



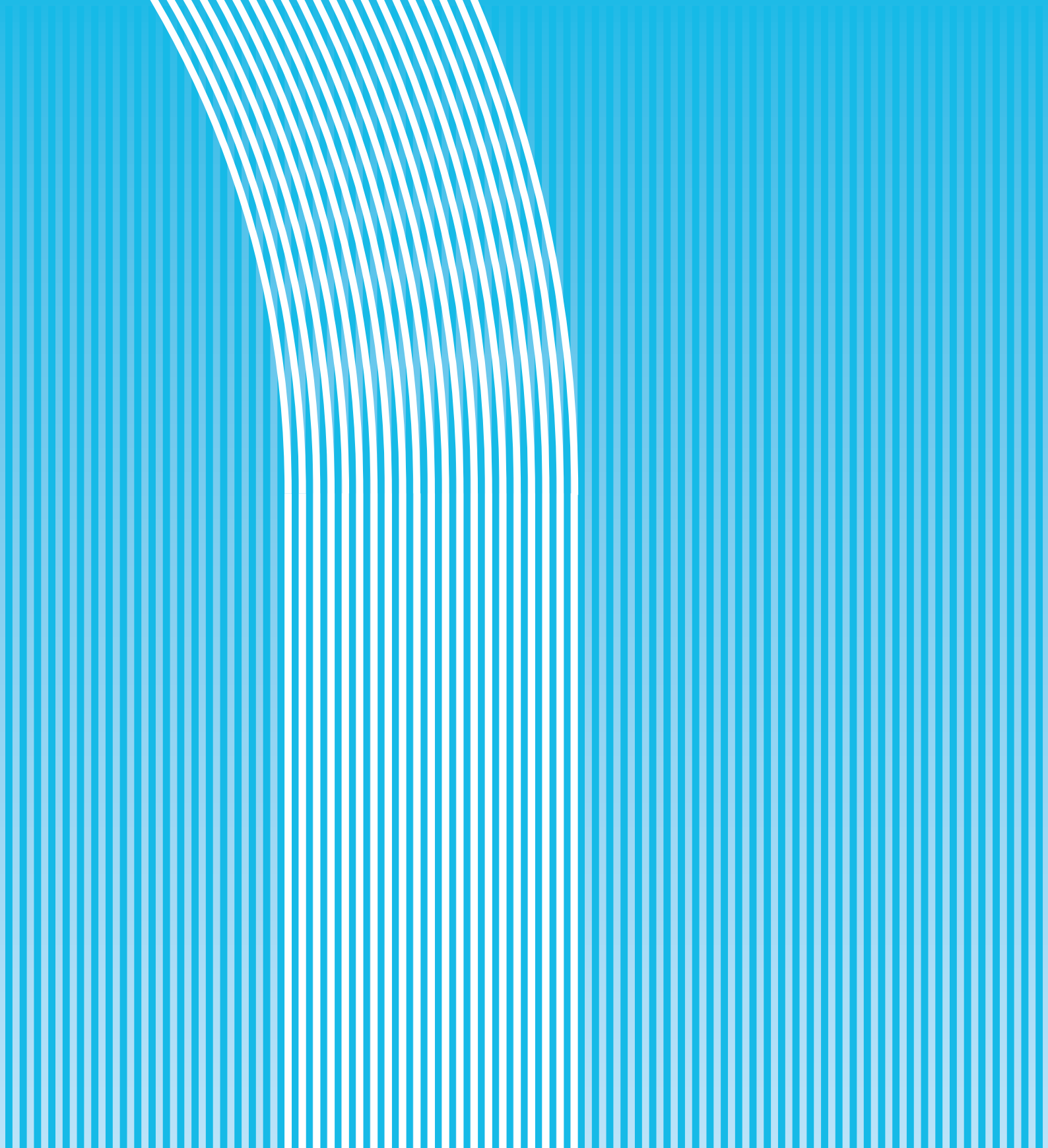
**2018**

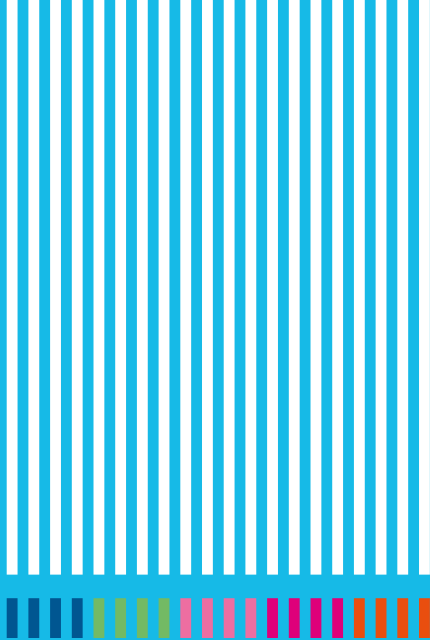
Carbon Footprint Report  
The climate crisis: an urgent  
call to action





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# Letter from the CEO

# Letter from the CEO

Once again this year, I am very proud to present ENDESA's Carbon Footprint Report, on this occasion for 2018.

This is now the eighth consecutive year that ENDESA has published its greenhouse gas (GHG) emissions as part of its commitment to tackle the current situation of climate emergency, by quantifying, analysing and managing its GHG emissions and thus prioritising transparency in the area of the environment.

In its vocation of continuous improvement, ENDESA has this time chosen to expand the scope of analysis of its carbon footprint to include the GHG emissions from the Company's own fleet in all its businesses, and the

emissions produced by the employees' in itinere displacements. In this way the organisation is able to obtain ever more precise results each year on the impact of its activity on the planet.

It is clearly necessary to take a firm and resolute stand in the face of the current scenario of climate crisis, and all of us in the energy industries have a key role to play. ENDESA's attitude to climate change is incontestable. It is firmly committed to the decarbonisation of its energy mix by 2050, and has drawn up a concise roadmap for its reductions up to that date, investing in renewable energy and promoting initiatives for the electrification of the final energy demand and electric mobility.

The carbon footprint is an essential part of ENDESA'S sustainable energy

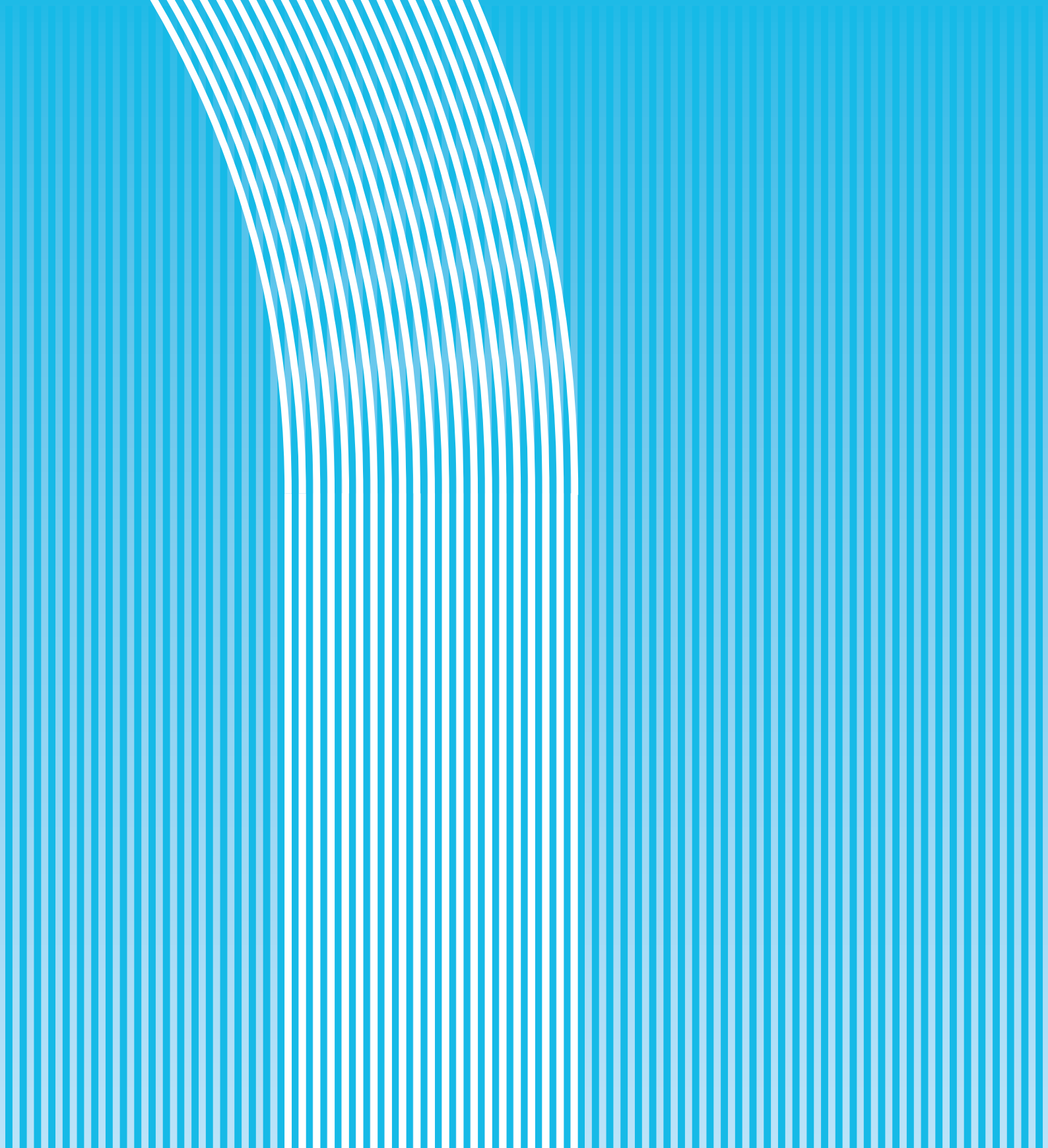
model. It is an instrument for monitoring and balancing the GHG emissions generated by the Company's activities, and offers full awareness so we can establish and comply with ENDESA's decarbonisation objectives. The present report is thus an element of transparency that makes the results of these calculations available to everyone, and as a way of announcing our achievements and initiatives in the task of reducing greenhouse gas emissions.



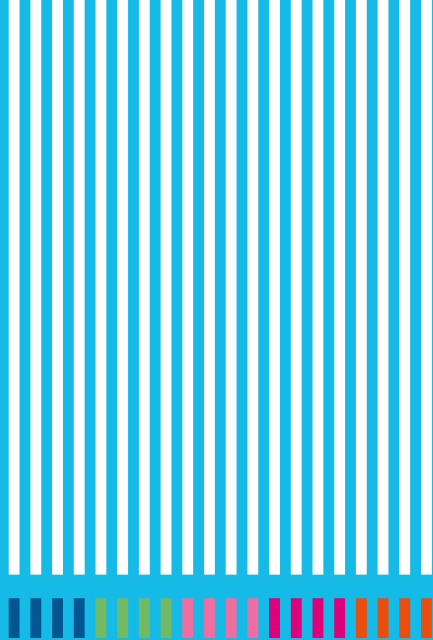
**José D. Bogas Gálvez**

Chief Executive Officer of ENDESA









01

The climate crisis:  
an urgent call to  
action



# 1. The climate crisis: an urgent call to action

**T**he United Nations Framework Convention on Climate Change (UNFCCC) meets once a year at the Conference of the Parties (COP) for the purpose of assessing and approving instruments to reduce greenhouse gas (hereinafter GHG) emissions and tackle global warming.

The COP 21 or Paris Agreement, adopted in December 2015, came into force on 4 November 2016, and marked a turning point in the international struggle against climate change, establishing three key objectives in the areas of mitigation, adaptation and funding of climate change.

Since that time, the subsequent meetings of the COP have focused on defining and focusing the itinerary to achieve these objectives. The next meeting (COP25), to be held from 2 to 13 December in Chile, aims to lay down the criteria for compliance with the Paris Agreement and improve the countries' reduction targets.

ENDESA always closely follows these intense international negotiations and has aligned its business strategy with the current proposed global commitments and objectives in the struggle against climate change.

