SUSTAINABILITY
REPORT
2022

OUR ENERGY FOR A SUSTAINABLE FUTURE

EF SOLARE

INTERACTIVE PDF

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LETTER TO STAKEHOLDERS

We are proud to present the fourth edition of the Sustainability Report, the story of our work and efforts in the energy transition, supporting territories and communities.

In 2022, the ramifications of the Russian-Ukrainian geopolitical crisis made the need for huge concerted efforts in the development of renewable sources even more urgent. Disruptions in the procurement of fossil fuels highlighted the advantages that these sources not only provide for decarbonization, but also for energy security and independence. In this context, the political initiatives undertaken by the European Union were aimed at accelerating the growth of renewable energy sources in order to achieve increasingly more ambitious targets. The REPowerUE plan, approved following the invasion of Ukraine by Russia in February 2022, intends to put an end to dependency on Russian fossil fuels by 2027, increasing the share of renewables in final energy consumption from 40% to 45% by 2030.

As many industry experts observe, in the light of difficult socio-economic circumstances, now is the time for renewables more than ever. EF Solare, as a primary photovoltaic operator in Europe, is fully aware of the great opportunity and responsibility resulting from this situation.

For this reason, our corporate strategy is being developed with the awareness of the challenges we find ourselves facing, always keeping a focus on the needs and requirements of the areas and communities.

A concrete example of this is **our innovative Agrivoltaic 2.0 model**. Starting with our ten-year experience in photovoltaic greenhouses, we have developed an open-field, zero ground consumption agrivoltaic model, capable of producing clean energy, developing the agricultural land, reducing the water footprint for cultivation, and creating new jobs. Establishing a constructive dialogue between farmers, industry, and institutions is vital for us in the development of projects capable of creating shared value. For this reason, during the year **we have taken part in the public debate** (also in trade associations), in order to disseminate the culture of sustainable and high-quality agrivoltaics. We have also taken part in the definition of the **European Symbiosyst research project**, coordinated by Eurac Research, dedicated precisely to the search for a standardized and cost-effective agrivoltaic model.

In 2022 **our industrialization process aimed at developing the photovoltaic plants in the portfolio also continued**: Revamping activities were carried out for modules and inverters for a total of 106 MW, to which 2 MW of repowering was added; a multi-year retrofit plan was launched for inverters that involved 196 MW; the in-sourcing process for Operations & Maintenance (O&M) continued with the in-house management of 87 plants totalling 227 MW. Added to these activities was the important reorganization and change management project for Operations which led, among its first effects, to the reorganization of the Asset Management area.

Spurred on by the ambitious revamping program, in the last two years, we had to measure against **the management of the end-of-life of a large volume of photovoltaic modules**, in a market context that is not yet fully mature.

To respond to this challenge as best as possible, in 2022 the company implemented a series of preparatory activities for the prompt definition of the adequacy requirements of suppliers and the criteria for the subsequent monitoring of activities.
2022 was the year in which we launched a **digital procurement platform**, which integrates the social and environmental evaluation of suppliers in an overall derating system. The objective is to evaluate suppliers according to circular economy principles and on the basis of their commitment to decarbonization issues.

Not least, we are continuing with the conviction of creating a corporate climate that can be the motivation for the growth of our human capital. **Listening, developing and a team spirit are the values that guide EF Solare in our relations with our people**. It is the people that make achieving our goals possible. Among the many initiatives carried out during the year, an important moment in listening was definitely the launching of a survey aimed at identifying the needs and demands of employees. From the findings, various projects were established aimed at improving corporate awareness and interactions between colleagues, such as the creation of the corporate intranet and the “Conoscersi” (getting to know one another) project.

We have achieved these and many other goals in 2022 and we expect 2023 to be equally full of ambitious challenges to be faced with passion and enthusiasm.

Happy Reading

Paolo Duiella
President

Andrea Ghiselli
Chief Executive Officer

PROFILE OF EF SOLARE

SECTOR LEADER

EF Solare, primary photovoltaic operator in Europe, has consolidated its leadership role in promotion of the energy transition over the years, thanks to its business model focused on technological innovation, operational excellence, and human capital.

The company's portfolio is composed of **more than 300 utility-scale photovoltaic plants, with a total installed capacity exceeding 1000 MW**.
The shareholding structure of EF Solare is made of two shareholders that support its growth and development: F2i - Fondo Italiano per le Infrastrutture, the largest infrastructure fund operating in Italy, which owns 70% of the company and Crédit Agricole Assurances-Predica, the leading French institutional investor in renewable energy, which owns the remaining 30%.

318
PLANTS

1.048 MW

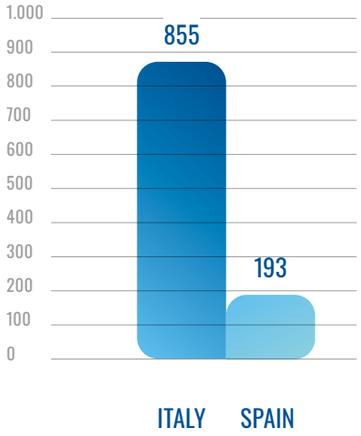
In 2022, EF Solare continued to operate at the service of the community and the territories, in the awareness of how crucial its contribution is in achieving the European decarbonisation and energy transition objectives.

DEVELOPMENT AND INTERNATIONALISATION

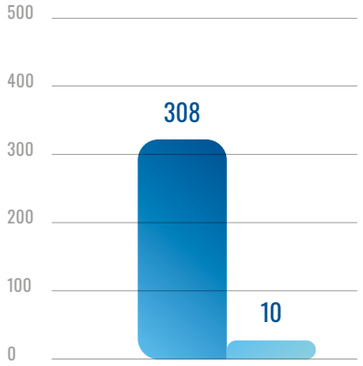
With **the acquisition in 2020 of Renovalia**, one of the most important Spanish operators in the field of renewables, EF Solare has started an internationalization process, with a strong strategic significance, placing the company among the major European producers of solar energy. The activity in Spain continues with maximum attention paid to the development plan for new plants that will keep the team busy over the coming few years.

2022 HIGHLIGHTS

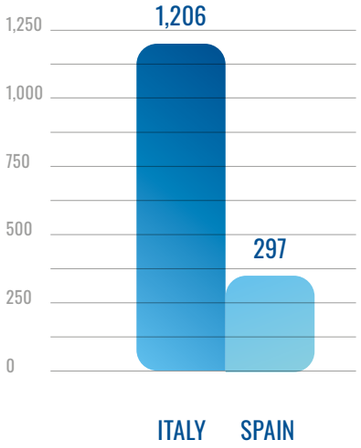
INSTALLED CAPACITY (MW)



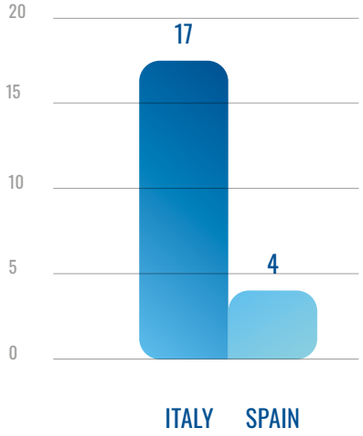
OPERATING PLANTS



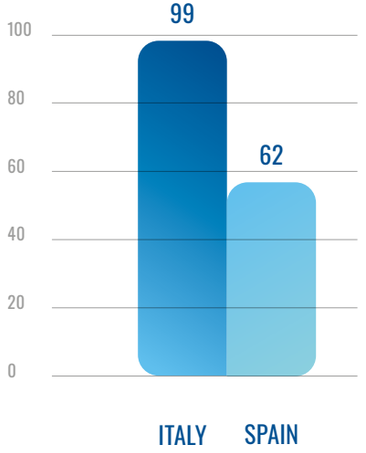
ENERGY PRODUCED (GWH)



N. REGIONS IN WHICH PLANTS ARE PRESENT



EMPLOYEES



OUR HISTORY

2009

F2i establishes HFV, the JV with the Novenergia fund dedicated to investments in the photovoltaic industry in Italy.

2015

The JV with Novenergia ends and EF Solare Italia is established, an equal joint venture between F2i and Enel Green Power with an initial portfolio of 252 MW.

2018

F2i acquires, and confers on EF Solare Italia, the second largest photovoltaic operator in Italy: RTR, with 134 plants and a total power of 334 MW. The JV with Enel Green Power ends.

2020

The acquisition of Renovalia, the leading Spanish solar operator, is concluded by EF Solare Italia. 102 MW of operating plants and 879 MW relating to projects under development are acquired.

Publication of the first Sustainability Report and launch of the action plan to strengthen EF Solare Italia's sustainability profile.

2021

Crédit Agricole Assurances, the leading French institutional investor in renewable energy, together with CA Vita, its Italian subsidiary operating in life insurance, acquires 30% of the share capital of EF Solare from F2i Sgr, the leading Italian infrastructure fund.

The installed capacity reached over 1 GW when the new El Bonal photovoltaic plant in Spain came onstream.

ISO 14001 and ISO 45001 certification obtained for the management of environmental impacts and worker health and safety.

2022

Revamping and repowering plan continued: 78 MW of module revamping, 28 MW of inverter revamping, 2 MW of repowering.

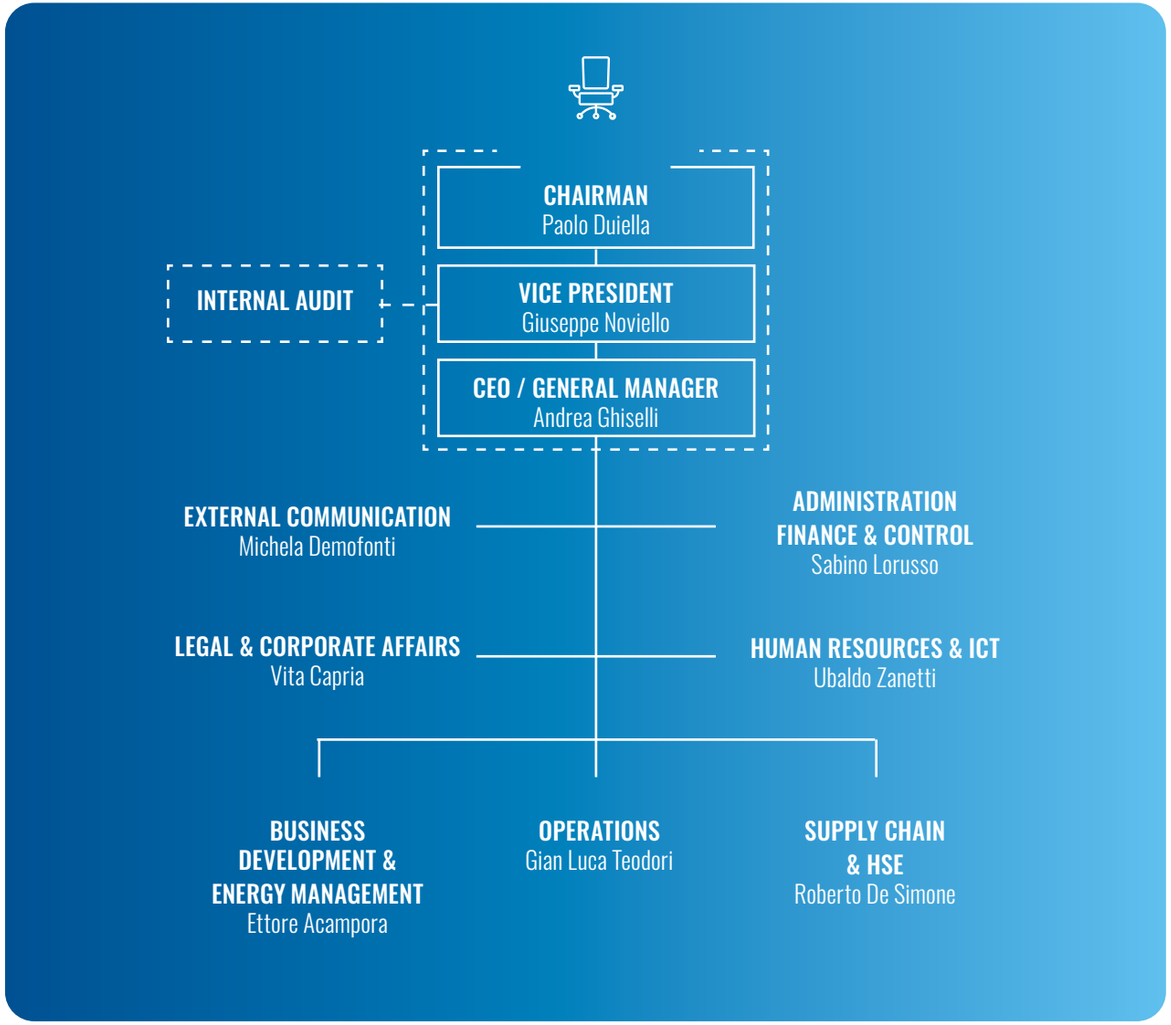
Confirmed the commitment to disseminate knowledge of agrivoltaics and our innovative model in the open field.

Promotion of a listening process for employees and initiatives dedicated to the training and development of human capital.

ORGANISATIONAL STRUCTURE

Sabino Lorusso, in the role of Chief Financial Officer, and Ettore Acampora, in the role of Head of Business Development & Energy Management, joined the organizational structure during 2022. They will focus their activity respectively on the strategic development of attractive investment opportunities and on the promotion of innovative business models and solutions.

With regards to the Operations sector, the operational core of the company, **2022 was characterised by numerous activities aimed at continuing the process of internalisation and industrialisation of the company**, pushing the Group to define a rational and scalable structure in each of its areas: a flexible model, capable of adapting to varying needs and opportunities. Among these activities is the launch of a process of reorganization and change management, which, among its first effects, led to the reorganization of the Asset management area. The aim of this redesign was to develop a new model capable of optimizing internal processes and increasing the profitable interaction with both suppliers and stakeholders.



OUR SOLAR PLANTS: PERFORMANCE AND EFFICIENCY

Having grown in recent years, especially thanks to the acquisition of existing plants, EF Solare has changed its strategy, directing it towards overseeing the entire value chain, starting with the development of new plants.

There are three main strategic priorities for EF Solare Italia:

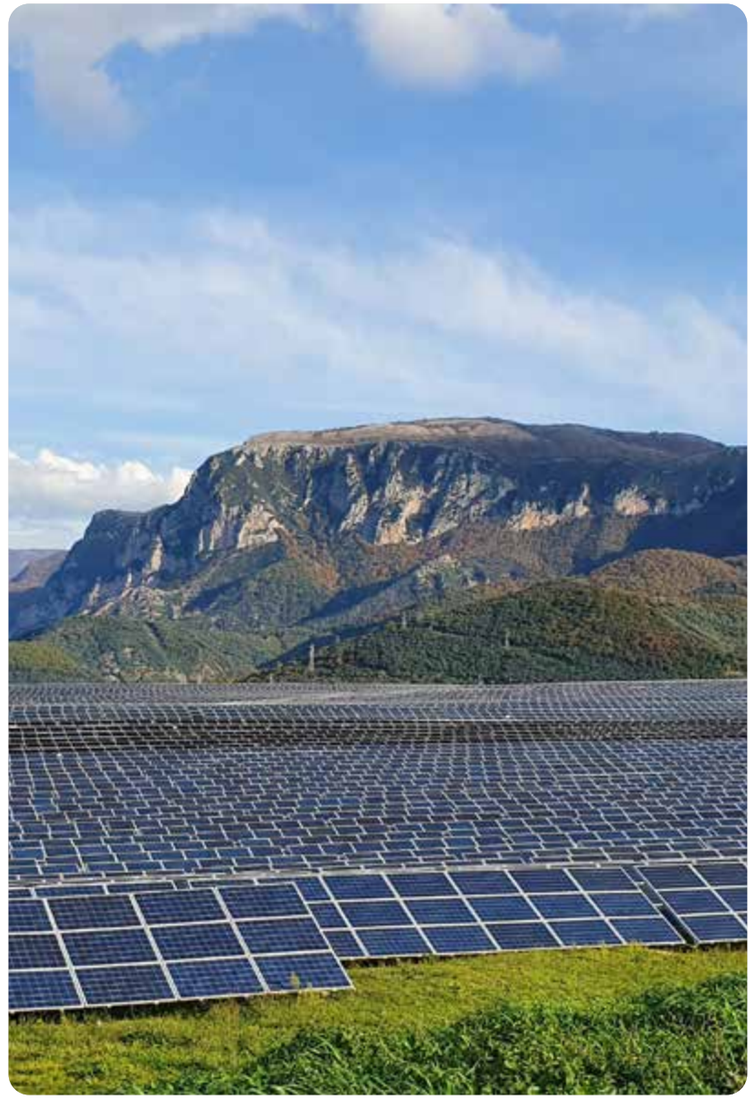
- the development of existing assets, through revamping and repowering;
- the development of new photovoltaic plants, even through innovative formats like agrivoltaics;
- the promotion of integrated and distributed energy solutions and new business models that enable flexible management of electricity, as well as storage systems.

