



— Miguel Stilwell d'Andrade
CHAIRMAN OF THE EXECUTIVE
BOARD OF DIRECTORS

1.1.1 Message from the Chairman of the EBD

Dear stakeholder,

In the future we may well look back on 2021 as a turning point for the planet. The energy sector remains at the heart of a myriad of challenges, from the fight against climate change to supply chain disruptions, volatile energy prices, rising inflation and an enduring pandemic – a warning for us all to properly plan for an orderly energy transition.

COP26 turned up the volume on the climate conversation. Political support from both sides of the Atlantic added momentum, contributing decisively to the acceleration of decarbonization. It was good to see further commitments within the *EU Fit for 55* packages as well as *EU Next Gen funds*, in addition to progress towards the implementation of the infrastructure bill in the US. Alongside these important steps forward on climate, the broader theme of stakeholder capitalism stood firmly at the top of the agenda. As the lines between life

and work continue to blur, worldwide attention turned to think more flexibly about the way we work, support and develop our teams.

The world faces unprecedented challenges and we need to collectively rethink how to live and preserve our planet. At EDP, we've answered this call to action by leading from the front on the global energy transition.

Our strategic commitment

The last twelve months have been transformational for EDP. In February 2021, we unveiled our strategic plan for 2021-2025, which is very clear in its ambition: an accelerated and sustainable growth strategy, enabled by an organization that is future-proof, offering ESG excellence and superior value to our shareholders.

Our bold and ambitious investment plan of €24 billion by 2025 will be mostly dedicated to Renewables, but also to Networks, Client Solutions and Energy Management.

The plan implies an additional 4 GW deployed yearly in renewables, with zero weight of coal on revenues by 2025 and carbon neutral (scope 1 & 2 emissions) by 2030 - our all-Green landmark. Our focus in networks will be in continuing to build a strong asset base maximizing asset value through smarter grids, investing more than €3 billion until 2025. We will also be investing in Client Solutions to scale up our footprint in decentralized solar generation and electric mobility, and exploring new services with a clear focus on efficiency and end-to-end digital transformation. Within Energy Management, we will leverage our distinctive 20+ year track record and expertise to create value, monetize flexibility and reinforce the origination of PPAs. We will invest in new growth avenues, namely offshore wind, renewable hydrogen and storage, and commit to €2 billion in innovation and digital transformation.

Our main business achievements in 2021

We've reached the end of 2021 stronger and more global than ever before, now present in 28 markets across Europe, North America, Latin America and Asia-Pacific, following the agreement of the acquisition of Sunseap in Singapore, the largest distributed solar player and top 4 solar player in South-East Asia. EDP is now growing in 4 continents, and we are proud to be the third greenest utility in Europe.

We've worked hard, and this has paid off. Our renewables portfolio is now at secured capacity of 8.4 GW, following the record installation of 2.6 GW additions in 2021. At EDP, over 75% of generated energy comes from renewable sources, showing real progress in decarbonizing the company portfolio, not forgetting the closure of our historic Sines coal power plant in Portugal.

A key pillar of our strategy remains geographical and business diversification. In that respect, 2021 was a year of many firsts: we entered Hungary and Chile and consolidated our presence in Asia; we commissioned our first wind farm in Greece and we inaugurated our largest wind project and solar array by capacity in the US - where EDPR is now the third largest producer of renewable energy; we started the construction of a major renewables' project in Colombia, and we inaugurated the largest ever photovoltaic project to be developed, built and operated in Brazil. In offshore, we achieved remarkable milestones through EDPR's joint venture with Engie (Ocean Winds), entering Poland, awarding a 400 MW PPA in the US, and, in the UK, commissioning our 950 MW Moray East wind farm, the largest offshore project in Scotland, and being awarded a 1 GW project at the Caledonian seabed. We have innovative projects in generation advanced at pace, including a floating solar project at the Alqueva hydro power plant and the

development of a pipeline of hybrid projects (sun and wind).

The networks business continues to deliver against our strategy with the successful completion of the Viesgo integration in Spain, the investment in transmission in Brazil including in the transmission company Celg-T with a portfolio of 756 km of networks and 14 substations, and the asset rotation transaction comprising the sale of 3 transmission lines in Brazil. In Portugal, we've successfully re-branded our networks' business and delivered our grid modernization and operational excellence plan.

Within client solutions, we are investing and growing in the solar distributed generation market – in 2021 we've contracted 417 MW in Europe, Brazil and US, and acquired a 194 MW portfolio in Asia. In electric mobility we are building close partnerships and contributing to a broader public charging network.

Green hydrogen is clearly emerging as an opportunity thus we launched our dedicated hydrogen business unit and engineering competence center, aiming to invest in projects that will guarantee 1.5 GW of capacity by 2030. We've made the WBCSD (World Business Council for Sustainable Development) H2Zero commitment together with 27 major global companies to accelerate the technology development and production. This year, we've also furthered our efforts in storage and will soon start construction of our first co-located storage facility in the US, while evaluating storage projects supported by strong fundamentals across our markets.

Across the group, we've revised our ambition and operating model of our global innovation platform to foster project's incubation through internal development, partnerships and ventures, as we increased our start-up Ventures target up to €100 million by 2025. Our efforts to accelerate the group's digital and technological transformation are progressing through the active

development of a new multi-cloud strategy, strengthening cybersecurity approach and deepening agile adoption.

Our strong financials

In 2021, we've further strengthened our financial base with €2.8 billion of proceeds secured in asset rotation transactions agreed and €2 billion in hybrid issuance. We've earned a long-term corporate credit rating upgrade to "BBB" by Standard & Poor's Global Ratings and Fitch Ratings as well as a Positive Outlook from Moody's.

EDP's results showed resilience and the ability to maintain sustainable growth by achieving a recurring net profit of €826 million representing a 6% increase year-on-year in a critical context of record high power prices, supply chain disruption and inflation resurgence. A strong operational performance of our renewables and networks segments and a an over €30 million nominal opex reduction enabled us to deliver a recurring EBITDA of €3,735 million representing a 7% increase year-on-year.

Our commitment to ESG excellence

It was a real moment to see EDP ranked in 2021 at the top as the world's most sustainable electric utility by the Dow Jones Sustainability Index. Also, EDP Brazil ranked first in the corporate sustainability index of the Brazilian stock exchange.

We've been fully committed to further advancing climate action within the group, with our partners and participating in global efforts, addressing external barriers on the pathway to net zero societies in international forums as the High-Level Dialogue on Energy and COP26, and joining relevant initiatives promoted by WBCSD, SEforALL and the UK COP26 Presidency. Furthermore, plans are advancing in the Just Transition and we are transforming our coal sites in Iberia (Sines, Barrios, Puente Nuevo, Aboño and Soto) in green

energy hubs, comprising hydrogen, renewables and batteries projects.

Our commitment to ESG goes far beyond EDP's decarbonization credentials. In 2021, we revised our social impact strategy establishing fair energy transition as the overarching global community investment theme. We are supporting the launch of 'solidarity solar communities' pushing forward the sharing of energy between neighborhoods. Furthermore, we have celebrated the 10th anniversary of our Volunteering Program, which touched more than 1.7 million people, through the commitment of more than 40 thousand volunteers since its inception.

At EDP, we maintain our strong commitment to the 10 principles of the United Nations Global Compact, to build a more sustainable world, aligned with the values of respect for human rights, employment, environmental protection and the fight against corruption.

I truly believe that our success rests on our people – they are the cornerstone of our distinctive portfolio strategy and growth. We have put our full effort behind the attraction and retention of talent, continuously working on well-being programs to provide a meaningful experience for our teams. I am pleased to say that in EDP our people demonstrate high levels of commitment and pride towards the company, above the overall market.

I'd also like to highlight our commitment to gender diversity and equality. EDP has been recognized, once again, by the Bloomberg Gender Equality Index for its efforts to support gender equality. We're leading by example with a 40% female participation in EDP's Executive Board of Directors as we continue to make progress towards our target of 30% female representation by 2025 across the group, both in overall representation and in leadership positions.

Finally, we continuously ensure that we follow corporate governance best practices and always aim at delivering the best interests of our stakeholders. We promote a culture of best ethical and compliance principles and have launched a dedicated health and safety corporate area, specialized in security policies and the mitigation of human, environmental and economic losses. In 2021 we have improved our decision-making processes to promote as much as possible efficiency, agility, and increased delegation and trust in our teams, paramount to the company's current growth path. In April, shareholders approved a new composition of the General and Supervisory Board, part of EDP's dual corporate governance model, with 16 members, of which 9 independent, a strong and varied professional track record, and diverse in gender and nationalities, providing valuable supervision and counsel in what was a demanding year for EDP.

ties –, for their trust on our mission and journey.

Personally, I am looking at 2022 with great expectations. I remain committed to creating superior value for shareholders and other stakeholders and I can assure you that EDP will continue to pursue the call to build a better future for the prosperity of mankind.



We are ready for 2022

EDP's Executive Board of Directors completed its first year of leadership and I am proud of what we've achieved, with resolute focus on the delivery of our strategic plan, doing our best at all times to lead by example. Together with EDP's General and Supervisory Board I know we are ready and fully committed to drive EDP throughout a promising path ahead leading the energy transition.

Finally, I would like to emphasize, on behalf of the Board of Directors, how grateful we are to our global team of over 12,000 employees. EDP's achievements would not have been attained were it not for their contribution and dedication – especially during another year of pandemic, struck by uncertainty. We also thank our external stakeholders around the world – shareholders, customers, suppliers, regulators, partners and local communi-



— Miguel Setas

1.1.2. Message from the Administrator

2021, a year of commitments towards net zero

2021 saw an unprecedented global movement of net zero commitments by countries, cities, regions, businesses and investors. While COP26 confirmed “code red for humanity” amidst the IPCC’s steepest assessment ever, it also kept to the objective to limit the global temperature rise to 1.5°C.

The energy transition emerged as the greatest challenge of our time, with the *High-Level Dialogue on Energy* (UN HLDE) convened in September by the UN Secretary General. The *International Energy Agency Net Zero Report* signaled a very narrow pathway to fulfill the long-term decarbonization targets, combining renewables, electrification and energy efficiency with the right policies in place and further technological innovation. Greater collaboration and action are needed from entire ecosystems, across business, supply chain, governments and society as a whole. If 2021 was a year of restored credibility in international negotiations, 2022 will need to deliver near-term action, improving policies, enhancing transparency and partnerships.

In 2021 we revised our business strategy which comprises ambitious ESG (Environmental, Social & Governance) targets. We also participated at the UN HLDE and COP26 and worked with our partners and relevant business networks, including WBCSD, UN Global Compact, The Climate Group, We Mean Business, SEforALL, Corporate Leaders Group, on collective projects and initiatives to

further advance those topics, through joint commitments as “Global Coal to Clean Power Transition”, “Glasgow Accord on Zero Emission Cars and Vans”, “H2Zero - Hydrogen Pledges”, and in important policy consultations and dialogues.

EDP Leading the Energy Transition

In 2021, we ramped up our efforts. We’ve incorporated a bold ESG ambition in our strategic update for 2021-2025 (BP 2021-25) focused on leading the energy transition, protecting the environment, delivering a positive impact on society and maintaining strong governance.

We committed a total of €24 billion of further investment in the energy transition, and we are set to become coal free by 2025 (zero contribution of coal to our revenues by 2025 year-end) while being an active shaper of the green future of the regions affected by coal phase-out policies.

We plan to reach all green by 2030, with 100% renewables generation in our portfolio, including through innovative renewable technologies such as green hydrogen (1.5 GW capacity by 2030) and storage (1 GW capacity by 2026).

Our efforts aim to reduce CO₂ emissions to become carbon neutral by 2030, reducing our scope 1 and 2 emissions by 98% and our scope 3 emissions by 50%, compared to 2015 levels. This target was recognized in 2021 by The Science Based Target Initiative (SBTi) in line with climate science requirements towards limiting global warming to 1.5°C.

In 2021, we reached 19.6 GW of renewable installed capacity corresponding to 80% of our total capacity. We also achieved 51% reductions in our scope 1 and 2 CO₂ specific emissions, and 30% reductions in our scope 3 CO₂ emissions, compared to 2015 levels. And we renewed our Executive Board of Directors Remuneration Policy, reinforcing ESG metrics, on variable components.

EDP continues to lead from the front as recognized from global indexes – this year we were ranked as the most sustainable electricity company in the world by the Dow Jones Sustainability Index. Further, EDP was yet again recognized as one of the most ethical companies in the world by the Ethisphere Institute. EDP Brasil recorded the best performance ever, reaching first position, in the Business Sustainability Index (ISE), the main ESG index in Brazil. In April, we also became part of the S&P Global Clean Energy Index.

We are ready to share our commitments to climate transition with our stakeholders, in 2022. EDP will step up efforts to reduce scope 3 emissions in accordance with the latest scientific data, aligned with the recent SBTi Net Zero Standard.

Facilitating a fair and just transition

Moreover, the quality of life, well-being and economical sustainability of our partners and clients are directly dependent on the accessibility, high-quality and affordable power. In an increasingly technological and digital society, ensuring that every person and organization can enjoy that is a priority EDP places at the heart of its business strategy. We are providing access to energy efficiency products and services by offering decentralized PV solutions, electric charging points for E-mobility and helping companies capture opportunities powered by digitalization and technological advancements. Our customers have saved 5.1 TWh of energy consumption and 9 MtCO₂ of emissions, since 2015, through our energy efficiency services.

Finally, we continue to be committed to addressing the vulnerability of people and communities, through i) contributions to reducing energy poverty and ii) investments in promising companies in the field of access to energy and co-funding access to energy projects mainly promoted by

NGOs, having committed €22.5 million until 2025. In 2021, we supported projects in Kenya, Tanzania, Mozambique, Nigeria, Angola, Rwanda and Malawi.

Capital and financial alignment with the SDGs and environmental goals

Sustainable finance is key to accelerating the transition to net-zero societies and the achievement of the SDGs.

In 2021, EDP continued to be directly involved in international and UN-linked initiatives to further advance SDG7 - Access to Affordable, Reliable, Sustainable and Modern Energy for All (SDG7). EDP became a member of the UN Global Compact CFO Task Force for the SDGs which is working towards the full integration of UN SDG goals into corporate finance. Our bond issues have been green since 2018, totaling EUR 6.4 billion. We also committed to have 50% of our funding structure from sustainable sources by 2025, which was 39% in 31 December 2021.

