

ENVIRONMENTAL PROFILE OF PORT AUTHORITY OF CARTAGENA

2024

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Introduction

The environmental management carried out by the Port Authority of Cartagena (PAC) is strongly committed to the values of conservation of ecosystems and to the regeneration of the marine and terrestrial environment. Proof of this are the different environmental milestones achieved year after year that have allowed a high degree of environmental quality in the Port. Behind these results is a team of people who work daily to achieve the best possible environmental performance throughout the Port of Cartagena.



2004
ISO 14001
Environmental
certification



2008
Registration in the
[EMAS Register](#)



2009
Creation of EMAS
Club Región de
Murcia



2014
ECOPORTS
Integration



2015
UPCT Environment
Chair



2018
Global Compact
Adhesion

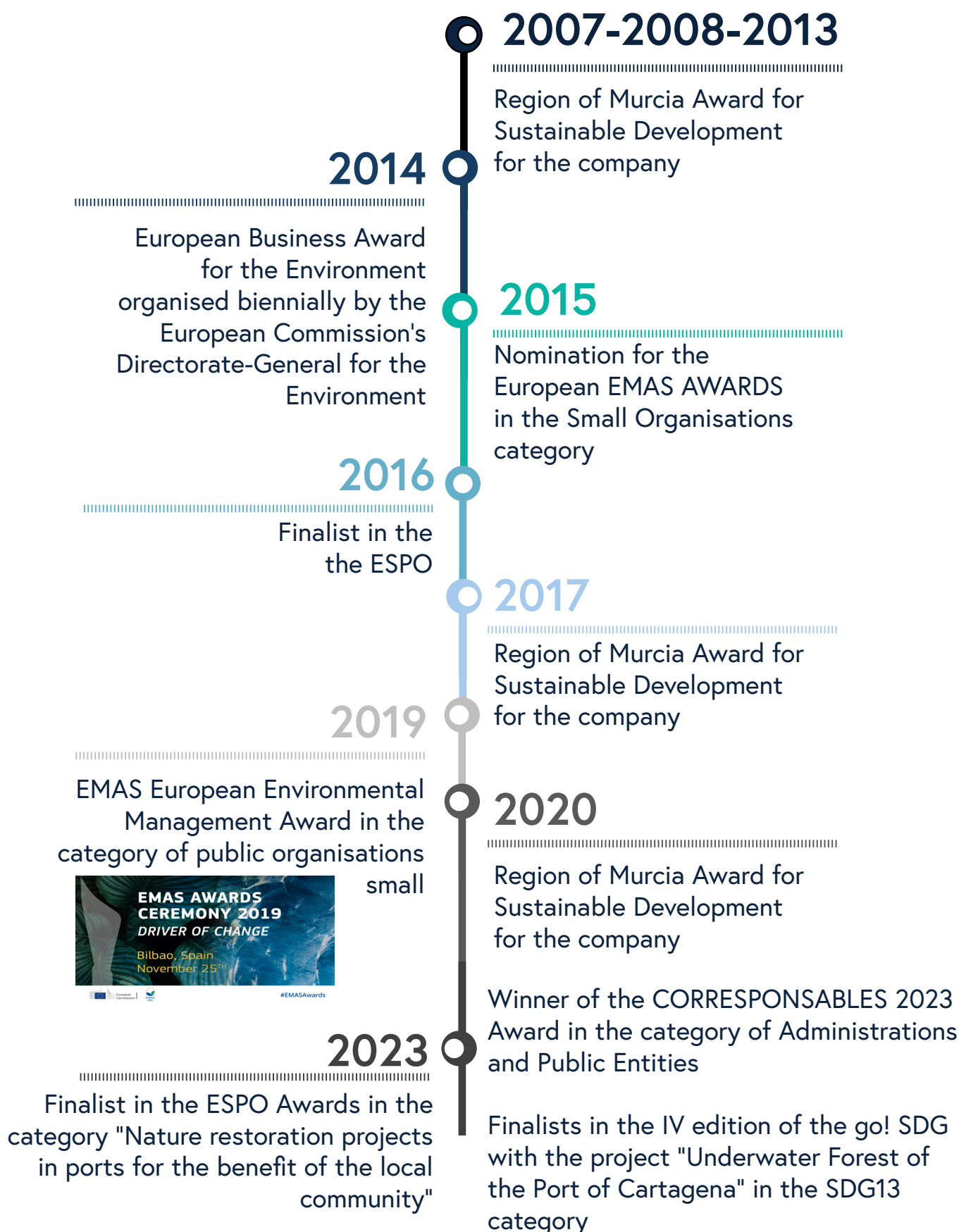


2019
EMAS Award for
Environmental
Excellence



2022
Sustainability Plan
2022/2025

Premios y reconocimientos



Main environmental indicators

0.300 tonnes per
staff member



From a total of 30
vehicles, 14 are less
than 7 years old

291,514 m³ of
MARPOL waste
from ships
managed in the last
20 years



9 research projects
framed in the Chair
of the Environment
in the period 2021-
2023

53.70% reduction
in tonnes of CO₂
equivalent for
fuel consumption
compared to 2013



882.74 tonnes of
waste extracted
from the surface
water since 2003

83.98% of average
