

2017 ANNUAL AND CORPORATE RESPONSIBILITY REPORT

ENVIRONMENT



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Our efforts are focused on minimizing the impact and making sure that our development as an energy company is aligned with respect for the environment and above all assure we are sustainable.

We approach the management of the most relevant environmental aspects in the development of our activities based on six main pillars:



ENVIRONMENTAL MANAGEMENT

Cepsa has an Integrated Environmental Management System (EMS) underpinned by our Health, Safety Environment and Quality Policy, (HSEQ), which is mandatory for all our areas of activity and processes. Having an EMS means we can manage large scale environmental projects, meet legal and other requirements and assess risks and opportunities. Our commitment is to improve our environmental work on a daily basis through prevention and mitigation of the adverse environmental aspects of our operations, products, and services both globally and at our plants. This is carried out through respectful environmental policies in tandom with transparent communication of our work to all stakeholders. To do this we set environmental objectives in line with our policy and implement processes to meet our objectives. One of the improvements we have made this year was adapting the latest EMS of the UNE-EN ISO 14001:2015 regulation, helping us to bring together the identification of environmental aspects across the whole company with the involvement of all our plants and business units.

Monitoring and measuring processes about the Environmental Policy, including engagements, environmental objectives and operational criteria, allow us to identify and take the appropriated actions for continuous improvement.

Our commitment goes beyond the legal requirements, having arranged Environmental Liability Insurance that anticipates the requirements under legislation and covers all our activity in Spain, Gibraltar, Portugal, Andorra and Germany, and that covers all facilities and not only those that require it by law. Our objective for the next financial year is to extend the scope of this insurance to other facilities, maintaining the coverage to continue reaching the objective of Zero Loss Ratio, aspiring to improve it through inspections conducted by insurance companies at our facilities and implementing the resulting recommended actions.

CLIMATE CHANGE

Climate Change has been established as the major challenge for the future. To this end, at Cepsa we use innovation, technology and proactivity to develop solutions that mitigate the impact of our activity on the climate.

We strive to reduce greenhouse gas emissions generated by our activities and we have a control system for CO_2 emissions to guarantee our activities are energy efficient. A large part of these emissions are verified by independent third parties under the ISO 14064 standard, which we use to measure our Carbon Footprint, and whose scope we increase year after year in order to obtain the greatest coverage and reliability possible.

We have also established an Energy Efficiency Plan in the production business units in order to establish a goal of reducing the CO_2 emissions associated with the energy consumption reduction measures. The plan sets a reduction target by 2020 in both Refining and Chemical and takes the emissions of 2015 as base year. Our goal is to be among the 10% most efficient companies in the sector, which we will achieve thanks to our efforts to respect on of our fundamental values: sustainability.

Cepsa has set a carbon intensity target with a horizon of 2019, with annual objectives. For this KPI indicator, a specific refining carbon intensity ratio has been selected, with this business area corresponding to the area in which most of our CO_2 emissions are concentrated. The CO_2 KPI is the leading benchmark in the Refining sector used in the European Regime of CO_2 Emissions Market, expressed as kg CO_2 per unit of CWT - Complexity Weighted Tonne - with this tonnage indicating the complexity of a refinery, given that it computes the loads and productions of the units that make up the refinery in terms of carbon intensity.

In order to monitor it, we take monthly readings of the emission intensity ratio in order to evaluate performance and the possibilities of reducing emissions; in 2017, the CO_2 KPI target value established initially was reached. This objective of reducing emission intensity applies to all Cepsa personnel, which demonstrates our commitment to climate change.

We believe that this indicator is a good reflection of our global commitment even though it is specific to Refining, although we are developing a C index that encompasses all our business units. We calculate our greenhouse gas emissions using the scope allocation applied by our carbon footprint calculation tools. These tools calculate the greenhouse gas emissions associated with a company's activities or the life cycle of its products in order to determine, assess and communicate their contribution to climate change, and to identify options for reducing atmospheric emissions and related costs.

