THE CEPSA

CARBON FOOTPRINT REPORT UNDER ISO 14064-1:2018

ORGANIZATION: ENERGY PARKS & COMMERCIAL AND CLEAN ENERGIES & MOBILITY AND NEW COMMERCI SPAIN GEOGRAPHY

REPORTING YEAR 2022

CE



INDEX

01.	GOAL	4
02.	REPORTING BOUNDARIES	6
03.	SCOPE	7
	3.1. Energy Parks	7
	3.2. Mobility & New Commerce	7
	3.3. Commercial & Clean Energies	7
04.	EMISSIONS DATA AND METHODOLOGY	10
	4.1. Emisssions Data	10
	4.2. Methodolgoy	14
05.	EMISSIONS REDUCTION ACTIONS	18
	5.1. Direct emissions	18
	5.2. Indirect emissions	19
06.	EMISSIONS REMOVALS	19
	6.1. Removal affecting emissions associated to use	19
07.	PERFORMANCE INDEX	22
08.	EXCLUSIONS AND UNCERTAINTY	24
09.	BASE YEAR	26

202





01. Goal

Cepsa continues this year 2022 with its inventory verification plan at the organizational level of Greenhouse Gas (GHG) emissions under the framework of ISO 14064-1:2018 in line with its Carbon Strategy. The verification includes the emissions of the following GHGs: carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), as well as the fugitive emissions from transportation and fugitive emissions as of hydrofluorocarbons (HFCs) or others from the refills of refrigeration systems.

The process of inventory verification has been carried out in Carbon Cycle with the accreditation of AENOR with a limited level of assurance and a threshold of maximum relative importance of 5%.

With this report:

- Under our strategy and commitment to reduce our CO₂ emissions, we adopt rigorous monitoring and volunteer audit of these emissions to enhance our transparency and rigor in communication of emissions.
- With the aim of meeting the targets set in the United Nations' Sustainable Development Goals for 2030, Cepsa has identified four priority objectives that it can maximize with its contribution as a global energy company. Climate Action is one of them, aware of climate change, aim to minimize the carbon footprint.





Cepsa has updated its policy framework and new climate action policy is available in <u>www.cepsa.com</u>

This Policy aims to establish a framework to articulate the Company's strategy and business model in a manner consistent with its commitment to carry out the necessary climate actions, aligned with the energy transition and a low-carbon economy <u>https://www.cepsa.com/en/the-com-</u> pany/strategy

Our Commitments

- Establish, monitor and validate by a third-party CO₂ emissions and abatement plan targets as well as in terms of the carbon intensity of its product portfolio.
- Integrate climate change in the company strategy and in all businesses decision-making processes. Analyze risk and opportunity management and climate financial reporting under different climate scenarios.
- Design carbon mitigation and adaptation plan considering the entire value chain and low carbon products growing demand.
- Keep climate-related objectives as monetary reward parameter.

2022

02. REPORTING BOUNDARIES 03.

SCOPE



02. Reporting boundaries

Following emissions are reported under this report.

- This report groups direct GHG emissions (CO₂, CH₄, N₂O and refrigerant gases) from the facilities, including combustion, process, fugitive emissions and emissions from mobile sources, (Category 1)
- Emissions from facilities's wastewater treatment plants have been included in the reporting boundary just assessing as significant under the materiality criteria (Category 1)
- And indirect emissions by purchased energy, steam and electricity, of the facilities included in the scope of this verification. (Category 2)
- Likewise, this 2022 report includes the indirect emissions of the value chain corresponding to scope 3 under the GHG Protocol Methodology and under ISO 14.064-1:2018 (Categories 3-6)

Greenhouse gas emissions sources have been identified and grouped in accordance with the ISO 14064-1:2018 standard. This standard lists six categories of emissions and differs somewhat from earlier categorisation in line with the Greenhouse Gas Protocol's Scopes 1 through 3.

- Category 1: Direct GHG emissions and removals
- Category 2: Indirect GHG emissions from imported energy
- Category 3: Indirect GHG emissions from transportation
- Category 4: Indirect GHG emissions from products used by the organization

- Category 5: Indirect GHG emissions associated with the use of products from the organization
- Category 6: Indirect GHG emissions from other sources

This report, although drawn up in parallel, is developed within the framework of the principles established by Cepsa regarding the quantification of GHG and the establishment of objectives to reduce GHG emissions.

