

## OPEN POWER FOR A BRIGHTER FUTURE.

WE EMPOWER SUSTAINABLE PROGRESS.







2019 ACTIVITY REPORT

## **About ENDESA**

ENDESA was established in 1944 under the name ENDESA was established in 1944 under the name Endes Nacional de Electricidad, S.A. On 25 June Empresa Nacional de Electricidad, S.A. On 25 June Empresa Nacional de Electricidad, S.A. Meeting changed 1997, the Ordinary Shareholders' Meeting changed the company's name to ENDESA, S.A. the company's name to ENDESA, S.A.



ENDESA, S.A. is entered in the Madrid Register of Companies, volume 323, book 1, folio 143, page M6405. It has its registered office and main offices at calle Ribera del Loira, No. 60, 28042 Madrid, and its Tax Identification number is A28023430.

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Its main business is the production,
distribution and sale of electricity. The
company is also a major operator in the
natural gas sector and carries out other
energy-related services.

ENDESA is the leading company in the Spanish electricity sector and the second operator in the Portuguese electricity operator in the Portuguese of €31.981 market, with total assets of €31.981 billion as at 31 December 2019.

As at 31 December 2019 the share capital of ENDESA, S.A. amounts to €1,270,502,540.40, epresented by 1,058,752,117 shares each with represented by 1,058,752,117 shares each with a nominal value of €1.2, fully subscribed and a nominal value of for listing on the Spanish stock paid up, admitted for listing on the Spanish exchanges.

In 2019, ENDESA achieved total revenue of €20.158 billion, gross operating of €3.841 billion, operating profit of €3.841 billion, operating profit of €388 million, and net profit of €171 million.

At year-end 2019, the Company directly employed 9,952 people in Spain and Portugal.

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## The ENEL Group

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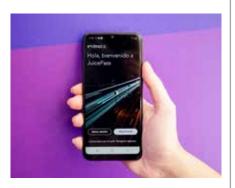


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The Company's governing bodies

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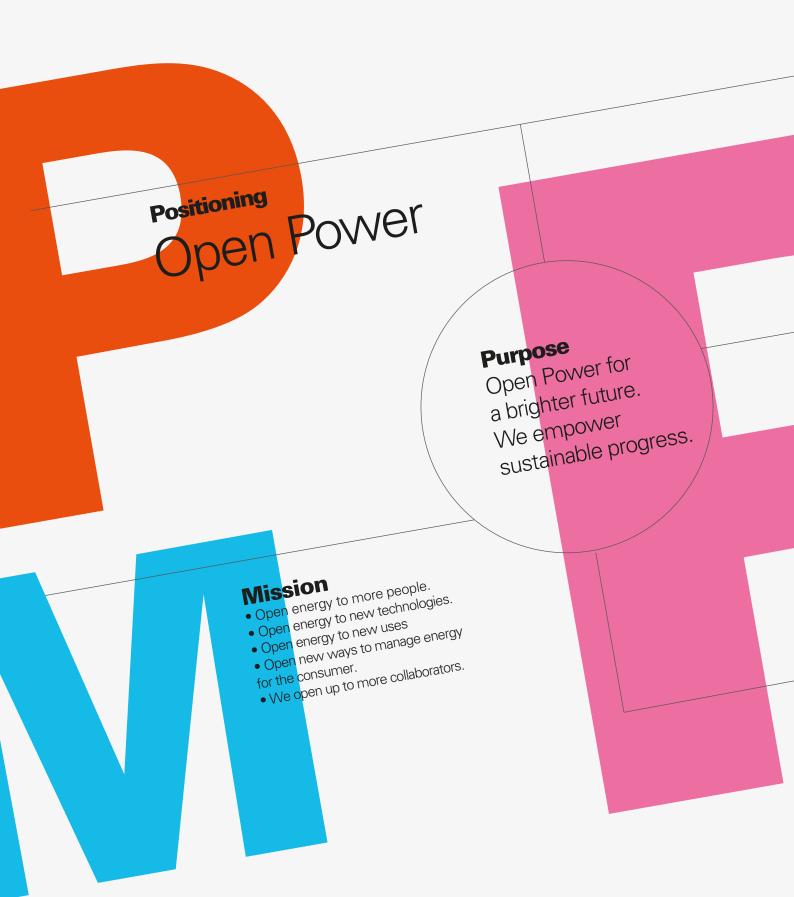
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## **ENDESA** is Open Power



### Vision Open Power to tackle some of the world's greatest challenges

### 2025 values

- Confidence
- Proactiveness
- Responsibility
- Innovation

### Values

- Responsibility. Each of us is responsible for the success of the group, at all levels. We pour our energy into helping people to improve their lives and live them more sustainably.
  - Innovation. We are inquisitive in work and life, we strive to go beyond the norm and overcome our fears to open up energy to new uses, technologies and people. Learning from our mistakes as well as our successes.
    - Trust. We act competently, honestly and transparently, to gain the trust of our colleagues, customers and external collaborators, valuing individual differences. In turn, we rely on their ability to create value and share it.
      - Proactiveness. We take direct charge of our work. We continuously interpret global scenarios and challenges to anticipate change, redefining priorities if the context requires it.

### **Institutional letter**





Dear Shareholders,

We are writing to you to present ENDESA'S Activity Report and to report on the management of financial year 2019.

We write to you in unprecedented times as a result of the health crisis caused by the Covid-19 pandemic. We recognise the enormous collective effort made by many people, and acknowledge the entire ENDESA and ENEL Group team who have guaranteed the energy supply that is so essential to keeping everything running. We also wish to send our heartfelt condolences to families and friends who have lost loved ones. Our most sincere sympathies go out to all the families who have suffered.

Aware of the seriousness of this crisis, ENDESA launched a Public Liability Plan in March and allocated a fund of €25 million based on three axes: the donation of health material and services; the guarantee of special conditions for energy supply to nursing homes, hospitals and medicalised hotels; and donations to institutions, agencies and health centres to meet the particularly serious and urgent needs.

We are aware that this is but a drop in the ocean and much more is needed. And there is no better way to help a country and show our commitment to it than to be a key vector in its economic and social recovery. For this reason, we will collaborate actively to ensure that the Energy Transition and the energy sector, of which ENDESA is the leader in Spain, drive the economy and growth. This will be our pledge. A pledge to which we will dedicate all our efforts and resources and which will be one of our main distinguishing features and commitments.

#### Financial year 2019

This past year was a particularly significant one. At the end of November the company presented its 2020-2022 Strategic Plan to the markets, a plan that builds on the work carried out previously, taking a step forward and once again leading the profound change that is taking place in the energy sector.

ENDESA's commitment to decarbonisation and the electrification of demand are the axes around which the company is creating a sustainable, dynamic and efficient business model, aligned with the principles that society demands, and were reflected in the COP 25 climate summit held in Madrid in December 2019, in which the company played a very prominent role. ENDESA's commitment will entail a total investment of €7.7 billion from 2019 to 2022.

With regard to decarbonisation, we have set ourselves the target of increasing installed capacity in renewable energies by more than 38% by 2022, with an investment of €3.8 billion in the construction of 3,700 MW. Furthermore, as part of this commitment, the 2020-2022 Plan includes the cessation of mainland coal activities by 2022 and a full withdrawal from coal-related activities over the course of the next ten years.

In terms of the second pillar of our plan, we anticipate an increase in electricity demand in the future as a result of increased electrification. This forces us to be prepared to meet the new and more complex needs of our customers,

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and to stay ahead of market trends, anticipating the creation of new, more efficient and sophisticated products and services.

A smart and flexible power grid will be essential to meeting customers' new needs. This is why we have been working on an intensive digitalisation process for our network for some time. The planned investment in this area, necessary to boost electrification of demand and the integration of renewable energies, will amount to €1.1 billion over the period of the Plan.

Throughout its history, and especially in recent years, ENDE-SA has stood out for its ability to fulfil its commitments. The 2020-2022 Strategic Plan, which we have just briefly touched upon, outlines the path we intend to take in the coming years in order to be able to continue to say the same.

In addition, it should be noted that all the objectives of ENDE-SA's Strategic Plan confirm the commitments of the Company's business model to the Sustainable Development Goals adopted in 2015 by the United Nations, particularly to SDGs 7 (Affordable and Clean Energy), 9 (Industry, Innovation and Infrastructure), 11 (Cities and Sustainable Communities) and, especially, 13 (Climate Action), to which more than 90% of the Plan's investments are dedicated.

2019 was no exception. We are pleased to announce that we have continued this long history that makes us a company widely recognised for its reliability, robustness

and responsibility. The figures are clear and convincing: €1.562 billion in ordinary net profit, €3.841 billion in gross operating profit (EBITDA) and, above all, €2.202 billion in gross investment, confirming that ENDESA is the electricity company that has invested the most in Spain in the last ten years.

The sound management of the liberalised market, in a complicated environment, both in the electricity and gas businesses, has once again been the key factor in these good results, in addition to the stability of the regulated market and the success of the cost containment effort.

To achieve this, ENDESA gave a new boost to its commitment in 2019 and substantially increased its investments in renewable energies (211%) compared to the previous year, and incorporated into the system all the power that was awarded to it in the auctions organised by the Government in 2017 (879 MW). During 2019, we consolidated a portfolio of Renewables projects, already under development, of more than 5,700 MW with grid access, both through organic and selective acquisitions. This strengthens and further accelerates our business plan. Around 70% of ENDESA's development investments in the past year have gone to renewable generation projects. This has allowed 73% of the mainland generation and 59% of the total ENDESA generation in 2019 to be free of CO<sub>2</sub> emissions.

The strength of these figures, as well as the strength of our business, allow us to go to ENDESA's General Meeting

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and propose to the more than 200,000 shareholders of the company the approval of a total dividend of €1,475 per share against the 2019 results. Overall, the proposed dividend is 3% higher than the 2018 dividend.

tion, that our company has decided to take a leadership role in this, and that it has the proven vision and ability to overcome this great challenge.

Taking into account the dividend paid in 2019 against the 2018 results, and the revaluation of the share price that year, we are proud to inform you that the return for shareholders last year was 25.3%.

Energy transition and decarbonisation targets are testing the ability of companies to take on long-term challenges that require a radical transformation of much of their business. At ENDESA, of course, we are prepared for this. We end this letter by assuring you with all humility, but also with full convictions.

Juan Sánchez-Calero Guilarte

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José Damián Bogas Gálvez
Chief Executive Officer

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## **Key economic** and financial figures

	2016	2017	2018	2019
Figures from the balance sheet (millions of euro)				
Total assets	30,960	31,037	31,656	31,981
Property, plant and equipment	21,891	21,727	21,840	21,329
Total liabilities	21,872	21,844	22,475	24,144
Equity - Parent Company	8,952	9,096	9,037	7,688
Equity - Non-controlling interests	136	137	144	149
Net Financial Indebtedness	4,938	4,985	5,770	6,377
5				
Figures from the Income Statement (millions of euro)				
Operating revenue	18,979	20,057	20,195	20,158
Gross Operating Profit (EBITDA)	3,432	3,542	3,627	3,841
Operating Profit (EBIT)	1,965	2,031	1,919	388
Net gain/(loss)	1,412	1,463	1,417	171
Main Economic flows (millions of euro)				
Net flows from operating activities	2,995	2,438	2,420	3,181
Total investments	1,221	1,175	1,470	2,202
Dividend payments	1,086	1,411	1,463	1,511

### **Key operating figures**

	2016	2017	2018	2019
Workforce				
Spain and Portugal	9,694	9,706	9,763	9,952
Capacity (MW)				
Spain and Portugal	23,691	23,678	23,766	24,231
Hydroelectric	4,765	4,752	4,804	4,792
Conventional Thermal	8,130	8,130	8,077	7,659
Nuclear Thermal	3,443	3,443	3,443	3,443
Combined Cycles	5,678	5,678	5,678	5,677
Renewables	1,675	1,675	1,764	2,660
Production (GWh)				
Spain and Portugal <sup>1</sup>	69,831	78,648	74,193	61,402
Hydroelectric	7,173	5,004	8,459	5,861
Conventional Thermal	28,100	31,906	28,997	13,346
Nuclear Thermal	25,921	26,448	24,067	26,279
Combined Cycles	7,425	11,849	8,957	11,687
Renewables	1,212	3,441	3,713	4,229
Sales (GWh)				
Spain and Portugal	93,490	96,513	89,639	89,441
Regulated price	13,815	12,919	12,356	11,385
Liberalised market <sup>2</sup>	79,675	83,594	77,283	78,056
Number of customers (thousands)				
Spain and Portugal <sup>3 4</sup>	11,016	10,848	10,754	10,635
Regulated market	5,593	5,255	5,029	4,807
Liberalised market	5,423	5,593	5,725	5,828
Energy distributed (GWh)				
Spain and Portugal	115,602	117,961	117,029	116,611

15 Key figures

Data measured at plant's busbars.
 Includes ENDESA Energía sales to customers in European countries.

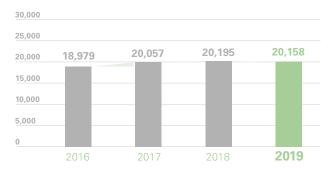
Includes English
 Supply points.
 Customers of the marketing companies.

### **Economic figures**

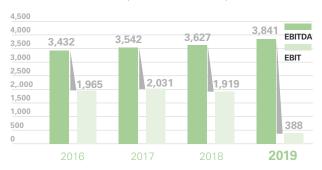
#### Assets, liabilities and Equity (millions of euro)



#### Operating income (millions of euro)

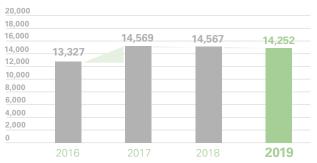


#### **EBITDA and EBIT** (millions of euro)

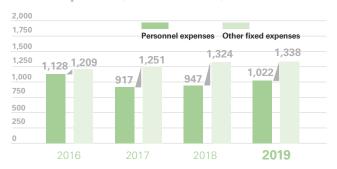


#### Supply costs



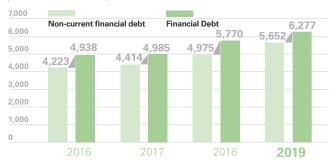


#### Other expenses (millions of euro)



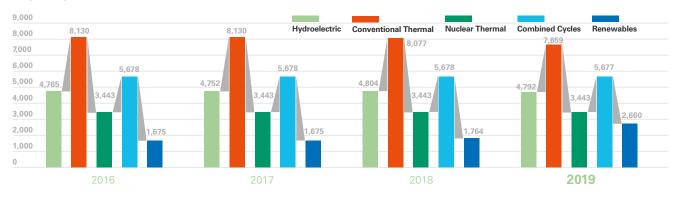
#### Financial debt and net financial debt

#### (millions of euro)

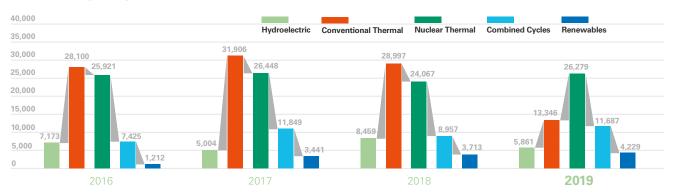


### **Operating figures**

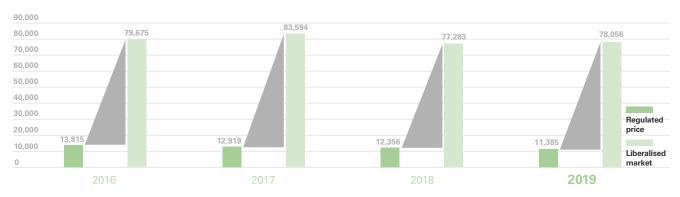
#### **Capacity (MW)**



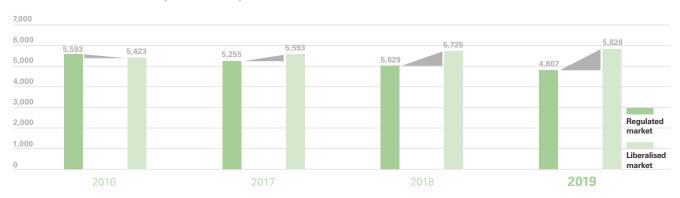
#### **Production (GWh)**



#### Sales to end customers (GWh)



#### **Number of customers (thousands)**



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## **1.** THE ENEL GROUP

When we talk about ENEL, we are talking about a multinational group in the energy field which owns most of the power distribution grid in its country of origin (Italy), and is also an active operator in the production, supply and sale of electricity and gas. It is a company with a presence in Europe, North America, Latin America, Africa and Asia, with over 64 million end users all over the world, giving it the largest customer base among its European competitors, with a net installed capacity of over 84 GW. The ENEL Group's gross operating profit (EBITDA) as at 31 December 2019 was €17.7 billion (€16.35 billion in 2018, an increase of 8.3%).

ENEL has been listed on the Milan Stock Exchange since 1999 and its main shareholder is the Italian Ministry of Economy and Finance with 23.6% of the capital. It has the largest number of shareholders of an Italian company.

Its shareholders include the largest international investment funds, insurance companies, pension funds and ethical funds, together with more than one million small savers, who value the adopting of international best practices in terms of transparency, corporate governance, environment and sustainability policies, as well as its zero tolerance to corruption and its Code of Ethics.

Having established itself as a multinational Group, ENEL devoted itself to consolidating its acquired assets and further integrating its businesses, considering that the Group has operations in 32 countries, with a particular focus on Europe and Latin America.

ENEL is Italy's leading electricity company. It operates in the generation sector with thermoelectric power plants and generation from renewable sources. In addition, ENEL manages most of Italy's electricity distribution network and provides integrated packages of electricity and gas products and services to its more than 31 million Italian customers.

On the Iberian Peninsula, ENEL owns 70.101% of ENDESA.

In Europe, ENEL is also present in Slovakia, with its holding in the country's largest electricity generator and the second largest in Central and Eastern Europe. In Romania, as well as in Greece, the ENEL Group owns and operates renewable energy generation plants. In Russia, ENEL also operates in

the generation sector, and in France, a strategic market for the Group, ENEL carries out trading activities in the gas and electricity markets.

ENEL is a major player in the energy market in Latin America, where it is the leading private group both in terms of installed capacity and number of customers. In South America it operates in 5 countries, with installed capacity from thermal and hydroelectric plants and other renewable energy sources. In the generation sector, it owns and operates power plants in Argentina, Brazil, Chile, Colombia and Peru. In the distribution sector, the Group is present in the Brazilian state of Ceará and in 5 of the main cities in South America: Rio de Janeiro, Bogotá, Buenos Aires, Santiago de Chile and Lima. In the transmission sector, it operates an interconnection power line between Brazil and Argentina. Chile and Brazil, as well as Costa Rica, Guatemala, Panama and Mexico, are home to wind and hydroelectric plants.

In North America, the ENEL Group owns and operates hydroelectric, geothermal, wind, solar and biomass power plants.

In Africa, ENEL is present in the gas exploration and production sector. Through ENDESA, ENEL also operates a thermoelectric power plant in Morocco. In South Africa, the ENEL Group operates the 412 MW Upington photovoltaic plant.

In Asia, the Group has been present in Japan, India and South Korea. In Oceania, its companies in Australia and New Zealand initiated the ENEL Group's presence in that continent.

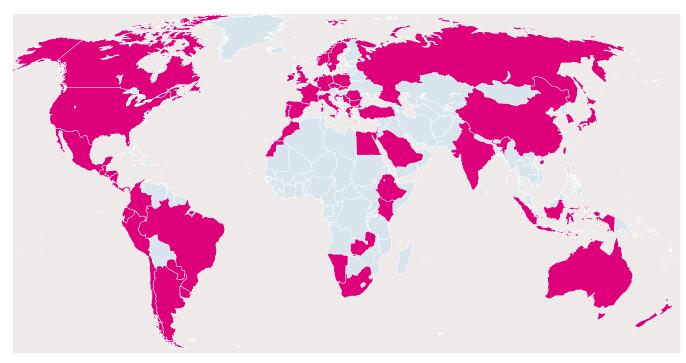
## ENDESA in the ENEL Group

ENDESA is part of the ENEL Group, which holds 70.101% of its share capital. Through ENDESA, the ENEL Group therefore has a strong presence in the electricity and gas market in Spain and Portugal.

Also through ENDESA, ENEL operates a thermal power plant in Morocco.



#### **ENEL** around the world



- 1. Italy
- 2. Spain
- 3. Portugal
- 4. Russia
- 6. France
- 7. Bulgaria 8. Greece
- 5. Romania

- Germany
- 10. Poland
- 11. The Netherlands
- 12. United Kingdom
- 13. Ireland
- 14. United States.
- 15. Canada
- 16. Costa Rica

- 17. Guatemala
- 18. Panama
- 19. Mexico
- 20. Brazil
- 21. Chile
- 22. Colombia
- 23. Argentina
- **24.** Peru

- 25. Morocco
- 26. South Africa
- 27. Zambia
- 28. India
- 29. South Korea
- 30. Japan
- 31. New Zealand
- 32. Australia

### **Innovation** and quality of service in ENEL

The ENEL Group promotes technological innovation to enable more efficient and reliable generation of electricity and offers new solutions to customers (from energy efficiency to smart grids) under a common denominator: electricity, the cleanest and most efficient energy vector.

ENEL was the first energy company in the world to replace traditional electromechanical meters with smart meters, which enable consumption to be measured in real-time and contractual relationships to be managed remotely. This inno-

vative tool is key to developing smart networks, smart cities and e-mobility.

ENEL made a strong commitment to renewable energy sources, and to the research and development of new green technologies. ENEL Green Power (EGP) is the Group's Renewable Energy Generation Company, which operates hydro, wind, geothermal, solar, biomass and cogeneration-based sources in Europe, America and Africa. ENEL Green Power is the renewable energy company with the most highly diversified smart technology of its competitors worldwide.

All while paying the utmost attention to quality of service and to the relationship with our partners, with a transparent policy of social responsibility, guaranteeing the creation of value for all our stakeholders, both today and in the future.

21 1. The ENEL Group





## 2. ECONOMIC, ENERGY AND REGULATORY FRAMEWORK

## Key macroeconomic aspects

## The global economy

In 2019, global growth in economic terms was 2.9% compared to the previous year. Global economic activity in 2019 was marked by the uncertainty created around policies arising from trade bids, particularly between the United States and China due to the imposing of tariffs on Asian products; political and social conflicts, notably in Latin America and Africa, but also in other parts of the world, such as Hong Kong, Chile and France; the idiosyncrasy characteristic of the key emerging market economies (India, Mexico, South Africa, among others) with slower than expected growth, as well as some weather-related disasters at various points across the globe (forest fires, drought, hurricanes, floods, etc.).

The **slowdown was widespread** in advanced-economy countries, weighed down by the moderating of growth in the United States. Despite job creation in these countries over the last year (in some cases, in the context of unemployment rates already at record lows), core consumer price inflation remained muted across advanced economies. It softened further across most emerging market economies amid more subdued activity. The decline in demand brought down metal and energy prices, which kept a lid on headline inflation.

At the end of the financial year, some temporary factors that had slowed manufacturing activity around the world

appeared to have faded. Among others, one of the most significant was the automotive sector, which had to make adjustments to meet emissions standards. Service sector activity weakened somewhat, although it remained in expansive territory, supported by consumer spending which in turn helped maintain low unemployment and modestly rising wages.

According to the IMF, "early signs of stabilisation reinforced financial market sentiment already shored up by central bank rate cuts. Markets appeared to have internalised the outlook for US monetary policy and the Fed's shift to "on hold" forward guidance following three rate cuts in the second half of 2019. Intermittent, but favourable, news on US-China economic relations and diminished fears of a hard Brexit supported investors' risk appetite. Equities continued to advance in the large advanced economies during the fourth quarter."

As for monetary policy, the IMF noted that currency fluctuations in the last quarter of 2019 reflected the overall improvement in risk sentiment and the easing of trade tensions as the US dollar and the Japanese yen weakened by around 2%, while the Chinese renminbi gained by around 1.5%. The most notable movement across major currencies was the appreciation of the British pound (4% since September) in view of the perceived reduced risks of a nodeal Brexit. Financial conditions at the end of the financial year could therefore be broadly described as accommodative across all advanced and emerging market economies.



At its meeting on 13 December, the European Central Bank decided to maintain official interest rates at historical minimum levels of 0.00% and placed the marginal deposit facility at -0.50% and the marginal lending facility at 0.25%.

Christine Lagarde, the first woman to head the institution following Mario Draghi's tenure, stated in her first public address that her intention is to pursue her predecessor's expansionary monetary policy to meet the inflation target. To this end, it kept interest rates intact at 0% and the asset purchase programme at €20 billion a month, following its first Governing Council last December.

The US economy slowed its growth in 2019 to 2.3%, compared to 2.9% in the previous year, its weakest growth since 2016 in the face of falling investment and trade tensions.

In the emerging economies, of note is the slowdown in China, which registered 6.1% growth in 2019, the country's lowest rate since 1992.

In Europe, the economy was faced with the threat of a hard Brexit. This process ended when Boris Johnson, following his election victory on 12 December, approved his Brexit project for early 2020.

In 2019, European Union GDP growth (including the United Kingdom for the last time before it left the EU) was 1.4%, six tenths lower than in 2018, and the weakest since 2014, when the GDP of the twenty-eight countries increased by 1.7%.

In the EU, the economy grew between October and December at a quarterly rate of 0.1%, two tenths lower than in the third quarter, its worst since the first quarter of 2013. Compared to the last quarter of 2018, the EU's year-on-year growth slowed to 1.1% from 1.4% in the previous quarter.

In 2019, the eurozone Gross Domestic Product (GDP) grew by 1.2%. This represents a significant slowdown, far from the 1.9% in 2018, and is the lowest rate of growth in the eurozone since the recession in 2013. This slowdown showed the weakness of three of the four largest euro-bloc economies (France, Italy, and Germany).



The slowdown in economic activity in the eurozone was particularly notable in the fourth quarter of 2019, when eurozone GDP slowed to 0.1% from 0.3% in the previous three months. This is the lowest quarterly growth rate since the first quarter of 2013, while year-on-year growth in the last quarter moderated to 1% from 1.2%.

In Germany, GDP in 2019 was €3.43599 trillion, i.e. 0.6% more than the previous year. This is a rate 9 tenths lower than in 2018, when it was 1.5%. The absolute value of GDP in Germany rose €91.62 billion compared to 2018.

UK **GDP** in 2019 was €2.523314 trillion, up 1.4% compared to 2018. This is a rate 1 tenth higher than in 2018, when it was 1.3%. The absolute value of GDP in the United Kingdom rose €99.577 billion compared to 2018.

Italy's **Gross Domestic Product** in 2019 grew by 0.3% compared to 2018. This is a rate 5 tenths lower than in 2018, when it was 0.8%. In 2019, GDP was €1.787664 trillion. The absolute value of GDP in Italy rose €22.243 billion compared to 2018.

France's **Gross Domestic Product** in 2019 grew by 1.3% compared to 2018. This is a rate 4 tenths lower than in 2018, when it was 1.7%. In 2019, GDP was €2.418997 trillion. The absolute value of GDP in France rose €65.907 billion compared to 2018.

Portugal's **Gross Domestic Product** in 2019 grew by 2.2% compared to 2018. This is a rate 4 tenths lower than in 2018, when it was 2.6%. In 2019, GDP was €212.245 billion. The absolute value of GDP in Portugal rose €7.949 billion compared to 2018.

The Spanish economy, fourth in the eurozone, grew by 0.5% in the fourth quarter reaching an annual growth figure of 2%, far exceeding the average of 1.2% in the eurozone. In Spain, GDP in 2019 reached €1.244757 trillion, an increase of 2.0% on 2018. This is a rate 4 tenths lower than in 2018, when it was

2.4%. The absolute value of GDP in Spain rose €42.564 billion compared to 2018.

Business sentiment indicators in the eurozone economy stabilised at the end of 2019. The composite PMI remained unchanged in December (50.6 points) thanks to the slight improvement of the services PMI (52.4 compared to 51.9 in November), which compensated for the fall of the manufacturing PMI (45.9, compared to 46.9), which remains in recessive territory. So far, services continue to largely withstand this context of global slowdown. The message is very similar when analysing data available by country. In Germany, the manufacturing sector does not appear to have bottomed out yet, with a PMI of 43.4 (44.1 in November), while the services PMI improved enough (52.0 versus 51.7) to keep the composite PMI unchanged, at 49.4 points. In France, however, the composite PMI worsened slightly (52.0 compared to 52.1 in November) due to the fall of the manufacturing PMI (50.3 compared to 51.7).

In the eurozone, the Economic Sentiment Indicator (ISE) rose in December to 101.5 points, from 101.2 in November, while the economic confidence figure for the EU as a whole stood at 100, in line with November.

By country, the most significant data was reported by the United Kingdom, which reached 87.9 points from 90.3 in the previous month, the worst since May 2012. Similarly, but more moderately, France closed with an indicator of 103, from 103.2. The Netherlands closed the year at 100.4, down 0.4 tenths from the previous month.

In contrast, countries such as Germany, with a slight rise, stood at 100 points in December compared to 99.6 points in November. Italy stood at 101.6 in the last month of the year, while in the previous month it was 99.9.

In Spain, confidence improved in December by 1.3 points to 103.2 points compared to 101.9 points in November.



## The Spanish economy

Within an overall context of economic slowdown, Spain ended 2019 with growth of 2% (almost double the European average), the creation of 402,000 jobs (despite still having a very high unemployment rate) and low inflation.

Despite having registered a 2% growth in terms of volume compared to 2018, the increase in Gross Domestic Product (GDP) was the lowest increase in this indicator in the last five years, reflecting an increase four tenths below that seen in 2018.

The year-end GDP figure was in line with the Bank of Spain's estimates, standing one tenth above the forecast given by the European Union (EU) and one tenth below the government's official forecast.

With this growth, the Spanish economy has achieved six consecutive years of progress, although last year's was the lowest since 2014 (when GDP grew by 1.4%). The highest figure

in this period of economic recovery, following the crisis, was achieved in 2015 with growth of 3.8%.

According to the National Statistics Institute (INE), the growth in 2019 was due to a contribution to domestic demand of 1.5 points, compared with 2.6 points in 2018, while external demand contributed four tenths to the growth of GDP, after having reduced a few tenths in 2018.

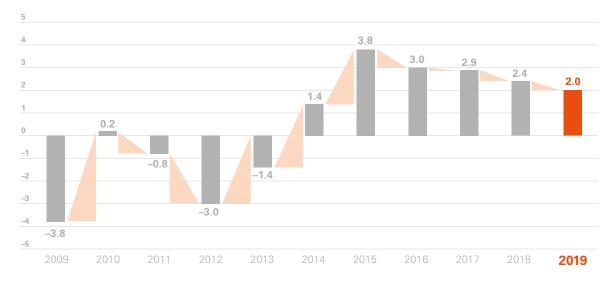
The growth of the Spanish economy is significant relative to the average of 1.2% in the eurozone, where, for example, countries such as Germany and Italy recorded values of 0.6% and -0.2%, respectively.

The GDP value, at current prices for 2019 as a whole, stood at €1.244757 trillion, an increase of 3.5% over 2018.

In a year that was economically unfavourable worldwide, affected both internationally (by the US-China trade war, plus the threats of a hard Brexit) and nationally (due to the existence of a functioning government following two electoral processes, and the downwards pull of high unemployment figures), the Spanish economy accelerated in the last quarter of the year with growth of 0.5%, compared to 0.1% in the eurozone. If we look at the causes of this growth in the last

#### **Gross domestic product**

Chained volume. Year-on-year variation rates (%)



months of the year, we have to bear in mind that GDP rose that quarter thanks to exports (3.7%), destined primarily for the European market, compared with investment (0.4%) and household consumption (1.1%).

The economy of Spain is the world's thirteenth largest by volume of GDP. GDP per capita in 2019 stood at €26,420, which puts Spain at number 33 (out of a total of 196 countries) in the per capita GDP ranking.

Looking at Spain's 2019 Trade Balance, Spain recorded a deficit of €34.3533 billion, representing 2.76% of its GDP. Note that this value is lower than in 2018, when it recorded a deficit of €37.1771 billion, representing 3.09% of GDP that year. The reason for this is that, although in the year under review there was an increase in imports, an even greater increase in exports from Spain was seen. That is why the coverage rate (percentage of imports that can be paid with exports) was 90.88%.

If we take the Trade Balance values with respect to the GDP figures, in 2019 Spain improved its position relative to other countries, since it rose from 74th position (which it occupied in 2018) to 72nd position. Regardless of the ranking position, the value of Spain's Trade Balance was an average balance compared to that of the rest of the countries.

By comparing the evolution of the Trade Balance with historical values since the beginning of the 2008 crisis, a deficit reduction trend is seen since the values recorded in 2009 continue to improve (2009 saw the worst Trade Balance figure with a deficit of €47.2321 billion, representing 4.4% of GDP for the year).

Exports in Spain grew by 1.38% in 2019 compared to the previous year. Sales abroad represented 23.9% of GDP, which ranked Spain at 83 (out of a total of 190 countries analysed) in the export ranking relative to GDP. Spanish exports went mainly to France, Germany and Italy, which accounted for 15.82%, 11.28% and 8.07% of the country's total exports respectively. The export figure reached €297.5218 billion in 2019.

On the other hand, **imports into Spain** grew 0.37% compared to the previous year, representing 26.66% of GDP. This value put Spain at 63 (out of a total of 190 countries analysed) in the import ranking relative to GDP. The import figure reached €331.8752 billion.

The main countries from which Spain makes purchases are Germany (13.83% of imports), followed by France (11.62%) and China (6.88%).

The Spanish economy achieved its seventh consecutive year of Current Account surplus (which measures the inflow and outflow for the exchange of goods, services, incomes and transfers), with a positive balance of €23.941 billion, representing an increase of 2.8% compared to 2018. This meant the first increase from the historical peak reached in 2016 (€35.371 billion).

This change in the Current Account of the Balance of Payments, in its breakdown by components, can be explained by the increase of 4.4% in goods and services, which reached the figure of €34.057 billion. In contrast, primary and secondary incomes (i.e., income on labour, investment, taxes, contributions, social benefits, and current transfers) increased their deficit to €10.116 billion.

The Current Account surplus plus the positive balance of the Capital Account left the Spanish economy in 2019 with a financing capacity of €29.136 billion, 0.3% over the 2018 values, representing its eighth consecutive year with financing capacity, i.e. net lending to the rest of the economies.

This meant that Spain did not need, in terms of net balance, external resources to maintain its growth, since it could be a net lender and lend resources abroad, thus reducing its net external debt each year, which is around 80% of GDP, moving away from the 100% of GDP in the early years of the crisis.



The Consumer Price Index (CPI) stood at 0.8% year-onyear in 2019, its lowest value in four years. According to the data offered by INE, price performance at the end of the year was influenced by the rise in fuel prices and, to a lesser extent, in air transport prices. Conversely, this value was offset by the fall in the price of electricity, since butane, propane and electricity prices fell the most in 2019, while the prices that increased most were flights and gasoline. More specifically, the prices that fell most were butane and propane (-16.6%); electricity (-16.4%); mobile telephone equipment (-13.9%); other computer media, such as external hard drives and USB sticks (-13.7%); and olive oil (-11.4%). On the contrary, the prices that rose the most in 2019 were jewellery and costume jewellery (10.5%), international flights (9.6%), gasoline (8.9%), domestic flights (7.9%) and pork (7.2%).

December saw the close of a year marked by moderate inflation. After closing 2018 at 1.2%, inflation in January 2019 stood at 1% and the annual CPI rate continued to rise until April, standing at 1.1% in February, 1.3% in March and 1.5% in April. As of the fifth month of the year, the increases were more moderate, namely 0.8% in May, 0.4% in June, 0.5% in July and 0.3% in August, falling to 0.1% in September and October, reaching the lowest levels seen in the last three years.

The trend changed in November with a price recovery that left the rate at 0.4% but fell 0.1% in December compared to the previous month (it rose four tenths its year-on-year rate) to end the year at 0.8%, the third consecutive rise in annual price performance and the highest figure since May. This meant that inflation fell four tenths below 2018 (for which the rate was 1.2%) and, in turn, was the lowest year-end since 2015. The December year-on-year rate was the fortieth positive rate on the year-on-year CPI.

