

ECONOMIC DIMENSION

103-1, 103-2 AND 103-3

GRI Renewable Industries has made an extraordinary investment effort totalling close to 500 million euros since its creation.

This effort allows us to provide coverage to our main customers through innovative and high-quality products, as well as very efficient processes.

Economic Value Generated (EVG) ▶
645 million euros



◀ Economic Value Distributed (EVD)
623 million euros

Industria 4.0 ▶
Cultural Change & Digital
WorkPlace 2019-2021



◀ Innovation
New Innovation Centres in
Turkey and Seville

Supply Chain ▶
Suppliers **100%** evaluated and approved.
15 "in situ" audits





Global context

The mitigation of climate change is a primary challenge for the 21st century. Its achievement is partly subject to an adequate energy transition, which is driven by efficiency and the increase of renewable energies in the energy mix.

Although a reduction in global CO₂ emissions is expected in the long term, the International Energy Agency (IEA) estimates that world energy demand will see an increase of 30% by 2040, with an estimated 3.4% annual growth in the global economy and an increase in population from 7.4 billion to over 9 billion by 2040, complicating the achievement of the Paris Agreement objectives.

Likewise, the messages from the COP 25 (Madrid) are not very favourable. The latest report from the United Nations Intergovernmental Panel on Climate Change illustrates the enormous challenge we face, which requires immediate measures from governments, companies and the society.

The closing statement of the COP 25 stresses “the urgent need to keep the increase in global average temperature well below a 2°C increase above pre-industrial levels” and speaks of “efforts to limit temperature increase to 1.5°C”. However, the agreement still does not clarify how countries will do this, as they are only “encouraged” to present their renewed upward commitments in 2020, before the meeting in Glasgow.

Our sector

Global renewable energy capacity is estimated to increase by 50 per cent to over 1,200 GW between 2019 and 2024, led by solar photovoltaic energy. Thus, despite stagnating in 2018 for the first time in nearly two decades, global renewable capacity will grow again and the share of renewable energy in global power generation will increase from 26 per cent today to 30 per cent in 2024. (Source: International Energy Agency).

It is worth highlighting the notable increase in offshore wind energy, having installed a record 6.1 GW of new capacity in 2019, adding a total of 29 GW, 35.5% more than the previous year. This growth is expected to accelerate, with preliminary forecasts determining that an additional 50 GW of new offshore capacity could be installed by 2024, reaching 90 GW worldwide in the next five years (Source: GWEC Market Intelligence).

Within this new context, innovation and new technologies, which are increasingly competitive, allow for the proliferation of hybrid solar-wind installations, more sophisticated grid management and more efficient storage solutions, raising the prospect of a completely fossil-fuel-free electricity system in the not too distant future.



Also noteworthy are the conclusions of the independent KPMG report “The socio-economic impacts of wind energy in the context of the energy transition” commissioned by Siemens Gamesa Renewable Energy, among which we highlight:

- According to the most conservative estimates, low-carbon energy sources and natural gas will cover at least 80% of the increase in global energy demand by 2040.
- Over the last six years, renewable energies have been the main source of new energy capacity.

Favourable energy policies, along with innovation, play a fundamental role in this growth, with an increasingly important role for offshore wind energy.

The wind industry is at the vanguard of technological innovation and increased efficiency, with higher towers, bigger turbines with longer blades and improved aerodynamics that will, among other things, significantly increase energy efficiency, raising capacity factors.

At GRI Renewable Industries we are in a prominent position within the wind sector, we have a presence in 8 countries, we are collaborating on a new renewable and sustainable energy model, and developing modern, innovative and high-quality wind components, mainly towers and flanges.

By doing so, we contribute to the development of the communities where we operate by reducing pollution and improving access to electricity.

Balance

201-1

In recent years, GRI Renewable Industries has made an extraordinary investment effort totalling close to 500 million euros since its creation. The consolidation of the plants started up in recent years and the beginning of operations in other new plants are foreseen within the fiscal year 2020.

The company's key economic figures are outlined below:

Economic Value Generated (EVG) with a total of 644,934 thousand euros, distributed as follows:

	ECONOMIC VALUE GENERATED (thousand euros)	
	2018	2019
Turnover	386,364	636,827
Financial revenue	3,142	5,308
Other revenue	1,845	2,799
Total EVG	391,351	644,934

Economic Value Distributed (EVD) amounting to a total of 622,917 thousand euros, distributed as follows:

	ECONOMIC VALUE DISTRIBUTED (thousand euros)	
	2018	2019
Operational costs	306,688	481,881
CAPEX	59,604	30,835
Payment to capital providers	7,185	14,336
Taxes	7,638	16,010
Personnel	63,816	79,844
Investments in the community	14	11
Total EVD	444,945	622,917

Economic Value Retained (EVR) with a total of 22,017 thousand euros.

The Net worth of the company is 326,595 thousand euros.

The locations where GRI Renewable Industries is present received a total of 16,010 thousand euros through business rates, taxes and levies, which contribute to improving the quality of life and the services available to the local population. Its distribution per country is given below:

	TAXES AND LEVIES (thousand euros)
	2019
Brazil	2,128
China	8,814
Spain	3,992
India	-460
Turkey	764
USA	-1,074
South Africa	1,846
Total	16,010

The company received 1,819 thousand euros (201-4) in the form of tax incentives by public administrations as shown below:

	TAX BENEFITS (thousand euros)	
	2018	2019
Tax reliefs and tax credits	486	682
Subvention	212	183
R&D	319	251
Financial Benefits	295	703
TOTAL	1,312	1,819

As for other accounting obligations, the companies that make up the GRI Renewable Industries Group are, for the most part, obliged to prepare annual audit reports on their individual annual accounts regarding the total volume of their assets, turnover and average workforce. There are no exceptions to those reports.