efficiency on water
consumption in the
last 10 years



273,603 euros
euros invested
in environmental
actions

Environmental impact on SDGs



In the PAC, we ensure that our environmental performance has a positive impact on the 2030 Agenda and its SDGs



SDG 15 - Sustainably manage terrestrial ecosystems, combat desertification and halt biodiversity loss

SDG 14 - Conserve and sustainably use seas and oceans and marine resources



SDG 13 - Take action to combat climate change and its impacts



SDG 6 - Ensuring water availability, sustainable management and sanitation for all



SDG 7- Ensure access to affordable, safe and clean energy



Back



It remains



Advance slowly



Progress Well

Environmental impact on SDGs



On 13 April 2023, the PAC published a situation map on the actions, projects and impact of the Port Authority of Cartagena on the Sustainable Development Goals.

2.838
visits



Protection of biodiversity: Recovery of flora and fauna

The Port of Cartagena is located in an area of high ecological value and shares space with eight protected areas that are part of the Natura 2000 Network and four spaces declared as Special Protection Areas for Birds (SPA).



La Muela and Cabo Tiñoso Regional Park

Sites of Community Interest (SCI) and Special Protection Area for Birds (SPA)

Cabo Tiñoso Marine Reserve

Marine Reserve of Fishing Interest (MRFI)

Cabezo of Roldan

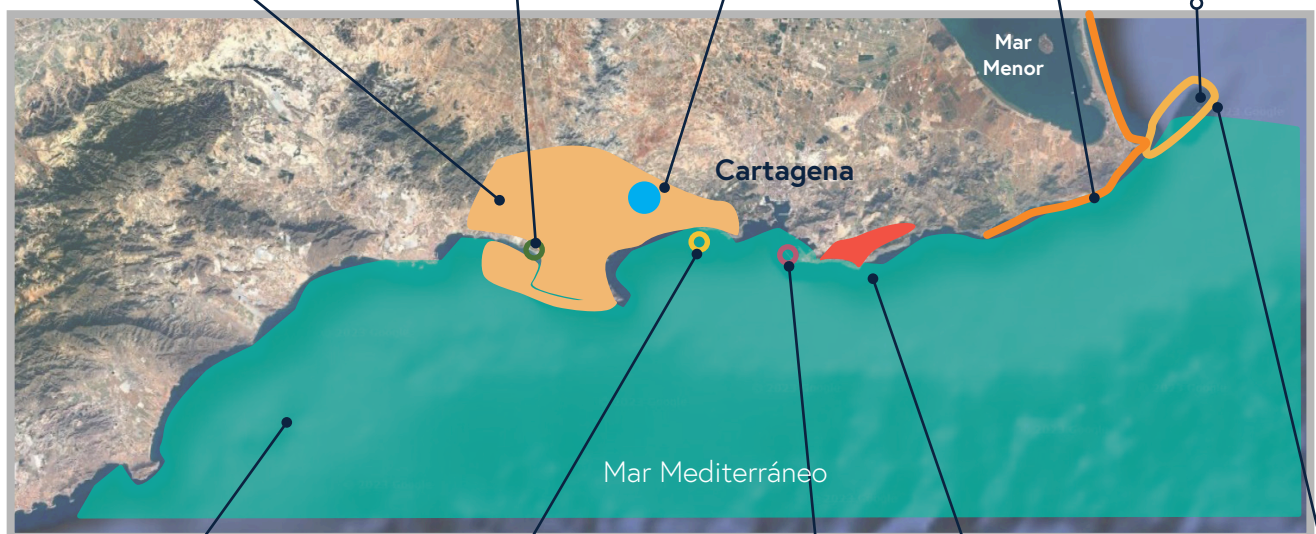
Sites of Community Interest (SCI)