In 2021, EF Solare Italia continued to work to improve the performance of portfolio assets and upgrade their management. The revamping programme has seen 78 MW of interventions on modules and 28 MW on inverters, in addition to 2 MW of repowering.
2022 has also been an important year both in Italy and in Spain for preparatory activities for the construction of new plants. In Italy, in particular, in addition to continuing the activities relating to the necessary authorisation procedures, the foundations for the production of approximately 23 MW during 2023-2024 were initiated.

Between Italy and Spain, in 2022 the electricity produced by EF Solare's photovoltaic plants totalled over 1,500 GWh, thus avoiding the release of over 580,000 tons of CO_2 into the atmosphere.

OVER
1,500 GWh
OF ENERGY PRODUCED

OVER
580,000[1] tCO_2
AVOIDED



[1] Source of the conversion factor for calculating the avoided emissions: ISPRA 2022 - gross thermoelectric production - fossil fuels only.

OUR PHOTOVOLTAIC ENERGY PRODUCTION

+1,500 GWh
OF ENERGY PRODUCED

Equal to:

→ The average annual consumption of around 555,000 Italian families made up of 4 people[2]

→ The electricity consumption of the municipality of Bologna[3]

580,000 tCO_2

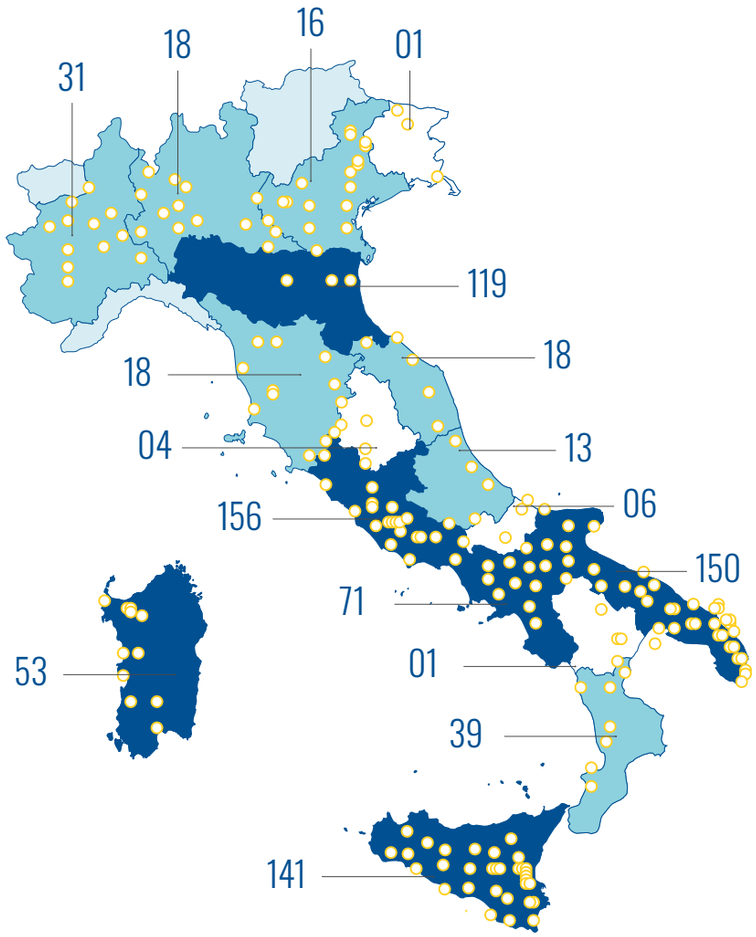
Equivalent to the emission of CO_2:

→ Approximately 26,000 Rome-Paris flights[4]

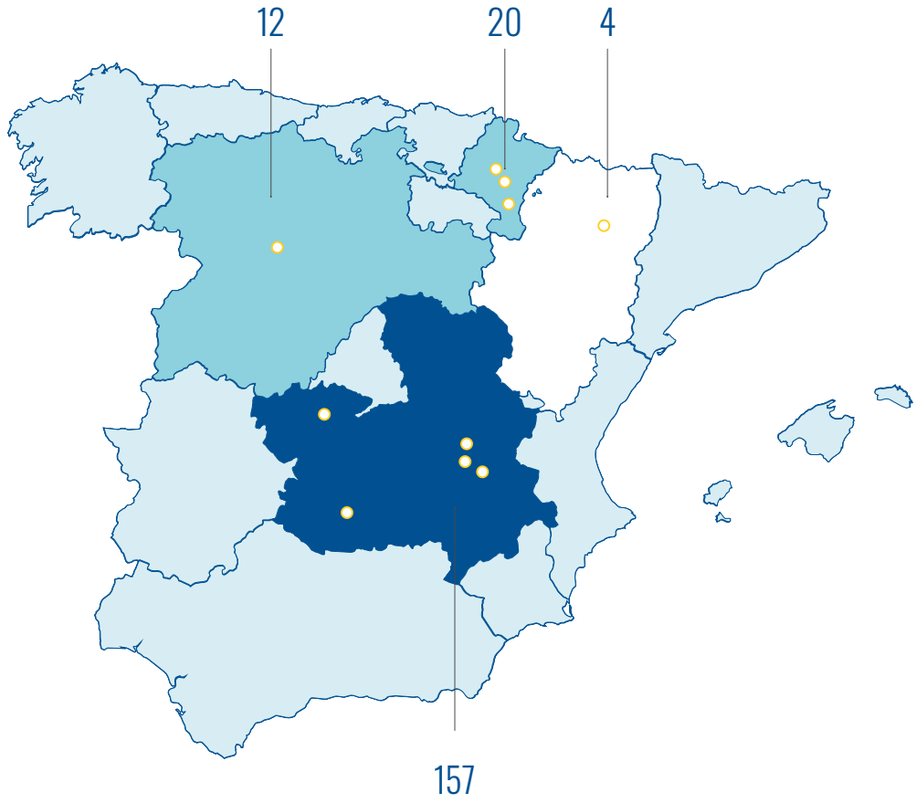
→ Emails sent by about 3.5 million workers[5]

[2] The average consumption per family is estimated at 2,700 kWh
[3] Source ISTAT
[4] Source for the calculation of the kg of CO_2 referred to the section: International Civil Aviation Organization (ICAO)
[5] Source for calculating the CO_2 grams referred to the sending of an email: Ademe, the French Agency for the Environment and Energy Management

PLANTS IN ITALY



PLANTS IN SPAIN



INSTALLED MW BY REGION

> 50 MW | 10 - 50 MW | < 10 MW | IMPIANTI

LOANS IN THE SERVICE OF DEVELOPMENT

2022 was an encouraging year from an economic point of view, EF Solare succeeded to keep the results growing. Revenues stood at over €460 million, an increase of almost 10% compared with the previous financial year.

The financial transactions concluded in 2021 have made it possible to begin a significant repowering and revamping program for the plants of the EF Solare group moving into 2022. The results of the investment plans **will allow the group's plants to significantly increase the energy produced and fed into the system, contributing to the mitigation of climate change**, in line with the provisions of the European objectives of the Green New Deal.

LEARN MORE

SACE SUPPORTS
EF SOLARE'S
INVESTMENTS IN ITALY

"EF Solare is a Group experiencing strong growth. It operates in an evolving sector influenced by macroeconomic dynamics. Maintaining the balance between the requirements of financially sustainable growth and achieving strategic goals is vital. For this reason, it is important that in defining change processes in the reference context institutions pay attention to the economic effects that these actions could generate in a sector in which financial entities have a crucial role. In these evaluations it is also important to consider that the investments made by these parties have positive repercussions rather than proportional ones in terms of influence on the areas, therefore able to be a real driver of growth."

Sabino Lorusso
Chief Financial Officer

THE INTEGRATION OF SUSTAINABILITY IN THE STRATEGY

The materiality analysis represents the tool through which the most relevant topics are defined from a social, environmental and governance point of view on which to concentrate the non-financial reporting activity.

With the entry into force of the GRI Standards 2021, the process indicated for the definition of material topics has been reviewed and strengthened especially around the concept of impact. According to the Standards, the key to identify the areas subject to reporting will therefore be that of the impact, understood as the effect (negative or positive) that an organization has or could have on the economy, the environment, or people, including human rights, as a result of its business activities or relationships (GRI 1).

For the 2022 Sustainability Report, the adoption of the new method of identifying materiality took place in a hybrid way. The updating of the topics was carried out following a perspective focused on the impacts in the context of listening to internal and external stakeholders, without however extensively applying the process envisaged by GRI 3 (involvement of sector experts, prioritization of impacts, etc.). The materiality update was also realised through the study of the analysis carried out by Renovalia, as regards the Spanish context.

Moreover, unlike previous years, the representation of material topics was not carried out according to the four-quadrant matrix, but according to a list to which the impacts of the organization are connected, as indicated by the GRI.

We also continued this year with the process of listening to and involving external stakeholders. In particular, interviews were targeted to selected individuals, representatives of the key stakeholder categories:

- Majority shareholder **Alberto Ponti** – Head of Strategy & Business Development of F2i Sgr SpA;
- President of the sector association Elettricità Futura – **Agostino Re Rebaudengo**;
- Prof. **Davide Chiaroni** – Full Professor of Strategy & Marketing of the Department of Management Engineering of the Politecnico di Milano and Vice Director & Co-Founder of the Energy & Strategy Group;
- **Valerio Natalizia** – Chief Executive Officer of SMA Italy, a primary supplier of inverters worldwide;
- **Mariangela Lancellotta** – Co-founder of Le Greenhouse, historical agricultural partner of EF Solare for the development of agrivoltaic projects;
- President **Raffaele Chiulli** of SAFE, a partner of training projects such as the post-graduate master dedicated to energy resources.

The comparison with the stakeholders, which took place again this year and centred around the impact made, **returned a positive perception of the company, recognized as a leader within the sector, as well as an open and collaborative subject towards all partners**. Furthermore, another element that emerged strongly within the process of listening to external stakeholders was the awareness of operating in a historic moment of great favour and opportunity for renewables, strengthened by the international geopolitical and macro-economic context, despite the persistent difficulties in supply chain and in the context of authorization procedures, still characterized by some legislative nodes that hold back the development of renewables.

2022 MATERIALITY

MATERIAL ISSUE	INTERPRETATION OF THE ISSUE FOR EF SOLARE	IMPACT ON THE ECONOMY, ENVIRONMENT AND SOCIETY
ADVOCACY AND SUPPORT FOR INSTITUTIONS FOR THE ENERGY TRANSITION	It is vital for EF Solare to maintain an ongoing, constructive dialogue at an institutional level in order to actively collaborate with the authorities to define a clear legislative framework that enables and supports growth in the sector. *Where we talk about it*: CAP 2	Placing our experience and expertise on the issue of renewables at the disposal of institutions, clearly and transparently, means raising awareness of their potential and facilitating the energy transition.
DISSEMINATION OF INNOVATION IN THE ENERGY SYSTEM	Technological and management innovation is for EF Solare Italia, the key for enabling the transition and competitiveness of renewable energy sources. *Where we talk about it*: CAP 2	Working pursuing technological, organizational, and financial innovation, as primary photovoltaic operator in Europe has positive repercussions on the entire sector, because it allows the widespread dissemination of good practices facilitating the achievement of decarbonization targets.
ETHICS AND INTEGRITY	Ethics and integrity are the core values of EF Solare Italia, which increase credibility and prestige with regard to stakeholders. *Where we talk about it*: CAP 2	Taking into consideration the ethical values of the company in all stages of conducting business and at all levels of the organization, contributes to protecting the reputation and credibility of the entire sector, increasing the confidence of stakeholders.
DIGITALIZATION OF PROCESSES	EF Solare has undertaken a program of organic digitalization of its processes in order to optimize them and make them more efficient to better respond to the challenges posed by the context and the sector which is undergoing constant development. *Where we talk about it*: CAP 2	The digitalization of processes aims for an increase in productivity in conducting business and consequently the objectives of increasing the production of energy from renewable sources by the company and indirectly the entire sector.
CIRCULAR ECONOMY	The transition to a circular economy model, even in the light of difficulties in procurement as a result of the geopolitical situation, represents an enormous challenge, which EF Solare Italia is called upon to respond to, accompanying the innovations from a circular economy perspective which look to technology. *Where we talk about it*: CAP 3	According to the Irena estimates - by 2050, 78 million tonnes of waste from photovoltaic solar panels will be produced globally. This figure, combined with the fact that the technologies for the production of renewable energy require the use of rare earth (critical raw materials), making all the efforts aimed at promoting circular business models, which strive to close the circle, urgent. At EF Solare we are aware that our efforts in this direction can be crucial for the entire sector, which can face certain technological challenges creating a critical mass and fostering economies of scale, from which all operators can benefit.
RESPECTING BIODIVERSITY AND THE AREA	At EF Solare we work to ensure that the photovoltaic plants are in harmony with the areas and ecosystems without removing value or changing the balance, thanks to carefully-considered localization decisions, minimal environmental impacts during the entire life cycle and the promotion of innovative models such as agrivoltaics. *Where we talk about it*: CAP 3	Some of the literature[6] claims that the inclusion of solar plants within an agricultural context can increase biodiversity because with the latter lest pesticides are used and there is a large presence of human beings (anthropic disturbance). EF Solare pays great attention to the search for models that protect biodiversity in full implementing the most recent industry rules and good practices.

[6]Lammerant, L., Laureysens, I. and Driesen, K. (2020) Potential impacts of solar, geothermal and ocean energy on habitats and species protected under the Birds and Habitats Directives. Final report under EC Contract ENV.D.3/SER/2017/0002 Project: "Reviewing and mitigating the impacts of renewable energy developments on habitats and species protected under the Birds and Habitats Directives", Arcadis Belgium, Institute for European Environmental Policy, BirdLife International, NIRAS, Stella Consulting, Ecosystems Ltd, Brussels, pp. 12-20.

MATERIAL ISSUE	INTERPRETATION OF THE ISSUE FOR EF SOLARE	IMPACT ON THE ECONOMY, ENVIRONMENT AND SOCIETY
ATTRACTION, DEVELOPMENT AND MOTIVATION OF HUMAN CAPITAL	The company is aware of how crucial it is for business continuity, to take care of human capital and work in a way to attract talent. Education, sharing, and listening are therefore the words that steer relations with human resources with a view to growth and continuous improvement. *Where we talk about it*: CAP 4	According to Renewable Energy and Jobs: Annual Review 2022, published by IRENA, in spite of the long-lasting effects of COVID-19 and the increasing energy crisis, global employment in the renewable energy sector has continued to rise with further 700,000 new jobs added in a year. In this context, EF Solare trains highly specialized workers, vital for the energy transition and the decarbonization of the economy.
DIVERSITY AND EQUAL OPPORTUNITIES	The values guiding EF Solare's relations with human resources are inclusion, diversity and listening, in the awareness that the multitude of stories and voices are key for successfully responding to the challenges that the company is required to respond to on a daily basis *Where we talk about it*: CAP 4	According to the report "Solar PV: A Gender Perspective" by the International Renewable Energy Agency (IRENA), women constitute 40% of the workforce in the photovoltaic sector, out of a global total of more than 4.3 million people worldwide, namely one third of the total numerical volume of those employed in renewable energy. As stated in the IRENA report, gender equality is not only a fundamental right or development goal but it is also a crucial tool to improve efficiency in the sector. In spite of the large number of women in the sector, there are many significant imbalances from the point of view of roles. The majority of women employed in the photovoltaic industry work in the administrative area, while women are under-represented when managerial and senior management roles are taken into consideration. For EF Solare having policies designed to incentivise diversity and inclusion means encouraging the entire sector to promote and devote increasing attention to the talent of all employees.