Following approval by the corresponding body, these reports are presented, in due time and form, to the Mercantile Register for each financial accounting year, with the legalization of the Official Records and the filing of the Annual Accounts. Furthermore, the companies of the group have no outstanding Social Security, General Treasury or tax payments.

Main risks at GRI Renewable Industries

102-15, 102-29, 102-30, 102-31, 103-1 AND 103-2

At GRI Renewable Industries we work to mitigate and reduce all possible risks through mechanisms integrated in the organization, as is outlined next:



Risk management: new projects

Deriving from possible changes in the company's strategic lines or in the country's situation, such as political or regulatory changes, currency devaluations, changes in energy policies, trade restrictions, etc.

For the development and execution of our new projects, an exhaustive study is done in which all quantitative and qualitative aspects of the project, as well as the potential risks, are analyzed and assessed by the distinct departments prior to their presentation to the Board of Directors.

All proceedings and their derived risks are continuously analyzed by the management and the teams of the company, which allows for their detection and for the quick and agile implementation of correcting measures.

Phases:

1. Data collection (customers, potential business volume, investment costs, regulatory aspects, capital repatriation, etc.). Once analyzed, and if viable, it is brought to the Board of Directors for the next phase.
2. The Board of Directors approves the new project as well as the necessary measures to mitigate potential risks. It is periodically informed about its degree of process by the different main managers.
3. Once approved, all procedures to obtain the necessary permits and licenses, the startup and the outsourcing of the design, engineering and construction activities are initiated, as well as the investment, financing, and purchasing of assets and machinery. Similarly, the selection of the necessary personnel for the plant's operations is started.
4. Once the plant is finalized and starts operating, it counts with "startup teams" from other plants of the group to put the plant into operation together with the local teams.





Risk on financial information

Since 2015, GRI Renewable Industries counts with a “General Internal Control Framework”, based on COSO (Committee of Sponsoring Organizations of the Treadway Commission) methodology, which includes:

- Internal Control Committee and Policy
- Array of Entity Levels Controls (ELC)
- Risk and Control Matrix for each key business process

GRI has documented those processes it considers with risk of material impact on the preparation of financial information. These describe the controls that enable and adequate response to the risk associated to the achievement of the objectives related to the reliability and integrity of the financial information in such a way that the risk of errors is prevented, detected, mitigated and corrected.

The disclosure of processes, flowcharts and matrices is done through the specific portal in Leading the Change, remaining available for consultation by any member of the organization, constituting another working tool.

After the annual risk assessment of the financial information and associated processes, from a qualitative and quantitative point of view, the review of various processes in 11 GRI societies and various processes were defined representing 65% of the (412-1).

During the review process, both training and implementation of the model were carried out, as well as the corresponding tests. The corrective measures and action plans were already implemented at the end of the year, which help to reasonably guarantee the reliability of the financial information and compliance with the applicable standards and legislation.



Risks: confidentiality and privacy

Systems are a fundamental element for the execution of business processes and for implementing strategy, even more in a context of collaboration and innovation based on emerging technologies and in an increasingly turbulent business environment. The systems and the “IT” organization are essential to take advantage of the most powerful wave of digital transformation.

This makes necessary to revise and reinforce our systems with security policies, so that these are less vulnerable and are adapted to changes in personal data protection regulations.



Operational risks

We focus our efforts on keeping and improving the relationships with our customers, adapting ourselves to their needs, amplifying our product and service portfolio and increasing our global presence.

In order to minimize this risk, various technological actions for improvement, innovation and production efficiency have been defined within the Strategic Plan.

All of this with the aim of avoiding faults in the product, management problems, competition problems, etc. and adapting better to the customer’s requirements, without losing the high quality for which we are renowned. These initiatives are detailed in the innovation chapter.

As a result of the control tests, a list of improvements for different company processes was defined in the different processes of the company in order to improve efficiency and homogeneity, most of which have been implemented during the year 2019.



Reputational, ethical and human right risks

These are caused by possible behaviors which are contrary to the guidelines indicated in the policies and codes of GRI Renewable Industries regarding ethics, human rights and anticorruption.

Through the new Management of Corporate Compliance and the managers of the different plants, an ambitious training plan covering the compliance codes and policies for all personnel has been executed.

In addition, a Compliance Committee and the Ethical Chanel belong have been defined to respond to complaints and conflicts that may arise.

Through these mechanisms, we have mitigated the risks and improved communication and management regarding the economic impact of our factories (business opportunities to local providers, employment, improving the local economy, tax payments, etc.).

Respecting to project financing, in 2019, 10 contracts required clauses or commitments of compliance in labour, environmental and human rights matters, directly related to compliance with international treaties and/or the Equator Principles (412-3).



Environmental risks and climate change

The actual environment clearly shows us the risks associated with environmental, social and governance (ESG) issues as the Climate Change, water scarcity and Human Rights, are increasingly relevant. Therefore, it's necessary to incorporate them into the company's decision making, business strategy, performance and management.

Good management of these aspects minimizes risk to reputation, regulation, labor, access to capital and credit, among others.

Among these risks, the one derivative of "Climate Change" stands out. To combat this risk various initiatives have been implemented as the "New Green Deal" from the European Union, the more restrictive regulations in many countries and the demands of all the main customers of the company and the society. All of them provide a clear roadmap towards a carbon-neutral future at two key milestones 2030 and 2050.

GRI Renewable Industries incorporates these demands adapting its strategy and developing a roadmap that allows us to advance along this path, in accordance with the demands of the governments, customers and society.

The new Plan will include innovation and efficiency measures, reforestation, promotion of renewable energies, purchase of energy certificated in origin and sustainability mobility, among others, and it will be published during 2020.

Likewise, precautionary and continuous improvement principles through the Code of Ethics and Conduct, the Integrated Policy and the Sustainability Policy (102-11).