Significance and Materiality

It is necessary to define and explain own pre-determined criteria for the significance of indirect emissions, considering the intended use of the inventory.

Factors for consideration in assessing significance and materiality include:

- Magnitud or Size of the emissions
- Level of Influence on the emission source
- Difficulty in obtaining data
- Poor validity in available estimation
 approaches

Whilst all of the above would be considered in materiality assessments, the criteria that would mandate disclosure of emissions sources as significant is:

a) Where there is a single source with estimated emissions likely to be at least 1% of its category. In this case, that emissions source must be included.

b) Where the total of 'insignificant' sources has estimated emissions likely to be at least 5% of total emissions. In this case, enough of the 'insignificant' emissions must be included until the estimate of excluded emissions is below 5%.

≠+ CEPSA

03. Scope



3.1. Energy Parks

Energy Parks will transform our two refineries into energy parks and manage energy production, including future production of our sustainable energy solutions, such as hydrogen and biofuels. future production of our sustainable energy solutions, such as hydrogen and biofuels.

Refining has been characterized by increases in the diversity of raw materials such as biomass, fats, residues, plastics that allow the decrease of fossil content in the products being manufactured and the start-up of ener-gy recovery projects that have improved the energy index of the plants.

Cepsa operates in three facilities in Spain (Tenerife, La Rábida in Huelva and Gibraltar-San Roque in Cádiz). Among the petroleum products manufactured by Cepsa are diesel, gasoline, fuel oil, kerosene and liquefied petroleum gas (LPG), among others.

The production in Energy Parks is characterized by high energy efficiency in its units. Our interest is to reduce energy consumption and thereby reduce GHG emissions, for which we have Energy Management Systems, certified under ISO 50001, that allow us to monitor and optimize these consumptions.

• Energy Parks San Roque (Cádiz)

Since its implementation in 1967 in San Roque (Cádiz), a strategic area for exports, the Gibraltar-San Roque refinery has been configured as a highly integrated industry with the petrochemical complex. • Energy Parks La Rábida (Huelva)

La Rábida refinery came into operation in 1967 in Palos de la Frontera (Huelva). Its production plants and port facilities allow it to store and distribute a wide range of products for various industries and consumers.

• Facility Tenerife (Tenerife)

The choice of Tenerife Island as the site for the first Spanish refinery in 1930 has had a remarkable impact on the industry and the economic and social development of the city of Santa Cruz de Tenerife, as well as of the Canary Islands. This strategic situation has allowed it to supply petroleum derivatives to various markets.

3.2. Mobility & New Commerce

• Service Stations in Spain and Portugal are included with direct and indirect management.

3.3. Commercial & Clean Energies



Gas&Power facilities

Gas & Power area supplies gas in the wholesale and retail markets and electricity to industrial customers and consumers in the tertiary sector.

Object of this verification are the cogeneration (231 MWe) and combined cycle (394 MWt) plants integrated in Energy Parks. The cogeneration allows the reduction of CO₂ emissions thanks to the generation of steam along with the production of electricity. This steam is imported by the Refining and Chemical facilitieS.

GHG emissions reported in this report correspond to the total shareholding of the facilities, under operational control.

🗲 CEPSA



Renewable Energy

Biofuels unit called Cepsa Bioenergía San Roque owns the facility for FAME production (Fatty Acid Methyl Ester), located in San Roque. It has been included in this scope since its incorporation to Cepsa's portfolio in 2017. Biofuels are produced from raw material certified under Sustainability Standard of ISCC, offering a GHG reduction in the production process versus fossil fuels and crude raw material.

This is another example of the industrial integration in Cepsa location in San Roque.

Renewable power facility in Cadiz, Alijar wind energy facility. Its power is 29MW and no direct emissions are allocated to it.