The climate crisis is the greatest threat humanity has ever faced, and ENDESA is fully aware that the energy companies play a key role in this challenge. As part of ENDESA's commitment to this task, the calculation of the carbon footprint is a crucial tool for information management and transparency, and can help deal with the risks and opportunities facing our Company so we can successfully **integrate the progressive decrease in GHG emissions into our business management and decision-making processes.**

ENDESA is a pioneering company in this area, and has calculated its carbon footprint since 2009, covering all its business lines and offices and improving both its calculation and its scope each year, with the ultimate goal of ensuring that it is as complete as pos-

sible. In addition, since 2013, it has registered its carbon footprint with the Spanish Climate Change Office's National Carbon Footprint Register, a symbol of transparency and of the Company's commitment to the fight against climate change.

## 1.1. The Company

ENDESA carries out its activities in the electricity and gas business, and is a market leader in Spain and the second operator in Portugal. To a lesser degree it markets electricity and gas in other European markets, in addition to other value-added products and services (VAPS) related with its main business. All this thanks to its almost 10,000 employees, who make it possible to provide service to almost 11 million customers.

In 2018, the total energy distributed by ENDESA's network, measured in power plant busbars, was 117,519 GWh.

On 31 December 2018, ENDESA's total net installed capacity in Spain was 20,904 MW in ordinary regime, of which 16,370 MW corresponded to the mainland electricity system and the remaining 4,534 MW to the electricity systems of non-mainland territories (TNP) (Balearic and Canary Islands, and the cities of Ceuta and Melilla).

ENDESA's generation plants in Spain had a total net output of 74,193 GWh in 2018.

Renewable energy plays an important role in the transition towards a competitive, safe and sustainable

## We are currently in a situation of climate emergency, and ENDESA is tackling this serious challenge with clear and ambitious goals

energy system. ENDESA develops and manages renewable energies in Spain through Enel Green Power Spain (100% owned by ENDESA), the fourth Spanish operator in the Spanish renewables sector. This company is exclusively dedicated to producing electricity generated from renewable sources in Spain, and in 2018 had 98 wind, hydraulic and solar generation plants, with 1,815 MW of installed ca-

capacity and a production of 3,833 GWh in 2018.

We are currently in a situation of climate emergency, and ENDESA is tackling this serious challenge with clear and ambitious goals, with which it plans to achieve decarbonisation by 2050.

For some years ENDESA has been aware of the need to integrate the principles of sustainability into the





development of all its activities and businesses, and as part of this undertaking, it has once again this year conducted a process of analysis, consultancy and strategic reflection for the design of the new ENDESA Sustainability Plan (ESP) 2019-2021. This Plan seeks to promote the creation of long-term sustainable value, and establishes as strategic priorities, among others:

- > **Growth through technology and low-carbon services:** the new ESP maintains the same roadmap in order to accomplish ENDESA's commitment to becoming a company with a totally decarbonised generation mix by 2050. To this end it establishes emission reduction targets and objectives for increasing investment in the development of renewable energies.
- > **Improved operations for a better service:** the ESP includes lines of actions aimed to promote efficiency and quality in the management of generation and distribution assets, and relating to the promotion of its employees' sustainable mobility in their travel for work-related and personal motives. Digitalisation is also essential for achieving a sustainable energy model.

ENDESA is firmly and resolutely committed to the responsible management of matters involving climate

change. One of the main pillars of ENDESA's sustainability strategy is climate change, and the Company's Board of Directors is responsible for its development and implementation.

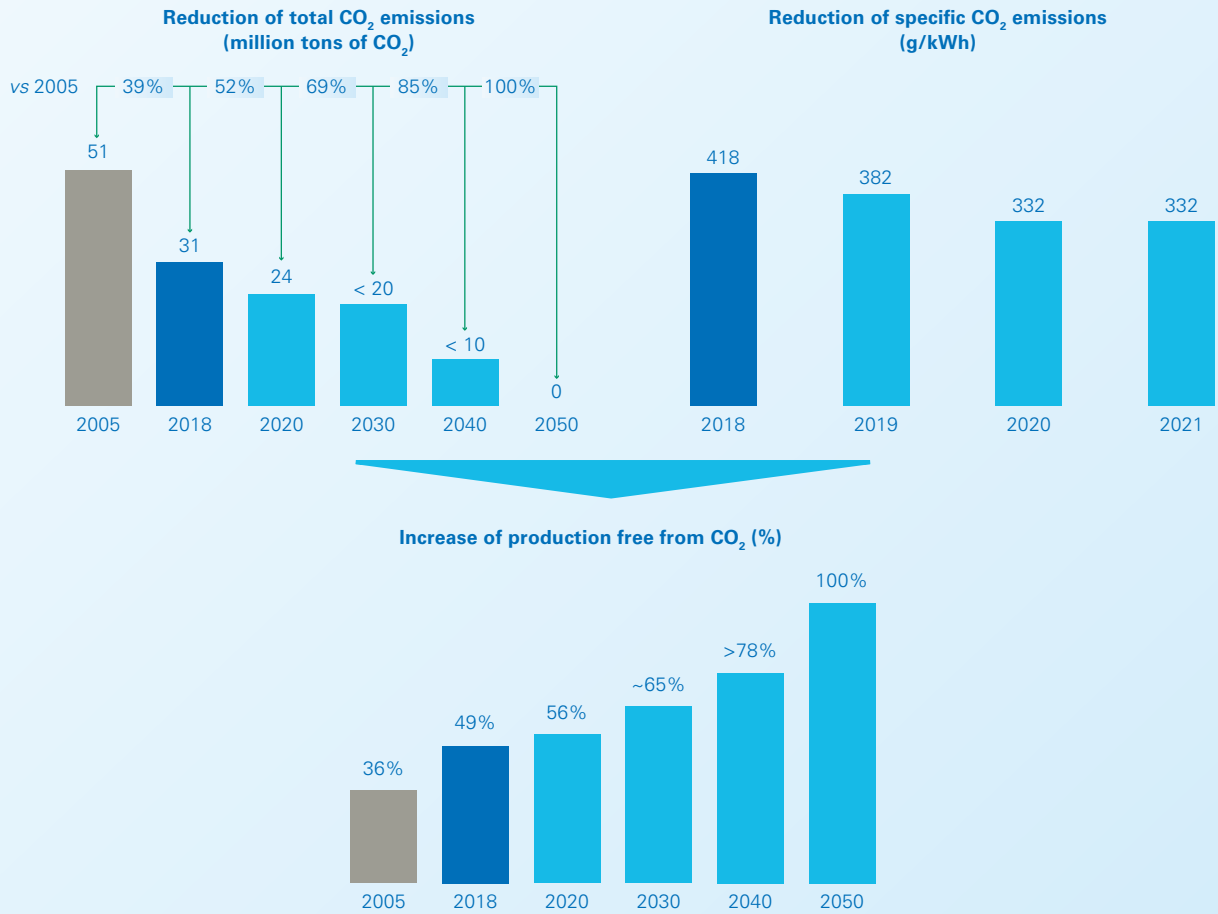
## 1.2. Decarbonisation of the energy mix

ENDESA is aware of its ability to contribute to achieving a low-carbon economy and has established a roadmap towards the decarbonisation of its energy mix by 2050, which sets intermediate targets for reducing CO<sub>2</sub> emissions for 2020, 2030 and 2040. This roadmap is based on a steadfast commitment to renewable energies, the promotion of electric mobility and the optimised management of traditional technologies.



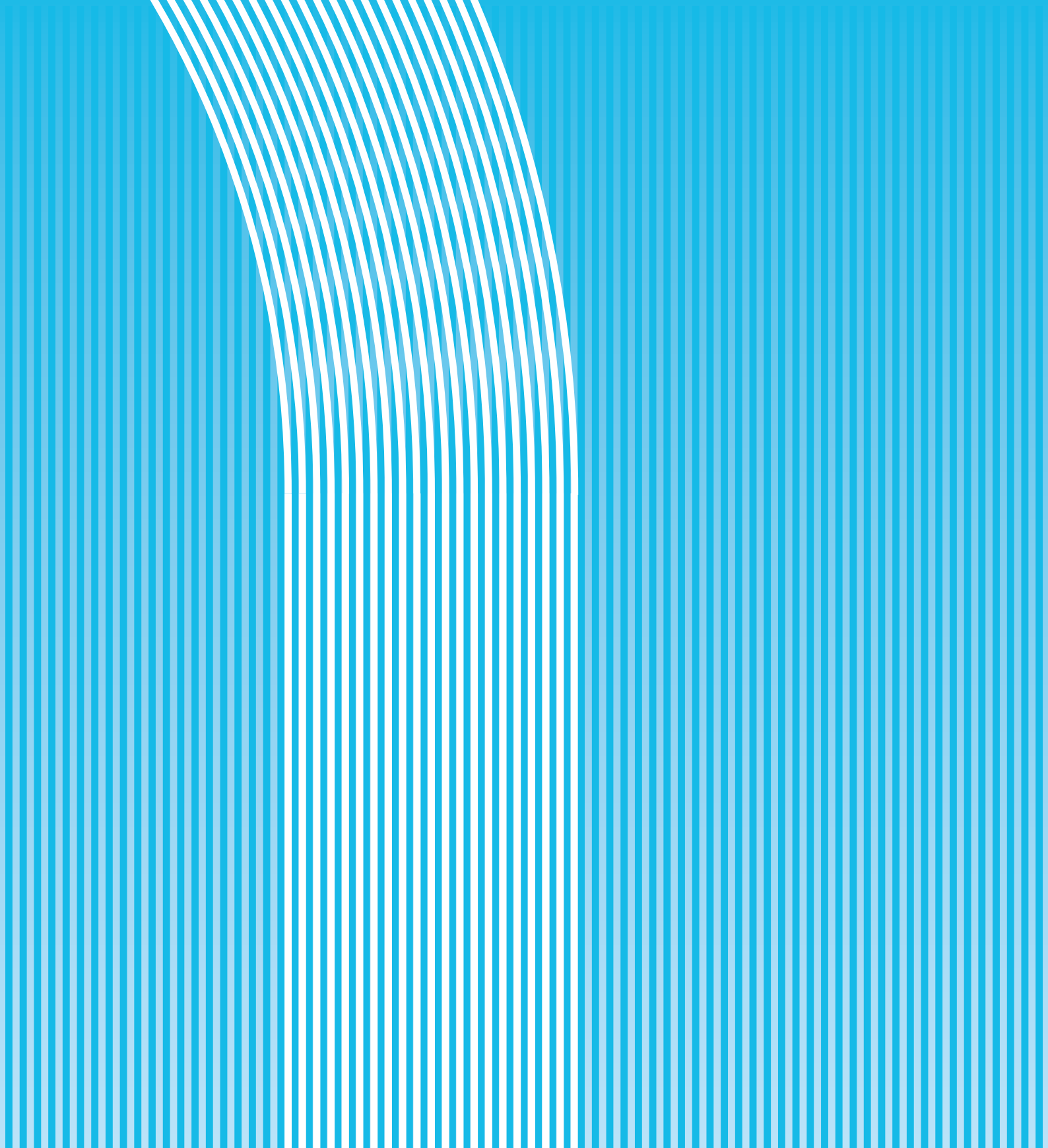
CO<sub>2</sub>  
free

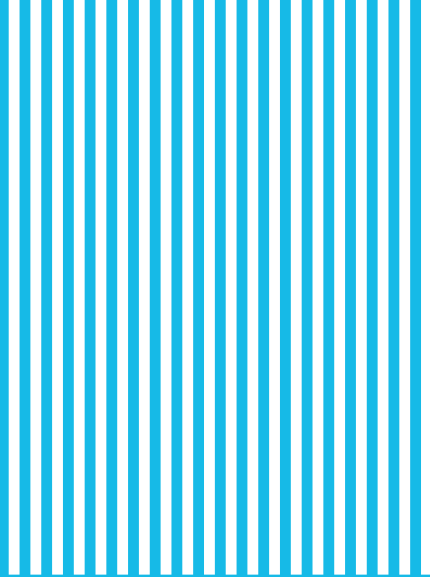
## ROADMAP TOWARDS DECARBONISATION IN 2050



Source: 2018 ENDESA Sustainability Report.