Risks related to health and safety

The Health and Safety of our employees is a key aspect, always present in the decision-making process and in the development of work plans aimed at constantly improving safety and working conditions in all our installations.

We actively manage all identified risks, through our policy, through awareness and training measures, through our management system certified under the ISO 45001 standard and through the IPRL excellence system. We implement preventive and corrective measures to reduce both the probability and the severity of any undesired event that might occur, through common criteria and through requirements which are stricter than those stipulated by the applicable legislation.

This allows us to identify and develop improvement actions that contribute to improving our employees' work environment.

Main risk 2019

- The change in the wind market's pricing model in countries where GRI Renewable Industries has a presence (Turkey, South Africa, USA, India).
- Concerns related to data fraud, cyber attacks and other technological vulnerabilities
- The tendency to concentrate on big customers, which reduces their number of potential customers.
- Commercial risks. The threat of Chinese tower producers and the high tariffs on steel originating from China.
- Risks arising from the USA protectionist policy and Brexit changes.
- Currency devaluation in some countries we are present.
- The growth of environmental, social and governance (ESG) awareness.
- Climate change, natural disasters and illnesses.
- The withdrawal of the most emission countries from the Paris agreement (COP 21).

It is important to remark the enormous risk that we are facing derivative from the Covid-19 pandemic of global dimensions.

Therefore, we started this financial year 2020 with a very uncertain situation for the economy, after its start in China paralyzing all the country, we witness its expansion to the world affecting the population indiscriminately, which produces a standstill in the economy, closing the production and distribution of the most sectors and affecting employment.

The enormous expansion of the pandemic and the lack of information about its duration, make us foresee a very complicated macroeconomic landscape.

Business process support

Systems are a fundamental element for the execution of business processes and for the implementation of our strategy, even more so in this innovative and collaborative environment that relies on emerging technologies in an increasingly turbulent business environment. Systems and IT organization are essential to harness the most powerful wave of digital transformation.

The IT department of GRI Renewable Industries faces a challenging balance between the need for digital innovation on a company-wide scale and the need to maintain and operate with today's most advanced systems and processes in order to maintain operational excellence. 2019 has been a very challenging year in this regard: The Group's centralised **ERP SAP** system, infrastructure services and communications were both maintained and improved, with a focus on business support, efficiency, and profitability. At the same time, transformation projects have been launched to align our business and systems strategy and move forward on the journey towards digital transformation.

The IT Department, in collaboration with the Communication and Sustainability Department, has supported all the companies in the Group. At the same time, and in a coordinated manner, it has worked on the recent challenges the organization faces, which include creating new IT capabilities to increase productivity and efficiency. The department has been actively involved in the workplace through the **Digital Workplace** initiative, a cultural change that embraces technology to improve the way employees work and interact with customers and suppliers, enhancing experience, satisfaction and productivity through collaboration.



Simultaneously, and with the aim of eliminating the innovation "latency", to enable and accelerate the adoption of initiatives in this area, work has been done on adopting new technologies to add IT capabilities and new operating models, such as the so-called "hyper-convergence", which makes it possible to close the gap between the traditional infrastructure and public cloud services and production lines. **Hyper-convergence** provides a "hybrid cloud" approach in an industrial environment, which keeps critical infrastructure and data under GRI control, but allows for their integration with machines at the plants and with applications and data in the cloud. It is an enabler for data collection and process automation, one of the pillars of the digital transformation strategy.

In some cases, in order to manage the scalability of IT capacities, it may be necessary to collaborate with third parties, which are selected through an impartial process of publishing specifications, receiving and evaluating bids and making the final selection based on the quality criteria for business support and system efficiency.

At GRI Renewable Industries we are convinced that information has become a strategic asset for the company and ensuring its security is one of the Group's greatest challenges.



Information security

Cyberthreats continue to grow in ingenuity and frequency, online fraud continues to evolve thanks to new social engineering techniques, and these are responsible for million-dollar losses in companies worldwide.

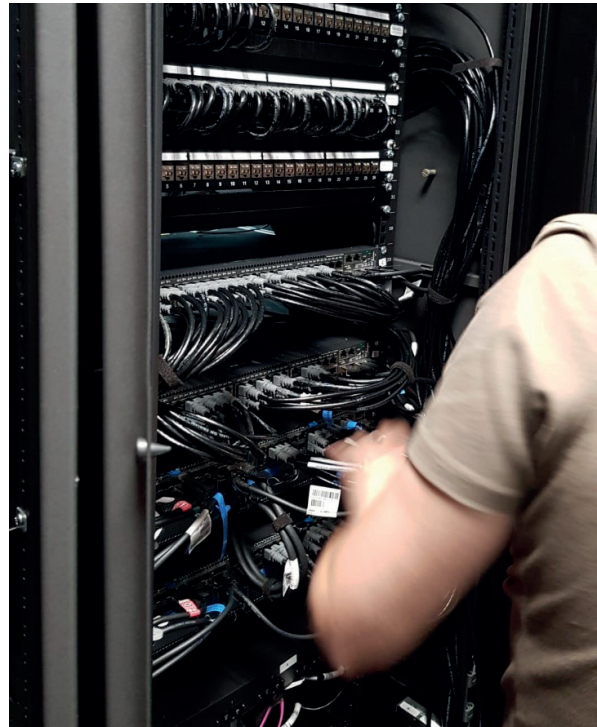
The rapid proliferation of intelligent devices and the connectivity given by the Internet of Things (IoT), coupled with the lack of global security standards makes many of these devices very vulnerable and exposes personal and business information.

This trend is shown by the increase in the kidnapping of corporate computer equipment by hackers, with the aim of "mining" crypto currencies. This is done through a modern malware that is designed to go after business networks which can make these collapse or even damage the hardware.



According with what we mentioned above, also has increased the phishing fraud, so every day it is necessary to adequate all the security policies and the devices with the aim to protect the actives and the people's security.