Asphalt facilities

Cepsa's current Asphalts Division has 5 modern, strategically located factories on the Iberian Peninsula (Alcala de Henares, Alcudia, Valencia, Gijon y Tarragona), allowing it to supply the peninsular market and providing an excellent platform for exports and for its 7 sales offices that provide commercial coverage to our customers. Once the bitumen has been produced in our Energy Parks it is distributed to the Asphalt Unit's factories for processing and subsequent delivery to the end customers. We manufacture and market bituminous emulsions, modified bitumen, and materials for industrial applications. The paving and waterproofing of surfaces sections have developed in parallel



Lubes facilities

Cepsa's current Lubricants Division has 2 strategically located factories on the Iberian Peninsula (San Roque and Paterna), allowing it to supply the peninsular market We sell more sustainable lubricants with our Fuel Economy, Hybrid and Biodegradable ranges. At Cepsa, we are experts in lubrication and we are always working to offer you the product that best suits your needs. From products for cars, motorcycles, trucks or vessels to lubricants for machinery, installations and production systems.

Aviation facilities

There are different storing and distribution facilities included in the reporting sope grouped as SIS, CMD and CAV.

SIS, The "intoplane" service consists of the on-board supply of the fuel aircraft needed for flight operations. In order to ensure that engines do not fail during flight, the quality and quantity of fuel is of paramount importance.

Taking into account the characteristics of this type of fuel, the operation must be carried out with due respect for safety and the environment.

Currently, the main fuel used by most aircraft is kerosene, with its different specifications, depending on civil or military use and geographical area: USA or Europe. Aviation gasoline is also used on a small scale for light aircrafts.

CAV and CMD, facilities in canary Islands are also dedicated to the supply of the fuel aircraft needed for flight operation in the airport facilities.

2022



04.

EMISSIONS DATA AND METHODOLOGY



04. Emissions Data and Methodology

4.1. Emisssions Data

The general distribution of emissions among the above mentioned ISO 14064-1:2018 for the year 2022 categories is shown in the following graph, according to the materiality criteria:



It is seen that Category 5 contributes to the most emissions, specifically the emissions from the use of sold energy products. This is followed by Category 1 and 4. **Total emissions account to 59,709,855 tonnes of CO2eq.** This sum of emissions does not consider the biogenic emissions but considers removal by nature based solutions.

Indirect emissions corresponding to category 2, emissions from purchased energy is shown in the graph as market-approach calculation.



The percentage distribution graphs for carbon footprint by scope show that indirect emissions account for the largest percentage of emissions calculated.



The breakdown of these direct emissions is shown in the following table where, in addition to the contributions from combustion, flare, fugitive and refrigerants, the equivalent tons of CO_2 are broken down on the location of the facilities.

Direct emission source	CO ₂ tonnes	CH₄ as CO₂e tonnes	N₂O as CO₂e tonnes
Energy Parks/Facility Tenerife			
Combustion	2,169,092	955	3,099
Process	785,180	80,532	9,695
Flaring	76,865	15	30
Fugitives	884	28,431	-
Mobile sources	768	1	7
Commercial & Clean Energy			
- Cogeneration & Combined Cycle Power Plants			
Combustion	1,377,768	2,772	9,432
Fugitives	36	22,113	-
- CBSR Bio Facility			
Combustion	306	0	2
Process	-	260	0
Fugitives	0	5	-
- Asphalts			
Combustion	5,134	4	23
Fugitives	0	38	-
- Lubricants Facilities			
Combustion	2	0	0
- Cepsa Aviación, Spanish Intoplane Services, CMD Aeropuertos Canarios			
Combustion	923	1	13
Mobility & New Commerce			
Service Stations	0	0	0
Biogenic emissions	114		
TOTAL with biogenic, tCO ₂ e	4,574,498		
TOTAL without biogenic, tCO ₂ e	4,574,385		

Although the contribution of the fleet is not significant **776 tonnes CO_{2eq}**, it has been included in the report in order to establish an improvement plan associated with the mobility of employees in the work centers and the type of vehicles that make up the fleet, such as the incorporation of hybrids and electric vehicles in a dominant manner. By 2022 Cepsa has launched its Sustainability Plan for the Employee, a survey has been submitted to employees to look for different imporvement and interest measures.



The following table shows the same results of **direct emissions**, in this case by business.

