

The EMAS Register is a guarantee of the Port of Barcelona's environmental solvency and a guide to excellence for all the operators that make up the port logistics chain.

We are pleased to present this summary of our eighth Environmental Statement, the most up-to-date report on the environmental management associated with the activities and functions of the Barcelona Port Authority.

This is an extract where we invite you to learn about the essential and most significant aspects, which you can expand upon over the pages of the full version of this publication.

In this latest publication, we present, in detail and at length, the major projects and improvements we are working on in order to ensure optimal environmental monitoring, better use of resources and energy efficiency.

We share a unique environment that we must conserve, and we will focus our best efforts and innovation on this in the coming years.

July, 2022



The Port of Barcelona supports the Sustainable Development Goals

SUSTAINABLE
DEVELOPMENT
GOALS



Port de Barcelona

BARCELONA PORT AUTHORITY
www.portdebarcelona.cat

Path to Sustainability

PRESENTATION
OF THE ENVIRONMENTAL STATEMENT

EUROPEAN EMAS REGULATION

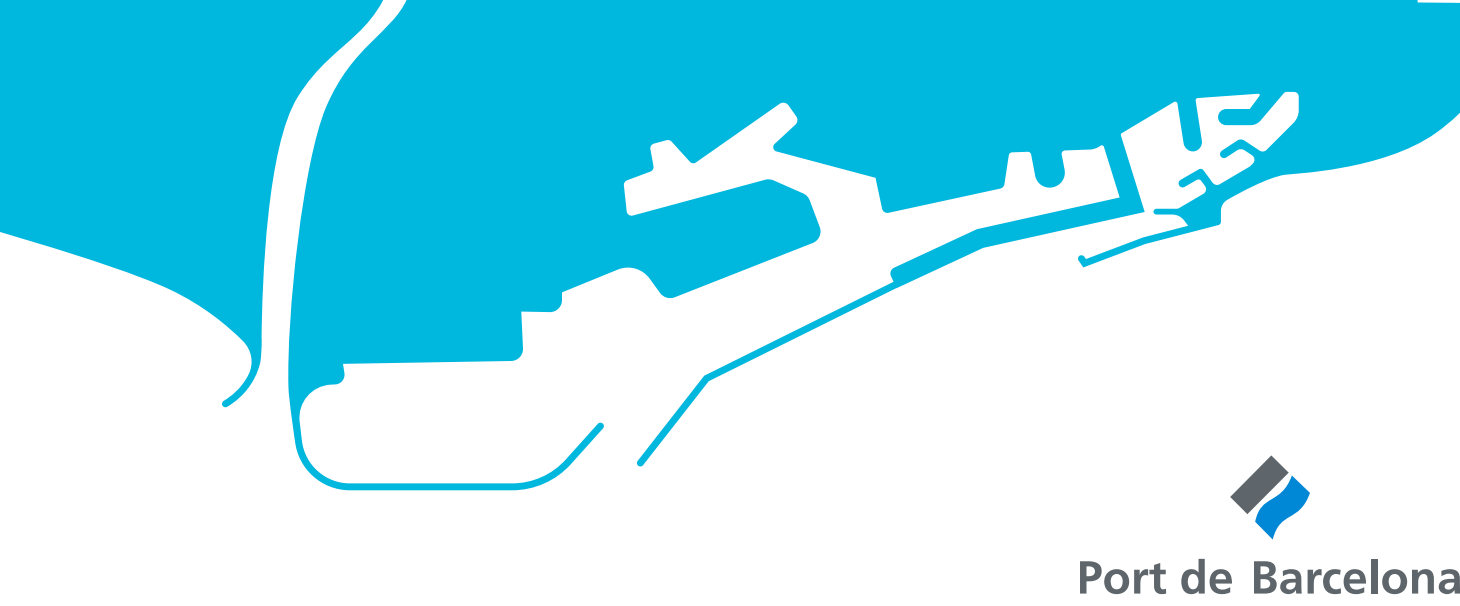
2022



Port de Barcelona

The Port of Barcelona is firmly committed to sustainability and environmental protection, both from a local and global perspective.





Port de Barcelona

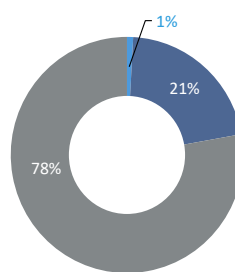
Main contents of the 2022 Environmental Statement



Water consumption

The APB's water supply comes from the companies Aigües de Barcelona and Aigües del Prat.

63,258 m³



The main consumption recorded is for irrigation of green areas and gardening with 49,277 m³, representing 78% of total consumption in 2022.

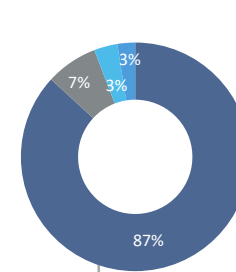
E.S. 2022: Page 31



Energy consumption

The APB's main energy consumption corresponds to the electricity supply of buildings and the lighting of roads and facilities, followed by the consumption of diesel, natural gas and petrol.

7,821 MWh



100% renewable

- Electricity
- Gasoil
- Gasoline
- Natural Gas

Since January 2017, 100% of the electricity supplied to APB and its subsidiaries (WTC, CILSA, Port Vell) was of renewable origin from January 2017 until the end of 2022.

E.S. 2022: Page 31-32



Climate Strategy

The Port of Barcelona has made commitments to reduce its greenhouse gas emissions at three levels:

812 t CO₂eq

40 Electric vehicles

- Emissions from port activity
- Emissions from the Port Authority
- Emissions from concessions and Port Community operators

The goal is to reduce CO₂ emissions by 50% by 2030 and 100% by 2040 compared to 2017 emissions.