We have reinforced our reports by increasingly aligning with the *Task Force on Climate-related Financial Disclosure* recommendations and further integrating the *EU Taxonomy* requirements, aiming at having 70% of our revenues' taxonomy-aligned by 2025 and 80% by 2030.

Biodiversity

At EDP we recognize the value of nature and its known limits. The *World Economic Forum* (WEF) has signaled that approximately \$44 trillion of economic value generation is moderately or highly dependent on nature.

In line with the UN, we protect, restore and promote a sustainable use of ecosystems and biodiversity. In 2021, we continued our involvement in collective initiatives as the Act4Nature. We set specific biodiversity commitments aimed at protecting our surrounding ecosystems,

which include: i) not to build new generation assets in UNESCO World Heritage Natural Sites and ii) No Net Loss of biodiversity for all new projects with significant residual impacts until 2030.

Human rights

With the entry into force of the new Code of Ethics, the Human and Labour Rights policy was revised, including now a specialized committee to guarantee its implementation and the extension of Due Diligence obligations, both in the development of new infrastructures and in the selection of suppliers.

The complexity of supply chains continues to be a major challenge for companies when applying sustainability policies, particularly regarding human rights. Therefore, EDP has teamed up with peers and global organizations and initiatives (Bettercoal, Global Alliance for Sustainable Energy, Power Europe and US Solar Energy Industries Association).

Beyond this, EDP also started a program to ensure the engagement of direct suppliers with the goals of decarbonization, transparency and equality, while maintaining the objectives of guaranteeing respect and protection of fundamental human and labour rights. In 2021, despite our best efforts towards our suppliers, we still faced seven fatalities with contractors' workers. We deeply regret these fatalities and loss, and we continue to work hard to achieving zero occupational accidents, reinforced by the launch of the "PlayitSafe" program.

Looking ahead

The 2021 *Global Risks Report*, carried out by the WEF, served as a wake-up call to long-term risks including the pandemic, rising economic disparity and social fragmentation, all impact-

ing geopolitical stability. Environmental concerns and social crisis continue to top the list for risk in 2022.

While the energy sector faces economic and political pressure in the global energy mix and rising prices, it remains critical to accelerate and deliver the energy transition globally and avoid catastrophic climate change.

Our strategy is aligned with EDP being a global energy major, leading the transition to create superior value. We are well positioned across all platforms and pursue the creation of stakeholder value. The business case for sustainability and net zero may be clear, but there is no standardized single path to reach it.

In 2022 we will focus on delivering our ESG commitments, on the specific challenges regarding carbon neutrality, supply chain and climate efficiencies of EDP products and services. We will integrate the new generation of ESG legislation, regulation and reporting standards, aligning with best practices. And we will continue to cooperate with our partners to collectively improve efforts and complementary actions to Changing Tomorrow Now.

Miguel Neves Leirão

3.2. Accelerated and focused growth

3.2.1. Decarbonising the world

Alignment with the SDGs	Targets	KPIs 2021	Target 2025
	Installed capacity of renewable origin	80%	>90%
	Smart meters installed in the Iberian Peninsula	70%	100%
	Public and private EV charging points in Portugal, Spain and Brazil	3,804	>40k

The fight against climate change and, in particular, the fulfilment of the climate goals of the Paris Agreement, reinforced in the Glasgow Pact, has led to a five-fold acceleration in the pace of decarbonisation of the world economy.

The electricity has a key role in this acceleration, through the use of renewable energies and the promotion of electrification of the remaining sectors, in particular transport, air conditioning in buildings and industry.

Obviously, EDP's activity means that it plays a central role in this collective effort to combat climate change.

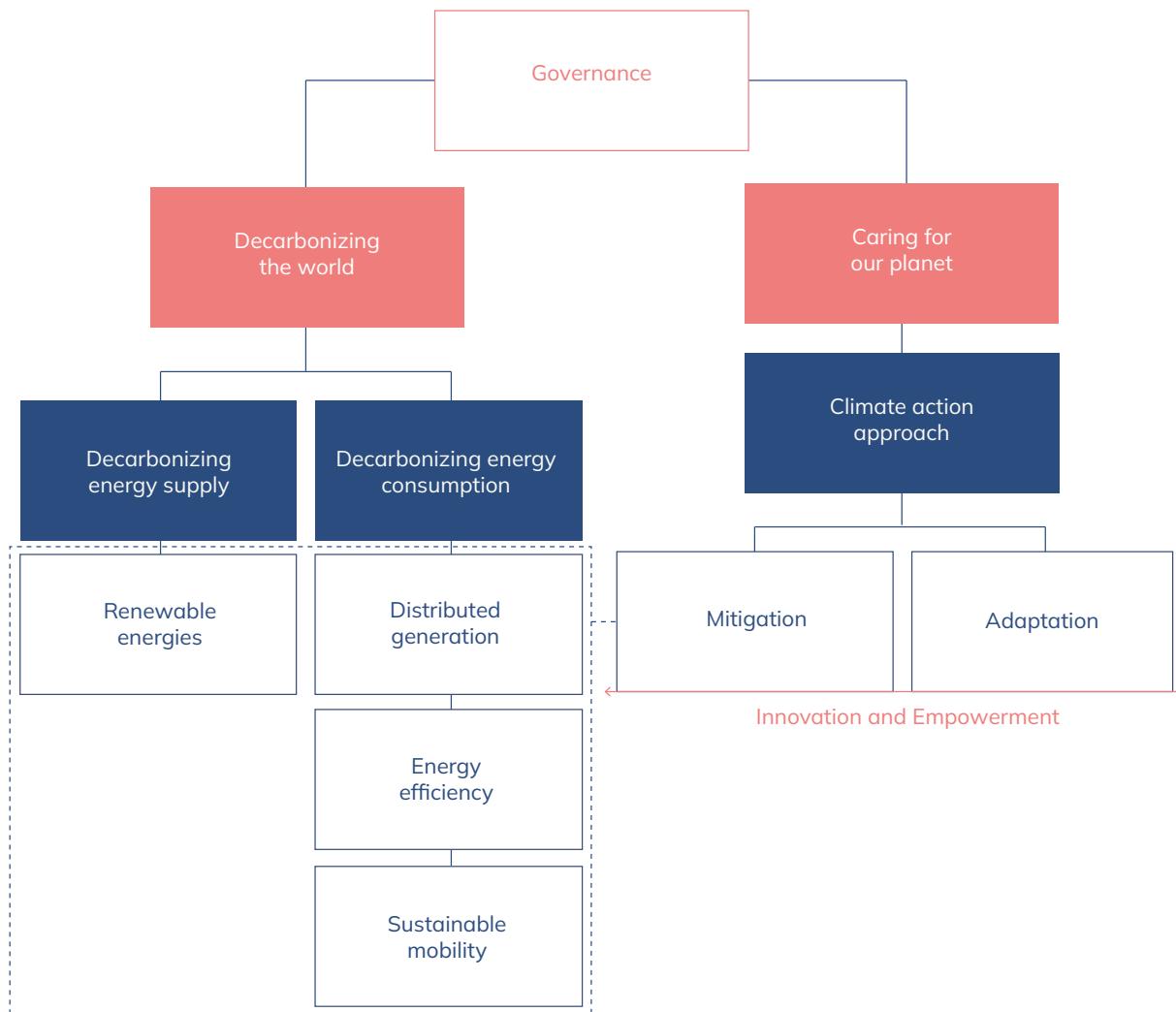
The Group prioritizes the fight against climate change as an integral part of its global strategy. Indeed, leading the energy transition, contributing to a low carbon economy,

has been a primary objective of the Group. It was to this end that the business was built and developed and is currently a recognized example among the largest companies globally.

EDP contributes to the decarbonisation of the world economy on two different fronts. Through the decarbonisation of generation, through expansion into renewable energies and the progressive closure of thermoelectric plants. Then also through the decarbonisation of consumption, with solutions for new low-carbon products and services, which can be used mostly inside and outside the EDP sphere. These services are mainly of three distinct and complementary types:

- solar power - simulation of savings and installation of solar photovoltaic systems in self-consumption schemes tailored to customers and local specifics.
- electric mobility - support, advice and availability of in-home and out-of-home charging solutions available in the three geographical areas where EDP is present.
- energy efficiency - more efficient equipment and lighting such as LED lamps, high performance motors, variable electronic speed drives and heat pumps. Advisory services and energy audits.

3.2.1.1. Renewable energies



The EDP Group has, from an early stage, been ahead of its peers in moving into decarbonisation with a strong focus on the production of electricity from renewable sources. EDP Renováveis is currently the world's fourth largest producer of electricity from renewable sources and one of the world's largest producers of wind power.

In 2021, renewable energies accounted for 76% of the electricity generated by the Group (excluding nuclear). Of this 76%, wind energy accounted for about 65%.

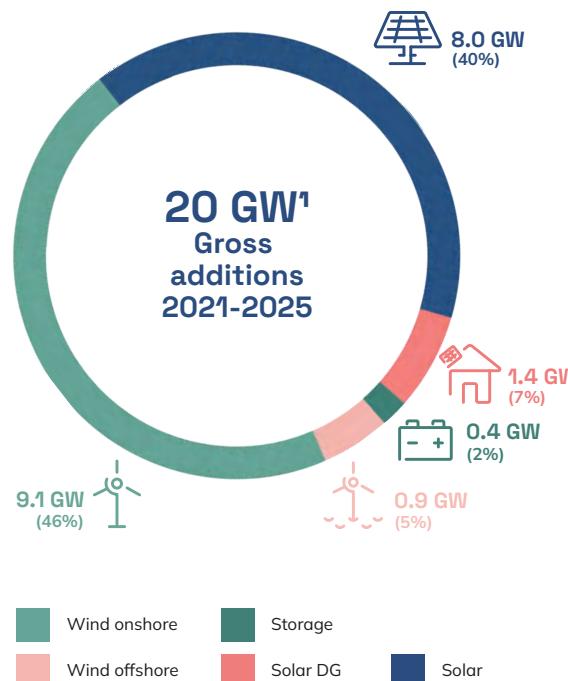
The 2021-2025 Business Plan emphasises the acceleration of the Group's investment in renewable energies. For 2021-2025, planned investment in the expansion of renewables is 19.2 billion euros, which is 80% of the Group's total investment in the energy transition. This unprecedented investment in renewable energy includes wind, solar, green hydrogen and energy storage technologies.

The Plan targets 20 GW gross added renewable capacity by 2025. New gross capacity additions of 4 GW on average are estimated annually for 2021 to 2025.

This increase in capacity will mainly be provided through the Group's growth in its main markets - the USA and Europe. This is an investment in geographical regions that the Group knows well - low-risk markets with regulatory stability - predominantly through PPAs (Power Purchase Agreement) and long-term Contracts for Difference (CfD) energy sales contracts.

From a technological perspective, 9.1 GW of the 20 GW of forecast renewable capacity, i.e., 46%, will be allocated to onshore wind energy, a technology where EDP has a

clear competitive advantage and accumulated know-how.



¹ EBITDA + Equity GWs

A similarly significant capacity addition is predicted for solar technology for 2021-2025. 47% of total planned capacity, 9.4 GW of the 20 GW, will be allocated to solar technology. 8 GW will go to centralised production of electricity, so that the cost competitiveness of solar technology will increase. 1.4 GW will be allocated to decentralised solar generation, thus contributing to the various go-to-market strategies, and to the Group's competitive advantage.

To increase flexibility, EDP also intends to expand its energy storage capacity beyond its traditional storage in

hydroelectric plants with a reservoir. An increase of 0.4 GW of capacity is therefore planned for 2021-2025.

To ensure flexibility, hydropower will continue to play a major role. The Group's hydroelectric assets ensure high cash flows, by exploiting hydropower through the management of variable pumping capacity. The Investment Plan does not provide for capacity additions in this area, but investment in maintenance of its assets is planned.

The decarbonisation route that the Group has followed also involves the development of innovative projects, in anticipation of future business solutions. There is notable investment in areas such as energy hybridisation, which leverages potential synergies between different technologies (solar, wind, hydro, and storage), the medium-term production of green hydrogen and solar and wind installations on offshore structures.

In 2021, the following innovative projects were of note: the [BEYOND project](#) (example of synergy between offshore wind energy and green hydrogen production) and the [Alqueva floating photovoltaic project](#).

In offshore wind technology, the 2021-2025 Business Plan also calls for an increase in capacity of 0.9 GW over its term, to be delivered by the company Ocean Winds (50/50 joint venture with Engie).

EDP has been increasing its visibility in offshore wind growth with 0.5 GW of capacity in operation in 2021, and 3.5 GW under construction. The Group is therefore amplifying and diversifying its profitable long-term growth options while maintaining a balanced risk profile.

The Group's asset rotation continuation strategy contributes significantly to the implementation of the 2021-2025 Business Plan. Rotation facilitates the monetisation of assets before their end of life (for example: wind farms), with the aim of accelerating investment and, therefore, EDP's growth. In fact, 65% of the expected increase in renewable capacity (20 GW) will be kept on the balance sheet (installed capacity) while 35% will be covered by the asset rotation strategy.

For the period 2021 to 2025, EDP has 8.1 GW of assured renewable capacity (EBITDA and Equity GW), through

KPI 2021

RENEWABLE ENERGY

TARGET 2025

80% Installed capacity of renewable origin

>90%

76% Production from renewable sources

83%

645 MW Installed capacity in centralised solar photovoltaic systems

5.5 GW

436 MW Installed capacity in decentralised solar photovoltaic

3.7 GW

attractive returns, in long-term contracts, protected from capex inflation.

In this context and due to the geographical diversity, that has been added to the Group, it is worth highlighting EDP's acquisition of an 87.4% stake in Sunseap. Sunseap is the largest decentralised solar company and one of the four largest solar companies in Southeast Asia. The acquisition enabled EDP to establish a 4th regional renewable energy hub (in addition to North America, Europe and South America).