02

ENDESA Forest





## 2. ENDESA Forest

2018 saw the continuation of ENDESA's Forest initiative, for the purpose of reforesting deteriorated areas or those that have suffered fires with autochthonous and resilient species. The first forest area to be restored was La Atalaya, in the municipality of Valdemaqueda (Madrid). The aim of this action was to reforest an area of 20.05 ha that had been affected by fire in 2012.

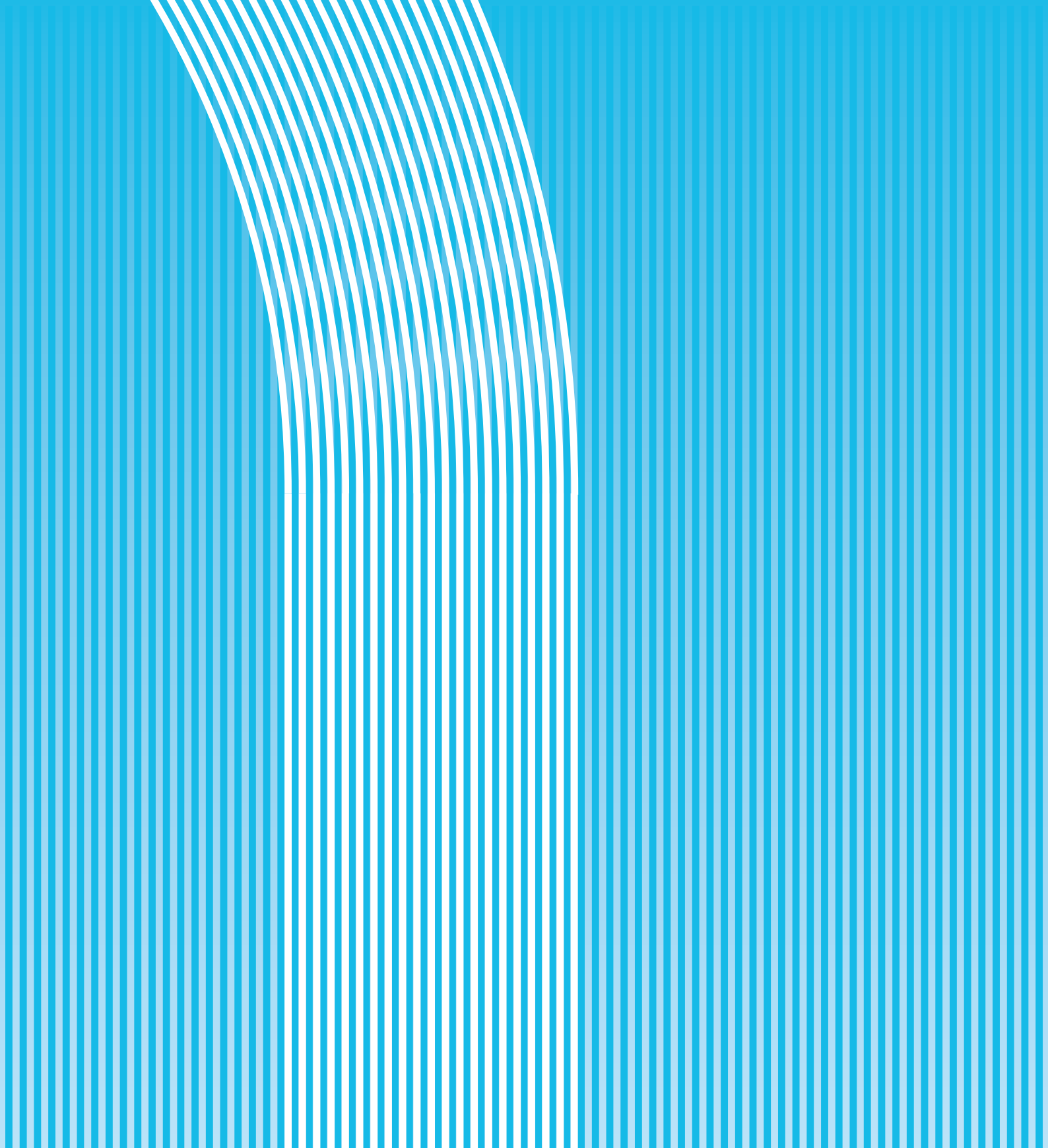
The actions in this area began in 2016 with the restoration of the forest itself, and have continued in 2017 and 2018 with a second field inventory, re-planting, and a review of the project status. This is all intended to ensure a 100% success rate for the plants introduced in 2016, which will ensure the survival of the forest and the lon-

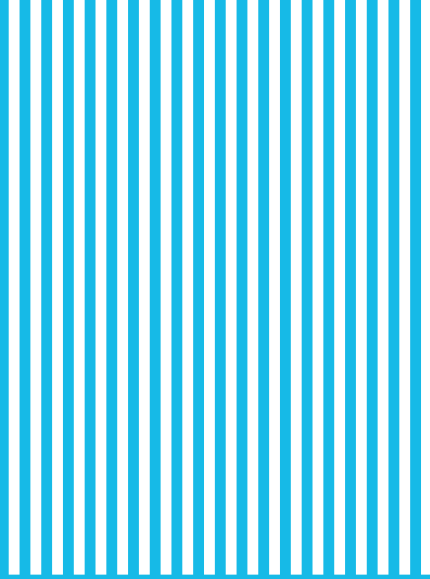
g-term ecosystem services it generates. As is customary, the fieldwork was done using local workers, giving priority to the unemployed, young people, women, over 45s or people at risk of exclusion. The project thus continues to comply with the three-fold objective initially established for the purpose of helping to mitigate climate change (CO2 absorption by the plants introduced), while contributing social benefit and favouring the recovery of biodiversity.

Finally, it is worth noting that, thanks to this project, in 2018 ENDESA became the first company in the energy sector to obtain the registration of its carbon footprint and the activation of the stamp in all its phases (I calculate, I reduce and I offset) in the Carbon

Footprint Register of offsetting and absorption projects in the Ministry of Ecological Transition's Spanish Climate Change Office (OECC).







03

Carbon Footprint



# 3. Carbon Footprint

**T** This report publishes the results of the calculation of ENDESA's carbon footprint for 2018, for the purpose using this indicator to analyse the annual GHG emissions deriving from the Company's activity. This experience consolidates a process of carbon footprint calculation and management that has been an essential part of the Company's strategy since 2009.

In addition, given its experience in this area, since 2013 ENDESA has begun to manage its emissions more actively by applying the figure of Directed Actions within the scope of Standard UNE-EN ISO 14064-3<sup>1</sup> to verify some of the projects it carries out in its facilities for the purpose of improving energy efficiency and reducing emissions. The level of assurance agreed for the verification of the carbon footprint also increased in 2013, from a limited level to a **reasonable level**, meaning that the verification was done with a more

<sup>1</sup> UNE- EN ISO 14064 - Greenhouse gases. Part 3: Specifications and guidelines for the validation and verification of greenhouse gas declarations

extensive sampling and with more stringent requirements governing the data used to calculate the carbon footprint. The external verification declaration is attached at the end of the present report.

**ENDESA's carbon footprint includes the development of a calculation methodology, a proprietary IT tool**, the implementation of a management system and the determination of a company-wide inventory of GHG emissions and removals. This inventory covers both direct emissions generated by activities controlled by the Company and the indirect emissions over which it has no control, but which are associated with its activity. The calculation of the carbon footprint is an essential element for information and transparency that serves to manage the Company's risks and opportunities in relation to GHG in a global and integrated way, as it covers the emissions associated with the business's complete value chain, allowing the "carbon component" to be incorporated into decision-making.

The quantification of emissions and their verification with regard to the standard UNE-EN ISO 14064-1<sup>2</sup> ensures consistency, integrity and transparency for stakeholders in terms of ENDESA's processes of quantification, reporting and monitoring, and an integral and homogeneous management in all the Company's businesses.

This report aims to reflect the work carried out to calculate the carbon footprint, and the results obtained for 2018.

<sup>2</sup> UNE- EN ISO 14064 - Greenhouse gases. Part 1: Specifications and guidelines for the whole organisation for the quantification and declaration of greenhouse gas emissions and reductions.

## 3.1. The carbon footprint in the Company

Medio Ambiente Iberia is responsible for calculating ENDESA's carbon footprint by developing a proprietary calculation methodology and a specific IT tool, so the person responsible for this task is the head of Medio Ambiente Iberia at ENDESA.



## 3.2. Consolidation scope and systems included

ENDESA's main activity is the generation and distribution of electricity and the supply of electricity and natural gas.

The scope of ENDESA's carbon footprint for 2018 includes the following systems associated with ENDESA's businesses:

- > Thermal generation: coal, fuel oil/diesel and natural gas.
- > Nuclear generation.
- > Renewable generation: hydropower, mini hydropower, biogas, wind and photovoltaic power.
- > Electricity distribution.
- > Restoration of old coalfields.

- > Port terminals.
- > Buildings<sup>3</sup>.
- > Supply of natural gas and electricity.
- > CO<sub>2</sub> sinks: forests.

The consolidated results included in the present report take into account data from the Company's stakeholders and operations, according to ENDESA's consolidation scope, which is determined by the Company's Economic and Financial area.

<sup>3</sup> The calculation of the emissions from the main offices of ENDESA include the emissions deriving from the employees' work-related trips, the vehicles associated with these offices and the employees' travel to work.

That is, 100% of the emissions are accounted from all the facilities where ENDESA has a majority stakeholding, and hence responsibility over the operational control of the facility. The emissions from all other facilities in which it does not have a majority stakeholding are also included, reporting the percentage share corresponding to ENDESA. This is the case of nuclear facilities.





### 3.3. Limits of the organisation

Below is a list of the facilities in each of the systems included within the scope of ENDESA's carbon footprint and on which the GHG emissions inventory is calculated.

GENERATION		
Thermal generation	Coal	CT Alcadia, CT Compostilla, CT As Pontes, CT Teruel, CT Litoral de Almería
	Fuel oil/diesel	CD Ceuta, CD Melilla, CT Jinamar, CT Barranco de Tirajana, CT Candelaria, CT Granadilla, CD Punta Grande, CD Las Salinas, CD El Palmar, CTD Llanos Blancos, CD Los Guinchos, CD Mahón, TG Arona, TG Guía de Isora
	Natural gas	CTCC Besós, CTCC San Roque, CTCC As Pontes, CTCC Cristóbal Colón, CTCC Ca's Tresorer, CTCC Son Reus, CD Ibiza y TG Formentera y CTCC Pego (Portugal)
Nuclear generation	Nuclear	CN Almaraz, CN Ascó y CN Vandellós