Coastal strip of the Murcia Region

Sites of Community Interest (SCI)

Hormigas Island

Special Protection Area for Birds (SPA)



Palomas Island

Special Protection Area for Birds (SPA)

Escombreras Island. Islands and islets of the Mediterranean.

Sites of Community Interest (SCI)

Cabo de Palos and Hormigas Island

Marine Reserve of Fishing Interest (MRFI)

Underwater valleys of the Escarpment of Mazarron

Special Areas of Conservation (SAC)

Mountain la Fausilla

Special Protection Area for Birds (SPA) and Sites of Community Interest (SCI)

Protection of biodiversity: Recovery of flora and fauna



Reforestation with *Posidonia oceanica* in the waters of the Port of Cartagena.

Survival rate close to 80%, which encourages the continuation of the project and the expansion of the reforestation area



Study of the population of the Escombreras Betic Lizard, a unique species. In 2023, a total of 443 images evidenced the presence of lizards.



Protection of biodiversity: Recovery of flora and fauna



Monitoring yellow-legged gull and seabirds populations in the surroundings of the Mazarrón Lighthouse and Escombreras Island.

In 2023, the total number of nests managed for this species has been 60, practically half of what it was in 2021 (108). The reproduction parameters obtained continue to remain much lower than in those prior to 2020.



273,935 euros invested in environmental management.



Study of the biological communities in the deep sea of the Island of Escombreras. The study concludes that the area has high biodiversity.

Protection of biodiversity: Recovery of flora and fauna

14 LIFE
BELOW WATER



15 LIFE
ON LAND



Biodiversity Lighthouse Project. Environmental restoration of the surroundings of the Cabo de Palos lighthouse

The Port Authority of Cartagena and the Association for the Recovery of the Native Forest of Cartagena - The Union (ARBA), in collaboration with the coastal services of the City of Cartagena, is undertaking an environmental restoration project around the Cabo de Palos lighthouse. This effort involves volunteer personnel, also from the PAC, with the primary goal of restoring the habitats of native plant species characteristic of the area.



The final outcome of this entire process will be a diverse shrubland of high ecological value, providing food and shelter for local wildlife, while also being resilient to climate change.