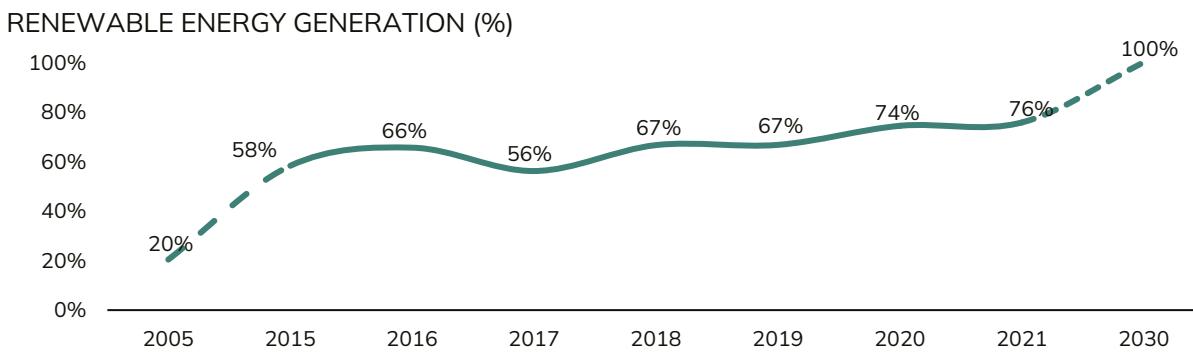
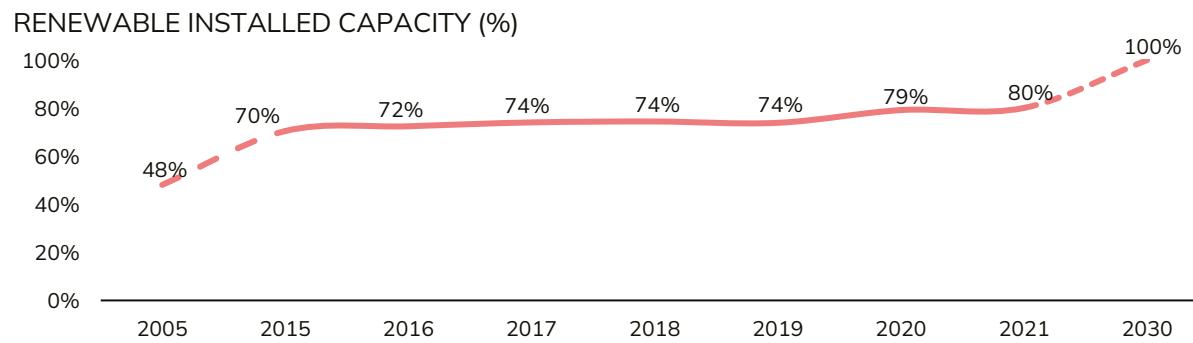
Of the guaranteed overall renewable capacity, approximately 4 GW are onshore wind, 3 GW solar (centralised and decentralised) and about 0.3 GW are provided through offshore wind energy.

In line with the intensive investment planned in renewable energies, EDP has set demanding targets for 2021 to 2025 for the renewable origin (%) of installed capacity and electricity production. These targets support the Group's ambition to abandon coal generation by 2025 and its commitment to carbon neutral in 2030. By 2030, the Group intends 100% of installed capacity to be of renewable origin and for the production of electricity also to be 100% renewable.

In relative terms, at the end of 2021, 80% of installed capacity was from renewable sources - an increase of one percentage point compared to 2020.

The installation of 1,769 MW of new wind farms and 503 MW of solar farms were the main contributors to this percentage value of installed capacity from renewable sources. However, with the rotation of assets, the net increase in capacity was 968 MW.

In 2021, EDP Renewables' installed EBITDA capacity increased to 11.5 GW, about 1 GW compared to 2020.



Europe and North America represented 42% and 52% of the portfolio, respectively.

The balance between the sale of renewable plants in the different geographical regions (in line with the asset rotation strategy), and the new acquisitions, was therefore positive in 2021.

Since 2005, EDP's evolution has been a generally progressive move towards installed capacity based entirely on renewable energies.

Similarly, this trend has also been observed for the production of electricity from renewable energies.

Although the Group's total electricity production fell by 5% in 2021 compared to the previous year - largely due to the pandemic and lower associated energy demand in all the markets where the EDP operates, renewable energies accounted for 76% of the total electricity produced. This was an increase of one percentage point compared to 2020.

The production of wind power increased by 5% in 2021 compared to 2020 and was 49% of the total energy (renewable and non-renewable) produced. Contributions to this production were predominantly from Europe and Brazil, the resulting of greater installed capacity in these geographical regions.



By contrast, Hydro production decreased significantly (19% less than 2020) mainly due to the sale of 1.7 GW of 6 hydroelectric plants in Portugal in December 2020. Additionally, Brazil experienced a historically dry season, which was reversed in the fourth quarter of 2021, thus keeping the hydro production utilisation factor in line with 2020. This improvement meant that production from coal could be stopped from mid-December 2021.

However, the Group recorded a 30% year-on-year increase in production from coal, largely due to the drought in Brazil and the increase in the price of natural gas, which offset the 34% reduction in production of energy from natural gas in 2021.

In 2021, EDP Renováveis produced 30.3 TWh of electricity from renewable sources – an increase of 6% compared to 2020.

3.2.1.2. Distributed generation

Anticipating the new energy paradigm, EDP has been consolidating its presence in a future where the production, consumption and distribution of energy will be increasingly decentralised. In this sense, the Group offers a variety of solutions aimed at the specific needs of various customer segments, through a diverse and competitive set of products and services that avoid emissions in the final consumption of energy. Decentralised solar energy services have been one of the Group's major focuses.

In addition to the suppliers in Portugal, Spain and Brazil, and the services offered in Italy and Poland by EDP Comercial, EDP Renováveis has also started this activity:

- in the United States, with the acquisition of a majority stake in the company C2 Omega, with a portfolio of 88 MW of installed capacity and a short-term pipeline of more than 150 MW in 16 states;
- in Singapore, with the acquisition of a majority stake in the company Sunseap, one of the largest operators in Southeast Asia, with 540 MW of solar projects operational and under construction and a considerable portfolio in different stages of development, namely 5.5 GW of renewable projects. These assets were not consolidated in 2021.

In 2021, EDP installed a total of 219 MW of solar photovoltaic systems, both in the transactional model, with a customised installation service tailored to each customer, and in the "as-a-service" model, in which the investment and operation of the system is ensured by EDP during a certain contracted period of time with the customer.

In Portugal, the approximately 183 MW installed generated savings estimated in more than 200 GWh, avoiding the emission of ~32 ktCO₂.

In Spain, with 46 MW of installed capacity in solar photovoltaic solutions for self-consumption, the savings amounted to 60 GWh and a CO₂ avoided of 7 kt.

In Brazil, the activity is carried out by EDP Smart, which ended the year with 106 MWp of installed capacity. These systems are estimated to have generated around 36 GWh in 2021 and avoided the emission of 4,6 ktCO₂.

3.2.1.3. Sustainable mobility

Electric mobility also plays a fundamental role within the scope of the services provided by EDP, which contribute to the decarbonisation of energy consumption.

Indeed, sustainable mobility will be essential for the decarbonisation of the transport sector, which currently accounts for around 25% of global carbon emissions.

For EDP, decarbonisation of the economy involves a significant increase in production from renewable sources, accompanied by a significant electrification of energy consumption, particularly in transport. The Group therefore intends to position itself as the benchmark partner for electric mobility.

Given the potential for action, the company has brought in-house a large part of its efforts in the area of electric mobility, through solutions (products, services and charging networks), mostly directed at its customers, but also at internal measures at the Group level. In this field, EDP has established initiatives to encourage its employees to purchase electric vehicles. **In 2021, EDP launched the "Employee Electric Mobility Pack" initiative, offering special conditions to employees in Portugal for the purchase of electric vehicles and the use of charging solutions.** EDP has also set itself the target of electrifying

100% of its light vehicle fleet by 2030. The transition to a 100% electric fleet has already begun and will lead to a 70% reduction in CO₂ emissions from EDP's global fleet of over 4,000 vehicles.

In addition, EDP's approach has integrated the promotion of an ecosystem of electric mobility partnerships and initiatives, some of which are listed in the next page.

KPI 2021

SUSTAINABLE MOBILITY

43.5k Customers with electric mobility solutions

13.2% Light vehicle fleet electrification

3,804 Charging stations installed

TARGET 2025

180k

100% in 2030

>40k

Partnerships and initiatives

Context:

CLIMATE GROUP EV100

The EV100 initiative, promoted by The Climate Group, which brings together companies from various sectors across the world, committed to accelerating the transition to the electrification of transport. The EV100 is a clear signal of the requirement for the expansion of electric vehicles, addressed to manufacturers and governments;



The Corporate Mobility Pact (CMP), an initiative promoted by the World Business Council for Sustainable Development (WBCSD) with the City of Lisbon. This pact was signed by 54 companies and aims to serve as a catalyst for corporate leadership to transform mobility in cities, involving cities and businesses for collaborative actions. Also, as part of the scope of the WBCSD, the integration of EDP in a multi-sectoral program of business solutions and guidelines for the Transformation of Urban Mobility.

PORUGAL MOBI summit

The annual Portugal Mobi Summit, held in partnership with the Global Media Group, the biggest urban mobility event in Portugal where sustainable mobility issues are discussed.



The strategic partnership with the association of Users of Electric Vehicles (UEV), with the joint goal of promoting electric mobility in Portugal and, through greater proximity to users, understanding its constraints. EDP has been actively participating in the national EV users' event - ENVE.



EDP's participation as a member of the board of directors of ChargeUp Europe, an association representing companies in the electric vehicle charging infrastructure sector. EDP was the first Portuguese company to join this association, whose mission is to facilitate the creation of modern, high-quality charging infrastructure across Europe that meets the needs of electric vehicle users.



EDP's active participation in Eurelectric and the Conseil de Coopération Economique, contributing to the ongoing discussions in these organisations on the development of business-oriented regulations and frameworks to support the transition to clean mobility.

Products and services

The EDP Group has a wide commercial range of products and services, particularly in Portugal, Spain and Brazil. Throughout 2021, EDP worked to make the best charging solutions available to its customers. On the one hand, the Group focused on the development of increasingly comprehensive electric mobility solutions tailored to the needs of the growing market. And, on the other, on having more competitive prices, thereby reaching increasing numbers of drivers of electric vehicles.

In Portugal

EDP Comercial supplies and installs charging solutions for electric vehicles through charging stations for the B2C and B2B segments.

In the B2C segment, EDP launched a new range of charging solutions for individuals with new prices and products, from a reinforced electrical socket suitable for plug-in hybrid vehicles, to the new Premium EDP Commercial charger, to charge electric vehicles faster.

For B2B customers, the range of solutions available on the Save to Compete platform (a program created by EDP in 2012, which promotes energy efficiency, competitiveness and innovation) was updated with charging solutions suited to the real needs of business customers, both for private and public access spaces, specifically five different products, with different levels of customisation.

In awareness of how important that transportation sector is to decarbonisation, in 2021 the Group conducted an internal analysis of the commuting movements of its employees before and after the COVID-19 pandemic. The results showed that before the pandemic, diesel and petrol vehicles were the predominant mode of transport used. The annual emissions associated with the use of these vehicles were estimated at 22,736 tonnes of carbon. On the other hand, in the post-lockdown scenario, the vast majority of employees surveyed demonstrated their willingness to carry on working from home two days a week, if permitted by their role. The study verified that

continued remote working by these employees would represent a 35% decrease in carbon emissions from commuting. In this scenario, 7,200 tonnes of CO₂ will be avoided per year.

Additionally, out of the group of employees who responded to the survey, 20% showed an interest in switching to an electric vehicle if EDP offered benefits for purchasing or renting one. This change would lead to a 5% reduction in annual carbon emissions from commuting per business unit (988 tonnes of CO₂ per year).



The EDP EV.Charge platform (app and website) - a digital interface with electric mobility customers created in 2019 - is the digital solution created by EDP Comercial to integrate the electric vehicle charging experience into public and private spaces. The app also allows searches for the nearest public charging stations, queries of detailed information, including location, sockets, power, ID, cost or directions on how to reach the desired charging stations. As of 2021, the platform will include all charging types and needs, specifically charging at home (homes and communities), at work and on public roads. The platform is part of the ongoing focus on the digitalisation of the customer experience, allowing its users, through the app or website, to manage and monitor charging sessions.

In Spain



The MiVē product, launched in December 2020, is an app aimed at the B2C segment, fully configurable by the customer, featuring a calculator that covers all the consumer's needs for a single fixed monthly fee, specifically: charging at home, including the charger, its installation and energy consumption; charging away from home, at the public charging stations of EDP's public charging app (MOVE ON); and other additional services.

In the B2B segment, in 2021 EDP finalised a configuration on the Save to Compete platform that offers the possibility of managing its charging stations through MOVE ON.

In this way, the corporate customer decides the conditions of access to its charging stations (users, prices, etc.), EDP manages them and then returns the income generated to the corporate customer. Member companies thereby obtain a new potential source of revenue.

Public power charging network

The pandemic has accelerated the transition to electric mobility. Remote working and the intensification of micro-mobility have significantly boosted the demand for electric vehicles and the inevitable requirement for charging infrastructure.

In Portugal

In Portugal, the estimated electric charging needs for the coming years point to a demand for 20,000 charging stations in 2025.

In 2021, EDP committed to having 1,000 charging stations on the public grid. By the end of the year, the Group had over 1,100 charging stations contracted on the public charging grid, through electric mobility partnerships and concession contracts.

In 2021, emphasis should be placed on new electric mobility partnerships with key partners, specifically with McDonald's, for the installation of 150 charging stations in 75 locations.

The 48 fast and ultra-fast charging stations on national motorways planned by the partnership with Brisa, BP and Repsol are mostly already installed and operational.

EDP leads the EMEM (Electricity Marketer for Electric Mobility) market and has one of the most competitive tariffs on the public charging market with more than 38,000 cards issued.

In Spain

By the end of 2021 in Spain, EDP had a total of 366 public charging stations, an increase of 38%, compared to 2020.

Throughout 2021, EDP increased the number of sales and customers in all segments, with a particular emphasis on public charging through MOVE ON. It ended the year with over 6800 registered customers.

EDP also remains committed to interoperability. In other words, through the MOVE ON app, customers can charge their vehicles both at the Group's recharging stations, but also at the recharging stations of other operators.

In Brazil

The number of charging stations increased to more than 300 stations in 2021 in Brazil.

In 2021, two more charging stations will be installed at the São Paulo International Airport, in Guarulhos. This addition allows the airport to provide electric vehicle charging infrastructure at all its passenger terminals.