Pensions were revalued at twice the CPI overall at the beginning of last year (i.e. 1.6%, except the minimums, which rose by 3%).

At the end of 2019, Navarra and the Basque Country were the communities with the highest CPI rates, 1.3% and 1.2%, respectively, while those with the lowest rates were Asturias and the Canary Islands (0.4% in both cases).

The Harmonised Index of Consumer Prices (HICP), which measures price developments with the same method in all eurozone countries, closed the year at the same figure as the CPI, 0.8% year-on-year, three tenths more than in November.

Industrial Production increased by 0.6% in 2019 as a whole. The annual rate of the Industrial Production Index (IPI) saw a change of 0.8% in December 2019 compared with the same month of the previous year, corrected for seasonal and calendar effects. This rate was 0.8 points lower than in November, and 2.5 points higher than in November of the previous year.

Looking at the breakdown by sector, and with rates corrected for seasonal and calendar effects, durable consumer goods (6.2%) and capital goods (3.8%) had positive annual rates, while intermediate goods (-1.2%) and non-durable consumer goods (-0.1%) recorded negative annual rates.

The annual percentage rate of industrial production grew in 13 autonomous communities and decreased in the other four compared to December 2018. The largest increases occurred in Navarra (24.3%), La Rioja (10.2%) and Extremadura (8.1%). Conversely, the most notable declines were in Andalusia (-8.8%), Asturias (-8.0%) and Cantabria (-5.3%).

As regards the annual change in retail sales, according to INE data, the General Retail Trade Index (ICM), the original ICM series at constant prices, recorded an annual change of 1.9%, 1.1 points below the rate of the previous month. Annual retail sales increased 2.3% in 2019% in the seasonal and calendar adjusted series and 2.4% in the original series. Taking into consideration the rate corrected for seasonal and calendar effects, it grew by 1.7% in the last month of 2019 compared to the same month of the previous year (a rate that was eight tenths lower than that recorded in November 2019).

By Autonomous Communities, annual rates of change in sales for the year as a whole indicate that the Community of Madrid (4.3%), Andalusia (3.7%) and Murcia (2.8%) reached the highest average retail sales rates, while Asturias (0%), Extremadura (0.1%) and Cantabria (0.5%) had the lowest rates.

The employment rate in the retail sector showed a rise of 1% on average for 2019 as a whole.

Retail sales in Spain recovered in 2019, a year in which they were generally positive, although a slight loss of dynamism in December (2.3% year-on-year, the most modest in six months) should be noted. In any case, sales closed the year with growth, in real terms, of 2.4%, a rate triples that of 2018 and the best balance since 2016. This acceleration was based, fundamentally, on the practically universal increase in sales by type of goods, particularly those related to health and leisure.

Although Spain's economy has grown somewhat more than the countries surrounding it, it remains burdened by a lack of dynamism in job creation. At the end of 2019, a total of 3.19 million people were unemployed and 19.96 million were employed.

During 2018, 402,300 jobs were created in Spain, bringing the unemployment rate to 13.78% of the working population.

According to INE data, this was due to the upturn in employment in the last quarter, following two consecutive periods when the number of unemployed grew. Specifically, between October and December last year employment increased by 92,600 workers (78,400 of whom where in the Community of Madrid) and unemployment fell by 22,500 people. Even so, the annual job creation figure does not reach the figure of half a million jobs created over the previous five years (2015-2018).

In the year under analysis, almost all autonomous regions increased their number of workers. Specifically, the best figures were recorded in Madrid (138,900), Catalonia (87,000) and Andalusia (45,000). In Extremadura, there was no improvement on the 2018 figure. The opposite trend was seen in Castilla-La Mancha, where 5,900 jobs were lost.

One figure that can be considered historic in Spain's employment market is that, in 2019, the number of women employed reached a record 9.15 million workers. Six out of ten new jobs created last year were taken by women.

Of the employment that was created in Spain in 2019, a total of 360,000 positions were generated in the private sector and 42,300 in the public sector.

By area of activity, the services sector was where more jobs were created, with a total of 374,600 job positions. In industry, 54,400 jobs were generated, compared with 2018 when 3,000 jobs were lost, as it was a year marked by trade tensions and bad news in the automobile sector. By contrast, in construction, only 4,000 were created, far from the 136,300 generated in 2018. However, it must be borne in mind that demand in this area was lower and labour costs also increased. A total of 31,700 jobs were lost in agriculture in 2019.

The number of permanent contracts rose by 414,200 in 2019, while the number of temporary contracts decreased by 78,600. This type of contract accounts for 26.11% of the total. As for part-time contracts, these have gradually declined since 2014, corresponding to 14.7% of those employed at the end of 2019.

The number of households with all members unemployed reached 1,013,000 by the end of 2019, a decrease of 40,000 compared with the previous year.



# Changes in interest rates and exchange rates

2019 began with uncertainty about the growth of the economy, the latent threat of new trade disputes, doubts about the final terms of the Brexit process, and, in the case of Spain, uncertainty about the electoral process following the 2018 vote of no confidence.

At the March European Central Bank (ECB) meeting, following the drastic deterioration of growth prospects, Mario Draghi changed the Bank's policy by delaying expectations of rate hikes and anticipating the launch of new liquidity injections for September.

Following the poor economic data, investors took refuge in eurozone public debt, and the 10-year German bond started to yield negative returns in March – as it did in 2016 – reaching a historic low of -0.72% at the end of August. In the case of the 30-year German bond, there was an unprecedented case of trading with negative returns from August to October 2019.

In September, the ECB kept its main interest rates at 0% but cut the deposit facility rate (rate charged to banks for their deposits) by 10 basis points (bps) to -0.50%. It also launched a new asset purchasing or "Quantitative Easing" programme (QE2). After eight years in office, at the end of October Mario Draghi ceded the presidency of the European Central Bank (ECB) to Christine Lagarde, formerly Director of the International Monetary Fund (IMF).

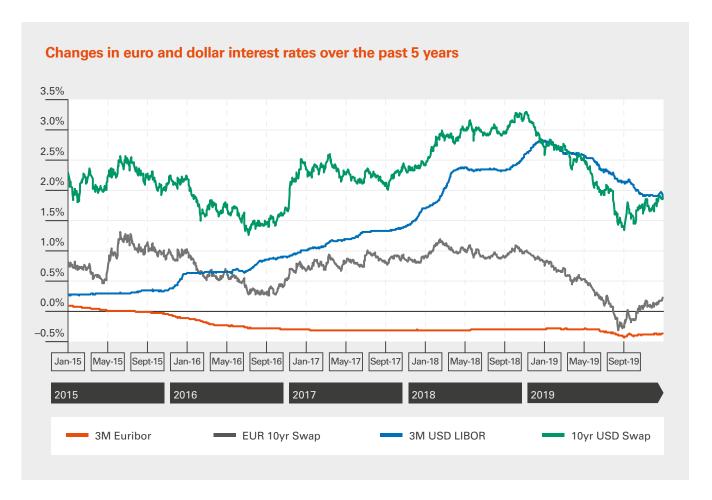
In the case of the US dollar (USD), the Federal Reserve also changed its strategy and cut interest rates, which had not happened since 2008, reducing the reference interest rate on

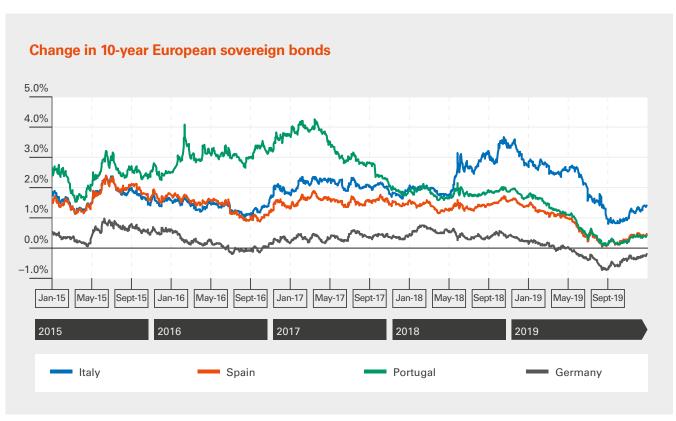
three consecutive occasions by 25 bps to place it in a range between 1.50% and 1.75%.

During 2019, the yield on the 10-year Spanish bond fell from 1.41% at the beginning of the year to 0.46% at year-end, reaching a historical low in August, trading at 0.03%. As a result, Spain's country risk premium (differential with the German 10-year bond) improved by 52 bps to reach 65 bps at the end of 2019. In Italy, the risk premium stood at 160 bps at the end of 2019, 90 bps less than the previous year, while Portugal's risk premium decreased by 85 bps to 62 bps at the end of the year.

During 2019 the long-term euro interest rate (10-year swap) decreased by 60 bps to 0.21% at the end of the year, having traded in August at historical lows of -0.33%. The short-term interest rate (3-month Euribor) also declined by 7 bps, ending the year at -0.38%. The long-term interest rate on the US dollar (USD) fell in 2019 from 2.71% to 1.90%, while the 3-month interest rate on the US dollar (USD) fell by 90 bps to end the year at 1.91%.

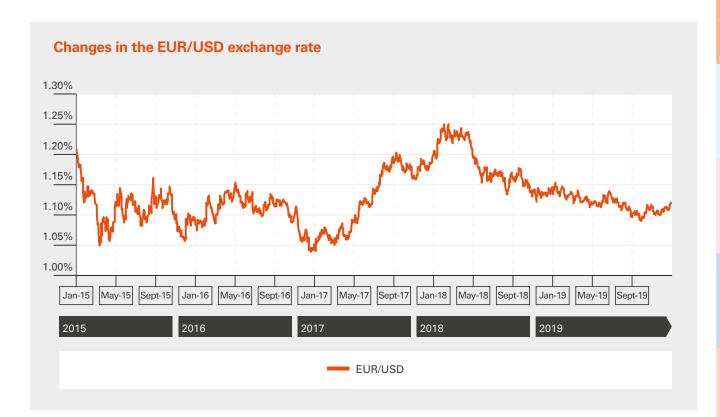
As for exchange rates, in 2019 the euro depreciated by 2.2% against the US dollar (USD), the euro/US dollar (EUR/USD) exchange rate going from 1.15 at the beginning of the year to 1.12 at year-end.











### **Financial** management

#### 1.2.1. Change in indebtedness and average cost of debt

At 31 December 2019, ENDESA had net financial debt of €6.377 billion, an increase of €607 million compared with the previous year. The average cost of ENDESA's debt amounted to 1.8% in 2019. At the end of the year, 98% of gross debt was denominated in euro. At 31 December 2019, 70% of gross financial debt was at fixed interest rates, while 30% was at floating rates. The average life of ENDESA's gross debt was 5.2 years as of December 2019.

Liquidity rose to €3.3 billion, of which €3.077 billion corresponded to amounts available unconditionally on credit lines, of which €1 billion corresponded to a credit line with ENEL Finance International, N.V. This level of liquidity allowed for coverage equivalent to 26 months in debt maturities.

#### Millions of euro

Structure of Gross Financial Debt of ENDESA							
	31 December 2019	31 December 2018	Difference	% change			
EUR	6,498	6,021	477	7.9			
USD	109		109	N/A			
Total	6,607	6,021	586	9.7			
Fixed rate	4,639	3,550	1,089	30.7			
Floating rate	1,968	2,471	(503)	(20.4)			
Total	6,607	6,021	586	9.7			
Average Life (No. years)	5.2	5.3					
Average Cost (%)	1.8	1.9					

During financial year 2019, the main financial transactions carried out were:

- > Extensions of credit lines were signed with various financial institutions to mature in March 2022, and the limits of some of these were increased, giving a total amount of €2.125 billion.
- The Euro Commercial Paper (ECP) issue programme through International ENDESA B.V. came to an end and a new ECP issue programme was launched through ENDESA, S.A., the outstanding balance of which at 31 December 2019 was €796 million, the renewal of which is backed by irrevocable bank credit lines.
- In the context of the financial transaction signed in the form of a green loan from the European Investment Bank (EIB) in 2018, on 19 March 2019 €335 million was drawn down. This drawdown bears a floating interest rate, with a 15-year maturity payable from March 2023.

- ENDESA, S.A. signed a green loan amounting to €300 million with the Instituto de Crédito Oficial (ICO), Spain's official credit agency, drawing it down on 20 May 2019. This drawdown is at a variable rate of interest and matures in 12 years, with repayments starting in May 2022.
- On 30 June 2019, ENDESA, S.A. signed the extension of the inter-company credit line with ENEL Finance International, N.V., for €1 billion, extending its maturity to 30 June 2022.
- With the entry into force from 1 January 2019 of IFRS 16 Leases, net financial debt includes a liability for the recognition of the payment obligation for the right of use contracts in which ENDESA acts as lessee. As at 31 December 2019, this financial liability amounts to €274 million (€186 million as at 1 January 2019).





# International market for fuels and freight

# Petroleum and petroleum products

2019 was a year of high volatility in crude oil prices. The prices maintained a clearly upwards trend in the first months of the year, supported by the OPEC agreement to cut production, reaching more than \$75/bbl in April, slightly more than \$20 above its price in early 2019. As of May, prices corrected sharply to \$56/bbl due to lower than expected growth in global crude demand and the macroeconomic impact of the US-China trade war. In the second half of the year, volatility prevailed in the markets, with peaks of \$72/bbl in the days following the attacks on oil facilities in Saudi Arabia in September, dropping back down to \$56/bbl a few weeks after the attack. During the last quarter, prices increased progressively to close the year at \$66/bbl.

### **Natural Gas**

In 2019, the price of international LNG (liquefied natural gas) gradually decoupled from the price of crude oil, entering a downwards spiral that led to it losing more than

60% of its end-2018 value during the period between June and October 2019, with a very slight recovery in November, which was barely maintained in December. This is mainly due to the excess supply on the international LNG market, which was absorbed primarily by the European gas market, the main liquid market with regasification capacity available worldwide. As a result, the price of gas in Europe (TTF) followed the negative performance of LNG, dragging the Spanish PVB with it.

In Spain, gas demand closed 2019 with a growth of 14% compared to the previous year, due to 80% growth in electricity generation demand, while conventional demand remained stable (-0.2%). The percentage of consumption used for electricity generation soared in 2019 to 28%, having fallen slightly below 18% in 2018.

### Coal

2019 was a year of weakness for the international thermal coal market, with API2 prices down by more than 37% since the start of the year, and trading down to levels last seen in 2016.

The ramping up of LNG export capacity increased the availability of cheaper alternative fuels for power generation, while in Europe stronger CO<sub>2</sub> prices indicate that gas has been favoured as a feedstock over coal for power generation.

In Asia, several markets in the region saw weaker demand than in previous years.

In Japan, cumulative thermal coal imports over the first ten months of the year were down around 3% YoY. The restarting of nuclear capacity in the country is a key factor behind this weakness and with further applications for reactor restarts, this is expected to continue to weigh on Japanese coal imports in the longer term.

South Korea has also seen reduced imports. Over the year, the country has temporarily shut down several coal-fired power plants in order to try to lower pollution levels, and similar action will be taken over this winter with the government idling a number of plants.

China, however, has performed differently, with volumes over the first ten months of the year increasing by almost 8% year on year. There is no clear government policy on future coal consumption. In recent years the government has intervened to try to stabilise the domestic market. Domestic coal prices are trading down at levels last seen in 2016 and, if there is further weakness, the government could look at the possibility of restricting imports to try to support the domestic coal industry.

On the supply side, the low-price environment has had a significant impact. Colombia has seen a downturn in exports, with Europe largely responsible. This should have meant an increase in flows of Colombian coal into Asia; however, the lack of competitiveness of this coal in price has meant that only exports have decreased.

For Indonesia, the largest exporter on the market, the country has continued to produce above expectations. But growth in domestic demand has consumed much of the new output, and this trend is increasing. The current low-price environment should weigh on future output.

In Australia, exports have reached unprecedented levels, given expansion and the ramping up of new capacity. The long-term outlook for Australian supply is less uncertain than in Indonesia. Despite the high-price environment seen in the coal market, exploration expenditure is still struggling to reach the levels seen in 2011. This does highlight the general attitude toward coal that, with an uncertain demand outlook, miners appear reluctant to invest significantly in new projects, while obtaining financing from banks is likely to be another key issue.

The share of coal in the energy mix in Spain was low. As has already been mentioned, due to low gas prices and high emissions prices, the use of thermal coal equipment in Spain has been minimal, particularly since the beginning of the second quarter. This fact, coupled with EU environmental policy, which is more restrictive for emissions, has resulted in companies with this technology having announced agreements with States for the orderly closure of coal-fired thermal plants.

### 2019 freight market

2019 was a year of change for the freight market due to the impact of the new IMO 2020 regulation, which limits sulphur emissions from marine fuels. Uncertainty surrounding the availability and price of new fuels, as well as the availability of scrubber-fitted vessels, continued through to the end of the year, generating tensions in freight markets. This uncertainty was further increased due to the US-China trade war.

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As regards routes, the C4 Capesize started the year falling to the minimum of \$4.7/t in March, then rising to \$10.7 in September and correcting again to close at \$8.4/t at 31 December. This rise in the third quarter was due to the fact that both the miner Vale and Capesize's main shipowners decided to bring forward the installation of scrubbers. The Vale accident, which affected iron ore exports and redefined some traffic, must also be noted. But regardless of the fluctuations in levels, the lower trading volume of thermal coal and the fall in its prices on international markets affected the liquidity of the markets, negatively affecting the capacity of bulk carriers, the largest being the most affected due to the shortage of loads. Some traffic has been

particularly affected, as is the case with RBCT-Rotterdam (C4 Capesize) where the BALTIC EXCHANGE has already announced the suspension of its corresponding index due to lack of liquidity.

In terms of volume, in 2019 ENDESA maintained its tanker chartering portfolio, transporting around 54 MT under its policy. In dry bulk, ENDESA transported 2.3 MT of coal under its chartering portfolio, 70% less than in 2018. 2019 was a year marked by the restructuring of the chartering portfolio to adapt it to the new situation and align it with the group's decarbonisation objectives.



# The regulatory framework in 2019

## Main regulatory developments in Spain

On 21 January 2020 the Council of Ministers approved the Declaration on the Climate and Environmental Emergency in Spain, committing itself to adopt 30 priority lines of action to combat climate change with cross-cutting policies. This Declaration is made in response to the general consensus of the scientific community, which calls for urgent action to safeguard the environment and the health and safety of citizens.

In the Declaration, the Executive undertakes to implement 5 of the above 30 measures in the first 100 days of Government:

- Send to Parliament the Draft Climate Change Law to ensure that zero net emissions will be reached no later than 2050, promoting a 100% renewable electricity system, a stock of passenger and commercial vehicles with zero emissions, a CO<sub>2</sub>-neutral equivalent agricultural system, and a fiscal, budgetary and financial system compatible with the necessary decarbonisation of the economy and of society.
- The definition of the long-term decarbonisation path to ensure climate neutrality by 2050.
- Invest in a safer country and one less vulnerable to the impacts and risks of climate change. Along these lines, the

second National Plan for Adaptation to Climate Change will be presented, including the National Climate Observation System and the development of a range of impact indicators.

- Strengthen existing participation mechanisms with a Citizens' Assembly on Climate Change, which will represent all sectors of society including young people.
- Promote the transformation of the industrial model and the service sector through Fair Transition Agreements and support measures.

At the same time, all Member States of the European Union must submit to the European Commission an integrated National Energy and Climate Plan (NECP 2021-2030) to plan for the implementation of climate change goals and targets in line with the Paris Agreement. A draft NECP 2021-2030 is currently under discussion and is being subjected to various hearing procedures at national level, and a structured process of dialogue with the European Commission is also under way, which will culminate with the final approval of the Plan during 2020. This is a framework document, which defines national emission reduction targets, the incorporation of renewable energies and energy efficiency meas-



ures, among other issues. The Plan contains a series of measures that enable the objectives set out in the Draft Law on Climate Change and Energy Transition to be comfortably met, so that by 2030 greenhouse gases will have been reduced by 23% compared to 1990, renewables will account for 42% of final energy use, energy efficiency will be improved by 39.5%, and the electricity mix will contain 74% renewable energy.

In addition, a number of reforms were undertaken throughout 2019 affecting the various activities of the electricity and gas sector, the most relevant being these discussed below.

### Royal Decree Law 1/2019, of 11 January, of urgent measures to bring the powers of the National Commission on Markets and Competition into line with the requirements of EU law

The publication of Royal Decree Law 1/2019, of 11 January, of urgent measures to bring the powers of the National Commission on Markets and Competition (CNMC) into line with the requirements of EU law in relation to Directives 2009/72/ EC and 2009/73/EC of the European Parliament and of the Council, of 13 July 2009, on common rules for the internal market in electricity and natural gas, is intended to adapt the powers of the CNMC to EU law, following the requirements of the EU authorities.

In accordance with this Royal Decree Law, the CNMC is responsible for approving, through circulars, aspects such as the structure, methodology and specific values of tariffs for access to natural gas and electricity transport and distribution networks, the methodology and parameters for the remuneration of gas and electricity transport and distribution, the system operator and the technical manager of the gas system and the rate of remuneration of transport and distribution activities within the maximum limit set by the Government.

In application of this rule, by 1 January 2020 the CNMC should have approved fourteen policy development circulars, the current status of which is as follows: eleven approved and three pending, of which one is already with the Council of State.

### Remuneration methodology circulars

Circular 2/2019, establishing the methodology for calculating the financial remuneration for the transport and distribution of electricity and the regasification, transport and distribution of gas.

Through this circular, the National Commission on Markets and Competition (CNMC) establishes a 5.58% rate of remuneration (6.003% for 2020) for electricity transport and distribution activities, applicable in the second regulatory period (2020-2025).

Circular 6/2019, of 5 December, establishing the methodology for calculating the remuneration of electricity distribution activity.

This Circular establishes the methodology for calculating the remuneration of distribution companies for the performance of their activities, in order to guarantee the adequate provision of the service, incentivising the improvement of the quality of supply and the reduction of losses in distribution networks, with homogeneous criteria throughout the Spanish territory and at the lowest possible cost for the system. This methodology is applicable from 2020 onwards.

The methodology takes into account the energy policy guidelines contained in Order TEC/406/2019 of 5 April, the seventh paragraph of which refers to the Circular establishing the methodology for the remuneration of electricity distribution activity.



In this sense, the Circular is largely in line with the previous methodology, established in Royal Decree 1048/2013, of 27 December, establishing the methodology for calculating the remuneration of electricity distribution, for the first regulatory period. In addition, it establishes mechanisms for gradual absorption of regulatory changes, particularly in the cases of fraud and loss incentives, among others.

It also makes certain modifications in order to simplify the requirements for information to be submitted by companies and to increase the freedom of companies in their investment and spending decisions. It also takes explicit account of new investments in the development of renewable energies and the digitalisation of networks, with the aim of promoting the objectives of energy transition and decarbonisation of the economy. It also includes the recognition of investments in pilot projects, which provide a quantifiable benefit for the whole system.

Furthermore, the extension of the service life of distribution facilities is incentivised, so that investments are profitable and the necessary costs of companies are rationalised, generating savings for the entire system.

Finally, the principle of financial prudence is incorporated, based on the application of recommended ranges of values in relation to corporate indebtedness, in accordance with CNMC Communication 1/2019, of 23 October, defining ratios to assess the level of indebtedness and the economic and financial capacity of companies engaged in regulated activities, and their recommended value ranges. This communication proposes recommended values for these ratios, and creates a global index based on the ratios that would have an impact on remuneration below certain values. Similarly, it establishes a gradual incorporation of said mechanism, which will not apply until the fourth year of the first period of application of this methodology, in order to enable companies to adapt to the recommended ranges of values.

The scope of this communication includes the transport and distribution activities of the electricity and gas sectors. In addition, for the purposes of analysing shareholding operations, it could also apply to companies operating in Non-Mainland Territories in the electricity sector, and to companies operating in the hydrocarbon sector.

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### Tariff circulars

Circular 3/2020, establishing the methodology for calculating electricity transport and distribution tariffs.

The Circular establishes the methodology for determining the annual value of electricity transport and distribution tariffs.

The methodology establishes an hourly breakdown in all tariffs, in line with European regulations, both in terms of energy and power, the adaptation of time periods to facilitate the transmission of prices to consumers and encourage efficient behaviour, in addition to introducing a tariff for supply points dedicated exclusively to the recharging of public access electric vehicles.

The application of this new methodology is conditional on the publication of the charges methodology by the Ministry for Ecological Transition and the Demographic Challenge.

Access and balancing circulars

Draft Circular establishing the methodology and conditions for access to and connection to the transport and distribution networks of electrical power production facilities.

The purpose of this Circular is to regulate the procedures, time limits and criteria for the assessment of access capacity and the granting of permits, to improve the transparency of the process, as well as other aspects relating to monitoring the degree of progress of projects, so that completion is assured.

Circular 8/2019, establishing the methodology and conditions of access and allocation in the natural gas system.

The purpose of this Circular is to regulate the regulated access of third parties to facilities (capacity services and products, capacity allocation procedures, general operating criteria and congestion management mechanisms). It introduces a new regasification plant management model: it establishes a Virtual Balancing Tank (TVB) for all plants, the LNG storage service and the service for regasification of LNG from the TVB. It also defines the services and products to be offered by the different infrastructures and establishes the auction as a capacity allocation mechanism.

Circular 2/2020, setting natural gas balancing standards.

This Circular aims to homogenise the balancing methodology in all facilities in the gas system (balancing areas): transport and distribution network (PVB), regasification plants (TVB) and underground storage (AVB). In practice, it extends the PVB balancing model to LNG plants (TVB) and underground storage (AVB).

The Circular establishes a daily calculation of the balancing of users in all balancing areas (PVB, TVB and AVB) and a daily settlement of imbalances (imbalances in underground storage and regasification plants are not currently settled). The calculation of the daily balancing is performed by the Technical Manager of the Gas System on day d+1, applying the principle of economic neutrality.

### Market rules circular

Circular 3/2019, establishing the methodologies that regulate the operation of the wholesale electricity market and the management of the operation of the system.

The purpose of the Circular is to establish the regulations relating to energy markets in the various time horizons (futures, daily, intra-day, balancing and congestion resolution markets of the electricity system), as provided for in the European regulations developed under Regulation (EU) No.

714/2009, establishing the conditions for access to the network for cross-border trade. In addition, it establishes methodologies relating to the operation of the electricity system and the emergence and replacement of the electricity service.

### Royal Decree Law 17/2019, of 22 November, on urgent measures

On 22 November 2019, Royal Decree-Law 17/2019 was approved, adopting urgent measures for the necessary adaptation of remuneration parameters affecting the electricity system and responding to the process of ceasing the activity of thermal generation plants. It introduced the following measures: (i) sets the reasonable rate of return to be applied in the second regulatory period for renewable facilities, cogeneration and waste at 7.09%; (ii) exceptionally, maintains until 2031 the current value of 7.398% for installations in operation at 13 July 2013 that renounce litigation or arbitration; (iii) sets the financial remuneration rate for the generation of non-mainland electricity systems for the second regulatory period at 5.58%, although it may not vary between two consecutive years by more than 0.5% in absolute value, thus taking a value of 6.003% for 2020; and (iv) in the event of closure of nuclear or coal-fired plants, and in order to promote a just transition process, the Minister for Ecological Transition may regulate procedures and establish requirements for the granting of all or part of the evacuation access capacity of the network nodes affected by such closures to new renewable energy generation facilities which, in addition to technical and economic requirements, will weigh up the environmental and social benefits.

Order TEC/1260/2019, of 26 December, which sets out the technical and economic parameters to be used in the calculation of the remuneration for electricity production in Non-Mainland Territories with additional pay regime during the regulatory period 2020-2025, and reviews other technical matters. With regard to the Non-Mainland Territories, Order TEC/1260/2019, which revises the technical and

economic parameters of remuneration of generation groups in the Electricity Systems of Non-Mainland Territories, setting new values to be applied in the second regulatory period (2020-2025), applying the methodology already contained in Royal Decree 738/2015 of 31 July, was adopted. The Order also envisages, in relation to fuel prices, that within three months the product and logistics prices will be revised by Ministerial Order, effective from 1 January 2020, with the beginning of its processing date.

#### Tariff balance

Finally, during 2019, the consolidation of the balance of the electricity tariff continued, as evidenced by the fact that the final settlement of 2018, approved in December 2019, resulted in a surplus of  $\in$ 96 million, which is added to the surpluses of  $\in$ 550 million,  $\in$ 469 million,  $\in$ 421 million and  $\in$ 150 million in 2014, 2015, 2016 and 2017 respectively.

#### Generation

ENDESA achieved the target of registering all of the capacity that it was awarded in the auctions in May and July 2017 in the specific pay regime register before 31 December. ENDESA connected to the network the 541 MW wind and 338 MW photovoltaic that was awarded at the 2017 auctions within the established deadlines.

On 26 June 2019, the Institute for Energy Diversification and Savings (IDAE) published a Resolution providing aid for the first call for investment aid for wind power production facilities located in the Canaries, which are co-financed with ERDF Community funds. ENDESA, through its subsidiary ENEL Green Power España, S.L.U. (EGPE), was awarded 16.1 MW out of a total of 184 MW, to which aid was granted and which must be connected to the network by 30 June 2022.

Similarly, on 28 November, a Resolution was published for the granting of aid in connection with the first call for investment aid for photovoltaic solar power production facilities located



sociated consumers if the latter are not consuming their Administrative procedures are simplified for all users, especially for small self-consumers (installations up to 15 kW

in the Balearic Islands co-financed with ERDF Community funds. ENDESA was awarded 168.6 MW out of a total of 326 MW, to which aid was granted and which must be connected to the network by 2022.

### Self-consumption

On 6 April 2019, Royal Decree 244/2019 was published, regulating the administrative, technical and economic conditions of self-consumption of electric power. It covers the following aspects, among others:

- Together with individual self-consumption connected to an internal network, it also covers group self-consumption, whereby several consumers can connect to the same generation plant (for example, in associations of owners or among companies or industries in the same location).
- It also defines the concept of "production facility close to consumption facilities and associated with them", which allows self-consumption to be carried out not only with generation facilities located in the same house (the current situation), but also with those located nearby.
- A simplified surplus compensation mechanism is introduced (energy generated by self-consumption installations that are not instantly consumed by the user) for installations with capacity not exceeding 100 kW and provided that they produce electricity from renewable sources. In this case, it will not be necessary, in order to obtain compensation, to become an energy producer, since the electricity supplier will compensate the user for the surplus energy in each monthly invoice, for up to 100% of the energy consumed in the month.
- In the case of group and proximity self-consumption, the distribution of energy among the associated consumers in proportion to the contracted power is contemplated, the Royal Decree containing the possibility of developing dynamic distribution coefficient methods, so that a consumer can take advantage of the surpluses of other as-

proportional shares.

or up to 100 kW in the case of self-consumption without surpluses). Metering configurations are also simplified so that, in most cases, a single meter is sufficient at the border point with the distribution network.

### Interruptibility

The interruptibility service is an efficient demand management service that enables consumers to stop their consumption at times when the electricity system is saturated, receiving economic compensation in return for doing so. This demand management tool allows for more flexible operation of the system and makes it possible to provide quick and efficient responses to possible emergency situations, minimising the impact on the safety of the system.

During the week of 17-20 December 2019, auctions were held to allocate the interruptible power for the delivery period between 1 January and 30 June 2020, awarding total power of 1,000 MW. In annual terms for the year 2020, the cost of auctions is €8.76 million, a reduction of €187.4 million (-95.5%) compared to 2019.

### 2019 electricity tariff

On 22 December 2018, Order TEC/1366/2018, of 20 December, establishing electricity access tariffs for 2019, which remain unchanged, was published in the Official State Gazette. It should be noted that this Order abolished the availability incentive of Order ITC/3127/2011, of 17 November, until such time as the capacity mechanisms for its adaptation to European regulations and the energy transition process are revised.

#### 2020 electricity tariff

Order TEC/1258/2019 of 20 December 2019 establishing access tariffs for 2020 was published in the Official State Gazette on 28 December 2019. In accordance with said Order, the access tariffs remain unchanged until the entry into force of the tariffs set by the Spanish National Commission on Markets and Competition ("CNMC").

2019 gas tariff

Order TEC/1367/2018, of 20 December, maintained the 2018 access tariffs, with the exception of the ship unloading tariff, which increased for 3 of the 6 plants. In addition, the tariff for the loading of Liquefied Natural Gas (LNG) to ships was changed and prices for new services were set, which are intended to favour LNG bunkering. A provisional price of 0 €/kWh/day/month was also fixed for the tariff for access to the virtual balancing point from the distribution network.

The TURs (last resort tariffs) for natural gas were updated for the first quarter of 2019, with a 3.8% decrease for TUR.1 and 4.8% decrease for TUR.2 from the previous quarter, due to the reduction in the cost of raw material.

### 2020 gas tariff

Order TEC/1259/2019, of 20 December, maintained the 2019 access tariffs, with the exception of the variable term of supply tariffs for consumers in Group 3 (P≤4bar), which decreased 0.474 €/MWh as a result of the end of the period of application of the surcharge due to the Sonatrach Award.

The TURs (last resort tariffs) for natural gas were updated for the first quarter of 2020, with a 3.3% decrease for TUR.1 and 4.2% decrease for TUR.2 from the previous quarter, due to the reduction in the cost of raw material.

### Infrastructure planning

On 1 March 2019, Order TEC/212/2019 of 25 February was published, initiating the procedure for making proposals for

the development of the electricity transport network with Horizon 2026, which is to be guided by the following guiding principles:

- > Fulfilment of the energy and climate commitments to be made at national level in the 2021-2030 draft NECP.
- > Maximisation of renewable penetration into the electricity system, minimising the risk of discharges, and in a manner compatible with the safety of the electricity system.
- The evacuation of renewable energy in areas where there are high levels of renewable resources and the use and transport of the energy generated is environmentally possible.
- Contributing, as far as the electricity transport network is concerned, to ensuring the safety of the electricity supply.
- > The compatibility of the development of the electricity transport network with environmental constraints.
- The removal of existing technical restrictions in the electricity transport network.
- Compliance with the principles of economic efficiency and the principle of economic and financial sustainability of the electricity system.
- Maximising the utilisation of the existing network, renewing, expanding capacity, using new technologies and reusing existing facilities.
- > Reducing losses for the transport of electricity to consumption centres.

Subjects were required to submit their proposals within three months and, six months after the deadline for submission, the System Operator should refer the initial proposal for the development of the transport network to the Ministry for Ecological Transition and the Demographic Challenge.



### National Strategy against Energy Poverty

On 5 April 2019, the Council of Ministers approved the National Strategy against Energy Poverty 2019-2024, in response to the mandate contained in Royal Decree Law 15/2018, of 5 October, on urgent measures for energy transition and consumer protection.

In this instrument the concepts of energy poverty and vulnerable consumer are defined, a diagnosis of the situation of energy poverty is made, including the implications for health, personal, social and equality development, action paths are identified and objectives for reduction are set.

The National Strategy against Energy Poverty is based on the need to maintain and improve the benefit systems (electricity and thermal Social Bonus) as transitional instruments that will gradually give greater prominence to structural measures that seek to address the root causes and long-term implications of the problem.

In order to analyse and carry out an appropriate monitoring of the various types of energy poverty, the official primary indicators adopted are those contemplated by the European Observatory against energy poverty (energy expenditure as a percentage of income, hidden energy poverty, inability to keep the home at an appropriate temperature and late payment of bills). In order to improve the lowest value in the series of these indicators in 2008-2017, and raise the European Union average, the Strategy establishes a minimum reduction objective of 25% by 2025 (vs. 2017), with a target of 50%.

The time frame of the National Strategy against Energy Poverty will be 5 years (2019-2024), and for its execution the development of operational plans is envisaged. Its management and monitoring will be the responsibility of the Institute for Diversification and Energy Savings (IDAE).

