



group  
**elecnor**



# Carbon Footprint Report 2022



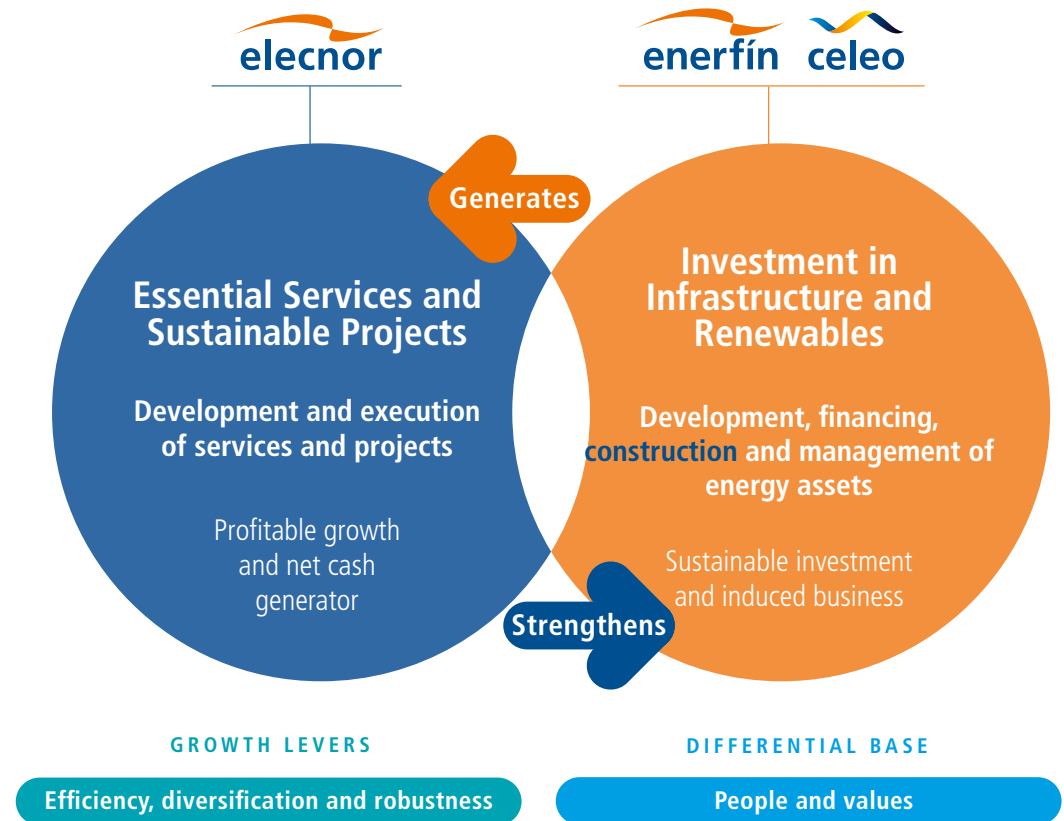
## Two businesses, one Group

The Elecnor Group is a Spanish corporation present in more than 50 countries that drives its purpose with a business model based on people, and which believes in generating shared value and sustainability. A business model that is developed through two key businesses that complement and mutually strengthen each other: Essential Services and Sustainable Projects and Investment in Infrastructure and Renewables.

### Our purpose, our raison d'être

We generate change and well-being by deploying infrastructure, energy and services to territories all over the world in order to develop their potential.

## GENERATING SHARED VALUE AND SUSTAINABILITY



## An ally of the SDGs

The Elecnor Group is one of the key players in the development and progress of people and the environment. Aware of the contribution of its activities, its objective is to maximize the positive impacts and minimize the negative impacts on society and the environment, through responsible, ethical and sustainable behavior.

Infrastructure, renewable energy, water or environmental projects provide solutions to some current and future challenges, such as climate change, the reduction of greenhouse gas emissions, inequality and the energy gap, among others.

This report on its carbon footprint reflects the Elecnor Group's contribution to **SDG 13, Climate Action**. The company addresses climate change by calculating its carbon footprint, setting emission reduction targets and implementing its Climate Change Strategy.



# Carbon Footprint

## Used methodology for the calculation

There are currently several methodologies and standards for carbon footprint calculation depending on their approach, scope and orientation. The Elecnor Group has opted for ISO 14064-1 to assess its carbon footprint, as it is considered the most internationally recognized standard in the field in terms of calculating an organization's carbon footprint. Furthermore, this methodology is based on these five principles: relevance, completeness, consistency, transparency and accuracy.