The year 2021 also saw the installation of nine ultra-fast charging stations, one of which is the most powerful in Latin America (350 kW).

3.2.1.4. Energy efficiency

EDP promotes the improvement of energy efficiency along the value chain as an important contribution to decarbonization, contributing to greater efficiency in the end use of energy by offering its customers low carbon products and services.

By 2021, 16% of B2C customers in the liberalised market had sustainable services such as energy efficiency, electric mobility or decentralised solar services. The goal is to ensure that we offer these services to 25% of these customers in 2025. and 50% in 2030.

In Portugal, the Electric House program, aimed at b2c customers, continued, which aims to promote the change of consumption of butane or propane gas for electricity, with an impact on energy consumption and safety and in alignment with the strategy of electrification of consumption.

In the business segment, EDP supports companies in the implementation of integrated energy efficiency services, through the provision of solar energy solutions, sustainable mobility and consumption management. One of the reference programs in business support was Save to Compete. This program identifies measures to reduce energy consumption, including decentralised solar, promoting its implementation and costing through the savings generated. Since its launch in Portugal (2012) and Spain (2013), the program has led to accumulated savings of more than 600 GWh, corresponding to a reduction of approximately 170,000 tons of CO₂.

In Brazil, EDP also invests in energy efficiency initiatives, both through the distribution companies and the service company EDP Smart. Distributors, operating in the regulated market, according to the legislation of the Brazilian

electricity sector, have the obligation to apply 0.4% of net operating revenue annually in Energy Efficiency Programs (PEE) and 0.1% in the National Electric Energy Conservation Program (PROCEL). EDP Smart operates in the liberalized market and offers solutions to improve energy efficiency (lighting, air conditioning, steam production) and also in the area of electric mobility and distributed generation. In 2021, the measures implemented led to energy savings of 51 GWh and 52 ktCO₂ avoided.

Energy efficiency services generated around €261 million income in 2021, an increase of 7% compared to 2020.

All energy efficiency, sustainable mobility and distributed generation initiatives carried out in 2021 led to an estimated energy savings of 513 GWh, avoiding the emission of 267 ktCO₂, including that corresponding to the sale of electricity of renewable origin. Since 2015, the savings generated from sustainable services have enabled the emission of 8.9 MtCO₂ to be avoided, a little more than half the 2025 target.

KPI 2021

ENERGY EFFICIENCY

16% Customers with sustainable services

8.9 MtCO₂ Avoided emissions on customers

TARGET 2025

25%

15 MtCO₂

Alqueva floating solar park project

The floating photovoltaic park project on the reservoir of the Alqueva dam is one of EDP's most innovative solar energy projects.

The Alqueva hydro plant is a reversible power plant, with one of the largest energy storage capacities in Portugal. By pumping water upstream from the reservoir in periods of excess electricity production, the water can be stored upstream for later reuse in the production of hydroelectric energy. By making the water pass through the turbines, posteriori, at peak hours, energy is available in periods of greater demand.

Given the reversible set-up of the Alqueva plant, the solar park, in addition to the photovoltaic panels, a battery storage system, integrated with the hydroelectric plant has been implemented. The batteries enable the Alqueva hydro plant to leverage the energy produced by the photovoltaic park during periods of upstream pumping from the reservoir (periods of excess production).

After receiving the production licence in April 2021, EDP proceeded to award the 5 hybrid project contracts, 5MWp photovoltaic and 1 MW / 2 MWh battery, at the Alqueva hydroelectric plant.

Site work began in October 2021, with the supply of the floating platform equipment, including 60 pontoons, 26,000 floats and 11,312 x 445 Wp photovoltaic panels.

Assembly started in December 2021 and resulted in several complete rows of floats with panels mounted on the waterline. In 2021, a total of 237 panels were assembled, 272 primary floats, 320 secondary floats and 83 bridge floats.

All the equipment needed to build the 28 anchors can now be found at the shipyard of the anchor and mooring contractor, under the European FRESHER project, and the deployment locations in the reservoir have already been marked with buoys of different colours and the 10 temporary anchors to support the assembly have been installed.

The contracts for the batteries, changes in the systems for control, metering and communication with the project's National Transmission Network, are at an advanced stage of development and will be installed in early 2022, while the first tests of connection of the photovoltaic plant to the grid are taking place.

It is already possible to view the equipment comprising the floating platform in detail - the pontoons made of UHPC (ultra-high-performance concrete) that will be installed on the periphery of the platform, the main floats supporting the photovoltaic panels and the floats that incorporate a percentage of cork in the recycled HDPE (high-density polyethylene) material, which has produced a 30% reduction in the project's carbon footprint.

In environmental terms, it is also of note that the project uses an area of the water body that has no use and does not undergo changes with the installation of floating panels.

On the other hand, integration with a plant with existing connections to the grid avoided the construction of new transmission and distribution lines and the consequent occupation of land. In this case, hybridisation can allow double the amount of energy to be delivered at the same point, without the need to increase the capacity of the line.

These aspects, among others, were recognised in the Environmental Impact Study, included in the evaluation and licensing process.

The project has boosted renewable energy installed capacity by 5 MWp, and will allow the production of 7 GWh annually, an energy supply representing the needs of approximately 25% of families in the region.



3.2.2.1. Promoting sustainable consumption

In line with EDP's ambition to be the global leader in energy transition, the Group has been broadening its portfolio to provide consumers with products and services that enable them to contribute to a more sustainable planet.

Planet Zero

Alongside more demanding, informed consumers concerned about their impact on the planet, there is growing customer demand for information to support a more environmentally friendly lifestyle.

In 2020, EDP Comercial launched the app EDP Zero, in Portugal, for customers to find out about potential CO₂ savings associated with the electricity they consume and to invite to enter the Planet Zero area. This programme, aimed at residential customers, rewards good customer

PLANETA ZERO IN 2021:

- + **500,000** Clients
- 10** Social projects
- 12** Global challenges
- + **120** Awareness workshops
- + **590,000** Interactions

environmental and social practices and challenges customers to change their behaviour by participating in voluntary actions, adopting more efficient energy consumption and adhering to more sustainable EDP solutions. As an incentive, customers add points for each more sustainable behaviour, which in turn gives them access to raffles, events, partner benefits and the right to vote in social and environmental projects. Throughout the year, Planet Zero registered more than 590,000 interactions with events, challenges, prize draws and support for projects.

Green Energy

Opting for a low carbon power source is one of the simplest ways to contribute to a decarbonised, cleaner planet.

In 2021 the number of residential customers signing up for EDP's green tariff more than doubled compared to 2020 - a clear sign of their commitment to sustainable energy consumption.

However, green tariffs are especially attractive for companies that already purchase energy from renewable sources as part of their sustainability strategy.

Currently, a number of solutions are driving this consumption - e.g., guarantee of origin certificates, electronic documents that prove the renewable origin of the energy purchased. Additionally, there are also *Power Purchase Agreements*, which enable companies to acquire energy from renewable sources for long periods at a pre-set, fixed price, ensuring predictability and stability of costs, as well as significant savings in their energy bills. All while reducing their carbon footprint. These agreements also have the capacity to accelerate renewable energy projects by being associated with renewable assets.

Offer of green electricity and natural gas with carbon compensation

Although we are heading towards a future of electrification of energy consumption, not all customers currently meet the requirements for this transition. To support the reduction of its customers' environmental footprint, EDP Comercial launched an innovative offer: guaranteed compensation of CO₂ associated with the domestic consumption of natural gas. This offsetting takes place through the purchase of carbon credits generated by sustainable projects that reduce CO₂ emissions elsewhere in the world and which are chosen by consumers by a vote on Planet Zero. It is estimated that, by the end of 2025, more than 260,000 customers in the natural gas portfolio (40% of the Natural Gas portfolio forecast in the Business Plan) will be participating in CO₂ offsetting, representing a total offset of more than 100,000 tonnes of CO₂.

Solar Energy

The production of solar energy for self-consumption enables customers to reduce their energy dependency and, consequently, their energy bills, and they can achieve a further return on their investment by selling surpluses to the grid.

EDP Solar Energy solutions also include the offer of a consumption monitoring system, so that customers can keep track of the energy production and manage energy consumption in their home, wherever they are.

For the corporate sector, EDP is developing services tailored to the unique needs of each business, with an emphasis on the *as-a-service* model, in which the Group assumes the entire investment and takes charge of the

installation, operation and maintenance of the power station, so that the customer benefits from a net cost saving from day one.

To overcome the lack of space available for installation, EDP launched *Bairros Solares*, renewable energy communities in which the energy produced by one photovoltaic installation benefits not only the producers, who make their space available, but also the community members. EDP *Bairros Solares* democratise consumer participation in decentralised generation with low acquisition costs, discounts on bills and a positive impact on the planet. Additionally, in order to ensure that this is a fair and inclusive transition, *Comunidades Solares Inclusivas* (Inclusive Solar Communities) have also been created, to facilitate access for vulnerable institutions and/or communities to energy from renewable sources, promoted also through discounts on electricity bills.

Mobility

In addition to developing home and workplace charging solutions, which are increasingly comprehensive and digital, EDP has significantly expanded the public charging network, in its various geographical areas. In the first half of 2021, EDP exceeded the target set for the year of reaching 1,000 charging points contracted on the public grid. The increase in capillarity is one of EDP's major objectives in order to reduce consumer charging anxiety and, consequently, accelerate the adoption of this more sustainable mobility model.

Additionally, with a strong and clear focus on digital and on user experience, the EDP *EV.Charge* app was the first in Portugal to combine the management of charging in public and private spaces in the same application. The app provides users with a map of charging points on the national grid, their availability and tariffs and can be used to link the EDP Electric Mobility card to charge with 100%

green energy, fully digitally, by mobile phone at any station on the national grid.

3.2.2. Customer satisfaction

The EDP group has made a commitment to maintain a customer satisfaction level above 75% by 2022. This goal is monitored at the level of the commercial business units, either by monitoring customer satisfaction with the interactions with the company (Voice of Customer questionnaires), by the number of complaints, or through satisfaction questionnaires carried out periodically.

In **Portugal**, the satisfaction value in the free market reached 82%, an increase of almost 3 p.p. compared to the previous year. The NPS (Net Promoter Score) of the free market, which measures the degree of customer recommendation in relation to the company, remained stable compared to 2020 in the B2C segment (23%) and recorded a growth in the B2B segment (also reaching a score of 23%). In the regulated electricity market, there was a drop of 3 p.p. to 78%, which nevertheless remains above the corporate target. This was a year marked by rising energy prices in the wholesale markets, which were eventually reflected in the end customer and caused natural dissatisfaction among customers, but also put pressure on the margins of the various operators. Some of them were even forced into bankruptcy and SU Elettricidade, as Supplier of Last Resort, had to integrate those customers.

In Brazil, the main indicator used to measure customer satisfaction is the Quality Satisfaction Index (ISQP), obtained through the ABRADEE Residential Survey, conducted annually. In 2021, there was a national drop in results, and EDP also recorded a reduction in this indicator, both in São Paulo and Espírito Santo. Despite the drop in the indicator, EDP improved its position in the

ranking for both countries. EDP São Paulo reached 69.5% and EDP Espírito Santo, 72.6%.

In Spain, in 2021, no B2C customer satisfaction survey was carried out, due to the restructuring of customer service following the sale of the B2C portfolio. In B2B, average satisfaction in Q4 2021 was 7.6 (scale of 0 to 10).

Sustainable finance

Sustainable Finances are responsible for the new paradigm in the financial market, which redirects financial flows towards sustainable investments, and a financing policy defined by the expected sustainable return, where agents internalize externalities and present a long-term vision.

Investors, regulators and companies support their performance in ESG (environmental (E), social (S) and governance (G)) and give substance to the implementation of the concept of creating value for all stakeholders (stakeholder capitalism approach). The main objectives of this approach are to facilitate long-term investment in companies and shift the short-term focus (shareholder view) in order to satisfy other priorities (e.g., employees, suppliers, customers and society in general).

Market direction pushes the financial system to go beyond financial returns and include ESG considerations in its capital allocation and financial valuation models. Governments, investors, regulators, credit rating agencies and companies all monitor this transformation.

Governments

In this new financial system environment, ESG issues, such as fair transition, have been gaining importance and are increasingly being equated with other themes, such as ensuring the transition to carbon neutrality.

New commitments are emerging, such as those announced during COP 26, for the gradual elimination of funding for projects linked to fossil fuels by 2022, signed by 20 countries, including the USA, the United Kingdom

⁷ An organization created within the auspices of the United Nations that currently has 3,826 signatories, representing more than 121.3 billion dollars in Assets under Management (AuM) whose objective is to support an international network of investors that include ESG factors in their

and Portugal, and five development institutions, including the European Investment Bank.

Investors

From a risk perspective, the debate on sustainable finances was extended to the three areas of sustainability in 2006 with the disclosure of the Principles for Responsible Investment (PRI)⁷.

Globally, the Socially Responsible Investment (SRI) is worth 35.3⁸ billion US Dollars (Assets under Management (AuM)), i.e., 36% of the total market, an increase of 2.5% compared to 2018.

Europe and the US continue to hold the largest shares of total SRI assets.

Additionally, private financing will help companies realign their business models towards net-zero ambitions. In April 2021, two new alliances for the financial sector were launched. The Glasgow Financial Alliance for Net Zero (GFANZ) and the Net-Zero Banking Alliance (NZBA) will coordinate commitments within the financial system. These commitments are subject to transparent reporting and accounting, in line with the Race to Zero criteria - a United Nations-led initiative aiming to achieve net zero carbon emissions by 2050.

Regulation

Regulators make the private sector more accountable by standardizing sustainability information reporting and accountability for the negative impacts of activities.

investment decisions. Further details on responsible investment principles can be found [here](#)

⁸ 2020 Global Sustainable Investment Alliance

Regulators make the private sector more accountable by standardising the reporting of sustainability information and accountability for the negative impacts of activities.

Some of the key elements shaping the current regulatory framework include:

Growing concern about the financial impact of ESG risks, which justified, in 2015, the decision of the G20 to set up a working group for the dissemination of climate (TCFD⁹).