The National Strategy against Energy Poverty sets out 4 lines of action comprising 19 concrete measures:

- To improve knowledge of energy poverty, through a detailed study of the energy expenditure of consumers according to the climatic zone in which they live, paying attention, among others, to the presence of minors in the home. The Government will update the indicators annually.
- To improve the response to the current situation of energy poverty. Among other aspects, it is concluded that it is necessary to prepare a new Social Bonus, fixing the main lines that will govern it: it will be an Energy Social Bonus (for all energy supplies), direct concession by Administrations (automation) must be favoured and mechanisms must be implemented for coordinated management among the Public Administrations involved. Exceptional responses are also dealt with, such as the prohibition of supply cuts for extreme weather situations.
- To facilitate a structural change by means of actions in the short, medium and long term, for the energy rehabilitation of homes and replacement of old appliances and equipment with efficient appliances.
- Consumer protection and social awareness measures. Among other actions, an action protocol will be developed to detect situations of vulnerability by primary care professionals, and the management of information on public benefits will be standardised, seeking to have this information incorporated into the existing universal social card. In the area of public awareness, communication actions will be developed on the use of smart meters, on consumption habits, energy savings and efficiency improvement and a permanent communication channel will be established with the subjects and groups concerned.

### **Energy efficiency**

Law 18/2014, of 15 October, on urgent measures for growth, competitiveness and efficiency, created the National Energy Efficiency Fund in the field of energy efficiency in order to meet the energy saving target.

Order TEC/332/2019, of 20 March, establishes for ENDESA a contribution to the National Energy Efficiency Fund of €29 million corresponding to the obligations for financial year 2019.

Order TED/287/2020, of 23 March, establishes for ENDE-SA a contribution to the National Energy Efficiency Fund of €27.54 million corresponding to the obligations for financial year 2020. It depends in any case on the cut-off date.

#### Social Bonus

Order TEC/1080/2019 of 23 October 2019 established the distribution percentage of the financing of the 2019 Social Bonus, the percentage corresponding to ENDESA, S.A. being 36.26%, compared with the previous 37.15%.

On 28 January 2020 the Ministry for Ecological Transition and the Demographic Challenge began the hearing procedure concerning the proposal for an Order establishing the distribution of financing of the Social Bonus for 2020, the percentage proposed for ENDESA, S.A. being 35.57%.

### Regulatory developments in Europe

Progress continued in Europe in 2019 on the project to integrate the electricity and gas markets. In 2019, publication of the final texts of the Clean Energy for all Europeans legislative package was completed. This package has 4 main objectives: (i) put energy efficiency first; (ii) accelerate the reduction of greenhouse gas emissions; (iii) empower consumers to actively participate; and (iv) modernise the design of electricity markets. Specifically, 2019 saw the publication of: Directive

2019/944 on common rules for the internal electricity market, Regulation 2019/943 on the internal electricity market, Regulation 2019/942 establishing the European Union Agency for the Cooperation of Regulators, and Regulation 941/2019 on risk preparedness in the electricity sector.

This year, countries continued to join the intraday market. Following the first wave in 2018, which included Spain and 14 other countries, in 2019 7 other countries (Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania and Slovenia) were added. Agent bids in one country may be matched to agent bids from other countries, provided that cross-border transport capacity is available. On the first day of trading of this second wave, transactions between the Iberian Electricity Market (MIBEL) and Croatia were closed. The remaining countries will be coupled at a later stage.

Another important package presented by the Commission was the Clean Mobility Package. This package seeks to: (i) integrate the transport sector into the climate change objectives, taking into account the competitiveness of the sector; (ii) set ambitious CO<sub>2</sub> reduction targets for 2030 for light and heavy-duty vehicles such as vans; (iii) promote clean mobility and the infrastructure necessary for its deployment; and (iv) incentivise low-emission vehicles.

Of the proposals in this package, 2019 saw the approval of: Directive 2019/1161 of 20 June 2019 on the promotion of clean and energy-efficient road transport vehicles; Regulation 2019/631 of 17 April 2019 setting  $\rm CO_2$  emissions performance standards for new passenger cars and new light commercial vehicles; and Regulation 2019/1242 of 20 June 2019 setting  $\rm CO_2$  emissions performance standards for new heavy-duty vehicles.



# Stock market performance and investor relations

### **ENDESA** in the stock market

2019 was a positive year for international financial markets, which closed with high overall returns in the equity and fixed income markets. This development was achieved despite the uncertainty generated by Brexit in Europe and the trade tensions between China and the United States, which put global economic growth at risk. Thanks to the changes in monetary policy made by the central banks to deal with the situation, the main global stock indices managed to close the year with double-digit increases, mostly offsetting the losses posted in the previous year.

The North American markets led the way, marking new historical highs supported by the three interest rate cuts approved by the Federal Reserve. The NASDAQ 100 technology index led the ranking with a rise of close to 38%, its biggest annual advance in the last 10 years, followed by the S&P 500 index with a revaluation of 28.9% and the Dow Jones Industrial Average with 22.3%

The European stock exchanges also achieved significant gains, most particularly those in which the industrial sector weighed heaviest. The Italian FTSE MIB index closed with a revaluation of 28.3%, the highest since 1998, the French CAC 40 index with 26.4% and the German DAX with 25.5%. The pan-European Eurostoxx 50 also rose 24.8%, its biggest increase in 20 years. The most moderate returns

corresponded to the FTSE index in the United Kingdom, with 12.1%, and the Spanish IBEX-35, which lagged behind with just 11.8%, which even so was its biggest rise since 2013 when it rose 21%.

The Spanish index was slowed down by the weight of banks in its composition, this sector being the worst performer in relative terms as a result of low interest rates and the political uncertainty due to the fact that after two general elections, the year ended with a government still in office. In this context, the main indicator of the Spanish stock market closed the year at 9,549.20 points, two sessions after marking the annual maximum at 9,700.5 points. The minimum price for 2019 was recorded on 15 August at 8,519 points, 0.24% lower than at the beginning of the year.

A total of 22 shares in the IBEX-35 closed 2019 in positive territory, with 10 of them registering increases of more than 20% at closing and four of them with revaluations greater than 40%. These are mostly defensive bias companies, with less exposure to the economic cycle, with stable income and high dividend yields. Among the last positions of the selection were the banks, with four companies in the sector closing the year with negative returns.

Unlike the banking sector, the main stocks of the energy sector closed in prominent positions within the index, leading the way by capitalisation. Shares in the oil and energy sectors amounted to €143 billion in market capitalisation at the close compared with €129.5 billion for the banking sector.

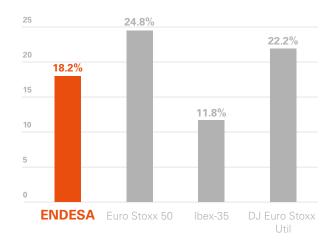
Within this ranking, ENDESA, S.A. shares were in the second best position in the sector, and in the number 15 position within the IBEX-35, with an upwards trend throughout 2019 and an accumulated revaluation of 18.18%. Within the European sector index Eurostoxx Utilities, which closed with an increase of 22.2%, ENDESA, S.A. shares were also in an outstanding seventh position.

ENDESA, S.A.'s shares rose throughout 2019, from a low of €20.07 per share at the close of the session on 2 January 2019 to the peak of €25.49 per share in the session of 27 December 2019, a new all-time high. The stock finally closed 2019 at €23.79 per share, gaining 18.18% and increasing its market value by €3.9 billion to €25.2 billion.

From that minimum at the beginning of the year, the shares of ENDESA, S.A. performed positively during the first half of the year, encouraged by the presentation of the draft integrated National Energy and Climate Plan (NECP) 2021-2030 and by the signing of the Nuclear Protocol for the gradual closure of nuclear power plants by ENRESA and the companies in the sector. The biggest ups and downs in the annual evolution of ENDESA's shares occurred in July, when the first drafts of the new remuneration for the sector were published by the Spanish National Commission on Markets and Competition ("CNMC"), although the stock resumed its upwards trend shortly afterwards.

The last half of the year was marked by the announcement of the discontinuation of the operation of the mainland coal-fired power plants due to unfavourable market conditions and by the presentation of the Company's new 2020-2022 Strategic Plan, with a strong commitment to renewable energy and digitalisation. This ambitious Strategic Plan, which will allow ENDESA to lead the energy transition process that has begun in the country, received a very favourable reception from the market, which has continued to appreciate the solid evolution of the Company, the stability of its income and the high dividend yield granted to its shareholders.

### ENDESA's performance on the Madrid Stock Exchange and comparison with the main reference indices. 2019



#### Change in ENDESA's 2015-2019 stock market capitalisation (M€)



endesa

Main statistical data of ENDESA shares in 2019

Continuous market	High	Low	Medium	Closing	% annual return	% total return	Volume of securities traded
ENDESA	25.490	20.070	22.948	23.790	18.2	25.27	404,075.920

Total shareholder return, calculated as the sum of the market return and dividend yield, was 25.3% in 2019. Added to the 18.18% positive stock market return are the €1.427 per share distributed as a dividend from 2018 earnings, which gave an additional dividend yield of 7.09%.

At the end of the financial year, ENDESA's market capitalisation stood at €25.188 billion, the 8th largest capitalisation of the lbex-35, a position higher than the previous year.

**Dividend** 

In line with the Dividend Policy approved by ENDESA's Board of Directors on 20 November 2018 for the period 2018-2021, ENDESA's General Shareholders' Meeting held on 12 April 2019 approved the distribution of a total ordinary dividend charged against the closing profits for 2018 at a gross amount of €1.427 per share, equivalent to €1.511 billion in total. This dividend was paid to shareholders in two cash payments made on 2 January 2019, for €0.7 gross per share (€741 million in total), and 2 July 2019, for €0.727 gross per share (€770 million).

For the coming years, the Dividend Policy for the period 2019-2022, approved by the Company's Board of Directors at its meeting held on 26 November 2019, provides that the Board of Directors shall ensure, for financial years 2019 and 2020, that the ordinary dividend per share agreed to be paid out for these years is equal to 100% of the ordinary net earnings of the Parent Company in the consolidated financial statements of the Group that it heads.

For financial year 2021, the Board of Directors shall ensure that the ordinary dividend per share agreed to be paid out for that year is equal to 80% of the ordinary net earnings attributed to the Parent Company in the consolidated financial statements of the Group.

Finally, for financial year 2022, the Board of Directors shall ensure that the ordinary dividend per share agreed to be paid out for that year is equal to 70% of the ordinary net earnings attributed to the Parent Company in the consolidated financial statements of the Group.

It is the intention of the Board of Directors that the payment of the ordinary dividend be made exclusively in cash, by payment in two instalments (January and July) on the specific date that is to be determined in each case and which shall be appropriately communicated.

As for the ordinary dividends charged against the profits for 2019, the Board of Directors of ENDESA, S.A. agreed to distribute to its shareholders a dividend in the gross amount of €0.70 per share.

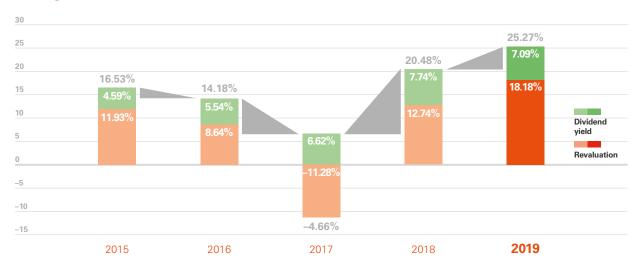
Payment of this dividend, involving an outlay of approximately €741 million, was made on 2 January 2020.

### Total shareholder return

ENDESA's total shareholder return was 25.27% in 2019, since the profitability of 7.09% allocated based on dividends paid in the year was added to the 18.18% revaluation of the stock.

In the last five years, ENDESA's average total shareholder return has been 14.36%.

#### Change in total return for ENDESA shareholders 2015-2019



### **ENDESA** in the IBEX-35

Since its return to the IBEX-35 in November 2014, ENDESA is weighted in this index with a coefficient of 40% of its capital,

since its floating capital (*free-float*) is 29.9%, within the range of 20% to 30%.

Taking this weighting into account, ENDESA's shares ended 2019 in 15th position on the IBEX-35 by level of capitalisation adjusted for "free-float", one position above the previous year.





### Liquidity

The average daily trading volume of ENDESA shares in 2019, taking into account trading on the Continuous Market and including special blocks and transactions, amounted to 1,584,611 shares, 26.2% lower than in 2018, which was 2,146,447 shares.

The total trading volume in 2019 was 0.38-times the Company's capital. However, this was 1.28-times when taking into consideration only the number of actual shares outstanding at year-end, 29.9% of the capital after the IPO in November 2014.

**ENDESA**'s rating

During 2019, the only change in the sovereign rating of the Kingdom of Spain was that decided on by Standard & Poor's on 20 September 2019. On that date Standard & Poor's raised the rating from A- with positive outlook to A with stable outlook. In contrast, Fitch and Moody's kept their ratings unchanged at A- with stable outlook and Baa1 with stable outlook, respectively.

In its analysis, Standard & Poor's expects growth in Spain's Gross domestic Product (GDP) to exceed that of the euro area

average in the period 2019-2022. It also notes that the country's external balance sheet and budgetary situation continue to improve and expects the 2019 budget deficit to continue to decline to around 2% of GDP.

With regard to ENDESA, during 2019 we would highlight improvements in the long-term credit ratings assigned by Fitch and Moody's, while Standard & Poor's maintained its rating unchanged from the BBB+/Stable level in which it placed it in 2017. Short-term ratings were maintained in all cases.

The first change was that of Fitch, on 11 February 2019, when it raised ENDESA's rating from BBB+ to A-, leaving the outlook unchanged at stable. Subsequently, on 16 July 2019, Moody's raised ENDESA's long-term credit rating outlook from stable to positive, leaving the rating at Baa2.

According to the Moody's report, ENDESA's credit strength is supported by its scale and the high proportion of regulated activities within its business, with the low level of indebtedness also standing out as a positive lever. For its part, Fitch highlighted in its report that ENDESA is well positioned to capture long-term growth opportunities in the Iberian Peninsula, both in renewables and in distribution, given its strong balance sheet.

The evolution of ENDESA's credit ratings in 2019 can be summarised as follows:

Credit rating

	31 December 2019 <sup>1</sup>			31 December 2018 <sup>1</sup>			
	Long-term	Short-term	Outlook	Long-term	Short-term	Outlook	
Standard & Poor's	BBB+	A-2	Stable	BBB+	A-2	Stable	
Moody's	Baa2	P-2	Positive	Baa2	P-2	Stable	
Fitch	A-	F2	Stable	A-	F2	Stable	

<sup>&</sup>lt;sup>1</sup> At the respective dates of preparing the Consolidated Management Report.

ENDESA's credit rating is conditional on that of its parent company ENEL in accordance with the methods used by the rating agencies, and at 31 December 2019 it was classed as investment grade by all the rating agencies.

ENDESA works to maintain its investment grade credit rating in order to efficiently access money markets and bank financing, and to obtain preferential terms from its main suppliers.

Investor relations and Shareholder Office activities

ENDESA maintains a constant relationship with its shareholders, with private and institutional investors, and with the main stock market analysts, providing continuous, detailed information through the Investor Relations Department and the Shareholder Office, located in Madrid.

In this regard, on 11 November 2015 ENDESA's Board of Directors, in accordance with the Code of Good Governance of Listed Companies, approved the "Policy Regarding Communication and Contacts with Shareholders, Institutional Investors and Proxy Advisors". The main objective of this Policy is for the Company to provide transparent, complete and truthful information, continuously fostering its relations with shareholders and institutional investors.

The general principles by which this policy is governed are transparency, immediacy, continuous information, equal treatment, affinity with social interest and regulatory compliance.

The Audit and Compliance Committee is the body responsible for overseeing the strategy for communications and relations with shareholders and investors, including small and medium-sized shareholders. In compliance with this policy, at its meeting on 16 December 2019, the Audit and Compliance Committee oversaw the Strategy for Communications and Relations with Shareholders and Investors and other Stakeholders for the year 2019.

The conclusions of this Committee indicated that ENDESA's information dissemination channels function properly and are carried out in accordance with the general principles of ENDESA's Policy and in accordance with best corporate governance practices.

### Investor Relations

The activities carried out by the Investor Relations Department in 2019 include public presentations to analysts and investors on the Company's quarterly results and its strategic plan.

In this regard, on 27 November 2019 ENDESA submitted to the market an update of the strategic plan for the period 2020-2022.

In 2019, ENDESA carried out two Non Deal Roadshows. The first was carried out in Europe and the United States during the months of February and March, following the presentation of results for the 2018 financial year. The second, also in Europe and the United States, was carried out in November and December, following the presentation of the update of the 2020-2022 strategic plan, with the aim of informing the main investors of the Company in depth of the updating of this plan. During these two Roadshows, ENDESA visited a total of 14 cities, where it met with 111 investors. ENDESA also participated in 6 Reverse Roadshows where it held meetings with 60 investors in Madrid.



ENDESA's Investor Relations Department attended a total of eight international conferences on the sector, meeting with 101 investors in seven different cities.

As part of its daily activity, it should also be noted that the Investor Relations Department answered, by telephone, e-mail or in-person meetings a total of 839 inquiries from analysts, investors and rating companies.

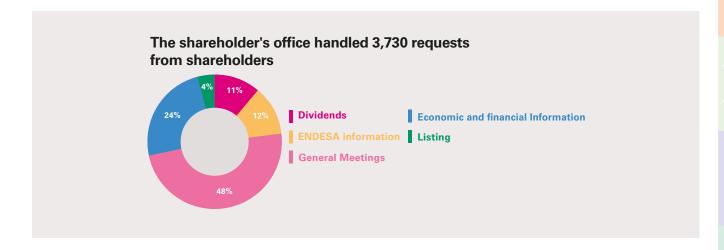
Finally, ENDESA held its Ordinary General Meeting on 12 April 2019 at the Hotel Madrid Marriott Auditorium in Madrid, when all the items on the agenda were approved, reaching an attendance quorum of 85.751% of capital.

## Shareholder Office

One of the most important channels that the company makes available to its private shareholders is "Information for Shareholders and Investors" published on its corporate website (www.endesa.com).

In 2019, 1,809 phone calls were handled by the ENDESA Shareholder Office, 589 visits were received and 1,332 document deliveries were made.

Type of information requested from ENDESA's Shareholder Information Office in 2019.







## **3.** GOVERNING BODIES

## The company's governing bodies

### NRC

NOMINATIONS AND REMUNERATION COMMITTEE

Chairman

**Miguel Roca Junyent** 

**Board Members** 

Alberto de Paoli Ignacio Garralda Ruiz de Velasco Francisco de Lacerda Helena Revoredo Delvecchio Alejandro Echevarría Busquet

Secretary

Francisco Borja Acha Besga



BOD

BOARD OF DIRECTORS

Chairman

Juan Sanchez-Calero Guilarte

Vice Chairman

Francesco Starace

Chief Executive Officer

José D. Bogas Gálvez

**Board Members** 

Alberto de Paoli
Miquel Roca Junyent
Alejandro Echevarría Busquet
María Patrizia Grieco
Antonio Cammisecra
Helena Revoredo Delvecchio
Ignacio Garralda Ruiz de Velasco
Francisco de Lacerda

Secretary

Francisco Borja Acha Besga

Chairman

Ignacio Garralda Ruiz de Velasco

Board Members

Alejandro Echevarría Busquet Alberto de Paoli Miquel Roca Junyent Francisco de Lacerda Helena Revoredo Delvecchio

Secretary

Francisco Borja Acha Besga



Chief Executive Officer

José D. Bogas Gálvez

General Manager - ICT Digital Solutions

Manuel Fernando Marín Guzmán

General Manager - Marketing

Javier Uriarte Monereo

General Manager - Generation

Rafael González Sánchez

General Manager - Energy Management **Juan María Moreno Mellado** 

General Manager - Infrastructure and Networks **Gianluca Caccialupi** 

General Manager - Communications

Alberto Fernández Torres

Secretary General and Secretary of the Board of Directors, and General manager - Legal and Corporate Affairs

Francisco Borja Acha Besga

General Manager - Nuclear

Gonzalo Carbó de Haya

General Manager - Audit

Patricia Fernández Salís

General Manager - Administration, Finance and Control

Luca Passa

General Manager - Human Resources and Organisation

**Andrea Lo Faso** 

General Manager - Media

José Luis Puche Castillejo

General Manager - Sustainability

María Malaxechevarría Grande

General Manager - Institutional Relations and Regulatory Affairs

José Casas Marín

General Manager - ENDESA X

Josep Trabado Farré

General Director - Procurement

**Pablo Azcoitia Lorente** 





4. STRATEGY

# **ENDESA's Business Plan**

### **Energy Policy**

During 2019 ENDESA made further progress and passed new milestones on its committed path towards a more sustainable, dynamic and efficient business model, aligned with its strategic vision of being a leading player in the energy transformation that Spain is faced with, and capitalising on any new opportunities that may arise from this great challenge.

The European Union (EU) has made a clear commitment in the fight against global warming, calling for a climate-neutral Europe by 2050. The European Union thus subscribes to the Paris Agreement, which aims to prevent the average global temperature from rising to more than 2°C above pre-industrial levels, as well as to promote additional efforts that make it possible for global warming not to exceed 1.5°C.

The transposition of these objectives into Spanish legislation is under way, and in this respect, on 22 February 2019, the Ministry for the Ecological Transition launched a public consultation on the Strategic Energy and Climate Framework, which essentially contains the following documents:

- 1. Draft Law on Climate Change and Energy Transition.
- 2. Draft of the integrated National Energy and Climate Plan (NECP) 2021-2030.
- 3. Fair Transition Strategy.

During COP 25 in Madrid in December 2019, the European Commission presented the European Green Deal, an ambitious package of measures with which Europe seeks to lead the fight against climate change and head the transition of the world economy towards a clean and fair model. To do this, the document includes more than 35 initiatives in all areas of European Union (EU) activity, which will have to be implemented in the coming years.

### Strategic lines of action

The fulfilment of these ambitious decarbonisation targets in Spain will mean facing major challenges between now and 2030. With the publication of the 2020-2022 Strategic Plan, ENDESA reiterates its firm commitment to contributing to the development of a new energy model, based on a high degree of electrification from renewable sources, as a more efficient and sustainable energy vector that ensures a fair and inclusive transition.

The main lines of the new Strategic Plan are closely aligned with the new energy paradigm, both in order to capture the new growth opportunities associated with the energy transition, and to continue to consolidate the current leadership position. This Plan is based on the following priorities:

 Acceleration in the decarbonisation commitments of generation facilities, by strongly promoting renewable



awarded in capacity auctions in 2017.

38% since the end of 2019. This includes the 879 MW

2. Electrification of demand, consolidating the current leadership position by leveraging management based on customer value and the development of customised solutions and

3. Progress in the development and operation of more efficient networks that facilitate the integration of renewable energies and the electrification of transport. Always with the ambition of being the pre-eminent digital grid operator in the industry.

energies and the gradual closure of higher-emission

technologies.

new tools.

4. Promotion of new platforms and ecosystems that serve to lay the foundations for future business opportunities.

In addition, all the objectives of ENDESA's Strategic Plan confirm the commitments of the Company's business model to the Sustainable Development Goals adopted in 2015 by the United Nations, particularly to SDGs 7 (Affordable and Clean Energy), 9 (Industry, Innovation and Infrastructure), 11 (Cities and Sustainable Communities) and, especially, 13 (Climate Action), to which more than 90% of the Plan's investments are dedicated.

### Acceleration in the decarbonisation commitments of generation facilities

ENDESA's commitment to the gradual reduction of emissions to achieve the final target of zero emissions by 2050 is reflected in the following strategic lines:

Acceleration of the estimated investments in Renewables in the period 2019-2022, amounting to €3.8 billion, almost double the amount of investments estimated in the previous plan. During the 2020-2022 period, ENDESA will add a capacity of 2.8 GW, so that by the end of the Plan it will have increased its renewable installed capacity by almost This commitment to decarbonisation was once again endorsed in 2019 when the ENDESA Board of Directors reported, as a "Significant Event", the acceleration of the gradual cessation of activity of mainland coal plants over the period of the Strategic Plan. In this regard, the discontinuation of all coal plant activity has been proposed before 2030.

This profound transformation of the generation mix will allow ENDESA to obtain an emissions-free mainland production estimated for 2022 at 85% of the total, with a 60% share of renewable sources. Additionally, this change in the mix will favour a 70% reduction in the total specific emissions of carbon dioxide (CO<sub>2</sub>) in 2030 compared with 2017, putting ENDESA in a good position to achieve the target of total decarbonisation by 2050.

### Electrification of demand

ENDESA expects an increase in electricity demand in the future, as this is the cleanest and most sustainable source of energy. That is why it must be prepared to meet the new and more complex needs of customers resulting from this paradigm shift, as well as to stay ahead of market trends, anticipating the creation of new, more efficient and sophisticated products and services. This will involve the implementation of the following actions:

- Consolidate ENDESA's current leadership position in gas and electricity supply businesses in Spain, through active customer value-based management, developing comprehensive solutions that allow the capture of the most sophisticated profiles.
- Focus on the customer experience, gaining a greater understanding of ENDESA's customer base and their needs through the development of analytical capabilities that in-

61 4. Strategy

crease the perceived value added, thereby increasing its business margin.

- > Strengthen efficiency and operational excellence in dealings with the customer base with the launch of new digital care and self-management channels.
- Launch of new commercial channels to complement traditional ones.
- Implementation of new commercial strategies that favour customer retention in both electricity and gas, through preventive campaigns based on advanced analysis and prediction models.

## Development of grids as a facilitating and integrating element

Development of the electricity grid has long been a fundamental pillar of ENDESA's strategy. Projected investment, driven by the electrification of demand and the integration of renewable energies, aims to improve grid quality and efficiency, reduce operating costs and increase the value of assets through investments in smart grids and the pursuit of excellence.

To this end, ENDESA is continuing its investment effort aimed at becoming the reference digital operator, and for this will allocate €1.1 billion in 2019-2022 to the development, automation and modernisation of the grid. This amount accounts for approximately 55% of the €2 billion total investment envisaged for this business in the plan.

These digitalisation initiatives will help to improve grid reliability and service quality. In particular, ENDESA expects to reduce interruptions by 19%, grid losses by 0.3 percentage points, and operating costs per customer by 9% over 3 years.

# Promotion of new platforms and ecosystems that serve to lay the foundations for future business opportunities

The changes in the electricity sector resulting from the implementation of energy transition policies at supranational level, which in the case of Spain have been reflected in the draft integrated National Energy and Climate Plan (NECP), will lead to an increase in electricity consumption as a proportion of total final energy consumption reflected in the generalised use of:

- Electric vehicles, for which the draft integrated National Energy and Climate Plan (NECP) estimates that 5 million units in service will be reached in 2030, tripling the electricity consumption of transport to 24 TWh. In this regard, ENDESA has presented a plan to encourage electric mobility, with the aim of rolling out a total of 36,000 public and private recharging points throughout Spain by 2022.
- Residential electrification, an area in which total electricity consumption is expected to increase from the current 38% to 45% by 2030.

These changes in consumption patterns and the development of new platforms open the door to new business opportunities that ENDESA hopes to exploit and expand under the ENDESA X business line.

Quantitatively, mature businesses, including the e-Home and e-Industries lines, will absorb about two-thirds of the nearly €200 million of investment allocated to ENDESA X in order to maintain the growth path achieved in recent years. These mature businesses will lay the foundations for the development of new ones that represent future business opportunities, such as e-Mobility, energy storage by means of batteries and services associated with electric vehicles and demand management.



These strategic lines of action are combined with ENDESA's strong commitment to the pursuit of continuous efficiency through the digitalisation of its businesses. To this end, ENDESA intends to deploy digitalisation investment programmes across all its businesses, amounting to €1.3 billion between 2019 and 2022, which will result in an estimated improvement in the gross operating profit (EBITDA) of €150 million by 2022. The largest such investments will come in Distribution, with €1.1 billion invested in digitalising said business, accounting for approximately 85% of the investments envisaged for the period.

### Main financial indicators

The Business Plan approved by the Board of Directors of ENDESA, S.A. on 26 November 2019 provides for an investment target, net of subsidies and assets assigned by customers, of €7.7 billion in the period 2019-2022, 20% more than in the previous Strategic Plan.

The breakdown of this Plan by nature of investments is as follows:

- > Investments in asset development (62%).
- > Investments in asset maintenance (30%).
- Investments in customers (8%).

The breakdown of the investment plan by Business Lines is as follows:

Seneration (€5.2 billion) Renewable generation investments amount to €3.8 billion and will focus on the development of new capacity of approximately 2.8 GW, in addition to the 879 MW allocated in the 2017 auctions which came on stream at the end of 2019. The rest of the mainland investments mainly consist of recurring maintenance investments. In terms of amounts, it is especially worth mentioning those destined for nuclear power plants

with the aim of ensuring their optimal operation, safety and long-term profitability, as well as the investments for efficiency improvement planned in the combined cycle gas plants, which will become the reference support of the System as the cessation of activity of the coal plants is completed.

- Distribution (€2 billion), with investments in maintenance and growth investments aimed at modernising and developing new infrastructures that respond to decarbonisation and electrification trends in the economy. Digitalisation initiatives will further increase the level of automation and digitalisation of the grid, with significant projects such as a new phase of the Quality Plan or the Remote Control of the Grid.
- Marketing and ENDESA X (€500 million), with investments aimed at the development of new IT tools to support customer digitalisation, as well as the development of new service and care channels, and other products and services.

On the basis of the strategic lines of action described above, and taking into account the market and regulatory estimates for the coming years, ENDESA has prepared a business plan that includes, among other parameters, forecasts on economic indicators for the Group's consolidated results. As a result, ENDESA expects a positive trend as follows:

- > Gross Operating Profit (EBITDA): €4.3 billion for financial year 2022.
- > Net ordinary income: €1.9 billion for financial year 2022.
- Net cash flows from operating activities, which will amount to €9.5 billion during the period 2020-2022, will enable ENDESA to carry out its investment plan and maintain an attractive shareholder remuneration policy.

Notwithstanding the foregoing, forward-looking information should not be considered as a guarantee of the Company's future performance in that such plans and forecasts are subject to risks and uncertainties, which could result in ENDESA's future performance not matching the initial forecasts.

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**5.** ECONOMIC AND FINANCIAL RESULTS

# **Economic and financial results**

# Key consolidated figures

### Net profit

ENDESA achieved net income of €171 million in 2019, down 87.9% on the €1.417 billion achieved in 2018.

The decrease in ENDESA's net income for financial year 2019 is due to the recognition of a net impairment of €1.409

billion related to the total net book value of the mainland coal-fired thermal power generation assets (€1.105 billion) and to the cash-generating units (CGUs) of the Non-Mainland Territories (€304 million) (for more information, see Section 2.3.2 "Operating costs", page 418 of the Legal Report).

The breakdown of net income and net ordinary income for financial year 2019 across ENDESA's Businesses and their change with respect to the previous year is shown below (for more information, see Section 2.4. "Segment Results", page 425 of the Legal Report):

#### Millions of euro

Willions of Euro									
		Net income <sup>2</sup>				Net ordinary income <sup>3</sup>			
	2019	2018	% change	% contribution to the total	2019	2018	% change	% contribution to the total	
Generation and Marketing	(823)	396	(307.8)	(481.3)	586	490	19.6	37.5	
Distribution	1,077	1,046	3.0	629.8	1,059	1,046	1.2	67.8	
Structure and Others <sup>1</sup>	(83)	(25)	232.0	(48.5)	(83)	(25)	232.0	(5.3)	
Total	171	1,417	(87.9)	100.0	1,562	1,511	3.4	100.0	

<sup>&</sup>lt;sup>1</sup> Structure, Services and Adjustments.

<sup>2</sup> Net income = Net income of the Parent Company.



<sup>&</sup>lt;sup>3</sup> Net Ordinary Income = Net Income of the Parent Company - Net Income in Sales of Non-Financial Assets (over €10 million) - Net Loss due to Impairment of Non-Financial Assets (over €10 million).

Below is a breakdown of the key figures from ENDESA's Consolidated Income Statement for financial year 2019 and the changes with respect to the previous financial year.

Millions of euro

	Reference <sup>1</sup>			
	neierence	2019	2018	% change
Income	24	20,158	20,195	(0.2)
Supplies and services	25	(14,252)	(14,567)	(2.2)
Contribution margin <sup>2</sup>		5,906	5,628	4.9
Work performed by the Group for its Assets	3a.1 and 3d.2	295	270	9.3
Personnel expense	26	(1,022)	(947)	7.9
Other fixed operating expenses	27	(1,338)	(1,324)	1.1
Gross Operating Profit (EBITDA) <sup>3</sup>		3,841	3,627	5.9
Amortisation, depreciation and impairment losses	28	(3,453)	(1,708)	102.2
Operating Profit (EBIT) <sup>4</sup>		388	1,919	(79.8)
Net Financial Income <sup>5</sup>	29	(184)	(139)	32.4
Result before tax		230	1,818	(87.3)
Net income <sup>6</sup>		171	1,417	(87.9)
Net ordinary income <sup>7</sup>		1,562	1,511	3.4

- Notes to the Consolidated Financial Statements for the year ended 31 December 2019.
- Contribution Margin = Income Supplies and Services.
- Gross Operating Profit (EBITDA) = Income Supplies and Services + Work performed by the Group for its Assets Personnel Expense Other Fixed Operating Expenses
- Operating Profit (EBIT) = Gross Operating Profit (EBITDA) Amortisation, Depreciation and Impairment Losses.
- Net Financial Income = Financial Income Financial Expense + Net Exchange Differences.
- Net income = Net Income of the Parent Company.
- Net Ordinary Income = Net Income of the Parent Company Net Income in Sales of Non-Financial Assets (over €10 million) Net Loss due to Impairment of Non-Financial Assets (over €10 million).

### Analysis of results

In 2019, the gross operating profit (EBITDA) was €3.841 billion, up 6% compared to the previous year.

The operating profit (EBIT) for financial year 2019 was €388 million (-80%), due mainly to the impairment of assets mentioned earlier in this section, amounting to approximately €1.873 billion, as well as the impact of IFRS 16, i.e. the new international standard that requires leases to be capitalised. The application of this standard has had an impact of €34 million on amortisation and depreciation.

#### Income

Revenue in 2019 totalled €20.158 billion, €37 million lower (-0.2%) than in 2018.

The breakdown of Revenue is shown below, as stated in the Consolidated Income Statement for financial year 2019, as are the changes with respect to the previous year:

#### Millions of euro

			Inco	ome		
	Reference <sup>1</sup>	2019	2018	Difference	% change	
Sales	24.1	19,258	19,555	(297)	(1.5)	
Other operating income	24.2	900	640	260	40.6	
Total	24	20,158	20,195	(37)	(0.2)	

<sup>&</sup>lt;sup>1</sup> Notes to the Consolidated Financial Statements for the year ended 31 December 2019

During financial year 2019, electricity demand changed as follows:

> The mainland cumulative electricity demand decreased by 1.7% on the previous year (-2.7% after correction for working and seasonal patterns).

> The electricity demand in Non-Mainland Territories ended 2019 with an increase of 0.9% in the Balearic Islands and 0.4% in the Canary Islands compared to the previous year (+0.9% and -0.2%, respectively, after correction for working and seasonal patterns).

Financial year 2019 has been characterised by lower prices, with the arithmetic average price on the wholesale electricity market at €47.7/MWh (-16.8%) as a result, mainly, of the

change in the prices of raw materials, particularly natural gas, as well as the increased participation of renewable energies, despite the increase in the price of carbon dioxide emission allowances (CO<sub>2</sub>).

#### Sales

Below is a breakdown of Sales for financial year 2019 and the changes with respect to the previous year:

#### Millions of euro

		Inco	Income				
	2019	2018	Difference	% change			
Electricity Sales	13,801	14,137	(336)	(2.4)			
Liberalised market sales	9,404	9,236	168	1.8			
Liberalised market sales - Spain	8,320	8,227	93	1.1			
Liberalised market sales - outside of Spain	1,084	1,009	75	7.4			
Sales at regulated price	2,055	2,339	(284)	(12.1)			
Sales Wholesale Market	843	1,130	(287)	(25.4)			
Compensation from Non-Mainland Territories	1,376	1,318	58	4.4			
Remuneration for Investment in Renewable Energies	105	96	9	9.4			
Other Electricity Sales	18	18	_	_			
Gas Sales	2,450	2,554	(104)	(4.1)			
Liberalised market sales	2,369	2,469	(100)	(4.1)			
Sales at regulated price	81	85	(4)	(4.7)			
Regulated Revenue of Electricity Distribution	2,266	2,209	57	2.6			
Other Sales and Service Provision	741	655	86	13.1			
Total	19,258	19,555	(297)	(1.5)			

Notes to the Consolidated Financial Statements for the year ended 31 December 2019.