The atmospheric emissions to be calculated are broken down into three scopes and expressed in equivalent CO_2 tonnes. Scope 1 relates to our company's direct atmospheric emissions, including all activities we control. Scope 2 comprises atmospheric emissions from our electricity consumption, i.e., emissions that occur when electricity is generated for our use. Finally, Scope 3 comprises indirect emissions that are a consequence of our activity but are not produced from our own sources or controlled by us, such as work-related travel, emissions generated by purchased products or transport carried out upstream of our production processes, among other categories. The following table shows the greenhouse gas emissions that Cepsa produced throughout 2017:

GREENHOUSE GAS EMISSIONS. SCOPES 1 AND 2 . (Thousands of tonnes of equivalent CO₂)

Alcance 1
Alcance 2







This year we managed to reduce our GHG emissions by more than 5% with respect to 2015 in scopes 1 and 2, despite the fact that there was a slight increase with respect to the emissions recorded in 2016, due to the fact that we included new plants and consumption. All data were verified under the ISO 14064 Standard. We also reduced scope 3 emissions in spite of including three new categories among those certified under the standard to reach 10 categories out of 15 proposed in the GHG Protocol.

The data show that intensity of emissions have held at similar levels or declined. Unifying emissions for every business unit we see a global trend lower in 2017. We have managed to increase our business in different business units without compromising energy efficiency or the optimization of resources to do it. As such we are able to continue to grow sustainably without seeing an exponential increase in our emissions.

GREENHOUSE GAS EMISSIONS. SCOPE 1 AND 2.

	2017	2016	2015
Exploration and Production (tonnes of CO_2 equivalent/tonnes Oil&gas)	0.12	0.147	0.155
Refining (tonnes of CO ₂ equivalent/tonnes crude oil processed)	0.184	0.177	0.183
Chemicals (tonnes of CO ₂ equivalent/tonnes production)	0.17	0.167	0.29
Gas & Power (tonnes of $\rm CO_2$ equivalent/MWe)	0.80	0.67	0.68
Total emissions (tonnes of CO_2 equivalent/Clean CCS NIAT, \in)	0.008	0.012	0.012

Our efforts to achieve this reduction focused mainly on improving our facilities and processes to reduce their respective emission rates. However, we believe our concern about climate change is a challenge not only for the company, but also for everyone at Cepsa. That's why we have set a range of emission targets linked to the remuneration of our managers and employees, so that we all get involved in looking for alternatives that will lead us to perform more effectively in this area.

CLIMATE CHANGE RISKS AND OPPORTUNITIES

We are aware that our activities, based on energy supply and petrochemical solutions, are powerfully affected by generation of GHG emissions. That is why we maintain a firm commitment to combat Climate Change. We have framed a Carbon Strategy that provides us with a range of tools to improve in this regard through compliance with the strictest regulations and standards, and with the efficiency and sustainability targets that we set ourselves in line with the improvement of our performance, evaluating them to put them in line with our 2030 strategy.

In our risk map we rate this area as a priority, and within it we consider various types of risks and opportunities that may arise.

For example, regulatory risks become more significant in relation to Climate Change. New international laws and regulations on emissions and carbon pricing will increase the costs of emission allowances and the infrastructure needed to cut down on emissions. The opportunity that this scenario offers us, however, is to position ourselves in industry bodies at the forefront of initiatives for developing new energy and atmospheric emissions regulations, and take the lead on the innovation pathway to enhance efficiency in the systems that underpin our activities.

Another major challenge facing us are the changes in mobility and transport. The energy transition and decarbonisation plans being implemented globally affect us as a fossil fuel supply company. However, our opportunity lies searching for alternatives in the supply of other forms of energy. We have already made progress with the purchase of a wind farm in Jerez (Cadiz), and are boosting our natural gas and LPG businesses through plans to develop renewable energies and alternative mobility.