The search for sustainability information relevant to the creation of globally consistent, comparable and reliable value led to the release of a joint statement supporting the creation of a common reporting system, with the participation of the CDP, the CDSB, the GRI, IIRC and SASB, in September 2020, and the creation of the International Sustainability Standards Board (ISSB), a new IFRS governance structure (which has the support of the FSB and IOSCO), announced at COP 26, in November 2021. The latter will initially focus on climate-related matters and aims to develop a sustainability framework for listed companies.

⁹ The Task-Force on climate-related Financial Disclosures



Carbon neutrality, as a priority for the European Union, includes Sustainable Finance as one of its priorities. By defining the Sustainable Finance Action Plan, the European Union is creating the regulatory conditions that enhance the transition to a decarbonised economy, guaranteeing the stability of the financial market, in particular through two major levels introduced by regulation:

- definition of a common language – the Taxonomy – the key element of the Sustainable Finance Action Plan
- obligation to disclose information related to sustainability in the financial services sector (SFDR).

Credit rating agencies

Credit rating agencies have been monitoring changes in the financial market around ESG topics in preparing information for investors and issuers. In 2021, EDP followed the development of methodologies for integrating ESG topics by Fitch, Moody's and S&P, after interaction with the three credit rating agencies in the public consultation processes launched and in the validation of the information provided.

Company

Unfavourable investor perceptions of the sustainability performance of companies can result in increased financial risk and a decrease in the ability to finance at more favourable rates. Additionally, good sustainability performance can translate into a greater ability to retain and attract new investors and increase stakeholder confidence in the company. There is, therefore, a tendency, on the part of companies, to bet on the standardisation of sustainability information reporting.

EDP

Over the years, EDP has invested in the involvement of various players in the ESG market.

In 2021, EDP, through the Corporate Investor Relations Department, was asked about ESG topics. The topics that dominated this assessment the ESG exam were the controversial topics related to the 2017 and 2018 fires and the case of Contractual Balance Maintenance Costs (CMECs), the energy transition, qualitative and quantitative climate-related performance indicators and environment and green bonds.

Currently, 25% of the capital of EDP's shareholder structure comes from SRI investors. EDP has demonstrated its expertise in ESG matters and its ability to manage disputes to SRI investors who follow active and passive investment approaches. On the other hand, with regard to the financing component, the Group has responded to requests from investors, who are increasingly demanding in terms of mitigating the risks inherent in ESG factors.

In order to promote greater alignment of the company's financing policy with its strategy, focused on sustainability, and in parallel with that in October 2018, EDP entered the Green Bonds market and since then has already issued around 6.4 billion euros of this type of bonds.

At the same time, the Group has been following regulatory developments in sustainable finance, given its implications for the sector in which it operates, and where climate change is seen by investors as both a risk and an opportunity. In this regard, the company has provided responses to public consultations and adopted legislation represented by associations such as Eurelectric, the Conseil de Cooperation Économique - Sustainable Finance Task Force, the WBCSD Shaping Sustainable Finance

Policy Working Group, and the Corporate Forum on Sustainable Finance.

This involvement allowed EDP during 2021 to sign up to some initiatives that support its positioning.

UN Global compact CFO Task Force for the SDGs

It is a challenge for companies to put the Sustainable Development Goals (SDGs) at the heart of their corporate strategies, increase the amount of business investment in line with sustainability goals and publicize their progress.

EDP believes in the potential of creating synergies that contribute to the SDGs. Accordingly, EDP has promoted collaboration with other companies to support the realignment of business models towards net-zero and participation in actions that will serve as a laboratory for the design of innovative financial instruments. As a result, in June 2021, EDP joined the UN Global compact CFO Task Force for the SDGs, created in 2019, and is now a member of the group of more than 60 companies, which have committed to investing more than 500 billion dollars to contribute to the SDGs over the next five years.

Through this initiative, EDP has made a global commitment to link close to 50% of all corporate funding to its sustainability performance, with plans to issue hundreds of billions in new sustainable financial instruments, including bonds linked to sustainability. Furthermore, the group has also committed to the public disclosure of its progress in implementing the Ten Principles of the UN Global Compact and the SDGs as part of the CFO Principles.

EDP's participation in 2021:

- It produced the industry case study on its thesis of impact on SDGs, investment and measurement;
- It provided data on KPIs and performance targets against the SDGs, and investment and corporate finance aligned to the SDGs;
- It participated in the Laboratory meetings of working groups 1,¹⁰ and 3¹¹;
- It contributed to the UN Private Sector Forum's September 20 CFO event, for the participation of the CFO, who spoke about the company during the event.

Expectations for 2022:

- Internal dissemination of the language of the SDGs alignment with strategy, corporate investment and specific KPIs;
- Conduct a specific audit of the KPIs associated with the SDGs and external verification of the alignment of the specific KPIs with the SDGs;
- Continue to participate in meetings to develop knowledge and collaborate with other members;
- Empower employees on these urgent topics to take a better approach to the "G" through better accountability
- Increase our EDP advocacy policy in target areas and joint actions, so that companies publicly support political positions;

European taxonomy

The European Union taxonomy regulation establishes the criteria for an activity to be qualified as environmentally sustainable and is the key instrument for achieving the path of carbon neutrality proposed by the European Commission and adopted in 2019 with the European Ecological Pact.

In accordance with the legislation in force and given the fact that EDP is covered by the Directive on Corporate Sustainability Reporting, as of 1 January 2022, the Group must report the degree of eligibility of its activities, in view of the two objectives and report alignment with the European taxonomy, namely the proportion of income, operating expenses (OPEX), and capital expenditures (CAPEX) associated with environmentally sustainable economic activities.

Adoption of the Taxonomy by the EDP Group

EDP welcomes this new classification of economic activities, which brings visibility to companies such as EDP, which develop solutions to reinforce the low carbon economy and meet the goals of the 2030 agenda.

Since 2020, the EDP Group has positioned itself at the forefront of these initiatives, publicly disclosing not only eligibility, but also the degree of alignment of its economic activities with the taxonomy's climate objectives. This anticipation was motivated by the aim of improving investors' understanding of EDP's portfolio of sustainable solutions.

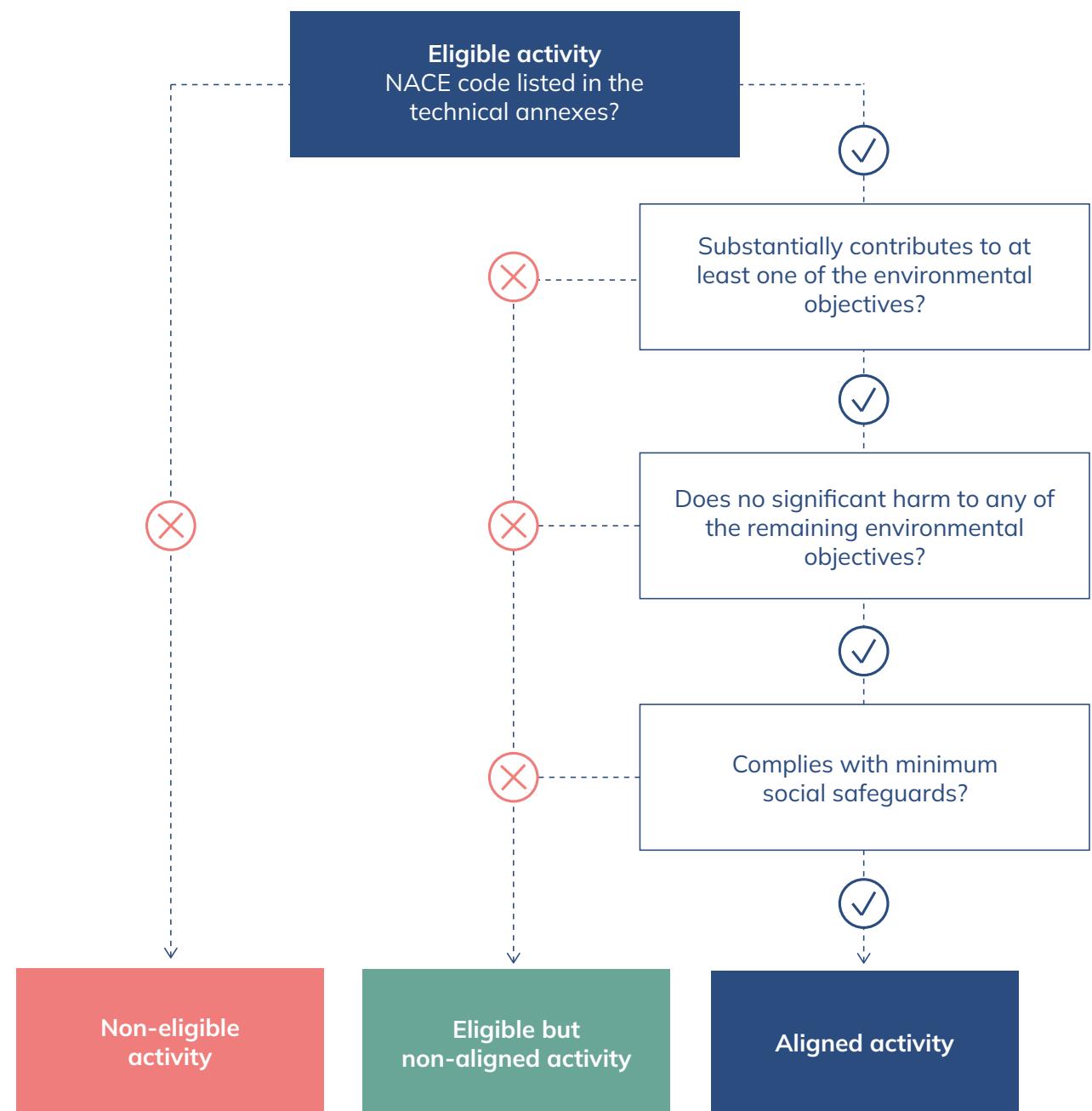
¹⁰ Principle 3. Integrated corporate SDG Finance

¹¹ Principle 4. Integrated SDG communication and reporting

In 2021, EDP disclosed eligibility information (amount and proportion) for its income, operating expenses (OPEX) and capital expenditures (CAPEX), and its alignment with the Taxonomy (amount and proportion) in income and capital expenditures, with operational expenses expected to be aligned in 2022 because it involves a more complex data collection process. These environmental financial indicators meet the criteria for evaluating the taxonomy of activities that contribute to the mitigation of climate change, and the accounting policies applied are described in the [Annual Report 2021](#), point 2 of the notes to the consolidated and individual financial statements.

To demonstrate the alignment, EDP revisited the economic activities that, in 2021, contributed substantially to the mitigation of climate change, and assessed the possibility that they could cause significant damage to the other environmental objectives and comply with the minimum social safeguards, in accordance with the process presented in the figure on the right.

The European Taxonomy represents challenges for the Group, with emphasis on demonstrating the alignment of facilities outside Europe, where EDP has a strong presence, and the need to adapt the current accounting and reporting systems and respective internal structures.



Main eligibility and alignment assumptions

The regulation has not yet defined the technical evaluation criteria for electricity trading activities. However, EDP believes that these should be classified as enabling activities, as they allow carbon emissions to be reduced in other activities. EDP used the composition of the electricity consumption mix in Portugal and Brazil as an eligibility criterion.

EDP also considered gas production and nuclear energy activities to be ineligible.

EDP guarantees that its activities do not significantly damage the environmental objectives defined by the European Union. Through its [Environment Policy](#), EDP has undertaken a set of commitments in three strategic action areas: climate change, the circular economy and biodiversity (see respective chapters).

Moreover, the Group's main corporate documents, such as its [Code of Ethics](#) and its [Principles for Sustainable Development](#), as well as its [Human and Labour Rights Policy](#) in application of the Universal Declaration of Human Rights, the International Labor Organisation Conventions, the United Nations Global Compact and the Guiding Principles for Companies – the Ruggie Framework all form the basis for compliance with minimum social safeguards. For more details on the specific commitments undertaken, see the chapter [Ethics and Compliance](#) in this report.

Positioning in relation to the Draft of the Complementary Delegated Act of the EU Taxonomy regarding nuclear and natural gas activities as of January 2022

Given the relevance of this issue for the Group, whose strategy is fundamentally based on investments in renewable energies, the main messages from EDP in this regard are the following:

1. The draft complementary delegated act is **not in line with the scientific evidence-based approach** under the EU Taxonomy Regulation, as it considers sustainable activities to be those with carbon emission thresholds above the value that enables a substantial contribution to climate mitigation objectives (100 gCO₂e/kWh).
2. The draft complementary delegated act is **inconsistent with other items of legislation in the sustainable financial package**, particularly the EU Green Bond standard. There is no space for financing activities related to electricity generation using nuclear energy or electricity generation from natural gas (because they are not considered sustainable investments), unless the GHG emissions in the life cycle of the natural gas technology are less than 100 gCO₂e/kWh.
3. The draft complementary delegated act has an **ambiguous definition of transitional activity**, insofar as it ends up being phased out of the taxonomy regulation as more sustainable alternatives become available.
4. Rather than including gas and nuclear activities, a framework outside the EU Taxonomy Regulation is preferred, because defining natural gas and nuclear activities as sustainable activities is

in conflict with the principle of the EU Taxonomy Regulation. This principle underlines that activities and investments are sustainable if they contribute to climate objectives and do not cause significant damage to other environmental objectives.

5. The EU Taxonomy Regulation is a key instrument for increasing green finance. Accordingly, including natural gas and nuclear activities in the taxonomy poses a threat to the credibility of sustainable investments.

Impacts at EDP Group level:

- a) In the business plan for 2021-2025, nuclear and gas technologies represent less than 1% of investment, compared to renewables, which account for 80%.
- b) EDP is one of the European Integrated Utilities with the least exposure to nuclear and gas and greater exposure to renewables, so the exclusion of these activities from the European taxonomy will enhance the Group's financing competitiveness in the next decade.
- c) In the event of inclusion in the regulation, the Group will:
 - Increase its eligibility, under the terms of the taxonomy regulation, by including the above-mentioned activities.

- Maintain its level of alignment with the taxonomy, as reported to date in terms of the taxonomy regulation, because combined cycle activities do not meet the requirements on assessment of emissions below 270 gCO₂e/kWh.
 - Will not have the means to demonstrate alignment with the Taxonomy of nuclear activity, in addition to having never reported environmental indicators for this activity, as it has never considered it sustainable.
 - Will see its presence in sustainability indices such as the FTSE, or the DJSI threatened,
- d) Will have to adapt its sustainability reporting in 2022 in light of the regulation in force.