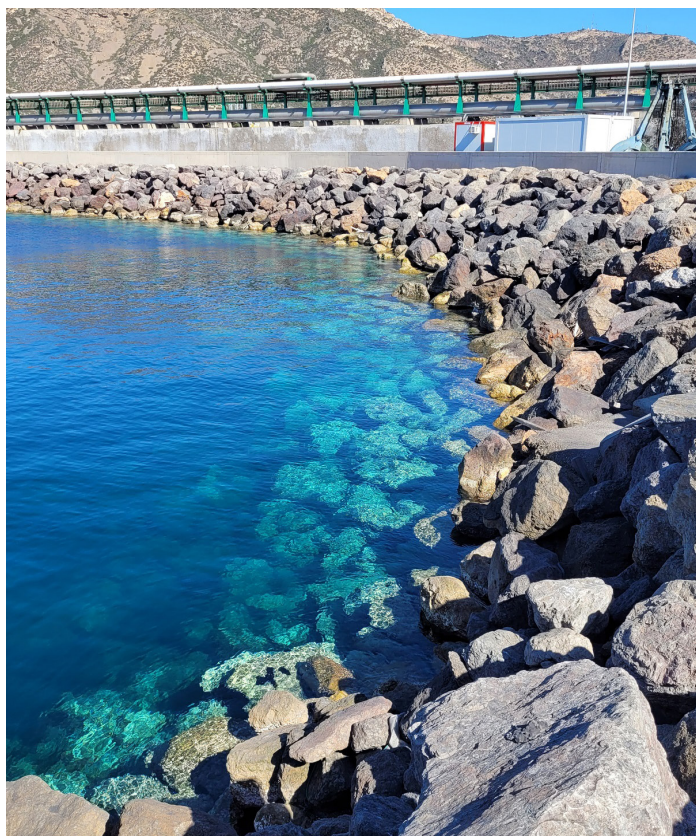
Marine environment protection: promotion of water



The PAC undertakes various actions to preserve the Mediterranean Sea.



The presence of *Posidonia oceanica* in the Port of Cartagena is an indicator of its high environmental quality.



A strong indicator of the port's water quality is the consistent presence of the pen shell mollusc, "*Pinna nobilis*", detected over the years.

Marine environment protection: promotion of water quality



LIFE project to reduce the impact of underwater noise.

An innovative project focused on minimizing the acoustic impact of port activities on marine fauna, particularly cetaceans, whose survival depends on sound for communication and navigation. **This effort aims to protect marine biodiversity from the noise generated by vessels.**

Through initiatives like these, we are moving towards the goal of making the Port of Cartagena the most sustainable in the Mediterranean



The project has a duration of 4.5 years and a budget of 2,134,577 euros for its execution

The project takes an integrated approach that combines advanced technology, conservation, education, and communication.



Scan this code and find out more about the Life projectPortSounds

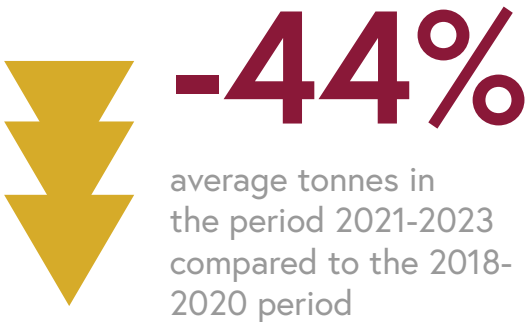
Waste management and circular economy



In the period 2021-2023, 13,119 kg of waste have been collected through the 'Pelican' vessel.

From 2003 to 2023, 882.74 tonnes of waste have been collected from the port's waters.

Between 2021 and 2023, 13.2 tonnes have been collected, an average of 4.4 tonnes per year.