GENERATION		
<p><b>Renewable generation</b></p>	<p>Hydroelectric and small hydroelectric</p>	<p><b>UPH Sur:</b></p> <p><b>Agrupación Antequera:</b> CH Cordobilla, CH Gobantes, CH Iznájar, CH Jauja, CH Nuevo Chorro, CH Paredones, CH San Augusto, CH San Calixto, CH San Pascual, CH San Ramón, CH Tajo de la Encantada</p> <p><b>Agrupación Córdoba:</b> CH Bembézar, CH El Carpio, CH Encinarejo, CH Guadalmellato, CH Jándula, CH La Vega, CH Marmolejo, CH Valtodano, CH Villafranca</p> <p><b>Agrupación Granada:</b> CH Canales, CH Cázulas, CH Chillar I, CH Dilar, CH Duque, CH Dúrcal, CH Ízbor, CH Nacimiento, CH Negratín, CH Nuevo Castillo, CH Pampaneira, CH Porqueira</p> <p><b>Agrupación Guadiana:</b> CH Cijara Margen Derecha, CH Cijara Margen Izquierda, CH La Serena, CH Orellana Canal, CH Orellana Presa, CH Puerto Peña, CH Zujar</p> <p><b>Agrupación Linares:</b> CH Doña Aldonza, CH Guadalén, CH Guadalmena, CH Los Órganos, CH Mengíbar, CH Pedró Marín, CH Racioneros, CH Tranco de Beas</p> <p><b>Agrupación Sevilla:</b> CH Alcalá del Río, CH Buitreras, CH Cala, CH Cantillana, CHEI Corchado, CH Guillena, CH El Pintado, CH Ronda</p> <p><b>UPH EbroPirineos:</b></p> <p><b>Agrupación Ebro:</b> CH Flix, CH Húermeda, CH Mequinenza, CH Mores, CH Ribarroja, CH Serós</p> <p><b>Agrupación Ribagorzana:</b> CH Baliera, CH Baserca, CH Bielsa, CH Bohí, CH Bono, CH Caldas, CH Escales, CH Graus, CH Llesp, CH Montanyana, CH Moralets, CH Pont de Suert, CH Senet, CH Vilaller</p> <p><b>Agrupación Garona:</b> CH Aiguamoix, CH Arties, CH Barradós, CH Benós, CH Bossost, CH Jueu, CH Pont de Rei, CH Torán, CH Vielha, CH Túnel de Vielha</p> <p><b>Agrupación Segre:</b> CH Balaguer, CH Camarasa, CH Canelles, CH La Baells, CH Lleida, CH Oliana, CH Santa Ana, CH Termens</p> <p><b>Agrupación Ter:</b> CH Boadella, CH Calabuig, CH Les Illes, CH El Molí, CH Montesquiu, CH Orfes, CH Pasteral I, CH Pasteral II, CH Sau, CH Susqueda, CH Tregurá, CH Casas</p> <p><b>Agrupación Alto Pallaresa:</b> CH Espot, CH Esterri, CH La Torrasa, CH Lladres, CH Llavorsí, CH Montamara, CH Sant Maurici, CH Tavascan Inferior, CH Tavascan Superior, CH Unarre</p> <p><b>Agrupación Bajo Pallaresa:</b> CH Cabdella, CH Gavet, CH Pobla II, CH Sallente, CH Talarn, CH Terradets</p> <p><b>UPH Noroeste:</b></p> <p><b>Agrupación Orense-Zamora:</b> CH Porto, CH San Sebastián, CH San Agustín, CH Prada, CH Moncabril G1, G2 y G3, CH Moncabril G Auxiliar, CH Cornatel, CH Quereño</p> <p><b>Agrupación Sil-Eume:</b> CH La Ribeira, CH Eume, CH Rioscuro, CH Las Ondinas, CH Peñadrada, CH Santa Marina I, CH Santa Marina II, CH Bárcena</p> <p><b>Agrupación Otras Cuencas:</b> Anllo, Arroibar, Los Batanes, Rosarito, San Juan de Muro, Castadón, Fervenzas, Requeixo y Villameca</p>





GENERATION		
Renewable generation	Wind	<p><b>Andalucía:</b> Angosturas, Energía Eólica del Estrecho, Énix, Granujales, Los Barrancos, Los Lances I, Los Lances II, Madroñales, Menaute, Padul, Peesa - Cortijo La Joya y Pesur</p> <p><b>Aragón:</b> Acampo Hospital, Aguilón, Almarén, Aragón, Escucha+San Just, Puerto Trinidad, La Muela II, La Muela III, Saso Plano, Sierra Costera II y Sierra de la Virgen</p> <p><b>Asturias:</b> Belmonte</p> <p><b>Canarias:</b> Barranco de Tirajana, Arinaga, Cueva Blanca, San Antonio, Santa Lucía, Aricol y II, Epina, Faro Fuencaliente, Garafía, Granadilla I, Granadilla II y Punta de Teno</p> <p><b>Guadalajara:</b> Caldereros, Peña II y Picazo</p> <p><b>Ávila-León:</b> Aldeavieja, Altos de Cartagena, Lanchal, Navas del Marqués, Navazuelo, Peña del Gato, Pucheruelo, Valdesamario y Valdihuelo</p> <p><b>Soria-Burgos:</b> Ágreda, Ampliación S<sup>a</sup> Cortado II, Cantiruela, Cogollos II, Las Pardas, Los Llanos, Sierra del Cortado y Sierra del Madero I y II</p> <p><b>Galicia:</b> Barbanza I y II, Capelada I y II, Castelo, Coriscada, Corzán, Do Vilán, Faladoira-Coto Teixido, Peña Forcada, San Andrés, Touriñán IV, Viravento, Careón, Chan do Tenón, Couto de SS, Leboeiro, Pena Ventosa y Peña Armada, Farrapa, Pousadoiro y Peña Revolta</p> <p><b>Valencia-Castellón:</b> Casillas I y II</p> <p><b>Cataluña:</b> Les Forques y Montargull</p>
	Photovoltaic	Aznalcollar, Guadarranque, Los Barrios y Tejados
	Biogas	EDAR Aguas de Jerez

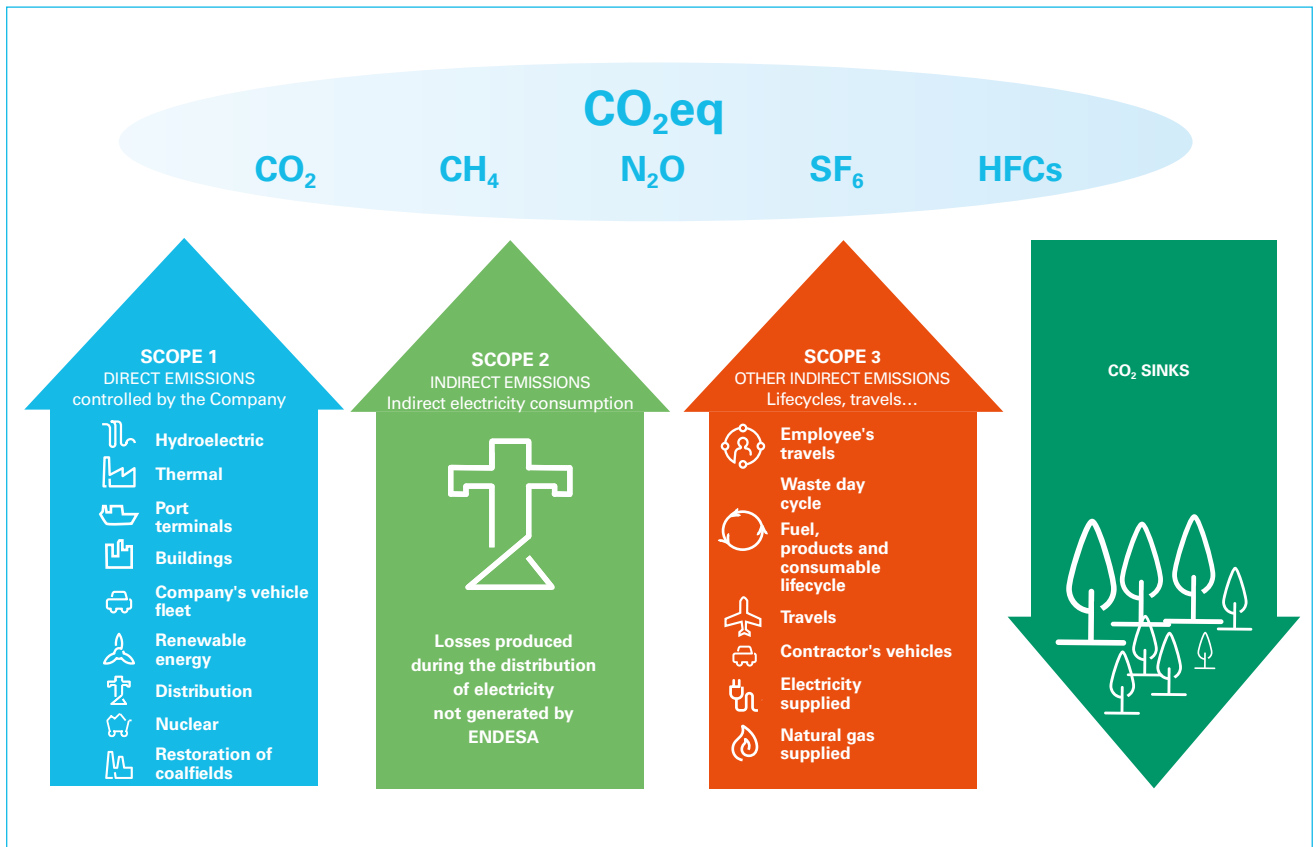
<b>Electricity distribution</b>	Andalucía, Extremadura, Aragón, Baleares, Canarias, Castilla y León y Cataluña
<b>Restoration of coalfields</b>	Puertollano
<b>Port terminals</b>	T. P. Carboneras, T. P. Los Barrios y T. P. Ferrol
<b>Buildings</b>	Sede Ribera del Loira (Madrid), Sede Vilanova (Barcelona), Sede Sant Joan de Déu (Palma de Mallorca), Sede Woerman (Las Palmas de Gran Canaria), Sede Aznar Molina (Zaragoza), Sede Borbolla (Sevilla)
<b>Retail</b>	Gas Natural Electricidad
<b>Sinks</b>	Bahía de Bolonia, Escombrera Puentes, Finca Son Orlandis, Spot, Reforestación perímetro mina Puentes, Dilar, Dúrcal, Guejar Les Escales, Monte La Ralla, Monte Forgoselo, Tiscar, Montejaque, Son Juny, Mina Emma, Moguer, El Campillo/Minas de Riotinto, Altafulla y Sineu



## 3.4. Operating limits

ENDESA establishes the operating limits on the basis of the guidelines of the GHG Protocol<sup>4</sup>, with a complete scope throughout the life cycles

of each system, so the results of the carbon footprint include direct and indirect emissions according to the following classification:



<sup>4</sup> The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (revised edition) provides regulations and guidelines for companies and other organisations for compiling inventories of greenhouse gas emissions.



### 3.4.1. Scope 1. Direct emissions

Direct GHG emissions, understood as those produced by sources that are controlled by the Company itself. This classification includes emissions deriving from:

- > Fuel consumption (coal, fuel oil/diesel, natural gas, biogas) for the production of electricity by generating plants.
- > Use of SF<sub>6</sub> as cooler in transformers in ENDESA's electricity distribution systems and in nuclear power plants.
- > Consumption of HFCs in the cooling systems of port terminals.
- > Fire extinction equipment in port terminals.
- > Methane leaks generated in hydro-power plant reservoirs.
- > Fuel consumption in the restoration of old coalfields belonging to ENDESA.
- > Heating/air-conditioning of buildings (fuel use in boilers or generators).
- > The Company's own vehicle fleet.

### 3.4.2. Scope 2. Indirect emissions by energy

Indirect GHG emissions corresponding to the technical losses produced during the distribution of electricity not generated by ENDESA.

### 3.4.3. Scope 3. Other indirect emissions

Other indirect GHG emissions, including those that, although they are not generated in sources controlled by ENDESA, are associated with its activity. This scope includes all emissions associated with the different stages of the electricity life cycle that are not controlled by the Company and which have not been included in the previous scopes, considering:

- > Extraction, production and transport of fuel consumed in the operation.
- > Manufacture and transport of chemical products consumed in the operation.
- > Transport and treatment of waste generated in the operation.
- > Extraction, production, transport and use of marketed natural gas by the end user.

- > Generation of the marketed electricity that has not been produced in plants belonging to ENDESA. This is accounted based on the country's electricity mix.
- > Trips made by employees by plane, train and in rented/leased vehicles.
- > Vehicle fleet for maintenance and installations (electricity distribution, renewable production) belonging to contractors.
- > Displacements by ENDESA employees from their homes to work (in itinere).

The limits defined by the geographic scope of the carbon footprint are determined by:

- > The location of the facilities included in the systems considered for Scope 1 and 2 emissions.
- > The countries and regions where the different phases of the life cycles of the indicated systems take place, and the supply activities for Scope 3 emissions.