For this reason, the necessary mechanisms have been established to safeguard information privacy and to protect the data of customers and providers, as well as to manage and treat documentation adequately according to its level of relevance, and to enhance security, information security procedures are periodically reviewed and systems are continually tested to ensure they are secure.



In the year 2019, the following measures, among others, have been taken to improve security policies:

- Periodical system scans to detect external and internal vulnerabilities and their correction based on their level of criticality.
- Diagnosis of information security and its risks based on the ISO 27000 standard.
- To reinforce awareness and training of the group's employees', campaigns and training courses took place.

In addition, training sessions have been carried out in both corporate and plant offices on the risks of connecting to public networks and protecting your personal data, due to the risk this new type of crime poses to people and assets.

We have also continued to support and improve the relevant measures to adapt to the new European data privacy regulations (GDPR) that came into force in May 2018. This implies a more transversal level of supervision on the protection of personal data information.

In addition, new versions of anti-ransomware analysis software have been installed through pilot tests, new tools for cataloguing and protection of corporate information (IRM - Information Rights Management) and for the protection of smartphones or tablets (MDM - Mobile Device management).



Customers and innovation

Our commitment to R+D+I

We understand innovation as a factor of change and adaptation to the new requirements of customers and markets, generating added value to the business and minimizing its environmental impact. Therefore, innovation is one of the strategic pillars of GRI Renewable Industries, contributing to its profitable and sustainable growth.

This commitment is embodied in the R+D+i team, with an increasing number of qualified professionals, and in the constant search for opportunities and improvement projects, which allow us to anticipate the market, offering differential and more efficient products, in line with new technological trends.

We are currently involved in different national and international projects, including our participation in REOLTEC (Wind Industry Technological Platform), in which we coordinate RGD+I activities that respond to the needs of the sector.

Also significant was the start-up of the "RGD Center" in Turkey, integrated into the GRI Tower Turkey facilities and the launch of the "Elcano University Innovation and Training Center" project in the Port of Seville.

GRI Towers Sevilla and the Centro de Innovación y Formación Universitario Elcano

Started in 2018, GRI Renewable Industries is proud of the final approval of the project for the creation of the "CIUSA University Innovation and Training Center" in the Port of Seville.

The project is leading by the University of Seville and together with the Universities of Alentejo and Algarve, within the INTERREG V-A SPAIN-PORTUGAL funds (POCTEP 2014-2020) and supported by the Seville Port Authority.

GRI Renewable Industries plays a key role in the development of wind component research projects and in the training of future professionals in the sector.

The Centre will take residence in buildings and warehouses located in the area conceded to GRI, as well as in other buildings still belonging to the Port Authority, and will have a testing area, laboratories, a welding area and training areas.

Its close proximity with GRI Towers Sevilla is a fundamental lever for the company's strategy to promote the Innovation and Development department for new tower designs, as well as to make improvements in production processes and, through these, increase our competitiveness.



RGD Center at GRI Tower Turkey

En 2019 it will be completely operational. Located in the GRI Tower Turkey facilities, it has a multidisciplinary team of 11 researchers, 7 technicians and support staff, who together with various professionals will work on the design and development of all the process engineering.

The aim of the innovation center is to improve the machinery used in the production of wind towers and, thus, to reduce production cost and to obtain a higher quality of products. Therefore, this will allow for increased cooperation with the suppliers and customers in terms of designs and production matter, also to improving the global efficiency in order of implementing the improvements achieved in the rest of the factories.

RGD team is already developing different equipment for the multiple critical processes of tower manufacturing with very satisfactory results. This shows the importance of the innovation in our sector, not only externally through different collaborations, but internally with the aim of serving as a reference in advanced manufacturing processes to achieve the operational excellence.

For its development we have the collaboration of prestigious universities such as "Balkesir University". Also, this year GRI Towers Turkey attended the 7th Award Ceremony for Technology Development and RGD Centers where it received the "certificate of approval of the RGD Centre" from the Turkish Ministry of Industry and Technology.



Customers: product innovation

The success of GRI Renewable Industries is based on its capacity to identify and meet its customer needs. As the only supplier with the capacity to design and manufacture new prototypes of towers and flanges, innovation plays an essential part.

Because of this, we have highly qualified innovation teams, who focus directly on improving our products, on process efficiency and cost reductions, while keeping to our high safety and quality standards.

Through innovation we design lighter and more efficient products. This allows us to optimize the costs of wind energy, being more competitive by improving the standardized cost of electricity (LCOE) compared to other renewable energy sources, thus contributing to increase the profitability of our customers.

Closeness to the client is a fundamental aspect, for that reason we are committed to the personalization and the constant improvement of our service through our commercial teams, specialized and adapted to each type of business, client, country and product, which allows us to provide a more specific coverage.

To ensure quality and excellent service, we have a Corporate Quality Policy, which is why all plants are certified under international quality standards. The plants of GRI Towers Turkey and GRI Towers Seville have updated the standard to the new version 2015 and the rest are in the process of being adapted. Most of GRI Renewable Industries' factories are also certified under the EN1090 standard, and, consequently, our products have the CE conformity declaration.

Due to the classification of our products and services, their evaluation on health and safety matters is deemed non-applicable (416-1).

In addition, we follow a rigorous procedure of approval and control of suppliers to ensure the proper receipt of raw materials, components and equipment according to our requirements.