Thanks to our proactive stance and our resilience supported by more than 80 years of experience in the industry, we shall adapt to future circumstances and provide the energy that each reality needs. We shall be a leading energy company that is clean, sustainable and committed to the environment.

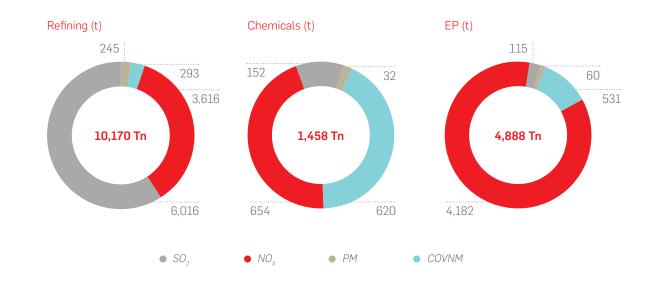
NON-GHG EMISSIONS

At Cepsa, we are working to decrease pollutant emissions arising from our operations and optimise the formulation of our fuels, which would enable us to reduce their impact on air quality.

Our efforts to reduce pollutant emissions into the atmosphere are clearly reflected in the downward trend in our emissions indicators for each of our business units. During 2017, the only increases that have been registered are SO_2 emissions and suspended particles from the Chemicals business area, due to the inclusion of Sinar Mas Plant in Indonesia.

Improvements in controls and infrastructure for trapping and abatement of contaminants in our plants will enable us to bring our non-GHG emissions below regulatory requirements, so that we can minimise the impact of our processes on the atmosphere.

NON-GHG EMISSIONS BY BUSSINES UNIT



WATER MANAGEMENT

Water is a source of life. We are aware of its importance and we recognise the fundamental right of people to access and availability of fresh water; we assume the responsibility to manage it in a sustainable way and we apply the best techniques to control and reduce discharges from operations, emphasising the quality of the water that we return to the natural environment in order to minimise as much as possible the impact derived from the activities and processes of the production plants and business units. Water is an essential resource for operations. In exploration and production it is required for the drilling of wells and also during the extraction phase. In refining, petrochemical, marketing of products and generation of electricity water is used during manufacturing, and as a source of steam and process cooler, among other uses.

We strive to seek out and implement the best techniques to ensure that water capture and discharge to and from our facilities are compliant with the limits set in our operating licences and are respectful of the natural environment. Furthermore, before designing a new project or expanding existing facilities, we consider the issue of responsible water use and seek to set in motion the following measures:

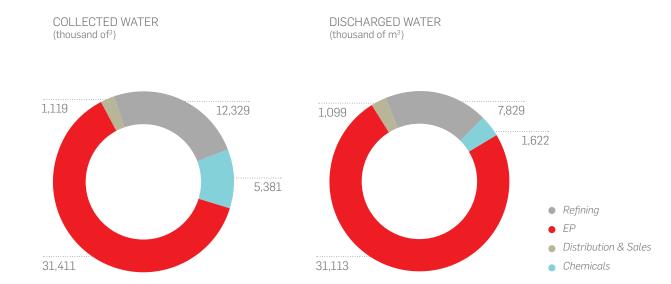
- Prevention: use water efficiently to drive savings.
- Maximise reuse of process waters.
- Purification of water in order to be able to recycle it.

• Treatment of water that cannot be reused or recycled to adapt its quality to the receiving environment in accordance with environmental authorisations.

The highest water collection by business unit is seen in the Exploration and Production area.

With regards to the water collected, this is extracted along with crude oil that is produced. After that, this water could be either recycled to be used for alternative purposes or reinjected into the ground to take it back to the place from it was extracted unintentionally. The reuse and recycling of water in Exploration & Production reduces the use of water significantly from other sources. The volume of water discharged is the same as the amount collected.