## Definition of the limits of the carbon footprint

The first step in the development of the carbon footprint is the definition of organizational limits, consisting of establishing the outlines of the company to be analyzed and defined in the Corporate Accounting and Reporting Standard.

In setting organizational limits, a company selects an approach to consolidate its greenhouse gas (GHG) emissions. In other words, it determines the business units and operations that make up the company.

To calculate the Elecnor Group's carbon footprint, an operational control approach has been chosen.



The organizational limit in the Elecnor Group study was defined as a set of facilities with mobile production processes - construction sites - and static production processes - plants - as well as offices and warehouses.

### Operational limit

Based on the operational controls, organizational limits are determined by classifying emission sources into 3 possible scopes of study.

According to the GHG Protocol, the operational limit defines the scope of direct and indirect emissions for operations that fall within the organizational limit set for the company. Organizations are required to account for and report **Scope 1 and 2** emissions separately, while accounting for **Scope 3** emissions is optional but recommended.

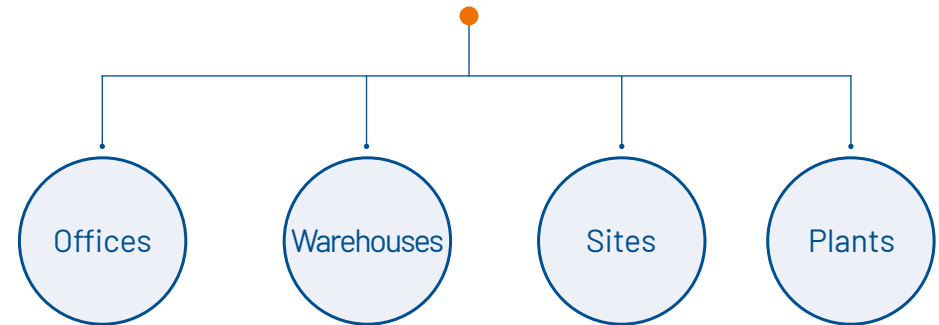
However, the new update of ISO 14064 establishes the need for a prior analysis of all **scope 3** emissions in order to study and include the most relevant ones.

When calculating the carbon footprint, the different emission sources must be considered. These will be defined within **scope 1, 2 or 3** depending on how the organizational boundaries are defined.

When calculating the Elecnor Group's carbon footprint, the following have been quantified direct **Scope 1**, indirect **Scope 2** and other indirect emissions of **Scope 3**.

## PROCESS MAP

### Centre/Organization



**CARBON FOOTPRINT**

Methodology used for calculation  
Definition of carbon footprint boundaries  
Operational Limit

**2022 CARBON FOOTPRINT RESULTS**

Elecnor Group's carbon footprint  
Avoided emissions  
Comparison between 2021 and 2022.  
Scope 1 and 2

CO<sub>2</sub> ENVIRONMENT  
CERTIFICATE  
VERIFIED

# Carbon Footprint Report 2022



In order to identify the significant **Scope 3** emission sources, the recommendations set out in the **Scope 3** Emissions Calculation Guide, a document supporting the GHG Protocol standard, have been followed, with the following being considered relevant:

- ➔ Supply chain (purchase of products and services).
- ➔ Capital goods (reported in conjunction with supply chain).
- ➔ Life cycle of fuels and energy consumed.
- ➔ Transport and distribution of goods (upstream).
- ➔ Management of generated waste.
- ➔ Business travel by plane, train and car (private, rental and taxi), as well as hotel stays.
- ➔ Employee commuting to and from work.
- ➔ Leases (downstream). End of life of products sold.
- ➔ Investments.

### Scope 1 emissions (direct emissions):

Emissions that are a result of the activities that the organization controls. Examples of processes that can generate them:

- Combustion in stationary sources
- Physical or chemical processes
- Combustion at mobile sources
- Fugitive emissions resulting from intentional or unintentional releases such as refrigerants used in air conditioning and refrigeration equipment.

### Scope 2 emissions (indirect emissions):

Emissions from the organization's use of externally purchased electrical energy, heat or steam.

### Scope 3 emissions (other indirect emissions):

Emissions from the organization's products and services. They are induced by the company's activities but occur at sources that are not owned or controlled by the company.

# Results: Carbon Footprint 2022

This section will present the results of the Elecnor Group's organisational carbon footprint analysed in different ways.

## Elecnor Group's Carbon Footprint

The Elecnor Group's carbon footprint in 2022 was 1.157.445 tonnes of CO<sub>2</sub>e.

Of all emissions, 7% were **Scope 1** emissions, i.e. direct emissions associated with the consumption of fuels and refrigerant gases. **Scope 2** indirect emissions (electricity consumption) were only 0.14% of the the total footprint. The remaining of the footprint emissions belong to **Scope 3** (93%).