We are aligned with the development of the new models of towers and flanges that are more versatile, efficient, eco-

nomical and easy to develop, transport and assemble. This year we have reinforced our commitment to our customers by designing new towers with lower weight and, thus, lower costs, without compromising their resistance that will allow the construction of more modern wind farms with less impact. Among them, we highlight the following:

- Started in 2018, we continue with the Forestalia project as the company awarded a large part of the future parks of the Government of Aragon, where this year we have delivered 220 new towers of 85m high and three sections. The factories of Turkey, Galicia and Seville participated in the project.
- Thanks to the success of the first project, Enercon reconfirmed its confidence in GRI by granting a second and important project where we delivered 49 towers of 131 meters high, manufactured in Brazil. Likewise, we started a new project for Sweden for the year 2020.
- In Seville, upcoming manufacture of the first 125-meter-high offshore tower for Vestas, the world's largest OEM. Also with Vestas, three new towers designs were defined for manufacture in 2020, where we achieved an 8.5% reduction in weight, also to designing 14 new prototypes to be built in all our factories. Likewise, the homologation process for the new client MHI Vestas is being completed for the supply of towers in two new projects.
- GRI Towers Sevilla has new orders from GE for their projects in USA.

Regarding the flanges production, it has put in operation from successful way the new rolling line at GRI Flanges Iraeta, started in 2018, with an investment of 16 million euros. This will allow us to go one step back in the supply chain, manufacturing the steel bars directly. Also, the approval of a new welded flange for offshore projects for Siemens Gamesa and GE are in their final phase.

Finally, it is highlighted the manufacture and deliver of the first forged flange with more than 15 meters of diameter in China factories, the biggest forged flange manufactured ever made.

New rolling mill at GRI Flanges Iraeta

The rolling mill is now fully operational and is able to produce steel bars in multiple sizes, perfectly adapting to the needs of the plant and which is primarily used to manufacture flanges for onshore and offshore wind towers.

During the process, the raw material is heated in the furnace (at about 1250°C) and then compressed/rolled in a roller box, where it is given its final format, square or rectangular bar.

The installation, and its product, has been the object of audits and qualifications in conformity with the APQP4Wind platform with customers such as: VESTAS, SIEMENS GAMESA, GE, OERSTED, MVOW, etc. In addition, it is certified under the standards ISO9001, ISO14001 and EN10025 + CE MARKING.



Innovation in processes

At GRI Renewable Industries we believe that technological investments and continuous improvement through innovation are part of our culture and bring us significant benefits, including quality as excellence, worker safety and better control of results (data collection, analysis and management).

Likewise, these projects have managed to generate significant savings through improvements in processes and reductions of the consumption of raw materials, natural resources and the generation of waste, emissions and spills, thus contributing to the circular economy.

The initiatives undertaken fall into two different categories: on the one hand, improvements in production processes and, on the other, digitalisation and Industry 4.0 projects. Below we summarise some examples:



Improvements in processes

For GRI, adapting to customer needs is a priority. A clear example are the various changes made in Brazil to adjust to the **new production and design requirements** for the towers of the Enercon project, which made it possible to significantly optimize the processes.

Projects focused on efficiency, improvement of safety and working conditions, quality and minimization of resources, among others, are being developed in different factories.

A system was developed to monitor and control boiler-making **consumables** (welding, painting, etc.), which includes the training of operators in their correct use and proper recording. In the facilities where the system was implemented, a 10% saving in consumables was observed with respect to the previous year.

We have improved the **logistics** process. In some facilities, the management of the finished sections under the existing distribution was very long and complex. For this reason, a project was drawn up for the redistribution and reorganisation of the sections in stock, which allowed for a significant reduction in times and the minimisation of worker exposure risks.

The flange **painting** process, as it was set up, required a significant amount of paper and working time to cover parts of the flange. Polyamide templates were designed to cover the surface of the flange quickly and efficiently by using magnets. This implies a notable reduction in painting times and paper use, thus avoiding the management of this waste.

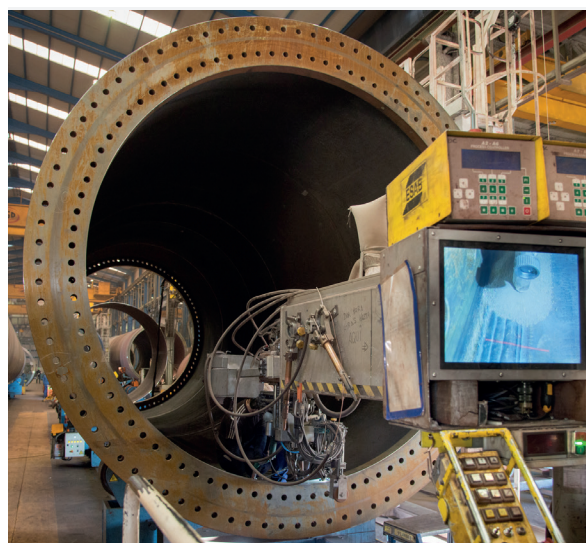
With regard to air conditioning, another of the upgrades made to the facilities was the total enclosure of the **boiler-making** area. This allows a significant improvement in comfort for workers and significant energy savings in air conditioning.

Minimizing **waste** is also a priority. We have made a pilot project where, with a simple adaptation to the machines, it is possible to replace the 100kg consumable containers with others of 1000kg. This initiative significantly reduced packaging and waste management costs, and increased efficiency in the use of raw materials.

To improve productivity and reduce power consumption, several adjustments were made to the plasma cutting machine to balance the use of oxyfuel, reducing manual **beveling**. Depending on thickness, application of the manual passes on the bevels for an adequate finish varies. If there is a greater thickness, the process time increases significantly. Therefore, this improvement results in a reduction of the time and the surface area of operation, improving productivity by around 20% and electricity consumption by 50%.

A pilot project based on the modification of the joint profile on the flange bevels has been developed. The new design significantly reduces the welding space and, therefore, the welding consumables, improving the quality of the finishes. It is estimated that there will be a reduction of around 35% in welding wire. An additional time reduction of 20% was made in some factories by reducing the thickness of the welding wire.

To improve the working environment, the **flux dust** collection and filtering system was modified from the previous open design with diffuse emissions to a closed recirculation model, resulting in a cleaner working environment without emissions.