Our water management was rated "C" under CDP, thus our challenge for next year is to improve water management and, as a result, be recognised for this.



CIRCULAR ECONOMY

One of our environmental objectives is to minimise consumption of materials and waste production, thus minimising impacts on the environment. To achieve this, we use a range of measures to optimise our utilisation of materials and waste treatment in accordance with the hierarchy required by regulations:

- **1** | **PREVENTION:** We use the best techniques to minimise waste volume and hazardousness.
- **2** | **REUSE:** Reusable materials are sorted from other waste.
- **3 RECYCLING:** We deliver some waste to licensed management firms so that they can be used to manufacture other products.
- **4 ENERGY RECYCLING:** We deliver recyclable waste to licensed management firms so that they can be used as alternative fuels.
- **5** | **ELIMINATION:** Waste that is ineligible for any of the above processes is taken to specific landfills by category.

Consumption of raw materials

We are aware that any increase in our business involves an increase in raw material utilisation. Our efforts focus on innovation projects that seek alternatives to optimise our materials utilisation and ensure our processes increasingly use renewable materials. As a result, in 2017 renewable materials accounted for 1,56% of the total utilised by Cepsa.

In 2017, the largest increase in raw materials utilisation was seen in the Chemicals Business Unit, mainly as a result of increased production at our plants in Palos de la Frontera (Huelva) and Puente Mayorga (Cadiz), and at other locations such as China and Indonesia. We highlight that 1,12% of the materials used in this business area are renewable.

At our Refining facilities we also have the licenses and infrastructure in place to treat MARPOL waste and recycle the hydrocarbon part. This is waste generated by ships' operations, maintenance and cleaning, and requires special management that is strictly regulated by international conventions. In 2017 there was a decrease in the amount of MARPOL waste managed: a total of 63,352 tonnes of waste was received for treatment, from which we obtained 2,949 tonnes of hydrocarbons for further processing at refineries. RAW MATERIALS BY SOURCE AND BUSINESS AREA (Thousands of tonnes)

	Renewable			Non-renewable		Packaging materials		Total				
	2017	2016	2015	2017	2016	2015	2017	2016	2015	2017	2016	2015
Refining ¹	401	324	313	21,260	21,748	21,667	-	-	-	21,661	22,071	21,980
Chemicals ²	48	-	-	4,264	3,931	3,734	-	-	-	4,312	3,931	3,734
Gas & Power	-	-	-	482	381	369	-	-	-	482	381	369
Commercial	102	-	-	6,189	-	-	2,653	2,164	2,468	8,944	2,164	2,468
Total	552	324	313	32,195	26,060	25,769	2,653	2,164	2,468	35,400	28,548	28,550

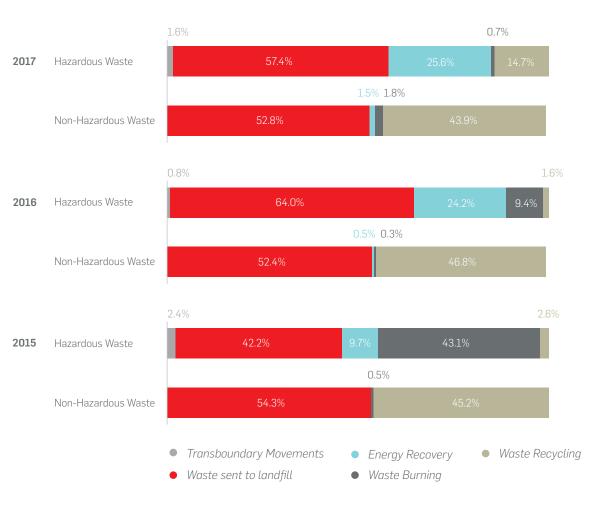
¹ For the Refining business unit, about 80% of raw materials are reported, in so far as the report includes both tonnes of processed crudes and quantity of substances from renewable sources used in processing. ² For the Chemicals business unit, figures comprise the main tonnage of raw materials for processing. The volume of chemicals is not reported.