## 3.5. Exclusions

The exclusion from the emissions quantification has been done according to section 4.3.1 of Standard UNE-EN ISO 14064-1, based on the following criteria:

- > All sources or sinks whose emissions have a low representation (< 5%) in the total emissions. This category includes:
  - Emissions deriving from vehicle fuel consumption by contractors in thermal generation, port terminals and restoration of old coal-fields.
  - Emissions from waste representing less than 3% of the total waste generated in each of ENDESA's businesses.
  - Emissions from any consumables not included in the 95% of total consumables consumed in each of ENDESA's generation technologies and other businesses.
- Fugitive emissions of SF<sub>6</sub> in all ENDESA's businesses, except the distribution and nuclear power plant business.
- Fugitive emissions of HFCs in all ENDESA's businesses, except the port terminals business.

- Fugitive emissions of CH<sub>4</sub> from water in reservoirs that are NOT owned by ENDESA.
  - Consumption of diesel by generators in wind farms, where the maintenance is managed by contractors.
- > Emissions whose quantification is not technically feasible or profitable as no complete or reliable data are available within the corporate systems.



## 3.6. Quantification methodology

The process of defining and calculating ENDESA's carbon footprint as a whole has been done according to the following premises:

- > The definition of electricity and gas life cycles and of ENDESA's other businesses, taking into account each technology associated with the energy generation and distribution, starting at the fuel extraction phase through to the management of the final waste products generated.

- > Once the life cycles have been defined, the GHG emissions/removals are calculated based on the EMEP/CORINAIR methodology, which makes it possible to estimate the volume of emissions from each type of emission source based on quantifiable data (activity data), as in the case of fuel consumption or supply, and emission factors from verified sources. This is done by considering separately the following GHGs: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, HFCs,





SF<sub>6</sub>, in the appropriate cases, according to the type of system.

- > It was therefore necessary to compile information to allow the quantification of the GHG emissions that take place at each phase of the life cycles. This information comes from:
  - the direct emissions caused by activities regulated by the Emissions Trading Directive (generation activities) declared according to the GHG emissions monitoring and notification protocols approved in Decision 2007/589/EC of the Commission of 18 July, 2007, which establishes the guidelines for the monitoring and notification of GHG emissions,
  - and for the data on ENDESA's own activities (the main consumptions in the facilities), emissions factors (from the IPCC, documentary and bibliographic sources or determined analytically by ENDESA's facilities).
- > Specific emissions factors have been applied for each type of GHG and for each phase of the life cycle according to the guidelines established in the document entitled "2006 IPCC Guidelines for National Greenhouse Gas Inventories" and other recognised sources.

## 3.7. Uncertainty impact

The following requirement levels are established for the emissions inventoried within the scope of the carbon footprint:

- > For the verified emissions from the facilities covered by the European Emissions Trading Directive, the maximum relative importance associated with the verified emissions is 2% or 5% depending on the category of the facility (categories A, B or C), applying the proposed procedures and levels required in the applicable authorisations and emissions monitoring plans.
- > A controlled and minimised relative importance is established for all other emissions, as these are calculated based on data for the activity in the facilities and emissions factors. The data on activity correspond to the main consumptions in the facilities and the generation and management of their main waste products. These data are subject to commercial exchange, and are therefore measured and controlled to manage their invoicing, and their amount is monitored metrologically. The emission factors used are taken

from verified sources and are specific for each phase of the life cycles, so the level of uncertainty is known and controlled. The emissions factors calculated internally are based on measurements from analytical equipment that is calibrated and verified externally.

By applying these considerations, ENDESA can minimise as far as possible the uncertainty of the data provided for its carbon footprint.

Additionally, measurements are developed for the continuous management of uncertainty to ensure it is controlled and, as far as possible, reduced. These measures are focused on improving the quality of the data for activity and emission factors, as the main aspect on which any practical action can be taken to control uncertainty. These measures establish:

- > The performance of regular technical reviews to validate changes in the methodologies for the conceptualisation, design and calculation of the inventory.
- > Regular internal audits of the information management process and the activity data.
- > Regular assessment of the quality of the data used in the inventory.
- > Critical review of the data and results obtained.

## 3.8. Baseline year

To be able to analyse the GHG emissions and highlight their trend in order to assess the variations in emissions each year, it is necessary to set a starting year, known as a baseline year (hereinafter BY). Given the Company's characteristics in regard to the stability of the businesses (acquisition, sales, etc.), the BY selected was a "rolling base year"; that is, each year the results are compared with the results of the previous year. It is always assumed that to ensure the consistency of the emissions monitoring, it is important to take into account any major structural changes that ENDESA may have undergone since the last calculation of the footprint, which may mean that the emissions are not comparable with the BY emissions. If this is the case, it will be necessary to recalculate the BY and incorporate the significant changes that have taken place in the Company.

In the case of the 2018 carbon footprint, the BY has been established as 2017 and as no significant changes have taken place in the Company's scope throughout the year, it has not

been necessary to recalculate the BY emissions.

## 3.9. Directed Actions

### 3.9.1. Renewal of distribution lines

Since 2011 ENDESA has participated in the Catalonia Voluntary Agreements, an initiative promoted by the Catalan Climate Change Office whose aim is to establish a voluntary commitment to reducing GHG emissions beyond what is required by the regulations.

In 2018, ENDESA once again ratified its adherence to the **Voluntary Agreements Programme for the reduction of greenhouse gases (GHG)**, and its contribution has been audited by AENOR, with the scope of the project executed in 2018, consisting of the substitution of the conductor of two 110 kV circuits (Altafulla-Rourell and La Geltru-Tarragona sections). The existing conductor (Cu127) has been exchanged for another with a larger

section (Cóndor LA 455). The substituted section was 10.854 km, and is now 12.28 km, as it includes variants (change of layout).

This project has achieved a reduction in electricity losses of 246 MWh a year and represents **an annual savings in emissions of 78.97 equivalent tons of CO<sub>2</sub>** in Scope 2 of ENDESA's Distribution Business.

### 3.9.2. Efficiency in ENDESA's buildings

ENDESA carries out specific actions to reduce its carbon footprint by optimising the use of space and reducing energy consumption, supplies and the generation of waste.

Thanks to the optimisation of the use of the workspace, 2018 saw a 6,240 m<sup>2</sup> reduction in office space, saving 528 tons of CO<sub>2</sub> emissions a year. Additionally, the reduction in the generation of paper and cardboard waste in offices has saved 3 tons of CO<sub>2</sub>. These two measures represent a **total emissions saving of 531 tons of CO<sub>2</sub>**.





### 3.9.3. Sustainable management of ENDESA's fleet

ENDESA also reduces its carbon footprint through the efficient management of its vehicle fleet. Below is a list of the different actions implemented and their results:

> **Reduction of the carbon footprint due to the electrification of fleets.**

One of ENDESA's areas of action to promote sustainable mobility is the management of its own fleet. For this reason, for some years, ENDESA has implemented measures aimed at reducing its combustion fleet and incorporating hybrid and electric vehicles. In 2018 ENDESA had a total of **100 electric vehicles and 529 hybrid vehicles**, which in total represent almost 30% of the fleet, 6% higher than in 2017, as opposed to the 94 and 485 vehicles respectively for 2017.

> **Reduction of the combustion fleet.** Another of the areas of action is the substitution of combustion vehicles with cars producing lower emissions. In 2018, **55 combustion vehicles** were replaced, the same number as in 2017.

> **Streamlining of the fleet.** Finally, another contribution to cutting emissions, fuel savings and reducing the costs associated with management is the elimination of combustion vehicles. In 2018, **303 combustion vehicles were withdrawn** from the Company's fleet, compared to 162 in 2017.

These three actions represented a **total saving of 313 tons of CO<sub>2</sub> emissions** in 2018.

### 3.9.4. Renewal of distribution lines

Support for working outside the office As part of its sustainable mobility policy, ENDESA offers the option of ENDESA employees being able to voluntarily sign up to this system that currently allows them to work one day a week outside the office. In 2018, 1,400 people took part in this initiative, thus avoiding the emissions from their travel to work, which is estimated to **save 244 tons of CO<sub>2</sub>**.

### 3.9.5. Renewal of distribution lines

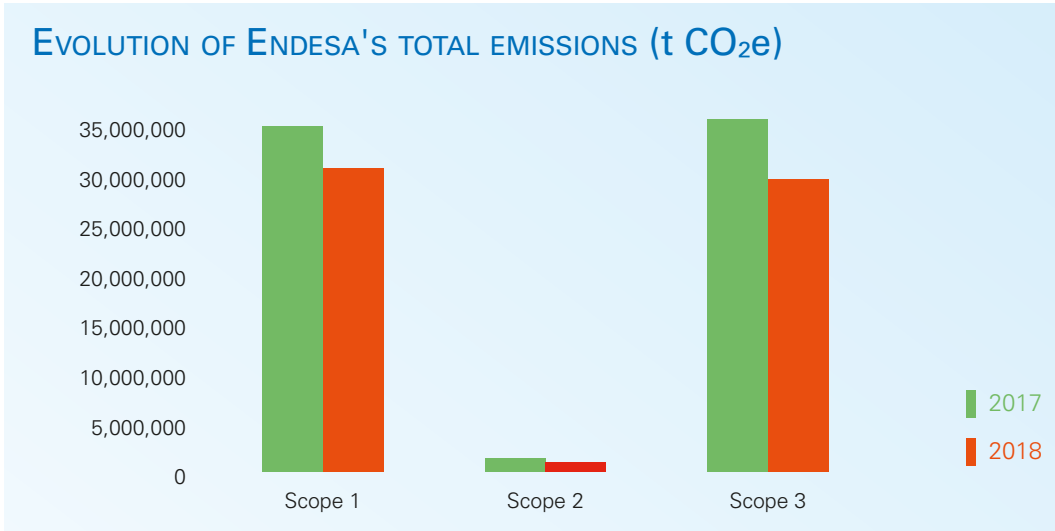
Electric Mobility Plan for employees

In 2015 the Company launched its Electric Mobility Plan for employees, which has been selected as a Climate Project by the Ministry of Ecological Transition since 2016. This plan enables the acquisition of electric vehicles by ENDESA employees for a specific period for their personal use.

Thanks to the employees' adhesion to this plan, their travel from home to their work at ENDESA has an important component of electric mobility, and avoids the emissions that would have occurred if they had used combustion instead of electric vehicles. The total savings in emissions is estimated at **887 tons of CO<sub>2</sub>** in 2018.

## 3.10. GHG emissions data

The 2018 results, consolidated at the corporate level, and the analysis of the main data presented are shown below.



### ENDESA (t CO<sub>2</sub>e)

Year	Scope 1	Scope 2	Scope 3	Sinks
2017	34,801,749	707,019	35,237,225	-32,700
<b>2018</b>	<b>31,292,646</b>	<b>591,547</b>	<b>30,004,109</b>	<b>-32,700</b>

The above graph and tables highlight the reduction in the results of the calculation of ENDESA's carbon footprint in its three scopes, compared to 2017. This reduction in the Company's emissions is justified below:  
In the case of ENDESA, most Scope 1 emissions are due to the electricity

generation activity. **Scope 1 emissions fell in 2018** as the production from coal, fuel oil/diesel and natural gas plants was considerably lower than the previous year. It is worth noting that 2017 was the hottest and second driest year since 1965, requiring

greater use of thermal power plants that year.