Stakeholder Strategy:

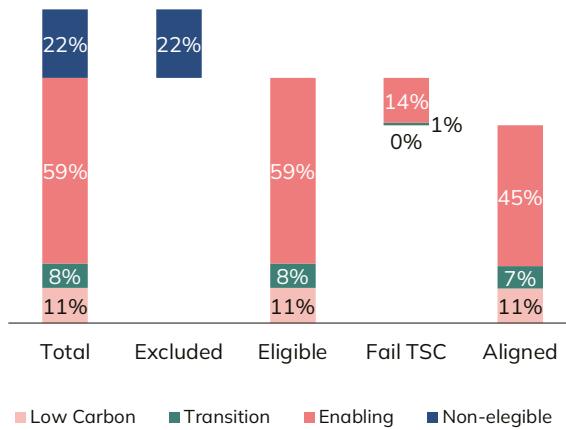
Between February and May 2022, the European Parliament and the European Council will have four months to review and discuss the delegated act. Accordingly, and based on its positioning, the EDP Group has drafted a general Stakeholders Plan

Eligibility and alignment

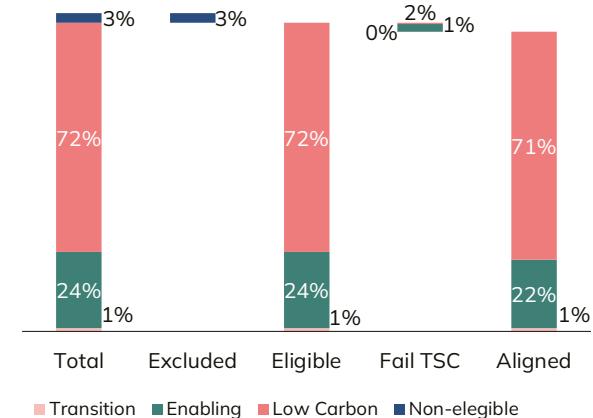
Eligibility

The tables on annex 4.4 present information on eligible and ineligible economic activities in accordance with the European taxonomy regulation, in particular the delegated acts relating to climate and Article 8.

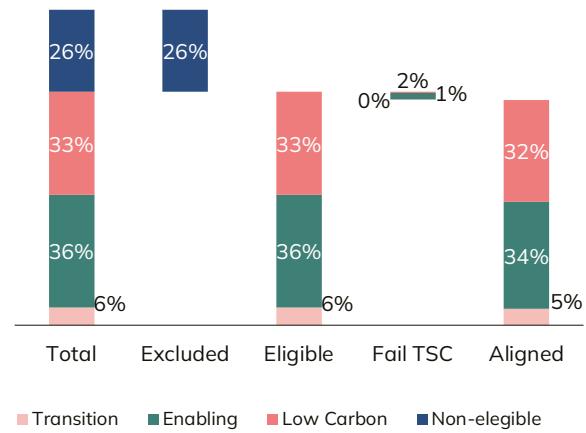
TURNOVER



CAPEX



OPEX



Sustainable Financing

The topic of "Sustainable Financing" continues to attract increasing attention from investors, issuers (public and private) and regulators, and is playing a key role in mobilizing the capital needed to meet the sustainable development goals. There is now a considerable array of sustainable financial products and solutions, including green bonds, the number (and value) of which has grown rapidly in recent years. Issuers find credit investors increasingly demanding in assessing the sustainability performance of companies and their respective reporting. In this context, the capital market is expressing a growing preference for more sustainable financing. In this context, the capital market has begun signalling a preference for more sustainable financing. Issuers that resort to this type of financing and that assertively communicate the use of funds raised and the incorporation of ESG policies in their strategy, are differentiating themselves in an increasingly more positive way.

EVOLUTION OF THE GREEN BONDS MARKET (BILLIONS OF DOLLARS)



Initially introduced by the European Investment Bank in 2007, Green Bonds have grown rapidly in recent years, demonstrating the inevitability of using sustainable financing instruments to support the channelling of the volume of investments needed arising from pressure from climate change and other pressing environmental needs

The market for green bonds in the Utilities sector accounts for 18% of all green bonds issued and in circulation.

Currently the fraction of green bonds corresponds to about 1% of the overall bond market value (over USD 139 trillion).

In 2021, according to data released by Bloomberg, the cumulative value of green bond transactions was USD 1,425 billion. In annual average terms, this corresponds to a 151% growth in the period between 2008 and 2021.





By the end of 2021, EDP has issued around EUR 6.4 billion in green bonds: four senior debt issuances, one of which in US dollars, and two issues of subordinated debt (hybrid).

EDP's green bond issuances are supported in its Green Bond Framework. This document presents the set of principles that support the process of issuing this type of bond and that follow the international standard of Green Bond Principles (GBP), voluntary principles developed by the International Capital Market Association (ICMA). This document was reviewed by Sustainalytics, which issued a favourable external opinion regarding the framework with the GBP, having mentioned that EDP's Green Bond Framework "is credible, impactful and aligned with the four components of the Green Bond Principles 2018".

EDP has committed to generating 50% of its financing structure from sustainable sources by 2025 (in December 2021, this percentage was 39%).

The Group continues to work on updating its framework of principles for green issuing, in order to consider alignment with European taxonomy regulation, and to analyse the use of other financial instruments, such as sustainable green loans.

3.4.2. Caring for our planet



EDP
01

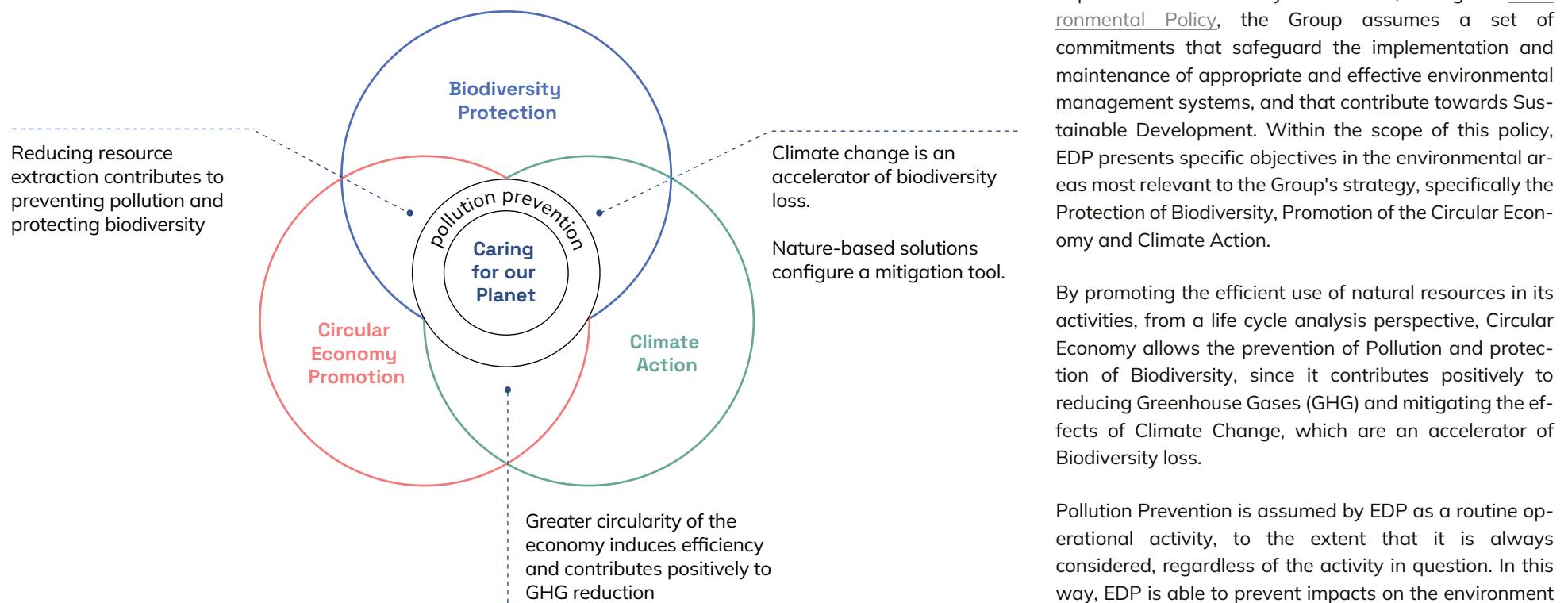
SHARING THE VISION
02

PERFORMANCE
03

ANNEXES
04

BACK

Alignment with the SDGs	Objectives	KPIs 2021	Target 2025
	Reducing the intensity of CO ₂ emissions (scope 1 and 2)	-51%	-70%
	Recycling of waste from activities	17%	85%



and make a positive contribution to the protection of biodiversity, mitigate the effects of climate change and promote the Circular Economy.

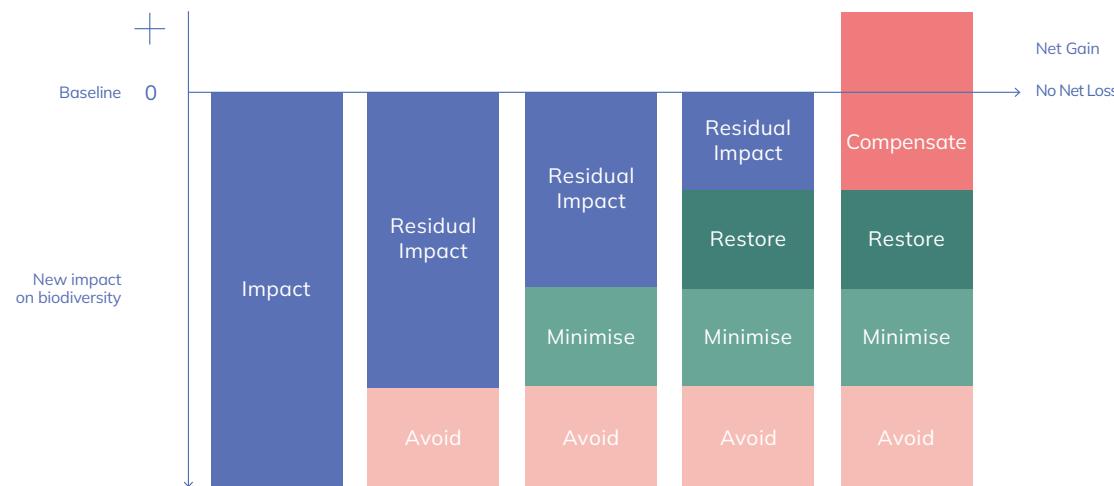
The mitigation of environmental impacts, an integral part of EDP's [Environmental Policy](#), is ensured by environmental management systems certified in accordance with ISO 14001:2015, aligned in a Corporate Environmental Management System (SIGAC), certified since 2008 by Lloyd's Register Quality Assurance (certificate no. ISO 14001 - 0030519).

EDP set the objective of achieving 100% ISO 14001:2015 environmental certification of any group activities with significant environmental aspects, and 90% has been achieved.

In 2021, as far as monitoring is concerned, 116 near-miss accidents were recorded and 481 simulations were carried out, for which the respective corrective and preventive measures were implemented. 1 accident involving environmental damage was recorded, due to the loss of the "Mexican pine snake" protected species. Additionally, emergency response training and awareness-raising activities are also provided to employees, service providers and other stakeholders such as the local community (when applicable).

Similarly, EDP is still investing heavily in having a positive effect on the environment, with a total of EUR 88.2 million in improving technologies and in initiatives to prevent and mitigate the environmental impacts arising from operations. Around 27% of this investment was related to biodiversity protection.

MITIGATION HIERARCHY



3.4.2.1. Protection of biodiversity

Biodiversity is under threat and the goal of halting its accelerating loss depends on the active contribution of all sectors of society. The decade 2021-2030 is considered by the UN as the "decade on ecosystem restoration".

In order to protect the environment and value natural capital, EDP assumes a responsibility to protect biodiversity through specific commitments in its [Environmental Policy](#):

- Contribute to reducing biodiversity loss, prioritise the mitigation hierarchy and aim for a positive outcome on the biodiversity balance sheet in the long term
- Contribute to deepening scientific knowledge of biodiversity and ecosystem services, particularly by establishing partnerships.

At the same time, EDP undertakes to "not build new generation facilities in areas classified as Natural Sites on the UNESCO World Heritage List", to ensure it continues to have no presence in these territories and sets No Net Loss of biodiversity goal for all new projects with significant residual impacts, by 2030, and a related commitment of No Net Deforestation, based on a mitigation hierarchy approach.

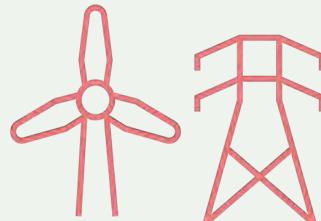
The mitigation hierarchy allows EDP to anticipate and avoid potential impacts; to minimise, when it is not possible to avoid them totally; to restore, when impacts occur; and to compensate, when residual impacts remain. It is a gradual and cumulative action with the main aim of reducing the impact until there are no adverse effects on biodiversity, achieving at least a No Net Loss level, but always aiming for (Net Gains).

EDP's activities of generation (hydroelectric, thermal, wind and solar) and transport and distribution of electricity have the greatest impact on biodiversity, through disturbances caused by alteration/conversion of land uses resulting in habitat fragmentation, alteration and

destruction with a direct or indirect impact on species. However, potentially impacted habitats and species are the target of conservation and mitigation measures for the described impacts in three areas: ecological flows,

bird life and natural capital. In 2021, emphasis should be placed on the following:

Protection of bird life



Portugal

In 2021 actions continued to be carried out under the Bird Life VIII Protocol, LIFE Projects and the National Specific Wild Birds Program (PENAS). The actions set out in the Protocol continued the field survey work in some power lines, and the compilation and validation of information regarding risk maps of threatened species. The corrections to the medium and high voltage (MV/HV) overhead power lines were made by applying mitigating technical solutions, such as rotating and tape-type firefly to minimise collision, changing horizontal disconnectors to vertical ones and a combined solution to minimise electrocution, on about 35 km.

Spain

According to Royal Decree 1432/2008, in 2021 a total of 6,376 km of EDP Redes España lines have been identified in bird protection areas, which will have to be adapted. E-Redes and Viesgo are drawing up joint Bird Life Plans, in which a number of lines to be adapted each year will be determined.

