


# THE ENVIRONMENTAL PROFILE OF PORT AUTHORITY OF CARTAGENA



**Puerto de Cartagena**

Autoridad Portuaria de Cartagena





# We want to make Cartagena the most sustainable Port in the Mediterranean

The objective of our environmental Profile is to explain how the Port of Cartagena contributes to improve the environmental quality of the port. This goal enhances us to engage the entire Port

Community and the citizenship, which forces us to become increasingly demanding in our environmental management practices.

**Welcome to the Port of Cartagena,  
a port progressively  
more sustainable.**

**Antonio Sevilla**  
President of the  
Port Authority  
of Cartagena  
(PAC)



The background of the page is a scenic view of a coastal area. On the right side, there is a prominent lighthouse with a red upper section and a white lower section, topped with a weather vane. The lighthouse is situated on a rocky outcrop. In the background, there are mountains under a clear blue sky. The overall scene is bright and sunny.

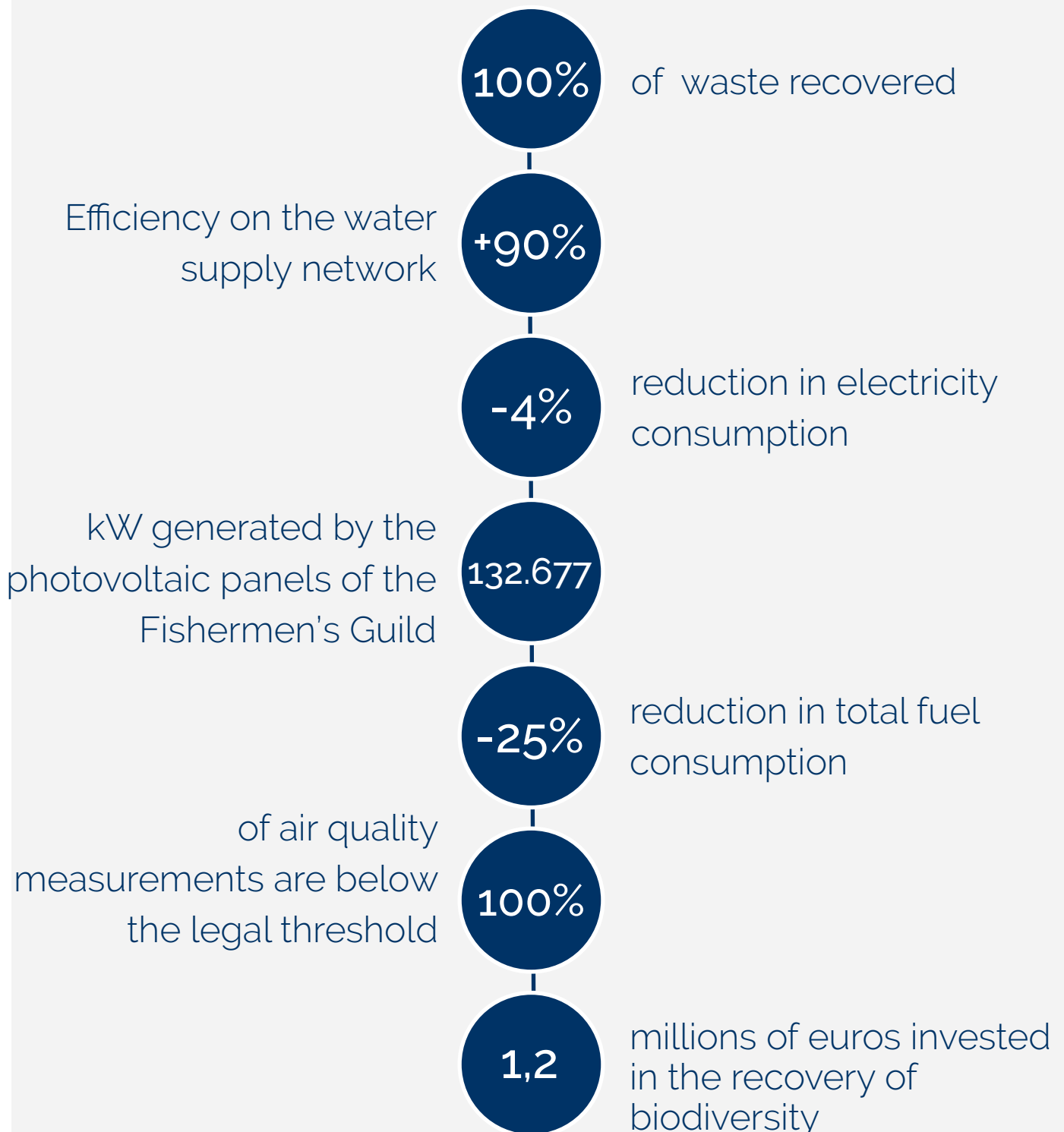
**We are committed  
to the environment**