**CARBON FOOTPRINT**

Methodology used for calculation  
Definition of carbon footprint boundaries  
Operational Limit

**2022 CARBON FOOTPRINT RESULTS**

Elecnor Group's carbon footprint  
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CO<sub>2</sub> ENVIRONMENT  
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VERIFIED

**Carbon  
Footprint Report 2022**



**Emissions**

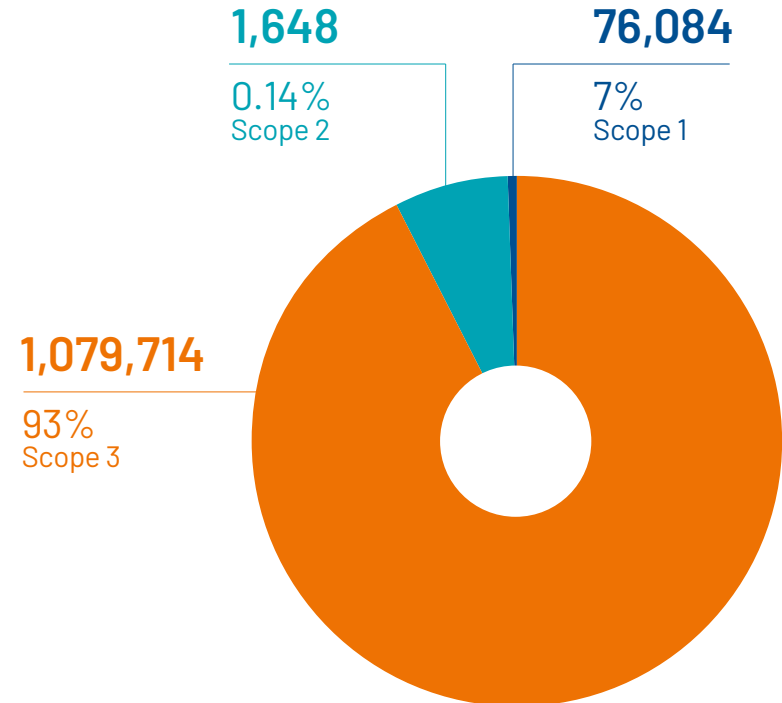
**BY TYPE OF SOURCE AND SCOPE**

Scope	Source	Emissions (t CO <sub>2</sub> e)
Scope 1	Stationary and mobile combustion	76,084
Scope 2	Electricity consumption	1,648
<b>Total Scope 1 y 2</b>		<b>77,731</b>
Scope 3		1,079,714
<b>Total</b>		<b>1,157,445</b>

**Emissions contribution**

**PER TOTAL CARBON FOOTPRINT SCOPE**

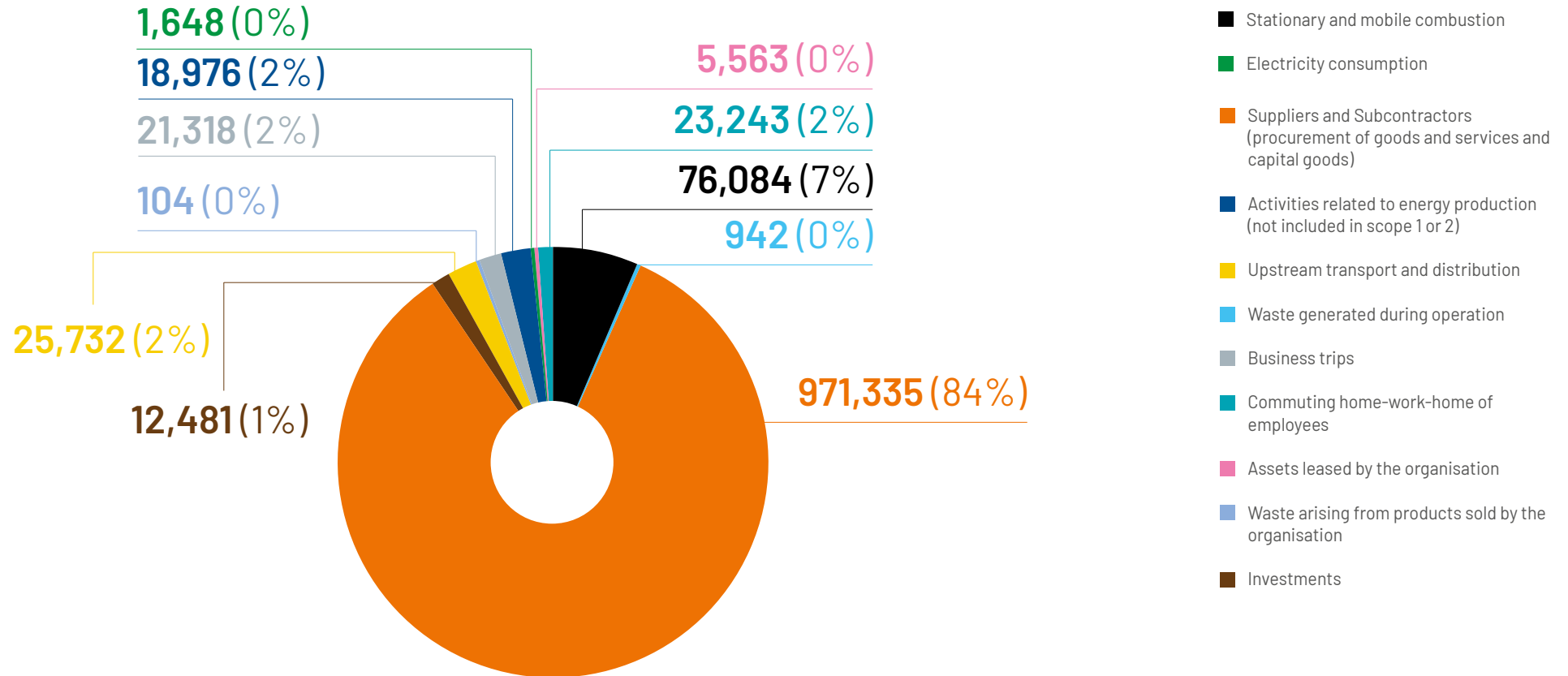
(tCO<sub>2</sub> equivalent)





