projects are about process improvement and efficiency, digitalisation and the Industry 4.0 project. The company is involved in innovation projects in the sector funded by the European Union and works with leading universities, research centres and the best technological and industrial partners in each region where it operates.

One of the projects being carried out is the **Manufacturing Execution System (MES)** to collect and digitise all the data on processes from multiple sources and variables and use, improve and analyse it through big data in real time. MES is already being applied in **Turkey** and **Galicia**.
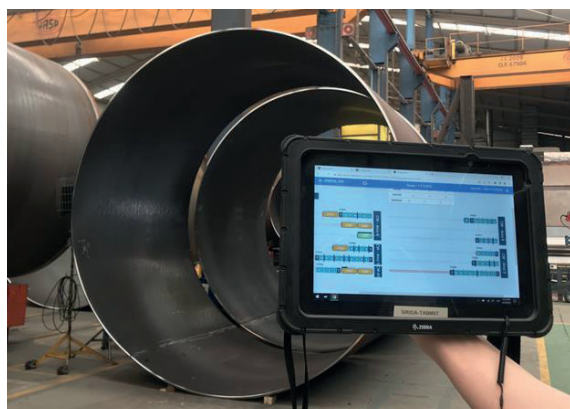
# Supply chain

GRI Renewable Industries' suppliers are a key part of the value chain. The company expects its suppliers to follow compliance standards in all areas, such as health and safety, human rights, compliance with trade sanctions, anti-corruption and environmental protection. These criteria are set out in the Supplier Code of Conduct that was introduced in 2023 and are crucial for choosing a new supplier, as well as keeping and retaining an existing supplier. The Code is based on the protection of Human Rights, the commitment to the Sustainable Development Goals and the standards of the International Labour Organisation (ILO). Non-compliance cases can be reported through the company's Ethics Channel.

The company's strategy aims at the **growth of local supply chains** to support industry near its factories, reduce transport and procurement risks, as well as the incorporation of new technologies to enhance traceability and optimise process monitoring and control.

### Sustainable procurement

In 2023, the **supplier approval** procedure for sustainability has been completed and **internal KPIs** have been defined to assess the percentage of suppliers that meet sustainability requirements and their assessment in each of the areas examined. This information will be available from 2024 onwards.

## Progress made during the financial year

Implementation of a
new PPA in **Brazil**

New SPV Self-consumption
project in **Galicia**

Agreements with steel suppliers for
the development of low-carbon steel:
**Salzgitter and VULCAN**

Collaboration on sustainability with
key suppliers: **ESAB y HEMPEL**

# Community

## Local contribution

GRI Renewable Industries contributes to the local communities where it works by creating jobs, developing education and training programmes for local workers and supporting community projects.

In 2023, the company supported 7 projects with a positive impact on the community, benefiting more than **128,500 people**. The total investment in these projects was 400,000 euros, with the cooperation of 7 partners.

In the profile of the beneficiaries, **youth and/or students** make up about 98% of the total, highlighting the strong emphasis on education and youth development. **Children** account for about 0.4%, while **vulnerable groups** comprise about 1.6%.

The projects have been spread across several areas of action: health and social welfare, education, development cooperation, social and territorial cohesion and emergencies.

## Environmental Volunteering Programme "GRI Forest"

The company promotes the corporate programme **"GRI Forest"** with the aim of offsetting $CO_2$ emissions, but also to raise awareness among its professionals and society as a whole of the importance of getting involved in the fight against climate change and the conservation of biodiversity.

In 2023, the environmental volunteering programme was developed in Brazil, Spain, Turkey and India. The aim is to extend this programme from 2024 to increase its coverage to all the group's factories.



## Collaborating entities

In 2023, GRI collaborated with the following institutions:

## Sustainability Policy

The governing bodies of GRI Renewable Industries consider environmental, social and governance (ESG) factors in their choices, to develop as a profitable and sustainable company.

The Board of Directors agreed on the new **Sustainability Policy** on 4 March 2021, which is in line with the Sustainable Development Goals and the combat against Climate Change.

## New policies

- Human Rights
- Anti-Fraud and Corruption
- Risk Management
- Insider trading and insider information
- Relations with Public Administrations



## Code of Ethics and Conduct

During 2023, twenty complaints were received from Spain (5), Brazil (3), South Africa (3), Turkey (8) and USA (1). Since the launch of the **GRI Ethics Channel**, sixty-four complaints have been received. As at 31 December 2023, there are three (3) complaints pending resolution.

### Ethics and human rights training

**+12,000** hours    **+ 2,600** trained employees

**Phone & WhatsApp**
+34 606 558 932

**Web**
https//gri.i2-ethics.com

**E-mail**
ethicalcode@gri.com.es

**Ordinary mail**
Att./ Comité de Cumplimiento
C/. Ombú, 3. Planta 2.
28045 Madrid. Spain

## Risks and opportunities

The **Physical Risks of Climate Change** assessment project started in 2023, with the **measurement** of physical risk factors exposure in all the Group's factories. The project will continue through 2024 with the estimation of the related impact based on the project's defined scenarios and time frames. The project's goal is to determine the Value at Risk related to the effect of climate change on GRI's physical assets and operations.

### Climate risk exposure analysis for all GRI assets based on:

**Time horizons**
- Short term (2030).
- Long term (2050).

**Climate scenarios**
- RCP2.6: Paris Agreement.
- RCP2.8: Business as usual.

**Risk factors analysed**
- Temperature variations (max.).
- Temperature variations (min.).
- Drought.
- Floods (riverine).
- Heat wave.
- Heavy precipitation (rain).
- Heavy precipitation (snow).
- Thawing of permafrost.
- Storm (snow).
- Forest fire.
- Water stress.

## Transparency

### Sustainability ratings

As part of its commitment to transparency, GRI Renewable Industries collaborates with two global sustainability rating agencies.

**CDP**, the leading climate change impact measurement agency, has awarded GRI Renewable Industries a **B** rating for its good performance and the quality of the information reported.

**EcoVadis** monitors sustainability practices in companies' supply chains. In 2023 GRI participated for the second consecutive year in this rating, winning the Bronze medal.

These recognitions demonstrate GRI Renewable Industries' commitment to sustainability as a strategic pillar of its business.

GRI Renewable Industries

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