Direct emissions	CO ₂ tonnes	CH₄ as CO₂e tonnes	N ₂ O as CO ₂ e tonnes
Energy Parks/Facility Tenerife	3,032,789	109,934	12,831
Commercial & Clean Energy			
- Cogeneration & Combined Cycle Power Plants	1,377,804	24,886	9,432
- CBSR Bio Facility	306	265	2
- Asphalts	5,134	41	23
- Lubricants Facilities	2	0	0
- Cepsa Aviación, Spanish Intoplane Services, CMD Aeropuertos Canarios	923	1	13
Mobility & New Commerce	0	0	0
TOTAL without biogenic, tCO2eq		4,574,385	

Within the section of **indirect emissions**, the following table shows the results corresponding to indirect emissions derived from the use of electricity and steam (Category 2). As previously indicated, the results of emissions associated with electricity have been carried out according to the market methodology, although the value associated with location has been calculated, which is also represented in the grouped table, in this case by business.

Indirect emissions (Category 2)	market approach CO _{2 eq} , tonnes	location approach CO _{2 eq} , tonnes
Energy Parks/Facility Tenerife	8	173,000
Commercial & Clean Energy		
- Cogeneration & Combined Cycle Power Plants	881	732
- CBSR Bio Facility	0	765
- Asphalts	67,289	68,586
- Lubricants Facilities	3,564	3,254
- Cepsa Aviación, Spanish Intoplane Services, CMD Aeropuertos Canarios	66	193
Mobility & New Commerce	9,672	8,584
	81,482	255,115





Finally, indirect emissions associated with categories 2-6 are summarized in the following table.

Indirect emission category	market approach CO _{2 eq} , tonnes	location approach CO _{2 eq} , tonnes
Indirect emissions		
Category 2 (purchased energy)	81 482	255 115
Category 2 (porchased chergy)	1 421 265	1 421 265
Category 3 (Iransport)	2 9 / 0 9 7 9	2 9/0 979
Calegory 4 (products used)	3,869,878	3,869,878
Category 5 (use of products)	49,710,701	49,710,701
Biogenic emissions	1,780,820	1,780,820
Category 6 (others)	71,181	58,893
TOTAL w biogenic, † CO ₂ e	56,935,327	57,096,673
TOTAL wo biogenic, † CO2e	55,154,507	55,315,852

Total market approach indirect emissions



As can be seen, most relevant indirect category corresponds to **Category 5**, **use of products**, just emissions coming from the combustion of our energetic products (fuels as naphtha, kerosene, gasoil and fueloil) are the most relevant in chain value representation.



4.2. Methodolgoy

Direct emissions



- <u>Combustion emissions</u> in stationary sources: CO₂ according to Methodology European Reporting under EU ETS (European Emission Trading Scheme) for these facilities under compliance, and national inventory emission factors for the rest of facilities.
- <u>Flaring emissions</u> in facilities; CO₂ according to Methodology European Reporting under EU ETS. Activity data are reported following the EU Methodology regulation.
- <u>Diesel Combustion</u> emissions in stationary sources. CO₂ according to Methodology European Reporting under EU ETS (European Emission Trading Scheme) and national inventory emission factors.
- <u>Combustion emissions</u> in mobile sources: Internal registers for Activity data, majority coming from supplier service, and national inventory emission factors for considered GHG.
- <u>Stationary sources; CH₄ and N₂O</u> according to EU-PRTR Concawe methodology. Activity data are reported following the EU Methodology regulation and when not applied, invoices and/or internal registers are validated. GWP of CH₄ (27,9) and N₂O (273) GHG according to IPPC AR6 data.
- Fugitive emissions of transport and distribution of natural gas. Activity data reported under ETS methodology and IPCC Guidelines for emission factors; transport & ERM (natural gas) fugitive emissions

• Fugitive emissions of refrigerant gases; GHG according to IPPC AR6 emission factors. Activity data reported under refill and maintenance evidence.

Indirect emissions from energy

Associated emissions to purchased electricity and steam in facilities under scope. Activity data are reported under invoices/ETS reports. Emission factor of indirect emissions due to steam come from operational data and emission factor for power are reported under market-based and location-based criteria.