## Emissions contribution

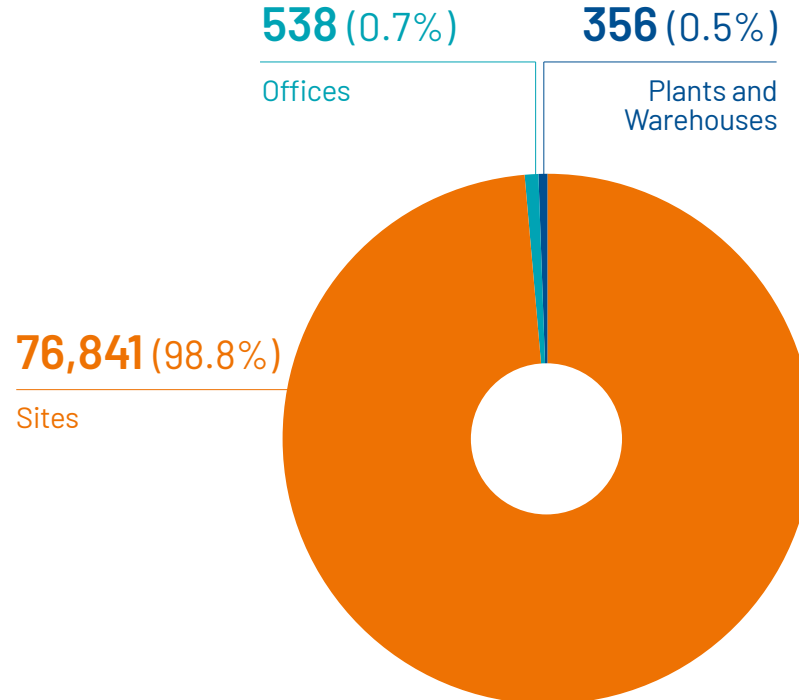
BY SOURCE TO TOTAL CARBON FOOTPRINT (tCO<sub>2</sub> equivalent)



If we analyze **Scope 1 and 2** emissions according to the type of installation where they are generated, the contribution of construction sites stands out, with slightly less than 99% of the total. These are followed by offices, which generate almost 1% of emissions. Plants (factories/operations) and warehouses are less represented, with 0.5% between them.

The following graph shows the breakdown of total of **Scope 1 and 2 emissions** by installation type.

## EMISSIONS CONTRIBUTION OF SCOPE 1 AND 2 BY TYPE OF INSTALLATION TO TOTAL CARBON FOOTPRINT (tCO<sub>2</sub> equivalent)



In terms of **Scope 3** emissions, indirect emissions related to the products used by the organization contribute the most (90%), followed by those related to different types of transport (8%), including activities related to upstream logistical movements, emissions from business travel and employee commuting.