Waste Management

Our management systems enable us to treat the waste we generate more efficiently by applying regulatory principles. We thus reduce consumption and waste production while mitigating environmental impact.

Re-use of recyclable resources in our processes and waste sorting at source, coupled with our analysis of the treatment destination of each waste category, help us reduce the quantity and impact on the environment of the waste we generate.

These waste categories are delivered to licensed management firms for suitable environmental treatment. Wherever possible, we prioritise delivery to management firms whose treatments lead to value recovery, through recycling or use as an alternative fuel. Depending on its source and characteristics, each material is earmarked for a different purpose or treatment among four main categories: Recycling, Incineration, Energy recovery and Landfill (after going through an inerting process). Hazardous waste earmarked for management plants outside the country of origin (known as "Transboundary" under the Basel Convention) is properly recycled in compliance with the relevant environmental legislation of the receiving countries.



The increase in waste over 2017 was due to higher production levels, especially in the Chemicals unit, where a plant was started up in Indonesia. Also, production was higher at our plant in Shanghai and works were carried out to extend the Deten plant in Brazil. The data for 2016 have been recalculated. We take special care to earmark the waste we generate to a suitable purpose or treatment so that our activities have the lowest possible impact on our environment and we can achieve sustainable development of our businesses.

PROTECTION OF ECOSYSTEMS

It is a key concern for us at Cepsa to protect biodiversity and minimise the impact of our activities. We therefore choose to go beyond regulatory requirements and undertake actions and projects to improve our ecosystem performance still further.

We are strongly committed to the conservation of ecosystems and biodiversity through efficient natural resource management and involvement in research and protection projects focusing on species, habitats and ecosystems, since the setting in which we operate is the foundation of our success at each of our locations.

Managing the environmental impacts of our business is one of the mainstays of the Company's strategy, and resource conservation and rational use is a key underpinning of Cepsa's policy. This philosophy means that every project must be preceded by an environmental assessment that analyses factors such as resource utilisation, pollutant emissions, soil management, greenhouse gas emissions and biodiversity protection. If our analysis – which is intrinsic to every decision-making process – suggests that the environment will be affected, we implement the mitigation hierarchy model, as follows: preventing an impact, minimising unavoidable impacts, restoring, and, finally, offsetting the residual impact.

Our environmental assessments of the ecological value of the areas where we operate are based on an internal tool that uses a geographical viewer to visualise protected areas that overlap with or are near or adjacent to our facilities. This tool is based on data provided by the World Database on Protected Areas (WDPA), the world's most comprehensive database of terrestrial and marine protected areas, which is the result of collaboration between the United Nations Environment Programme and IUCN (the International Union for the Conservation of Nature). By identifying and gathering knowledge about our operational environment, we can suitably manage biodiversity through corrective measures.

We have around 100 areas of high biodiversity value near our operational sites in Spain, Germany, Colombia, Peru, Canada, Brazil and Indonesia, where we develop biodiversity conservation plans to minimise the impacts of our activities and to restore lost value and promote the creation of areas where local communities can enjoy nature.

In 2017, the highlight projects were:





Cepsa Foundation

Name: Madrevieja Environmental Station Location: San Roque (Cadiz, Spain) Extension: 17.6 Has

The Madrevieja Environmental Station was created in 2010, and rests on three foundations: the conservation of nature in a highly industrialised and urbanised environment through environmental improvements to promote biodiversity; research and monitoring of populations in the area and environmental education based on nature-friendly values; and dissemination of an incipient conservation philosophy based on a balance between industrial development and the conservation of natural species, especially local ones.