### Sales of electricity to customers on the liberalised market

As at 31 December 2019, the number of ENDESA electricity customers on the liberalised market was 5,827,786, a 1.8% increase on the number of customers as at 31 December 2018, as per the following breakdown:

- > 4,618,734 customers (-0.2%) in the mainland Spain market.
- 859,095 customers (+4.1%) in the Non-Mainland Territories market.
- > 349,957 customers (+28.2%) in liberalised markets outside of Spain.

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ENDESA's net sales to all these customers in 2019 totalled 78,056 GWh, up 1.0% on 2018.

### Sales of electricity at regulated price

During financial year 2019, ENDESA sold 11,385 GWh to customers under the regulated price, via its reference supplier, 7.9% less than in financial year 2018.

These sales represent an income of €2.055 billion, 12.1% less than in 2018, mainly due to the decrease in physical units sold.

#### Gas sales

As at 31 December 2019 the number of ENDESA gas customers was 1,648,705, a 2.8% increase on the number of customers as at 31 December 2018:

- 229,741 (-1.3%) on the regulated market.
- 1,418,964 (3.5%) on the liberalised market.

In financial year 2019 ENDESA sold 79,784 GWh to clients in the natural gas market, which represents an 8.0% decrease compared to financial year 2018.

The distribution of sales, income and other operating income across ENDESA's Businesses in financial year 2019 and the comparison with the previous year are presented below:

#### Millions of euro

			2019				
	Ge	neration and Mark	eting				
	Non-Mainland Territories	Rest of Generation and Marketing	Adjustments	Total	Distribution	Structure and Others <sup>1</sup>	Total
Income	2,034	16,405	(902)	17,537	2,828	(207)	20,158
Sales	2,030	15,718	(902)	16,846	2,566	(154)	19,258
Other operating income	4	687	_	691	262	(53)	900
Supplies and services	(1,496)	(13,603)	895	(14,204)	(182)	134	(14,252)
Contribution margin <sup>2</sup>	538	2,802	(7)	3,333	2,646	(73)	5,906
Work performed by the Group for its Assets	8	88	_	96	175	24	295
Personnel expense	(93)	(450)	1	(542)	(280)	(200)	(1,022)
Other fixed operating expenses	(186)	(937)	6	(1,117)	(442)	221	(1,338)
Gross Operating Profit (EBITDA) <sup>3</sup>	267	1,503 <sup>8</sup>	_	1,770	2,099	(28)	3,841
Amortisation, depreciation and impairment losses	(543)	(2,216)	_	(2,759)	(626)	(68)	(3,453)
Operating Profit (EBIT) <sup>4</sup>	(276)	(713)	_	(989)	1,473	(96)	388
Net Financial Income <sup>5</sup>	(23)	(92)	_	(115)	(63)	(6)	(184)
Result before tax	(298)	(684)	(130)	(1,112)	1,444	(102)	230
Net income <sup>6</sup>	(202)	(491)	(130)	(823)	1,077	(83)	171
Net ordinary income <sup>7</sup>	102	614	(130)	586	1,059	(83)	1,562

Structure, Services and Adjustments.

Contribution Margin = Income - Supplies and Services.

<sup>6</sup> Net income = Net Income of the Parent Company.

Gross Operating Profit (EBITDA) = Income - Supplies and Services + Work performed by the Group for its Assets - Personnel Expense - Other Fixed Operating

Operating Profit (EBIT) = Gross Operating Profit (EBITDA) - Amortisation, Depreciation and Impairment Losses.

Net Financial Income = Financial Income - Financial Expense + Net Exchange Differences.

Net Ordinary Income = Net Income of the Parent Company - Net Income in Sales of Non-Financial Assets (over €10 million) - Net Loss due to Impairment of Non-Financial Assets (over €10 million).

<sup>&</sup>lt;sup>8</sup> Includes the Gross Operating Profit (EBITDA) of ENEL Green Power España, S.L.U. (EGPE) of €223 million.

			20	18			
	Ge						
	Non-Mainland Territories	Rest of Generation and Marketing	Adjustments	Total	Distribution	Structure and Others <sup>1</sup>	Total
Income	2,115	16,527	(1,021)	17,621	2,784	(210)	20,195
Sales	2,106	16,118	(1,021)	17,203	2,509	(157)	19,555
Other operating income	9	409	_	418	275	(53)	640
Supplies and services	(1,504)	(13,976)	1,016	(14,464)	(201)	98	(14,567)
Contribution margin <sub>(2)</sub>	611	2,551	(5)	3,157	2,583	(112)	5,628
Work performed by the Group for its Assets	4	79	_	83	167	20	270
Personnel expense	(85)	(435)	_	(520)	(263)	(164)	(947)
Other fixed operating expenses	(174)	(934)	5	(1,103)	(428)	207	(1,324)
Gross Operating Profit (EBITDA) (3)	356	1,261(8)	_	1,617	2,059	(49)	3,627
Amortisation, depreciation and impairment losses	(314)	(715)	_	(1,029)	(630)	(49)	(1,708)
Operating profit (EBIT) <sub>(4)</sub>	42	546	_	588	1,429	(98)	1,919
Net Financial Income (5)	(19)	(131)	_	(150)	(75)	86	(139)
Result before tax	23	827	(382)	468	1,363	(13)	1,818
Net Income <sub>(6)</sub>	47	731	(382)	396	1,046	(25)	1,417
Net Ordinary Income <sub>(7)</sub>	166	706	(382)	490	1,046	(25)	1,511
* 1*1			· ·				

<sup>&</sup>lt;sup>1</sup> Structure, Services and Adjustments.

### Other operating income

In financial year 2019, other operating income amounted to €900 million, an increase of €260 million (+40.6%) on financial year 2018, mainly as a result of the increase of €256 million (+87.1%) in revenue for the valuation and liquidation of energy stock derivatives, mainly due to the valuation and liquidation of electricity and gas derivatives that are offset, with the increase of €407 million (164.8%) in expenses for the same concept recorded under the item "Other variable supplies and services" of the Consolidated Income Statement (see section 2.3.2. "Operating costs", page 418, of the Legal Report).



Below is a breakdown of Other operating income for financial year 2019 and the changes with respect to the previous year:

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<sup>&</sup>lt;sup>2</sup> Contribution Margin = Income - Supplies and Services.

<sup>&</sup>lt;sup>3</sup> Gross Operating Profit (EBITDA) = Income - Supplies and Services + Work performed by the Group for its Assets - Personnel Expense - Other Fixed Operating Expenses.

<sup>&</sup>lt;sup>4</sup> Operating Profit (EBIT) = Gross Operating Profit (EBITDA) - Amortisation, Depreciation and Impairment Losses.

<sup>&</sup>lt;sup>5</sup> Net Financial Income = Financial Income - Financial Expense + Net Exchange Differences.

<sup>&</sup>lt;sup>6</sup> Net income = Net Income of the Parent Company.

Net Ordinary Income = Net Income of the Parent Company - Net Income in Sales of Non-Financial Assets (over €10 million) - Net Loss due to Impairment of Non-Financial Assets (over €10 million).

<sup>8</sup> Includes the Gross Operating Profit (EBITDA) of ENEL Green Power España, S.L.U. (EGPE) of €212 million.

1.1

8.2

102.2

#### Millions of euro

	Reference <sup>1</sup>		Incom	е	
	heterence	2019	2018	Difference	% change
Change in energy stock derivatives		550	294	256	87.1
Allocation of subsidies to results <sup>2</sup>	15 and 24.2	23	21	2	9.5
Allocation to Profit and Loss of Liabilities Under Contracts with Customers	22 and 24.2	158	157	1	0.6
Provision of Services in Facilities		4	6	(2)	(33.3)
Trading Rights		56	42	14	33.3
Third Party Indemnities		14	31	(17)	(54.8)
Other		95	89	6	6.7
Total		900	640	260	40.6

Notes to the Consolidated Financial Statements for the year ended 31 December 2019.

### **Operating costs**

Millions of euro

Operating costs for financial year 2019 amounted to €19.77 billion, up 8.2% on the previous year.

	Reference <sup>1</sup>		Operating	g costs	
	helelelice	2019	2018	Difference	% change
Supplies and services		14,252	14,567	(315)	(2.2)
Energy Purchases	25.1	4,904	4,784	120	2.5
Fuel consumption	25.2	1,780	2,269	(489)	(21.6)
Transportation expenses		5,302	5,463	(161)	(2.9)
Other Variable Supplies and Services	25.3	2,266	2,051	215	10.5
Work performed by the Group for its Assets	3a.1 and 3d.2	(295)	(270)	(25)	9.3
Personnel expense	26	1,022	947	75	7.9

28

1,338

3,453

19,770

### **Supplies** and services

Total

Other fixed operating expenses

Amortisation, depreciation and impairment losses

The costs for supplies and services (variable costs) for financial year 2019 amounted to €14.252 billion, a 2.2% reduction on the previous year. The change in these costs in financial year 2019 was as follows:

Energy purchases increased by €120 million (+2.5%) and fuel consumption decreased by €489 million (-21.6%) to €4.904 billion and €1.78 billion, respectively. This change reflects the effect of lower thermal production (-34,0%) in the year and the impairment of €82 million corresponding to the stocks of the mainland coal-fired plants (€62 million net of tax effect).

14

1,745

1,494

1,324

1,708

18,276

The item "Other variable supplies and services" of the Consolidated Income Statement amounted to €2.266 billion, up by €215 million (+10.5%) on financial year 2018. This change mainly includes:

For financial year 2019 it includes €18 million relating to capital subsidies and €5 million of operating subsidies (€18 million and €3 million respectively for financial year 2018).

<sup>&</sup>lt;sup>1</sup> Notes to the Consolidated Financial Statements for the year ended 31 December 2019.

#### Millions of euro

	(	Other Variable Supplies and Services				
	2019	2018	Difference	% change		
Change in energy stock derivatives	654	247	407	164.8		
Carbon Dioxide Emissions Allowances (CO <sub>2</sub> )	372	361	11	3.0		
Tax on electricity production	225	300	(75)	(25.0)		
Water tax	34	59	(25)	(42.4)		
Catalan Nuclear Tax	(27)	12	(39)	(325.0)		
Social Bonus	51	88	(37)	(42.0)		
Public Road Occupancy/Lighting tax	195	190	5	2.6		
Radioactive Waste Treatment	181	166	15	9.0		
Nuclear tax	124	121	3	2.5		
Other	457	507	(50)	(9.9)		
Total	2,266	2,051	215	10.5		

This amount includes a reduction of €39 million in the Catalan nuclear tax as a result of the declaration of unconstitutionality in accordance with the judgement of the Constitutional Court of 12 April 2019, for which a reversal of the amount accrued in financial years 2017 and 2018 was recorded, amounting to €27 million

### Fixed operating expenses

The breakdown of the fixed operating expenses for financial year 2019 and the changes with respect to the previous financial year are as follows:

#### Millions of euro

Total		2,065	2,001	64	3.2
Other fixed operating expenses	27	1,338	1,324	14	1.1
Personnel expense	26	1,022	947	75	7.9
Work performed by the Group for its Assets	3a.1 and 3d.2	(295)	(270)	(25)	9.3
	Helefelice	2019	2018	Difference	% change
	Reference <sup>1</sup>		Fixed operating	j expenses	

<sup>&</sup>lt;sup>1</sup> Notes to the Consolidated Financial Statements for the year ended 31 December 2019.

In 2019, fixed operating expenses amounted to €2.065 billion, an increase of €64 million (+3.2%) compared to the previous year. This amount includes:

- > Net provisions to deal with plans for the replacement of staff, voluntary exit agreements, compensation and other risks of a fiscal and employment nature (€44 million in financial year 2019 and €0 million in financial year 2018).
- > The updating of the provisions for existing workforce restructuring plans (€1 million, positive, for financial year 2019 and €4 million, negative, for financial year 2018).
- Expenditure on disciplinary proceedings amounting to €57 million (€6 million in expenditure for financial year 2018).
- The impairment of other materials related to mainland coal-fired power plants for an amount of €21 million (€16 million, net of tax effect).



The decrease of €38 million under the item "Other fixed operating expenses" of the Consolidated Income Statement as a result of the recognition, from 1 January 2019, of the right of use of leased assets under IFRS 16 "Leases".

Without taking into account the effects described in the paragraphs above, the fixed operating costs for financial year 2019 would have decreased by €9 million (-0.5%) compared to the previous financial year.

### Amortisation, depreciation and impairment losses

Amortisation, depreciation and impairment losses for financial year 2019 amounted to €3.453 billion, an increase of €1.745 billion (102.2%) compared to financial year 2018. In order to analyse its change during 2019, the following must be taken into account:

Impairment of the assets of the coal-fired power plants of the Iberian Peninsula. During 2019, there was a major change in market conditions affecting coal-fired power plants, derived from the international price of commodities and the effectiveness of the new mechanisms for regulating the carbon dioxide emission allowances market, which displaced the plants with the highest volume of emissions in favour of other technologies. This structural situation determined that ENDESA's coal-fired thermal plants are no longer competitive and therefore their operation in the electricity generation market is not possible.

In this context, on 27 September 2019 ENDESA approved the discontinuation of these facilities, in accordance with established legal procedures. This decision involved, among other measures:

- > Bringing forward the expected closing date of the thermal power plants concerned, the previous economic life of which was expected to be until 2035.
- The recognition of the corresponding provision for decommissioning, removal or redevelopment of the fixed assets, including the planned costs for carrying out such operations until the closing date, which, as at 31 December 2019, was estimated at €459 million.
- Assessing the possibility of recovery of these assets and recording, as a result of such a decision and the analysis of the recoverable value of these assets, an impairment in the amount of €1.366 billion, considering that the expected cash flows from these plants will be negative over the remaining life period, both overall and on an annual basis.

Order TEC/1260/2019, of 26 December, sets out technical and economic parameters to be used in the calculation of the remuneration for electricity production in Non-Mainland Territories with additional pay regime during the regulatory period 2020-2025. This revision implied, among other things, a decrease in the remuneration of operating and maintenance costs for the period 2020-2025, and that the recoverable amount of the Cash Generating Units (CGUs) for each of the Non-Mainland Territories in the Balearic Islands, the Canary Islands, Ceuta and Melilla is lower than their carrying amount, for which reason an impairment of €404 million was recognised

For more information, see "Amortisation, depreciation and impairment losses" on page 420 of the *Legal Report*.

### Net financial result

The net financial result for financial years 2019 and 2018 was negative in the amount of €184 million and €139 million, respectively:

#### Millions of euro

	Deference		Net Financ	ial Result <sup>2</sup>	
	Reference <sup>1</sup>	2019	2018	Difference	% change
Net Financial Expense <sup>3</sup>		(185)	(137)	(48)	35.0
Financial income		27	36	(9)	(25.0)
Financial expense		(212)	(173)	(39)	22.5
Net Exchange Differences		1	(2)	3	(150.0)
Total	29	(184)	(139)	(45)	32.4

- <sup>1</sup> Notes to the Consolidated Financial Statements for the year ended 31 December 2019.
- <sup>2</sup> Net Financial Income = Financial Income Financial Expense + Net Exchange Differences.
- <sup>3</sup> Net Financial Expense = Financial Income Financial Expense.

In 2019, net financial expense amounted to €185 million, €48 million higher (+35.0%) than in the previous year.

In order to analyse the change in net financial expense during 2019, the following must be taken into consideration:

- As a consequence of the discontinuation of the activity at the Litoral Thermal Power Plant in Almeria, in financial year 2019 this item includes an impairment loss of €21 million corresponding to the compensation to be received by ENDESA Generación, S.A.U. from the Port Authority of Almeria within the framework of the Notice for the partial termination of the concession that it maintains with it in the Port of Carboneras.
- > Costs for financial liabilities at amortised cost increased by €4 million (3.1%) due to the lower average cost of gross financial debt, which decreased from 1.9% in 2018 to 1.8% in 2019, and additionally, the increase in the

average gross financial debt between the two years, from €6.777 billion in 2018 to €7.431 billion in 2019.

### **Equity**

As at 31 December 2019 the share capital of ENDESA, S.A. amounts to €1,270,502,540.40, represented by 1,058,752,117 shares each with a nominal value of €1.2, fully subscribed and paid up, admitted for listing on the Spanish stock exchanges. This figure did not change in 2019 and 2018.

As at 31 December 2019 and 2018, the ENEL Group holds 70.101% of the share capital of ENDESA, S.A., through ENEL lberia, S.L.U. As at the same dates, no other shareholder held shares representing more than 10% of the share capital of ENDESA, S.A.

As at 31 December 2019 and 2018, the breakdown was as follows:

#### Millions of euro

	31 December 2019	31 December 2018
Total Equity of the Parent Company	7,688	9,037
Share Capital	1,271	1,271
Share premium	89	89
Legal Reserve	254	254
Revaluation Reserve	404	404
Other Reserves	106	106
Adjustments for Change in Value	59	(67)
Translation differences	1	1
Unrealised asset and liability revaluation reserve	58	(68)
Reserve for actuarial gains and losses	(821)	(686)
Retained earnings	7,067	8,407
Interim dividend	(741)	(741)
Total Equity of Non-Controlling Interests	149	144
Total Equity	7,837	9,181









6. BUSINESSES

### **Generation business**

ENDESA's total installed capacity at the end of 2019 amounted to 24,231 MW. Of this amount, 19,458 MW were found in the mainland electricity system and 4,773 MW in non-mainland electricity systems (Balearic, Canary Islands, Ceuta and Melilla). These figures include 7,412 MW of renewable energy on the mainland and 40 MW in non-mainland electrical systems

During 2019, electricity demand in Spain experienced a 2.7% decrease compared to the previous year (adjusted due to the effect of working days and temperature), changing the trend of the previous three years.

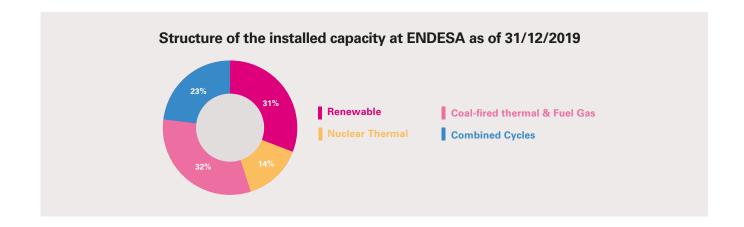
The demand coverage highlights the increase in the contribution of the combined cycles that replaced the coal production and covered the lower hydraulic production due to drought during much of the year. Among the technologies that have most contributed to meeting demand, nuclear production stands out, accounting for 22% of the mix, followed by wind production with 21% and combined cycles with another 21%. It is worth noting the growth of the solar photovoltaic and

thermal contribution, which reached 6%. Finally, 3% of demand has been met with energy imported from other countries (Source: REF)

Against this backdrop, ENDESA's generating capacity reached a total production of 61,402 GWh in 2019, 17.2% lower than the previous year due to lower generation with coal and hydraulic power. Of this amount, 59.2% (36,369 GWh) corresponds to emission-free generation, 0.4% higher than 2018, and 25,033 GWh to the generation of coal, gas and fuel plants, which represents a decrease of –34.0%.

Regarding production with conventional energy sources, on the mainland there was less production with national coal (-69.2%) and imported coal (-72.5%). On the contrary, there was higher production with combined cycles (+42.9%).

Regarding production with renewable energy sources, there was less contribution compared to the previous year of hydraulic production (-30.7%) as a result of less hydraulic activity. On the contrary, there was growth in wind and solar production (+13.9%).



ENDESA's production of electrical energy measured at the plant's busbars (GWh)

2019	2018	% change	% s/Total
5,861	8,459	-30.7	9.5
4,229	3,713	13.9	6.9
26,279	24,067	9.2	42.8
36,369	36,239	0.4	59.2
1,532	4,973	-69.2	2.5
4,115	14,951	-72.5	6.7
7,566	5,293	42.9	12.3
11,820	12,737	-7.2	19.2
25,033	37,954	-34.0	40.8
61,402	74,193	-17.2	100.0
	5,861 4,229 26,279 <b>36,369</b> 1,532 4,115 7,566 11,820 <b>25,033</b>	5,861       8,459         4,229       3,713         26,279       24,067         36,369       36,239         1,532       4,973         4,115       14,951         7,566       5,293         11,820       12,737         25,033       37,954	5,861       8,459       -30.7         4,229       3,713       13.9         26,279       24,067       9.2         36,369       36,239       0.4         1,532       4,973       -69.2         4,115       14,951       -72.5         7,566       5,293       42.9         11,820       12,737       -7.2         25,033       37,954       -34.0

### Renewable energy generation

As at the end of 2019, ENDESA has 7,452 gross installed MW of renewable power, 4,792 MW of which correspond to hydraulic energy, 2,308 MW to wind energy, 352 MW to photovoltaic energy and 0.5 MW to biogas plants.

In 2019, ENDESA generated 10,090 GWh with renewable energy sources. 5,861 GWh of which correspond to hydraulic energy, 4,127 GWh to wind energy, 101 GWh to photovoltaic energy and 1 GWh to biogas plants.

### Wind farm construction. Auction of May 2017

On 16 May 2017, ENEL Green Power España was awarded a total of 540 MW of power for the installation of new wind farms. This new capacity was assigned after the tender for 2,000 MW of renewable energy (expandable up to 3,000 MW) launched by the Spanish Government to achieve the goal of covering 20% of the country's energy consumption with renewable energy by 2020.

These wind projects are located in the regions of Aragón, Andalusia, Castilla y León and Galicia, autonomous communities that already have wind resources. These wind facilities will generate approximately 1,750 GWh per year and will avoid the emission of around 1,050,000 tons of CO<sub>2</sub> into the atmosphere.

During 2018, the construction of most of the wind farms began to reach the authorised power of 540 MW. In particular, 18 projects were chosen from the portfolio of projects that were submitted to the auction. By the end of 2019, ENDESA, through ENEL Green Power España, had fully fulfilled its commitment to commission, before 31 December 2019, the 540 MW of wind energy (18 projects), awarded in the wind energy auction of 2017.

### Construction of photovoltaic plants. Auction of June 2017

On 26 June 2017, OMIE held a second auction that aimed to reach 3,000 MW of new capacity in renewable energy. ENEL Green Power España was awarded 339 MW of photovoltaic solar capacity. This awarded solar capacity is added to the 540 MW of wind energy that was awarded in May of the same year.

During 2018, the construction of all the solar plants began to reach the authorised power of 339 MW. In particular, 7 projects were chosen from the portfolio of projects that were submitted to the auction.

The solar plant projects are located in the regions of Murcia and Extremadura and will generate approximately 640 GWh per year, avoiding the emission of around 348,000 tons of CO<sub>2</sub> into the atmosphere.

Altogether, ENDESA invested approximately €820 million in the construction of the wind and solar power that was awarded to it in the 2017 auctions.

ENDESA, through ENEL Green Power España, fully fulfilled its commitment to commission, before 31 December 2019, the 339 MW of photovoltaic energy (7 projects) awarded in the photovoltaic auction of 2017.

The construction of this wind and solar power (879 MW) was carried out with a focus on creating shared value, ensuring the generation of a positive impact on local communities and actively managing the relationship with local stakeholders.

### Acquisitions in 2019

On 5 March 2019, ENEL Green Power España S.L.U acquired 100% of the capital of the company "Energía Neta Sa Caseta

Llucmajor, S.L.", the company that owns the 22 MW "Sa Caseta" photovoltaic project, located on the Balearic Islands.

On 28 May 2019, ENEL Green Power España S.L.U acquired 100% of the capital of the company "Baleares Energy, S.L.", the company that owns the 15 MW "Biniatria" photovoltaic project, located on the Balearic Islands.

On 28 May 2019, ENEL Green Power España, S.L.U. also acquired 100% of the capital of the company "Baikal Enterprise, S.L.", the company that owns the 2 MW "Son Cartet" photovoltaic project, located on the Balearic Islands (Menorca).

On 30 September 2019, ENEL Green Power España, S.L.U. also acquired 100% of the capital of the companies "Renovables Mediavilla, S.L." and "Renovables la Pedrera, S.L.", both owners of the "Nudo Mudéjar" project, which includes the "Sedeis V" photovoltaic project (32 MW) and the "Iberos" wind farm project (49 MW). As a result of the final distribution of the Nudo Mudejar capacity, there is a surplus of 53 MW, from which the previous companies could receive up to 50% of additional capacity (26 MW). The project is located in the community of Aragón, province of Teruel.

On 23 December 2019, ENEL Green Power España, S.L.U. also acquired 100% of the capital of the 13 companies that own 10 photovoltaic projects, as detailed in the following table:

SPV	Project	Province	MWp
Bogaris PV1, S.L.U.	San Antonio	Huelva	30.44
Torrepalma Energy 1, S.L.	Torrepalma	Seville	22.5
Fotovoltaica Yunclillos S.L.	Sol de Casaquemada	Seville	49.9
Envatios Promoción I, S.L. Envatios Promoción II, S.L. Envatios Promoción III, S.L.	Carmona (Envatios 1, 2 and 3)	Seville	130
Emintegral Cycle, S.L.	Emin	Badajoz	150
Dehesa PV Farm 03, S.L.U. Dehesa PV Farm 04, S.L.U.	Caparacena	Granada	329
Pampinus PV Farm 01, S.L.U.	Pampinus	Valencia	49.9
Olivum PV Farm 01, S.L.U.	Torrecilla	Cáceres	49.9
Xaloc Solar S.L.U.	Castelfollit	Barcelona	45.3
Envatios Promocion XX, S.L.U.	Oncala	Soria	180
	Total		1,036.94



### Portfolio expansion in 2019

In addition, throughout the year ENEL Green Power España has worked on increasing the wind and solar projects in the pipeline, as well as on the progress and development of those currently in the pipeline, projects that will materialise in the coming years as new capacity (both in current REE infrastructures, as well as future planning for the period 2021-2026). This ensures the continued growth of renewable capacity in the future and increases the possibility of closing commercial agreements in the sale of renewable energy.

This is just the beginning of the great challenge of accelerating investment in renewable energy and decarbonisation.

### Conventional power generation

As of 31 December 2019, ENDESA has 16,779 MW of conventional power installed, of which 3,443 MW correspond to nuclear generation facilities, 5,041 MW to coal-fired thermal generation facilities and the rest to combined cycles, fuel oil and gas oil. These figures include the 855 MW Elecgas Combined Cycle, located in Portugal.

### **New facilities** and operational improvements in conventional power generation

The main electrical infrastructure projects started, developed or completed throughout 2019 in Spain were as follows:

### Mainland system

- Development of engineering works, civil works and electromechanical assembly of the SO<sub>2</sub> emission reduction system in 2 of the 4 Groups of the As Pontes Thermal Power Plant (La Coruña).
- Completion of work on the first phase of the demolition of the Foix Thermal Power Plant, including the plant itself and the fuel storage area at Mas Chinchola.
- Request to close the As Pontes and Litoral plants.
- Updating of the Besós 3 Integrated Environmental Authorisation due to its location in the urban area of Barcelona. Emission limits have been reduced below 70% load in the combined cycle.

### Non-mainland system

- Development of modernisation work on the control systems for Groups 3 and 4 of the Alcudia Thermal Production Unit (Mallorca).
- Carrying out the works to partially close the ash landfill of the Alcudia Thermal Production Unit (Mallorca).
- Tender and authorisations for the commissioning of a pioneering 4 MW energy storage system with second-life batteries from electric cars at the Melilla Diesel Power Plant. This system will contribute to the provision of support and security for the electricity supply of the autonomous city, an energy-isolated system, and is also a sustainable and economic solution.
- Completion of work at the Mahón plant to ensure compliance with emissions set by DEI and BREF. The plant has been operating while complying with emissions since December 2019.
- > Completion of the contingency plan work on the 80 MW steam sets at the Granadilla and Barranco de Tirajana

thermal power plants, which consists of the implementation of primary measures (OFAs) and urea injection in the boiler to reach the NOx limits set by DEI. Plants have been operating within emission limits since December 2019.

- Engineering, civil works and electromechanical assembly work are under way to adapt the 80 MW steam sets at the Granadilla and Barranco de Tirajana thermal power plants to the emission limits set by BREF, consisting of catalytic reduction of NOx in the gases leaving the boiler. The project will be in commercial operation in August 2021.
- Construction, installation, legalisation and operation of a new 4,000 m³ fuel oil tank at the Los Guinchos Diesel Power Plant that will allow expansion of the strategic fuel oil fuel reserve at the plant.
- Collaboration with the University of La Laguna in the development of a project to predict photovoltaic energy production based on cloudiness on the island of Tenerife.
- Execution of an R&D project for the installation of a stabiliser system based on energy storage in 1MW/3h Ion Li batteries in the auxiliary systems of the Llanos Blancos Power Plant, pending authorisation for commissioning at the end of the financial year.
- > Completion of the renovation of the immission control stations in Menorca and Ibiza.

### **Mining**

In recent years, ENDESA's coal mining activity in Spain has been developed in 4 mining centres: As Pontes (La Coruña) and Andorra (Teruel), belonging to ENDESA Generación, and Puertollano (Ciudad Real) and Peñarroya (Córdoba) through the company ENCASUR. Since 2016, there has been no coal production since mining activity ceased the previous year, with only the ENCASUR mining centres being in the phase of restoration and closure.

In 2019, the removal of the coal deposited in the mining centre of Puertollano was completed. A total of 229,965 tonnes have been removed.

Regarding the restoration in the mining centres of Puertollano and Peñarroya, work has continued on the remodelling of the land, dismantling and removal of disused equipment.

Regarding the As Pontes mining centre, in 2019 the agreement for the transfer of land and facilities to the As Pontes Council was formalised.

From 1 January 2020 onwards, the Puertollano mining centre will continue to dedicate itself to the work contemplated in the closure plan.

Likewise, during 2020, at the Peñarroya mining centre, maintenance work on the restoration and environmental monitoring will continue to be carried out, until the issuance of authorisation to abandon work, including the works that the Mining Authority has requested to ensure the stability of the final opening.

### ENDESA in wholesale markets

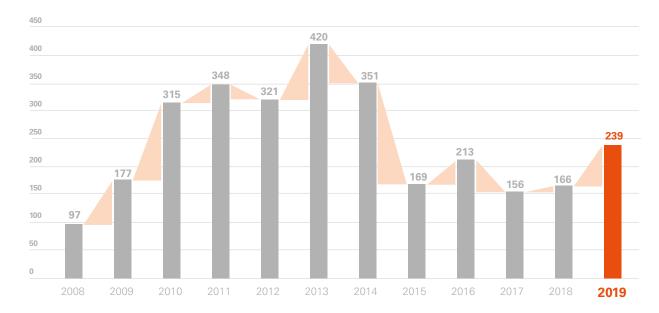
### The Spanish wholesale market

During 2019, the energy destined in the mainland for sale to final customers in the electricity market through distributors and marketers, exports and for coverage of the system's own consumption (grid losses, auxiliary consumption of the plants and pumping consumption) amounted to 249 TWh. Pumping consumption, the export balance and the mainland-Balearic Islands link totalled 2.1 TWh in the year. (Source: REE)

60% of the demand was covered with conventional thermal generation, 39% with renewable energy and 1% with the import balance of international exchanges, the Balearic-mainland link and pumping consumption.



### Volume traded on forward markets - Spain (TWh)



In 2019, a volume of approximately 239 TWh was traded in the electricity forward markets, 44% higher than in 2018. Of the total volume traded, 14 TWh have been closed on Organised Markets (OMIP and EEX). Of the remaining 225 TWh (volume traded in OTC), 201 TWh have been registered in the three clearing houses that operate in Spain: EEX (149 TWh), OMIClear (25 TWh) and MEFFPower (27 TWh). The percentage of the total volume that is settled in the clearing house (both through continuous market and clearing) continues to increase compared to previous years, with 89% compared to 81% in 2018 and 69% in 2017. In addition, of the total negotiated, about 6 TWh comes from long-term products, reaching up to year+10, with less volume than in 2018 (13 TWh), but with the appearance of more distant products (the most distant product during 2018 was year+6). The price trend has been declining, especially during the last quarter of the year as a consequence of the drops in gas and coal prices.

In the gas market (PVB) a volume of approximately 153 TWh was negotiated this year, a figure that represents a 38% increase over the previous year. 58.9 TWh, 38% of the volume, were traded on the MIBGAS organised market, compared to 62% of OTC transactions.

### Average daily price

The year 2019 has been characterised by a significant drop in the cost of natural gas and imported coal. This has had a notable influence on the decrease in the arithmetic average price of the electricity market, whose average value was €47.7/ MWh. This value represents a decrease of 16.7% compared to the 2018 price (€57.3/MWh).

The thermal gap was slightly reduced compared to the previous year, since the increase in wind and photovoltaic production due to the introduction of new capacity was partially offset by lower hydraulic production in the system, 32% lower than the previous year.

The price reached a monthly maximum in January with €62.0/ MWh, to start a declining trend, mainly due to the decrease in the cost of fuels, which reached a monthly minimum in December with €33.8/MWh.

### Purchases and sales in the wholesale electricity market

In 2019, ENDESA sold 44,500 GWh in the wholesale market, which represents 30% of the total supply of the Ordinary Regime and imports.

About 70% of the Company's total sales were made through bilateral contracting and the rest were sold in the organised markets of OMEL and REE.

Regarding energy purchases, ENDESA acquired 86,700 GWh in the wholesale market, of which 97% was used for commercialisation and the rest for pumping consumption and exports.

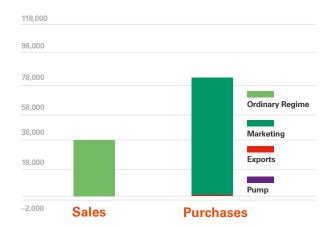
tions of limited volume.

ing the first Organised Market to trade this type of product, where until the end of 2019 there were only one-off transac-

### CO<sub>2</sub> market: approval of the ETS reforms

The  $CO_2$  market has been marked by volatility. Since the lows of the beginning of the year, price levels have undergone strong variations that have exceeded  $\[ \in \]$ 7/t, reaching highs at the end of July with sharp falls towards the beginning of October, ending the last weeks of the year at around  $\[ \in \]$ 24/t to  $\[ \in \]$ 26/t; a marked influence of the scenarios expected as a result of Britain's exit from the European Union.

### **ENDESA** sales and purchases (GWh)



### Purchases and sales in the wholesale gas market

For the year 2019, ENDESA acquired a total of 19.8 TWh of gas in the short-term wholesale natural gas market to supply its customers in Spain and Portugal. For the same period, sales of natural gas in the wholesale market amounted to 11.8 TWh. (NOTE: these volumes include purchase-sales in PVB, tank LNG in Spain and FOB/DES LNG in the international market).

In 2019, the entry of MIBGAS into the Spanish regasification plants tank LNG buying and selling market stands out, be-

### Fuel supply

The Iberian Electricity Market (MIBEL) thermal gap decreased compared to 2018 as a result of an increase in wind and photovoltaic production due to the introduction of new capacity.

In this environment, ENDESA has continued to participate in procurement in the physical and financial wholesale markets.

Fuel Supplied to ENDESA

	2019	2018	Diff.
	Total	Total	DIII.
National Coal (Kt)	130	1,811	-93%
Imported Coal (Kt)	3,594	9,419	-62%
Petroleum Coke (Kt)	_	950	-100%
Liquid Fuel (Kt)	1,981	2,220	-11 %
Natural Gas Cycles (bcm)	1.9	1.4	38%
Natural Gas Sales (bcm)	6.2	6.4	-3%

ENDESA contracted 3.6 million tonnes of imported coal in the financial year, 62% less than in 2018. In terms of liquid fuels, it managed 1.9 million tonnes, with a decrease of 11% compared to 2018, as a consequence of the introduction of wind energy plants.



The volume of gas managed for own consumption was 1.9 bcm, and the volume managed for sales was 6.2 bcm.

### Risk management in the electricity business

The results of ENDESA's liberalised business are subject to various risk factors, such as movements in the price of commodities (electricity, gas, coal, CO<sub>2</sub>) emission rights) and the euro/dollar exchange rate (market risk), potential contractual breaches of counterparties (credit risk), changes in regulation and other factors associated with the operation of the business (operational risk).