MATERIAL ISSUE	INTERPRETATION OF THE ISSUE FOR EF SOLARE	IMPACT ON THE ECONOMY, ENVIRONMENT AND SOCIETY
INVOLVEMENT OF LOCAL COMMUNITIES AND SHARING VALUE	For EF Solare working in the areas implies paying special attention to the communities that live there. For this, adopting practices of dialogue and sharing the value generated by the plants with the reference local communities, are strategic elements in conducting business. *Where we talk about it*: CAP 4	According to the Recommendation of the European Commission on the acceleration of Authorisation procedures for renewable energy products and the facilitation of sales agreements for energy, published in May 2022, states should encourage the participation of citizens, low and middle-income families and energy communities in renewable energy projects and adopt measures aimed at encouraging the transfer of the benefits from energy transition to local communities, thereby strengthening the acceptance and involvement of citizens.
SAFETY OF PLANTS AND OPERATORS	Guaranteeing the safety of plants and operators is an ongoing and fundamental commitment which EF Solare Italia fulfils through the application of management practices and standards aimed at preventing risks and safeguarding safety in the workplace. *Where we talk about it*: CAP 3	Guaranteeing safety when activities relating to the management, maintenance and administration of the solar plant are carried out is vital for promoting the confidence of the entire sector, called upon to promote a transition that has the care and protection of the well-being of people at its heart.
THE RESILIENCE AND CONTINUTY OF THE SUPPLY CHAIN	The careful management of the supply chain is a strategic element in business continuity. EF Solare Italia applies the good practices of correctness and transparency in the selection and management of relations with suppliers, guaranteeing high standards of quality and cost-effectiveness. *Where we talk about it*: CAP 3	As a result of the development of the context: geopolitical crisis, increase in the price of raw materials, shortage in components, the careful and informed management of the supply change has become a key element for guaranteeing the rapid dissemination of renewable energy sources. To do this EF Solare supervises and converses with institutions and other sector operators, because we believe that faced with global challenges of this magnitude the responses will be much more efficient if unanimous and shared.

OUR COMMITMENT TO THE ENERGY TRANSITION

DIFFUSION OF INNOVATION IN THE ENERGY SISTEM

ADVOCACY AND SUPPORT TO INSTITUTIONS FOR THE ENERGY TRANSITION

ETHICS AND INTEGRITY

DIGITALIZATION OF PROCESSES

SOLAR ENERGY FOR ACHIEVING THE GOAL OF CARBON NEUTRALITY

In 2022, the need for massive development of renewable sources has been made evermore urgent by the implications of the Russian-Ukrainian geopolitical crisis.

The discontinuity in the supply of fossil fuels has highlighted the advantages that renewable sources bring to energy security, leading many countries to strengthen policies to support this type of energy source. Simultaneously, the increase in fossil fuel prices worldwide has improved the competitiveness of solar photovoltaic and wind compared to other fuels[7].

Thanks to improved technology, economies of scale and more robust supply chains, renewable energy has indeed become increasingly cheaper to produce.

The so-called LCOE, for solar and wind projects, has decreased by at least 60% compared to a decade ago. Despite inflation, which affected raw materials, freight transport and financing, renewables have maintained their competitive advantage, as shown by the graph prepared by BloombergNEF[8] (Fig.1).

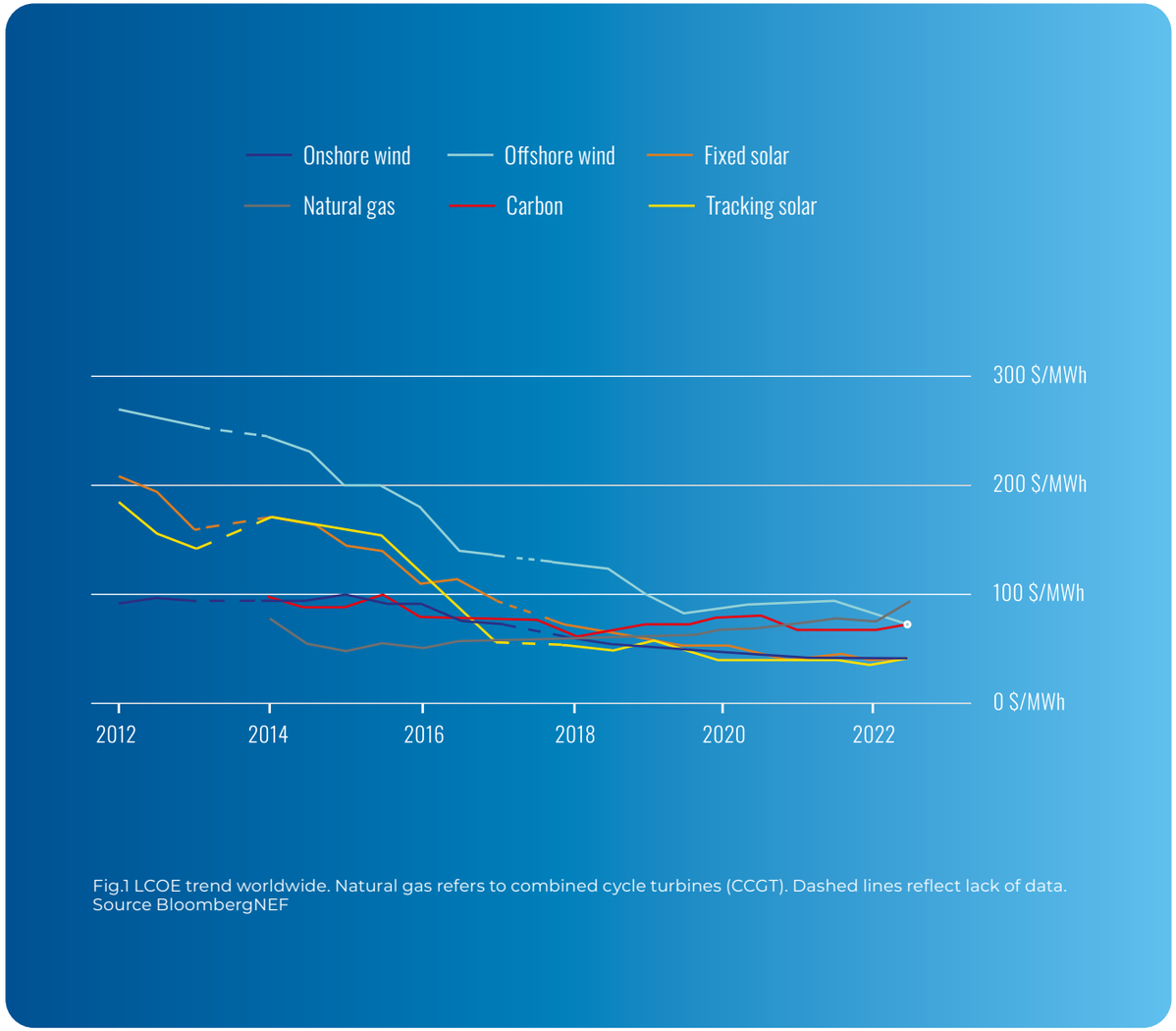


Fig.1 LCOE trend worldwide. Natural gas refers to combined cycle turbines (CCGT). Dashed lines reflect lack of data. Source BloombergNEF

[7] Energy & Strategy Group "*Electricity Market Report 2022*"
[8] BloombergNEF 's 2H 2022 LCOE Update

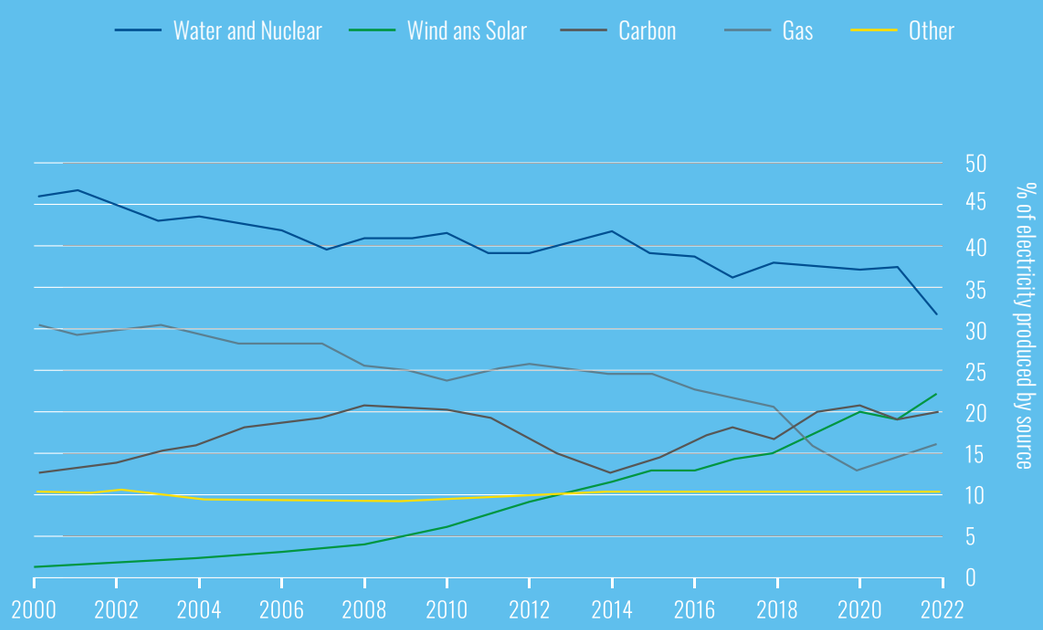


Fig.2 Trend of electricity production in the European Union (2000-2022)
Source: Annual electricity data, Ember

Throughout the year, Europe achieved record production from wind and solar, which accounted for 22% of the European Union's electricity, overtaking gas for the first time, which stood at 20% (Fig.2). **Solar power generation is growing fastest, with record 24% year-over-year growth in 2022**.

Europe reported an increase of 41.4 GW (+47% compared to 2021) of new photovoltaics capacity. 26 of the 27 member states increased photovoltaic installations through 2022. Of these, Germany remains the main European market with 7.9 GW of new installed capacity, followed by Spain (7.5 GW), Poland (4.9 GW), the Netherlands (4.0 GW), and France (2 .7 GW)[9].

Looking at the Italian context, the division recorded a positive trend; in fact, all the main indicators show significantly higher values than in previous years (Fig.3 e Fig.4). As at 31 December 2022, approximately 1,225,000 photovoltaic plants were operating in Italy (+21% compared to the end of 2021), for a total power exceeding 25 GW (+11%); annual production of 28.2 TWh increased by 12.5%.

Half of these plants belong to the industrial sector (which includes energy production companies, which concentrate 64% of the total installed power); followed by the residential (20%), tertiary (19%) and agriculture (11%) sectors. 34% of the plants are installed on the ground with the remaining 66% located on buildings, roofs, roofing, etc.[10].

[9] Solar Power Europe EU, Market Outlook for Solar Power 2022-2026
[10] GSE, Quarterly statistics on the photovoltaic sector in Italy - Data as at 31 December 2022

Number of implants

1,224,841

photovoltaic plants
in Italy as at 31/12/2022

+20.5%

compared to 31/12/2021

Peak power

25,048 MW

Peak power installed
as at 31/12/2022

+10.9%

compared to 31/12/2021

Gross production

28,161 GWh

Gross production
January-December 2022

+12.5%

compared to the period
January-December 2021

	2010	2015	2020	2021	2022
NUMBER	160,963	687,759	935,838	1,016,083	**1,224,841**
MW	3,592	18,901	21,650	22,594	**25,048**
GWh	1,906	22,942	24,942	25,039	**28,161**

Fig.3 Electricity production from solar energy in Italy
Source: GSE, Quarterly statistics on the photovoltaic sector in Italy - Data as at 31 December 2022

GROSS PRODUCTION

JANUARY-DECEMBER 2022

JANUARY-DECEMBER 2022 PRODUCTION (ITALY: 28,161 GWh)

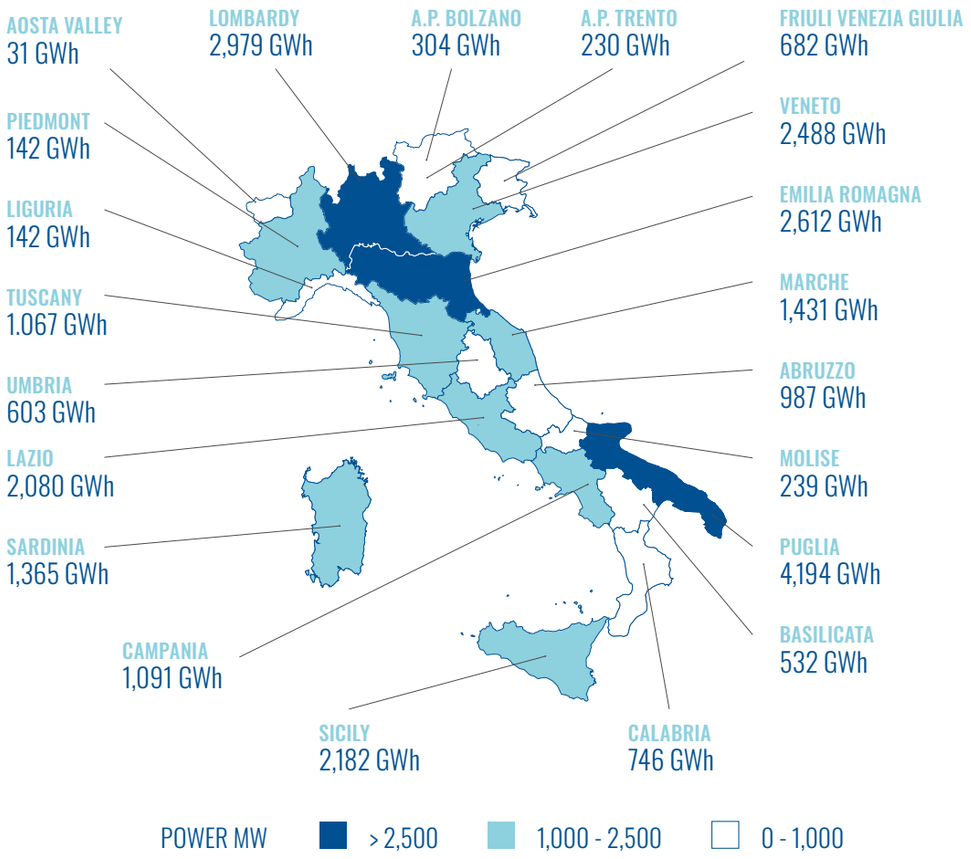
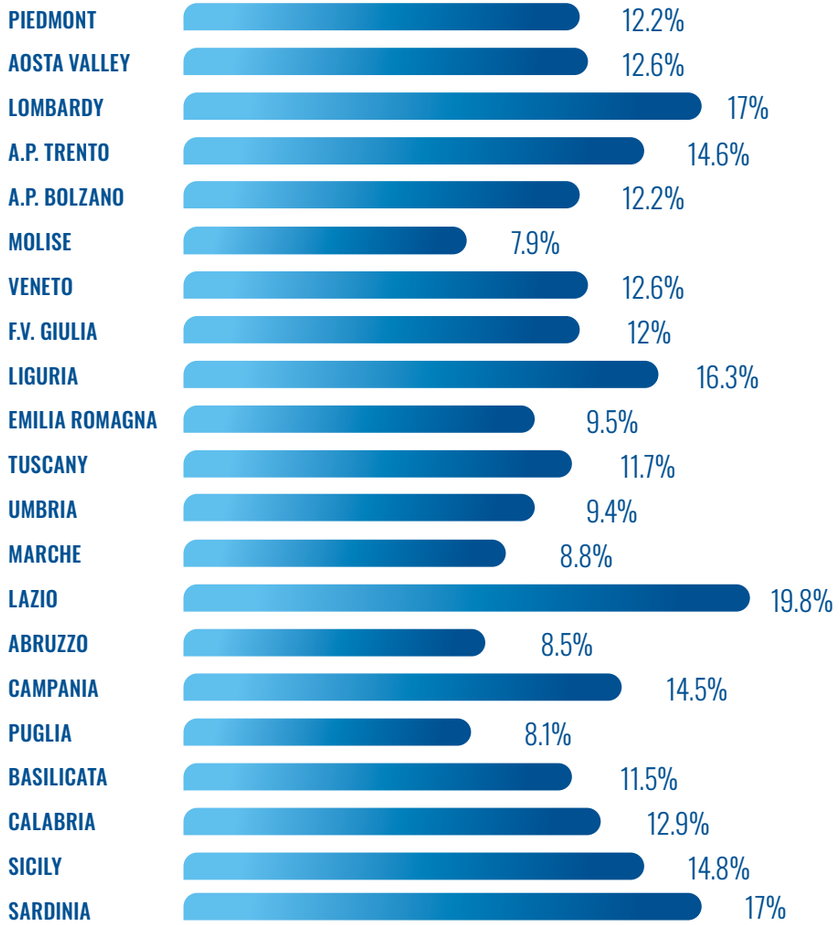


Fig.4 Electricity production from solar energy in Italy,
Source: GSE, Quarterly statistics on the photovoltaic sector in Italy - Data as at 31 December 2022

CHANGE IN PRODUCTION 2022/2021

JANUARY-DECEMBER



POLICIES AND OBJECTIVES

Already from the start of the energy crisis, the political actions undertaken in 2021 were directed at accelerating the growth of renewable energy in order to reach more ambitious decarbonization targets.