**The protection of the environment is one of the strongest commitments of the PAC.**

In recent years we have gone beyond legal compliance. We are still working to improve our performance.

In this document we summarize the integrated effort of the port community to make Cartagena the most sustainable Port in the Mediterranean.

# MAIN ENVIRONMENTAL INDICATORS 2012-2016





What do we  
talk about in  
our  
environmental  
profile?





# The Mediterranean is one of the most sensitive areas to climate change

## PROTECTION OF MARINE ENVIRONMENT

How does the Cartagena's Port work to preserve the water quality?

*Since 2009 we have been working on a voluntary collaboration agreement with the Autonomous Community of the Region of Murcia to protect the aquatic environment through the control and monitoring of water quality status in the port area of Cartagena.*



To know to act

Monthly checks and analyzes

The water presents an optimal quality in the measured parameters

Cala Cortina maintains the blue flag, symbol of quality of its waters since 2007

+ 136 species inhabit on the seabed of the inner harbor





# WASTE MANAGEMENT



The 'Pelican' watercraft is responsible for collecting waste from port surface water

In the last 5 years have been collected:

**38 tonnes of waste**

19 times the weight of the sculpture "El Zulo" of Víctor Ochoa!



**70% plastics**



**21% wood**



**9% from other waste**

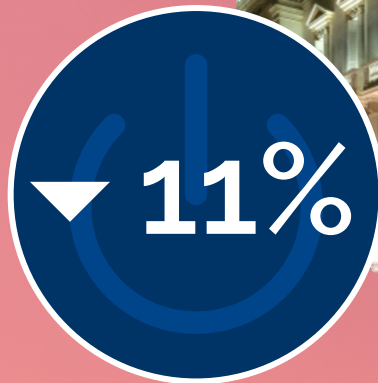




# RESOURCE CONSUMPTION EFFICIENCY

- RESOURCES  
+ EFFICIENCY  
+ SUSTAINABILITY

Last year, we  
have reduced  
the energy  
consumption  
ratio  
(in kWh/m<sup>2</sup>)



The energy generated in the  
last 5 years by solar panels  
installed in the Fishermen's  
Guild is equivalent to the  
annual consumption of an  
average dwelling for almost  
14 years\*

132.677 kWh



\*according to the "Instituto para la diversificación y el ahorro de la energía" (IDAE), on average, a Spanish house consumes 9,922 (kWh) in a year.



13%

In 2016, we have  
reduced the total fuel  
consumption.



*The Port of Cartagena Works to generate a value compatible with the respect for the environment.*

## RESOURCE CONSUMPTION EFFICIENCY

**+90%**

On average, between 2012 and 2016, the effectiveness of the water supply network has been over 90%

### Measures for responsible use of water:

- + sectorization of the network
- + electronic counters
- + telematic control in real time
  - less leakage
- + save on garden watering
- + network efficiency