As in previous years, the market hedging strategy applied in 2019 took into account the sales business, where ENDESA sold volumes of electricity that were higher than its own production. This strategy combined forward coverage of thermal generation assets to capture their optional value, due to the ability of these assets to have a higher yield in price rise scenarios and thus minimise risk, along with energy purchase programmes in wholesale markets to cover the positions resulting from the trading of electricity. These strategies manage risk through actions in the forward markets of the different commodities.

As for electricity, the risk of the gas portfolio is managed through a hedging mechanism specific to this business.

Regarding the markets for  $\mathrm{CO}_2$  emission rights, the management of ENDESA's exposure to these rights is similar to that of other commodities that participate in the price formation of thermal generation.

The application of the set of hedging and commercial strategies described allowed a reduced level of risk to be maintained within the limits established for the markets.

### Energy management and participation in European wholesale markets

ENDESA operates in various European wholesale electricity markets to optimise its positions outside the Iberian market. Among other objectives, this action allows it to have the energy necessary to supply its European customers and optimise the management of the generation portfolio through the France-Spain interconnection. Likewise, import and export operations of guarantees of origin and other renewable energy products to different European countries were continued, thus optimising the management of renewable assets.

The decrease in demand, the increase in renewable installed capacity and the falls in gas and coal prices have led to a notable decrease in electricity prices in the main European markets.

### Distribution business

ENDESA considers it a priority to guarantee access to electricity supply, as well as its continuity, safety, efficiency and quality, for which development of the necessary infrastructures that make it possible is of utmost importance.

The number of customers with contracts to access the Company's distribution networks reached 12.5 million, which represents an increase of 0.3% during 2019.

ENDESA distributes electricity in 27 Spanish provinces in 10 autonomous communities (Andalusia, Aragón, Balearic Islands, Canary Islands, Castilla y León, Catalonia, Valencia Community, Extremadura, Galicia and Navarra) and in the Autonomous City of Ceuta, with a total reach of 195,468 km² and a population of more than 21 million inhabitants.

ENDESA has supplied 101,338 GWh in 2019 to the customers of its distribution networks, representing 0.1% more than in 2018.

Total energy distributed by ENDESA's networks reached 116,611 GWh in 2019, measured at the plant's busbars, which represents 44% of total demand in Spain, which stood at 264.6 TWh, according to the operator of the Spanish electrical system (Source: REE).

The regulated income from the distribution activity during the 2019 financial year amounted to €2.266 billion, €57 million higher (+2.6%) than that recorded in the 2018 financial year.

# Development of distribution infrastructures

To ensure that its customers receive the correct energy supply, ENDESA's distribution network infrastructures are planned and operated in such a way that they are continually adapted to the capacity demanded by existing customers, to network expansions requested by new customers and to due attention to regulatory, legal actions, and actions that are subject to agreements.

The length of ENDESA's distribution network lines in Spain stood at 316,760 kilometres, 40.1% of which corresponded to underground lines. The number of substations at the end of the year was 1,295.

Along with the development of these infrastructures, a large number of actions were carried out aimed at improving the quality of supply, such as maintenance work, the renovation of facilities or the increase in the degree of automation of the high and medium voltage network.

Regarding this last activity, during 2019 the Company's Medium Voltage Network Automation Plan has continued to be developed, with a total of 54,399 remotely controlled elements.

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Other actions have focused on reducing the environmental impact of the networks and on the development of different specific plans agreed with the public services.

Thus, the length of the high-voltage lines is 19,582 km, 4% of which are underground. The medium voltage lines represent 115,943 km, 35% being underground. The low-voltage lines are 180,795 km long, 47% of which are underground.

The number of substations is 1,295 with an installed capacity of 87,932 MVA.

The number of transformation centres of the Company is 127.206.

### **Continuity** of supply

The continuity of supply in Spain is measured using the indicators TIEPI (Time of interruption equivalent to the power installed) and NIEPI (Number of interruptions equivalent to the power installed), the calculation procedure for which is regulated by Royal Decree 1955/2000. The TIEPI and NIEPI levels are audited annually by an independent external company.

During 2019, the TIEPI in the markets supplied by ENDESA in Spain stood at 60.6 minutes, in line with the value of 2018. The reliability of the service has been 99.99% of the total hours of the year.

Endesa's own NIEPI stood at 1.4 in 2019, reducing the figures from the previous year by one tenth.

The table shows the continuity of supply indicators for the main autonomous communities in which ENDESA provides services.

Time of interruption equivalent to the power installed (TIEPI) of ENDESA (minutes)

TIEPI	2017	2018	2019	Change 2019-2018
Andalusia	75	73	70	-4%
Aragón	82	70	58	-17%
Balearic Islands	41	54	51	-6%
Canary Islands	43	40	50	+25%
Catalonia	49	53	54	+2%
Extremadura	60	80	74	-8%
Ceuta	1.2	28.7	5.5	-81%
ENDESA	61	61	61	0%

NB: Unaudited data.

- Mainland: The year 2019 saw different behaviours across each of the autonomous communities. While Catalonia saw an increase in the indicator, Aragón, Andalusia and Extremadura saw a decrease. In the Andalusian community, the value of TIEPI was 70 minutes, Aragón was 58 minutes, Catalonia was 54 minutes and Extremadura was 74 minutes.
- Islands: In the case of the islands, as in the mainland, an increase in the value of TIEPI was observed in the Canary Islands, with 50 minutes, while in the Balearic Islands it decreased slightly to 51 minutes.
- Ceuta: In 2019, the quality levels of 2017 recovered after an exceptional 2018 in terms of incidents of each community's own responsibility recorded especially in the month of March.

The behaviour of Endesa's own TIEPI throughout 2019 was more favourable than in 2018, although the complex weather episodes in December (Daniel, Elsa and Fabien) considerably worsened the closing value of the year.

### **Network failures**

In relation to network failures. ENDESA is taking effective actions to reduce the volume of technical and non-technical failures, with the support of multidisciplinary and specialised teams.

The application of technological advances, with the use and processing of the data that has been mass and automatically obtained from low and medium voltage networks, together with the use of predictive models of automatic learning based on Big Data technology, have brought about a significant decrease in non-technical failures, which, in turn, have improved the level of total failures across ENDE-SA's networks.

Distribution margin

The contribution margin of the Distribution Segment in 2019 amounted to €2.646 billion, which represents an in-

crease of 63 million (+2.4%) compared to the previous year, mainly due to the fact that the regulated income from distribution activity during 2019 has amounted to 2.266 billion, 57 million higher (+2.6%) than that recorded in 2018.

The gross operating profit (EBITDA) for the 2019 financial year stood at  $\in$ 2.099 billion (+1.9%), due to the evolution of the contribution margin (+2.4%) offset by the evolution of fixed operating costs (+4.5%).

The operating result (EBIT) for the 2019 financial year increased by €44 million (+3.1%) compared to the previous year, mainly as a consequence of the 1.9% increase in the gross operating profit (EBITDA).





### Trading business

In 2019, ENDESA supplied customers in the national electricity market with 79.2 TWh, at almost 10.3 million supply points, reaching a share of 34.1% in terms of energy and maintaining absolute leadership in the sector. The Company's average marketing share in areas not covered by its distribution network was over 29%.

ENDESA remains one of the main operators in the Portuguese liberalised electricity market with a share of more than 15%. By the end of the year, ENDESA had supplied 7.2 TWh to almost 350,000 supply points.

# Customer Service Plan of Excellence

ENDESA has a Customer Service Plan of Excellence, in order to offer its customers the best possible service, the objective of which is to improve the main indicators of customer satisfaction year after year.

This plan focused its activities in 2019, among others, on the following aspects:

- Continuous improvement of the quality perceived by customers in Digital Channels.
- Improved response times at the Call Centre and quality standards with the implementation of ISO 19285.

- > Improved satisfaction with the Claims process.
- > Progress in the development and deployment of the "Universal Measurement" Model.

In order to ensure compliance with the improvements identified in the Plan, 20 key indicators are monitored monthly to verify the impact on improving ENDESA's commercial quality.

Among the most significant results of the Plan in 2019, the following stood out:

- > The significant improvement in the indicators of Availability and Performance of the Web and the ENDESA App, as well as an improvement in customer satisfaction with the App (+4%).
- > Improved waiting time for CCPPs (<10 minutes) and customer satisfaction with PdS (+3.5%).
- > The improvement in Claims managed in <5 days for RRyNN (+11.8%) and customer satisfaction with the claims process (+14%).

### Face-to-face assistance

ENDESA's face-to-face assistance is organised according to the customer segment, in order to adjust to each customer's requirements insofar as possible:

#### > Businesses and Companies (B2B):

ENDESA has a team of managers, organised by sector and territory, through which it aims to achieve in-depth

knowledge of customer needs and offer competitive solutions in a customised manner. The Company has around 350 personalised commercial managers distributed throughout the national geography and complements its coverage with a telephone and Internet service

#### General Public (B2C):

ENDESA has 11 commercial offices in Spain and 2 in Portugal and 254 service points distributed throughout the country, assisted by the Call Centre (CAT) and ENDESA's virtual office (www.endesaclientes.com).

	Service Points	Sales offices
Andalusia-Extremadura	83	3
Aragón	23	1
Balearic Islands	18	1
Canary Islands	23	2
Catalonia	61	3
Own territory	208	10
Expansion	46	1
Portugal	_	2
ENDESA	254	13

### The Call Centre

In 2019, ENDESA's Call Centre managed more than 15 million calls, resulting in a 19% decrease in traffic compared to the financial year. The demand for contact saw different changes in Portugal, where activity decreased by 7% due to the efficiency actions carried out in said market, while in Spain it decreased significantly (approx. 20%) based on plans to improve solutions at first contact, the push for digitalisation from the channel, automation and interaction management with the aid of bots.

Customers who chose the telephone channel to contact ENDESA did so in 54% of cases for reasons related to the business cycle, 18% for reasons related to unavailability of supply, and 4% to make requests for new contracts, among

other reasons, which places the Call Centre as one of the company's main sales channels.

4% of the activity managed by the telephone channel occurred through digital support channels that have been in development since 2018 to reinforce communication with customers, which makes these channels increasingly relevant within the telephone channel.

In 2019, the telephone channel continued its progress towards the cognitive contact centre, and became a reference in the sector by obtaining the Excellence in Customer Relations Award for the Best Innovation Project, which are arranged by AEERC (Spanish Association of Customer Relations Centres). This award recognises the lines of work that have allowed the development of the artificial intelligence integration model in voice channels as an additional agent, as well as the development of new customer services through Alexa and Google Home.

The most distinguishing points of the project, and those that pave a way forward within the contact centre industry, are based on the design of a consistent experience for customers by using a unique conversational model and the full integration of Artificial Intelligence via Watson, the IBM virtual assistant.

In addition, the working model of the telephone channel was also recognised as one of the Best Customer Experience Strategies in Latin America by the Latin American Alliance of Organisations for Interaction with Customers (ALOIC).

Under this framework, the following lines of work that have been developed in this financial year should be highlighted:

Digitalisation of the Contact Centre, whereby the technological renovation of the channel's infrastructures is being developed, self-service is being promoted with the incorporation of natural language dynamics and the support of Artificial Intelligence, and new voice channels with virtual assistants have been developed. Progress continues in the backlog, and new use cases have been incorporated so they can be processed with Artificial Intelligence.



Process quality, whereby a diagnosis of the operational model has been performed to implement ISO 19285 in the channel. It is anticipated that AENOR certification will be received in 2020, and we shall therefore become one of the first companies in our country to receive this and thus have a fully customer-oriented contact centre operations model.

Efficiency and quality, through the Cronos project, a project that seeks to reduce customer management times, improving perceived quality, which relies on the collaboration of all the partners that provide service for the telephone channel.

In this context, 2019 was once again a very positive year for the channel, which shall continue to develop the principles for improving customer service in 2020.

### Online customer service

At the end of 2019, ENDESA's commercial website, www. endesaclientes.com, reached more than 2.3 million registered customers (11% more than in 2018), with more than 3.7 million contracts. These users carried out more than 5.3 million interactions per month, with bill checking being the most common operation both on the web and in the app.

During 2019, electronic billing has also received a large boost and has been consolidated with 3.8 million contracts in force with e-billing.

The main features added during 2019 were:

- Chatbot available on the website www.endesaclientes. com to help agents with the login process.
- > Functional improvements for the Luz Happy 50 product (contracting process, customer communications, bill availability notifications, etc.).
- > Creation of a specific website for regulated market customers (RM) (www.energiaXXI.com).

- > Creating a specific app for RM customers.
- A new website and app for Open Market customers is being developed and is expected to be put into operation during 2020.

Since March 2013, there have been more than 1.1 million downloads of ENDESA apps, with almost 0.3 million downloaded in 2019.

In 2019, more than 74,000 cases were managed on WhatsApp, Twitter and Facebook (in 2018, 46,000 were managed, representing an increase of 60%). Mail and chat continue to be the digital channels with the highest volume, exceeding 600,000 cases per year.

ENDESA is currently developing a digital transformation process where customers are a fundamental element of said transformation.

### Sales to customers on the liberalised market

As of 31 December 2019, ENDESA had 5,828 thousand customers in the liberalised market, an increase of 1.8% compared to the number of existing customers as of 31 December 2018.

ENDESA's 5,828 thousand customers and their variation with respect to 2018 are distributed as follows:

- > 4,619 thousand customers (-0.2%) in the mainland Spain market.
- > 859 thousand customers (+4.1%) in the Non-Mainland Territories market.
- > 350 thousand customers (+28.2%) in liberalised European markets outside of Spain.

In economic terms, sales amounted to €9.404 billion (+1.8%) as per the following breakdown:

- > Sales in the Spanish liberalised market were €8.32 billion in 2019, €93 million higher than in 2018 (+1.1%), mainly due to the increase in physical units sold.
- ➤ Revenue from sales to customers in liberalised European markets outside of Spain amounted to €1.084 billion, €75 million (+7.4%) higher than in 2018, mainly due to the increase in the number of customers and the increase in physical units sold, mainly in Portugal.

### Sales at regulated price

During financial year 2019, ENDESA sold 11,385 GWh to customers under the regulated price, via its reference supplier, 7.9% less than in financial year 2018.

These sales represent an income of €2.055 billion, 12.1% less than in 2018, mainly due to the decrease in physical units sold.

### The Spanish natural gas market

Natural gas consumption in Spain amounted to more than 398 TWh, up 14.0% from 2018. Excluding the consumption of electricity generation plants (27.9% of the total), the conventional demand of end customers remained in line (-0.2%) with the demand registered in 2018.

### ENDESA in the natural gas market Sale of gas

ENDESA sold a total of 66.8 TWh to customers in the natural gas market in 2019 (without sales to generation or wholesalers), which represents a decrease of 10.3% compared to 2018

In economic terms, gas sales revenue in 2019 amounted to €2.45 billion, €104 million lower (-4.1%) than in 2018, as follows:

- > Gas sales in the liberalised market were €2.369 billion, €100 million lower than in 2018 (-4.1%), mainly due to the decrease in physical units sold.
- > Revenues from gas sales to customers at regulated prices amounted to €81 million, €4 million lower (–5.2%) than in 2018.

### Conventional market

ENDESA's customer portfolio in the conventional natural gas market as of 31 December, 2019, excluding sales for electricity generation, was made up of more than 1.6 million customers, representing growth of 2.8% compared to number of customers as of 31 December 2018.

ENDESA is the second largest gas marketer in Spain with a global share of 15.6% in the conventional market.

In the Portuguese gas market, ENDESA supplied more than 4.7 TWh to end customers, which represents an increase of 2.2% compared to 2018.

### Electricity generation market

Natural gas sales to electricity generation plants reached 20.0 TWh in 2019, which represents an increase of 26.5% compared to 2018.

### International market

The trading of natural gas in France, Portugal, the Netherlands and Germany reached a volume of 20.0 TWh, 21% less than 2018, mainly due to lower sales in France.

### **ENDESA X**

In the midst of a revolution in the energy sector, ENDESA X continues to adapt to the demands of society, with a vision based on three major spheres of development — decarbonisation, electrification and digitalisation. In this sense, ENDESA X develops innovative products and digital solutions in the



areas where energy brings the greatest transformations: city, housing, industry and electric mobility. The ultimate goal is to create an ecosystem capable of taking advantage of the opportunities offered by technology and digitalisation to create social, environmental and economic value in all areas.

In order to play the role of "value multiplier" and "accelerator of the energy transition" in the best possible way, ENDESA X is organised into the following Business Lines:

e-Industries, in the field of industry and companies, ENDESA X promotes new opportunities through energy efficiency, distributed power generation and auditing and consulting services. With these services, ENDESA X seeks to facilitate the industrial transition for its industrial customers, providing them with the most advanced and competitive products and services on the market. The integration of electrical self-generation within the production processes of customers thanks, among other things, to the improvement in the competitiveness of photovoltaic energy, has led to significant commercial activity during 2019 and a sustainable and economically viable value proposal for ENDESA X towards its customers. Likewise, this year, through the commercial development of the Energy Management Service, ENDESA X has allowed customers in the industrial and tertiary sector, through advice based on analytics and advanced monitoring of their consumption, to promote savings, energy efficiency and, ultimately, a more sustainable and proactive consumption by these sectors with a view to decarbonisation.

e-City, within cities, in order to attain the concept of "smart city", ENDESA X focuses on intelligent public lighting, managing 100,000 light points in 2019, efficient energy management in public buildings as well as offering the most advanced and innovative technologies for the energy management of public customers. In the field of public services, ENDESA X offers its significant capacity to manage complex energy projects using its experience in the private sector, offering solutions that allow the integration of different technologies, with proven results. In addition, it has reinforced its value proposition in solutions to deploy electric buses in cities that help reduce emissions from public transport.



**e-Home**, in the domestic sphere, ENDESA X offers products and services for the home, providing consumers with the latest technology in maintenance and repair, automation and home services. With a growing customer portfolio, which reached 2.2 million in 2019, ENDESA X maintained its commitment in terms of service and innovation in launching products that best meet the needs of its customers.

Among the new products launched by the e-Home Business Line in 2019, the launch of Ya! Gas is particularly notable. This is a repair service that was developed to meet the needs of customers in terms of fixing their breakdowns without having any prior contracted urgent assistance service, which reinforces and positions ENDESA X as a service company for everyone. Likewise, it launched Homix, a Smart home device that is currently available on Amazon and on the commercial websites of ENEL X and ENDESA Energía, S.A.U. This technological solution learns the habits of use of the household so it can independently respond to the needs of people, and thereby simplify the customers' lives thanks to the integrated management of heating, security and lighting in its homes.

**e-Mobility**, within offering sustainable solutions, it represents one of the fundamental pillars of ENDESA X, where there is a clear commitment to energy transition and decarbonisation. In this sense, ENDESA X promotes the development of the electric vehicle as one of the main ways to fight climate change and promotes electric mobility as an instrument to facilitate a zero-emission energy model.

The ENDESA X Business Line of e-Mobility develops and markets electric mobility solutions for residential, industrial, commercial and public service customers; playing an active role in this field to position itself as the sector leader in electric mobility.

### Public Charging:

In 2019, ENDESA X continued to take actions to set up more than 2,000 electric vehicle charging points in 2020, making it easier for any electric vehicle to travel anywhere in Spain.

- In a second stage (between 2021 and 2023), another 6,500 new public access charging points will be installed in shopping centres, car parks, hotel chains, service areas or on public roads to accompany the growth of the electric vehicle market, providing greater coverage of charging infrastructures in urban areas and the main strategic communication points, both on the mainland and on the islands; adding a total of more than 8,500 public access points.
- In 2019, ENDESA X launched the new ENDESA X Juice-Pass app that allows you to manage electric vehicle charging directly from your mobile phone, with access to all the detailed information on the charging point, prices and access times; you can book a charge point, monitor the details of your charging in real time and access your charge history and bills.

#### Private Charging:

Additionally, ENDESA X continues to market end-to-end value proposals for the deployment of private electric vehicle charging, offering electric mobility solutions for residential, business and commercial customers, as well as customers from the public service, with the range of Juice equipment, such as the JuiceBox, JuicePole, JuicePump, etc.

- ENDESA X has developed charging infrastructures for domestic use designed for private owners of electric vehicles. The home is the main charging point, where the electric car can be recharged during long breaks, especially at night.
- For companies, ENDESA X offers a complete solution that includes everything from installation, equipment supply and associated infrastructure maintenance, to remote management of all information on the use of the charging infrastructure.
- ENDESA X has a complete proposal for the Public Service to give the best service to users, advice, installation, charging infrastructure, maintenance, etc. Everything is managed from a control centre with monitoring so that the service is always available.



# Margins of the power generation and trading segment

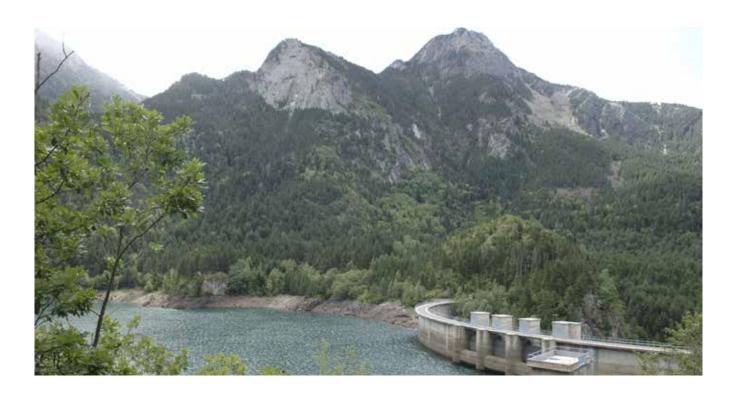
The contribution margin of the power generation and trading segment in 2019 amounted to €3.333 billion, which represents an increase of €176 million (+5.6%) compared to the previous year as a consequence, fundamentally, of the decrease in fuel consumption (–21.6%), mainly due to the lower thermal production in the period (–34.0%).

The gross operating profit (EBITDA) for the 2019 financial year stood at €1.77 billion (+9.5%) as a consequence, mainly of:

- > The 5.6% increase in contribution margin; and
- The evolution of fixed operating costs (+1.5%), mainly due to the deterioration of other materials related to mainland coal-fired power plants for an amount of €21 million (€16 million, net of tax effect).

The operating result (EBIT) for the 2019 financial year was €989 million, negative, and includes, among others:

- > The 9.5% increase in gross operating profit (EBITDA).
- > The increase of €1.73 billion in the "Amortisations and Impairment Losses" caption in the Consolidated Income Statement as a consequence, mainly, of the impairment record related to mainland coal-fired power plants and Cash Generating Units of the Non-mainland Territories for the amount of €1.77 billion and of the application of IFRS 16 "Leases" for the amount of €15 million.







### **7.** INTERNAL CONTROL SYSTEMS

## Internal control systems

### **Board of Directors**

The Board of Directors is responsible for monitoring the internal information and control systems and the Audit and Compliance Committee, in accordance with the Spanish Capital Companies Act, is responsible for monitoring the effectiveness of the company's internal control.

The Board of Directors carried out its role as the highest management body representing the Company, in accordance with the Law and its Articles of Association. The Board of Directors

tors, which has the broadest powers to manage, guide, govern and represent the Company, as a general rule entrusted the ordinary management of the Company to the delegated administrative bodies and concentrated its activity on general supervisory functions in consideration of matters of particular importance to the Company and its group.

The Board was also responsible for establishing the bases for appropriate and efficient coordination between the company and the companies belonging to the group of companies, of which the company is the controlling entity pursuant to Law, respecting in any case the autonomy of decision of its management bodies and officers in accordance with the corporate interest of the company and of each of the aforesaid societies.





Audit and Compliance Committee

The Regulations of ENDESA's Audit and Compliance Committee stipulate that the main task of the Committee shall be to ensure good corporate governance and transparency in all ENDESA's actions in the economic and financial areas, and in relation to external audit, compliance and internal audit. It is entrusted with the functions of overseeing the process of drawing up and presenting the regulatory financial information and of monitoring the effectiveness of ENDESA's internal control system and risk management systems, as well as discussing with the auditors or audit firms any significant weaknesses in the internal control system detected during the course of audit work. It is also responsible for overseeing internal audit services, ensuring their independence and effectiveness, proposing the selection, appointment, re-election and termination of the Internal Audit Service Manager, and receiving regular information on its activities and verifying that Senior Management takes into account the conclusions and recommendations of its reports. Members of the Audit and Compliance Committee are appointed on the basis of their knowledge and experience in accounting, auditing or risk management.

Transparency Committee

In 2004, the Transparency Committee was established, chaired by the Chief Executive Officer and composed of ENDESA's senior executives, including all members of the Executive Management Committee and other members of ENDESA's Management directly involved in the preparation, verification and disclosure of financial information.

The Committee's main purpose is to ensure compliance with, and the correct application of, the general financial reporting principles (confidentiality, transparency, consistency and accountability), to evaluate the facts, transactions, reports or other relevant matters disclosed, and to determine the manner and deadlines for presenting public information.

The Transparency Committee is also responsible for assessing the findings submitted to it by ENDESA's Administration, Finance and Control Department, based on the report prepared by ENDESA's Internal Control unit, on compliance with and effectiveness of internal controls for financial reporting and internal controls and procedures for public disclosure of information, formulating corrective and/or preventive actions in this regard, and reporting to the Board of Directors' Audit and Compliance Committee.

# Internal control over financial reporting

ENDESA's Administration, Finance and Control Department, in support of the Transparency Committee, carries out the following functions in relation to the internal control of Financial Reporting:

- > Proposing Financial Reporting Management Policies to the Transparency Committee, for their approval.
- Assessing and reporting to the Transparency Committee on the effectiveness of the Internal Control over Financial Reporting System, and, where appropriate, possible breaches of approved internal control policies.

# Internal control unit

ENDESA's Administration, Finance and Control Department has an Internal Control Unit, the functions of which are as follows:

- > Communicating approval of the policies and procedures for internal control over financial reporting to ENDESA's various companies and organisational areas.
- Maintaining, updating and making available to the company the internal control over financial reporting model and the documentation associated with the processes and controls.
- Defining the flows for certifying the evaluation of the effectiveness of the controls and procedures defined in the Internal Control over Financial Reporting Model.
- Overseeing the process for certifying internal controls over financial reporting and the internal controls and procedures for public disclosure of information, and preparing a periodic report on its findings with respect to the effectiveness of the system.

All matters relating to internal control over financial reporting are regulated in organisational procedure No. 5 'Internal Control over Financial Reporting', the purpose of which is to establish the operating principles and responsible bodies for the establishment and maintenance of internal controls over financial reporting, in order to ensure their reliability, and to guarantee that reports, events, transactions, or other relevant aspects are communicated internally and externally in an appropriate manner and time frame. The Internal Control over Financial Reporting System is evaluated and certified every six months.

### Codes of conduct

### Code of Ethics

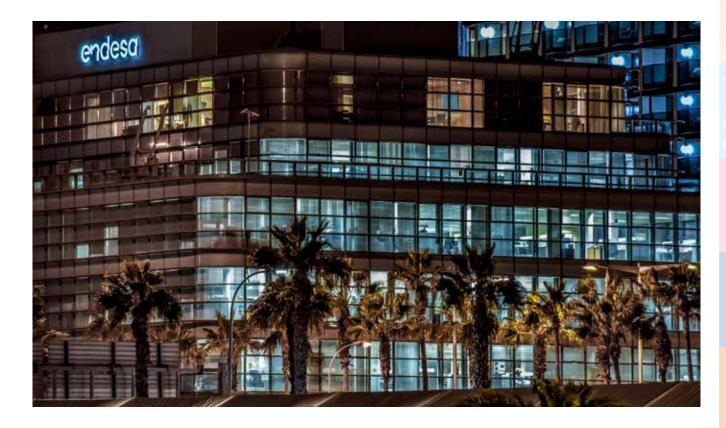
ENDESA has a Code of Ethics, approved by the Board of Directors, that sets out the ethical commitments and responsibilities by which the professionals working for ENDESA and its subsidiaries, be they Directors or employees, no matter their positions, are bound in the management of the business and corporate activities of these companies.

The Code of Ethics consists of:

- The General Principles governing relations with stakeholders and defining the reference values in ENDESA's activities.
- The Criteria of Conduct in relations with each type of stakeholder, which provide specific guidelines and standards to which ENDESA collaborators must adhere in order to comply with the general principles and to prevent the risk of unethical conduct.
- Implementation Mechanisms, which describe the organisational structure regarding the Code of Ethics, intended to ensure adequate knowledge and understanding of, and compliance with, the Code by all employees.

The principles and provisions of the ENDESA Code of Ethics must be respected and complied with by the members of the Board of Directors, the Audit and Compliance Committee and other control bodies of ENDESA and its subsidiaries, in addition to the executives, employees and collaborators linked to ENDESA by contractual relations of any type, including occasional or temporary.





The 16 principles established in the ENDESA Code of Ethics are:

- > Impartiality
- > Honesty
- > Relationships with the shareholders
- > Correct conduct in the event of possible conflicts of interest
- > Confidentiality
- > Protection of the shareholders' interests
- > Value of human resources
- > Fairness in authority
- > Integrity of the person
- > Transparency and integrity of information
- > Diligence and accuracy in the execution of tasks and contracts
- > Fair competition

- Quality of services and products
- > Responsibility toward the group
- > Correction and fairness in the management and possible renegotiation of contracts
- > Protection of the environment

### Zero tolerance to corruption plan

The Zero Tolerance to Corruption Plan approved by the Board of Directors requires all ENDESA employees to be honest, transparent and fair in the performance of their duties. The same commitments are required of its other stakeholders, i.e. individuals, groups and institutions that help ENDESA to achieve its objectives, or that are involved in the activities it carries out to achieve them.

In compliance with the tenth principle of the Global Compact, of which ENDESA is a signatory — "Businesses should work against corruption in all its forms, including extortion and bribery" — ENDESA rejects all forms of corruption, both direct and indirect, and to this end has a programme to combat it.

ethical or illegal conduct which, in their view, occurred in the performance of ENDESA's activities.

The procedure established for the use of the channel guarantees confidentiality since it is managed by an external and independent company, which handles all complaints or communications.

### Criminal risk prevention model

ENDESA's Criminal Risk Prevention Model entered into force on 1 January 2012, and is a control system designed to prevent or significantly reduce the risk of criminal offences within the company, complying with the provisions of the Spanish Criminal Code concerning the criminal liability of legal persons. The following protocols, which establish general criteria for action in different areas, form part of ENDESA's crime prevention model:

1. Protocol for action to be taken concerning conflicts of interests.

- 2. Exclusive dedication and commercial presence.
- 3. Protocol for accepting and offering of presents, gifts and favours.
- 4. Protocol for action to be taken concerning public officials and authorities.

The Code of Ethics and the Zero Tolerance to Corruption Plan are available on the company's website:

https://www.endesa.com/es/inversores/a201611-conductaeticapt.html

### Whistle-blowing channel

Since 2005, ENDESA uses an Ethics Channel or Mailbox, accessible from its website and Intranet, so that all its interest groups can report, securely and anonymously, irregular, un-

In addition to the Channel, complaints are received through other channels, which are always addressed to the Audit Department, in accordance with ENDESA's internal procedures.

The Audit Department is responsible for ensuring the correct handling of the complaints received, acting independently and exercising its own judgement in respect of the other units of the organisation. It has access to all Company documents necessary for the exercise of its functions and follows up the implementation of the recommendations contained in its audit reports. In addition, the Audit Department is a body affiliated with the Board of Directors through its Audit and Compliance Committee, which centralises and channels significant complaints and takes them to the Board.

During financial year 2019, ENDESA received, either through the Ethics Channel or through other media, a complaint relating to corruption, the investigation of which was complete when this report was prepared.

### Financial Reporting Risk Assessment

The Internal Control System for Financial Reporting is a part of the company's internal control system and consists of a complete set of processes that ensure reasonable certainty

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regarding the reliability of both internal and external financial information.

ENDESA's Internal Control Unit is the area responsible for identifying the most relevant processes, activities, risks and controls of the Internal Control System for Financial Reporting that it considers important to reasonably ensure that information disclosed externally is reliable and appropriate.

To this end, the business processes have been documented with the following basic objectives:

- > Identify critical processes directly and indirectly linked to the generation of financial information.
- Identify the risks inherent in processes that could generate material errors in financial information (typically related to integrity, validity, recording, cut-off, valuation, and presentation).

> Identify and characterise the controls established to mitigate these risks.

A control system evaluation process is carried out every six months in which each of the control managers evaluates both its design and its effectiveness. In addition, an ongoing verification process is performed by an independent expert. The results of both processes are reported to:

- a)The Board of Directors, which, in accordance with the Spanish Capital Companies Act (LSC), is responsible for monitoring internal information and control systems; and
- b)The Audit and Compliance Committee (ACC), which, in accordance with the Spanish Capital Companies Act (LSC), is responsible for monitoring the effectiveness of the Company's internal control.



# Internal control and risk management system

# General Risk Management and Control Policy

The General Risk Management and Control Policy establishes the basic principles and the general framework for the control and management of risks of all kinds that could affect the achievement of the objectives, ensuring that they are identified, analysed, evaluated, managed and controlled systematically and within the levels of risk established.

The General Risk Management and Control Policy seeks to guide and steer the set of strategic, organisational and operational actions that allow the Board of Directors of ENDE-SA, S.A. to precisely delineate the acceptable levels of risk, so that the managers of the various lines of business, staff functions and services can maximise the Company's profitability, the preservation or increase of its Equity and the certainty of level of success, preventing uncertain and future events from negatively influencing the achievement of fixed profitability objectives, its operations, sustainability, resilience or reputation on a sustained basis over time, providing an adequate level of guarantees to shareholders and safeguarding their interests, as well as those of customers and other stakeholders.

The General Risk Management and Control Policy is developed and supplemented by other risk policies specific to each of the lines of business, staff functions and services, as well as by limits that are established for optimal risk management in each of them.

The General Risk Management and Control Policy is implemented through an Internal Control and Risk Management System, which comprises an organisation, principles, a regulatory system and a risk control and management process.

The Internal Control and Risk Management System conforms to a model based, on the one hand, on the ongoing study of the risk profile, applying current best practices in the energy or benchmark sectors as regards risk management, homogeneous measurement criteria within the same type of risk, segregation of risk managers and controllers, and, on the other hand, on ensuring a link between the risk assumed and the resources necessary to operate the businesses while maintaining an appropriate balance between the risk assumed and the objectives set by the Board of Directors of ENDESA, S.A.

The risk control and management model implemented in the company is aligned with international standards following a methodology based on the 3 lines of defence model, as described in the General Risk Control and Management Policy published on the company's website. https://www.endesa.



com/es/accionistas-e-inversores/gobierno-corporativo/politicas-corporativas.html

The organisation of the Internal Control and Risk Management System is implemented through independent risk management and risk control functions that ensure adequate segregation of duties.

The General Risk Management and Control Policy defines the Internal Control and Risk Management System as an interlinked system of rules, processes, controls and information systems, where global risk is defined as the total consolidated amount of all risks to which it is exposed, taking into consideration the mitigating effects between different exposures and categories thereof, allowing the consolidation and assessment of the risk exposures of the different units of the Company, as well as the development of the corresponding management information for decision-making in terms of risk and adequate use of capital.

The risk management and control process consists of the identification, evaluation, monitoring and management over time of the various risks, and considers the main risks to which the company is exposed, both internally (by internal factors) and externally (by external factors):

- Identification: The purpose of the risk identification process is to generate the risk inventory based on events that could prevent, hinder or delay the achievement of the objectives. Identification should include risks whether their origin is under the control of the organisation or because of unmanageable external causes.
- Evaluation: The objective is to obtain the parameters that allow the measurement of the economic and reputational impact of all the risks for their subsequent prioritisation. The evaluation involves different methods tailored to risk characteristics such as scenario assessment, estimation of potential loss based on assessment of impact and probability distributions.
- > Monitoring: The objective is to monitor risks and establish management mechanisms to maintain risks within the limits set, as well as to take appropriate management actions.
- Management: The aim is to implement the measures aimed at adapting the risk levels to the optimum levels and respecting, in any case, the limits laid down.