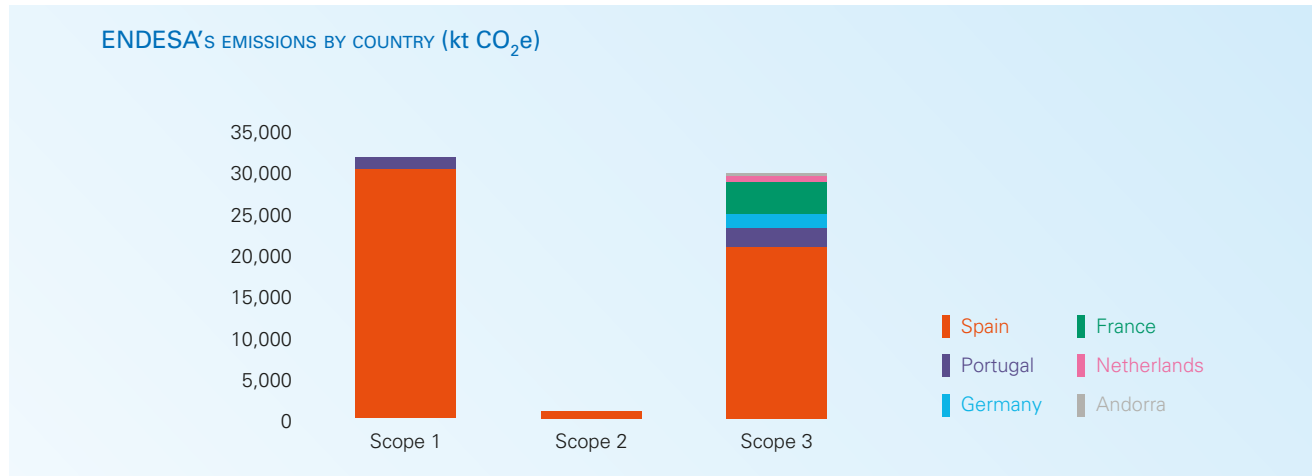
The **fall in Scope 2 emissions** is due both to improvements in the distribution networks, which reduces energy loss, and to the reduction in the emission factor in the Spanish electricity mix.





### 3.10.1. ENDESA's emissions by country

The following tables show the distribution of ENDESA's emissions by scope for each country where the Company operates.



#### ENDESA 2018 (kt CO<sub>2</sub>e)

COUNTRY	Scope 1	Scope 2	Scope 3
Spain	30,549.20	591.55	21,553.55
Portugal	743.44	0.00	1,777.79
France	0.00	0.00	4,739.93
Germany	0.00	0.00	1,154.30
Netherlands	0.00	0.00	725.98
Andorra	0.00	0.00	52.57
	<b>31,292.65</b>	<b>591.55</b>	<b>30,004.11</b>

As can be seen in the graph, most emissions occur in Spain, as this is the country with the highest business volume. The total generation busi-

ness is located in Spain and Portugal (Scope 1), the electricity distribution business is only in Spain (Scope 2) and the electricity and gas supply business

(Scope 3) is also located in the other countries.



## 3.10.2. ENDESA's emissions by type of GHG

The following table shows the distribution of ENDESA's emissions by type of greenhouse gas. As expected, it can be seen that the highest percentage corresponds to CO<sub>2</sub> emissions.

### ENDESA 2018 (kt CO<sub>2</sub>e)

	Scope 1	Scope 2	Scope 3
SF <sub>6</sub>	5.12	0.00	0.00
CO <sub>2</sub>	31,016.20	588.28	28,144.97
CH <sub>4</sub>	145.04	0.95	1,804.70
N <sub>2</sub> O	126.21	2.31	54.44
HFC-32	0.01	0.00	0.00
HFC-125	0.06	0.00	0.00
HFC-134a	0.00	0.00	0.00
HFC-227	0.00	0.00	0.00
	<b>31,292.65</b>	<b>591.55</b>	<b>30,004.11</b>

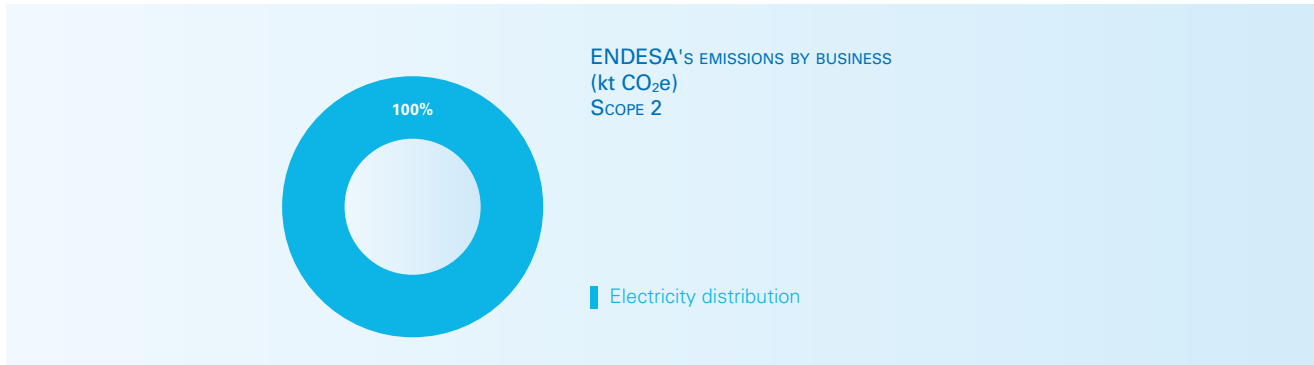
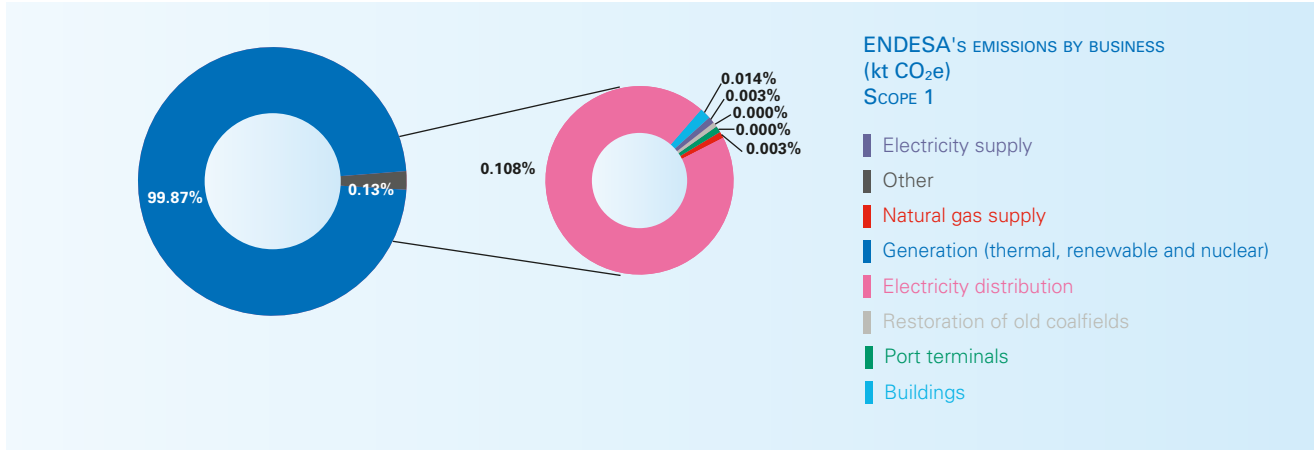


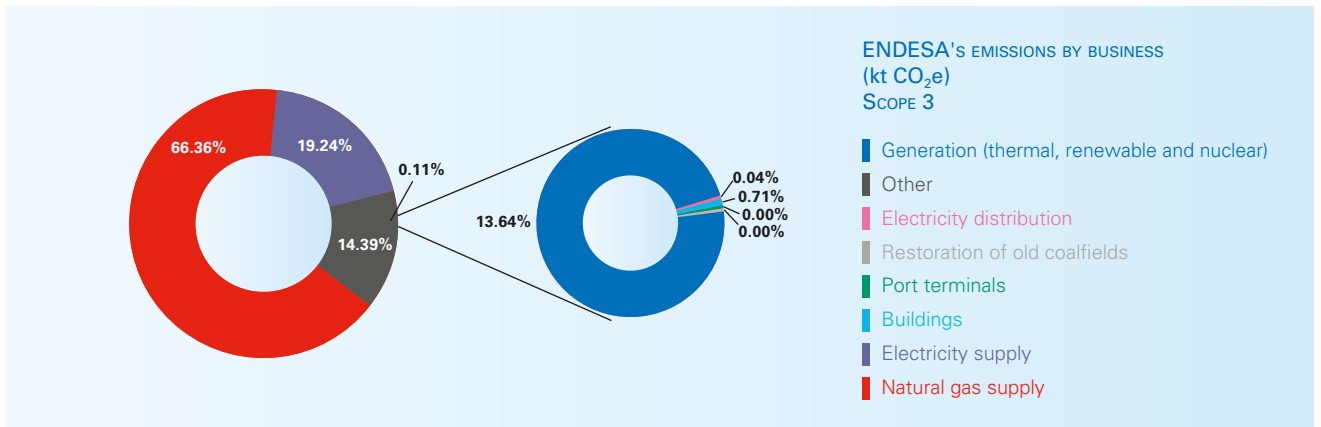


### 3.10.3. ENDESA's emissions by business

The distribution of ENDESA's emissions between its different businesses is shown below. Electricity generation is the business with the highest Scope 1 emissions, electricity distribution

has the highest Scope 2 emissions, and the natural gas supply business has the highest Scope 3 emissions.





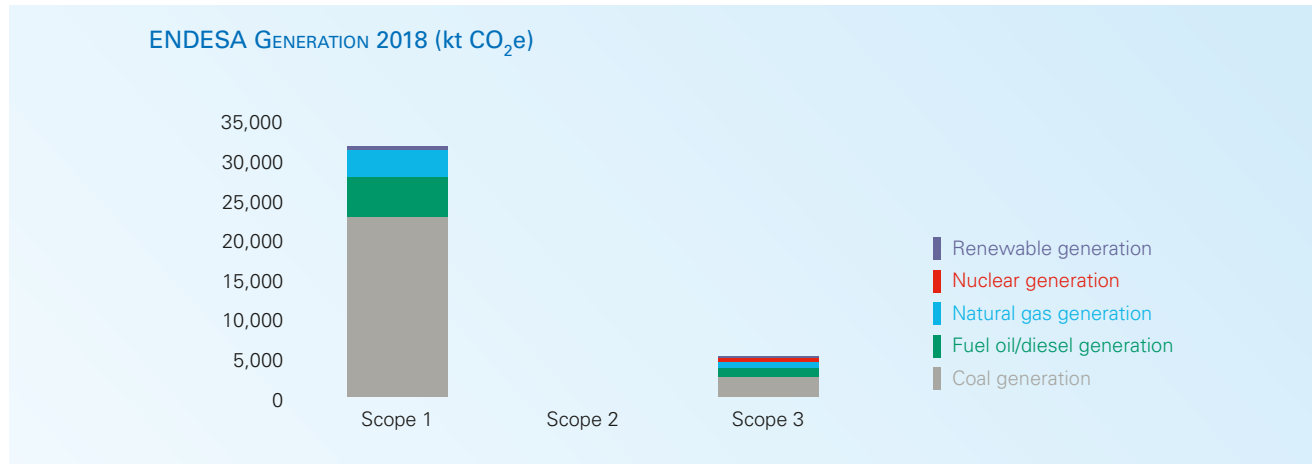
## ENDESA 2018 (kt CO<sub>2</sub>e)

Business	Scope 1	Scope 2	Scope 3
Generation (thermal, renewable and nuclear)	31,252.67	0.00	4,092.56
Electricity distribution	33.66	591.55	13.12
Restoration of old coalfields	0.01	0.00	0.01
Port terminals	0.10	0.00	0.34
Buildings	4.29	0.00	211.66
Natural gas supply	0.83	0.00	19,912.19
Electricity supply	1.08	0.00	5,774.24
	<b>31,292.65</b>	<b>591.55</b>	<b>30,004.11</b>





The following table and graph shows the emissions for the different types of generation facilities.