CARBON FOOTPRINT

Methodology used for calculation  
Definition of carbon footprint boundaries  
Operational Limit

2022 CARBON FOOTPRINT RESULTS

Elecnor Group's carbon footprint  
Avoided emissions  
Comparison between 2021 and 2022.  
Scope 1 and 2

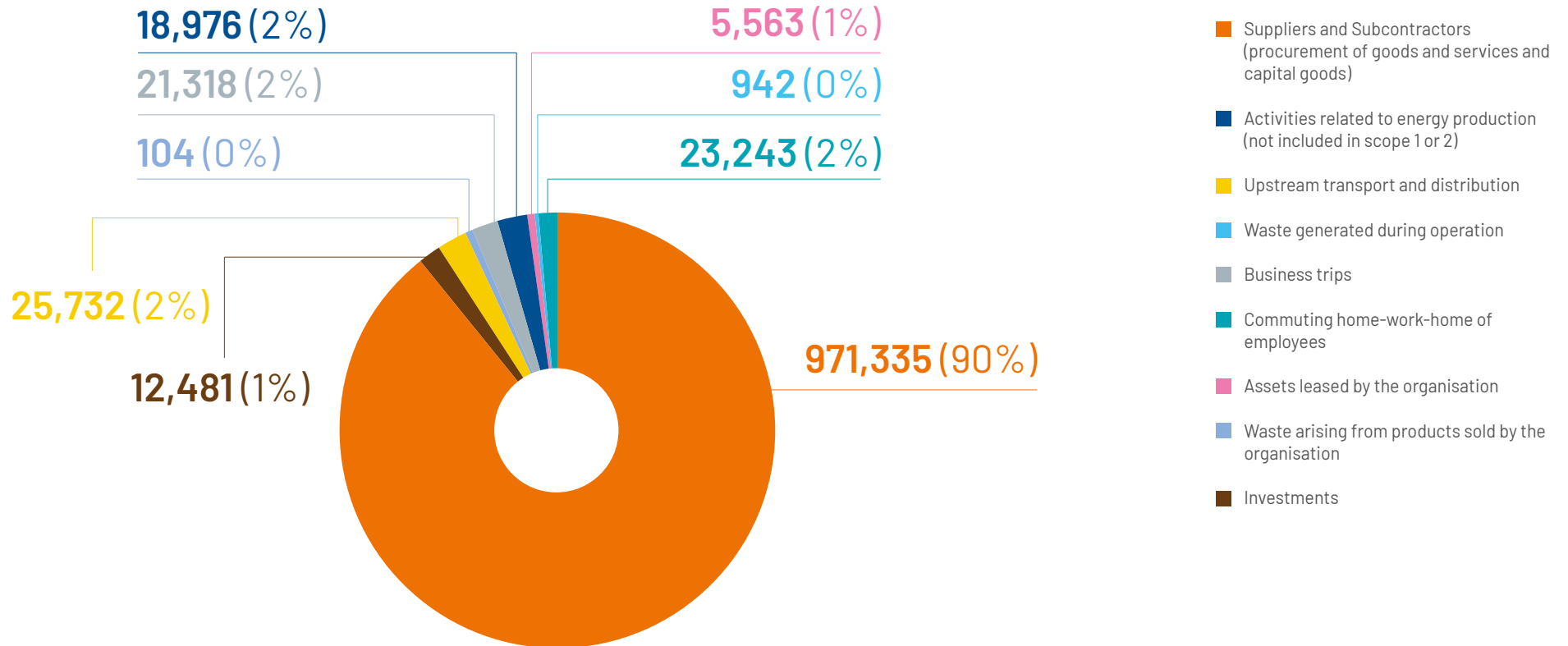
CO<sub>2</sub> ENVIRONMENT  
CERTIFICATE  
VERIFIED

# Carbon Footprint Report 2022



## INPUT FROM EACH SOURCE

TO SCOPE 3 EMISSIONS (tCO<sub>2</sub> equivalent)



The table that follows shows the contribution of each organisation with respect to the total **Scope 1 and 2 emissions** generated by the Elecnor Group.

The organisations that contribute most to the Elecnor Group's total emissions are Elecnor do Brasil, Central Regional Office, Southern Regional Office, North-Eastern Regional Office and Audeca. The sum of the contributions of these five organisations accounts for 77% of total emissions.