Digitalization and Industry 4.0

In 2019 we continue to be immersed in the **Industry 4.0** project and in the **digitalization** of the manufacturing process in all its phases.

These actions allow us to improve standardization, to be more flexible and to adapt to customer requirements in a personalized manner, shortening design, manufacturing and sales cycles, through faster and more efficient production series, with less environmental impact. In this area, the advances made at the innovation centre in Turkey are noteworthy, as summarised below.

The **"MES" project** was designed to integrate and digitize all the information about the processes from multiple channels and variables; exploit it, optimize it and perform "Big Data" analysis in real time.

The **"Camera Assisted Fit Up"** project which, through a system with a camera, laser, and a projector, simplifies the joining of the ferrules by observing the joining points in detail, improving precision and time.

The **"Counter Flow & Re-works - VT"** pilot is being developed, where the material and the weld are inspected using a laser and 2D and 3D cameras that detect millimetre defects. This allows for a more precise identification of defects during the initial inspection process and their automatic marking with an ink mark, with the consequent savings in time and raw materials.

Another problem identified in the initial phase of the process is caused by dirt from the received steel sheets. Therefore, a new installation has been designed to clean these sheets by sandblasting (**wisebrush**) to remove the dirt. This improvement also allows to visually detect possible failures from the beginning of the process and to improve the working environment of the operators.

Welding is one of the key processes at GRI Renewable Industries and this is why we are involved in several improvement projects. The implementation of a new laser stands out, which makes it possible to mark the exact welding point of the internal parts of the tower, optimizing and reducing time, the margin of error and improving the working environment.

Through the **WWS** program we are able to improve monitoring, control and error detection in the circular welding process. This initiative allows us to store all records, which improves the detection of possible errors and the high quality of the finishes. It should be noted that the automatic machine for welding interiors on cylindrical surfaces has already been implemented with great success in 100% of the tower factories.

In order to enhance the automatic welding of the door frame, the **"Cartesian CNC"** project allows us to improve and adapt the machine used in the cutting and welding process of the door frames of a wind tower. Among its advantages are the optimization of operation times, finishes and safety conditions, thus reducing risks in the working environment.

With regard to the **painting** process, a project was developed to automate the interior painting process (the exterior process is already automatic). This results in significant savings on raw materials by significantly reducing paint consumption (between 15-18%), a more homogeneous paint distribution on the surface and minimizes the risks of worker exposure.

Also, due to its adverse conditions (heat, dirt, etc.) the manual process of internal **blasting** is a logical area for improvement. A new design allows us to automate the process, increase its efficiency, improve the quality of the finishes and reduce the effort required to complete the entire section. This is all done in a cleaner industrial environment with numerous direct and indirect benefits for both maintenance work and human health.

Significant improvements are also being made at the Corporate level, including the **"Standardization Project"** which aims to unify general documentation and processes, including welding processes in collaboration with the IT department.

Ultimately, process improvements allow us to improve product quality, delivery times and control of the supply chain, along with some product improvements that allow us to reduce weight and the total landed cost, as, by reducing raw materials, we contribute to the optimization of customer coverage.



GRI Renewable Industries App

GRI Renewable Industries is constantly engaged in the digitalization process, which is transferred and applied to its business model and focuses on providing employees with the best tools to conduct their work.

When the GRI 4.0 Intranet was rolled out, the "GRI Renewable Industries App" was launched. Available on both Android and iOS devices, it provides easy access to all personal content and improves connections with colleagues at any time and from anywhere.

Cultural Change & Digital WorkPlace 2019-2021

Collaboration

Foster
Collaboration
Culture



Cloud

Work
Anytime,
Anywhere



Engagement

Increase
Employee
Engagement



Efficiency

Boost
Personal
Performance



Innovation

Company
Intelligence
Powered



“Digital WorkPlace” project began in 2019 aiming to embrace Microsoft technology and provide employees with the Office 365 tools to continue advancing in the company’s digital transformation.

It is a process that demands an important management of the cultural change of the whole company, in a collaborative environment that allows to approach successfully this challenge of incorporating the new digital technologies, but another piece of an ambitious project throughout the company in these 3 areas:

- **Digital Competences:** increase digital competences, knowledge and skills to adapt to a constantly changing market and environment.
- **Digital Workplace:** define how new technologies may improve the way of working in all aspects.
- **Digital Experience:** boost digital agility in all work aspects.

The main change derives from the integration of Outlook, OneDrive and SharePoint tools in the Office 365 platform. The project is aligned with SDG 9 and our innovation and digitalization strategies.

It’s been implemented based in two approaches:

On the one hand, transfer all the information to the new platforms, where:

- Migration of all the information hosted in the document manager into the new SharePoint platform, updating admin profiles and adapting the access to each group to the new available profile options.
- Each user migrated its personal information into OneDrive.

On the other hand, all employees were encouraged and trained to use this new technology. To this effect, a thorough implementation and training program was developed, including a number of initiatives and training materials, enabling to conclude with great success the first stage of the DWP adoption project. The main milestones are shown below:

“Digital Champion” campaign

The implementation of the project began in March with the “Digital Champion” campaign. This aims to identify collaborators in each area and country where the company is present; based on an active, open, constructive, and motivated profile of employees who do not fear technology.

Once identified these profiles, it was formed a group of more than 50 Digital Champions spread through all the countries in which Gonvarri is present. This group became a very active asset of the project, playing a key role of functional support and assistance to final users during the transition process.

The group received specific training to provide them with the necessary knowledge and tools to enable the identification and problem resolution, feedback compilation on the identification of the main resistance to change.

With the support of these team of Champions, the following training stage in the usage of DWP tools began. To this effect, a number of activities were developed, to mention some.