### Generation (kt CO<sub>2</sub>e)

	Scope 1	Scope 2	Scope 3
Coal generation	21,759.16	0.00	1,934.40
Fuel oil/diesel generation	6,938.75	0.00	1,232.07
Natural gas generation	2,422.14	0.00	613.96
Nuclear generation	0.43	0.00	309.46
Renewable generation	132.18	0.00	2.67
	<b>31,252.67</b>	<b>0.00</b>	<b>4,092.56</b>

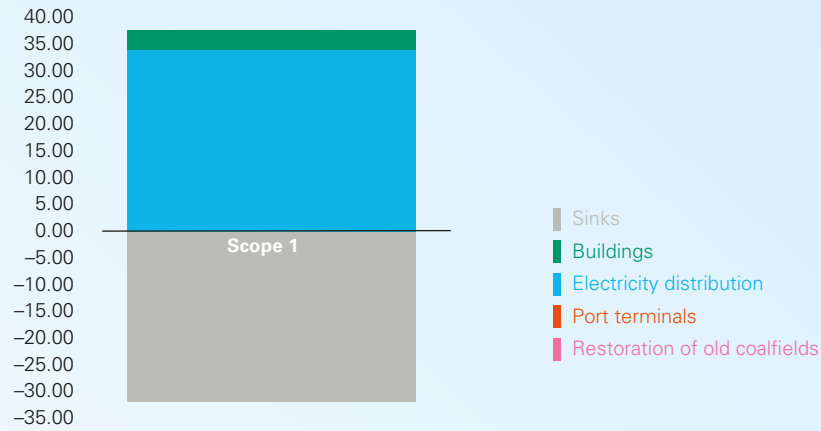
### | 3.10.4. CO<sub>2</sub> sinks: forests

The absorption capacity of the forest stands owned by ENDESA, constituting the greenhouse gas removals

produced by these spaces are shown below in negative Scope 1 values. It can be seen that the absorption capac-

ity of the so-called *CO<sub>2</sub> sinks: forests* is almost as much as the direct emissions from electricity distribution.

### SCOPE 1. ENDESA EMISSIONS BY BUSINESS EXCEPT GENERATION (kt CO<sub>2</sub>e)



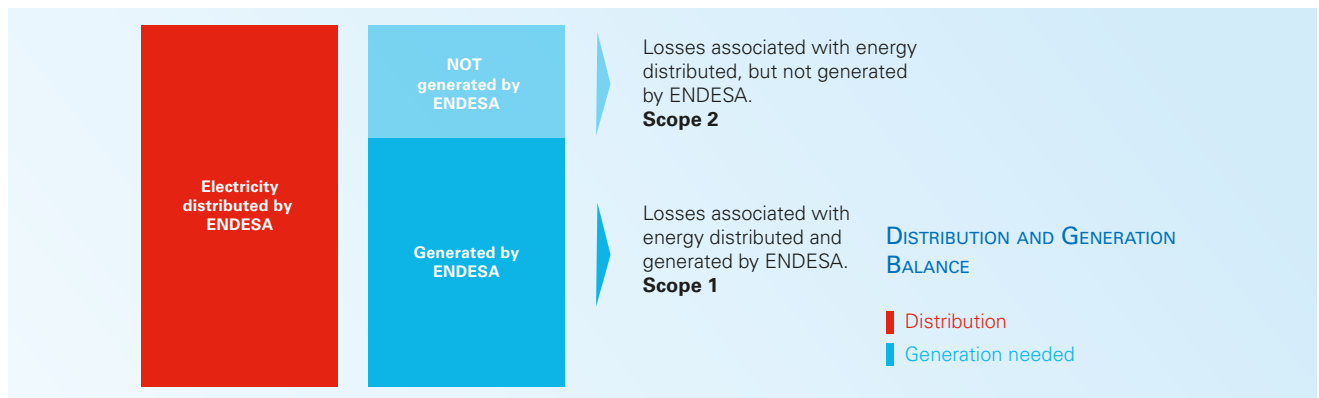
### 3.10.5. Emissions balances

In the case of business groups, like ENDESA, which have businesses that are integrated vertically throughout the electricity value chain, it is necessary when reporting the Company's carbon footprint to consolidate the emissions

by carrying out a series of balances to avoid the double accounting of emissions between the different scopes in the individual businesses. The aim is not to account the emissions from a business as Scope 3 when they have already been accounted as Scope 1 emissions from another integrated business.

### Distribution and generation balance

This is the case of Scope 2 emissions from electricity distribution, where ENDESA distributes more energy than it generates. So the emissions from the generation of the energy produced and distributed by ENDESA





are already accounted in Scope 1, and are therefore considered to be zero in Scope 2. This is only applicable if ENDESA distributes more energy than it generates. Additionally, the emissions from the generation of energy by other companies that is lost for technical reasons during distribution in ENDESA's networks is also considered in Scope 2.

## Generation and supply balance

Similarly, a balance needs to be made between the amount of electricity generated and the amount supplied in each country where these activities take place.

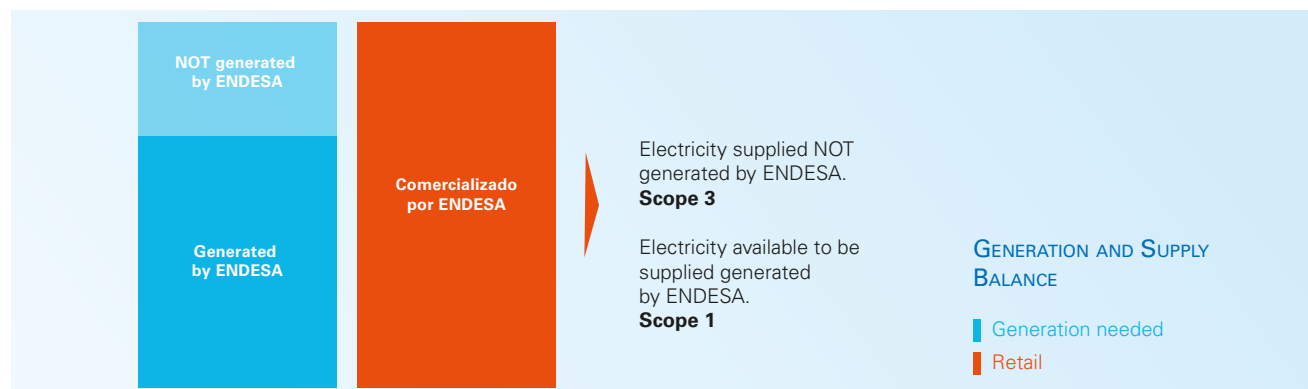
The calculation of Scope 3 emissions only considers the energy supplied by ENDESA but not generated in its facilities. This is because, as in the previous case, ENDESA applies more energy than it generates, so that part of the energy supplied has been generated by the organisation itself, so the emissions from its generation have already been considered in Scope 1 and must be discounted from Scope 3.

## Electricity consumption and generation balance

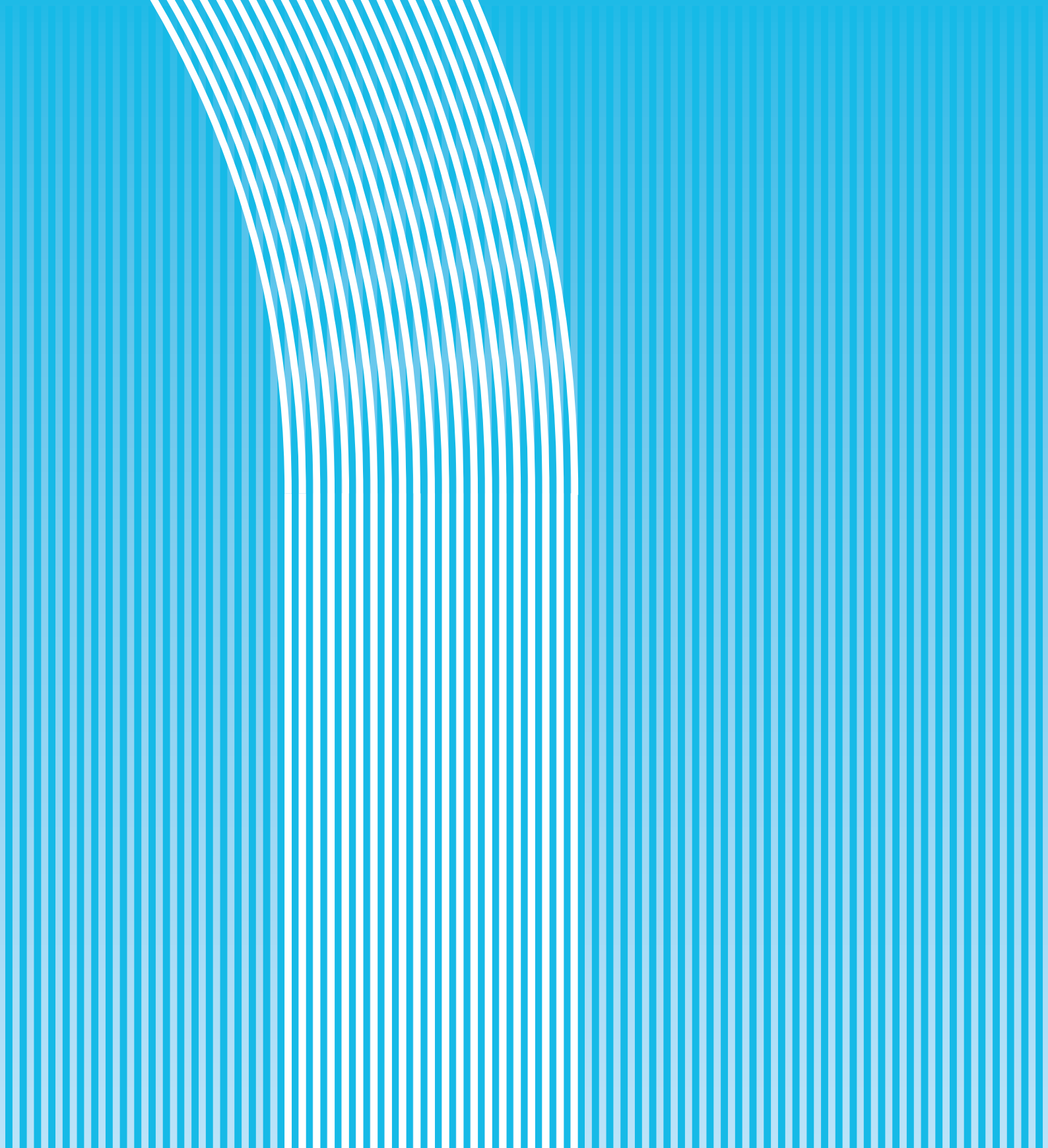
As specified in the GHG Protocol in its "GHG Protocol Scope 2 Guidance," to minimise the double accounting between Scope 1 and 2 within the same

inventory, the companies that have energy generation facilities must consider their electricity consumption in the buildings and offices as though it were supplied by their own generation facilities, without reporting any additional Scope 2 emissions.

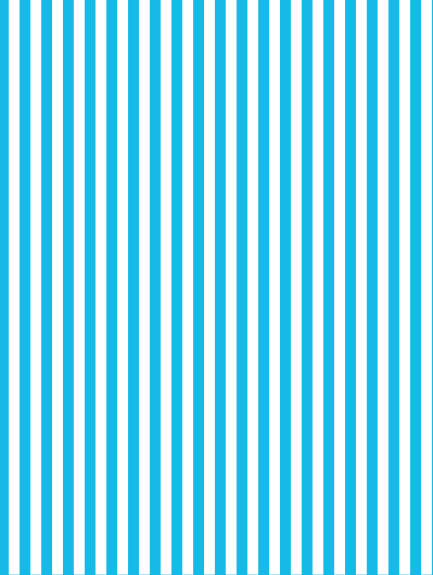
The final balance would therefore correspond to the energy consumed in the facilities not associated with production centres (restoration of old coalfields, pumping in hydraulic generation, port terminals, offices and other businesses) because, as they are supplied by ENDESA, the associated emissions would already have been accounted in Scope 1.











04

AENOR

Declaration



# APPENDIX: AENOR Declaration

## AENOR

### Declaración de Verificación de AENOR para ENDESA S.A. del Inventario de emisiones de gases de efecto invernadero correspondientes al año 2018

EXPEDIENTE: 1997/0694/GEN/01

#### Introducción

ENDESA, S.A. (en adelante la compañía) ha encargado a AENOR llevar a cabo una revisión razonable del Inventario de emisiones de gases de efecto invernadero (GEI) para el año 2018 de sus actividades incluidas en el informe de GEI de junio de 2019, el cual es parte de esta Declaración.

AENOR se encuentra acreditada por la Entidad Mexicana de Acreditación, con número OVVG04/14 (vigente a partir del 31/10/2014; fecha de actualización 27/11/2018), conforme a la norma ISO 14065:2013, para la realización de verificación de emisiones de gases de efecto invernadero conforme a los requisitos establecidos en la norma ISO 14064-3:2006 para el sector de la energía.