## CONTRIBUTION OF EACH ORGANISATION

Organization	Scope 1 (tCO <sub>2</sub> e/year)	Scope 2 (tCO <sub>2</sub> e/year)	% of total
<b>Elecnor do Brasil</b>	32,200	508	42%
<b>Central Regional Office</b>	12,984	13	17%
<b>Southern Regional Office</b>	6,189	0	8%
<b>North-Eastern Regional Office</b>	4,144	0	5%
<b>Audeca</b>	3,827	90	5%
<b>Elecnor Angola</b>	3,753	460	5%
<b>Eastern Regional Office</b>	3,371	0	4%
<b>Elecnor Chile</b>	3,116	6	4%
<b>Energy Unit</b>	2,190	118	3%
<b>Major Networks Unit</b>	2,153	96	3%
<b>IQA</b>	968	19	1%
<b>Australia</b>	646	29	1%
<b>Engineering Unit</b>	233	135	0%
<b>Enerfin</b>	194	133	0%
<b>Ehisa</b>	113	16	0%
<b>Atersa</b>	3	26	0%
<b>Corporate offices</b>	0	0	0%



## Avoided emissions

The greenhouse gas emissions avoided in 2022 were due to the initiatives to divert 29,534,252 t of waste to clean points and to the generation of renewable energy in Enerfin, which amounted to 2,875,260 MWh in 2022.

The following table shows the GHG emissions that were avoided thanks to the two initiatives above.

In both cases, the equivalence in tCO<sub>2</sub>e has been achieved by comparing the avoided emissions with a baseline scenario, i.e. what emissions emissions associated with the waste if it had not been managed at a clean point or the energy generated from non-renewable sources.

## AVOIDED EMISSIONS

Iniciatives	Avoided Emissions (t CO <sub>2</sub> e)
Waste management at clean points	3,347
Renewable energy generation	429,620
<b>Total</b>	<b>432,967</b>



## Comparison between 2021 and 2022 Scope 1 and 2

The Elecnor Group's internal protocol for calculating GHG emissions defines the comparison of the carbon footprint obtained in a given year with the emissions calculated for the previous year as a control and monitoring system. Footprint obtained in a given year with the emissions calculated for the previous year.

Thus, based on the activity data for the years 2021 and 2022, we wanted to establish a comparison of the GHG emissions generated by the Elecnor Group for both years, in order to be able to analyze the evolution of the organization's carbon footprint in time.

2020 has been established as the base year, as it is the first year that the Elecnor Group's calculates the total emissions of all the scopes. However, a comparison will also be made with respect to 2014 as a historical starting point, in the scopes where possible.

The Elecnor Group's carbon footprint in 2022, as far as **scope 1 and 2** are concerned, was 77,731 tones of CO<sub>2</sub>e, with the ratio between the emissions generated and the number of hours worked was 1.67 kg CO<sub>2</sub>e/hour.

	2021	2022	Variation
Total Emissions Scope 1 and 2 (kg CO <sub>2</sub> e)	63,959,000	77,731,041	22%
Nº hours worked	36,572,587	46,556,470	27%
Ratio (kg CO <sub>2</sub> e/hour)	1.75	1.67	-5%



It should be noted that the ratio of emissions generated per hour worked has decreased by more than 5% compared to 2021, from 1.75 to 1.67 kgCO<sub>2</sub>e/hours.

It can also be seen that the ratio shows a downward trend with respect to the starting year 2014. By 2022, the carbon footprint has been reduced compared to 2014 by 30% in relative terms.