In 2021, the European Commission published the Fit for 55 package of policies and proposed to increase the share of renewable energy produced by the EU by 32% and at least 40% by 2030, to help the European Union **achieve climate neutrality by 2050**, as defined by the European Green Deal and climate law of June 2021.

After the invasion of Ukraine by Russia in February 2022, energy security was another reason for accelerating the transition and in May 2022 the Commission published the **REPowerEU plan**, which intends to put an end to dependence on Russian fossil fuels by 2027. The plan also aims to **increase the share of renewables in final energy consumption to 45% by 2030**, thereby reviewing the increase to 40% previously negotiated.

In spite of the policies confirming a widespread consensus compared with the decarbonization of the energy system, if you look at the European context, the scale of the challenge does, however, remain ambitious and the European decarbonization targets for 2030 and 2050, for advancing renewable sources and streamlining energy consumption remain far off[11]. According to the International Energy Agency IEA), to reach the installed capacity necessary to generate 69% of electricity from renewable sources by 2030 (as required by the Repower EU plan), solar photovoltaics needs to increase on average by 30% per year and wind power by more than double[12].

These ambitious targets are also reflected in the individual member states.

If you look at the **Italian situation, to achieve the 130 GW from renewable sources by 2030, it will be necessary to install at least 60-65 GW of new production capacity from non-programmable** renewable sources in Italy, increasing the rate of installations which is still too slow. In effect, the projection for the current installation rate could be totally unsatisfactory in the medium term, with a wind and photovoltaic installed base of slightly more than 50 GW. **An installation rate of around 1.75 GW/year is needed for wind power and 5.6 GW/year for photovoltaics**, more than 4 and 7 times the current 0.38 GW/year and 0.73 GW/year[13]. Looking at **Spain**, we find the approval of the 7/2021 climate law, which increased the 2030 target of electricity generated from renewable sources to 74%. In addition, the *Plan Nacional Integrado de Energía y Clima 2021-2030* outlines an ambitious renewables growth process, with **photovoltaic power reaching 39 GW of installed power by 2030**, from the current 15 GW.

RENEWABLES
BEST OF 2022

BY 2025 MORE THAN 320 GW OF NEWLY INSTALLED PHOTOVOLTAIC CAPACITY AND ALMOST 600 GW BY 2030, ACCORDING TO REPOWEREU.

IN 2022 41.4 GW OF NEW PHOTOVOLTAIC POWER IN EUROPE, A 47% INCREASE COMPARED WITH 2021, WHICH BRINGS THE AGGREGATE TOTAL SHARE TO 208.9 GW.

INCREASE IN PHOTOVOLTAICS IN ITALY WHICH, ACCORDING TO THE GSE, HAD 2.5 GW OF NEWLY INSTALLED SOLAR CAPACITY IN 2022.

7.5 GW OF NEW CAPACITY INSTALLED IN SPAIN IN 2022[14].

[11]Energy & Strategy Group "Renewable Energy Report 2022"
[12]EA, Renewables 2022
[13]Energy & Strategy Group "Renewable Energy Report 2022"
[14]Solar Power Europe EU, Market Outlook For Solar Power 2022-2026

REGULATORY BARRIERS AND KEY ISSUES

TOWARDS INDEPENDENCE FROM RUSSIAN FOSSIL FUELS: THE REPOWEREU PLAN AND THE EU SOLAR STRATEGY

Following the worsening of the energy crisis caused by the invasion of Ukraine by Russia, in May 2022 the European Commission presented **the REPowerEU plan**, with the objective of reducing the EU's dependence on Russian fossil fuels accelerating the transition and creating a more resilient energy system. The plan was completed on 29 July with a further step aimed at reducing 15% of the demand for gas in all EU member states and storing more gas for the winter.

The REPowerEU plan, which is attached to the "Fit for 55" package of proposals integrating the interventions for energy procurement and energy storage security, includes a series of additional actions aimed at:

- energy saving;
- diversifying procurement;
- rapidly replacing fossil fuels accelerating the European transition to clean energy;
- combining investments and reforms in an intelligent way.

The investment necessary to implement the REPowerEU plan stands at more than €210 billion to be spent over the next 5 years. The resources that can be drawn on come partly from the Recovery and Resilience Plan, which makes €225 billion available in the form of loans and €20 billion in the form of subsidies. For this purpose, member states can add a REPowerEU chapter to their recovery and resilience plans (PNRR) to direct investments to REPowerEU priorities. In addition, a further €26.9 billion from the cohesion fund (7.5%) and €7.5 billion from the 2023-2027 common agricultural policy could be dedicated to implementing the plan. With regard to the need to speed up the transition to clean energy, the EU, as well as increasing the 2030 target for renewable energy from 40% to 45%, adopted the new **EU Solar Strategy** in May 2022. The strategy will be the cornerstone of the Plan and is aimed at introducing more than 320 GW of solar photovoltaics into the grid by 2025 (more than double compared with 2020) and almost 600 GW by 2030. This additional capacity, the implementation of which will be concentrated in the initial phase, will make it possible to avoid the consumption of 9 billion cubic metres of natural gas per year by 202715 .

[15]CE, EU strategy for solar energy, May 2022

In Italy, some barriers remain, making it difficult to achieve the European targets, mainly legislative, which prevent the widespread diffusion of renewable energy sources. In addition to **the problems relating to the supply chain and logistics**, which in 2022 caused an increase in the price of plant components, the main barriers to overcome, for a change in pace in installations and the refurbishment of renewable plants in Italy, are well described in the 2022 edition of the Energy & Strategy Group's (POLIMI) Renewable Energy Report and involve three main intervention areas:

- **legislative-regulatory aspects** (among all the difficulties and time required to successfully negotiate the authorization process)
- **economic sustainability** (such as the uncertainty over the future progress of prices)
- **issues relating to the electrical system** overall (such as the need to adapt the grid to the increase in renewable sources).

As far as the legislation is concerned, a large part of the barriers identified through the survey in the 2019 edition of the same report were dealt with by the legislator through several regulatory measures well received by the sector operators. The above provisions, however, are very recent and therefore not systemic, the reason why more time is needed for the impact to be felt in full. **It is necessary to continue to promote simplification actions and create a unified law** that can represent the framework organically and clearly.

With regard to economic sustainability, the sector operators stress the need to stabilize revenue. This can take place through competitive public tender systems with a time horizon of several years or through long-term Power Purchase Agreements (PPA). With regard to the former instrument, we are waiting for the issue of a new ministerial decree set out in Legislative Decree 199/2021 which includes the RED II Directive; the long-term PPAs, on the other hand, are an instrument still not very widespread in Italy.

Lastly, the barriers relating to the electrical system were partly dealt with, but the process for overcoming them still requires various actions[16], which should take into account the diversity of the players and requirements. **The adaptation of the grid following the increase of renewable sources** is one of the main aspects to take into consideration as it is vital for responding to phenomena such as the reduction of inertia, the increase in over-generation episodes, and the risk of congestion.

[16] Energy & Strategy Group "*Renewable Energy Report 2022*"

In Spain, the regulatory framework is currently more favourable, also thanks to the approval in March 2022 of Royal Decree 06/2022, which involves a series of reforms designed to deal with network congestion and authorization problems for renewable energy projects. Among the various measures, the introduction of simplified environmental authorizations for photovoltaic solar projects of less than 150 MW and wind energy projects below 75 MW, which have cut the response times from six to two months[17]. **Overall, the time frames for the construction of a utility-scale photovoltaic plant in Spain are around half of those in Italy**.

In this context, EF Solare oversees and offers its support to industry organizations and associations which carry out research into and promote the culture of renewables in order to make a tangible contribution to overcoming the difficulties that are still holding back the reaching of the EU targets. This commitment is described and reported in the paragraph “Assets under public debate”.

[17] IEA, Renewables 2022.

"Guaranteeing the best performance of the operating plants through constant monitoring and precise planning of routine and extraordinary maintenance activities means strengthening corporate leadership. In addition, it enables us to position ourselves as a benchmark player for innovation and operating efficiency contributing to achieving the European decarbonization targets".

Gian Luca Teodori
Head of Operations

AN INTEGRATED STRATEGY

The integrated strategy of EF Solare is coherently grafted onto the trends and challenges of the sector and is based on four fundamental pillars: technology, the development of economies of scale, an integrated approach to the market, and finance, understood as the search for innovative financial instruments.

TECHNOLOGY

Increasingly digitalised smart maintenance of plants and significant revamping and repowering operations.

ECONOMIES OF SCALE

To make operational management more efficient through a significant plant portfolio.

INTEGRATED APPROACH TO THE MARKET

To increase the revenue streams and stabilise cash flows over time.

FINANCE

Research and development into innovative financial instruments to give access to the financial resources needed to support long-term development.

As far as the Operations area is concerned, it featured many activities aimed at moving the company's industrialization process forward. They include: continuing the r**evamping & repowering activities** aimed at developing and upgrading the photovoltaic plants in the portfolio; the development of a **multi-year retrofit plan for the inverters**; moving the **in-sourcing process for Operations & Maintenance (O&M) activities** forward; the launch of a **reorganization and change management** process which, among its main effects, has led to the reorganization of the Asset Management area.

When preparing revamping activities, we always start from detailed analyses of the plants which are vital for really being aware of the state of health of our assets. Each plant and the related area have their own distinctive features and it is therefore vital to get to know them better to identify and **develop the best engineering** solution capable of maximizing performance, respecting the area, and optimizing costs. The Operations team is permanently committed to learningabout all the latest technological innovations and technical updates in the industry to understand and apply all the new opportunities. Alongside the best known, **we use the most modern diagnostic methodologies** (drones, thermography, and electroluminescence) to check for malfunctions and promptly identify the measures to implement. The interventions are designed with the best technologies for materials adopting double-sided photovoltaic modules, with a capacity 3 times the size of traditional ones, high efficiency, and limited degradation (e.g., half-cut cells, N-Type technology and low-Pid, etc.). The transformation of all the plant components is assessed, not only the panels, evaluating the solar tracking technology, the introduction of string inverters and the move to new remote surveillance technologies.

Thanks to these activities **78 MW of module revamping interventions and 28 MW of inverter revamping activities took place in 2022. Added to this there was 2 MW of module repowering**.

Operations for a further 450 MW are planned over the next 3 years to improve the efficiency of modules and inverters. Thanks to the use of new technologies, it will also be possible to install more than 130 MW of new capacity with the same soil use.

LEARN MORE

INNOVATION AT THE SERVICE OF PHOTOVOLTAICS: THE EF SOLARE PROJECT FOR THERMAL IMAGING ANALYSIS USING DRONES

78 MW
OF MODULE REVAMPING IN 2022

28 MW
OF REVAMPING INVERTER IN 2022

2 MW
OF REPOWERING IN 2022

Alongside the revamping and repowering activities, in recent years EF Solare has **implemented and strengthened maintenance activities for our photovoltaic plants**, developing multiple solutions helpful in satisfying the different requirements of our assets. These include i**nverter retrofit activities**, an activity aimed at the revision, repair, and/or replacement of specific machine components that allow the inverter to be restored to its original efficiency, prolonging its useful life.
These operations are included within the wider scope of extraordinary maintenance activities. The multi-year retrofit project will involve a total of approximately 550 MW of inverters in around 200 plants in Italy. I**n 2022 inverter retrofit operations were carried out on 196 MW spread over 42 plants**.

The in-sourcing of Operations & Maintenance (O&M) activities continued in 2022. These activities are aimed at integrating EF Solare along the entire value chain and maximizing our business expertise. **In 2022 EF Solare's O&M managed 87 plants located in Sicily, Apulia, and Campania with a total of 227 MW in house**.

LEARN MORE

EF SOLARE'S INVERTER RETROFIT PLAN TO DEVELOP EXISTING ASSETS

Within the Operations area, 2022 saw the launch of a change management and reorganization project which, among its main effects, led to the **reorganization of the Asset Management area**. The purpose of this redesign was to develop a new model capable of optimizing the internal processes and guaranteeing an increasingly productive interaction with suppliers and stakeholders. The new operating model for the Asset Management area involved an expansion and redistribution of the working groups, specifically in the Commercial Asset Management area. The latter was divided into three different teams, one of which was called upon to interface with colleagues in the EF Maintenance Department, while the other two interacted with specific O&M contractors. This division, compared with the other types of divisions, such as, for example, the one on a regional basis, makes it possible to make the interaction with suppliers much more timely and effective, stimulate the development and dissemination of know-how with experienced partners and improve the planning of interventions. Alongside this, the Technical Asset Management area was introduced, a specialist team capable of supporting colleagues in the area across the board on more technical issues and focusing on specific extraordinary maintenance activity projects and improving plant efficiency.

LEARN MORE

THE "NEW" ASSET MANAGEMENT AREA FOR THE INCREASINGLY EFFICIENT MANAGEMENT OF THE PLANTS

MORE ENERGY FOR THE SAME SURFACE AREA: THE REVAMPING OPERATION AT THE SANTA LUCIA PLANT (LAZIO)

EF Solare's commitment to increase solar energy production takes shape through multiple activities that include not only the development of new projects, but also the development of existing assets using innovative technologies.

In recent years the Group has launched multiple revamping activities aimed at improving the output of several photovoltaic plants with low performance or malfunctions with the main components (modules and inverters).

Starting with the collection and analysis of the data made available by the EF Solare integrated monitoring system, it was decided **to launch a revamping activity at the Santa Lucia (Lazio) plant for 2.7 MW** to cope with the increased deterioration discovered for the modules compared with anticipated productivity.