The Risk Management and Control Policy, established and approved by the Board of Directors of ENDESA, S.A., constitutes the central element of the system from which other specific documents and policies are derived, for example, the "Policy on Management and Control of Tax Risks" or the "Criminal Compliance and Anti-Bribery Policy", which are approved by the Board of Directors of ENDESA, S.A. and in which risk and control catalogues are defined.

In addition, in view of the growing interest in the management and control of the risks to which companies are exposed and given how complicated it is becoming to identify them from a comprehensive point of view, it is important for employees to take part in this process at all levels. In this regard a risk mailbox has been created for employees to help identify market risks and come up with suggestions for measures to mitigate them, thereby complementing the existing top-down risk management and control systems and mailboxes and specific procedures for reporting breaches of ethical behaviour, criminal risks and employment risks.



# ENDESA's Criminal and Anti-Bribery Risk Prevention Model

Organic Law 5/2010 amending Organic Law 10/1995 of 23 November, on the Criminal Code, as subsequently amended by Organic Law 1/2019 of 20 February, established a list of crimes applicable to legal persons, referring to the need to establish monitoring and control measures for their prevention and detection. This legal regime was reformed by Organic Law 1/2015 of 30 March detailing the requirements for allowing legal persons to prove their diligence in the field of crime prevention and detection.

In accordance with the provisions of this Organic Law, ENDE-SA has developed certain internal rules that have satisfied the need for adequate control and management systems applied in the area of crime detection and prevention, particularly in conduct to restrict bribery.

ENDESA's Criminal and Anti-Bribery Regulatory Compliance Management System (hereafter referred to as the "Compliance System") comprises an integrated body of provisions based on the Criminal and Anti-Bribery Compliance Policy, which complies with relevant Spanish legal requirements and meets the standards expected of Organisations operating according to the highest levels of commitment in the most advanced markets.

The main activities that are carried out in ENDESA for the effective application of the Compliance System are the evaluation of the risks and the control activities and the supervision of the same, thus guaranteeing its design and operability.

The Criminal Compliance and Anti-Bribery Policy was approved by the Board of Directors on 6 November 2017 and is additional to the General Risk Control and Management Policy; it establishes the general principles of the Compliance System, which inform the content and application of all corporate internal standards, as well as the Organisation's actions.

effectiveness of the Internal Control System for Financial Reporting and the internal controls and procedures for the disclosure of information externally, formulating corrective and/ or preventive actions in this regard. The conclusions of the Transparency Committee are subsequently forwarded to the Audit and Compliance Committee (ACC).

The functions of verification, monitoring and updating of the Compliance System are performed by the Criminal Risk Monitoring Committee and, ultimately, the operation and compliance of the System is supervised by the Audit and Compliance Committee (ACC) of the Board of Directors.

See section 2.3 and 2.4 of the Fight Against Corruption and Bribery section of this document for more details.

### The Internal **Control System** for Financial Reporting

The Internal Control System for Financial Reporting is a part of the company's internal control system and consists of a complete set of processes that ensure reasonable certainty regarding the reliability of both internal and external financial information. ENDESA's Internal Control Unit is the area responsible for identifying the most relevant processes, activities, risks and controls of the Internal Control System for Financial Reporting that it considers important to reasonably ensure that information disclosed externally is reliable and appropriate.

The Transparency Committee is the ENDESA Management body that evaluates the conclusions on the compliance and

### **Risk Control and** Management

ENDESA has established a risk management and control process that allows it to obtain a complete view of all the risks to which it is exposed, taking into consideration the mitigating effects between the different exposures and categories thereof, as well as the development of the corresponding management information for decision-making in terms of risk and adequate use of capital.

The Risk Committee supervises the management and monitoring of all risks other than those of a criminal nature and those related to internal control and financial information, referring the results of its deliberations and conclusions to the Audit and Compliance Committee (ACC) of the Board of Directors of ENDESA S.A.

Risk Control is the area delegated by the Risk Committee to define the procedures and standards of the Internal Control and Risk Management System, to ensure that all the risks are homogeneously and periodically identified, characterised, quantified and properly managed in the area of responsibility that affects the entity, including off-balance sheet risks, monitoring risk exposure and the control activities implemented. To carry out its functions, Risk Control relies on other areas and committees that have specific and complementary risk control and management models and policies.





8. SUSTAINABILITY

## Commitment to sustainability

ENDESA has placed sustainability at the centre of its corporate culture, integrating it into its strategy and contributing to sustainable development based on the exchange of value creation within and outside of the company. Maintaining a leadership position and strengthening it for the future requires a balanced fulfilment of ENDESA's responsibilities in economic, social and environmental matters, based on ethical criteria.

The future commitments set out in the Sustainability Policy constitute the basis and guidelines for ENDESA's conduct in managing its business activity, and their fulfilment, which is expressly driven by the Company's Management, concerns

employees, contractors and suppliers and is evaluated by third parties. In addition, the Board of Directors, through the Audit and Compliance Committee, oversees the correct implementation of policy principles throughout the company's entire value-creation chain.

ENDESA has a sustainability management and governance system that involves all areas of the company. This ensures that ENDESA's commitment to sustainability remains strong in all decision-making processes and in the performance of its daily activities.





# Commitment to the United Nations agenda

As a key player in the construction of a new, global and sustainable energy model, ENDESA subscribes to the main international benchmarks promoted by the United Nations for sustainable management. Thus, it remains firmly committed to the Ten Principles of the Global Compact, the UN Guiding

Principles on Business and Human Rights and the 17 Sustainable Development Goals (SDGs).

This vision is shared within the ENEL Group, which has publicly committed itself to 6 SDGs and redefined its objectives for 2030.



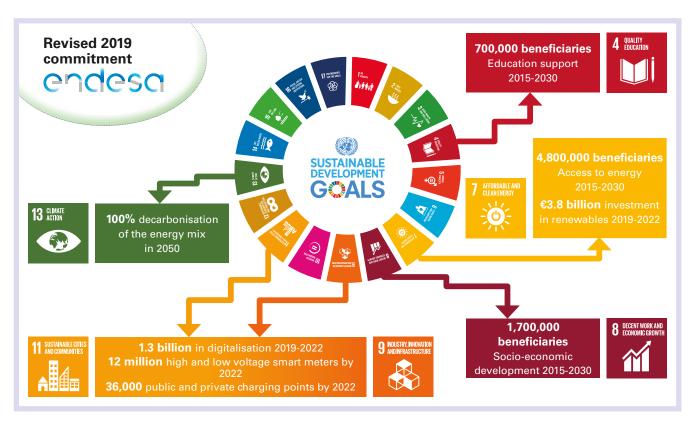
ENDESA, for its part, takes on these commitments and adapts them to the context in which it operates. Thus, since the announcement in 2016 of its specific contribution to Agenda 2030, the company has continued to make progress on its commitment to six objectives. Four of them directly affect its own business model:

- SDG 13 (Climate Action): Decarbonisation of the energy mix by 2050, setting ambitious targets for the reduction of specific CO<sub>2</sub> emissions compared to 2017 of around 70% by 2030 and 100% by 2050. In addition, it set a target of 60% emission-free production by 2020, 75% by 2030 and 100% by 2050.
- SDG 9 (Industry, Innovation and Infrastructure) and SDG 11 (Sustainable Communities and Cities): Investment of €1.3 billion in the period of validity of the 2019-2022 Strategic Plan to lead the energy future through digitalisation, installation of 12 million high and low voltage smart meters by 2022 and the Plan to deploy public infrastructure for 36,000 electric vehicle charging points (public and private) by 2022.
- > SDG 7 (Affordable and Clean Energy): As a direct contribution, we incorporate ambitious targets into both the business plan and the sustainability plan: €3.8 billion of invest-

ment in the development and management of renewable assets for the period 2019-2022 to reach approximately 60% of mainland capacity based on renewable sources by 2022, with 85% CO<sub>2</sub>-free production. As an indirect contribution, educational and training programmes on energy, accessibility and the promotion of energy efficiency are being run and will reach a total of 4.8 million beneficiaries over the period 2015-2030.

ENDESA also contributes to SDG 4 (Quality Education), having made a public commitment to reach 700,000 beneficiaries in the period 2015-2030, and to SDG 8 (Decent Work and Economic Growth) for which the company has made a public commitment to reach 1,700,000 beneficiaries in the same period through the social initiatives carried out.

These six are the highest priority SDGs for ENDESA, and therefore those on which it places the greatest emphasis, but it also acts decisively on all SDGs, on which it has been setting targets and reporting since their introduction. To this end, ENDESA's 2020-2022 Sustainability Plan sets out the roadmap for the next three years in order to contribute to the 2030 Agenda, aligning its sustainability strategy with this universal framework.



## Strategic sustainability planning

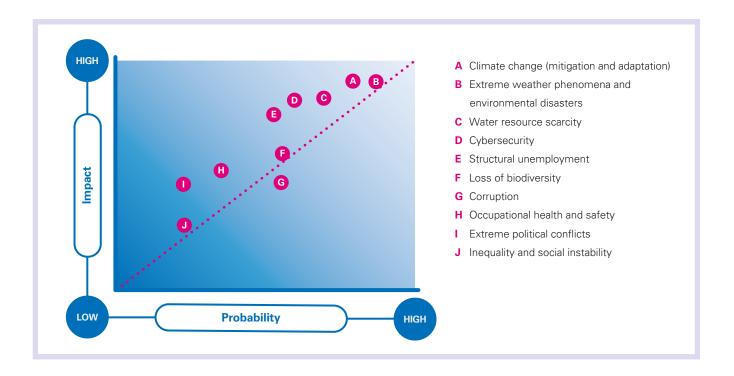
## Main sustainability risks

ENDESA is exposed to certain risks that it manages through the application of identification, measurement, control and management systems. In this sense, the different types of risk, financial and non-financial (operational, technological, legal, social, environmental, political and reputational), that the Company faces are taken into consideration. These aspects are integrated into the company's risk management and control system and are monitored by the Audit and Compliance Committee (ACC) of the Board of Directors.

In 2019, ENDESA, as it has done systematically and on an annual basis, updated the identification of emerging sustainability risks with medium and long-term impact related to some of the dimensions that make up sustainability, with the aim of analysing the impact on business and establishing the necessary measures for its control and prevention.

To this end, ENDESA has taken as its benchmark the identification of global risks developed by the World Economic Forum based on a consultation of 1,000 experts from the business, academic, civil and public sectors regarding perception of global risks over a time horizon of 10 years. This map was adjusted to ENDESA's operating context on the basis of the Company's consultations with stakeholders within the framework of the materiality study, which thus allowed it to identify the most significant sustainability risks, and the consultation with stakeholders within the Human Rights Due Diligence to identify the risks at country level. These three factors (World Economic Forum analysis, materiality study and Due Diligence risk analysis) determine both the probability and the impact of the different risks. This analysis is complemented by that of the Company's exposure to each of the risks carried out taking into account the MSCI and Sustainalytics analyses.

The resulting risk map varies slightly from the previous year since some of the macro-trends identified in previous years, such as climate change and its effects, biodiversity loss and associated environmental activism, among others, have been accentuated.



## Materiality study: process of identifying priority issues

Aware that stakeholders and their expectations form the basis of its sustainability strategy and serve to guide its business plan in a way that responds to those needs, reducing risks and taking advantage of the business opportunities that are generated by satisfying these expectations, ENDESA is committed to encouraging continuous dialogue with its different stakeholders, which it reviews, identifies and catalogues, on an annual basis, at both the global level and in its local operations.

ENDESA is committed to maintaining continuous dialogue with stakeholders, opening itself further to participation and collaboration, in order to successfully address future challenges. All of this helps to improve risk and opportunity management, identify trends and relevant issues early, enhance credibility and confidence by enabling synergies, facilitate decision-making processes and create opportunities for improvement and business.

In 2019, ENDESA carried out a materiality study that served as a basis for defining the priorities of its 2020-2022 Sustainability Plan and for this it carried out the following analyses and tasks:

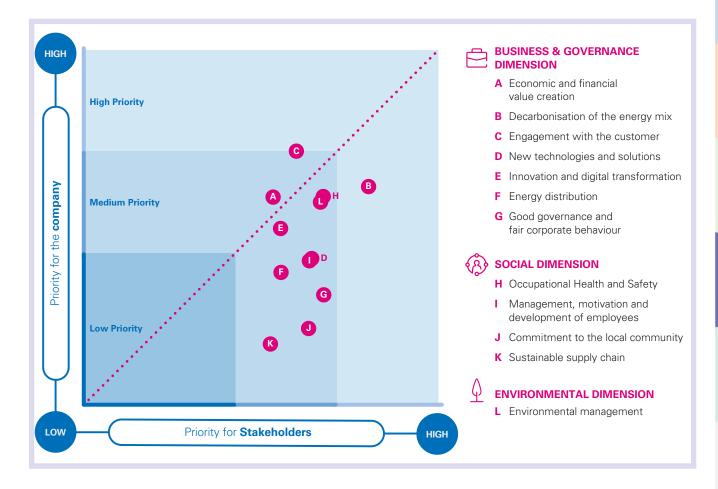
- Analysis of trends in energy and sustainability with possible current or future effect on the Company's activity.
- Analysis of investors, proxy advisors and investment analysts on sustainability issues.
- > Review of the assigned relevance and maturity of the issues in the management of the main companies in the electricity sector.
- > Analysis of media and social networks.
- > Online consultations and in-depth telephone interviews with different external stakeholders.



 Focus group with employees who are key to managing the Company's sustainability issues.

- In-depth interviews with ENDESA's Senior Management.
- Analysis of existing reports incorporating issues related to the sustainability of the Company: corporate reputation report, employee climate survey, customer satisfaction survey and other studies conducted in previous years.

A combined analysis of the relevance within the business strategy and the priority for stakeholders for each of the issues, results in the following matrix:



In order to identify the issues on which ENDESA should focus in the coming years so as to ensure that it creates shared value and provides as much benefit as possible to society and its shareholders in the long term, the Company combines the results of the above analysis with that of the business model,

the sector and the stakeholder expectations. The following areas of action are identified as a result:

> Sector response to climate change: international commitments and technological developments are driving the push towards renewable energies and the gradual reduc-

tion in the weight of fossil fuel generation in the energy mix.

- > Value creation models for the new energy scenario: increased competition, technological development and new consumer demands will likely lead energy companies to transform their business model into one more focused on distribution (promoting digitalisation) and marketing (developing and diversifying the service offering, particularly in respect of renewables, energy efficiency, mobility and digital services).
- > Strengthening social legitimacy: the energy sector has high public exposure, driven by greater social awareness in this regard. It is therefore essential to continue working on improving social perception in order to continue competing in the new energy scenario and on implementing the shared value creation model at all stages of the life cycle of business operations.
- > Responsible business management: increases the importance of environmental, social and governance issues in determining a responsible business. These include issues associated with human rights, human capital development, occupational health and safety, environmental management, cybersecurity and the extension of sustainability to the supply chain.

In short, according to the stakeholders consulted, the company's value creation must be based on a set of requirements necessary to operate (such as corporate governance, environmental management, health and safety, human rights, the supply chain or community relationships) and incorporate a set of elements aimed at generating future value for the business (such as customer focus, new business solutions, digitalisation and operational efficiency). All of this must be done on the basis of the promotion of an emissions-free energy model by 2050 and through the continuing commitment to the development of highly qualified human capital to lead the energy transition.

# Compliance with the 2019-2021 Sustainability Plan

The 2019-2021 Sustainability Plan has been driven by innovation and established four strategic priorities: growth through low-carbon technologies and services; operational improvement for better service, involvement and inclusion of local communities; involvement and inclusion of our people, and five basic pillars for responsible management: Occupational Health and Safety, Good Governance and Ethical Conduct, Environmental Sustainability, Sustainable Supply Chain and Economic Value Creation.

ENDESA has responded to each of the strategic priorities and pillars defined in the 2019-2021 Sustainability Plan through more than 100 quantitative management objectives, achieving global compliance of more than 92%. For more information see the 2019 Sustainability Report.

### ENDESA's new 2020-2022 Sustainability Plan

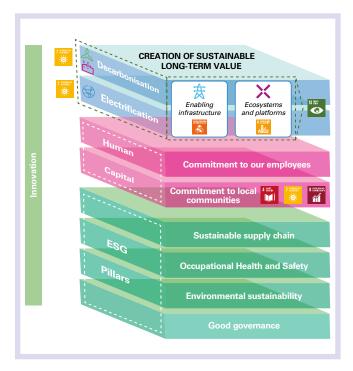
Continuing with its priority of integrating sustainability into business management and into decision-making processes, ENDESA seeks alignment between the business strategy and the sustainability strategy, in such a way that both are oriented toward achieving the same objective and thus generate economic value for the Company in the short and long term. On 27 November 2019, ENDESA presented the update to the Strategic Plan for the period 2020-2022.

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When drawing up its new 2020-2022 Sustainability Plan, ENDESA carried out a process of strategic analysis, consultation and reflection based on the achievements and opportunities for improvement identified in the previous plan and allowing the identification of priorities for action for the next three years.

The new 2020-2022 Sustainability Plan, like the previous one, also sets out ENDESA's contribution to the United Nations Sustainable Development Goals. This framework represents the basis of the Sustainability Plan and acts as a benchmark to establish a sustainability strategy that generates long-term value for both the Company and the community within which it operates.

#### Structure of ENDESA's new 2020-2022 Sustainability Plan



ENDESA's new 2020-2022 Sustainability Plan seeks to promote the creation of sustainable long-term value, establishing the following strategic priorities and defining more than 100 quantitative management objectives, the details of which are reflected in the 2019 Sustainability Report:

- Decarbonisation: The new Sustainability Plan, aligned with the Strategic Plan, maintains as a priority the decarbonisation of the energy mix to lead the transformation of the energy model, with the ultimate goal of being a CO<sub>2</sub> emissions-free company by 2050 with a roadmap setting ambitious intermediate targets, such as a 70% reduction in specific emissions in 2030 compared to 2017, aligning its goals with science. All this will be possible by investing in renewable energies and ending the use of technologies with higher levels of emissions. In addition, through the new circular economy approach, ENDESA seeks to instil the low-carbon culture to its people, develop lines of action to generate a second life for its assets and promote a more sustainable supply chain.
- **Electrification:** Another strategic line of the 2020-2022 Sustainability Plan is the electrification of demand. To this end, ENDESA is committed to active customer management through innovative products and services, the development of efficient and intelligent networks and the development of new products, ecosystems and platforms, paying particular attention to customer relations and the quality of service provided. Along these lines, the new Sustainability Plan includes some infrastructure objectives for customers such as the 36,000 charging points, for private and public use, for electric vehicles and the promotion of the virtual assistant in the telephone service.

To achieve this, lines of action are included aimed at promoting efficiency and quality in the management of assets, as well as promoting the sustainable mobility of employees on their journeys for work and personal reasons. In addition, through an open innovation approach, the Sustainability Plan includes lines of action aimed at promoting the attraction of external talent and exploring new avenues of collaboration for the development of new business solutions that promote sustainability. Digitalisation is fundamental to achieving a sustainable energy model, hence the investment objectives set out in this 2020-2022 Sustainability Plan. It also pays special attention to cybersecurity in order to minimise the risks associated with digital transformation.

#### Human capital

- > Commitment to our employees: In order to fulfil all its targets and face the challenges it has set itself, ENDESA needs its most important asset, its people. The new Sustainability Plan therefore includes objectives that will further promote the level of employee satisfaction, diversity and inclusion, talent development and work/life balance. But in addition, this new Sustainability Plan includes objectives aimed at supporting people affected by the energy transition that ENDESA has set out to lead.
- Commitment to local communities: Through the value-sharing model, ENDESA aims to integrate sustainability into the entire value chain. In the same way that it consults its various stakeholders in its materiality study prior to preparing the Plan, the company tries to combine its interests with the priorities and needs of local communities. The Sustainability Plan therefore includes objectives aimed at promoting access to energy, socio-economic development and education, as fundamental axes of its commitment.
- **ESG** pillars
- > Sustainable Supply Chain: The new Sustainability Plan sets out lines of action aimed at increasing supply chain control and monitoring systems according to environmental, safety and human rights criteria, as well as incorporating sustainability criteria into competitive bidding processes with the various suppliers.
- > Occupational Health and Safety: In order to maintain the performance attributed to ENDESA in the field of occupational health and safety by its various stakeholders and with the aim of maintaining a zero accident rate and the well-being of everyone involved directly or indirectly in the Company's activities, the Sustainability Plan sets objectives aimed at reducing the accident rate among employees and contractors, as well as promoting adequate checks on safety, by means of inspections, and on health, through the carrying out of appropriate medical examinations.

- > Environmental Sustainability: ENDESA continues with the objective of reducing its environmental footprint and for this purpose, the new 2020-2022 Sustainability Plan includes objectives for reducing the main environmental indicators, as well as for promoting the conservation of biodiversity by striving for excellence in environmental management. In addition, in fleet management, targets and alternative solutions are presented in order to continue reducing emissions.
- Sood Governance and Ethical Conduct: The new Sustainability Plan includes the objectives necessary to maintain a high level of excellence in fulfilling the Company's ethical commitments and responsibilities, the implementation of good practices in corporate governance and the promotion of transparency in relations and communications with all its stakeholders.

## Creation of long-term sustainable value

By integrating sustainability into the company's strategy and maintaining a commitment to the creation of long-term sustainable value, ENDESA puts significant effort into carrying out its various Sustainability Plans, with the result being the high level of compliance achieved in the 2019 Plan through the different strategic lines:

#### Decarbonisation

Always up to date with the intensive international negotiations, ENDESA aligns its business strategy with the global commitments and objectives currently being raised in the fight against climate change. This means ENDESA remains committed to contributing to a just transition and to the creation of sustainable and decent jobs. A greenhouse gas-neutral

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economic system in the second half of the current century, as envisaged in the Paris Agreement, will require major technological, social and economic transformations. That is why there must be a fair transition, in which jobs are sustainable and decent, greenhouse gas emissions can be neutral, poverty is eliminated and communities are prosperous and resilient.

ENDESA is fully convinced that decarbonisation is a real opportunity for society as a whole, but it is essential that the transition be understood by all as a benefit, and not as a change that will be beneficial to some and detrimental to others. In September 2019, ENDESA demonstrated its commitment in this regard by signing up to the United Nations commitment to a just transition under the "Climate Action for Jobs" initiative.

ENDESA promotes a reporting model based on transparency, aimed at demonstrating to stakeholders that its commitment and ambition in the fight against climate change is firm and realistic. ENEL, parent of ENDESA, made a public commitment in June 2017 to adopt the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). As a result of this commitment, and given the importance that this initiative has taken on, to the point of becoming a benchmark for investors, institutions and society in general, ENDESA follows the core elements structure used in the final report of recommendations in order to more clearly identify how it is responding satisfactorily to the above recommendations of the TCFD. For more information, see the decarbonisation section in the 2019 Sustainability Report.

Drawing on the activities and commitments undertaken in 2019, ENDESA defined its new 2020-2022 Strategic Plan, with which it aims to become a leader in the global transformation process and make a decisive contribution to the collective goal of reducing global warming to 1.5°C by fulfilling its various strategic pillars, aware that the road to an efficient and sustainable energy model will be possible thanks to a greater presence of renewables in the generation mix, and the electrification of demand.

For more information see the 2019 Sustainability Report.

#### Operational efficiency

To ensure that its customers receive the correct energy supply, ENDESA's Distribution Network infrastructures are planned and operated in such a way that they are continually adapted to the capacity demanded by existing customers, to network expansions requested by new customers and to due attention to regulatory actions, legal actions, and actions that are subject to agreements.

ENDESA's own facilities that it has for its customers meet all legal requirements and for each of them the mandatory revisions are planned with the frequency that applies in each case: weekly, monthly, quarterly, annually, etc.

This effort is rewarded with the OHSAS certification to our Health and Safety Management System for the sale, installation and maintenance of products and services related to the supply of electrical power, thermal installations, gas and/or sanitary hot water, installations for the recharge of electric vehicles, maintenance and repair of face-to-face technical services linked to the supply of electricity and gas, and the sale of energy products and value-added services to customers.

For ENDESA, excellence in customer service is the main value in the relationship with its customers, always seeking maximum efficiency in the operation of its customer service channels, tools and platforms through continuous innovation and improvement processes.

ENDESA has a Customer Service Plan of Excellence, in order to offer its customers the best possible service, the objective of which is to improve the main indicators of customer satisfaction year after year.

This plan focused its activities in 2019, among others, on the following aspects:

- > Management of dissatisfaction in all areas of measurement in the area of Commercial Quality.
- Launch of the Universal Measurement of Perceived Quality Project.

- > Continuous improvement of customer perceived quality in > Continued improvement in customer satisfaction in the digital channels; web and app.
- Improvement of data quality.
- > Acting on the two levers (deadlines and timescales) with the greatest impact on the satisfaction of corporate customers with complaints.
- RyN claims: Improve customer perception and increase first-time resolution.

In order to ensure compliance with the improvements identified in the Plan, the key indicators are monitored in order to verify the impact on the improvement of ENDESA's commercial quality. Among the most significant results of the Plan in 2019, the following stood out:

- non-mass market with the management of claims in relation to sales (14%).
- Continued improvement in satisfaction with the ENDESA Clientes website during the period (7.22; 1% above the 2018 valuation).
- Significant improvement in satisfaction with the service offered at ENDESA supply points (8.79; 3% above 2018 valuation).

ENDESA is continually carrying out communication actions to raise awareness of energy efficiency. The most notable are:

A free information and advice service that allows customers to control and manage electricity consumption in their homes, with the help of a digital and easily customisable service. Customers have access to detailed information that helps them to understand their power consumption, comparing it with households with similar consumption patterns (in their neighbourhood, municipality and province), and personalised tips and tools that guide them on how to reduce the amount of their bills. These help them to become more aware of their energy consumption habits and to understand how they can become more efficient, thereby being able to reduce their electricity bills.



A free online advice service exclusively for small businesses. Through the Online Energy Efficiency Diagnostics service website, a small business can assess its energy efficiency and receive improvement measures to optimise the consumption of its premises and thus reduce



Invoice tips: space reserved on the front of the invoice to provide advice to customers on how to save energy and protect premises.

Savings advice at www.endesaclientes.com

Specific communications to customers in the first year of their contract (information brochures, guides, etc.).

For more information see the 2019 Sustainability Report.

#### Our people

ENDESA has continued to make progress in its digital transformation process with the aim of adapting its value proposition to the new digital customer and successfully implementing the latest technologies. ENDESA began the implementation of an *agile* organisational model with which each person is to be held responsible for the Company's objectives and achieving more efficient product development processes. This work philosophy, with a more cross-cutting perspective and management, seeks to increase the commitment of professionals to the Company and to allow more collaborative and flexible working environments, moving towards flatter and less hierarchical structures.

ENDESA is committed to talent development and personal and professional growth as part of its business strategy focused on the sustainability of human capital. In this sense, in 2019 various professional development activities, tailored to the specific needs of each business, were carried out. Highlights include the workshops aimed at people managers, for the improvement of people leadership skills ("Coach Manager" and "Coach Manager +" courses), coaching actions (both team and individuals), mentoring actions and consultancy tailored to the specific requirements demanded by each business.

ENDESA is committed to encouraging the professional and personal development of its personnel through continuous training, aligned with the Company's strategic objectives, in all areas of activity, so that they contribute to the Company's excellence.

ENDESA continually seeks to identify and develop people's potential so that their performance can contribute to making the company a benchmark in the sector. In addition, it encourages training, teamwork, the sharing of knowledge, generating a work environment that rewards dialogue, creativity and the capacity to take initiative.

ENDESA is firmly committed to compliance with the legislation in force in relation to each and every area in which it operates. This involves the inclusion of numerous training actions, including those relating to occupational health and safety, prevention of criminal risks, combating corruption, respect for human rights, sustainability and the environment.

ENDESA's remuneration policy is in line with the recommendations of national and international regulations on Corporate Governance. Its main objective is to retain, attract and motivate the best professionals, ensuring that internal equality and external competition are maintained, and establishing remuneration according to best market practices.

In 2019, a detailed study was carried out on the salaries of employees and the differences between men and women, and two types of indicators, the average and the median, were analysed in order to reach a deeper understanding of their causes. For more information see the 2019 Sustainability Report.

### Responsible relations with communities

ENDESA's commitment to the development of the communities in which it operates is part of the Company's Creating Shared Value Policy (CSV), which seeks to incorporate Sustainability into the Company's strategy, increasing its competitive advantages by offering a perspective that combines the company's objectives with the priorities of stakeholders. Its aim is to legitimise the business and strengthen its sustainability, becoming rooted in the communities and promoting progress in the local environment where it operates.

This model allows the orderly and effective incorporation of the social and environmental variable in the Company's decision making and offers value that distinguishes it positively from other operators in the sector, by sustainably maximising the contribution to the environment, since it combines the

company's objectives with the priorities and needs of the community in which it operates.

CSV support plans have been implemented in all of the new wind and solar farm construction projects that have covered the power awarded at auctions since 2017, in all of the thermal and renewable generation facilities in operation with different degrees of progress, and in the decarbonisation projects. The progressive implementation of the CSV model is foreseen in all the Company's businesses and throughout the value chain.

In 2019, and according to LBG methodology, ENDESA contributed €12.5 million in social investment to the communities in the environments in which it operates, of which €9.4 million in cash or in-kind contributions.

In 2019, the number of direct beneficiaries of the 203 social development projects carried out by ENDESA amounted to around 1,070,620, of which more than 423,000 (40%) correspond to initiatives to facilitate access to energy, more than 133,000 (12%) to employability and socio-economic development projects, more than 73,000 (7%) were beneficiaries of education projects and around 441,000 (41%) were beneficiaries of local community support initiatives.

In addition, ENDESA contributes to the commitments set with respect to the United Nations Sustainable Development Goals for the period 2015-2030:

- > 1.6 million beneficiaries since 2015, in energy access projects, the target being 4.8 million by 2030.
- > 0.5 million beneficiaries since 2015, in socio-economic development activities, the target being 1.7 million by 2030.
- > 0.19 million beneficiaries since 2015, in actions to promote education, the target being 0.7 million by 2030.

For more information see the *Responsible relations with* communities section of ENDESA's 2019 Sustainability Report.



#### Sustainability Projects

#### Energy access projects

ENDESA is committed to the development and well-being of society, which cannot occur without access to a basic commodity such as energy. In this sense, the company promotes initiatives, aligned with its core business, that minimise economic barriers to vulnerable groups, provide training and education in the field of energy, ensure technological or infrastructure accessibility, and promote energy efficiency and raise awareness of its use.

In 2019, and according to LBG methodology, ENDESA has invested around €4.7 million in social projects in this area, with the management of 52 initiatives that have benefited more than 423,000 people. The most noteworthy are:

Agreements signed against energy poverty. ENDESA is aware of the serious problem of energy poverty in many

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Spanish households, and has, since 2015, addressed a course of action to respond to this social issue. Indeed, the Company has pioneered the signing of agreements with town halls, councils, autonomous communities and public bodies to guarantee supply to vulnerable families, accredited by social services and in a situation of non-payment. In 2019, the number of agreements in force was 272, as in 2018. Of these, it should be noted that 6 correspond to Autonomous Communities and 5 to Federations of Municipalities. As a result, in 2019, an estimated 36,723 families benefited, corresponding to over 110,000 people.

Energy Volunteering: A project started in 2015, promoted by ENDESA and the ENDESA Foundation, in collaboration with the Red Cross and Ecodes and aimed at households in a situation of energy poverty, with two levels of action: Recommendations to families for optimising their electric bill and lowering their energy consumption, including distribution of DIY efficiency kits and identification of risk situations in the electrical installations of the most vulnerable households, which are subsequently corrected by certified installers.

Within the scope of the programme (14 territories), 4 sites were included in which it was intended to strengthen the relationship of 4 thermal generation plants with the community through CSV interventions. The 2018/2019 edition closed with 2,410 beneficiary families, of which 772 were dealt with in 2019. A new edition of the project has now been launched and will be developed in 2020.

Employability and job creation in the energy sector: Likewise, the "Access to energy" category provides for employability and job creation in the energy sector. In 2019, around €643,000 was invested in 8 projects of this type that benefited 734 people, of which it is estimated that, on average, more than 29% find work. It is worth highlighting the renewable energy programmes that have been integrated into the CSV plans of new parks under construction. These programmes aim to promote the hiring of local labour, to promote employment and to create an economic fabric in the areas surrounding the new parks by improving the employability of those with some technical training living in those areas. In 2019, 11 renewable energy courses were carried out, in which the

183 participants received training in the operation and maintenance of solar and wind farms.

### Community socio-economic development projects

This area encompasses non-energy-related projects that contribute to job creation, infrastructure development, skills transfer and training, and support for local business activities.

In 2019, the company invested approximately €2.5 million according to LBG methodology in this type of initiative, representing 20% of the total investment, with the management of 48 projects that benefited more than 133,000 people. Some examples:

Candelaria Train Yourself Employment: A Candelaria industry employment programme, within the plant's CSV plan. In May 2019, the Council of Candelaria and ENDESA, together with the Spanish Red Cross, renewed the agreement for the socio-labour integration of residents in the municipality. The programme focuses on training in all areas that allow participants to meet the requirements and minimum qualifications necessary to be able to work in industrial facilities, thereby improving their positioning and participation in the jobs market. The project is currently being managed and consolidated results are expected for 2020.

You know more if you share what you know: In collaboration with the Randstad Foundation, this corporate volunteering programme offers employees the opportunity to improve the social and work integration of persons with disabilities and at risk of exclusion in the job-seeking process. The skills, knowledge and experience of ENDESA employees are maximised through a training programme in which the volunteers themselves are the trainers. In the 2019 edition, 12 volunteers participated in Barcelona, Madrid, Seville, Las Palmas and Valencia, giving 54 workshops and training 279 people.

#### **Education projects**

ENDESA is committed to promoting access to inclusive and quality education, in line with the United Nations' fourth sustainable development goal, to which the company adheres.

In 2019 and according to the LBG methodology, the company invested more than €1.8 million in this type of project, representing 15% of social investment with the management of 28 actions that have benefited more than 73,000 people. Notable examples include:

**ENDESA Red Chair:** In collaboration with the University of Seville, the University of the Balearic Islands, the University of Las Palmas and the Polytechnic University of Catalonia, this initiative covers different types of activities that serve as a bridge between the academic and business spheres through the holding of seminars, conferences, final-year projects and doctoral theses, as well as research in the electrical sector.

**Orienta-T programme:** ENDESA has collaborated for a further year in the development of an educational programme for the promotion of *STEM* studies (science, technology, engineering and mathematics) among young girls. Aimed at 3rd year secondary students (aged 14 to 16) and secondary school teachers, this initiative aims to raise awareness among young people of employment opportunities in *STEM* careers and to promote the leadership role of women in this field.

In 2019, 1,228 students from 22 educational centres across 11 Spanish provinces (A Coruña, Almeria, Madrid, Barcelona, Lérida, Zaragoza, Valencia, Seville, Palma de Mallorca, Huelva and Tarragona) participated in the programme. In addition, 48 ENDESA volunteers were involved and collaborated through lectures in school classrooms and at events held nationally.

**ENDESA RetoTech Foundation:** Public-private partnership between the ENDESA Foundation and the Education Ministries of the Autonomous Communities of Madrid, Aragón and Andalusia, whose aim is to promote educational innovation through technological entrepreneurship in schools. During

the 2018/2019 school year, 5,400 students were trained and 360 teachers from 90 schools (75 from Madrid and 15 from Aragón) collaborated.

### Projects to support local communities

ENDESA supports local communities through various types of projects aimed at improving the well-being of individuals and communities, maintaining their cultural identity, preserving their heritage, improving the environment and local biodiversity, promoting sport, encouraging healthy habits and providing support for meeting basic needs.

When carrying out these actions, ENDESA focuses on the knowledge and awareness of each local reality and collaborates with the main social organisations in the area in which it operates, based on territorial units. This pillar of action has had an investment of 28% of the budget according to LBG, which corresponds to almost €3.5 million, 75 projects managed and almost 441,000 beneficiaries. Examples include:

Campaigns for collecting resources and helping disadvantaged groups: ENDESA has collaborated with various NGOs to collect and/or donate resources to help disadvantaged people, through different initiatives. In 2019, a new food collection campaign was held in the Canary Islands for vulnerable families, with 26 volunteers participating. Some 2,977 kg of non-perishable food was collected and donated to Food Banks, Social Kitchens, Caritas delegations and Social Affairs departments in various municipalities of the Islands.