## Ratio change kg CO<sub>2</sub>e/hours worked

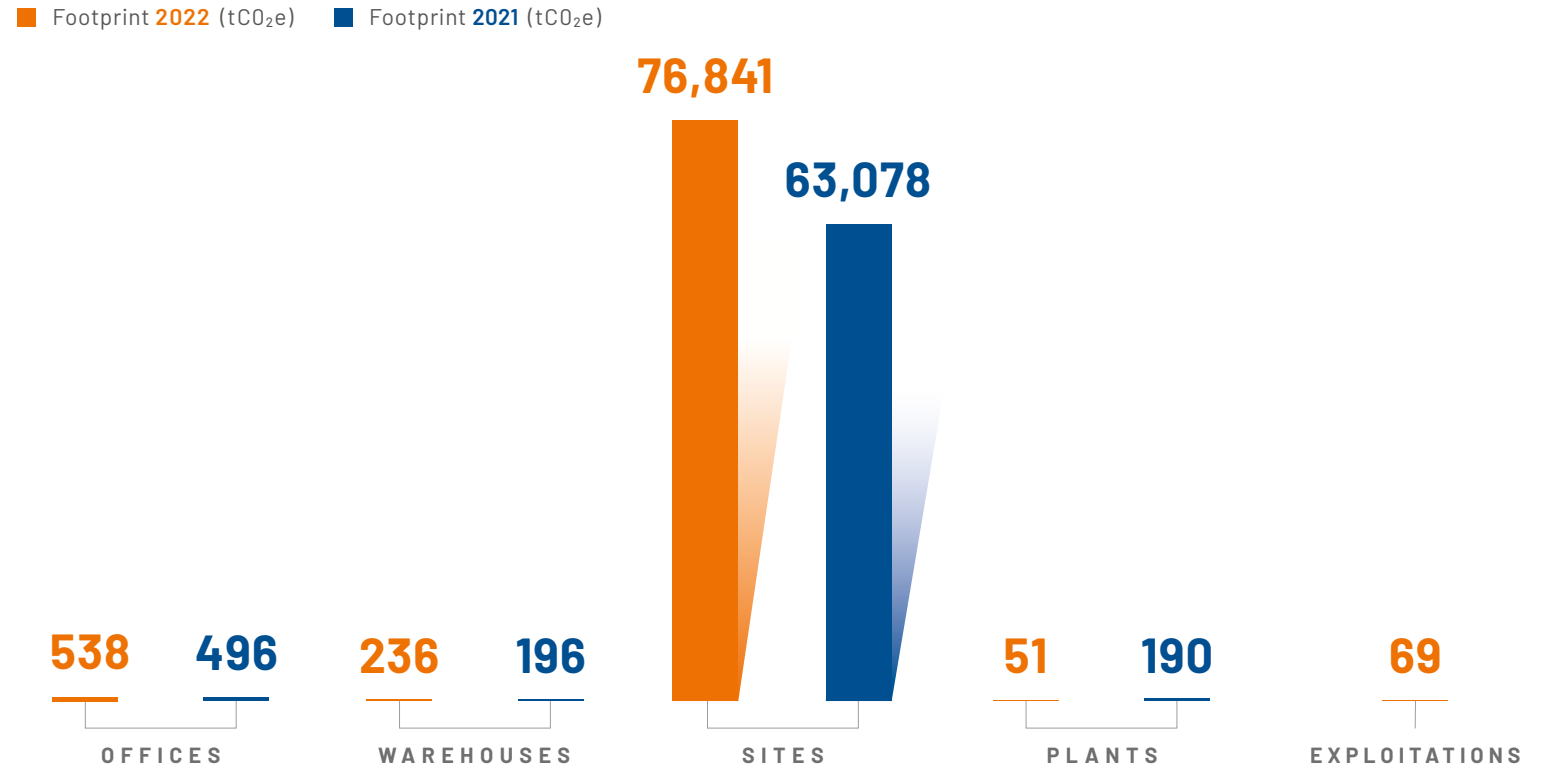
PERIOD 2014-2022

	Elecnor Group Footprint (tCO <sub>2</sub> e)	Hours worked	Elecnor Ratio (kg CO <sub>2</sub> e/h)	Evolution compared to previous year	Evolution compared to 2014
2022	77,464	46,556,470	1.67	-5%	-30%
2021	63,959	36,572,587	1.75	-6%	-27%
2020	57,070	30,723,020	1.85	3%	-24%
2019	50,308	27,819,881	1.8	-4%	-26%
2018	49,771	26,472,538	1.9	-2%	-23%
2017	54,498	28,341,988	1.9	-5%	21%
2016	46,250	22,894,701	2.0	-6%	-17%
2015	44,665	20,826,530	2.1	-12%	-12%
2014	46,067	18,912,402	2.4	-	-

Analysing the evolution of the Elecnor Group's emissions by facility, we can see that the contributions in absolute values for most of them have increased (offices, warehouses and works) with respect to last year's financial year. On the other hand, "plants" has seen its emissions decrease with respect to 2021 and "operations" has reported for the first time in 2022.

### Carbon footprint comparison

PER TYPE OF INSTALLATION (SCOPE 1 AND 2) (tCO<sub>2</sub> equivalent)