61%
Waste plastics

7%
Other waste

9%
Organic waste

21%
Wood waste

1%
Algae residues

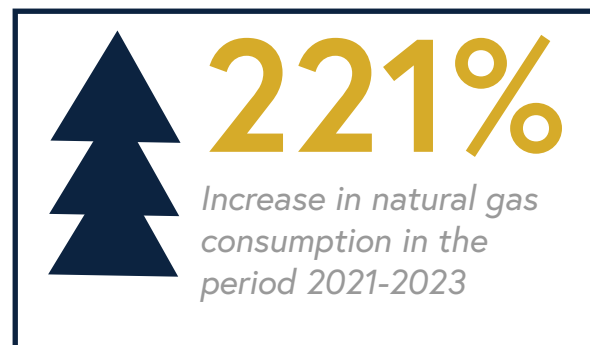
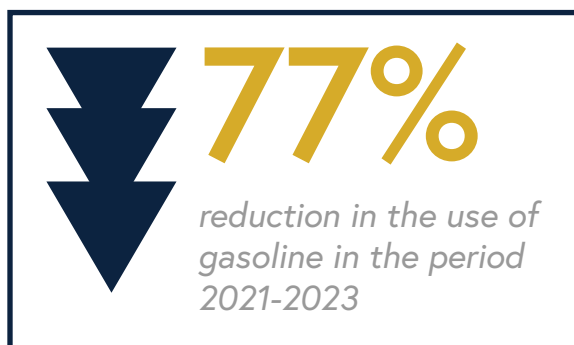
1%
Fatty waste

*Percentages in the period 2003-2023

Energy consumption and fuel consumption



50% of the PAC's vehicle fleet has been renewed. The fleet has been renewed with ecological vehicle categories.



Tonnes of CO₂ equivalent per fuel consumption. Between 2021 and 2023, an average of 57.26 tCO₂, was consumed, compared to 248.2 tCO₂ between 2017 and 2020.



Energy consumption and fuel consumption



Adaptation and improvement for LNG loading.

The project includes the expansion of the Príncipe Felipe dock at Escombreras, aiming to establish the Region of Murcia as a European leader in Liquefied Natural Gas (LNG) traffic.



Change of lighting installations to LEDs.

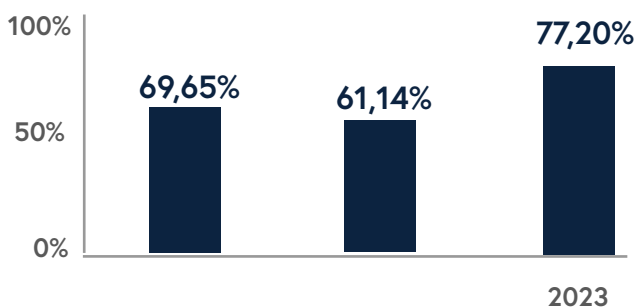
Improve the energy efficiency of the lighting installed at the docks of both quays by replacing the current high-pressure sodium vapor lamps with LED lamps

The new drinking water supply networks in the Cartagena and Escombreras docks have been completed

PAC makes responsible use of water by investing in resources that enhance efficiency and reduce consumption.



Total network efficiency in PAC un the period 2021 - 2023 (%)



69,33%

Between 2021 and 2023, the average water consumption efficiency of the PAC network.

Local community and environment



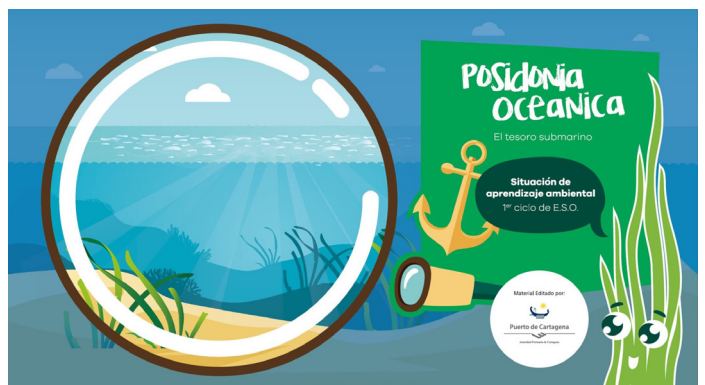
Active engagement to the EMAS Club of the Region of Murcia.

Curricular program in the Region schools, including visits to the port

ClubEMAS
Región de Murcia



Full inclusion agreement between the Region of Murcia and the PAC.



**CARTAGENA
PUERTO
SOSTENIBLE**

Compromiso por el desarrollo sostenible del puerto de Cartagena

302 recreational activities authorised in the port area.