Indirect emissions from value chain

Following subcategories as energy and purchased fuels, raw materials and services (category 4), upstream transportation of raw material and downstream transportation and distribution (category 3), use of sold products and waste management (category 5), investment, franquises and upstream leased asset (category 6) have consistent activity data for their calculation as they are verified in other categories to carry out emission calculations

Category 3: GHG from transportation



Subcategory Indirect emissions by transport and distribution upstream

The quantification methodology used for calculating emissions is based on the activity data (raw materials for facilities) and the emission factors by Ecoinvent and directive 2018/2001. It accounts for **1,002,437 tones CO**_{2eq}.



Subcategory Indirect emissions by transport and distribution downstream

The quantification methodology used for calculating emissions is based on the activity data (sold products) and the emission factors by Ecoinvent. It accounts for **418,828 tones CO**_{2eq}.



The emissions associated with trips made by employees between their homes and their worksites using different means of transport. For this year 2022 and under the Sustainability Plan for the Employee, a survey has been submitted to update data for commutting.

These emissions account for **5,073 tones** CO_{2eq} but as it is explained in point 6 Removals, they have been removed through carbon credits based on nature-based projects.



<u>Subcategory</u> Indirect emissions <u>caused by business travel *</u>

The emissions associated with the business trips made by employees using different means of transport (car, aircraft or train), hotel, etc for which the distances travelled, or hotel nights are multiplied by DEFRA 2022 emission factors. The emissions account for **2,159 tones CO**_{2eg}.

Category 4; GHG from products used



Subcategory Indirect emissions from purchased products

As upstream emissions of purcharsed fuels and electricity and transimissions and distribution losses The quantification methodology used for calculating emissions is based on the activity (electricity and diesel consumption) data and the emission factors published by DEFRA 2022. In the case of electricity involve losses by generation transmission and distribution. It accounts for **371,100 tones CO_{2eq}**.

Subcategory Indirect emissions from purchased products

As raw materials as crude oil and renewable raw materials.

The quantification methodology used for calculating emissions is based on the activity data (raw materials for facilities) and the emission factors by Ecoinvent and directive 2018/2001. During this year 2022 emission factor for exploration&production for crude oil have been improved, emission factors come form Ecoinvent and it has been calculated for specific slate crude in each Energy Parks, which explains the relevant reduction in this subcategory versus 2021. It accounts for **3,498,778 tones CO_{2eq}**.



Subcategory Indirect emissions from other services *

The emissions associated with the contracting of consulting services by the business unit in the european area. Activity data is cost of the service and emission factor of consultancy. The emissions account for **36,032 tones CO**_{2eq}.



Subcategory Indirect emissions caused by services used by the organization such as wastes generated in operations *

The quantification methodology used for calculating emissions is based on the activ-



ity data (official annual declaration of managed wastes) and the emission factors published by DEFRA 2022. The emissions account for 8,104 tones CO_{2eq}.

Category 5: GHG from use of products



Subcategory Emissions from the use of sold products.

The quantification methodology used for calculating emissions is based on the activity data (sold energy products) and national emissions inventory for emission factors. It accounts for 49,710,701 tones CO_{2eg}.

Category 6: Any other GHG emissions



Subcategory Emissions from the upstream leased assets such franquises in service stations

The quantification methodology used for calculating emissions is based on the activity data (number of petrol stations in Spain and Portugal) and the emission factors by CNMC in Spain and REN in Portugal. It accounts for 29,334 tones CO_{2eq}.



Subcategory Emissions from investments. Involving emissions in ASESA facility (bitumen facility) (50% share Cepsa)

The quantification methodology used for calculating emissions is based on the activity data (Natural gas, diesel and torchs) verified under ETS methodology and the emission factors by Concawe and IPCC AR6. It accounts for 41,847 tones CO_{2eq}.



Subcategory Emissions from the upstream leased assets. Involving emissions in Cepsa's headquarters in Madrid.

The quantification methodology used for calculating emissions based on invoices for activity data (natural gas and electricity) and national emissions inventory and CNMC) for emission factors. It accounts for 541 tones CO_{2eq}.

*Emissions from these subcategories described have been calculated based on the above description and found not to meet the materiality requirements (lower than 5%) so that they are not included in the graphs.

However, they have been included in the current report, with the aim of report all associated emissions with traceable activity data as well as to incorporate new categories. For categories not included in this report due to the difficulty of accessing the data, action plans are being developed.

2022

05.

EMISSIONS REDUCTION ACTIONS

06.