Workshops in offices and factories

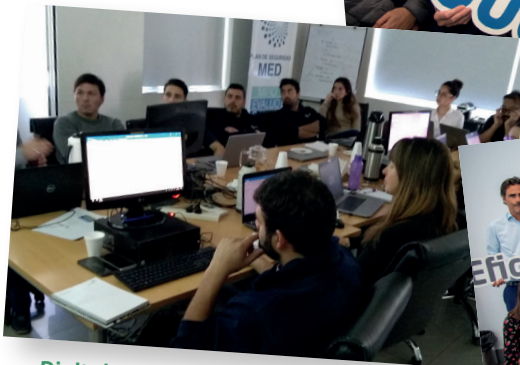
A series of workshops were designed and developed in offices and factories between April and December aiming to motivate and train employees in a fun, easy and comfortable way. 2019 workshops were held in our offices in Madrid and factories of Galicia, Seville, Texas, Argentina and Brazil. In 2020 the rest of the factories will be visited.

All of them consisted in an introductory speech explaining the corporate history in the adoption and technological evolution processes and the development of playful dynamics on DWP. Afterwards, attendees took part in a tour with five experiences based in the five pillars of the project: Collaboration, Innovation, Efficiency, Commitment and Cloud.

- Organized in groups by departments they discovered the voice-interaction technology and the different concepts and features of the DWP at the **Innovation stand**;
- They made suggestions of the features they would like to find with regard to the new digital tools at the **Efficiency stand**;
- They experienced the coedition at the **Collaboration stand**;
- They took selfies and learnt about the new features of the mobile App at the **Commitment stand**.
- And they addressed the new Intranet and the vision "Work anytime, anywhere" at the **Cloud stand**.



Digital Workplace Day 2019 Madrid
April 23, 24 and 25



Digital Workplace Day 2019 Argentina
September 18



Digital Workplace Day 2019 Madrid
October 2nd



Digital Workplace Day 2019 GRI Brasil
October 9



Digital Workplace Day 2019 GRI Towers Texas
October 23



Digital Workplace Day 2019 Sevilla
November 7



Digital Workplace Day 2019 Galicia
November 11



+500
N° of attendees to
the Workshops



+500
N° participants in
the webinars



8
N° of training
hours per person
/ Audiovisual
Materials (all
languages)



3,200
N° of video
displays

*Digital
Champion*
65
N° Champions



5
N° of training
hours per
person
Presential

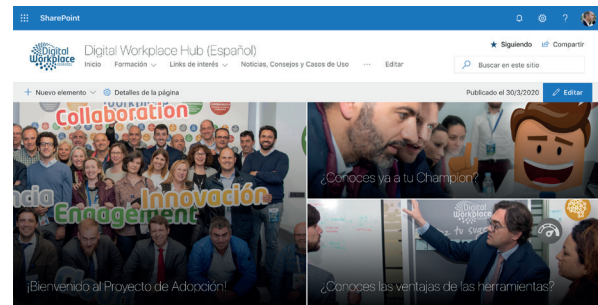
Training

On site: developed by experts during the different stages of the project, aimed at different target (managers, champions, employees, and so on). They were shown and explained the use of the tools and had the chance to actively test them.



Digital Workplace Hub

The Digital Workplace Hub is a SharePoint site That gathers all the information with regard to the DWB project. There all employees can access to DWP training materials, FAQs documents, webinars, training courses hosted in GRI Academy, tips, calendars, the Digital Champions network, feedback, and so on.



Herramientas de Microsoft



Online training - webinars: online live training for multiple groups of employees. This training consisted of a brief description of the tools and its advantages, as well as a detailed description of its usage and a wide range of possibilities they offer.

Videos: Videos presenting and summarizing DWP project.

Videos - píldoras formativas: short videos in the shape of case studies to explain specific aspects and advantages of the new tools.

GRI Academy: platform that offers training of the different tools of the Digital WorkPlace, its features, benefits, tips, etc.

Various

Referential training guides for Outlook, OneDrive and SharePoint: these materials include manuals that cover all the usage instructions and the different functionalities of Office 365 tools in a very simple and graphic way.

Frequent asked questions (FAQs): documents that gather the most common queries about these tools, general tips regarding their usage and questions that other colleagues have made which are every bit as useful.

Tips for the tools: Tips to get the most out of the Outlook, OneDrive, SharePoint and Office Suite tools.

Satisfaction Survey: Surveys to know the opinion off the employees about the materials and actions performed.

Management of Supply Chain

102-9

GRI Renewable Industries' suppliers are an indispensable asset within the value chain, both for their importance in project planning and for the company's cost competitiveness.

Therefore, our purchasing model aims to have the best suppliers, managed through procedures that ensure transparency, fair conditions, respect for human rights and long-term relationships.

Purchase management is centralized in the corporative "Supply Chain" division, which integrates the following areas:



Procurement

This is the first link in the chain. It is their role to ensure that suppliers are compliant in time and form, meet deadlines, monitor costs (based on previous planning) and encourage the use of the latest technologies to optimise supply chain management.

In each project they establish continuous and fluid communication and manage the risks until the reception of the material in the plant.

To comply with these requirements, meetings are held and monitoring templates are shared, to facilitate the identification and minimization of risks.



Purchases

We differentiate purchases into two types based on their characteristics: direct and indirect. In both groups it is essential to meticulously follow our purchase procedures which are based on the parameters of the group's general purchasing conditions. These conditions safeguard us in the service we provide and in the most significant measures linked to our responsibility to sustainability.

Direct Purchases

All these purchases are strategic and therefore managed from the corporate headquarters in Madrid. In all business lines there is a wide range of product families.

Steel, in terms of volume and cost, is our main raw material. For this reason, we only work with suppliers which are adequately calibrated in the market and that contribute a differential value to GRI.

As steel processors, we are very proud of our strategic relations that tie us to other steel providers, by dedicating a great deal of effort to ensure that these relations are long-term and present a competitive advantage to both parties.