Ecological flows



Portugal

In 2021, out of the 16 identified hydroelectric power stations, 15 have already implemented an EFR, and the respective monitoring programmes to evaluate their effectiveness are under way. Only in the case of Alto Cágado, given the poor quality of the water in the reservoir and the good quality of the stretch downstream of the reservoir, it was decided not to launch an EF since it could have negative effects on the body of water downstream.

Spain

Following the notification in 2019 from the Cantabrian Hydrographic Confederation (CHC) for mandatory and strict compliance with the aforementioned ecological flows by December 2021, the current situation is that ecological flows are being complied with in Miranda, Caño, La Barca, Priañes, Laviana and San Isidro. In Proaza, Tanes, Florida and Priañes there are projects under way or awaiting approval aimed at hydroelectric exploitation and adaptation of drainage elements.

Natural Capital



Spain

As part of the working group on Natural Capital in the energy sector, an app was developed for the rapid assessment of environmental impacts produced by electricity distribution lines on habitats, species and ecosystem services.

EDP Spain has become a member of the Technical Committee for Standardisation in Biodiversity, with the aim of adapting its natural capital and biodiversity advances to standards defined at a national and international level.

In addition, in 2021, EDP continued to increase its public commitments in this area through:

- participation in a partnership with the International Union for Conservation of Nature (IUCN) in the development of a mitigation hierarchy application guide, identifying best available practices to reduce biodiversity impacts associated with on-shore and off-shore wind and solar power projects. The report draws on the experience of three energy companies, as well as BirdLife International, Fauna & Flora International, The Nature Conservancy and Wildlife Conservation Society, whose main objective is to guide all stakeholders through understanding and managing the biodiversity risks associated with the described projects, with an emphasis on science-based best practices. They also provide over 30 globally representative examples and case studies
- joining Act4Nature-Portugal, an initiative led by BCSD-Portugal, in which EDP joined the Steering Committee and Advisory Board and subscribed to the 10 common commitments and 12 individual commitments for 2030. By 2021, 10 of the 12 individual commitments have been achieved or are under way, and two are yet to start.

Three new initiatives stand out from EDP's biodiversity agenda in 2021:

- A project by EDP Brasil to recover 10 springs with the aim of promoting the recovery and conservation of water resources through the forest restoration of springs and installation of five mini sewage treatment plants in rural properties in the municipality of Baixo Guandu in the state of Espírito Santo

- The LIFE Águeda Project being implemented by EDP Produção, with the aim of carrying out conservation and management actions for migratory fish in the Vouga Ribeirão-Ermida river basin
- The Hectarea Natura Project, which aims to restore and enhance ecosystem services and natural capital, with EDP Spain undertaking to eliminate all eucalyptus trees and encourage the spontaneous growth of native species over the next five years.

Pollution prevention

Preventive operational actions relating to pollution in the context of biodiversity protection concerning the mitigation of the impacts of electricity generation and distribution activities, specifically:

- Vegetation analysis using satellite images
- Diversion of line routes to less sensitive ecological areas
- Preparation of standard projects for adapting lines to the requirements of bird life
- Use of technology that prevents birds and animals from approaching electrical system structures
- Prevention of the production and hazardous nature of waste. Sorting, storage and ensuring the appropriate final destination of the waste that is produced
- Replacement of mineral oil in transformers, which generates hazardous waste, with vegetable oil
- Analysis of the causes of occurrences with an environmental impact and identification of rapid corrective and preventive measures

- Implementation of noise minimisation measures
- Contractual environmental requirements to external service providers, with the application of penalties if these requirements are not met
- Environmental training for employees involved in activities that impact the environment.

EDP Professorship in Biodiversity II (2018-2021)

In alignment with EDP's commitment to contribute to deepening scientific knowledge of biodiversity and ecosystem services, the Professorship II, which began in 2018, has directed the scope of its actions towards the development of knowledge applied directly to business, in the dimension of environmental genomics, and to collaborating with distribution activity, through the scientific publication of data accumulated by E-REDES as part of the project for the Technical Commission for Monitoring Overhead Power Lines (CTALEA).

The following developments achieved in 2021 stand out in each of the research pillars of the Professorship II achieved in 2021:

Environmental genomics



To develop new methods of taking inventories and monitoring biodiversity, based on environmental DNA and promoting the transfer of technology and knowledge to LABELEC.

Objective

Actions

ZEBRA MUSSEL: INVASIVE SPECIES

Development of the MinION handheld device based on the lowest cost and fastest molecular techniques for the early detection of invasive and other species.

Early detection of invasive species, the zebra mussel, an environmental and operational threat in hydroelectric generation. Implementation of the quantitative real-time PCR technique at Labelec.

Development of protocols based on the eDNA technique to demonstrate equivalent methodology and its recognition by the national authority as an alternative to conventional methodologies.

Distribution

Mitigation of environmental impacts



To support E-REDES in the consolidation of scientific knowledge associated with the impact of power lines on bird life.

ORGANISATION INFORMATION

Collection and systematisation of biological information, essentially for work to model the Bonelli's eagle population.

EFFECTIVENESS OF MITIGATION MEASURES ON BIRD MORTALITY

Research lines combined and worked around available and consistent data (population of Bonelli's eagle - *Aquila fasciata*- in Southern Portugal). Statistical modelling and publication of scientific papers in international journals related to the speciality.

MODELLING THE IMPACTS OF MEASURES ON POPULATION DYNAMICS

Analysis of the interaction with power lines (behavioral and demographic component), which demonstrated a behavioural idiosyncrasy of the species in relation to the lines (staying away or attraction), resulting in a significant reduction effect. However, measures should be applied on a case-by-case basis.

3.4.2.2. Circular economy

The Circular Economy is one of the axes of the EDP Group's sustainability strategy and is an important pillar of its Environmental Policy. In EDP's business, Circular Economy takes the form of the efficient use of natural resources, from a life cycle analysis perspective, specifically:

- Minimising the use of natural resources required for the proper execution of its activities
- Optimising and efficiently managing internal products and services, promoting a circular economy among our customers
- Maximising the recovery of waste and its re-introduction into the economy as by-products.

In 2021, EDP's **Circular Economy Strategy** (CES) was approved, based on six major guiding principles, promoting:

- systemic approaches
- innovative solutions
- optimising the use of resources
- strategic partnerships
- efficiency in the value chain
- transparent communication.

EDP's Circular Economy Strategy vision is based on three fundamental pillars: Reduction, Enhancement and Optimisation, as a way to promote greater circularity in the business, implemented through seven priority areas of action - as identified/demonstrated in the following figure.

CIRCULAR ECONOMY STRATEGY

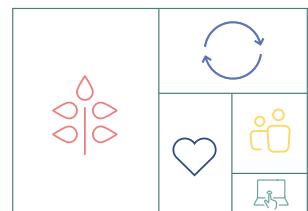


EDP has set four ambitious goals for 2025, in line with SDGs 8 and 12 - promoting decent work and economic growth, and sustainable production and consumption, respectively.

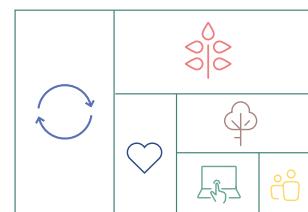
In order to achieve these objectives, EDP has defined a Corporate Plan that brings together several operational plans developed by the business units, in which the areas

for priority action take on different relevance depending on their activity.

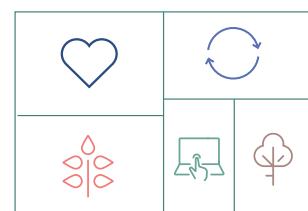
EDP Global Solutions



EDP Renováveis



E -Redes



EDP Produção

Priority Axes of Action

Initiatives

Waste management strategy

Implementation of a transversal strategy to the installations in order to harmonize practices with the objective of reducing the production of waste.
CE Strategy Axis: Efficiency in the use of resources and materials

R3FIBER

In partnership with TRC, development of alternatives for recycling wind turbine blades that are not in use.
CE Strategy Axis: Efficiency in the use of resources and materials

CONSTRUCTION OF THE ACTION PLAN FOR THE E-REDES CE

Use of the CTI Tool to analyze the circularity of the main materials and equipment in the network (EMI, transformers, cables and concrete posts) in their use phase and end of life.
CE Strategy Axis: Product Longevity

DIGITALIZATION OF PROCESSES

Equipment monitoring through machine learning to predict possible malfunctions or failures.
CE Strategy Axis: Digitalization

On-going

Planned

KPI 2021

PROMOTING CIRCULAR ECONOMY

	Target 2025
77% Accelerating circularity in renewables in terms of operational waste and decommissioning	>80%
-81% Reduction in operational waste	-82%
17% Increase the recyclability rate in the operation	85%
-70% Reduction in water consumption	-78%

Pollution Prevention

EDP makes every effort to develop solutions to allow its main waste materials to be used as by-products and raw materials for other industries, specifically fly ash and coal slag, as well as gypsum, which made up around 87% of the total waste materials recovered (249,546 tonnes).

As regards construction activities, operation and maintenance of facilities, reuse is prioritised so that when it comes to disposal, recycling is always considered as the primary solution.

SPECIFIC PRODUCTION OF RESIDUAL MATERIALS (T/GW H)



Therefore, contracts are established with licensed operators who send the waste to the preferred recovery destination. Efficient waste management goes beyond the suitable disposal of waste and its incorporation into the economic circuit, by promoting its reintegration whenever possible. This management starts upstream, in the design and in the choice of materials necessary for the suitable functioning of operations.

Water management

EDP recognises access to drinking water and sewerage as a universal Human Right and assumes its responsibility in pursuit of SDGs, in particular SDG 15, contributing to the sustainable use of freshwater ecosystem services, and SDG 7, seeking to ensure the supply of clean and affordable energy for all.

Under its [Environmental Policy](#), EDP is committed to mitigating its impacts, managing risks and promoting the continuous improvement of processes, practices and performance through a collaborative approach with stakeholders for the sustainable management and efficient use of water.

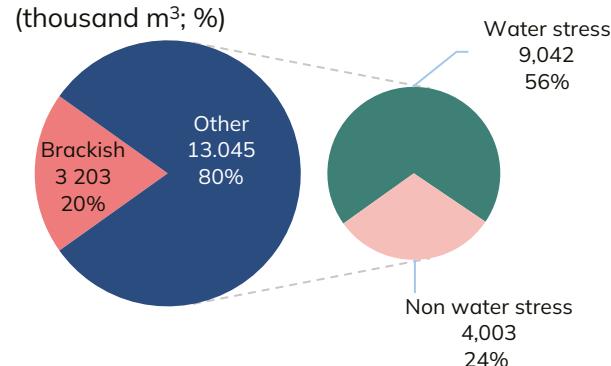
Water is a vital resource for electricity generation, particularly hydroelectricity, which is a major part of EDP's renewable generation portfolio and is crucial to its strategy of reducing CO₂ emissions and mitigating climate change.

EDP's activities can have both negative and positive impacts on water resources and ecosystems:

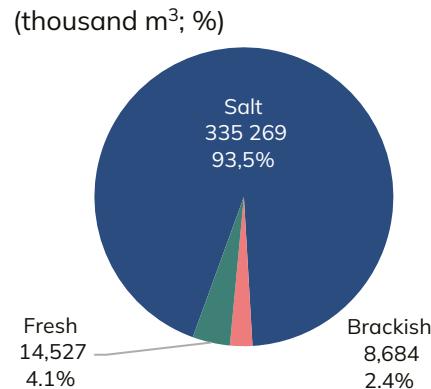
IMPACTS	DESCRIPTION	+/-
The use of water by thermal power plants results in a wastewater output and can increase the temperature of water bodies receiving cooling water discharges	The use of water by thermal power plants results in a wastewater output and can increase the temperature of water bodies receiving cooling water discharges	-
The presence of dams transforms lotic systems into lentic systems with very different hydraulic characteristics	The presence of dams transforms lotic systems into lentic systems with very different hydraulic characteristics	-
The reservoirs of hydroelectric power stations increase access to water for other uses, such as agriculture, water consumption and leisure, serving as strategic water reserves and helping to regulate floods downstream	The reservoirs of hydroelectric power stations increase access to water for other uses, such as agriculture, water consumption and leisure, serving as strategic water reserves and helping to regulate floods downstream	+

owever, and unlike the organisation's other activities, the use of water in hydroelectric generation is not considered consumption. EDP monitors the volume of water managed in these assets, which reached 199 million cubic metres, -2% compared to 2020. This indicator heavily depends on the hydroelectric productivity index that in Portugal, in which the hydro portfolio is most relevant, is 0.97 (compared to 0.97 in 2020), 3pp below the average hydrological year.

WATER CONSUMPTION 2021



WATER WITHDRAWAL 2021



The specific consumption of fresh water changed in 2021 (+35% compared to 2020), which is justified by the increase in coal-fired electricity generation in some regions of the EDP group (40% compared to 2020). In 2021, the main use of freshwater was as cooling water.

EDP monitors the potential scarcity and quality of water and sediments and the impact on biodiversity of managing this resource. To do this it ensures minimisation activities, such as the release of ecological flows, the transposition and transport of fish, and support for scientific research related to these matters.

It is important to mention the fact that the Pecém thermoelectric power station in Brazil is located in an area of water stress, and that EDP therefore uses the World Resources Institute's Aqueduct to assess its exposure to water risk on a river basin scale. A local analysis is subsequently conducted, considering quantitative information from national institutions and the experience of internal operations teams.

Since 2010, EDP has responded to the CDP Water Security, where it provides a detailed description of its ongoing initiatives. In 2021, EDP achieved the highest performance level of this index (leadership) with a rating of A-.

In 2021, EDP reached the level of higher performance (leadership) with the rating

A-
(CDP Water Security)

The last quarter of 2021 was marked by a severe drought in Brazil, which impacted the production of electricity from hydroelectrolyc plants

Pollution prevention

Thermoelectric power plants are covered by stringent environmental permits, which establish continuous monitoring, taking into account parameters and sensitivity to the environment in which they are integrated. These have physical-chemical wastewater treatment process-es, ensuring that they are discharged in accordance with the limit values established for each parameter. Similarly, there are also measures for reusing treated effluent for example for irrigation; increasing the concentration cycles in the cooling towers; and carrying out industrial cleaning inside the cooling towers.

EDP also monitors the quality of ground water in the area surrounding the landfills using a piezometer network.