Partnerships with various NGOs and foundations to alleviate precarious situations of vulnerable groups: ENDESA has collaborated with several initiatives to assist these institutions, notably the contribution to the NGO Maghreb Secour in Tangier (Morocco), which offers solutions to combat social exclusion through education and facilities suitable for children in vulnerable situations, or the Nazaret Foundation in the Balearic Islands which welcomes children from families who cannot meet their basic needs.

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#### Projects to protect the environment and biodiversity:

These include voluntary projects by the company to improve awareness, conservation, research, recycling, regeneration and improvement of the environment in general and of biodiversity in particular in order to conserve and improve the community environment. In 2019 ENDESA allocated 11% of its total social investment to these projects.

For more information see the Responsible relations with communities section of ENDESA's 2019 Sustainability Report.

#### Innovation

ENDESA has a strong commitment to innovation. The Company considers it a strategic element in addressing the challenges of all areas of the company, which means it must form part of all its activities. This is why ENDESA develops projects, invests resources and ultimately takes the initiative in this area from all its lines of business. In 2019, ENDESA invested €19.44 million in innovation projects developed by the different lines of business.

ENDESA has an open innovation model in order to find quality ideas in the development of innovative solutions capable of transforming the current energy model. Open innovation is a new relationship model for companies with external key players such as universities, start-ups, research centres, or other companies in the same or different sectors, that promotes partnership and the exchange of knowledge.

ENDESA is highly interested in working with entrepreneurs and start-ups due to their capacity for ground-breaking innovation, their use of technology, their expertise and, above all, their agility in developing and bringing products and services to market in the shortest possible time.

For more information see the 2019 Sustainability Report.

#### Digitalisation and Cybersecurity

The digital transformation of a company is the process by which it is transformed into an organisation fully in tune with the digital ecosystem, with a smart and streamlined customer focus. It is a process that requires significant change management in order to successfully address the challenge of incorporating new digital technologies. These new technologies essentially allow the interconnection between people and objects, and facilitate new access to both traditional and newly created products and services.

ENDESA is very aware of this reality and the opportunities that it presents and therefore made digital transformation a key part of its 2019-2021 sustainability plan, investing more than €352 million in 2019. These strategic lines of action are combined with ENDESA's strong commitment to the pursuit of continuous efficiency through the digitalisation of its businesses.

ENDESA puts digitalisation at the heart of its value chain, With generation, distribution, marketing and our people as key drivers for improving efficiency. The highlights and the investments undertaken this year were as follows:

- > In Generation, predictive diagnosis, digital transformation of the worker, and control system response.
- > In Distribution, process digitalisation and systems integration, data-based networks (quality plan, loss reduction, remote control), and smart meters.
- In Marketing, advanced analysis, new platforms (new CRM), channel digitalisation (electronic billing, etc.), new digital billing platform.
- > ENDESA X (new businesses), digital platform development.

ENDESA is aware that the ways of working and interacting within companies are also changing. The company has therefore decided to promote the agile methodology to support

current transformations. This new way of working, which originated in the Information Technology areas and is beginning to extend to other areas of the company, proposes a focused approach to the objective of delivering to the customer, in a short time and quite frequently, combining methodological thoroughness with adaptation to the different needs of the customer and the context in the development of a product or service. For more information see the *2019 Sustainability Report*.

Integrity and ethical conduct form one of the basic pillars of ENDESA's sustainability strategy. ENDESA's 2019-2021 Sustainability Plan therefore included specific objectives aimed at maintaining a high level of excellence in this area, reaching a global compliance level of 100%.

ENDESA makes an Ethical Channel available to all its stake-holders, accessible via its website (www.endesa.com) and on its Intranet, so that they can communicate, safely and anonymously, any irregular, unethical or illegal conduct which, in their view, occurs in the performance of the Company's activities. For more information see the 2019 Sustainability Report.

#### **Pillars**

### Good Governance and Ethical Conduct

ENDESA is fully committed to compliance with ethical standards and principles, as well as with existing legislation, both internally and in its external relations.

To this end, the company has an Code of Ethics and a Zero Tolerance to Corruption Plan, which represent its pillars of ethical culture and integrity. These documents require directors, managers and employees to carry out their activities and relations with stakeholders in an honest manner.

ENDESA has a Criminal Risk Prevention and Anti-Bribery Model, which provides the company with a control system aimed at preventing or significantly reducing the risk of crime within its business activity, in compliance with the provisions of the Spanish Criminal Code regarding criminal liability of legal entities, a set of rules introduced in the Spanish legal system in 2010.

The Model was revised in 2019 and the certifications obtained for it in 2017 — for its compliance with the Standards UNE 19601:2017 Criminal Compliance Management Systems and UNE-ISO 37001 Anti-Bribery Management Systems — were maintained.

## Occupational Health and Safety

ENDESA considers occupational health and safety to be a priority objective and a fundamental value to be preserved at all times for all those who work for the Company, whether they are ENDESA staff or work for collaborating companies.

To ensure that operations are carried out safely, ENDESA has implemented a safety inspection plan covering all levels of the company. These inspections are carried out in part by ENDESA's own staff and in part by staff of collaborating companies who have previously been trained in ENDESA's work procedures as well as in the actions or behaviours that we consider to be unacceptable from the point of view of risk prevention.

All of ENDESA's centres are OHSAS 18001 certified, the internationally accepted standard that defines the requirements for the establishment, implementation and operation of an effective Health and Safety Management System. In addition, it is compatible with management systems standards such as ISO 9001 and ISO 14001, which will facilitate their integration with quality and environmental management systems. For more information see the *2019 Sustainability Report*.



## Environmental sustainability

Sustainable development is an essential pillar of ENDESA's strategy, with environmental protection one of its most important commitments. This attitude is a positive and distinguishing feature for the company, since it is a fundamental principle of behaviour that is expressly reflected in its business values.

This commitment aims to minimise the impact of ENDESA's activities on the natural environment in which it operates. Essentially, the focus is on issues related to combating climate change, adequate waste management, protecting biodiversity, minimising emissions to the atmosphere and discharges, and managing contaminated soils and other potential negative impacts.

Furthermore, ENDESA's environmental management aims at the sustainable use of natural and energy resources, with a commitment to the protection of biodiversity and ecosystems in the environments where it operates in order to promote the natural capital of those resources.

The assessment of the environmental risks associated with the performance of the company's activities and the environmental certifications granted by external bodies help to ensure excellence in ENDESA's environmental management, and demonstrate that it is integrated and aligned with its corporate strategy.

ENDESA therefore managed to reduce its direct environmental footprint in 2019 by 37% compared to 2018, by meeting its specific emission reduction targets, among others.

ENDESA is investing heavily to achieve excellence in environmental management. ENDESA's investments in environmental activities during 2019 led to a 7.7% increase in accumulated investments compared to 2018.

ENDESA is committed to achieving excellence in the environmental management of its business activity through the value chain. Hence, its 2019-2021 Sustainability Plan established the objective of maintaining 100% of its generation and distribution facilities certified for International Standard ISO 14001. This objective, which was fully met in 2019, is maintained in the new 2020-2022 Sustainability Plan.

Comprehensive water management is one of ENDESA's major concerns. The main lines of action in this area are the improvement of efficiency in consumption, water quality through the control of discharges and wastewater, and the management of reservoirs, evaluating their ecological potential for hosting avifauna, the possibilities of control of invasive species and avoiding the existence of dry stretches in regulated rivers.

During 2019, 161,224 m³ of wastewater was reused in processes, representing 0.711% of the total fresh water collected. 99% of the water collected by ENDESA for use in its facilities is returned to the environment so that it can be reused.

ENDESA has environmental management systems that include specific operational procedures to manage the waste generated in all its activities, which are reviewed regularly so as to be able to identify and carry out improvements. ENDESA manages its waste according to the waste hierarchy (prevention, preparation for reuse, recycling, other types of recovery, including energy, and finally disposal), always starting from prevention, and when that is not possible, prioritising recovery and recycling treatments for the waste it generates, especially inert waste, as well as the treatment for reuse of those hazardous wastes that allow it, e.g. used oils or cleaning solvents.

A significant proportion of the total waste produced at ENDE-SA in 2019 was managed at external facilities, 90% of the total non-hazardous waste and 68% of the hazardous waste in Spain and Portugal.

The ENDESA Biodiversity Conservation Plan provides a structure that makes it possible firstly, and subject to criteria of scientific, social and applied interest, to select and assess all initiatives received, both internal and external, in terms of biodiversity conservation. Secondly, each initiative is then cate-



gorised and classified within a matrix according to the scope of application (spaces and species) and the scope of action (installations, areas of influence, research projects, socio-environmental or emblematic projects). Lastly, it is entered on a database for monitoring until the end of the project.

By the end of 2019, the Biodiversity Conservation Plan had a total of 26 actions under way, with the following balance: 21 started in previous years (with 5 of them ending in 2019 and 16 ongoing) and 5 further actions started in 2019. The Plan's actions were undertaken across almost all of Spain and Portugal and covered most of ENDESA's business lines; Generation accounted for 38% of the Plan's actions, Distribution for 35% and the Corporate area for 27%.

For more information see the 2019 Sustainability Report.

#### Supply chain

All ENDESA contracts include specific clauses in their General Conditions regarding the commitment of other parties to human rights, the safety of people, the environment and corruption.

In order to promote responsible management in the supply chain, ENDESA has an integrated procurement process, which requires suppliers to be rated following sustainability criteria (environmental, social, ethical, integrity, human rights) in addition to technical and economic criteria, before the tender process and contract formalisation. Finally, once the service



has been provided, their level of compliance and performance
in that service is assessed.

Therefore, as part of the qualification process, to access the
ENDESA provider register, the provider must undergo a specific and mandatory assessment of environmental, health and

ENDESA has established a supplier qualification system that allows for a careful selection and evaluation of companies wishing to participate in procurement procedures through the assessment of technical, economic, financial, legal, environmental, safety, human rights and ethics, and good repute requirements, in order to ensure the appropriate level of quality and reliability when awarding contracts in the energy sector.

ENDESA aims to select the best contractors in terms of

health and safety, environment, and human rights. To this end, in September 2016, group Global Purchasing adopted a "Global Assessment Model for Sustainability Requirements", identifying sustainability risk factors in the supply chain through the mapping of the risk level of the various groups of goods: it defines a precise operating model that will be applied globally to assess whether contractors of works, services and supplies who wish to qualify for registration or to renew their qualification meet the sustainability requirements. This Operation Note provides several control categories: Health and Safety, Environment, Human Rights. All of these matters relate to quality standards, such as the possession of OHSAS 18001 or ISO 14001 certification.

Therefore, as part of the qualification process, to access the ENDESA provider register, the provider must undergo a specific and mandatory assessment of environmental, health and safety and human rights requirements. These assessments are in addition to the usual economic, financial, legal and technical verifications. In practice, the provider is requested to complete questionnaires and submit appropriate supporting documentation to assess, for example, the provider's management system and accident rates, the effective enforcement of its policies on human rights issues (for example, inclusion and diversity, protection and privacy of workers, verification of their supply chain, forced labour/child labour), as well as respect for issues of environmental sustainability and health and safety in the workplace. In the case of activities considered to be of high risk to safety or the environment, an on-site audit is planned for the verification of these aspects.

By the end of 2019, the Supplier Qualification System had been implemented in 577 purchasing families, 241 Global families (international qualification), and 336 Local families in ENDESA. In 2019, 189 new contractors were registered, with the sum of contracts exceeding €1.5 million (172 local and 17 abroad). Additionally, in 2019, integrity, corruption and bribery aspects of 1,495 suppliers were verified through the Thomson Reuters World Check One external service.

For more information see the 2019 Sustainability Report.





9. RESEARCH, TECHNOLOGICAL DEVELOPMENT AND INNOVATION

# ENDESA and its research, technology and innovation activities

ENDESA strives for an open innovation model that opens the company to external players, to promote collaboration and the exchange of ideas to optimise its efforts.

Open innovation is a relationship model between companies and the innovation ecosystem (universities, start-ups, research centres, other companies in the same or different sectors, etc.) that promotes collaboration and the exchange of ideas.

ENDESA has adopted this model to maximise its capabilities through collaboration with the most relevant players in the innovative ecosystem that contribute to the growth and creation of new business opportunities. The aim is to build a new culture of innovation to enable the generation of creative value solutions capable of transforming the current energy model.





Our focus is on the entire energy value chain: conventional and renewable generation, infrastructure & networks, value-added products and services for residential customers, SMEs, businesses and large customers, digitalisation of the company and the relationship with our customers, and trading, as well as new vectors such as electric mobility. We are looking for solutions that are ground-breaking from a technological point of view and new business models, as well as looking to improve our own business processes.

OPEN INNOVABILITY is the ENEL group platform for launching innovation and sustainability challenges, for Group employees as well as for start-ups, independent innovators, universities, research centres, potential business partners, NGOs and other associations. It is therefore open to all and inspired by the Open Power philosophy. During 2019, 18 challenges related to topics such as energy storage, augmented reality, development of local economies, or Mass customisation were launched.

Through this channel, the company publishes specific challenges related to topics of special interest. It is open to the entire entrepreneurial ecosystem, but also serves as an internal channel for identifying innovative initiatives of employees from across the entire group.

# **ENDESA's** culture of innovation: Idea Hub

ENEL IDEA HUB SPAIN was created to encourage the creation of a culture of innovation among ENDESA employees, a key factor for transformation. It is a unit dedicated to fostering innovative culture within the company through the promotion of the use of creativity methodologies, intra-enterprise projects and training programmes in specific innovation tools.



The activities carried out during 2018 include the following:

- > CHALLENGE DRIVEN SESSIONS: creative problem solving (CPS) methodology application workshops for the search for innovative solutions to company challenges. The sessions held throughout the year involved more than 300 employees.
- NETWORK INNOVATION AMBASSADORS: training and implementation of a network of 20 people who will carry out tasks to facilitate innovation from different areas of work to ensure that innovation reaches all areas of the company.
- > INNOVATION ACADEMY: a specific training programme aimed at training employees in work skills and methodologies that enable them to facilitate the innovation culture in their field.

## **ENDESA** and **entrepreneurs**

ENDESA is highly interested in working with entrepreneurs and start-ups due to their capacity for ground-breaking innovation, their use of technology, their expertise and, above all, their agility in developing and bringing products and services to market in the shortest possible time.

As part of the ENEL Group, ENDESA benefits from the activities of the ENEL Innovation Hub Europe opened in 2017 in Madrid, as well as the Group's ten Innovation Hubs located in important entrepreneurship centres and strategic markets for the Group around the world.

ENEL Innovation Hub Europe is responsible for developing relationships with the relevant entrepreneurial ecosystems in Europe, including the entrepreneurial ecosystems of Spain and Portugal, markets in which ENDESA is present, and for prospecting European start-ups that can respond to ENDESA's challenges, as well as those of the other companies of the ENEL Group.

As a result of the work carried out during 2019, the ENEL Group has prospected more than 2,700 start-ups worldwide, of which more than 280 are Spanish and Portuguese, and

started more than 90 collaborations with start-ups globally, of which 9 are with Spanish start-ups (at the end of 2019 the ENEL Group had started more than 260 collaborations with start-ups globally, of which more than 30 were Spanish and Portuguese start-ups).

Of the collaborations carried out by ENDESA and other companies of the ENEL Group in 2019 with Spanish and Portuguese start-ups, the following stand out:

- NIDO Robotics, which has set up an underwater drone for remote inspection and intervention in maintenance work on thermal generation facilities and in the inspection of underwater cables.
- Karten Space, which has shared its knowledge and expertise in the processing of satellite images.
- DAIL Software, which has developed a solution for the Trading area based on natural language processing (NLP).
- Omniflow, with which progress is being made in the development of a smart pole.

In addition, in its work to support entrepreneurship ENDESA has sponsored South Summit Madrid, South Summit Bogotá and Start-up Weekend Madrid Sustainable Revolution.



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## Technological projects

# Innovation projects in the Generation area

- Virtual Visit: Digital system for making virtual visits to industrial facilities in order to reduce lead times for bidding processes with contractors. At the same time, this tool allows for faster remote support in the field.
- > Development of artificial intelligence systems based on Machine Learning for the detection of anomalies and incipient problems in thermal generation fleet.
- > E-Sense: New advanced systems for monitoring and diagnosing high, medium and low voltage circuit breakers.
- Digital Substation: Innovative digital solutions for the improvement of the monitoring of power transformers and substation elements.
- Cubic: Use of ultrasonic emission systems to improve cleaning of cooling circuits of generation plants and reduce consumption of chemicals.
- > TES Project: Study for the integration of a pilot thermal storage scheme in solid materials in order to recover waste heat at the Las Salinas thermal plant in Fuerteventura.

- Robotisation of the construction processes of renewable facilities: Use of drones for monitoring the progress of works. Validation of a robot for the automation of the installation process of photovoltaic panel modules.
- Use of a new design of prefabricated foundations for wind towers, achieving savings in construction time and reducing the environmental impact of the work.
- In the nuclear field we participate in various R&D&i programmes such as the EPRI nuclear programme, the CEI-DEN platform and the Nuclear Energy Committee of the Nuclear Forum.

# Innovation projects in the electricity distribution area

- Coordinet: Creation of a European energy platform and opening up the market to consumers, taking advantage of the flexibility that small generators and demand can provide to the system and that is not currently used to improve the stability of the grid.
- The objective of the Aerial-Core project is to seek to develop core technology modules and an integrated aerial cognitive air robotic system, which will have unprecedented

- capabilities in the range of operation and safety in interaction with people (fellow air workers).
- > Network Digital Twin (NDT). Digital and highly computerised replica of physical assets and their management, development and maintenance processes. In 2019 the project was defined and work was started on the 3D modelling block, with the scanning of several substations in the Malaga and Barcelona areas.
- > DIGI&N Iberia. Global programme for the digital transformation of all ENEL Infrastructure and Network processes, through ground-breaking efficiency, an agile operational model and convergence of cutting-edge technology, promoting best practices among the Group's countries.
- > It is nine years since the Smartcity Malaga initiative was launched, and it continues to be certified in the European Network of Living Labs ("ENoLL").
- Preventive Analysis of Smart Grids with Real-time Operation and Integration of Renewable Assets (PASTORA): Complementary project to the Project for the Monitoring and Advanced Control of Medium and Low Voltage Distribution Networks (MONICA).
- > Resilience to cope with Climate Change in Urban Areas (Resccue): Focused on assessing the impacts of climate change on the functioning of essential city services such as water or energy, and on providing practical and innovative models and tools to improve the resilience of cities to current and future climate scenarios.
- Growsmarter: A predictive maintenance project developed in collaboration with Disruptive Technologies, to monitor the temperature of the cable connectors in medium voltage cabins of substations to detect faults.
- > Smartnet: Project to improve the efficiency and stability of the electricity grid, making use of the flexibility offered by the new role played by consumers, who are now also producers of energy using collaborative models.

- > Flexiciency: The final phase of the demonstration has been carried out, within the area of the SmartCity Malaga Living Lab. It pointed to the potential for flexibility offered by large-scale low-voltage micro-grids and new services for all agents in the European electricity market based on the access to almost-real-time data from meters.
- > Coordinet: Creation of a European energy platform and opening up the market to consumers, taking advantage of the flexibility that small generators and demand can provide to the system and that is not currently used to improve the stability of the grid.
- Standardisation-Security-Synchronisation Connected Substation 3S-CS: Development of an integral system for the control of electrical substations based on IEC61850, with wireless and IoT capability.
- Aerial-Core: Development of core technology modules and an integrated aerial cognitive air robotic system, which will have unprecedented capabilities in the range of operation and safety in interaction with people (fellow air workers).
- Reset: To develop a 4-branch STATCOM converter in full bridge in low voltage to correct the imbalance of loads between phases that causes the appearance of homopolar currents, additional losses in the network or malfunction of loads.
- > I'm in: Change of procedure for accessing remotely controlled facilities, switching from a procedure based on a telephone call to a system using custom-developed app that communicates with the control centre.
- Open&me: Uses the same platform as the "I'm in" project, and incorporates the functionality of on-demand access control through the use of smart padlock and key. With this solution, owner and worker security is increased without compromising operations.

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# Innovation projects in the marketing area

- Confía Project: project for improving the management of vulnerable clients with blockchain. This project will improve coordination between the public administrations involved, social services and energy companies.
- Accessible telephone service channel for hearing impaired clients, through a mobile app developed by Startup Pedius, capable of transforming voice into text and vice versa in real time and via VoIP.
- Interactive training based on the 3D immersive virtual reality of real physical spaces performed by Startup 6DLab.

# **ENDESA** X innovation projects

- City Analytics, a support tool for the territorial planning and urban planning departments, and the areas of tourism, mobility and citizen security, which makes it possible to organise services according to actual demand. By analysing Big Data the system provides a detailed description of the situation in urban centres.
- Smart Poles: new developments in public lighting solutions that take into account the safety, health, mobility and connectivity needs of citizens.
- > Proof of concept (PoC) with NILM technology, an algorithm used to analyse changes in the voltage of a fuse



box, working out which appliances are used in the house, as well as their individual power consumption.

# Participation in technology platforms

In 2019, ENDESA continued to participate actively in different technological platforms aimed at promoting the development of a far more advanced distribution network, capable of responding to the challenges of the future.

These include the collaboration with the Futured platform, which is part of the steering group, and which provides a forum for dialogue and debate between different agents to increase knowledge and define a shared vision of the network of the future.

ENDESA has also held the presidency of the association Meters and More since 2018, which promotes the standardisation of the communications protocol for metering solutions. More than 40 million meters have already been installed across the world and the association has more than 45 members.

ENDESA once again collaborated this year with the Pro Rebus Foundation, whose aim is to participate with the Royal Academy of Engineering, promoting and developing activities that contribute to its promotion and dissemination, especially its application to the business world and to society in general.

In 2019 ENDESA was a driving force behind the second edition of the go!ODS Awards organised by the Spanish Global Compact Network in collaboration with the Rafael del Pino Foundation. The awards recognise and give visibility to the best innovative projects and initiatives that help achieve the United Nations' Agenda 2030 Sustainable Development Goals (SDGs). The awards were handed out for all 17 categories on 20 February 2020 at the headquarters of the Rafael del Pino foundation in Madrid.











10. OUR PEOPLE

## The ENDESA workforce

ENDESA had 9,952 employees as at 31 December 2019, 9,916 of which in Spain and 36 in Portugal.

During 2019, 426 people have joined, of which 375 have been new hires in Spain and Portugal and the rest have been transfers from Group companies and reinstatement of leaves of absence. On the other hand, there have been 251 contract terminations in the same area, of which 73 have been voluntary departures, 11 voluntary redundancies, 23 retirements, 21 layoffs and 123 other leave.

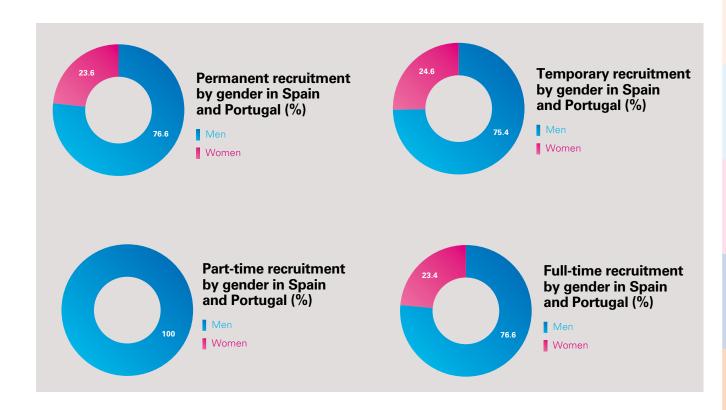
#### ENDESA workforce

	2017	2018	2019
Workforce in Spain and Portugal	9,706	9,763	9,952
Average workforce	9,856	9,696	9,761

Segmentation of the workforce by age shows that the largest number of employees, 54.8%, was in the range between 30 and 50 years. The average age of the workforce was 47.3 years.

Workforce data from Spain and Portugal	Over 50 years of age	30-50 years of age	Below 30 years of age
Age distribution of the entire workforce	41.4%	54.8%	3.8%
Age distribution of Managers	59.0%	41.0%	_
Age distribution of Middle Management	29.2%	66.4%	4.4%
Age distribution of persons in Administration and Management category	48.0%	47.8%	4.2%
Age distribution of persons in Operator category	45.2%	53.1%	1.7%





At the end of 2019, 96.1% of ENDESA workers were employed under a permanent contract, amounting to 9,562 contracts. There were 390 temporary contracts in this period.

At the end of the financial year, the average time spent in the company was 16.7 years; more than 68.6% of employees had been working in the Company for more than 10 years.

With regard to gender distribution, the workforce was 76.1% male and 23.9% female.

In 2019, a total of 34,003,191 hours were worked by contractors.



# Leadership and development of people

ENDESA's leadership is based on its vision, mission, values and conduct. The *Open Power* values are present in all personnel management systems.

#### **VALUES**

#### Responsibility

Each of us is responsible for the success of the group, at all levels. We pour our energy into helping people to improve their lives and live them more sustainably.

#### Innovation

We are inquisitive in work and life, we strive to go beyond the norm and overcome our fears to open up energy to new uses, technologies and people. Learning from our mistakes as well as our successes.

#### Confidence

We act competently, honestly and transparently, to gain the trust of our colleagues, customers and external collaborators, valuing individual differences. In turn, we rely on their ability to create value and share it

#### **Proactiveness**

We take direct charge of our work. We continuously interpret global scenarios and challenges to anticipate change, redefining priorities if the context requires it.

In 2018, ENDESA established an innovative process to evaluate people's conduct based on the exchange of feedback among everyone in the organisation: *Open Feedback Evaluation* (OFE). The Open Feedback evaluation process is open all year round.

In 2019 the *Open Feedback* process was kept open to the entire organisation in order to further enhance the culture of exchange of feedback at all levels. 84.8% of ENDESA employees are eligible for evaluation through the *Open Feedback* tool.





### Talent development

ENDESA is committed to talent development and personal and professional growth as part of its business strategy, focusing on the sustainability of human capital.

In 2019, various professional development activities, tailored to the specific needs of each business, were carried out.

Some of these activities are detailed below:

- Onboarding: aims to facilitate the integration of new employees into the organisation and communicate ENDESA's values and culture to them. Improvements were made in 2019 to streamline administrative procedures and, as a result, new employees have all the necessary elements right from the start.
- Knowledge interviews: ENDESA's Personnel and Organisation professionals continued carrying out knowledge interviews in order to get to know the interests and aspirations of personnel. Progress has been made in the implementation of new support tools within the framework of the Company's digital transformation. In 2019, 6,313 interviews were conducted.
- Coaching: ENDESA has continued to be strongly committed to coaching. During 2019, more than 200 people benefited from this type of individual or group action. They were carried out by the professionals of the Internal Coaching Network made up of more than 30 internal coaches. This is a model of reference in IBEX-35 companies.

- > Skills workshops: ENDESA carried out the course "Coach Manager", aimed at people managers, to develop skills and competencies through coaching, and thus transform the manager profile within ENDESA. With the participation of internal trainers from ENDESA's Internal Coaching Network, 30 workshops were held this year in 13 different geographic locations, and more than 350 people managers participated.
- > *Mentoring:* This is a knowledge transfer project, in which key professionals in specific knowledge areas accompany other colleagues for a period of 3 to 6 months. More than 80 people participated in mentoring programmes in 2019.
- People and Organisation Consulting: During 2019, ENDESA further strengthened an internal consulting line that provides ad-hoc solutions to needs raised by businesses. This activity is carried out by internal development experts, applying coaching techniques and tools and people development consultancy. In 2019, 10 workshops were held involving nearly 150 people.
- Succession Plans: ENDESA continued to manage succession plans in order to identify successors for the positions of greatest managerial responsibility. In 2019, a new platform allowed those holding the highest positions in the company to transparently share among themselves the appointment of their successors in order to expand the identification of talent and promote transversality.
- > Job Shadowing: An initiative involving more than 100 employees, giving them the opportunity to choose a colleague to accompany for a week's work, through a structured schedule, in order to learn from a business other than their own. This initiative has enabled the development of empathy, innovation, networking, and a more cross-cutting vision of business.

### **Training**

ENDESA is committed to encouraging the professional and personal development of its personnel through continuous training, aligned with the Company's strategic objectives, in all areas of activity, so that they contribute to the Company's excellence.

ENDESA presents its employees with a wide range of training in order to provide them with, and improve upon, the technical qualifications that they require for the performance of their functions, as well as to promote the growth of behaviours and skills for their personal development.

In 2019, ENDESA invested €34.1 million in training activities, €12.9 million of which in direct costs. In this financial year, ENDESA carried out 2,198 training sessions, involving 9,060 employees.

This totalled 402,953 hours of training, averaging 40.5 hours per employee.

#### Cross-sectional training to develop personal and professional attitudes and Skills skills. Mandatory training for the prevention of occupational Safety risks and occupational health and safety. Training required to comply with regulations (legal or business), certifications required by units other **Prescribed** than those of the student.

## Type and content of training

Training activities respond to the needs identified in different analysis processes that ensure continuous and up-to-date learning in the different defined categories:

#### > Energy sustainability training

ENDESA's commitment to sustainable development is central to its activities. Training in this area is of great importance and the aim is that ENDESA employees will embrace the principles of sustainability in their professional and private activities, and, by changing their energy behaviour, become a reference point for society.



#### > Health and safety training

Occupational risk prevention courses are aimed at the entire workforce and are mandatory, combining online training with in-person training.

In 2019, specific actions were carried out for people with a specific prevention responsibilities, such as: Prevention Representatives, Preventive Resources and emergency team members.

In its commitment to digitalisation of processes, and in line with its strong commitment to security, ENDESA has incorporated virtual reality into training in Occupational Health and Safety. In 2019, it launched the "VIVES" Training Programme (Virtual, Immersive, Vision, ENDESA, Security), which combines innovation with security.

#### **Environmental training**

In 2019, environmental training continued with the provision of approximately 2,075 hours of training to ENDESA employees. This training enables the company to fulfil the requirements established for the renewal of the different ISO 14001 certifications for energy efficiency and the Company's Integrated Environmental, Energy and Indoor Air Quality Management System (SIGAEC).

#### **Digitalisation training**

Digital transformation training was a major focus in 2019, with 22,559 hours of training provided. In 2019, the programme "Digital Routines in 21 days" (R21D) was launched, the aim of which is to promote good digital practices and improve people's digital skills.

In addition, in 2019 the range of courses in relation to digitalisation was expanded, with the addition in particular of courses on data management, programming and modelling: Salesforce; Business Analytics; Digital and Social Marketing Media Management, among others.

#### > Technical training

One of ENDESA's fundamental commitments, which has remained constant over the years, is technical training for employees. This enables their professional progress and gives them the qualifications necessary for the performance of their activities.

In 2019, 119,525 hours of technical training were provided in the areas of Conventional Power Generation, Renewables, Distribution, Marketing, Global Digital Solutions (GDS), Purchasing and Support Areas.

#### Other training activities

Through training in managerial, social and leadership skills, ENDESA has provided employees with tools for their personal and professional development. This type of training was carried out across the various business lines and support areas. In 2019, 141,815 hours of skills management training was provided.

In 2019, a number of training programmes were launched in relation to the different dimensions of diversity: in the gender dimension the "Take the lead" course, aimed at women in middle management or team leading positions; in the age dimension the "Managing generational diversity" course focused on promoting work in intergenerational teams; in the disability dimension, online training aimed at raising awareness of different abilities, as well as universal accessibility.

## Attracting and retaining talent

ENDESA has carried out "Employer Branding" activities to improve the Company's positioning in the labour market and to be perceived as an attractive place to work. The focus in recent years has been attracting young talent.

As part of this, the *Flow Your Talent* project, implemented in 2019 at ENDESA, aims to enhance skills and develop young talent. Within this framework of action, we highlight initiatives such as "Fórmula Student" or "Innovation Flow", programmes through which talented youngsters who have received a scholarship at ENDESA have been able to propose innovative ideas for real business challenges.

In 2019, more than 180 young graduates were recruited through the ENDESA Scholarship Programme. This programme enhances their employability and provides the opportunity to put into practice the knowledge acquired at university and start their professional career. Once the scholarship period has ended, some of them have been able to become part of the ENDESA workforce.

The turnover rate in Spain as 2.6% in 2019. This result is within the values expected by the company.

### Personnel selection

In 2019, ENDESA continued to encourage its employees to participate in the selection processes, giving priority to the internal publication of job offers. In this way, internal mobility

has been enhanced, offering people the opportunity to improve their professional development, according to their interests and motivations.

In 2019, ENDESA carried out around 200 internal movements to cover vacancies.

When internal promotion does not allow positions to be filled, personnel are hired from the labour market. In 2019, for Spain and Portugal, 400 external processes were carried out to fill permanent and temporary vacancies.

### Remuneration policy

ENDESA's remuneration policy is in line with the recommendations of national and international regulations on Corporate Governance. The main objective is to retain, attract and motivate the best professionals, ensuring that internal equality and external competition are maintained, and establishing remuneration according to best market practices.

In 2019, as in previous years, the individual salary review process was carried out for all employees, across all professional categories. These main purpose of these processes has been to recognise the efforts of individuals and their commitment to the Company, adjusting remuneration on a case-by-case basis, while at the same time ensuring that the minimums established in the Fourth Framework Convention are observed. This policy has also helped to

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strengthen the role of managers in the recognition employees' achievements.

In 2019, an exercise in transparency of the salary review process in communications to personnel was carried out, with special emphasis on the gender perspective.

## ENDESA's commitment to diversity

Within the framework of its Diversity and Inclusion Policy and the Human Rights Policy, ENDESA rejects all forms of discrimination and undertakes to guarantee and promote diversity, inclusion and equal opportunities, as well as to foster and maintain a climate of respect for people's dignity and individuality, and to ensure the highest standards of confidentiality with respect to any private information related to employees which may become known.

In accordance with, and as part of, the values and principles contained in the ENDESA Code of Ethics, the Company adopts the following fundamental principles:

- > Non-discrimination.
- > Equal opportunities and dignity for all forms of diversity.
- Inclusion.
- > Balancing of personal, family and professional life.

ENDESA considers diversity among its employees to be enriching. The progressive increase in women in the workforce, the incorporation of people of other nationalities, as well as persons with disabilities, show respect for the different dimensions that make up its Diversity Policy. In terms of age, more young people have gradually been hired, creating a workforce that combines both seniority and gradual renewal.

Based on the above principles, ENDESA has implemented specific actions to promote non-discrimination and inclusion in the following areas of diversity, defining the following action plan:



In 2019 there were no incidents of discrimination in ENDESA, a figure that the Company periodically reports to the Workers' Representatives.

### Promotion of gender equality

ENDESA promotes gender equality in all areas of the Company, with particular attention to positions of responsibility and the recruitment of personnel, objectives both included in ENDESA's 2019-2021 Sustainability Plan. Thus, in 2019, the proportion of women hired reached 37.9%.

#### "More women, better companies" initiative

As a sign of its commitment to promoting and advancing gender diversity, in 2019 ENDESA signed the new protocol with the Ministry of Equality. This protocol sets ambitious targets for the duration of the 2019-2023 protocol in order to promote and increase the presence of women in positions of responsibility. This action forms part of the Ministry of Equality's "More women, better companies" initiative:

#### Agreement Equality Plan

ENDESA has an Equality Plan containing Human Resources policies that promote the implementation of the actions necessary to facilitate the incorporation of women into the company and into positions of greater responsibility. The Plan guarantees the effective application of the principle of equal



remuneration for work of equal value and, in particular, the absence of gender pay differences.

The Plan also includes the possibility of adapting the working day through flexible hours, temporary changes in hours, reductions in working hours and family-care leave. It also has specific pregnancy and maternity measures, and special measures for the protection of victims of gender-based violence. As a tool to help in the care of children, for both mothers and fathers, the Plan provides for agreements with day-care centres, and awareness-raising in the area of equality through information and communication.