Specifically, a technological modernisation project was responsible for:

- The replacement of polycrystalline modules with monocrystalline modules which are technologically ore advanced and efficient, thanks to lower losses resulting from temperature, thereby guaranteeing greater energy density;
- optimization of the photovoltaic generator restringing, maintaining the original configuration of the field switchboards and conversion group.

Thanks to this activity, it was possible to increase the plant performance by approximately 10% for the same land used, thus contributing to an increase in the green electricity production generated by EF Solare.

In 2022, the increase in electricity production generated by this intervention, not only made **it possible to satisfy the annual electricity consumption of 160 more families** compared to the levels prior to the intervention, but **also generated an increase in the reduction of CO_2 emissions**. In particular, the greater green energy produced thanks to the new modules saved about 160 tons more CO_2 in this period, an amount that, if it had been emitted, would have required over 8 thousand trees to be absorbed.

LEARN MORE

MORE ENERGY FOR THE SAME SURFACE AREA: THE REVAMPING OPERATION AT THE SANTA LUCIA PLANT

ACTIVE IN THE PUBLIC DEBATE

EF Solare actively participates in the main sector initiatives, contributing, through a constructive and open dialogue with the main reference players and the development of a regulatory framework that is favourable to the growth of the sector and the diffusion of the culture of renewables.

The company participated in 13 events as a speaker throughout 2022, including sponsoring the international conference of the Electrotechnical, Electronic, Automation, Information Technology and Telecommunication Association (AEIT). The company made a significant contribution to the dissemination of awareness of the world of photovoltaic power and to insights into innovations under development within the industry, through collaboration in and the sponsorship of various research projects.

PARTICIPATION IN INDUSTRY ASSOCIATIONS AND INSTITUTIONS

- Elettricità Futura
- AIET
- CEI - Comitato Elettrotecnico Italiano
- Italia Solare
- ISES Italia
- Associazione Italiana Agrivoltaico Sostenibile (Italian Sustainable Agrivoltaic Association)

THE CONTRIBUTION TO AWARENESS OF THE SECTOR: EF SOLARE ITALIA'S COLLABORATION IN RESEARCH PROJECTS

01

IREX ANNUAL REPORT 2022

The electricity sector and renewables. Between the energy crisis and decarbonisation scenarios

Althesys

Overview of the renewables sector in its entirety following the geopolitical upheavals. The Irex Annual Report 2022 shows how Italian investments in renewables are growing, with operators increasingly leaning towards technological and business innovation, but still held back by bureaucracy.

02

RENEWABLE ENERGY REPORT 2022

Road to 2030: the first concrete steps towards achieving the production targets from renewables in Italy

Energy & Strategy Group
Polytechnic of Milan

An accurate survey of the state of development of renewable energies, including the regulatory framework, analysis of energy price trends, reading of technologies from both a Life Cycle Assessment perspective and a future scenarios perspective.

03

ELECTRICITY MARKET REPORT 2022

«Mind the gap»: enablers of the energy transition wanted

Energy & Strategy Group
Polytechnic of Milan

State of the art, evolutionary scenarios and "enabling tools" of the national electricity system and analysis of some of the technological, legislative-regulatory and market tools necessary to govern the transition: storage systems, the opening of the Dispatching Services Market, and Energy Communities.

LEARN MORE

THE CURRENT STATE OF RENEWABLES AND THE OPPORTUNITIES FOR THE ENERGY FUTURE OF THE COUNTRY

LEARN MORE

KNOWING THE ELECTRICITY MARKET TO ACCELERATE DECARBONIZATION: EF SOLARE SPONSOR OF THE ELECTRICITY MARKET REPORT OF THE ENERGY & STRATEGY GROUP

PUBLIC VOICE FOR THE ENERGY TRANSITION

Television programs

- Presa Diretta, Rinnovabili, consumo di suolo zero
- Tg Leonardo
- Tg2, Tutto il bello che c'è

Articoli di giornale

- **Milano Finanza – 12 marzo 2022 - Per EF Solare l'Italia green passa dall'agrivoltaico (for EF Solare, green Italy passes from agrivoltaics)**
  Interview with Andrea Ghiselli, CEO of EF Solare, on the opportunities associated with agrivoltaics
- **Solare B2B April 2022**
  Issue dedicated to agrivoltaics: the model and the opportunities
- **La Repubblica of 30/01/2023**
  Interview with Andrea Ghiselli and Gian Luca Teodori on the occasion of the launch of Symbiosyst, a European project dedicated to the installation of agrivoltaics in an apple orchard in Alto-Adige
- **Rinnovabili.it of 21/02/2023**
  Interview with Andrea Ghiselli on the potential of agrivoltaics

The Company's commitment to agrivoltaics continued throughout 2022. In addition to the development activities carried out by the Business Development team, **EF Solare participated in the public debate for the creation of a clear and effective regulatory framework and worked to disseminate knowledge on agrivoltaics**, adhering to European calls and laying the foundations for research projects with leading national institutes. The company also continued to participate in associative roundtables in *Elettricità Futura* and *Italia Solare* and in the first national network launched by ENEA to promote sustainable agrivoltaics. EF Solare is also a registered founding member of the Italian Sustainable Agrivoltaics Association (AIAS), which promotes the virtuous development of agrivoltaics, supporting projects that enhance its potential, including through advanced technological solutions.

Finally, confirming the validity of this commitment, the **Scalea greenhouses** have also obtained an important recognition from the **Coldiretti Giovani which awarded Antonio Lancellotta, co-founder of the historic agricultural partner Le Greenhouse, the national "Oscar Green"** award in the category "Sustainability and Ecological Transition" precisely for sustainable cultivation under photovoltaic greenhouses.

"Operating in total compliance with the rules is vital in protecting the credibility and reputation that we have built up over time. Our mission is to carefully integrate the legal aspects with the requirements of the business supporting all areas. We work, on a daily basis, to reduce risks and offer interpretations of the regulations, making our contribution to the development of the photovoltaic sector."

Vita Capria
Head of Legal & Corporate Affairs

ETHICS AND INTEGRITY

The principles of responsibility and standards of behaviour that guide the company when conducting its business are summarised in the EF Solare Code of Ethics, which, first and foremost, commits employees, but also all those working towards achieving the company's objectives, from shareholders to suppliers.

EF Solare Italia attentively supervises compliance with the **Code of Ethics**, with adequate prevention and control information tools and procedures. The EF Solare Italia Supervisory Body has guarantee functions. The corporate document is part of a wider internal audit and risk management system, centred around the **Organisation and Control Model in conformity with Legislative Decree 231/2001**. The Model is periodically reviewed so that it is constantly in line with legislative amendments and complies with organisational changes. To this is added more generally the presence in EF Solare of a "culture of control". For some time now, the company has had an **adequate internal control and risk management system**, subject to periodic updating. With regard to privacy policy, **in 2022 EF Solare made improvements to the Privacy Model to make it more responsive to the business context**, updating the register of treatments through specific interviews with each company function, adapting the information to the regulatory changes, arranging for the appointments of the privacy figures envisaged by the model. In addition, in 2022, the appointment of a Data Protection Officer (DPO) external to the organization was formalised.

VALUES FOR RESPONSIBLE BUSINESS MANAGEMENT

IMPARTIALITY

HONESTY

CORRECTNESS IN THE CASE OF POTENTIAL CONFLICTS OF INTEREST

FAIRNESS WHEN EXERCISING AUTHORITY

CONFIDENTIALITY

RELATIONS WITH SHAREHOLDERS AND VALORISATION OF THEIR INVESTMENT

VALUE OF HUMAN RESOURCES AND PROFESSIONAL DEVELOPMENT

PERSONAL INTEGRITY

TRASPARENCY AND COMPLETENESS OF INFORMATION

DUE DILIGENCE AND CARE WHEN EXECUTING TASKS AND CONTRACTS

FAIR COMPETITION

PROTECTING THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

RENEWABLE ENERGY STARTING FROM RESPECT FOR THE ENVIRONMENT

OPERATIONAL EFFICIENCY GOES HAND IN HAND WITH ENVIRONMENTAL SUSTAINABILITY: OUR ACTIVITIES ARE COMPATIBLE WITH THE ENVIRONMENT IN WHICH THEY FIT AND ARE HARMONIOUSLY INTEGRATED IN THE TERRITORY

CIRCULAR ECONOMY

RESPECT OF BIODIVERSITY AND THE TERRITORY

RESILIENCE AND SUPPLY CHAIN CONTINUITY

SAFETY OF INSTALLATIONS AND OPERATORS

"The Energy transition is closely connected to technological innovation. For this reason, EF strives daily to develop integrated energy solutions and sustainable business models mindful of the needs of local communities. A concrete example of our commitment is the Agrivoltaic 2.0 model where the synergy between photovoltaic and agricultural production facilitates mutual advantages in terms of promotion of the territories, development of skills and an increase in the competitiveness of the primary sector."

Ettore Acampora
Head of Business Development
& Energy Management

AGRIVOLTAICS: A FRONTIER OF INNOVATION TO CONTRIBUTE TO THE ENERGY TRANSITION

Agrivoltaics represents a new frontier for renewables, capable of combining decarbonisation objectives with the needs of the primary sector, optimizing the use of the land which is destined for both activities at the same time.

This model therefore makes it possible to overcome the main impact which, in common sentiment, is connected to ground-based solar installations: land consumption. The latter represents a myth that needs to be dispelled, since to achieve all the photovoltaic objectives of the Italian PNIEC (Integrated National Energy and Climate Plan), 0.36% of the agricultural areas used would be sufficient, or less than 4% of those unused[18]. In any case, **agrivoltaics represents an installation method that does not subtract land from agriculture, on the contrary, in some cases it adds it** (e.g., when the land is not cultivated before the installation of the agrivoltaic system).

[18]Energy&Strategy Group "*Renewable Energy Report 2021*"

Agrivoltaic is a model that provides for the assembly of the modules on fixed or solar-tracking structures, such as to allow the dual use of land whilst not compromising the continuity of the agricultural activities that are carried out there.

Therefore, agri-PV projects represent a win-win opportunity: in addition to the combined use of soil, they counteract the abandonment of agricultural land by promoting investments to the advantage of the competitiveness of farms.

Furthermore, agrivoltaics is connected to positive environmental and social externalities.

BENEFITS FOR THE ENVIRONMENT

- Allows for dual use of the land;
- Counteracts the abandonment of agricultural land;
- Counteracts desertification of rural areas;
- Helps to reduce water usage, protecting crops from heat and reducing evapo-transpiration thanks also to mobile shading.

BENEFITS FOR THE COMMUNITY

- Creates new job opportunities in rural communities;
- Stimulates the creation of new professional skills – e.g., agronomists with digital skills;
- Stimulates investments to increase the competitiveness of the farm through digitalisation, also acting as an element of modernization;
- Stimulates activities of direct involvement of the population such as training courses.

THE PNRR FOR AGRIVOLTAICS

The National Recovery and Resilience Plan (PNRR), approved in 2021 and aimed at relaunching the national economy after the Covid-19 pandemic, orienting and enabling the Country's green and digital development, envisages within Mission 2 "**Green Revolution and Ecological Transition**", a 1.10 billion euro investment dedicated to the development of agrivoltaics. In particular, the investment aims to implement hybrid agriculture and energy production systems, which do not compromise the use of land dedicated to agriculture but contribute to the environmental and economic sustainability of the companies involved.

At the same time, it will be necessary to create plant monitoring systems that are able to collect data both on the production of solar energy and on the underlying agricultural activity, in order to evaluate the microclimate, water saving, recovery of soil fertility, resilience to climate change and agricultural productivity for different types of crops.

THE EVOLUTION OF THE REFERENCE REGULATION

*The legislative and regulatory framework relating to agrivoltaics is currently in formation. After the introduction in the **Legislative Decree 77/2021** (Simplifications Decree)[19] of an initial definition of agrivoltaics as a quid novo compared to ground-mounted photovoltaic systems in agricultural areas which are currently prohibited from accessing incentives, in June 2022 the MiTE (Ministry of the Environment and Energy Security) published the **Guidelines on agricultural and subordinate systems** in public consultation the requirements for the granting of incentives aimed at promoting the construction of the plants envisaged by the PNRR.*

These documents represented an important step in the process of defining what is meant by an agrivoltaic system and what characteristics are required. Pending the issuance of the related Ministerial Decree, **in February 2023, the Italian Electrotechnical Committee (CEI) published the PAS 82-93** which details some definitions and calculation methods of the requirements envisaged in the ministerial Guidelines. **Throughout 2022 simplifications were also introduced in the authorisation procedures for some types of agri-PV plants**. Of importance is the one that provides for the possibility of using the Simplified Authorization Procedure (PAS) for agrivoltaic plants with characteristics for accessing public supports if they are located no more than 3 km away from areas for industrial, craft and commercial use, regardless of the power of the plant.

To support the development of this sector and ensure investments, **it is necessary to continue to define a clear legislative and regulatory framework, harmonise regional legislation ensuring consistency with national guidelines and provisions on the subject, continue with the process of simplification of the authorization procedures recognising the positive externalities that the agrivoltaic projects have on the territories**.

[19] In the Decree Simplifications 77/2021 the ban on access to incentives is waived if the agrivoltaic plant has the following characteristics:
- provides for the adoption of innovative integrative solutions with assembly of the modules elevated from the ground, also providing for the rotation of the modules themselves (both fixed structures and trackers are included);
- does not jeopardize the continuity of agricultural and pastoral cultivation activities, also by allowing the application of digital and precision agriculture tools;
- provides for the simultaneous creation of monitoring systems that make it possible to verify the impact on crops, water savings, agricultural productivity for the different types of crops and the continuity of the activities of the farms concerned on the basis of the guidelines adopted by CREA in collaboration with the GSE.

THE TEN-YEAR EXPERIENCE OF EF SOLARE

EF Solare has been managing and promoting agrivoltaic systems for over ten years. The experience started with the construction of photovoltaic greenhouses on the Tyrrhenian and Ionian coast of the province of Cosenza, in Calabria, and it continued with the acquisition of facilities of the same type in Umbria and Sardinia.

13,000 fruit trees are grown inside the greenhouses, mainly citrus fruits (lemons, citrons, oranges), and 2,000 Goji berries.
The approach adopted has always favoured collaboration with local realities. In addition to being respectful of the traditions of the area, it is also, mindful of modern technologies: underneath the photovoltaic greenhouses, it is possible to **support the development of innovative, digitalised types of agriculture with the development of new professionals**.

All the plants grown are constantly monitored through sensors that measure different agronomic factors, making it possible to guarantee the best possible growing conditions for the crops and improving the agronomic results achieved compared with open-field cultivation. The lemons grown in our greenhouses in Sicily are the same quality as the IGP lemons grown in open fields.

OUR PV-GREENHOUSES

3
DIFFERENT
Regions

Over 30 MW
OF INSTALLED CAPACITY

+40 million kWh
PER YEAR OF PRODUCTION CAPABLE OF SATISFYING THE ELECTRICITY NEEDS OF
over 16,000 families

+20,000 tons
AVOIDED EMISSIONS OF
CO_2

ABOUT
15,000 plants
CULTIVATED

Long-term partnerships
WITH AGRICULTURAL OPERATORS OF EXCELLENCE

RESPECTING THE SPECIAL FEATURES OF THE AREAS AND BIODIVERSITY

Constant dialogue with the community at all stages is of primary importance for a harmonious coexistence of clean energy production with agriculture.

For this reason, EF Solare begins with observing and studying the special features of the area (natural, geomorphological, production, human) when developing its projects. In order to support and respect biodiversity, **EF Solare cultivates native species within its greenhouses**, such as the citrons in Calabria and the Sardinian pompìa in Milis. **This contributes to the maintenance of millenary traditions, also enhancing the territories and their history**. Always with a view to protecting biodiversity, the Scalea and Orsomarso photovoltaic greenhouses have **smart beehives** that control the presence of the bees, a species particularly threatened by climate change. It is possible to remotely monitor the weight of the hive inside the greenhouses and other parameters aimed at assessing the well-being of the bees. In recent years, the results that have emerged from monitoring the activities of the bees, including pollination, were positive and have confirmed a virtuous coexistence between photovoltaic greenhouses and the biodiversity of the external environment. Furthermore, it has contributed to sensitize many operators who collaborate in greenhouses on the subject of biodiversity and the importance of bees for the ecosystem.