EMISSIONS REMOVAL



05. Emissions Reduction Actions

5.1. Direct emissions 😤

No measures implemented during 2022 affecting direct emissions, but there three measures implemented by 2021 being reported for 3-4 months by 2022 till completing one year in the reporting.

Cepsa has certified energy efficiency actions in the facilities. The certified energy efficiency projects are included in the Energy Management System audited under the international standard ISO 50001 and are included in the Efficiency Plans of the business unit.

Energy Parks San Roque (Cádiz)

• Installation of Packinox heat exchanger in the Platforming unit.

Project implementation date was March 2021. CO_2 time reduction for this period: 3 months.

Direct emissions reduction accounts to **2,090 tCO**_{2eg}.

Energy Parks La Rábida (Huelva)

• Minimum flow system valvules change COP102.

Project implementation date was April 2021. CO₂ time reduction for this period: 4 months. Direct emissions reduction accounts to 74 tCO_{2eq}.

Facility Tenerife (Tenerife)

Replacement of fuel oil with diesel oil.
 Implementation date was July 2021.
 CO₂ time reduction for this period: 6 months

Direct emissions reduction accounts to **238 tCO**_{2eq}.

Total **direct emissions** reduction accounts to **2,402 tCO**_{2eq}



5.2. Indirect emissions

Energy Parks and Tenerife facility

By 2022 supplier contract has been modified to assure 100% renewable power consumption by the adquisition of guarantees of origin.

Indirect emissions reduction accounts to **291,524 tCO_{2eq}**. This reduction has been calculated according to market-based approach applying national mix by 2022.



06. Emissions Removals

During 2022 year Cepsa has implemented a removal action affecting indierect emissions in value chain and corresponding to emissions associated to energy products.

6.1. Removal affecting emissions associated to use

This removal action has been designed across an energy product in its portfolio. Heating diesel has been offered as neutral Carbono product to the clients by removing emissions associated to its use. <u>https://www.cepsa.es/en/individual-customer/gasoils/carbon-offset</u>

Several nature-based projects have been chosen as high standard quality for offsets and purchased to offset emissions during 2022 according to purchase orders from clients. Here you can find the portfolio of national and international projects.

"Combating climate change is our main objective and, to this end, the nine projects we are investing in throughout Spain and abroad are aimed at protecting and restoring our terrestrial ecosystems, combating deforestation, and halting the loss of biodiversity".

National projects are found in National Carbon Footprint Register in MITERD web. <u>https://www.miteco.gob.es/es/cambio-climatico/temas/mitigacion-politicas-y-medidas/organi-zaciones-proyectos.aspx</u>. International project in Brazil is found in VERRA web site. <u>https://www.carbonext.com.br/en-US/projects/evergreen</u>

19,037 tones of CO_{2eq} have been removed during November and December 2022, through this offsetting initiative, which has been pilot in Cepsa and relevant for our customer engagement. These emissions are deducted from indirect emissions, category 5: GHG from use of products, and subcategory Emissions from the use of sold products.

Nature-based portfolio projects

┽┝ CEPSA

- Arzádegos 2013-2017-2019 Ourense-Achieving the tree cover that this area had before the significant fire there in 2005. The project is intended to environmentally and touristically revitalize the area with a useful reforestation area of 23.92, 27.03 and 12.95 ha respectively.
- San Nicolas Farm Ávila This project aims to rotect the habitat, soil and landscape, promoting the conservation of biodiversity in a total area of 88.92 ha, through the forest recovery of this area affected by fires in 2013.
- Tellado e Viña . Ourense Plantation of Pinus radiata and different hardwood species in a neighboring common forest
- A rebordelo Pontevedra. A project based on reforesting burned land and recovering degraded soil to create a biodiverse forest mass.

\wedge
A 7 SA
LATA

- La Enebrosilla Farm Ávila The aim is to revitalize the soil structure and preserve the area as a source of renewable natural resources, promoting biodiversity, forestry, and rural employment
- **Carballedo** Pontevedra. This initiative includes habitat, soil, and landscape protection to combat the effects of climate change.
- Apui Amazonas Brazil This project involves the conservation of 58,073.54 hectares of forest throughout its useful life, which is an essential activity for climate change.