E.S. 2022: page 52-57



Emissions and air quality

Since 2016, the Barcelona Port Authority has been implementing the Plan for Improving Air Quality in its surroundings through various actions aimed at reducing emissions of polluting gases and suspended particles.

ZAL (Logistics Activities Zone) Immission Averages

- 1.14 µg SO₂/m³
- 26.25 µg PM₁₀/m³
- 24.4 µg NO₂/m³

To monitor air quality in the port environment, the APB employs a network of meteorological stations and a network of pollution monitoring stations.



E.S. 2022: Page 38-51

Highlighted actions

Page 53
COMMITMENTS OF THE PORT OF BARCELONA AS A WHOLE

- Energy transition.
- World Ports Climate Action Plan.
- Electrical connection of vessels.

Page 54
COMMITMENTS AT THE LEVEL OF THE PORT AUTHORITY

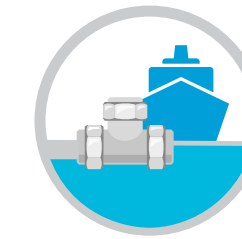
- Construction and facilities.
- Street lighting.
- Own fleet.
- Adherence to the OCCC's Voluntary Agreements.
- Electricity with renewable generation certification.

Page 56
COMMITMENTS AT THE LEVEL OF THE PORT COMMUNITY

- Extension of the electric vehicle charging points plan.
- Promotion of OCCC Voluntary Agreements.
- Promotion of clean fuels in terminal machinery.
- Equipment and resources of port service providers.
- Promotion of energy efficiency and renewable energy generation.
- Eco-calculator.
- Short sea shipping promotion.

According to preliminary calculations made by the APB, the totality of the activity carried out in the port area emits some 315,000 tonnes of CO₂ per year, of which 215,000 tonnes come from ships (including from anchoring, manoeuvring and during their stay in port); around 78,000 tonnes of CO₂ correspond to the total electricity consumption of the facilities within the port area, and the remaining 20,000 tonnes of CO₂ are from emissions from vehicles, both light and heavy, terminal machinery and industry.

Emissions from **port activity** are estimated to account for **7.6% of the city's air pollution for NO_x compounds and 1.5% for PM₁₀ particles**.



Port water quality

The port waters receive discharges from nearby urban and industrial areas and from the activities located in the port itself.

Collection of waste from the water surface

The APB (Spanish acronym for Barcelona Port Authority) provides a **service for the collection and removal of floating waste** from the water surface by means of specialised vessels, every day of the year and during daylight hours.

E.S. 2022: page 34-37



Waste generation

The APB is responsible for the removal and management of the different types of waste generated in the port's own buildings, facilities and communal areas, as well as waste from road cleaning.

1,104 t of waste

96% Non-hazardous waste

The APB implements the selective collection of recoverable waste fractions from containers located outdoors for paper, glass and packaging, and from bins and containers located inside APB buildings for paper, packaging, toner and used batteries.

E.S. 2022: Page 62-65



Physical-chemical analysis

E.S. 2022: page 36

The Port of Barcelona applies the Surveillance Plan for Coastal Water Bodies of Catalonia, approved by the Catalan Water Agency, to the Port's internal and external waters, as well as monitoring benthic communities, which shows an **improvement in the quality of the water and sediments in the Port of Barcelona in recent years**.

One of the main improvement actions was the constructing the port's new sewerage network, with a total length of more than 30 km of sewers and 16 pumping stations. Another positive development has been the progressive reduction in discharges from Barcelona's sanitation system during rainfall events.



MARPOL

RECEPTION OF WASTE FROM SHIPS

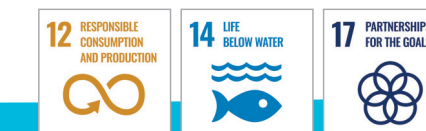
In accordance with the 1973 International Convention for the Prevention of Marine Pollution from Ships (MARPOL Convention 1973/78), ports must have adequate facilities for the reception of waste from ships by means of a port service.

The increase in port activity and ship traffic leads to an increase in such waste.

70,652 t Marpol I
Biodegradable oily fluids

101,525 t Marpol V
Solid waste

E.S. 2022: Page 65



Environmental monitoring of port works

All works undertaken by the Barcelona Port Authority are subject to environmental monitoring carried out by independent technical support, contracted directly by the APB.

120,974 t Dredging

5.47% Recycled filling materials

Recycled materials are used in these works, either in breakwaters, paving or filling materials.



E.S. 2022: page 60-61



Ecology and biodiversity

The port occupies a land area of 1,042 ha, and is located close to the Llobregat Delta Nature Reserve. This means that precautions must be taken to ensure that activity and works at the port interfere as little as possible with the ecosystems and the populations of birds and other species.

Surface area

Unsealed / unpaved: 2,337,219 m²

Sealed surface area: 8,084,042 m²

One of the actions carried out for the preservation of animal species is the provision of a new habitat for the cormorant population.



E.S. 2022: Page 66-67



2030 Agenda
E.S. 2022: page 28-29

SUSTAINABLE DEVELOPMENT
Puertos del Estado



Soil Contamination
E.S. 2022: page 58



Environmental noise monitoring
E.S. 2022: page 68



Emergency plans
E.S. 2022: Page 69-70



Stakeholders
E.S. 2022: Page 72-77



Environmental compliance
E.S. 2022: Page 78