3.4.2.3. Climate Action

Well known for its position at the forefront of the energy transition (page [Commitment to the Energy Transition 2030](#)), EDP recognises the importance of the electricity sector, and its contribution to a low-carbon economy, as a solution for tackling climate change. Anticipating the severity of climate risks, and in awareness of the exposure of the business, under its [Environmental Policy](#), in February 2021 EDP assumed the responsibility of achieving the carbon neutrality of its activity (scopes 1 and 2) through:

- Increasing the renewable portfolio
- An ongoing reduction of direct and indirect greenhouse gas emissions
- Providing low carbon energy solutions to its customers, promoting the electrification of consumption and energy efficiency.

And promote adaptation, to maximise the resilience of its assets to the effects of climate change

Given the current climate emergency situation, as well as meeting the global commitment, established by the Paris Agreement and reinforced by the Glasgow Pact, to limit the increase in the global average temperature to 1.5°C, EDP's contribution to combating climate change is takes the form of its Climate Action approach.

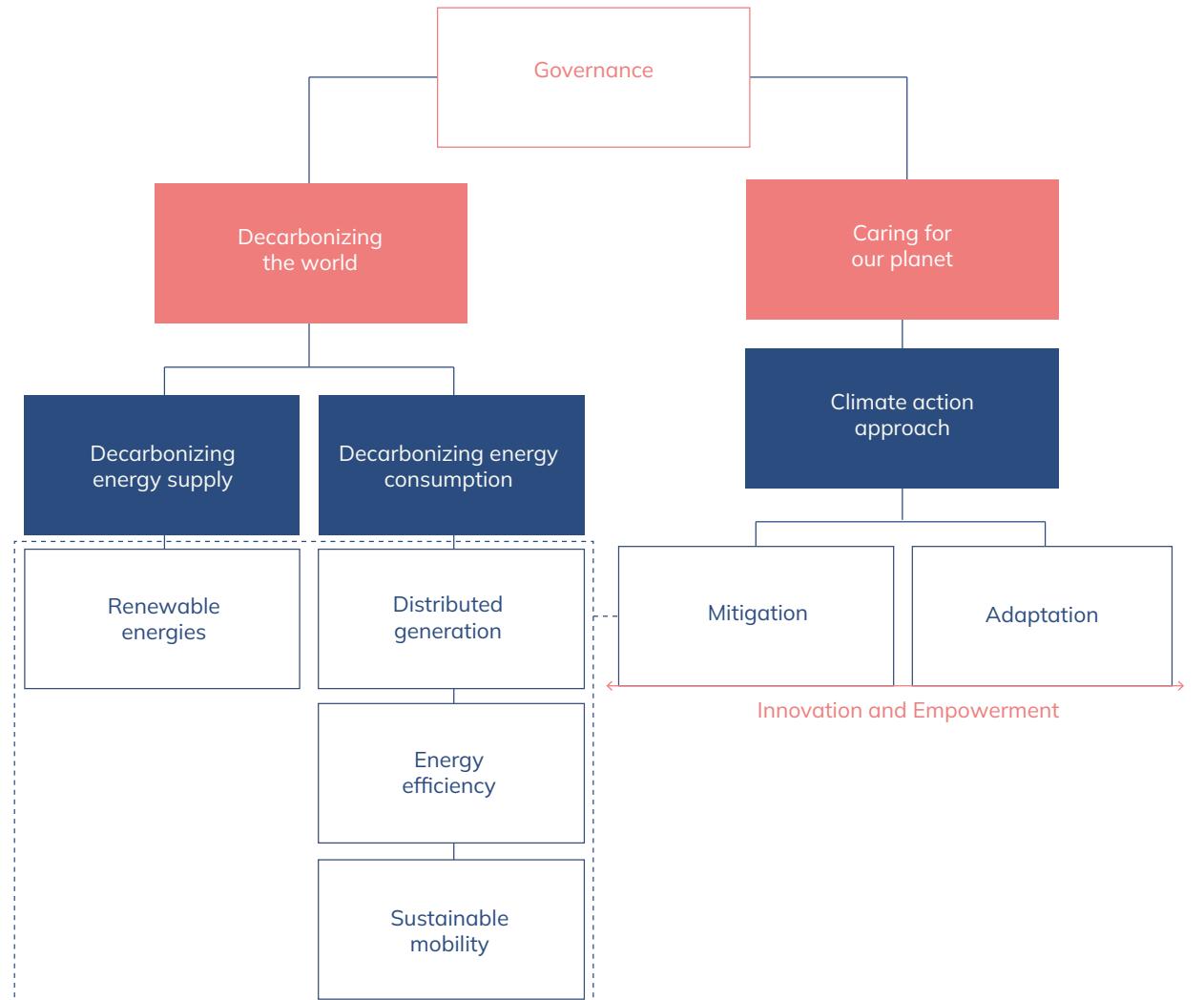
EDP's Climate Action approach focuses on mitigation actions - with the aim of reducing greenhouse gas (GHG)-emissions, and adaptation actions - by adopting climate change adaptation plans in all geographical areas and business units exposed to significant climate risks. These actions are supported throughout the company by innovation - which aims to promote the development of

carbon-neutral technologies and increase energy efficiency; and by training to increase awareness and transparency on climate change, both within and outside the EDP group.

This approach is the responsibility of corporate governance, which takes on a strategic role in the proper man-

agement of climate responsibilities and action plans, including the identification, analysis and management of climate-related risks and opportunities (see chapter [Risk Management](#)).

EDP has publicly committed to a set of short, medium and long-term objectives and targets that support its decarbonisation strategy, approved by the Science Based



Target initiative (SBTi) as being aligned with a 1.5°C decarbonisation trajectory and the Business Ambition for 1.5°C - Our Only Future initiative, which EDP signed up to in 2019.

In 2021, with the disclosure of the new business plan ([Strategic Update 2021-2025](#)), the Group made an even more ambitious commitment, specifically that of achieving carbon neutrality in 2030, with regard to its scope 1 and 2 emissions. Despite ongoing efforts to reduce GHG emissions, there are residual emissions that cannot be eliminated. EDP will offset these through the use of carbon credits.

Since 2018, EDP has also undertaken to follow the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) by disclosing information on governance, strategy, risk and opportunity analysis, metrics and the financial impact of climate change on the Company ([Annex EDP Alignment with TCFD Recommendations](#)).

The EDP Group publicly discloses its response to the CDP Climate Change questionnaire, in which it details its strategy and performance in the fight against climate change in line with the TCFD (CDP Climate Change EDP 2021). In 2021, EDP obtained the highest level of this index (Leadership), with an A- rating. In addition, EDP Brasil, which acts independently, achieved the maximum rating of Leadership A for the first time.

In 2021, EDP also joined other initiatives in the field of climate action, of which the following should be emphasised:

- Signing a corporate letter of support for the Biden-Harris Administration
- Joining GeSI's "Digital with Purpose Movement"

KPI 2021

CLIMATE ACTION

-51% Scope 1 and 2 specific emissions reduction vs. 2015

-30% Scope 3 absolute emissions reduction vs. 2015

- Signing the open letter to G20 leaders
- Adherence to the 24/7 Carbon-free Energy Compact
- WBCSD Business Manifesto for Climate Recovery.

Mitigation

Mitigation is directly linked to EDP's Business Plans, both on the supply side and on the demand side, with the aim of reducing global GHG emissions by implementing solutions based on four main axes:

However, compared to 2020 there was a significant increase (+40%, +4.4 TWh) in electricity generation from coal-fired power stations in Spain and Brazil, as a result of the increase in natural gas prices on international markets and the extreme drought in Brazil.

In contrast, natural gas combined cycle power stations (CCPS) saw a 34% reduction in production (-3.3 TWh) compared to 2020.

On the Iberian Peninsula, the Hydroelectric Capability Index (HCI) was slightly below 1 (average year) and, with the sale of 6 power stations in northern Portugal, hydroelectric output fell by 18% (-3.5 TWh) compared with the previous year.

TARGET 2025	TARGET 2030
-------------	-------------

-70% -98%

-30% -50%

As a result of these operating conditions, there was an increase of only 5% in emissions associated with electricity generation. The only reason why this figure was not more accentuated was the closure of the Sines power station.

Continued reduction of production from coal (until 2025) and natural gas (until 2030) power stations.

Increase in renewable installed power, with the public objective committed to by EDP of achieving 100% renewable installed capacity by 2030.

Reinforce electrification and promoting energy efficiency by prioritising renewable energy supply and demand

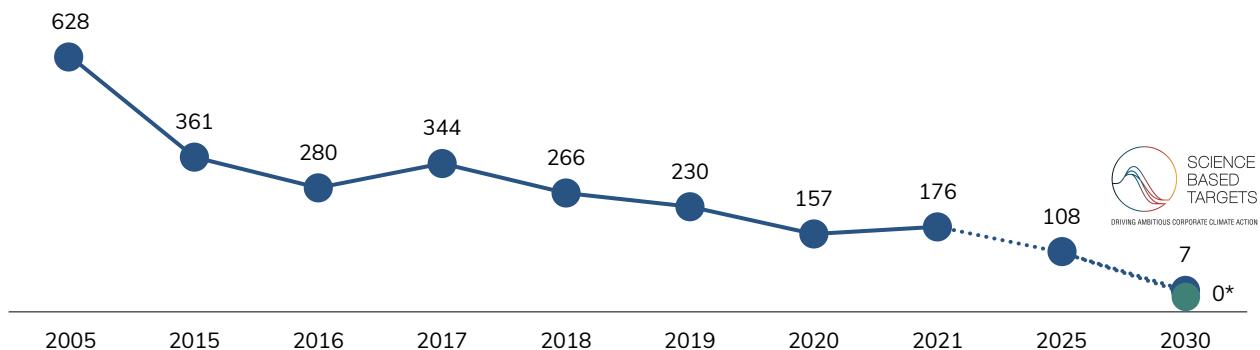
Promote innovation that contributes to mitigating the effect of climate change, contributing to the energy transition to a low carbon economy

EDP reports its GHG emissions in accordance with the GHG Protocol Corporate Accounting and Reporting Standard (categories detailed on the Annex 'ESG Indicators, 'Climate Change' tables). In short:

- Scope 1 emissions:** including stationary emissions from thermoelectric power stations, which account for 99.8% of the total, as well as emissions from the vehicle fleet, fugitive emissions (SF_6) and those corresponding to natural gas consumption in buildings. In 2021, they totalled 9.8 MtCO₂e.
- Scope 2 emissions:** this refers to electricity consumption, including losses in transport and distribution networks (the part produced by third parties), self-consumption in power plants and consumption in administrative buildings, supplied by third parties. In 2021, they totalled around 0.8 MtCO₂, increasing by 33% compared to 2020, particularly as a result of the greater contribution of network losses due to the fact that we distributed more electricity produced by third parties.
- Scope 3 emissions:** these comprise all remaining indirect emissions upstream and downstream of the value chain, not accounted for in the other scopes. In 2021, EDP revised the methodology for calculating these emissions, particularly with regard to the categories associated with the supply chain, in order to make the inventory more complete and robust, and also updated the 2020 results at the same time. The total value of scope 3 emissions amounted to 10.3 MtCO₂e, 3% less than in 2020, essentially due to the reduction in gas sales to end customers.

The 7% increase in Scope 1 and 2 emissions, combined with the slight reduction in electricity produced (-5%), meant that specific Scope 1 and 2 emissions increased by around 14% compared to 2020, settling at

SCOPE 1 AND SCOPE 2 SPECIFIC EMISSIONS (gCO₂/kWh)



* Residual emissions to be compensated

176gCO₂/kWh. It should be noted that this situation is merely due to the circumstances, and in no way alters the decarbonisation strategy announced for 2025 and 2030.

The generation of electricity at renewable energy power stations, as they replace fossil-based thermoelectric generation in the country where they operate, avoids the emission of a quantity of greenhouse gases corresponding to those that would be emitted by a mix of the existing thermoelectric portfolio in that country producing the same electricity. In 2021, avoided emissions amounted to 23.8Mt CO₂, 6% less than in 2020.

The decarbonisation strategy also has an impact on improving energy efficiency throughout the value chain, contributing to reducing upstream primary energy consumption and, on the other hand, to greater efficiency in the end use of energy, avoiding GHG emissions, particularly in the vehicle fleet, for which purpose EDP has committed to electrifying more than 40% of the fleet of light vehicles by 2025 and 100% by 2030.

By 2021, despite the greater use of coal in power stations, primary energy consumption has reduced by about 3,000 TJ. Regarding the vehicle fleet, the percentage of electrification in light vehicles increased to 13.2%, compared to 11% in 2021.

Adaptation

Ensuring the resilience of its electricity generation and distribution infrastructures is one of the priorities of EDP's climate action. Therefore, the Group has taken on the goal of having climate change adaptation plans in place in its business units by 2022, to ensure the resilience of infrastructure that may be exposed to extreme events of greater intensity and frequency, compared to reality as we know it today.

In 2021 the Group companies moved forward with the development of their climate change adaptation plans and some of them also started their implementation, the overall commitment being to achieve 100% implementation of the plans by the end of 2025.

To this end, the common corporate methodology supports the Business Unit plans already in place and the evaluation and quantification of physical risks are consolidated at the corporate level in accordance with EDP's risk taxonomy, in line with the TCFD's Recommendations.

Further information can be found at www.edp.com

Pollution Prevention

The coal-fired power stations in operation have been installed with equipment to minimise pollution from gas emissions into the atmosphere: electrostatic precipitators or bag filters to retain solid particles; gas desulphurisation systems with chemical neutralisation reactions using hydrated calcium hydroxides and a denitrification system, as well as a low NO_x burner system, with flame temperature control and stoichiometric control of the burning air.

Despite the closure of the Sines power station, output from coal-fired power stations in the Iberian Peninsula and Brazil was up significantly on the previous year (+57%), resulting in an increase in atmospheric emissions of sulphur dioxide (SO₂), nitrogen oxides (NO_x) and particulates. In 2021, SO₂, NO_x and particulate emissions were 12.1 kt (+48% than in 2020), 8.9 kt (+44% than in 2020) and 1.3 kt (+37% than in 2020), respectively.

Regarding the electricity distribution activity, to reduce accidental emissions of sulphur hexafluoride (SF₆) in substations, SF₆ switches have been replaced by vacuum switches.