Inventario de emisiones de GEI emitido por la Organización: **ENDESA, S.A.**, con domicilio social en CL RIBERA DEL LOIRA, 60 CAMPO DE LAS NACIONES 28042 - MADRID.

Representante de la Organización: D. Jorge PINA PÉREZ (Responsable de Medio Ambiente).

ENDESA, S.A. tuvo la responsabilidad de reportar sus emisiones de GEI considerados (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub> y HFCs) de acuerdo a la norma de referencia UNE-EN ISO 14064-1:2006.

#### Objetivo

El objetivo de la verificación es facilitar a las partes interesadas un juicio profesional e independiente acerca de la información y datos contenidos en el Informe de GEI de ENDESA, S.A. mencionado.

#### Alcance de la Verificación

El alcance de la verificación se establece para las actividades de:

- Generación térmica: carbón, fuel/gasoil, gas natural.
- Generación nuclear.
- Generación renovable: hidráulica, mini-hidráulica, biogás, eólica y solar.
- Distribución electricidad.
- Restauración de antigua cuencas mineras ya explotadas.
- Terminales portuarios.
- Edificios de oficinas y viajes de empleados
- Comercialización de electricidad y gas natural
- Sumideros de CO<sub>2</sub>: bosques

Los límites que delimiten el ámbito geográfico de la Huella de Carbono quedan determinados por:

El alcance de la verificación se establece para las actividades que presta la organización en España, Portugal, Alemania, Francia, Holanda y Andorra.

Se han considerado como gases de efecto invernadero: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub> y HFCs

# AENOR

Durante la verificación se analizó la información atendiendo al enfoque de control operacional que establece la norma ISO 14064-1:2006, a excepción de las centrales nucleares y de las cogeneraciones participadas de España, que se contabiliza bajo cuota de participación que establece la norma ISO 14064-1:2006, alineándose con el Informe de Sostenibilidad.

## **Las actividades directas, indirectas y exclusiones de la verificación**

En cuanto al alcance de las actividades de la compañía éstas se clasifican en directas e indirectas, siguiendo las directrices de la norma UNE-EN ISO 14064-1:

### Alcance 1- Emisiones directas de GEI

Las emisiones directas provienen de fuentes que son propiedad o están controladas por la Empresa. Se incluyen:

- Emisiones de CO<sub>2</sub>, CH<sub>4</sub> y N<sub>2</sub>O derivadas del consumo de combustibles (carbón, fuel/gasoil, gas natural, biogás) para la producción de electricidad en las centrales de generación
- Emisiones fugitivas de SF<sub>6</sub> en las instalaciones de Distribución de electricidad propiedad de ENDESA y en las Centrales Nucleares.
- Emisiones fugitivas de HFCs en los Terminales Portuarios.
- Emisiones fugitivas de CO<sub>2</sub> en equipos de extinción de incendios en terminales portuarios
- Emisiones fugitivas de metano (CH<sub>4</sub>) en los embalses asociados a la generación hidráulica.
- Emisiones de CO<sub>2</sub>, CH<sub>4</sub> y N<sub>2</sub>O derivadas del consumo de combustibles en la restauración de antiguas explotaciones mineras propiedad de ENDESA.
- Emisiones de CO<sub>2</sub>, CH<sub>4</sub> y N<sub>2</sub>O derivadas del consumo de combustibles en calderas o grupos electrógenos en edificios de oficinas.
- Emisiones de CO<sub>2</sub>, CH<sub>4</sub> y N<sub>2</sub>O derivadas del consumo de combustibles en la flota propia de vehículos.

### Alcance 2- Emisiones indirectas de GEI

Las emisiones indirectas son aquellas emisiones derivadas de la actividad de la empresa, pero generadas por otras entidades, se incluyen las emisiones de la generación de electricidad adquirida para el consumo por la empresa. Estas emisiones son:

- Emisiones asociadas a la producción de electricidad adquirida para compensar las pérdidas técnicas en la distribución de energía eléctrica que no haya sido generada por ENDESA.

### Alcance 3- Otras emisiones indirectas

El resto de las emisiones indirectas que son consecuencia de las actividades de la empresa, pero ocurren en fuentes que no son propiedad ni están controladas por la empresa. Estas otras emisiones son:

- Emisiones asociadas a la extracción, producción y transporte de combustibles consumidos en Generación.
- Emisiones asociadas a la fabricación y transporte de productos químicos consumidos en la Generación.
- Emisiones asociadas al transporte y tratamiento de residuos generados en la Generación.





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- Emisiones asociadas a la extracción, producción, transporte y uso por parte del usuario final del gas natural comercializado
- Emisiones asociadas a la parte de la electricidad comercializada que no ha sido generada en centrales propias de generación.
- Emisiones asociadas a los viajes de trabajo en avión, tren y vehículos de alquiler/renting.
- Emisiones asociadas a la flota de vehículos de los subcontratistas de mantenimiento e instalaciones (Distribución de electricidad, Generación Renovable)
- Emisiones asociadas al desplazamiento de los empleados in-itinere

### Exclusiones

La exclusión de la cuantificación de las emisiones se ha realizado conforme al apartado 4.3.1 de la norma UNE- EN ISO 14064-1, con los siguientes criterios:

- Aquellas fuentes o sumideros cuyas emisiones posean una baja representatividad (< 5%) respecto al total de emisiones. En esta categoría se incluyen:
  - Emisiones asociadas al consumo de combustible de vehículos de contratistas en Generación Térmica, Terminales Portuarios y Restauración de antiguas cuencas mineras.
  - Emisiones asociadas a aquellos residuos que supongan menos del 3% del total de residuos generados en cada uno de los negocios de ENDESA.
  - Emisiones asociadas a aquellos consumibles no incluidas en el 95% del total de consumibles consumidos en cada una de las tecnologías de generación y los otros negocios de ENDESA.
  - Emisiones fugitivas de SF6 en todos los negocios de ENDESA, exceptuando el negocio de Distribución y Centrales Nucleares.
  - Emisiones fugitivas de HFCs en todos los negocios de ENDESA, exceptuando el negocio de Terminales Portuarios
  - Emisiones fugitivas de metano (CH4) del agua embalsada en los embalses que NO son propiedad de ENDESA.
  - Consumo de diésel de los grupos electrógenos en los parques eólicos, donde el mantenimiento es gestionado por una subcontrata
- Aquellas cuya cuantificación no sea técnicamente viable ni rentable ya que no se disponga de datos completos o fiables dentro de los sistemas corporativos.

### **Acciones dirigidas y año base**

Se han verificado los cálculos de CO2e reducido por la acciones dirigidas realizadas en 2018:

- Mejora en la eficiencia de transporte de la energía eléctrica mediante la renovación de las líneas de distribución
- Mejora en la eficiencia energética en edificios de Endesa: reducción de generación de residuos y disminución de la superficie ocupada de oficinas
- Mejora en la eficiencia de la flota de Endesa: electrificación y racionalización de los vehículos de combustión.
- Disminución de las emisiones de los desplazamientos *in itinere*, mediante el Plan de Movilidad Eléctrica para empleados y promoción del teletrabajo.

La organización ha establecido el año 2017 como año base (rodante) para el análisis de la evolución de su huella de carbono.

# AENOR

## Importancia relativa

Para la verificación se acordó considerar discrepancias materiales aquellas omisiones, distorsiones o errores que puedan ser cuantificados y resulten en una diferencia mayor al 5 % con respecto al total declarado de emisiones.

## Criterios

Como criterio de verificación se establece la norma UNE-EN ISO 14064-1:2006 y de forma añadida, para los emplazamientos sometidos a verificación reglamentaria, la Decisión 2007/589/CE, así como las autorizaciones y Planes de Seguimiento vigentes correspondientes. De forma general, los criterios de verificación fueron los siguientes:

- 1) La norma UNE-ISO 14064-1:2006: Especificación con orientación, a nivel de las organizaciones, para la cuantificación y el informe de las emisiones y remociones de gases de efecto invernadero.
- 2) La norma UNE-ISO 14064-3:2006: Especificación con orientación para la validación y verificación de declaraciones sobre gases de efecto invernadero.
- 3) GHG Protocol y otros referenciales/Documentos internos.

Al ser la huella de carbono de una empresa integrada verticalmente, desde la generación de la energía eléctrica hasta su comercialización, incluyendo su distribución, se han realizado balances entre los negocios para evitar contabilizar dos veces las mismas emisiones, siguiendo la guía del GHG Protocol:

- Balance entre las emisiones de alcance 2 de la electricidad distribuida y el alcance 1 de la energía generada.
- Balance entre las emisiones de alcance 2 de la electricidad consumida y el alcance 1 de la energía generada.
- Balance entre las emisiones de alcance 3 de la electricidad comercializada y el alcance 1 de la energía generada.

Por último, fue objeto de la verificación el "Informe 2018 de Huella de Carbono Endesa", de junio de 2019.

AENOR se exime expresamente de cualquier responsabilidad por decisiones, de inversión o de otro tipo, basadas en la presente declaración.





# AENOR

## Conclusión

Basado en lo anterior y de acuerdo al nivel de aseguramiento razonable, en nuestra opinión, *no hay evidencia, que haga suponer que la información sobre emisiones reportada en el "Informe 2018 de Huella de Carbono Endesa", de junio de 2019, no sea una representación fiel de las emisiones de sus actividades.*

De forma consecuente con esta Declaración a continuación se relacionan los datos de emisiones y reducciones finalmente verificados.

## Emisiones GEI

EMISIONES	t CO <sub>2</sub> e
<b>Alcance 1: Emisiones directas de GEI</b>	<b>31.292.646</b>
Generación electricidad (Térmica, Renovable y Nuclear)	31.252.667
Distribución de electricidad	33.659
Restauración de antiguas cuencas mineras	15
Terminales Portuarios	103
Edificios	4.294
Comercialización de gas natural	829
Comercialización de electricidad	1.078
<b>Alcance 2: Emisiones indirectas de GEI</b>	<b>591.547</b>
Distribución de electricidad	591.547
<b>Alcance 3: Otras emisiones indirectas de GEI</b>	<b>30.004.109</b>
Generación electricidad (Térmica, Renovable y Nuclear)	4.092.559
Distribución de electricidad	13.119
Restauración de antiguas cuencas mineras	8
Terminales Portuarios	344
Edificios (incluyen las emisiones derivadas de los viajes laborales de los empleados y de los vehículos asociados a esas oficinas)	211.656
Comercialización de gas natural	19.912.186
Comercialización de electricidad	5.774.236

**Suma de sumideros de GEI (masas forestales en España): - 32.700 t CO<sub>2</sub>e**

# AENOR

## Emisiones GEI por País

t CO2e	Alcance 1	Alcance 2	Alcance 3
<b>España</b>	30.549.203	591.547	21.553.546
<b>Portugal</b>	743.443	0	1.777.786
<b>Francia</b>	0	0	4.739.931
<b>Alemania</b>	0	0	1.154.297
<b>Holanda</b>	0	0	725.976
<b>Andorra</b>	0	0	52.572

## Acciones dirigidas en 2018

	t CO2e evitadas
Reducción de consumo de electricidad en distribución por la renovación de líneas	79
Reducción del consumo eléctrico de algunos edificios al optimizar el uso del espacio de trabajo	528
Reducción de las emisiones asociadas a la gestión de residuos al reducir su generación	3
Reducción de las emisiones en los viajes con vehículos de flota por la gestión sostenible de la flota	313
Reducción de las emisiones en los desplazamientos in-itinere por el impulso al trabajo fuera de la oficina y el plan de Movilidad Eléctrica para empleados	1.131

Firmado por FERNANDO SEGARRA ORERO el día 30/07/2019 con un certificado emitido por AC Camerfirma Certificados Camerales



Verificador Jefe: Juan HERNÁN DÍEZ  
Madrid, a 17 de Julio de 2019

Revisor Técnico: Fernando SEGARRA ORERO



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