Local community and environment



I. Green Tour Edition Port of Cartagena

40 people participated in a hiking route through the Calblanque Regional Park. The program also included a visit to the Las Cobaticas Visitor Center and a tour of the Rassall salt flats.



Collection campaign toys
"Bring a toy and we buy
another one for"

700

toys, balls, and books were
distributed between 2021 and 2023
period

VI, VII and VIII editions of the 10k Race Port of Cartagena



Between 2021 and 2023, donation checks were delivered to: Parkinson's Association of the Cartagena Region, Alzheimer's Association (AFAL), Custoride Association, and Alcer Sureste.

Sustainability Observatory of the Port of Cartagena



OBSERVATORIO DE
SOSTENIBILIDAD
Puerto de Cartagena



The *Sustainability Observatory of the Port Authority of Cartagena* is a new space for knowledge, transfer and visibility of sustainability, integrating the actions we undertake for the benefit of society and the protection of the environment.

Scan this code and find out more
about the new sustainability
space



Know, learn, measure y consult



KNOW



- History of sustainability in the PAC Sustainability Plan.
- Interpretation space.
- Commitment to the Sustainability of the Port Community.
- PAC-CMN Environmental Chair.



LEARN



- Children and youth people.
- Port visitors and the general public.
- Companies and organizations.
- Social entities.



MEASURE



- Documents that highlight environmental progress.
- Documents that highlight social progress.



CONSULT

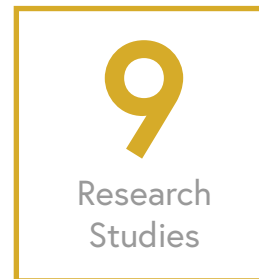


- Photographic resources.
- Written resources.
- Videos.
- News.
- Blog.

PAC Chair of the Environment and Mare Nostrum Campus.



The Chair carries out R&D&I activities, technological and scientific assistance projects, as well as training and outreach actions in the environmental field



Bachelor's and master's thesis awarded in the 2021-2023 period:

2021. Analysis of turbidity and nitrate concentration in samples from the Mar Menor. Development of a new method for nitrate absorption in aqueous samples using magnetic nanoparticles.

2022. Simulation of a container terminal using a computational tool.

2023. Application of hydrophobic coatings on asphalt pavements.

2021. Surface functionalization of low-cost lignocellulosic waste for use in nitrate removal from water.

2022. Comparison of fish video census methods for future application in studies of mesophotic Mediterranean reef colonization.

2023. Combination of innovative technologies for water reuse.



Our Sustainability Plan sets our route map towards a more Sustainable Port.

1 plan,
3 scales,
18 working axes



ENVIRONMENTAL SCALE	SOCIAL SCALE	ECONOMIC AND INSTITUTIONAL SCALE
1. CLIMATE NEUTRALITY	10. PERSONAL HEALTH AND QUALITY OF LIFE	16. SECTOR POSITIONING
2. AIR QUALITY	11. HISTORICAL AND CULTURAL HERITAGE	17. INTERNATIONAL OUTREACH
3. WATER QUALITY	12. PORT - CITY	18. CORPORATE ETHICAL CULTURE
4. SOIL QUALITY	13. TALENT BOOST	
5. BIODIVERSITY	14. APC VOLUNTEER	
6. ENERGY TRANSITION	15. INTEGRATED SOCIAL VALUE	
7. CIRCULAR ECONOMY		
8. ENVIRONMENTAL EDUCATION		COMMITMENT FOR SUSTAINABLE DEVELOPMENT OF THE PORT OF CARTAGENA
9. MANAGEMENT ENVIRONMENTAL		SUSTAINABILITY OBSERVATORY

**The Port of Cartagena
is a port committed to the development
and conservation of the territory, with the
regeneration and recovery
of the environmental values that make it a
unique port.**



Puerto de Cartagena

Autoridad Portuaria de Cartagena

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