LEARN MORE

SMART BEEHIVES IN THE PHOTOVOLTAIC GREENHOUSES OF EF SOLARE

COMMITMENT TO WIDESPREAD KNOWLEDGE

EF Solare is active daily in supporting and participating in **training sessions with schools and institutes, to stimulate knowledge and working methods for the development of future professionals in the energy sector**. Le Greenhouse, historic agricultural partner of EF Solare, has joined this year the school-work alternation project proposed by the professional agronomic institute of Spezzano Albanese, in Calabria, to promote a more in-depth knowledge of the agricultural sector and the related new opportunities of development. Through classroom lessons and direct experiences in the agrivoltaic plants of Cassano allo Jonio (CS), it was possible to demonstrate the functioning of photovoltaic greenhouses and all the integration and synergy processes present in these plants. **The contamination between theoretical knowledge and practical knowledge represents an opportunity of great value for students**, who have the opportunity to deepen their knowledge and curiosities regarding renewables, but also for the companies themselves, which promote greater awareness among younger generations regarding new opportunities for sustainable development.

LEARN MORE

AGRI-PV LESSONS: SCHOOL-WORK ALTERNATION IN OUR GREENHOUSES

THE NEW AGRIVOLTAIC MODEL 2.0: THE SCALEA EXPERIMENTAL PLANT

The successful experience of photovoltaic greenhouses led the Group, together with their historical agricultural partner Le Greenhouse and Convert Italia, a company specialised in the provision of solar tracker systems, to develop **an innovative agrivoltaic model, originating from the mutual sharing of skills and expertise gained in their respective areas** over the years. Made for the first time in Scalea, in Calabria, the model combines technological innovation and attention to the local area.

The new 2.0 agrivoltaic solution does not use up land and is capable of satisfying the needs of open-field cultivation while at the same time maintaining some of the benefits detected under the greenhouses, such as shade and water saving: 70% less water was used in EF Solare's photovoltaic greenhouses compared to open field cultivation.

THE NEW 2.0 AGRIVOLTAIC MODEL AT A GLANCE

01

DOUBLE-SIDED PANELS AND SUN TRACKER SYSTEMS

to capture as much energy as possible.

02

THREE METRES TALL GROUND-MOUNTED STRUCTURES

with no concrete foundations: to allow cultivation under panels and the complete reversibility of the installation.

03

ADEQUATE SPACING BETWEEN THE ROWS

to allow agricultural activity also with mechanized means.

04

IRRIGATION AND NEBULIZATION SYSTEMS INTEGRATED IN THE PANNEL SUPPORT STRUCTURE

to fully exploit the integration between the two sectors.

05

REMOTELY MANAGEABLE DIGITAL MONITORING SYSTEMS

to trace the agronomic parameters of the plants and those relating to electricity production.

06

CROPS CHOSEN ON THE BASIS OF CHARACTERISTICS AND THE TRADITION OF THE AREA

to respect and enhance the territory.

THE BENEFITS OF AGRIVOLTAIC 2.0

Agrivoltaic 2.0, in addition to producing green energy, allows:

AS WELL AS THE OPEN FIELD

- Integral use of agricultural areas (zero land consumption)
- Comparable cultivation density and, therefore, use of the same agricultural means

BETTER THAN THE OPEN FIELD

- Lower water consumption (it is estimated a reduction in water use of 1/3 compared to open-ended cultivation)
- Greater protection from catastrophic atmospheric events

BETTER THAN THE GREENHOUSES

- Lower investment costs
- Easy reversibility

SYMBIOSYST: THE EUROPEAN AGRICULTURAL RESEARCH PROJECT

During 2022, EF Solare, together with eighteen other companies and research centres, joined the international consortium coordinated by Eurac Research, in charge of carrying out the European research project on agrivoltaics "Symbiosyst"[20], selected and funded by Horizon Europe[21].

The project, which started in January 2023 with an expected duration of four years, has the ultimate **goal of developing strategies and technological solutions to increase the competitiveness of agrivoltaics in Europe and at the same time disseminate its culture**, bringing the topic to the centre of the debate and public policies. **EF Solare's task will be to coordinate the Work Package 5 group**, in charge of designing, applying, and testing on the field the innovative agrivoltaic solutions studied and developed in the project, finding solutions that make this technology truly integrated with the landscape and with the crops. The new plants will also be inspired by already existing demonstration models, such as the prototype developed by EF Solare in 2021 in Scalea. Furthermore, EF Solare will **design and build a new agri-experimental plant in Bolzano**, inside a "Guyot" apple orchard. The plant, which will be created in close collaboration with expert agronomists, will be complementary to that of Scalea, will have plants spread over rows and will be equipped with advanced irrigation technologies and hail protection.

Thanks to specific monitoring systems, data on electricity and agricultural production will be collected, as well as environmental data, used to define the guidelines for new agrivoltaic plants.

Other experimental plants will be built in Spain and Holland, with different configurations: in Spain, near Barcelona, will be planted horticultural and low crops, and it will be tested how the panels can protect against birds and insects. In the Netherlands, the revamping of an existing greenhouse planted with tomatoes will be started and semi-transparent panels will be tested, as well as a new building in which integration with grapes will be tested.

LEARN MORE

LAUNCHED THE "SYMBIOSYST" RESEARCH PROJECT TO INCREASE THE COMPETITIVENESS OF AGRIVOLTAICS IN EUROPE

LEARN MORE

TO PRODUCE ENERGY AND APPLES AT THE SAME TIME, THE BET IN SOUTH TYROL

[20]Grant Agreement N. 101096352
[21]Framework program of the European Union for research and innovation

THE LIFE CYCLE OF PLANTS: ENVIRONMENTAL IMPACTS AND SUSTAINABILITY

EMBODIED CARBON

The solar plant in operation does not generate climate-changing emissions; the main impacts in environmental terms concern other phases of the life cycle of the plant, i.e. the production of panels, components and support structures, transport, construction, and maintenance of the plant itself and, lastly, end-of-life treatment of photovoltaic cells, on average after 25-30 years The production of electricity using photovoltaic technology has an embodied carbon that does not exceed 50 gCO2eq/kWh[22], thus respecting the threshold of 100g CO_2 for the production of 1kWh of electricity set by the European Taxonomy[23].

EF Solare Italia is launching a study on the embodied carbon of some types of plants in its portfolio, with the aim of increasing transparency and awareness on the subject and representing a cutting-edge model for the entire supply chain.

CIRCULARITY

The sector has to deal with a constant increase in the volume of decommissioned photovoltaic panels, both in current and prospective terms. This phenomenon represents an environmental challenge to face, but also offers the opportunity to generate new value through the recovery of materials and the adoption of business models oriented towards reuse and the integration of the principles of the circular economy.

EF Solare has established a framework agreement this year which has made it possible to identify the most reliable subjects to efficiently manage the end-of-life of the panels.

USE OF NATURAL RESOURCES

With regard to the use of resources, the impact on water resources should be noted, which concerns the washing phase of the panel surfaces, carried out approximately once a year: for each megawatt installed, the estimated water consumption is around 6,000 litres.

EF Solare is committed to minimizing its water footprint throughout the life cycle of the plant.

[22]PCC, Chapter 7
[23]The Taxonomy of sustainable investments (European Regulation n. 2020/852) will condition the flow of financial resources towards the sector in the near future. In fact, the Taxonomy sets a maximum carbon footprint of 100g CO2 for the production of 1kWh of electricity for the energy sector, which will then have to be written off by 2050. In addition to compliance with this threshold, under penalty of ineligibility for the Taxonomy, it is naturally necessary not to damage ("do not significant harm") the other objectives set by the Regulation, such as the protection of biodiversity and compliance with the principles of the circular economy, guaranteeing that panels and associated components are manufactured with the longest possible life in mind, designed for easy dismantling, refurbishment, and recycling.

AN INNOVATIVE APPROACH FOR MANAGING THE END OF LIFE OF THE PANELS

Driven by an ambitious revamping program, in the last two years EF Solare has had to measure itself with the management of the end-of-life of a large number of photovoltaic modules, in a market context that is not yet fully mature.

To best respond to this challenge, in 2022 the company implemented a series of preparatory actions for the precise definition of the adequacy requirements of suppliers and the criteria for the subsequent monitoring of activities. This has laid the foundations for the identification, through a competitive selection process, of the most reliable subjects with whom a **framework contract** has been stipulated to manage the end of life of the modules efficiently and professionally. During the year, various control and audit activities were also carried out which concerned both the financial, managerial, and compliance characteristics of the selected subjects and the treatment plants used by them.

This approach has allowed EF Solare to gain a better understanding of the supply chain and to mitigate the risks associated with incorrect management of the end-of-life of the modules, thus strengthening the company's reputation. By choosing operators oriented towards innovation and technological investments, the company has also aimed to support the growth of the supply tchain itself in terms of offering production capacity and improving recovery processes and reducing costs.

This will be fundamental in the coming years to face growing demand and improve the quality and quantity of material recovery by pursuing the objectives of the circular economy.

2022 DATA

PROCESSED POWER

106 MWp

NO. OF PROCESSED MODULES:

644,711

(46% THIN FILM AND 54% CRYSTALLINE)

THE SUSTAINABILITY OF CORPORATE ACTIVITIES

The company is also committed to making its corporate activities more eco-compatible, with the implementation of various initiatives: the goal is to produce clean energy in a sustainable manner, adopting practices that ensure a significant reduction in greenhouse gas emissions attributable directly and indirectly to the business.

CONTRACT FOR HYBRID CAR RENTAL

for sustainable mobility with reduced CO_2 emissions.

ADAPTATION OF PRINTERS TO ECO-COMPATIBLE SYSTEMS (PRINT AND SHARE AND WITHHELD PRINTING)

introduction of printers with a console dedicated to keep track of consumption, to raise awareness of their environmental impact.

WATER DISPENSERS IN THE OFFICE AND A SUPPLY OF ALUMINUM BOTTLES

to reduce the use of plastic.

BICYCLE RACKS AT THE TRENTO OFFICE

for employees who want to travel by bicycle to facilitate sustainable mobility.

DIGITIZATION, UPGRADE, AND MODERNIZATION OF VIDEOCONFERENCE SYSTEMS

to improve remote collaboration and reduce the need of travel; release of the corporate document system in progress, to index and share documents in digital format.

2022 ENVIRONMENTAL HIGHLIGHTS IN ITALY

5.1 milion
LITRES OF WATER USED PER YEAR FOR WASHING THE PANELS

100%
OF WASTE PRODUCED FROM MAINTAINANCE AND REVAMPING ACTIVITIES SENT FOR RECOVERY

~ 1 milion euro
INVESTMENTS IN ENVIRONMENTAL MANAGEMENT

100%
OF PROCURED ELECTRICITY COMES FROM RENEWABLE SOURCES

THE CARBON FOOTPRINT OF EF SOLARE GROUP

SCOPE 1

267 tCO_2

Direct emissions from:
- use of fuel for heating;
- use of fuel for the company fleet.

SCOPE 2

403 tCO_2

Indirect emissions from the purchase of electricity intended for the operation of:
- offices;
- auxiliary facilities.

SCOPE 3

2,596 tCO_2

Indirect emissions as a result of the organization's activities:
- paper consumption;
- business travel;
- business travel accommodation;
- estimated mileage for O&M activities.

CO_2 AVOIDED BY EF SOLARE GROUP

580,000
TONS OF CO_2 AVOIDED THANKS TO OUR
PRODUCTION OF RENEWABLE ENERGY

"A sustainable, resilient supply chain has always been a strategic tool for us. This is truer than ever today, with global markets featuring prolonged shortages of essential semi-finished products, logistical bottlenecks, and highly volatile prices in important segments of the value chain. The availability of the main plant components, the selection of contractors for maintenance and construction activities, and the identification of reliable operators for the end-of-life management of photovoltaic modules are all crucial points, that EF Solare presides over with increasing commitment to ensuring high-quality supplies and services at acceptable prices for the growth plans, always safeguarding people and the environment."

Roberto De Simone
Head of Supply Chain & HSE

TOWARDS A RESPONSIBLE SUPPLY CHAIN

The selection and management of suppliers takes place by enhancing the sustainability aspects that EF Solare makes its own, with the aim of, over time, creating and maintaining a responsible supply chain.

An organic, structured process was launched in 2021 in conjunction with an external partner, for the ESG evaluation of suppliers, that considers their environmental and social performance, as well as economic and financial ones. **A digital procurement platform was launched in 2022**, which integrates the social and environmental assessment of suppliers into an overall rating system. The objective is to evaluate suppliers - starting from the first moment of qualification - also according to the principles of the circular economy and on the basis of their commitment to decarbonisation topics.

OUR SUPPLIERS - ITALY

500
SUPPLIERS IN THE REGISTER

146
SUPPLIERS QUALIFIED DURING THE YEAR

316
ACTIVE SUPPLIERS

AN INTEGRATED MANAGEMENT SYSTEM FOR SAFETY AND THE ENVIRONMENT

EF Solare Italia operates and manages its activities to reach "Target Zero": zero accidents, zero occupational illnesses and zero environmental impact.

The company is committed to constantly ensuring the safety of facilities and workers, applying the best management procedures and practices, and promoting a shared culture of protection of the environment and the health and safety of the people who work within the company.

In 2021, the company obtained certifications relating to the environmental impact management systems (ISO 14001:2015) and the health and safety of workers (ISO 45001:2018). The first defines a clear environmental management system to be integrated into the business process system, the second promotes safer working practices and the evaluation of worker safety and health protection performance. **EF Solare is constantly committed to improving the standards achieved, measuring and certifying the quality of the work performed** through a growing commitment to both internal and third-party audit actions.

GROWING TOGETHER WITH PEOPLE AND COMMUNITIES

PEOPLE ARE ALWAYS
OUR TOP PRIORITY: WE SUPPORT
THEIR GROWTH THROUGH PROMOTING
THEIR WELL-BEING AND WE CREATE
SHARED VALUE FOR THE COMMUNITIES
WHERE WE ARE PRESENT

ATTRACTION, DEVELOPMENT, AND MOTIVATION OF HUMAN CAPITAL

DIVERSITY AND EQUAL OPPORTUNITIES

INVOLVEMENT OF LOCAL COMMUNITIES AND SHARING VALUE

GROWTH THAT STARTS WITH PEOPLE

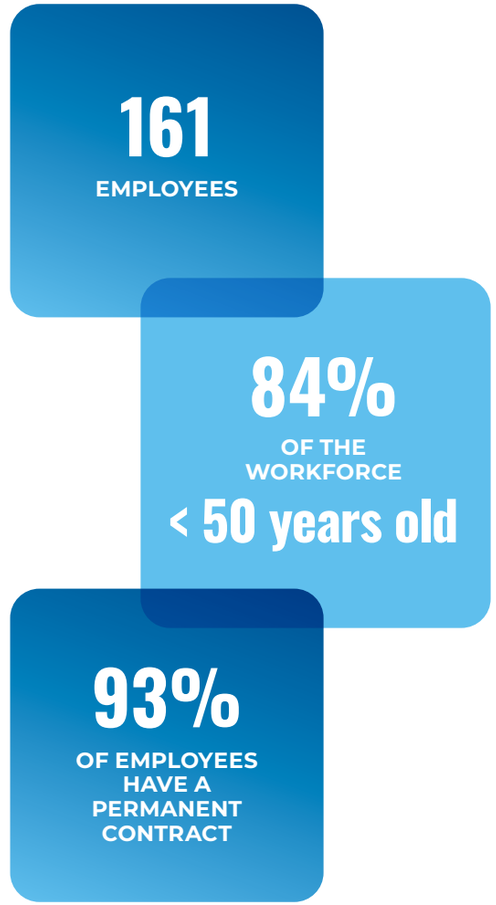
The people who work in EF Solare, their expertise and qualities are key for growth to continue. Knowing this, EF Solare is committed on a daily basis to creating a work environment in which every individual is at the heart, where talent is developed and is the vital tool for professional development.