**100%**

All the facilities of the Port of Cartagena have treatment systems



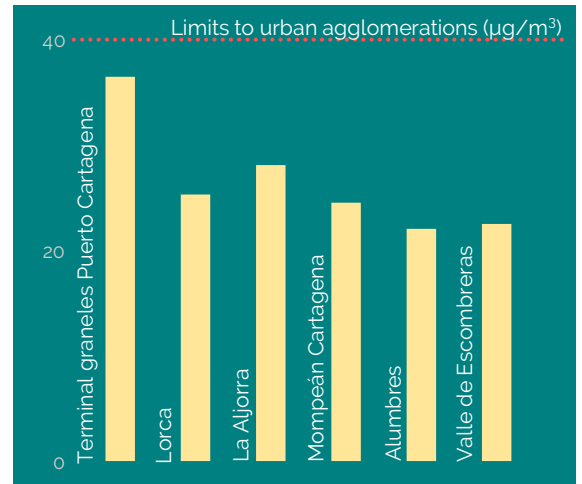
# FIGHT AGAINST CLIMATE CHANGE



How the Port of Cartagena reduces the impact of emissions?



Between 2012 and 2016, the average of air quality measurements carried out in the Port of Cartagena reflects a compliance with the threshold limits for urban agglomerations.



The activities developed at the port have specific instructions and good practice guidelines to apply environmental criteria. By this means, it is possible to reduce the impact to the atmosphere.



# SUSTAINABLE MOBILITY



Do you know that Liquefied Natural Gas (LNG) is a more environmental friendly fuel?

It generates almost 30% less CO<sub>2</sub> emissions and contributes to the reduction of sulphur oxides (SO<sub>x</sub>), particles (PM) and nitrogen oxides (NO<sub>x</sub>) emissions.

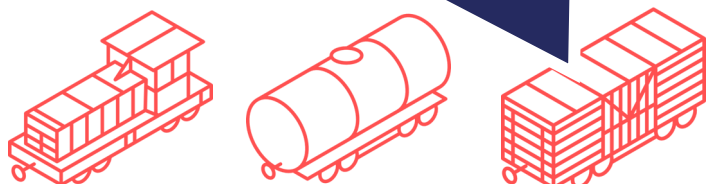
The Port of Cartagena participates in the project **Core LNGas hive**.

Its objective is to develop a logistics chain of LNG which allows the use of gas as fuel for transport, especially for maritime transport.





# SUSTAINABLE MOBILITY



Last year they have invested 44,5 million of euros in improving railway and road access to the Port of Cartagena.

Web platform for sharing vehicles



The Port of Cartagena promotes less polluting mobility

- CO<sub>2</sub>



Bicycle parking available for staff





PAC has been awarded  
for a decade, with the  
European certificate of  
Eco-Management and  
Eco-Audit EMAS

### **We go beyond legal compliance**

This guarantees our commitment to  
manage port activity within an  
environmentally and responsible  
framework.

*Know more on our website [www.apc.es](http://www.apc.es)*



We are the point of greatest biological wealth of the Murcia coast

Biodiversity conservation

In the Port of Cartagena we have developed specific projects for the **recovery of local flora and bird life** as a key measurement to enhance the conservation of biodiversity.



We are proud to say that Cartagena is the fourth port of Spain in goods traffic and hosts this service in 6 protected areas included in the Natura 2000 Network.





7.000.000 euros for the preservation of the island of Escombreras and the maintenance of its insularity and all its natural values.

1.222.639 euros invested in the recovery and consolidation of biodiversity in the last 5 years.



- ⚙ Fausilla mountain range.
- ⚙ Escombreras island.
- ⚙ Las Palomas island.
- ⚙ Strip of the submerged coast of the Region of Murcia.
- ⚙ La Muela - Cabo Tiñoso regional park.
- ⚙ Hormigas islands marine reserve.
- ⚙ ZEE Escarpe de Mazarrón.

The Natura 2000 Network is the main instrument for the conservation of nature at European level.  
**Cartagena has 6 spaces included within this network!**



Since 2001 the Audoin's gull has settled down in the island of Escombreras.

It is one of the rarest and most unique protected birds in Europe.

