



# Climate Change Action Plan Summary

2015-2020-2030



**RED**  
**ELÉCTRICA**  
CORPORACIÓN



## 1. BACKGROUND AND JUSTIFICATION OF THE PLAN

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In order to combat climate change, the transition to an energy model based on the electrification of the economy, the decarbonisation of the electricity sector and the increase of energy efficiency is crucial. Red Eléctrica, as transmission agent and operator of the electricity system is a key player in achieving that model. For this reason, the Company decided to formalise its commitment in this matter, publishing its Climate Change Strategy in 2011, which was reviewed and signed by the Chairman in 2014 and was again updated in April 2017, at which time it was renamed **Climate Change Commitment**.

In order to undertake and make the commitment a reality, it is essential to draft an action plan which sets out the objectives to be reached and includes the proposed actions to achieve them.

In May 2015, the Management Committee approved the climate change action plan. Since then there have been numerous changes in both the international scenario and in the management of Red Eléctrica (changes in calculation methods, improvement of available information, new organisational structure ...), which means it would be advisable to review and update the plan to fully adapt it to the new requirements.

For that reason, with the aim to adapt the plan to the Paris Agreement Commitment, set challenging goals in line with the overall 2-degree Celsius target and taking into account the new information available arising from the changes that have occurred in Red Eléctrica's emissions calculation method, a new **Climate Change Action Plan 2015-2020-2030** have been defined.

The new plan includes targets, referred to a new base line, and new actions and projects necessary to achieve them.

Besides, it is aligned with the **Strategic Plan** and consistent with the **Sustainability Model**.

The plan is divided into five main courses of action:

- A. Contribution to a more sustainable energy model.
- B. Reduction of the Carbon Footprint.
- C. Positioning, communication and raising awareness: participation in initiatives related to climate change.
- D. Adaptation to climate change.

The course of action related to innovation is cross-cutting. The objectives and actions related to it are integrated in the above indicated courses of action.

The overall goals and specific targets are outlined for each of the courses of action.

For each of the specific goals the following aspects are detailed:



- Performance monitoring indicators: Quantitative indicators are included whenever possible. The objective or reference values for each are established on a case by case basis. Some of these indicators will be considered as KPIs.
- Actions to be carried out, indicating the period foreseen for their achievement.

A short-term horizon 2020 and a medium-term horizon 2030 have been considered for the execution of the plan.



## 2. EXECUTIVE SUMMARY

<b>A. ACTIVE PARTICIPATION IN THE TRANSITION TO A MORE SUSTAINABLE ENERGY MODEL</b>	
<b>Overall goal</b>	Contribution to achieving the European 2020 targets (20-20-20) and the 2030 targets (40-27-30).
<b>Specific goals</b>	
A.1 Develop the infrastructure that enables the reduction of the CO <sub>2</sub> emissions associated to the electricity system as a whole.	
A.2 Achieve the maximum integration of renewable energy into the system, maximising its use.	
A.3 Contribute to greater efficiency of the electricity system by improving knowledge regarding the electricity demand and the development of new measures for its management.	
A.4 Prepare the operation of the electricity system to undertake the efficient penetration of the electric vehicle.	
A.5 Development of studies and projects to reduce losses in the transmission grid and improve its efficiency.	
<b>KPIs</b>	
Savings in emissions associated with the commissioning of facilities included in the electricity planning (t of CO <sub>2</sub> eq)	
Renewable energy share in demand coverage (%)	
MW of Demand Response Resource	
Energy supplied for the electric vehicle connected to CECOVEL (MWh)	



B. REDUCTION OF THE CARBON FOOTPRINT	
<b>Overall goal</b>	Reduction of the company's emissions in absolute and relative terms, establishing global and partial goals for H2020 and H2030.  (Goals are included in Chapter 3 of this document).
<b>Specific goals</b>	
B.1 Improve the carbon footprint calculation method.	
B.2 Reduce SF <sub>6</sub> emissions.	
B.3 Reduce electricity consumption and its associated emissions.	
B.3.a Reduce electricity consumption in work centres.	
B.3.b Reduce electricity consumption in substations.	
B.3.c Purchase of energy that is 100% renewable.	
B.4 Reduce emissions associated with Red Eléctrica vehicles (direct).	
B.5 Reduce emissions associated with business travel and employee commuting.	
B.6 Reduce emissions associated with the supply chain and involve suppliers in Red Eléctrica's commitments.	
B.7 Work towards reducing other emissions.	
B.8 Offset part of the emissions.	
B.9 Move forward in the inclusion of criteria regarding efficiency and the saving of materials in the design of facilities and infrastructure.	
B.10 Continue to make progress in the emission management models.	
<b>KPIs</b>	
Emissions: Scope 1; Scope 2; Scope 3 (t of CO <sub>2</sub> eq)	
Emissions: Scope 1 + Scope 2 (t of CO <sub>2</sub> eq)	
Scope 1: SF <sub>6</sub> emissions (t of CO <sub>2</sub> eq)	
SF <sub>6</sub> emission rate (%)	
Scope 1: Red Eléctrica vehicles emissions (t of CO <sub>2</sub> eq)	



Scope 2: emissions resulting from electricity use (t of CO <sub>2</sub> eq)
Consumption of electricity in work centres (KWh)
Scope 3: business travel by car (t of CO <sub>2</sub> eq)
Scope 3: Employee commutes (t of CO <sub>2</sub> eq)
Emissions offset (t of CO <sub>2</sub> eq)

Scope 1: Direct emissions (from sources owned or controlled by the Company): SF<sub>6</sub>, combustion emissions (vehicles and diesel generating sets) and emissions from air conditioning units.