EF Solare actively promotes policies for attracting new talents and recruiting professionals most suited to the requirements of the company.
To attract and develop the skill sets needed for the growth of EF Solare, the Group adopts an approach that prioritizes the sharing of values between the company and the individual, starting with listening to employees and their needs and moving on to their active involvement in the joint project for growth and development.

As at 31 December 2022, the workforce stood at 161 people, 99 of whom are based in Italy and 62 in Spain.
The average age is relatively young, with **more than 80% of employees under the age of 50**. This year, **56 new hires** were recorded, **more than 30% of whom were less than thirty years old**.
The introduction of new resources is always supported by training processes: specifically, induction training, namely programs designed for training new employees, which help to familiarize and integrate with the environment and colleagues.

Opportunities for socialising and getting together, aimed primarily at team building, which were extremely rare during the pandemic, were resumed: in April 2022, for the first time after the most severe phases of the health emergency, a **two-day team building event** was organized, which involved all personnel offering opportunities for socializing and training.

To continue **the integration process between EF Solare and Renovalia**, launched in 2020 following the acquisition, various round tables were held thanks to which the companies were able to make comparisons with the goal of achieving uniform management on different aspects of the business.



"We are navigating a historic context of great transformation and change, first and foremost, cultural: every operator is called upon to develop increasingly flexible and sustainable business models, developing and focusing on people. At EF Solare we want to be at the forefront when it comes to interpreting the new requirements and expectations that have emerged after the pandemic, overcoming the paradigm related to the head count to arrive at the heart count, leveraging fundamental aspects such as involvement, Motivation, passion, and direct participation in achieving the common goal of the creation of value."

Ubaldo Zanetti
Head of Human Resources & ICT

WELL-BEING AND LISTENING TO EMPLOYEES

EF Solare, since its establishment, has always paid great attention to the well-being of its employees.

The right work/life balance is vital for the psychological well-being of people and an indicator of the quality of their life: to be able to guarantee a better work-life balance, last year EF Solare offered the possibility of remote working two days a week, through a dedicated rule, an opportunity that was positively welcomed by employees. Following this positive experience, the company decided to extend this agreement moving to **10 working days per month of remote working starting from February 2023**.

In addition, this year too, EF Solare confirmed the **company welfare** system, which offers employees the possibility of benefiting from a dedicated budget, supporting the daily expenses they are faced with: healthcare, transport, education, and assistance to families.

The company is committed to keeping internal communication channels permanently open: the main tool is the company newsletter, updated monthly, a channel through which new resources are introduced, information is provided on innovations in the field of renewable energy and the main goals of the Group.

As another tool for engagement and sharing, a **questionnaire** was sent out in 2022, with the aim of exploring the needs and requirements of every employee. **The high participation rate demonstrated the desire and enthusiasm of people in contributing to improving the corporate setting**. The results of the survey were used as the basis for defining and planning future interventions: as an initial step, various work groups were launched on different themes with the task of promoting specific projects and initiatives. Some of these initiatives saw the light in the first months of 2023 as the **launch of the company intranet** and the "**Conoscersi**" (getting to know one another) **project**, which involves regular meetings open to all employees to facilitate familiarity with the main corporate processes and areas as well encouraging interaction between colleagues.

POST-SURVEY INITIATIVES

DEFINITION OF ACTIONS TO FACILITATE THE INCLUSION OF NEW HIRES AND THE ENGAGEMENT OF EMPLOYEES

DESIGN AND DEVELOPMENT OF A COMPANY INTRANET

DEFINITON OF BEST PRACTICES FOR TEAMWORK AND STRATEGIC ALIGNMENT, ALSO INCLUDING GOLDEN RULES FOR THE MANAGEMENT OF MEETINGS BETWEEN DIFFERENT TEAMS

ESTABLISHMENT OF DEDICATED MOMENTS OF INTERACTION BETWEEN COLLEAGUES

"The historic moment in which we are living requires us to respond rapidly to the demands of decarbonization and energy independence. Photovoltaics represents a cost-effective and safe solution for supporting the shift to a sustainable development model. It is therefore vital to implement a system of expertise and experience acquired to contribute to the definition of a legislative and regulatory framework that enables the growth of renewables. Alongside this, it is necessary to disseminate a culture of sustainability that encourages awareness and responsibility in the day-to-day actions of every one of us."

Michela Demofonti
Head of External Communication

WIDESPREAD SKILLS FOR GROWTH AND FOR THE SECTOR

EF Solare understands the training and development of its employee's skills as strategic levers and is committed to advancing them for all its resources.

In this sense, the mapping of corporate technical skills carried out in 2020 made it possible to define training paths for employees which integrate the needs of the individual Organizational Units with those of the Group, at the same time maintaining the general training activities dedicated to the development of technical and professional skills on environmental and safety issues. Last year the proposed training package was supplemented with **courses dedicated to general cybersecurity** and cybersecurity specific to the energy industry, created following an assessment on security awareness for all Group employees.

EF Solare's commitment is not limited to the development of in-house skills: for years, the company has been collaborating with various training institutions to support the development of skills in the sector. Specifically, we want to contribute to **creating and disseminating the culture of photovoltaics and to training versatile professionals who can satisfy the future requirements of the industry**.

3,030

HOURS OF TRAINING PROVIDED

18.7

HOURS ON AVERAGE OF TRAINING PER EMPLOYEE

Therefore, we continue to collaborate with the Accademia del Sole, on the specialist course for future technical maintenance personnel, and with the Sapienza University and SAFE, respectively, on the EFER post-university Masters (Energy Efficiency and Renewable Energy Sources and the Masters in Energy Resources Management. In 2022 four resources from the SAFE Master and the Accademia del Sole joined the company staff as a result of the training path and collaboration with these organizations.
In addition, this year **the CEO of EF Solare became part of the ELIS Fellow community**, devoting his time to the educational experiences promoted by the network and supporting the personal and professional training of new generations through his experience and knowledge. The project presented by the ELIS consortium has the goal of enriching the learning experience of students through the direct involvement of managers from different corporate organizations.

In Spain too, the Group promotes and supports educational paths and raises awareness about environmental issues, focusing on the younger generations and the world of professionals. An example of this is the organization of a series of training activities aimed at the children of the Valencian municipalities of Villar del Arzobispo and Casinos, as well as the environmental photographic workshop for students of the Valtierra Public College. With reference to the professional world, in November 2022 an open day was organized for professionals in the energy industry from the multinational Ernest&Young at the El Bonal and El Quin photovoltaic plants.

CONSCIOUS OF THE NEEDS OF THE COMMUNITIES

EF Solare is present in 17 regions of Italy and, since 2020, also in 4 regions of Spain. In the areas in which our plants are located, we have open channels of communication with the local communities, administrations, and other local stakeholders.

In recent years the Group adopted an approach that focuses on a harmonious collaboration with the players of the social and economic fabric, based on dialogue, mutual recognition, and the reduction of conflict thanks to the development of fair and transparent relations. The integration achieved has allowed EF Solare to highlight the benefits resulting from the generation of renewable energy, and to strike a deal with the local communities aimed at the creation and distribution of an increasingly shared value.

In 2022 the foundations were laid for an initial pilot initiative under the scope of an early-stage development project in Campania, aimed at implementing an activity to involve stakeholders in the area and evaluate the presence of conditions for the implementation of socio-cultural initiatives to benefit the local communities.

Through our activities EF Solare also supports the economy in the area in which we operate, prioritizing the local workforce, both in the processes of construction and maintenance, and advancing many activities promoting and announcing local events and initiatives.
Examples of this are the activities promoted in Spain, starting with the projects aimed at improving the well-being of the community through the creation of inclusive and accessible spaces, such as those created in the city of Puertollano, where the El Bonal photovoltaic plant entered into operation in 2021.

Overall, taking into consideration the various sponsorships, donations, and collaborations established, EF Solare Italia allocated approximately 100,000 euros in 2022.

APPENDIX

MAIN ENVIRONMENTAL AND SOCIAL PERFORMANCE DATA

PERSONNEL DATA

	GRI standard	Unit of measurement	Total 2021	Total 2022
PERSONNEL CONSISTENCY				
Number of employees at 01/01	2.7	no.	**146**	**136**
Total entries		no.	27	56
Total departures		no.	37	31
Total number of employees as at 31/12		no.	**136**	**161**
EMPLOYEES BY TYPE OF CONTRACT				
Employees with fixed-term contracts	2.7	no.	**9**	**11**
Employees with permanent contracts		no.	**127**	**150**
Employees by type of employment				
Employees with full-time contract	2.7	no.	**132**	**158**
Employees with part-time contract		no.	**4**	**3**
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING				
COLLECTIVE BARGAINING AGREEMENTS				
% of employees covered by collective bargaining agreements	2.30	%	100%[24]	100%

[24]The figure refers only to the Italian scope

	GRI standard	Unit of measurement	Total 2021	Total 2022
EMPLOYEE TURNOVER				
NEW HIRES AND PERSONNEL TURNOVER				
Total new entries	401-1	no.	**27**	**56**
New entries rate		%	**20%**	**35%**
Total number of departures		no.	**37**	**31**
Departures turnover		%	**27%**	**19%**
Average length of work		anni	4,11[25]	4,6
EMPLOYEE TURNOVER BY GENDER				
New entries	401-1	**no.**	**27**	**56**
Men		no.	22	42
Women		no.	5	14
New entries rate		**%**	**20%**	**35%**
Men		%	23%	36%
Women		%	12%	31%
Departures		**no.**	**37**	**31**
Men		no.	30	21
Women		no.	7	10
Departures turnover rate		**%**	**27%**	**19%**
Men		%	32%	18%
Women		%	17%	22%

[25]The figure refers only to the Italian scope

	GRI standard	Unit of measurement	Total 2021	Total 2022
EMPLOYEE TURNOVER				
EMPLOYEE TURNOVER BY AGE				
New entries	401-1	**no.**	**27**	**56**
<30 years		no.	12	19
between 30 and 50 years		no.	11	35
>50 years		no.	4	2
New entries rate		**%**	**20%**	**35%**
<30 years		%	57%	76%
between 30 and 50 years		%	12%	32%
>50 years		%	17%	13%
Departures		**no.**	**37**	**31**
<30 years		no.	10	9
between 30 and 50 years		no.	18	20
>50 years		no.	9	2
Departures turnover rate		**%**	**27%**	**19%**
<30 years		%	48%	36%
between 30 and 50 years		%	20%	18%
>50 years		%	39%	13%

	GRI standard	Unit of measurement	Total 2021	Total 2022
TRAINING[26]				
Technical and professional skills	404-1	no.	729	1,584
Environment and safety		no.	512	944
Management skills		no.	85	501
Total hours of training provided		**no.**	**1.540**	**3.029**
Employees who have attended at least one training course		no.	137	162
Average hours of training per trained employee		no.	11,2	18,7
HOURS OF TRAINING BY GENDER				
Total	404-1	**no.**	**1.540**	**3.029**
Men		no.	1.215	2.649
Women		no.	326	380
EMPLOYEES TRAINED BY GENDER				
Total	404-1	**no.**	**137**	**162**
Men		no.	94	113
Women		no.	43	49
HOURS OF TRAINING BY CATEGORY				
Total	404-1	**no.**	**1.540**	**3.029**
Top Managers		no.	304	159
Middle Managers		no.	426	634
White Collars		no.	533	1.125
Blue Collars		no.	278	1.112

[26]The 2021 data relating to the type of training refer only to the Italian scope. The total hours of training in 2021 also includes the hours provided in Spain.

	GRI standard	Unit of measurement	Total 2021	Total 2022
TRAINING				
EMPLOYEES TRAINED BY CATEGORY				
Total	404-1	**no.**	**137**	**162**
Top Managers		no.	9	8
Middle Managers		no.	34	39
White Collars		no.	64	87
Blue Collars		no.	30	28
DIVERSITY AND EQUAL OPPORTUNITY				
EMPLOYEES BY GENDER				
Men	102-8	**no.**	**95**	**116**
Women		**no.**	**41**	**45**
EMPLOYEES BY AGE GROUP				
<30 years	405-1	**no.**	**21**	**25**
between 30 and 50 years		**no.**	**92**	**111**
>50 years		**no.**	**23**	**25**

	GRI standard	Unit of measurement	Total 2021	Total 2022
DIVERSITY AND EQUAL OPPORTUNITY				
EMPLOYEES BY CATEGORY AND BY AGE				
Top Managers	405-1	**no.**	**8**	**9**
of which <30 years		no.	0	0
of which between 30 and 50 years		no.	5	6
of which >50 years		no.	3	3
Middle Managers		**no.**	**34**	**38**
of which <30 years		no.	0	0
of which between 30 and 50 years		no.	29	29
of which >50 years		no.	5	9
White Collars		**no.**	**66**	**78**
of which <30 years		no.	15	20
of which between 30 and 50 years		no.	39	48
of which >50 years		no.	12	10
Blue Collars		**no.**	**28**	**36**
of which <30 years		no.	6	5
of which between 30 and 50 years		no.	19	28
of which >50 years		no.	3	3

	GRI standard	Unit of measurement	Total 2021	Total 2022
DIVERSITY AND EQUAL OPPORTUNITY				
EMPLOYEES BY CATEGORY AND GENDER				
Top Managers	405-1	**no.**	**8**	**9**
of which men		no.	7	8
of which women		no.	1	1
Middle Managers		**no.**	**34**	**38**
of which men		no.	24	27
of which women		no.	10	11
White Collars		**no.**	**66**	**78**
of which men		no.	36	45
of which women		no.	30	33
Blue Collars		**no.**	**28**	**36**
of which men		no.	28	36
of which women		no.	0	0
EMPLOYEES BY TYPE OF CONTRACT AND GENDER				
Permanent contract	2.7	**no.**	**127**	**150**
of which men		no.	87	108
of which women		no.	40	42
Fixed-term contract		**no.**	**9**	**11**
of which men		no.	8	8
of which women		no.	1	3

	GRI standard	Unit of measurement	Total 2021	Total 2022
DIVERSITY AND EQUAL OPPORTUNITY				
EMPLOYEES BY TYPE OF EMPLOYMENT AND GENDER				
Full-time	2.7	**n.**	**132**	**158**
of which men		n.	95	116
of which women		n.	37	42
Part-time		**n.**	**4**	**3**
of which men		n.	0	0
of which women		n.	4	3
GENDER PAY GAP				
REMUNERATION DIFFERENTIAL (RATIO BETWEEN AVERAGE HOURLY WAGES FOR MEN / WOMEN)				
Top Managers	405-2	%	5%	-30%
Middle Managers		%	5%	5%
White Collars		%	-17%	-9%

HEALTH AND SAFETY

	GRI standard	Unit of measurement	Total 2021	Total 2022
EXPENSES AND INVESTMENTS FOR SAFETY[27]				
Security expenses (opex)		k euro	428	217
Security investments (capex)		k euro	265	68
Total expenses and investments		**k euro**	**693**	**285**
HEALTH AND SAFETY MANAGEMENT POLICIES AND SYSTEMS				
Employees covered by health and safety management policies or procedures	403-8	no.	136	161
		%	100%	100%
Employees covered by health and safety management policies or systems certified according to international standards (OHSAS 18001 - ISO45001)		no.	78	161
		%	57%	100%
ABSENTEEISM				
Absenteeism rate		**%**	2,71%	1,45%
WORKPLACE INJURIES				
Total employee injuries	403-9	**no.**	**3**	**3**
- of which in progress			0	0
- of which with lost days			1	3
- of which without lost days			2	0
- of which women			0	1
Hours worked		no.	252.245	265.744
Injury frequency index (not in progress)			**11,9**	**11,7**
Days lost due to injury		no.	103	62
Injury severity index (not in progress)			**0,4**	**0,24**
Near miss		no.	3[28]	11