Its presence is a good indicator of the state of the ecosystem.



Black-headed gull (*Chroicocephalus ridibundus*)



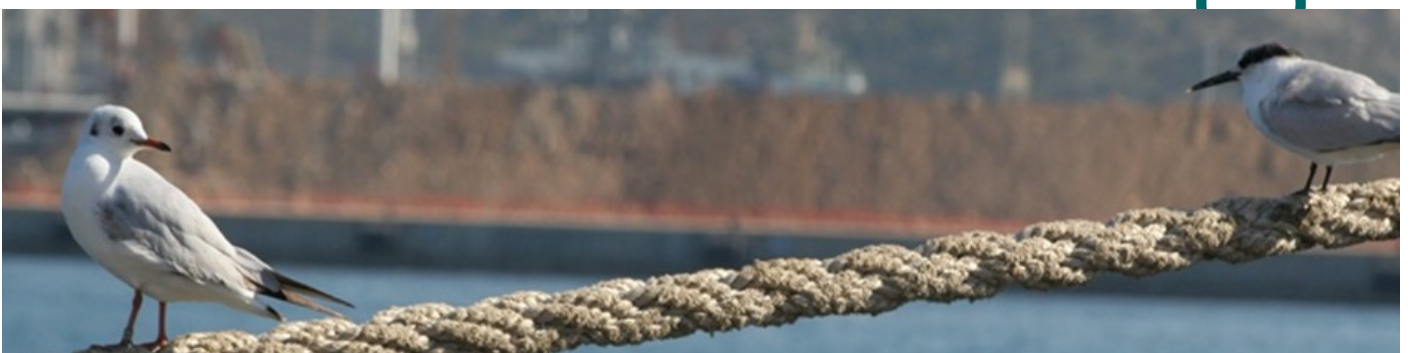
Audouin's gull (*Ichthyaeetus audouinii*)

In the bottom image, Black-headed gull (*Chroicocephalus ridibundus*) and Sandwich tern (*Sterna sandvicensis*)



## Wildlife recovery

We work to increase the health condition of terrestrial and marine ecosystems in the Port of Cartagena.





The **Yellow-legged gull** (*Larus michahellis*) has settle down in Escombreras. Other birds present in the port are:

- **Mediterranean gull**  
(*Ichthyaetus melanocephalus*)
- **European shag**  
(*Phalacrocorax aristotelis*)
- **Great cormorant**  
(*Phalacrocorax carbo*)
- **Peregrine falcon**  
(*Falco peregrinus*)
- **European storm petrel**  
(*Hydrobates pelagicus*)
- **Scopoli's shearwater**  
(*Calonectris diomedea*)



The Island of Las Palomas in the centre of the anchoring area and the Hormigas Islands are **declared as Special Protection Area (SPA) for Birds.**





# PROJECTS THAT IMPACT ON BIODIVERSITY

Between 2012 and 2016, PAC has allocated more than 70.000 euros to...



Forest improvement and maintenance of the quarry used in the expansion of Escombreras

Management of the Yellow-legged gull population on the island of Escombreras and Mazarrón's lighthouse

Maintenance and reforestation tasks

The chamomile of Escombreras is the plant of the year 2016!



The **Escombreara's chamomile** is a worldwide endemism in critical danger of extinction that only lives in the island of Escombreras, the coast of Cartagena and north of Algeria.

PAC collaborates actively with the UPCT University in its monitoring and conservation, which has achieved its reintroduction in Punta de Aguilones, where it was considered extinguished.



# + FUTURE ENVIRONMENTAL CHALLENGES

Integration  
of the  
Sustainable  
Development  
Goals

Cartagena's Port works to achieve sustainable development along with responsible citizenship.

Integrating  
biodiversity  
into port  
management

Blue  
Carbon

Management of  
coastal  
ecosystems for the  
conservation of  
biodiversity

CO<sub>2</sub>  
compensation  
mechanism

Know what  
we do in  
[www.apc.es](http://www.apc.es)





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