Apart from steel, other products fundamental for our competitiveness stand out, such as: internal tower parts, door-frames, flanges, etc. for which we seek global and strategic partnerships.

Indirect Purchases

For purchases related to investments, supplies and services there is a selection process based on service quality criteria, market positioning, competitive advantage and risk prevention.

Depending on the nature of the purchase, especially the synergy and reiteration of the same at a global level, these purchases are managed from the corporate or from the plants at a local level. That said, there is always monitoring of these purchases to ensure that they are executed under the group's procedures/standards and to identify new synergies and/or opportunities for improvement.

We seek to develop relations with suppliers to assure that the company has a cost and service advantage over its competitors, and at the same time to build a creditworthy and fruitful business for the supplier.



Supplier quality

This is done at both the corporate level and at each of the plants. The department is responsible for the certification/auditing of suppliers, complaint management and remedial action development, which allow us to ensure that products and their providers live up to the Group's standards.

To reinforce these issues, reduce complaints and align our suppliers with group standards we deployed numerous initiatives. We should mention the new "Online Supplier Portal", developed in collaboration with the company "FullStep pro" which is integrated into SAP.

This new platform allows for immediate registration and access to each supplier's portal, where they update their information and certificates. The homologation requirements are defined and adapted to the different categories of materials / services and supplies that are provided, categorizing as critical or non-critical. At all times, suppliers are informed on their current status, for instance: certification nearing expiration, documentation pending, additional data to be provided, valuation, etc; or even on the non-conformities they have.

The homologation requires that 100% of the suppliers provide certain data and evidence, which we believe guarantees that we can choose the best suppliers in the market. This information includes, among others, aspects of sustainability, ethics and compliance, human rights, availability of environmental, quality and safety and health certificates, absence of conflicting minerals, Reach compliance, etc.

In addition, in accordance with the procedure for "Control of suppliers for processes, products and services", for the suppliers of subjects considered "critical", an onsite audit is carried out that verifies conformity on the requested matters as well as a "First Piece Qualification" (FPQ) inspection focused on the product.

The final evaluation of the suppliers includes and weighs the result and the degree of conformity of all these requirements, and depending on their result and classification, different measures are established.

For those with lower ratings, action and improvement plans are defined, monitoring tasks and plans are drawn up in order to make them reach the good or excellent category.

All suppliers, once approved, are periodically evaluated each semester as a control mechanism to maintain their classification.

With regard to audits and inspections, these are always repeated whenever any incident occurs, a new product is required, any change is made to the process or any other cause that calls for their repetition.

It should be noted that some customers, among their contractual conditions, establish which suppliers and materials are to be used for the towers, which, in these cases, substantially limits our decision-making capacity. Similarly, in order to create local value, in some countries we find suppliers with whom we work closely, with which we increase control measures in order to minimise any risk, and with which we define action and improvement plans in order to improve their results in the assessment.

Evaluated suppliers

In 2019, work has been done on the implementation and use of the new portal web as a tool for the control of the approved suppliers. Therefore, it has been contacted all the Group's suppliers, providing them with information and support so they can register, as well as uploading all the documentation required for the approval, depending on the type of the material they supply or the services they provide.

A total of 232 suppliers were registered of which: 51 are classified as fully reliable, 45 are considered of minimal risk and 61 as medium risk.

The remaining suppliers are in the process of completing registration. The continuous improvement in the qualification of suppliers to achieve the maximum score is a milestone that the SQA area is pursuing day after day.

In addition to the evaluation, 15 "in-situ" audits, both for products and processes, were conducted by the purchase teams from the Plants and Corporate (308-1 and 414-1).

No operations or suppliers with significant risk of child labor cases have been identified (408-1).



Logistic

This department focuses on the reduction of transportation costs (for acquired goods, as well as for the finished product); thereby improving service and creating competitive advantage over competitors in the sector.

Within the multiple transports carried out, it is worth mentioning that in 2019, 9 complete ships were chartered, with 270 sections and 16,000 tons of finished product.

Additionally, this department centralizes all information related to tariffs and taxes associated with the movement of goods, which is of increasing relevance.





Expenditure in local suppliers

204-1

GRI Renewable Industries contribute to the development and generation of wealth in the communities of the countries in which we are present through expenditure in local providers.

No negative social impacts have been detected in the supply chain, therefore no measures to eliminate/mitigate these effects were necessary (308-2 and 414-2).

In 2019, supplier spending reached 594,464,938 euros, 74% of which corresponds to local agents.

	EXPENDITURE IN LOCAL SUPPLIERS		
	Total supplier's expenses	Local supplier's expenses	Local supplier's %
Brazil	92,971,922	88,246,692	95
Spain	173,092,723	40,670,878	23
India	15,755,160	13,886,163	88
Turkey	45,442,146	40,947,487	90
USA	54,733,369	50,331,406	92
South Africa	27,153,717	20,937,655	77
China	185,315,901	185,315,901	100
TOTAL	594,464,938	440,336,183	74

Main achievements in 2019

Within the numerous goals achieved in 2019, these are the most relevant:

In the **Purchases** and **Procurement** area:

- Acquisition of machinery and construction works for the extension of the plant in Turkey achieving a manufacturing capacity of 320 towers.
- Acquisition and commissioning of a new standardization furnace at GRI Flanges Iraeta that will reduce gas consumption as well as improve the process.
- Management of suppliers for the development of new clients in the portfolio. (Enercon, POMA...) in GRI Brazil and GRI Galicia.

- Monitoring and management with suppliers for the manufacture of the first Off-Shore project in GRI Towers Sevilla.

In the Suppliers **quality**:

- Implementation of the new "Full Step" tool, to follow up on all suppliers in the group's portfolio. Use of this tool as a single database for the management of approved suppliers, transferring the information previously managed by other means to the new platform.