#### Age

To manage generational diversity, ensuring integration, motivation and knowledge transfer, ENDESA has launched the following initiatives:

- 1. Mentoring programme for new hires.
- 2. Knowledge transfer initiatives.

Mentoring programmes are intended to support employees in their main transition periods, and especially after hiring at the Company.

Knowledge transfer initiatives have included both mentoring programmes and internal training exercises in which the trainers are senior or junior expert staff.

#### **Nationality**

To manage the differences between people of different nationalities and to encourage their integration, there is a mentoring programme for expatriates through which in 2019 they were assigned a mentor from the destination country to help and support them during their expatriation period.

#### Disability

In 2019, the Adecco Foundation offered its Family Plan to 76 family members of ENDESA employees with disabilities. These people received personalised counselling and therapy. Also through the Adecco Foundation, for the second year running the beneficiaries of this Family Plan were offered a one-week summer camp in which 18 children of ENDESA employees with disabilities participated.

#### Corporate volunteering

ENDESA supports corporate volunteering and therefore collaborates in the development of various social development projects with the involvement of its employees. Corporate volunteering acts as a catalyst for other initiatives and brings the Company closer to its stakeholders, encouraging the development and commitment of participants.

In addition, it constitutes a firm commitment to the development of the communities in which it operates, by offering its own personnel in activities that combine the interest of the Company and its stakeholders, such as facilitating access to energy for vulnerable groups, promoting employability and quality education, or improving the environment.

As a result of this firm commitment, ENDESA has supported Voluntare since its inception in 2011. This international network for the promotion of corporate volunteering is the result of the alliance between companies, academic entities and the third sector, to promote the expansion and professionalisation of corporate volunteering. This network currently consists of 38 companies and 45 social entities.

In 2019, ENDESA launched a project to review corporate volunteering. A survey on corporate volunteering was conducted for all employees, with 17.33% of the workforce taking part, which represents a high level of participation and interest in

the subject. Focus groups were conducted with employees in Barcelona, Madrid and Seville, as well as interviews with those responsible for the areas involved in corporate volunteering. In addition, a *design thinking* workshop was carried out with the participation of employees. Among other conclusions, this whole process revealed a high interest in environmental issues in line with the Company's purpose.

As for the corporate volunteering projects launched in 2019, 14 volunteer projects were developed, involving 277 volunteers during working hours and 19 outside of working hours. Of the total of 296 volunteers, 12 took part in both types. These projects involved a total contribution of 2,094 hours during working hours and 140 hours outside of working hours. Almost 6,900 people benefited from these initiatives in 2019.

The most notable projects were:

> #COMPANIES4SDGs: ENDESA joined this initiative and the SDGs at school multi-company corporate volunteering project. #COMPANIES4SDGs aims to promote SDGs among businesses and their employees, promote sustainable habits among employees and convey to them how to contribute to the global challenges of the SDGs, raise public awareness of the global challenges of the world and how they can participate, and align and promote corporate

volunteering in line with the SDGs. It has 43 affiliated companies and 100 participants, and as of June 2019, more than 428,909 employees in 45 countries have received information on the SDGs and approximately 80,000 volunteers have been mobilised.

- Prevent Foundation, this corporate volunteering initiative is aimed at people in situations of vulnerability and/or with special educational needs, with the aim of teaching them to understand and optimise an electric bill, to improve consumption habits in their homes and to learn about the possibilities of the social bonus. One volunteer took part in this second collaboration, this year in Barcelona, who gave a workshop attended by 6 people in vulnerable situations.
- Training of social services technicians and/or third-sector entities in energy-efficient consumption habits and bill optimisation. Since 2016 and in collaboration with the Association of Environmental Sciences (ACA) and the European Network for the Fight against Poverty and Social Exclusion of the Spanish State (EAPN-ES), a programme of training courses is being taught aimed at workers in social entities on issues such as energy saving and efficiency measures, the new social bonus, optimisation of electricity bills and protection against service cut-offs due to non-payment so that, in this way, they can better devel-





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op their advisory and support work for families in vulnerable situations. Coach Project: In collaboration with the Exit Foundation,

this corporate volunteer programme aims to improve the employability of young people at risk of social exclusion, boosting their self-esteem, motivation and professional orientation, using coaching or mentoring techniques. After going through the programme, 82% of young people pass the course and 76% continue training. In 2019, ENDESA participated in the Barcelona, Madrid, Palma de Mallorca, Seville and Zaragoza editions, benefiting 10 young people with the support of 10 volunteers.

Changing Lives: An ENDESA Foundation Programme, in collaboration with Integra Foundation, the aim of which is to improve the employability of people at risk of exclusion, by providing them with the tools necessary to integrate into the world of work. In 2019, 360 people were trained and 192 of them found a job. Part of the training is provided in 'Escuelas de Fortalecimiento' (strengthening schools) where the trainers are ENDESA's own volunteers. 76 corporate volunteers participated in the 2019 edition.

For more information on volunteer projects, see page 123 of this report and pages 165 to 167 of ENDESA's 2019 Sustainability Report.





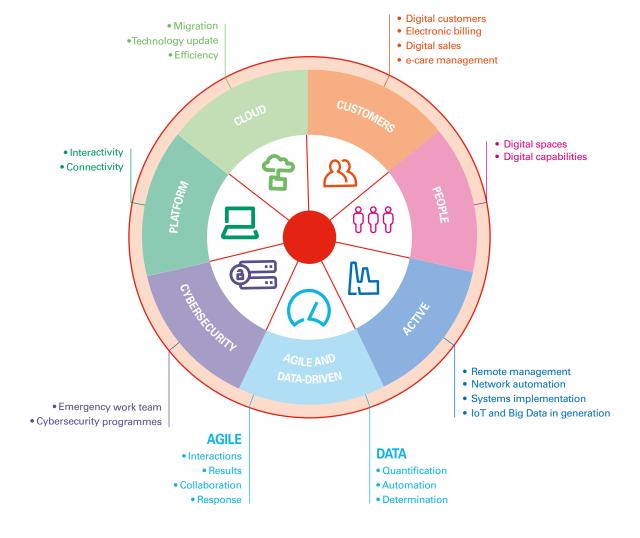
11. OTHER ACTIVITIES

## Digital transformation

The digital transformation of a company is the process by which it is transformed into an organisation fully in tune with the digital ecosystem, with a smart and streamlined customer focus. It is a process that requires significant change management in order to successfully address the challenge of in-

corporating new digital technologies. These new technologies essentially allow the interconnection between people and objects, and facilitate new access to both traditional and newly created products and services.

#### The digital transformation in ENDESA



Aware of this reality and the opportunities that it presents, ENDESA made digital transformation a key part of its 2019-2021 sustainability plan, investing more than €352 million in 2019.

These strategic lines of action were combined with ENDE-SA's strong commitment to the pursuit of continuous efficiency through the digitalisation of its businesses. To this end, the Company incorporated €1.3 billion (from 2019 to 2022) into its plans for investment in digitalisation in all its businesses. The largest investment was planned in Distribution, with €1.1 billion allocated for the digitalisation of the business.

ENDESA considers the digitalisation of its entire value chain—generation, distribution, marketing and our people—to be one of the key drivers for improving efficiency.

#### **Customers**

ENDESA developed new IT tools to support customer digitalisation, as well as the development of new service and care channels, and other products and services.

Consumer access to new technologies, their adoption and mass use, transformed the customer relationship. This uptake involved new habits and customs by consumers in their personal and professional lives and, of course, in their relationships with companies. The vast majority of them are, or are on their way to being, digital, connected and social customers.

Thanks to all these efforts, the following advances and achievements contributing to the digitalisation of the customer relationship can be singled out for 2019:

#### 2019 achievement



4.8 million digital customers



3.8 million contracts with e-billing



2022 Targets







11. Other activities 157

#### **People**

The digital transformation meant that the company had to adapt its value proposition to the new digital customer, resulting in the incorporation of new technologies into its value chain. In this sense, ENDESA worked in different areas:

- Improvement of data management processes that included, among other things, the use of the latest cloud data storage technologies, as well as the development of digital platforms to increase interactivity and connectivity.
- Striving for the highest standards for promoting cybersecurity in order to carry out digital transformation with the lowest possible risk.
- Being a data-driven company, where big data is used correctly to guide strategic decisions.
- Promoting the agile methodology to support current transformations. This methodology proposes a focused approach to the objective of delivering to the customer, in a

short time and quite frequently, combining methodological thoroughness with adaptation to the different needs of the customer and the context in the development of a product or service.

## Digitalisation in thermal power plants

The DIGI PLANT Programme was carried out in 2019. It started in 2018 with the deployment of digital technologies validated during the previous year that provide greater added value to ENDESA's thermal power plants. The technologies being evaluated aim to improve plant operation and maintenance and improve the safety and health of staff and the environment. The programme was rolled out through 18 digital initiatives and involves up to 28 production centres in the 2018-2021 period.





## Digitalisation in renewable power plants

Through its renewable energy management subsidiary ENEL Green Power España, digital initiatives such as real-time mobile phone applications, predictive diagnostic systems via software platforms in wind farms, modernisation of the control systems of hydraulic production units, web tools for process automation and dialogue, as well as several Engineering and Construction digitalisation projects were launched during 2019 in the renewables field.

> As for concentrators, this has been completed to a total of 136,000 installed devices, exceeding 99%.

In addition, in 2019 the remote management system was developed to allow the remote installation and operation of direct and semi-direct type-4 meters. And online consultation with the Remote Management meters progressed substantially with developments that led to clear benefits for customers.

ENDESA is thus strengthening its position as a leader in the development of this technological solution in the national market, encouraging energy efficiency and the sustainability of the electricity system.

# Digitalisation of the distribution network

ENDESA's Remote Management Project was aimed at implementing a system for the automatic and remote control and management of electricity supply for domestic customers.

Throughout 2019, ENDESA carried out:

- > 229,000 replacements, a cumulative figure of 11.98 million. This represents 99.3% of all type 5 meters with active contracts and contracted power of up to 15 kW (11.82 million supplies).
- > 187,000 type-4 equipment installations on supplies with contracted power between 15 and 50 kW, making a total of 194,292 devices with remote management capacity, more than 60% of active devices.

### Smart grids

ENDESA's networks continued to be configured according to the SmartGrid model. Technification and the incorporation of Information and Communication Technologies (ICT) enable networks to provide an effective response to users' needs.

ENDESA is developing SmartGrid concepts within the Smart-City programmes, where it is a leader with several projects. It is now nine years since the SmartCity project was introduced in Malaga, Spain.

This experience demonstrated the viability of this new energy management model in cities by achieving energy savings of more than 20%, a 20% reduction in  $\rm CO_2$  emissions per year and a significant increase in energy from renewable sources. SmartCity Malaga has been rolled out in an area of the city that houses 12,000 domestic customers, 300 industrial customers and 900 service customers.

11. Other activities

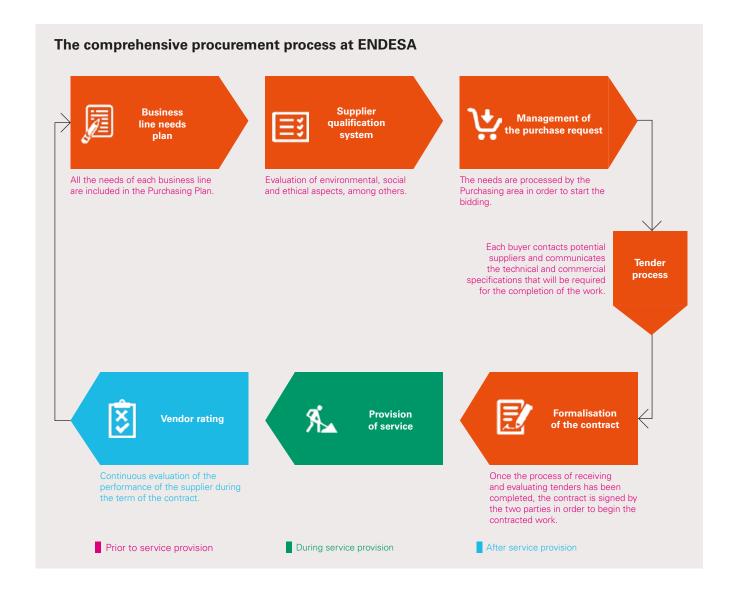
#### **Purchases**

In 2019, ENDESA worked with a total of 6,115 suppliers. This figure includes all those that were subject to tenders as well as direct purchases for special situations.

The amount of purchases from suppliers decreased by 8% compared to the 2018 figure, to €2.427 billion.

In addition, the number of days worked by contractors or subcontractors involved in construction, operation and maintenance activities in 2019 was 4,250,399, a 3.42% decrease compared to 2018.

The total number of hours worked by contractors in 2019 was 34,003,191.











#### 12. ANNEXES

# **ENDESA's generation** facilities in Spain at 31-12-2019

	Company of origin	Locality	Type of Fuel	No. of Groups	Total power (MW)	ENDESA %	Power that may be consolidated at ENDESA (MW)
MAINLAND SYSTEM							
Conventional thermal							
Coal							
COMPOSTILLA <sup>1</sup>	ENDESA	Cubillos del Sil-León	А-Н	3	1,052	100.0	1,052
ANLLARES <sup>2</sup>	33.33% ENDESA	Anllares-León	А-Н	1	0	33.33	0
AS PONTES	ENDESA	As Pontes-La Coruña	IC	4	1,469	100.0	1,469
TERUEL	ENDESA	Andorra-Teruel	ВС	3	1,101	100.0	1,101
LITORAL	66.66% END-33.33% SEV	Carboneras-Almeria	IC	2	1,159	100.0	1,159
Total Coal				13	4,781		4,781
Combined Cycle Gas							
SAN ROQUE <sup>1</sup>		San Roque-Cádiz	CCGT	1	408	100.0	408
BESÓS <sup>3</sup>		Besós-Barcelona	CCGT	1	419	100.0	419
BESÓS⁵		Besós-Barcelona	CCGT	3	873	100.0	873
COLON <sup>4</sup>		Huelva	CCGT	1	398	100.0	398
AS PONTES		As Pontes-La Coruña	CCGT	3	870	100.0	870
Total Gas				9	2,969		2,969
Nuclear							
ASCO I	40% END - 60% FEC	Ascó-Tarragona	N	1	1,033	100.0	1,033
ASCO II.	40% END - 45% FEC	Ascó-Tarragona	N	1	1,027	85.0	873
VANDELLOS II	72% ENDESA	Vandellós-Tarragona	N	1	1,087	72.0	783
GAROÑA <sup>3</sup>	100% NUCLENOR	Stª Mª Garoña-Burgos	N		0	50.0	0
ALMARAZ I	36% SEVILLANA	Almaraz-Cáceres	N	1	1,049	36.0	378
ALMARAZ II	36% SEVILLANA	Almaraz-Cáceres	N	1	1,044	36.0	376
TRILLO <sup>4</sup>	2% NUCLENOR	Trillo-Guadalajara	N	1	1,066	1.0	0
Total Nuclear Thermal				6	6,307		3,443
Total Mainland Conventional Generation Facilities					14,056		11,192
Conventional hydroelectric							
Hydr. Prod. Unit Northwest			Н		749.24	100.0	749.24
Hydr. Prod. Unit Ebro-Pyrenees			Н		1,951.95	100.0	1,951.95
Hydr. Prod. Unit South			Н		660.80	100.0	660.80
Pumped generation							
Hydr. Prod. Unit Ebro-Pyrenees			Н		759.89	100.0	759.89
Hydr. Prod. Unit South			Н		589.77	100.0	589.77
Total Hydroelectric					4,711.65		4,711.65



Mini hydraulic	Company of origin	Locality	Type of Fuel	No. of Groups	Total power (MW)	ENDESA %	Power that may be consolidated at ENDESA (MW)
ANLLO	ENEL Green Power España	GALICIA	Н	1	7.92		7.92
ARROIBAR	ENEL Green Power España	GALICIA	Н	1			14.70
BATANES	ENEL Green Power España	CASTILLA Y LEÓN	Н	1			0.22
CASAS	ENEL Green Power España	CATALONIA	Н	<u>'</u> 1			0.22
CASTADÓN - HERVEDOIRO	ENEL Green Power España	GALICIA	Н	<u>'</u> 1			1.21
CASTRO	ENEL Green Power España	GALICIA	Н	<u>'</u> 1			0.12
FERVENZAS-COIROS	ENEL Green Power España	GALICIA	Н	1			0.12
GRAUS	ENEL Green Power España	ARAGÓN	Н	 1			2.15
HOZ SECA-NAVAREJOS	ENEL Green Power España	CASTILLA-LA MANCHA	Н	1			0.78
IZBOR	ENEL Green Power España	ANDALUSIA	Н	1			11.98
LA CASTELLANA	ENEL Green Power España	GALICIA	Н	1			1.20
LA FLOR	ENEL Green Power España	CANTABRIA	Н	1			0.40
LA ROCHA	ENEL Green Power España	CASTILLA-LA MANCHA	Н	1	1.45		1.45
MANDEO-ZARZO	ENEL Green Power España	GALICIA	Н	1	25.60		25.60
MOLINAFERRERA-CABRITO I AND II	ENEL Green Power España	CASTILLA Y LEÓN	Н	1	1.05		1.05
MOLINO DE ARRIBA- PERALEJOS	ENEL Green Power España	CASTILLA-LA MANCHA	Н	1	0.93		0.93
MORLA	ENEL Green Power España	CASTILLA Y LEÓN	Н	1	0.19		0.19
PÉ DE VIÑA	ENEL Green Power España	PRINCIPALITY OF ASTURIAS	Н	1	0.68		0.68
REQUEIXO (AS CHAS)	ENEL Green Power España	GALICIA	Н	1	3.08		3.08
ROSARITO	ENEL Green Power España	CASTILLA Y LEÓN	Н	1	4.86		4.86
SAN JUAN DE MURO	ENEL Green Power España	GALICIA	Н	1	0.13		0.13
TUNEL DE VIELHA	ENEL Green Power España	CATALONIA	Н	1	0.25		0.25
VILLAMECA	ENEL Green Power España	CASTILLA Y LEÓN	Н	1	0.50		0.50
Mini hydraulic total				17	79.77		79.77
Wind							
ACAMPO	ENEL Green Power España	ARAGÓN	W	1	6.21		6.21
ÁGREDA	ENEL Green Power España	CASTILLA Y LEÓN	W	1	18.21		18.21
AGUILÓN	ENEL Green Power España	ARAGÓN	W	1	50.21		50.21
ALDEAVIEJA	ENEL Green Power España	CASTILLA Y LEÓN	W	1	14.73		14.73
ALLUEVA	ENEL Green Power España	ARAGÓN	W	1	25.41		25.41
ALMARÉN	ENEL Green Power España	ARAGÓN	W	1	12.11		12.11
ALTO DE LAS CASILLAS I	ENEL Green Power España	COMUNIDAD VALENCIANA	W	1	30.21		30.21
ALTO DE LAS CASILLAS II	ENEL Green Power España	COMUNIDAD VALENCIANA	W	1	30.21		30.21
AMPLIACIÓN CORTADO	ENEL Green Power España	CASTILLA Y LEÓN	W	1	13.71		13.71
AMPLIACIÓN LOS LLANOS	ENEL Green Power España	CASTILLA Y LEÓN	W	1			20.21
ANGOSTURAS	ENEL Green Power España	ANDALUSIA	W	1			36.21
ARAGÓN	ENEL Green Power España	ARAGÓN	W	1			5.49
BARBANZA I AND II	ENEL Green Power España	GALICIA	W	1	29.25		29.25
BELMONTE	ENEL Green Power España	PRINCIPALITY OF ASTURIAS	W	1	35.06		35.06
CALDEREROS	ENEL Green Power España	CASTILLA-LA MANCHA		1			38.01
CAMPOLIVA I	ENEL Green Power España	ARAGÓN	W	1	36.20		36.20

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	Company of origin	Locality	Type of Fuel	No. of Groups	Total power (MW)	ENDESA %	Power that may be consolidated at ENDESA (MW)
CAMPOLIVA II.	ENEL Green Power España	ARAGÓN	W	1	39.58		39.58
CANTIRUELA	ENEL Green Power España	CASTILLA Y LEÓN	W	1	15.21		15.21
CAPELADA I AND CAPELADA II	ENEL Green Power España	GALICIA	W	1	31.56		31.56
CAREÓN	ENEL Green Power España	GALICIA	W	1	18.21		18.21
COGOLLOS II	ENEL Green Power España	CASTILLA Y LEÓN	W	1	50.21		50.21
CORISCADA	ENEL Green Power España	GALICIA	W	1	24.21		24.21
CORZÁN	ENEL Green Power España	GALICIA	W	1	43.41		43.41
COUTO SAN SEBASTIAN	ENEL Green Power España	GALICIA	W	1	18.21		18.21
DO VILÁN	ENEL Green Power España	GALICIA	W	1	17.11		17.11
EEE	ENEL Green Power España	ANDALUSIA	W	1	32.21		32.21
EL CAMPO	ENEL Green Power España	ARAGÓN	W	1	20.01		20.01
EL PUERTO-TRINIDAD	ENEL Green Power España	ARAGÓN	W	1	25.29		25.29
FALADOIRA-COTO TEIXIDO	ENEL Green Power España	GALICIA	W	1	47.73		47.73
FARLAN	ENEL Green Power España	ARAGÓN	W	1	41.61		41.61
FARRAPA	ENEL Green Power España	GALICIA	W	1	20.21		20.21
GRANUJALES	ENEL Green Power España	ANDALUSIA	W	1			24.21
LA ESTANCA	ENEL Green Power España	ARAGÓN	W	1			24.21
LA MUELA II+ LA MUELA III	ENEL Green Power España	ARAGÓN	W	1			29.91
LANCHAL	ENEL Green Power España	CASTILLA Y LEÓN	W	1			21.46
LAS PARDAS	ENEL Green Power España	CASTILLA Y LEÓN	W	1			49.71
LES FORQUES	ENEL Green Power España	CATALONIA	W	<u>.</u> 1	30.21		30.21
LOMA GORDA	ENEL Green Power España	ARAGÓN	W	<u>·</u> 1			24.13
LOS ARCOS	ENEL Green Power España	ANDALUSIA	W	<u>'</u> 1			34.86
LOS LANCES	ENEL Green Power España	ANDALUSIA	W	1			10.89
LOS LLANOS	ENEL Green Power España	CASTILLA Y LEÓN	W	<u>'</u> 1			38.21
MADROÑALES	ENEL Green Power España	ANDALUSIA	W	<u>'</u> 1			34.21
MONTARGULL	ENEL Green Power España	CATALONIA	W	<u>'</u> 1			44.21
MONTE DE LAS NAVAS	ENEL Green Power España	CASTILLA Y LEÓN	W	1			49.05
	· · · · · · · · · · · · · · · · · · ·						
MUNIESA	ENEL Green Power España	ARAGÓN	W	1			47.01
W.F. CHAN DO TENON	ENEL Green Power España	GALICIA	W	1	22.61		22.61
W.F. DE ENIX	ENEL Green Power España	ANDALUSIA	W	1			13.41
W.F. DE ESCUCHA + SANT JUST	· · · · · · · · · · · · · · · · · · ·	ARAGÓN	W	1			28.59
W.F. LEBOREIRO	ENEL Green Power España	GALICIA	W	1			21.33
W.F. LOS BARRANCOS	ENEL Green Power España	ANDALUSIA	W	1			20.21
W.F. MENAUTE	ENEL Green Power España	ANDALUSIA	W	1			37.61
W.F. PENA VENTOSA	ENEL Green Power España	GALICIA	W	1			45.01
PADUL	ENEL Green Power España	ANDALUSIA	W	1			18.21
PARADELA	ENEL Green Power España	GALICIA	W	1	12.21		12.21
W.F. CASTELO	ENEL Green Power España	GALICIA	W	1	16.71		16.71
PENA REVOLTA	ENEL Green Power España	GALICIA	W	1	14.21		14.21
PEÑA ARMADA	ENEL Green Power España	GALICIA	W	1	20.91		20.91
PEÑA DEL GATO	ENEL Green Power España	CASTILLA Y LEÓN	W	1	50.21		50.21
PEÑA FORCADA	ENEL Green Power España	GALICIA	W	1	34.01		34.01
PEÑA II	ENEL Green Power España	CASTILLA-LA MANCHA	W	1	18.21		18.21
PESUR	ENEL Green Power España	ANDALUSIA	W	1	42.21		42.21
PICAZO	ENEL Green Power España	CASTILLA-LA MANCHA	W	1	14.21		14.21
EUROPEAN WIND POWER PLANT	ENEL Green Power España	ANDALUSIA	W	1	6.21		6.21



	Company of origin	Locality	Type of Fuel	No. of Groups	Total power (MW)	ENDESA %	Power that may be consolidated at ENDESA (MW)
POUSADOIRO	ENEL Green Power España	GALICIA	W	1	23.71		23.71
PRIMORAL	ENEL Green Power España	ARAGÓN	W	1	34.86		34.86
PUCHERUELO	ENEL Green Power España	CASTILLA Y LEÓN	W	1	23.16		23.16
REF. PEÑA VENTOSA	ENEL Green Power España	GALICIA	W	1	8.21		8.21
SAN ANDRÉS	ENEL Green Power España	GALICIA	W	1	33.21		33.21
SAN PEDRO ALACON	ENEL Green Power España	ARAGÓN	W	1	40.11		40.11
SANTO DOMINGO DE LUNA	ENEL Green Power España	ARAGÓN	W	1	30.07		30.07
SASO PLANO	ENEL Green Power España	ARAGÓN	W	1	39.41		39.41
SERRA DAS PENAS	ENEL Green Power España	GALICIA	W	1	42.21		42.21
SIERRA COSTERA	ENEL Green Power España	ARAGÓN	W	1	41.01		41.01
SIERRA COSTERA I	ENEL Green Power España	ARAGÓN	W	1	49.11		49.11
SIERRA DE LA VIRGEN	ENEL Green Power España	ARAGÓN	W	1	29.01		29.01
SIERRA DEL CORTADO	ENEL Green Power España	CASTILLA Y LEÓN	W	1	18.69		18.69
SIERRA DEL MADERO I AND II	ENEL Green Power España	CASTILLA Y LEÓN	W	1	28.92		28.92
SIERRA PELARDA	ENEL Green Power España	ARAGÓN	W	1	14.61		14.61
TOURIÑAN	ENEL Green Power España	GALICIA	W	1	24.86		24.86
VALDESAMARIO	ENEL Green Power España	CASTILLA Y LEÓN	W	1	24.21		24.21
VALDIHUELO	ENEL Green Power España	CASTILLA Y LEÓN	W	1	16.36		16.36
VIRAVENTO	ENEL Green Power España	GALICIA	W	1	1.41		1.41
Total Wind				82	2,267.71		2,267.71
Solar photovoltaic							
AZNALCOLLAR	ENEL Green Power España	ANDALUSIA	PV	1	1.00		1.00
DON QUIXOTE	ENEL Green Power España	EXTREMADURA	PV	1	42.30		42.30
PV CASTELO	ENEL Green Power España	GALICIA	PV	1	0.01		0.01
PV CASTIBLANCO	ENEL Green Power España	EXTREMADURA	PV	1	42.30		42.30
PV CORISCADA	ENEL Green Power España	GALICIA	PV	1	0.02		0.02
GUADARRANQUE	ENEL Green Power España	ANDALUSIA	PV	1	12.30		12.30
HERNÁN CORTÉS	ENEL Green Power España	EXTREMADURA	PV	1	42.30		42.30
LOS BARRIOS	ENEL Green Power España	ANDALUSIA	PV	1	0.10		0.10
NAVALVILLAR	ENEL Green Power España	EXTREMADURA	PV	1	42.30		42.30
TOTANA	ENEL Green Power España	REGION OF MURCIA	PV	1	84.90		84.90
VALDECABALLEROS	ENEL Green Power España	EXTREMADURA	PV	1	42.30		42.30
ZURBARÁN	ENEL Green Power España	EXTREMADURA	PV	1	42.30		42.30
Total Photovoltaic				12			352.12
biogas							
AGUAS DE JEREZ	ENEL Green Power España	ANDALUSIA	В	1	0.47		0.47
Total biomass				1	0.47		0.47
Total Mainland Renewable Generation Facilities				112	7,411.72		7,411.72
NON-MAINLAND SYSTEMS							
Balearic Islands							
Coal							
ALCUDIA <sup>5</sup>	GESA	Mallorca	IC	2	260.00	100.0	260.00
Fuel-Gas	GLOA	Wallorda	10		200.00	100.0	200.00
ALCUDIA	GESA	Mallorca	G	2	75.00	100.0	75.00
SON REUS	GESA	Mallorca	G	11	611.60	100.0	
CA'STRESORER	GESA	Mallorca	G	6		100.0	
MAHON	GESA	Menorca	F-G	8		100.0	
IBIZA	GESA	Ibiza	F-G	o 15		100.0	
FORMENTERA	GESA	Formentera	G G		14.00	100.0	
				1			

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	Company of origin	Locality	Type of Fuel	No. of Groups	Total power (MW)	ENDESA %	Power that may be consolidated at ENDESA (MW)
Canary Islands							
Fuel-Gas							
JINAMAR <sup>6</sup>	UNELCO	Gran Canaria	F-G	7	266.45	100.0	266.00
BARRANCO DETIRAJANA	UNELCO	Gran Canaria	F-G	10	697.00	100.0	697.00
CANDELARIA <sup>7 8</sup>	UNELCO	Tenerife	F-G	6	203.60	100.0	204.00
GRANADILLA <sup>9</sup>	UNELCO	Tenerife	F-G	14	797.40	100.0	797.00
PUNTA GRANDE	UNELCO	Lanzarote	D-G	13	231.01	100.0	231.00
LAS SALINAS	UNELCO	Fuerteventura	D-G	12	186.58	100.0	187.00
EL PALMAR	UNELCO	La Gomera	S	10	22.62	100.0	23.00
LLANOS BLANCOS	UNELCO	El Hierro (Canary Islands):	S	9	13.00	100.0	13.00
LOS GUINCHOS	UNELCO	La Palma	D-G	11	107.74	100.0	108.00
Total Canary Islands				92	2,525.00		2,525.00
Ceuta and Melilla							
CEUTA	ENDESA	Ceuta	F-D	10	99.00	100.0	99.00
MELILLA	ENDESA	Melilla	F-G	8	85.00	100.0	85.00
Total Ceuta and Melilla					184.00		184.00
Total Island and Non-Mainland Conventional Generation Facilities					4,732.00		4,732.00
Wind							
ARICO I AND II	ENEL Green Power España	CANARY ISLANDS	W	1	16.50		16.50
ARINAGA	ENEL Green Power España	CANARY ISLANDS	W	1	6.92		6.92
BARRANCO DE TIRAJANA	ENEL Green Power España	CANARY ISLANDS	W	1	2.00		2.00
CUEVA BLANCA	ENEL Green Power España	CANARY ISLANDS	W	1	2.00		2.00
FARO FUENCALIENTE	ENEL Green Power España	CANARY ISLANDS	W	1	2.25		2.25
FINCA SAN ANTONIO	ENEL Green Power España	CANARY ISLANDS	W	1	1.50		1.50
W.F. DE EPINA	ENEL Green Power España	CANARY ISLANDS	W	1	0.36		0.36
W.F. DE GARAFÍA (JUAN ADALID)	ENEL Green Power España	CANARY ISLANDS	W	1	1.60		1.60
W.F. GRANADILLA I	ENEL Green Power España	CANARY ISLANDS	W	1	0.15		0.15
W.F. GRANADILLA II	ENEL Green Power España	CANARY ISLANDS	W	1	0.30		0.30
PUNTA DE TENO	ENEL Green Power España	CANARY ISLANDS	W	1	1.80		1.80
SANTA LUCÍA	ENEL Green Power España	CANARY ISLANDS	W	1	4.80		4.80
Total Wind				12	40.18		40.18
GORONA DEL VIENTO <sup>10</sup>		El Hierro (Canary Islands):	H+W		11.50	23.2	0.00
Total Island and Non-Mainland Ren	ewable Generation Facilities			12	51.68		40.18
Total Island and Non-Mainland Ge	eneration Facilities				4,784.00		4,773.00

<sup>&</sup>lt;sup>1</sup> Compostilla: Resolution authorising closure of Group 2 (147.9 MW) 12/11/2015; the Sub-delegation of the Government of León extended the Closure Certificate on 11 January 2016.

Granadilla includes the Arona lacilities (191+192. 2-24.3 MW).

Gorona del Viento: Hydroelectric power production plant of the company Gorona del Viento El Hierro, S.A., 23.21%-owned by Unelco Generación, S.A.



<sup>&</sup>lt;sup>2</sup> Anllares: Ministry for Ecological Transition authorised closure on 20 November 2018. Closure Certificate pending.

<sup>&</sup>lt;sup>3</sup> Garoña: In the Official State Gazette of 3 August 2017 Order ETU/754/2017, of 1 August, was published by which renewal of the authorisation to operate the nuclear power plant was denied and the date of 6 July 2013, established in Order IET/1302/2013, was confirmed as the date for final cessation of the operating of the nuclear power plant in Santa Maria de Garoña

<sup>&</sup>lt;sup>4</sup> ENDESA Generación owns 50% of Nuclenor, a company that holds interests in Garoña and Trillo. Consolidated under the equity method.

During 2019, two groups were removed, so that only 520 MW were maintained at 31-12-2019.

<sup>&</sup>lt;sup>6</sup> Jinámar Diesel 1, 2 and 3 (3\*12 MW): Declared indefinitely unavailable following completion of the technical-economic feasibility study

<sup>&</sup>lt;sup>7</sup> Candelaria includes the Guía de Isora facilities: TG1: 48.6 MW (twin-pack type = 2\*24.3).

<sup>&</sup>lt;sup>8</sup> Candelaria TG3 (17.20 MW) and Diesel Groups 1, 2 and 3 (36MW): Declared indefinitely unavailable following completion of the technical-economic feasibility study

<sup>&</sup>lt;sup>9</sup> Granadilla includes the Arona facilities (TG1+TG2: 2\*24.3 MW).

# **ENDESA's generation** facilities in Portugal at 31-12-2019

	Company of origin	Locality	Type of Fuel	No. of Groups	Total power (MW)	ENDESA %	Power that may be consolidated at ENDESA (MW)
PORTUGAL							
Coal							
TEJO <sup>1</sup>	ENDESA	Pego, Abrantes	IC	2	628	43.8	0
Total Coal				2	628		0
Combined Cycle Gas							
ELECGAS <sup>2</sup>	ENDESA	Pego, Abrantes	CCGT	2	855	100.0	855
Total Combined Cycle Gas				2	855		855
Total Portugal				4	1,483		855
Total Conventional Generation Facilities					1,569		16,779
Total Renewable Generation Fac	ilities				364		7,452
Total Generation Facilities of EN	DESA				1,933		24,231

<sup>&</sup>lt;sup>1</sup> Tejo Energía consolidated under the equity method.

Total Morocco			1	392	32	0
MOROCCO <sup>3</sup>	Tahaddart	CCGT	1	392	32	0
MOROCCO						

<sup>&</sup>lt;sup>3</sup> Tahaddart consolidated under the equity method Fuel types:

A-H (anthracite-hard coal), BC (brown coal), BC (black coal), IC (imported coal),

F (fuel oil), G (gas oil), NG (natural gas), CCGT (combined cycle gas turbine), D (diesel), N (nuclear), H (hydraulic)

W (wind), PV (photovoltaic), B (biomass), H+W (hydraulic + wind)

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 $<sup>^{\</sup>rm 2}$  ENDESA has a 50% stake in Elecgas, but owns 100% of the Tolling contract.

#### Published:

Communications Department

#### Design:

Communications Department/Moonbook

#### Layout and prepress:

Moonbook

#### Printing:

Offsetti

#### Legal Deposit:

In process

ENDESA offsets CO<sub>2</sub> emissions produced by this publication

This book has been produced according to the ISO 9001:2008 Quality Management System and the ISO 14001:2004 Environmental Management System standards. Said systems verify at all times that the process is carried out optimising both production and waste management, pursuant to current regulations.

All paper used comes from responsibly managed forests and has been manufactured elemental chirorine free (EFC) with neutral pH, and is free from heavy metals. Paper suitable for filing according to standard ISO 9076.





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