Scope 2: Indirect emissions resulting from the consumption of electricity (includes transmission grid losses).

Scope 3: Indirect emissions arising from the activity of the Company that occur in sources that are not controlled by the Company (supply chain, business travel, employee commutes, logistics, waste, etc.).



<b>C. POSITIONING, COMMUNICATION AND RAISING AWARENESS: PARTICIPATION IN INITIATIVES RELATED TO CLIMATE CHANGE.</b>	
<b>Overall goal</b>	Involve stakeholders and engage them in Red Eléctrica's commitment on climate change
<b>Specific goals</b>	
C.1 Raise awareness of and communicate Red Eléctrica's stance and commitment on climate change and promote energy efficiency among stakeholders.	
C.2 Collaborate with the public administration on climate change matters.	
C.3 Increase transparency and improve the information provided to investors regarding climate change matters.	
<b>KPIs</b>	
Drafting of informative material on climate change/energy efficiency to be disseminated externally.	
Number of national forums/events on climate change/energy efficiency in which Red Eléctrica participates (sponsorship or active participation).	
Number of news articles on climate change/energy efficiency published on miRed.	

<b>D. ADAPTATION TO CLIMATE CHANGE</b>	
<b>Overall goal</b>	Define appropriate adaptation plans for the Company's activities to reduce the potential risks arising from the effects of climate change. Identify the opportunities that climate change and the present action plan offer the Company.
<b>Specific goals</b>	
D.1 Transmission grid facilities: "Study on the management of new climate risks over the life cycle of the transmission grid infrastructure".	
D.2 System operation: extend the work of the adaptation study to include activities related to system operation.	
D.3 Red Eléctrica Group: extend the risk analysis and climate change adaptation mechanisms to encompass the entirety of the Group.	
D.4 Opportunities: broaden and delve into the identification and consideration of opportunities associated with climate change. Establish the systematic review of opportunities and the promotion of actions associated with them.	



### 3. REDUCTION OF THE CARBON FOOTPRINT GOALS

Within the framework of the Paris Agreement, 195 Members party to the United Nations Framework Convention on Climate Change (UNFCCC) agreed to hold global temperature rises “well below 2 degrees Celsius and endeavour to reach 1.5 degrees Celsius compared to pre-industrial levels”

To make progress in this field it is essential that companies set their reduction targets in line with this commitment. Those responsible for the Carbon Disclosure Project (CDP), the United Nations Global Compact, the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF) are driving the Science Based Targets initiative (SBTi). The initiative aims to develop methods and tools to support companies in aligning their corporations' greenhouse gas reduction with the level of decarbonisation required to limit the global temperature increase to below 2° C.

The goals included in the Action Plan adopted in May 2017 have been updated with the aim of achieving greater alignment with the commitments of the Paris Agreement and the SBTi.

OVERALL TARGETS (base year 2015)
<b>H2020</b> <b>Absolute:</b> Reduction of 10% of total scope 1 and 2 emissions <b>Relative:</b> Reduction of 16% of total scope 1 and 2 emissions per MWh transported
<b>H2030</b> <b>Absolute:</b> Reduction of 30% of total scope 1 and 2 emissions <b>Relative:</b> Reduction of 40% of total scope 1 and 2 emissions per MWh transported

PARTIAL TARGETS (base year 2015)	H2020	H2030
<b>SCOPE 1</b>		
Reducción of SF6 emissions	-20%	-25%
Reduction of emissions associated with the use of Red Eléctrica vehicles	-30 %	- 50%
Reduction of total scope 1 emissions	-20%	-25%
<b>SCOPE 2</b>		
Reduction of emissions associated with electricity consumption in workcentres	- 85%	- 90%
Reduction of electricity consumption in work centres	-10 %	-30%

Targets approved in May 2018 by the Executive Committee.





## PROGRESS

OVERALL TARGETS SCOPE 1 +2 (base year 2015)			
<b>Absolute</b> H2020: Reduction of 10% of total scope 1 and 2 emissions H2030: Reduction of 30% of total scope 1 and 2 emissions <b>Progress:</b> Reduction in 2019: 31.5% Achievement H2020 target: 100% Achievement H2030 target: 100%			
<b>Relative</b> H2020: Reduction of 16% of total scope 1 and 2 emissions per MWh transported H2030: Reduction of 42% of total scope 1 and 2 emissions per MWh transported <b>Progress:</b> Reduction in 2019: 32% Achievement H2020 target: 100% Achievement H2030 target: 80%			
PARTIAL TARGETS (base year 2015)	Reduction 2019	H2020	H2030
<b>SCOPE 1</b>			
Reducción of SF6 emissions <sup>(1)</sup>	-32.7%	-20%	-25%
Reduction of emissions associated with the use of Red Eléctrica vehicles	-22.5%	-30 %	- 50%
Reduction of total scope 1 emissions	-32.1%	-20%	-25%
<b>SCOPE 2</b>			
Reduction of emissions associated with electricity consumption in workcentres	-89.2%	- 85%	- 90%
Reduction of electricity consumption in work centres	-16.4%	-10 %	-30%

(1) Maximum cumulative emissions in the period 2016-2020: 140000 tCO<sub>2</sub> eq.  
 Progress: Cumulative emissions 2016-2019=113477 tCO<sub>2</sub>eq