Indirect emission category	market approach CO _{2 eq} , tonnes	location approach CO _{2 eq} , tonnes		
Indivad amissions				
indirect emissions				
Category 2 (purchased energy)	81,482	255,115		
Category 3 (transport)	1,421,265	1,421,265		
Category 4 (products used)	3,869,878	3,869,878		
Category 5 (use of products)	49,710,701	49,710,701		
Biogenic emissions	1,780,820	1,780,820		
Category 6 (others)	71,181	58,893		
TOTAL w biogenic, † CO ₂ e	56,935,327	57,096,673		
TOTAL wo biogenic, t CO ₂ e	55,154,507	55,315,852		
Removals, tCO _{2e}				
19,037				
Category 5 (use of products)	49,691,664	49,691,664		
TOTAL w removals, tCO ₂₀	55,135,470	55,296,815		

Taking into account removals, emissions for **Category 5** have to be recalculated and are shown as it follows **49,691,664 tones of CO_{2eq}.**

20<mark>2</mark>2

07. PERFORMANCE INDEX



07. PERFORMANCE INDEX

Cepsa has implemented a Carbon Intensity Index as performance indicator following the Transition Pathway Initiative and other relevant references that use this Carbon Index as Benchmark in Oil&Gas sector.

The description of the Carbon Intensity Index construction is as follows: Cepsa published last March 2022 its Positive Motion Stratategy including areduction target in its Carbon Intensity Index of 15-20% vs 2019 reference year (76 gCO2/MJ).



With the following assumptions in its methodology:

- Scope 1 emissions only accounting CO2 as GHG material and linked to Carbon systems across operation
- Exploration & Production considers CH4 as other GHG due to its relevance in upstream emissions
- No fugitives emissions considered under the operation performance, these emissions due to natural gas transport will be reduced indirectly
- Scope 3 emissions considered are exclusively associated to use of energy products
- Energy sold includes liquid energy products, distributed power by

Commercial & CE and fossil power produced and sold to net.

Carbon Intensity Index for 2022 year, account for **75 gCO₂/MJ**

2022

08.

EXCLUSIONS AND UNCERTAINTY



08. EXCLUSIONS AND UNCERTAINTY

Uncertainty in the emissions inventory is a combination of the uncertainties in the emission factors and in the corresponding activity data.

Emission Factors

As for the emission factors used, they come from contrasted and specific sources, so their level of uncertainty is known and controlled. For scope 1 the emission factors calculated internally are based on measurements of calibrated and externally verified analytical equipment and according EU regulation so that the uncertainty is minimum. Scope 2 emission factor are based on market approach so that uncertainty is zero.

For scope 3, the selection of these emission factors is intended to minimise uncertainty as much as possible by updating the database.

Activity Data

The uncertainty of the activity data used for creating the Inventory is assured by the local regulations of countries participating in the EU ETS (Emission Trading System).

Data for Scope 1 and 2 is obtained from verification emissions report and commercial invoices so uncertainty is calculated according EU rregulation and is minimised.

Other indirect emissions (Scope 3): Uncertainties in the accounting of the Scope 3 emissions are related to generic assumptions made. Uncertainty is minimized by the internal procedure which tries to improve the methodology annually.

During this year 2022 a specific methodology to evaluate the uncertatinty associated to activity data and emission factors has set. It consists on evaluating the uncertainty based on a scale from 1 to 3, 1 for higher uncertainty and 3 for lower uncertainty, and versus the weight of each type of emissions in the global. This methodology will let us to monitor the reliability of our emissions and set a plan to improve.

The application of these considerations makes it possible to minimize as far as possible the uncertainty of the data provided in this Carbon Footprint report.

2022

09.

BASE YEAR



09. Base Year

Base year is 2021 just Chemical facilities and business has been segregated from rest of Organization and this is a significat change vs prevous year (higher than 5%).

Also during 2022 different facilities and Business under Commercial&Clean Energies have been included in the reporting scope as an improvement reccomendation from previous year and following Asphalts inclusion by 2021. By this way, Cepsa improves the alignment with ISO 14001 of Environmental Management which includes the Commercial Facilities. Added Facilities by 2022 accounts for not significant value in terms of energy consumption and GHG emissions, not significant and lower than 5% global emissions, just not change in base year.