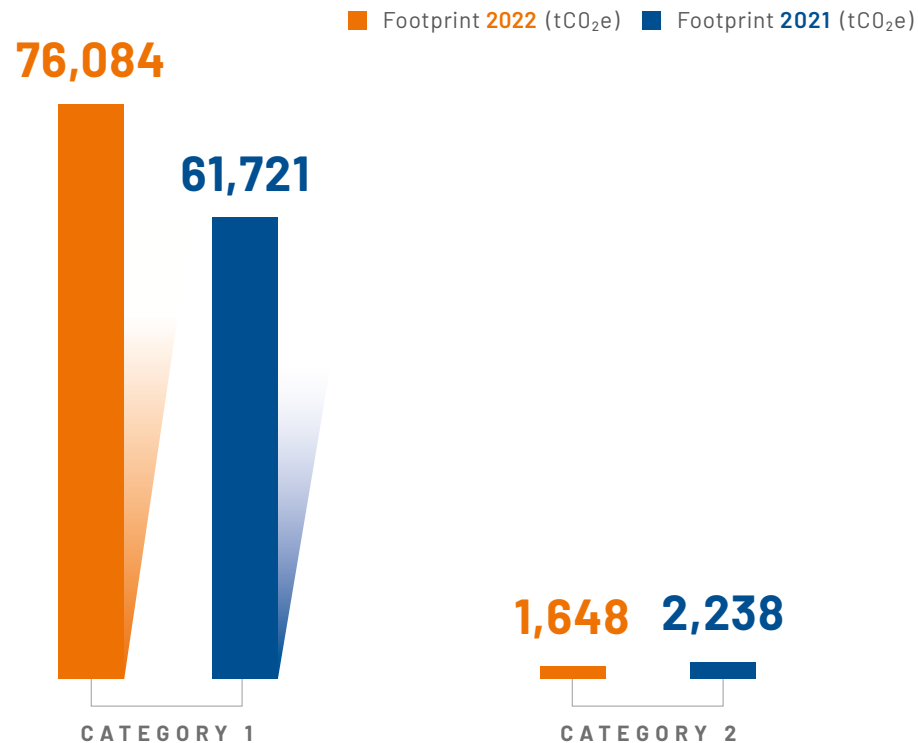




Finally, if we analyse the evolution of the Elecnor Group's emissions by type of scope, we can see how emissions associated with electricity consumption (scope 2) experienced a decrease of almost 26%, which is associated with improved energy performance of the facilities, as more and more organisations have opted for electricity from renewable sources. Scope 1 emissions, on the other hand, increase by almost 19%.

## Carbon footprint comparison

BY TYPE OF SCOPE (tCO<sub>2</sub> equivalent)



# Verified CO<sub>2</sub> Environmental Certificate

**AENOR**  
Carbon Footprint Certificate

**AENOR**  
CARBON FOOTPRINT  
CALCULATED CO<sub>2</sub>

HCO-2015/0011  
AENOR certifies that the organization  
**GRUPO ELECNOR**  
is in conformity with Standard ISO 14064-1:2018 Standard

for the activities: **SPECIFIED IN ANNEX TO THE CERTIFICATE**  
which is/are carried out in: **LIENCIADOPOZA, 55.48013 - BILBAO(BIZKAIA)**

Issued on: **2023-03-10**

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**AENOR**  
Confía

Carbon Footprint Certificate

**AENOR**  
CARBON FOOTPRINT  
CALCULATED CO<sub>2</sub>

HCO-2015/0011  
**Annex to Certificate**

Scope: It generates total emissions of 1,157,445.24 t CO<sub>2</sub>e. (Direct Emissions: 76,093.60 t CO<sub>2</sub>e; Indirect Emissions: 1,081,361.64 t CO<sub>2</sub>e).

The scope of the verification is established for the engineering, development and construction of infrastructure projects carried out by the following ELECNOR GROUP organisations:

**ELECNOR S.A.**  
**ENERFIN SOCIEDAD DE ENERGÍA, S.L.**  
**ELECNOR SERVICIOS Y PROYECTOS S.L.U.**  
• Subdirección General de Grandes Redes  
• Subdirección General de Energía  
• Subdirección General de Ingeniería  
• Dirección Centro  
• Dirección Nordeste  
• Dirección Este  
• Dirección Sur  
• Elecnor de Angola  
• Elecnor de Argentina  
• Elecnor Chile  
• Elecnor do Brasil  
• Elecnor de México  
• Elecnor de Honduras  
• Elecnor de R. Dominicana  
• OJA (Reino Unido)  
• Green Light Contractors (Australia)  
• Nortiega

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Carbon Footprint Certificate

**AENOR**  
CARBON FOOTPRINT  
CALCULATED CO<sub>2</sub>

HCO-2015/0011  
**Annex to Certificate**

Scope:

- Panamá
- Perú
- Camerún
- Adhorna Prefabricación
- Desmos
- Montelecnor (Uruguay)
- Aplicaciones Técnicas de la Energía, S.L. (Atersa)
- Andesa, S.L.U.
- Ehsa construcciones y obras, S.A.
- Hidroambiente
- Jonax Seguridad, S.L.
- Omnimetal Electricidade
- Oficinas corporativas

CALCULATED PERIOD: 2022

In accordance with the Verified Emissions Report for the period 2022 and the AENOR Verification Statement.

Issued on: **2023-03-10**

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