From the outset, birdlife was one of the main classes of wildlife targeted by the design of the Environmental Station, because birds provide a visible indicator of the effects of environmental improvements implemented from one year to the next. Over the year, we carry out two different kinds of regular birdlife monitoring: fortnightly sampling, which has been carried out systematically since July 2009, and bird ringing, a fundamental tool in the study of bird populations. Since 2016 this has resulted in participation as a ringing station in the PASEM programme of the Spanish Ornithological Society (SEO/Birdlife). The key outcomes of monitoring are the appearance of new species in the Natural Area and an increase in the number of individuals who choose this location as a waypoint and a site for feeding and breeding on a seasonal basis, which denotes the excellent ecosystemic health of this Environmental Station.

Moreover, in 2017 we entered into new partnerships to observe night butterflies, bats and ants. As to amphibians – the most endangered vertebrate wildlife on the planet – we created two temporary ponds, which led to the appearance of two new species.

Other than wildlife monitoring, throughout 2017 we undertook maintenance work, such as undergrowth clearing and improvement of wild olive groves, maintenance of grassland areas, orchids and firebreaks, and planting sunflowers.

In 2017, the highlight projects were:



Cepsa Foundation

Name: Laguna Primera de Palos Location: Palos de la Frontera (Huelva, Spain) Extension: 18.76 Has



Laguna Primera de Palos is an area classified as a Natural Reserve, a Site of Community Importance and a Wetland of International Importance. This is one of the flagship projects in our commitment to sustainability. In 2001, comprehensive restoration of Laguna Primera de Palos was completed. In 2005, our support was one of the factors leading to its recognition as a Wetland of International Importance. Today, we continue to help manage this natural space, with actions such as birdlife monitoring and conservation and maintenance.

Throughout 2017, we conducted several birdlife monitoring actions and took measures relating to conservation, research and enhancement of this natural space.

In 2017, species presence in the pond followed a similar dynamic to previous years, with an increase in biodiversity with respect to 2016. The pond therefore continues to be a refuge and feeding-place for a large number of vulnerable species, some of which are classified as "critically endangered", such as the squacco heron or the ferruginous duck.

Highlights in this year's census of species were the appearance of the common owl – populations are declining sharply owing to the disappearance of habitats – and mammals such as the badger and the potter: the otter is especially significant, as its presence is an indicator of high ecosystemic quality.

Finally, we started a coordinated bird ringing programme in 2017, making Laguna Primera de Palos the first and only station of its kind in the province of Huelva. We chose to join the PASEM programme, which aims to discover the patterns of bird migration, particularly the main routes and their frequency and volume.

As to maintenance work, we carried out pruning, felling and weed clearing, irrigation and fertiliser use, removal of invasive species, and plantation of four species.

In 2017, the highlight projects were:



Name: Chavinave Location: Municipality of Mani (Casanare, Colombia) Surface area: 49.87 Has



Chavinave is a settlement in the municipality of Maní, in Colombia, where we carry out Exploration and Production activities. It is surrounded by areas of high ecological value. Chavinave has therefore become a focus of our environmental research and observation activities, in partnership with the local communities. Our actions are structured by two main vectors.

First, we conducted a research project in the areas of influence of our department in Casanare to become familiar with the local biodiversity. In 2016 we published the book 'Aves de las Sabanas del Casanare' (Birds of the Casanare Savannahs), which sets out part of the project results. In the course of our research we also took steps to raise awareness of natural resource conservation among the local community.

In addition, we carried out proactive biodiversity conservation actions, such as reforestation, in partnership with members of local communities. Thanks to this project, a plantation of 49.87 ha of moriche palm (Mauritia sp) was established to recover and regulate the local water and wildlife resources, integrating the community for sowing and maintenance activities at the plantation to ensure its conservation over time.

In addition, we aim to set in motion a plantation sustainability scheme with the local community in the Chavinave trail: the community itself will implement the full complement of sowing and maintenance activities, using dry leaves for handcrafts and fruit to feed pigs, thus transforming the plantation into a self-sustainable system not only in ecological terms but also in the social sphere, by becoming a source of economic support for the community.