[27]Expenditure and investments for security refer only to the Italian scope both for the year 2021 and for the year 2022
[28]The figure refers only to the Italian scope

PLANTS

	GRI standard	Unit of measurement	Total 2021	Total 2022
PLANT DATA				
Total number of photovoltaic plants	EU-1	no.	318	318
Installed capacity		MW	1,046	1,048
Average age of operational facilities		years	11[29]	12
Land occupied by photovoltaic plants		conventional m^2	19.701.482[30]	23.561.482
OPERATING DATA				
Energy produced	EU-2	MWh	1.379.477	1.503.317
Energy fed into the grid		MWh	1.342.121	1.470.251
AVAILABILITY				
Average availability factor[31]	EU-30	%	96,9%	96,7%
EFFICIENCY				
Average performance ratio of the plants	EU-11	%	72,8%[32]	73,2%

[29]The figure refers only to the Italian scope
[30]The figure refers only to the Italian scope
[31]The figure refers only to the Italian scope for both 2021 and 2022
[32]The figure refers only to the Italian scope

PHOTOVOLTAIC GREENHOUSES[33]

	GRI standard	Unit of measurement	Total 2021	Total 2022
Total number of photovoltaic plants	EU-1	no.	10	10
Installed capacity		MW	32	32
Average age of operational facilities		years	11	12
OPERATING DATA				
Energy produced	EU-2	GWh	42,4	43,16
Energy fed into the grid		GWh	41,6	42,13
AVAILABILITY				
Average availability factor	EU-30	%	98,7%	99,1%
EFFICIENCY				
Average performance ratio of the plants	EU-11	%	71,4%	70%

[33]The data relating to photovoltaic greenhouses refer only to the Italian scope

ENVIRONMENTAL DATA

	GRI standard	Unit of measurement	Total 2021	Total 2022
Expenses (opex)		k euro	302.6	600
Investments (capex)		k euro	124,1	1016,44
Total[34]		**k euro**	**426,7**	**1.616,44**
ON SITE AUDITS				
HSE audits		no.	40	137
Third party audits		no.	159	40
ENVIRONMENTAL COMPLIANCE				
Monetary value of the sanctions suffered	307-1	k euro	0	0
Provisions of a non-monetary nature		no.	0	0
CHEMICAL SUBSTANCES				
SF6 present in electrical equipment		kg	n.a	n.a.
SF6 top up		kg	0	0

[34]The 2021 and 2022 data referring to expenses and investments relates only to the Italian scope

	GRI standard	Unit of measurement	Total 2021	Total 2022
WATER RESOURCES				
Water used for washing the panels[35]	303-5	lt	8.300.000	5.100.000
WASTE				
WASTE PRODUCTS RECOVERED				
Dangerous[36]	306-3	t	1,6	11,1
Not dangerous		t	2.312,3	11,275,5

ENVIRONMENTAL IMPACTS OF OFFICES AND OTHER VENUES

	GRI standard	Unit of measurement	Total 2021	Total 2022
MATERIAL USED BY WEIGHT OR VOLUME				
Paper	301-1	Kg	6.300[37]	1.057
ENERGY				
DIRECT CONSUMPTION BY SOURCE				
Natural gas	302-1	Sm^3	0	0
Diesel		Lt	84.257	83.090
Petrol		Lt	19.236[38]	20.218
GPL		Kg	0	0

[35]The figure refers only to the Italian scope for both 2021 and 2022
[37]Hazardous waste present only in the Spanish scope
[38]The figure refers only to the Italian scope
[39]The figure refers only to the Italian scope

	GRI standard	Unit of measurement	Total 2021	Total 2022
ENERGY				
INDIRECT CONSUMPTION				
Electricity supplied from the grid[39]	302-1	MWh	19.502	17.943
- of which from renewable sources		MWh	842	16.385
- of which from non-renewable sources		MWh	18,660	1.558
SELF-PRODUCTION AND CONSUMPTION				
Electricity produced and self-consumed	302-1	MWh	37.356	33.066
WATER RESOURCES				
Total water withdrawals (offices)	303-3	m^3	780	369

CARBON FOOTPRINT

	GRI standard	Unit of measurement	Total 2021	Total 2022
tCO_2 emissions (scope 1)	305-1	t CO_2	268	267
tCO_2 emissions (scope 2)		t CO_2	8.358	403
tCO_2 emissions (scope 3)		t CO_2	2.240[40]	2.596

[39]Electricity for the functioning of auxiliary services and for the offices
[40]The figure refers only to the Italian scope

SUPPLIERS[41]

	GRI standard	Unit of measurement	Total 2021	Total 2022
Total value of supplies	102-9	k euro	94.900	86.400
of which goods		k euro	28.800	26.300
of which services		k euro	66.100	60.100
of which works		k euro	0	0
Ordered value from local institutions[42]	204-1	k euro	70.200	57.600
Percentage of orders from local institutions		%	74%	66%
SELECTION AND QUALIFICATION OF SUPPLIERS				
Total suppliers in the register	102-9	no.	464	500
Suppliers qualified during the year[43]		no.	85	146
Active suppliers[44]		no.	540	316
ENVIRONMENTAL ASSESSMENT OF SUPPLIERS				
Percentage of new suppliers that were evaluated using environmental criteria	308-1	%	0%	0%
SOCIAL ASSESSMENT OF SUPPLIERS				
Percentage of new suppliers that were evaluated using social criteria	414-1	%	0%	0%

[41]The data in this section refer only to the Italian scope
[42]Value of orders from suppliers based in the provinces where the plants are located
[43]New qualified suppliers as well as suppliers who have re-qualified
[44]Suppliers who have received at least one order or contract during the year

COMMUNITY[45]

	GRI standard	Unit of measurement	Total 2021	Total 2022
INVESTMENT IN THE COMMUNITY				
Total investments	203-1	euro	111.000	92.744
of which sponsorships and monetary donations		euro	106.000	57.744
of which in kind donation value		euro	0	0
of which in man time value		euro	5.000	5.000
other		euro	0	30.00
BREAKDOWN OF INVESTMENTS BY FIELD OF INTERVENTION				
For education and cultural activities		%	95%	100%
For environmental protection		%	0%	
For social welfare		%	5%	
For sports support		%	0%	

[45]The data in this section refer only to the Italian scope

COMPLIANCE

	GRI standard	Unit of measurement	Total 2021	Total 2022
ANTI-CORRUPTION				
EMPLOYEE ANTI-CORRUPTION COMMUNICATION AND TRAINING				
% of total employees who have been notified of anti-corruption policies and procedures		%	100%	100%
ANTI-CORRUPTION TRAINING FOR EMPLOYEES				
Total employees trained on anti-corruption policies and procedures	205-2	no.	58	33
Total percentage of employees who have been provided with anti-corruption policies and procedures		%	43%[46]	20%
CONFIRMED CASES OF CORRUPTION AND ACTIONS TAKEN				
Confirmed episodes of corruption	205-3	no.	0	0
Proceedings against the organization or employees for corruption		no.	0	0
ANTI-TRUST				
Pending or completed lawsuits related to anticompetitive behaviour and violations of antitrust and monopolistic laws against the company	206-1	no.	0	0
SOCIO-ECONOMIC COMPLIANCE				
Monetary value of the sanctions suffered	419-1	K euro	0	0
Provisions of a non-monetary nature		no.	0	0

[46]This figure has been updated with respect to the 2021 edition

METHODOLOGICAL NOTE

Through the Sustainability Report, the fourth edition of which is being published this year, EF Solare Italia is reporting to all its stakeholders on the company's commitment to energy transition and the sustainable development of its activities. The document illustrates operating activities and the results achieved with reference to the financial year 1 January - 31 December 2022.

SCOPE AND APPLICATION OF GRI STANDARDS

The scope used for drafting the report is in continuity with the 2021 edition and covers both the Italian and Spanish operations in their entirety, presenting the data in an aggregated way, with some exceptions pointed out in the test and data tables.
The Report was prepared using the GRI Standards 2021 as a methodological reference, recently published by the Global Reporting Initiative (GRI), integrated with some indicators envisaged by the "GRI Electric Utilities Sector Supplement", recognizable in the document by the prefix "EU". The application of the standard took place according to the self-declared "with reference" level of conformity. The complete list of GRI Standards applied is given in the correlation table published on page 82.

MATERIALITY ANALYSIS AND REPORTING PROCESS

The process indicated for the definition of material topics has been reviewed and strengthened above all around the concept of impact, as indicated by the GRI Standards 2021. The updating of the materiality processes this year, in line with the previous year, also involved the direct participation of several external stakeholders, involved through dedicated interviews. The 2022 material topics are reported in the matrix published on pages 15-16.
The contents of the report were provided by the entire corporate organisational structure through a collection process based on dedicated forms, for quantitative data, and direct interviews with function representatives for the qualitative side, in line with the approach required by the GRI Standards. The preparation of the document was coordinated by External Communication. The report was presented to the Board of Directors of EF Solare Italia at the meeting of 26 April 2023 and then published on the company website (www.efsolareitalia.com). It was not subjected to external auditing. However, note that the most important economic and financial data and operating data were already included within the scope of the audit conducted on the financial statements. The reconciliation tables for material topics and associated GRI scopes are illustrated below.

Material topics	GRI standard (topic)	Limitation of the topic in the internal scope	Extension of the topic to the external scope
– Diffusion of innovation in the energy system – Resilience and continuity of the supply chain – Involvement of local communities and sharing of value – Digitization of processes	201: Economic performance		
	203: Indirect economic impacts		
– Ethics and integrity – Advocacy and support to institutions for the energy transition	205: Anti-corruption		
	419: Socio-economic compliance		
– Attraction, valorisation and motivation of human capital – Diversity and gender equality	401: Employment:		
	404: Training and education		
	405: Diversity and equal opportunities		
	406: Non-discrimination		
– Safety of plants and operators	403: Occupational health and safety		Suppliers (contracting work and services)
– Respecting biodiversity and the area	302: Energy		
	303: Water		Suppliers (contracting work and services)
	305: Emissions		Suppliers (contracting work and services)
	306: Waste		
	307: Environmental compliance		
– Circular economy	306: Waste		

GRI REFERENCES

GRI standard	Disclosure	Description	References
GRI 2 – INFORMATIVA GENERALE			
Organisation profile	2-1, a	Name of the organisation	EF Solare Italia
	2-6, b	Activities conducted, brands, products and services	P. 5
	2-1, c	Location of headquarters	Trento, Italy
	2-1, d	Location of operations	Pp. 5, 11
	2-1, b	Ownership structure	P. 5
	2-6, a	Markets served and scale of the organisation	P. 5
	2-7, 8	Information on employees and other workers	Pp. 55-59, 63-70
	2-6, b	Description of the supply chain	Pp. 51, 77
	2-6, d	Significant changes to the organisation and the supply chain	P. 51
	2-28	Membership of associations and external initiatives	P. 31
Strategy	2-22	Statement from senior decision-maker	P. 3
	2-25	Key impacts, risks and opportunities	P. 15

GRI standard	Disclosure	Description	References
GRI 102 – GENERAL INFORMATION			
Ethics and integrity	2-26	Mechanisms for advice and concerns about ethics	Pp. 34, 35
Governance	2-9	Governance structure	P. 8
Stakeholder engagement	2-30	Percentage of employees covered by collective bargaining agreements	100% of employees are covered by the CCNL
	2-29	Identifying and selecting stakeholders	P. 14
Reporting process	2-2	Entities included in the consolidated financial statements and not included in the sustainability report	The scope of the report coincides with that of the Sustainability Report published
	2-3, a	Reporting period	The report refers to the period from 1 January 2022 to 31 December 2022
	2-3, c	Date of the most recent report	2021
	2-3, c	Reporting frequency	Annual
	2-3, d	Contacts for requesting the report	Contact: info@efsolareitalia.com
	2-5	External audit	Not present

GRI standard	Disclosure	Description	References
GRI 3 – MATERIAL TOPICS			
	3-1	Process of determining material topics	P. 13
	3-2	List of material topics	P. 15
GRI 200 – ECONOMIC ASPECTS			
GRI 201 Economic performance	3-3	Approach to management	P. 12
	201-1	Direct economic value generated and distributed	P. 12
GRI 203 Indirect economic impacts	3-3	Approach to management	P. 60
	203-1	Infrastructure investments and services supported	P. 60
	203-2	Significant indirect economic impacts	P. 60
GRI 205 Anti-corruption	3-3	Approach to management	P. 34
	205-1	Operations assessed for risks related to corruption	P. 79
	205-2	Communication and training about anti-corruption policies and procedures	P. 79
	205-3	Confirmed incidents of corruption and actions taken	In 2022 there were no confirmed cases of corruption or reports received in this regard
GRI 300 – ENVIRONMENTAL ASPECTS			
GRI 302 Energy	3-3	Approach to management	P. 49
	302-1	Energy consumed within the organisation	P. 76
GRI 303 Water	3-3	Approach to management	Pp. 49-50
	303-1	Withdrawals of water by source	P. 76

GRI standard	Disclosure	Description	References
GRI 300 – ENVIRONMENTAL ASPECTS			
GRI 305 Emissions	3-3	Approach to management	P. 50
	305-1	Direct emissions of greenhouse gases (Scope I)	P. 76
	305-2	Indirect emissions of greenhouse gases (Scope II)	P. 76
	305-3	Other indirect emissions of greenhouses gases (Scope III)	P. 76
	305-4	Intensity of greenhouse gas emissions	P. 76
GRI 306 Dumps and waste	3-3	Approach to management	P. 15, P 48
	306-2	Waste by type and disposal method	P. 75
GRI 2-27 Environmental compliance	307-1	Non-compliance with environmental laws and regulations	In 2022 there were no confirmed cases of corruption or reports received in this regard
GRI 400 – SOCIAL ASPECTS			
GRI 401 Occupation	3-3	Approach to management	Pp. 16, 55-56
	401-1	New employee hires and employee turnover	Pp. 64-65
GRI 403 Health and Safety at work	3-3	Approach to management	P. 16, P. 52
	403-1	Occupational health and safety management system	P. 52, 71
	403-2	Identifying dangers, assessing risks and enquiries into incidents	Managed in accordance with the guidelines of Legislative Decree 81/08
	403-3	Workplace medical services	Managed in accordance with the guidelines of Legislative Decree 81/08
	403-4	Worker participation, consultation, and communication on occupational health and safety	Managed in accordance with the guidelines of Legislative Decree 81/08

GRI standard	Disclosure	Description	References
GRI 400 – SOCIAL ASPECTS			
GRI 403 Health and Safety at work	403-5	Worker training on occupational health and safety	P. 66
	403-6	Promotion of worker health	P. 52
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	There are occupational health and safety management procedures that apply to all employees
	403-8	Work-related injuries	P. 71
	403-9	Employees covered by an occupational health and safety management system	P. 71
	403-10	Work-related ill health	In the last three-year period, there were no confirmed cases of work-related ill health or reports in this regard
GRI 404 Training and education	3-3	Approach to management	Pp. 16, 58, 59
	404-1	Average annual training hours per employee	Pp. 66-67
GRI 405 Diversity and equal opportunities	3-3	Approach to management	Pp. 16, 55-56
	405-1	Diversity of governance bodies and employees	Pp. 68-69
	405-2	Ratio of basic salary and remuneration of women to men	P. 70
GRI 406 Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	No incidents of discriminatory behaviour were reported in 2022
GRI 2-27 Socio-economic compliance	419-1	Non-compliance with laws and regulations in the social and economic area	There were no confirmed cases of non-compliance with socio-economic regulations in 2022

GRI standard	Disclosure	Description	References
ENERGY AND UTILITIES SECTOR SUPPLEMENT			
	EU-1	Installed power	P. 72-73
	EU-2	Energy input	P. 72-73
	EU-11	Average efficiency	P. 72-73
	EU-30	Availability factor	P. 72-73

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Avanzi - Sostenibilità per Azioni

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