

Port of Barcelona, heading for sustainability

The Port of Barcelona is a pioneering port in promoting actions to reduce the impact of its business on the environment. It's firmly committed to sustainability as one of the strategic lines that form the basis for its development over the coming years.

The actions carried out over the past 20 years to reduce pressure on the water at the Port and improve its quality are a good example of this commitment. This continued effort has produced highly positive results, as can be seen in the data presented here.



Latitude: 41° 21' N
Longitude: 2° 10' E

www.portdebarcelona.cat

HEADING FOR
SUSTAINABILITY

Water quality in the Port of Barcelona



The second largest mass of sheltered water in Catalonia

Between its breakwaters, the Port of Barcelona contains a volume of 45 Hm³ of sheltered water over an area of 890 ha. Climate conditions and coastal currents determine the water's renewal rate, which is currently between 1 and 6 days, **three times faster than 20 years ago** when it took between 17-20 days.

The water that comes in through the Port's entrances and as run-off makes up the difference between the evaporated water (9.9 Hm³/year) and direct input via rainfall (5.7 Hm³/year).

Over 20 years acting to improve water quality
Key actions carried out at the Port ▶



45 Hm³
VOLUME OF SHELTERED WATER



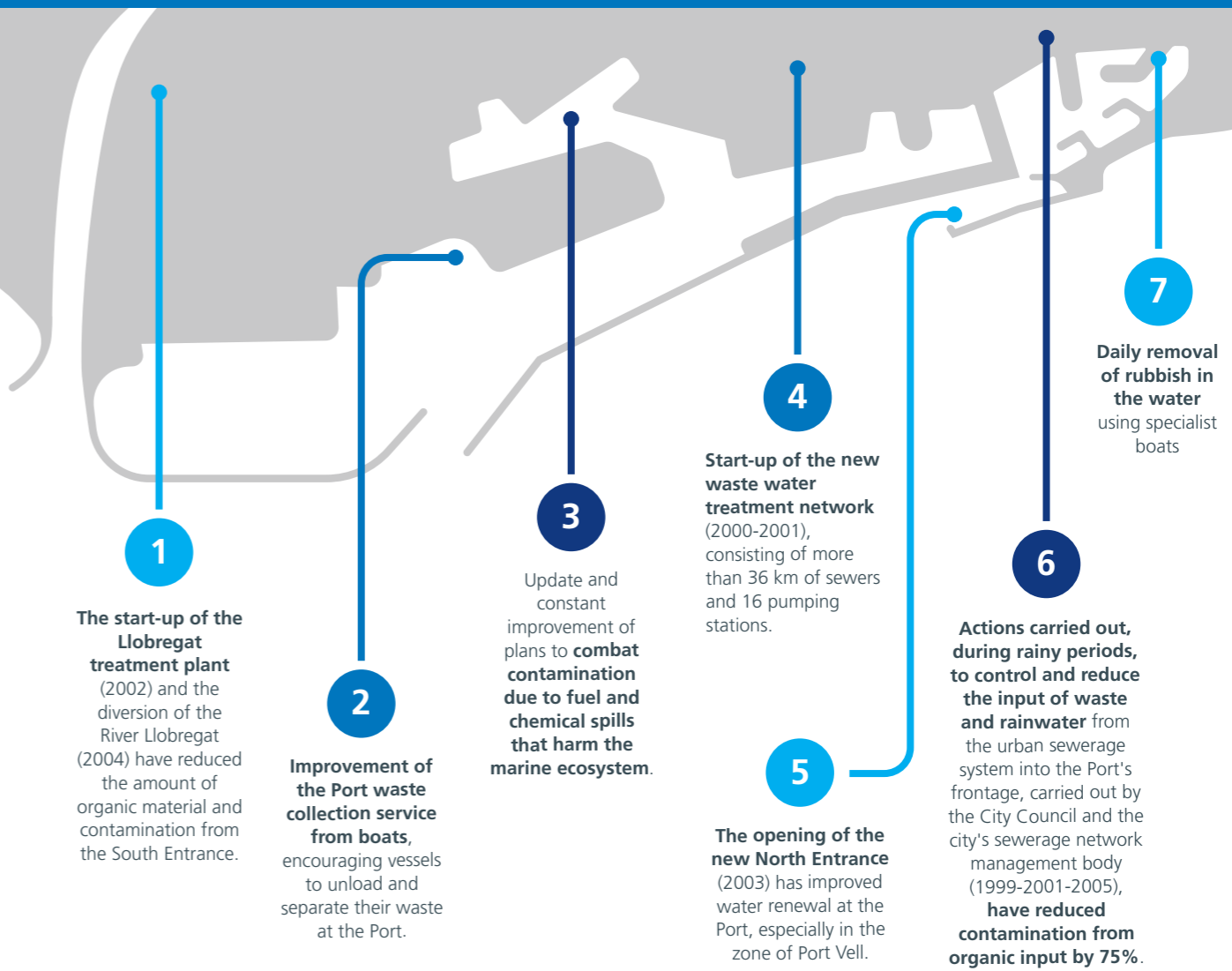
9.9 Hm³/year
WATER EVAPORATION



5.7 Hm³/year
WATER INPUT FROM RAINFALL

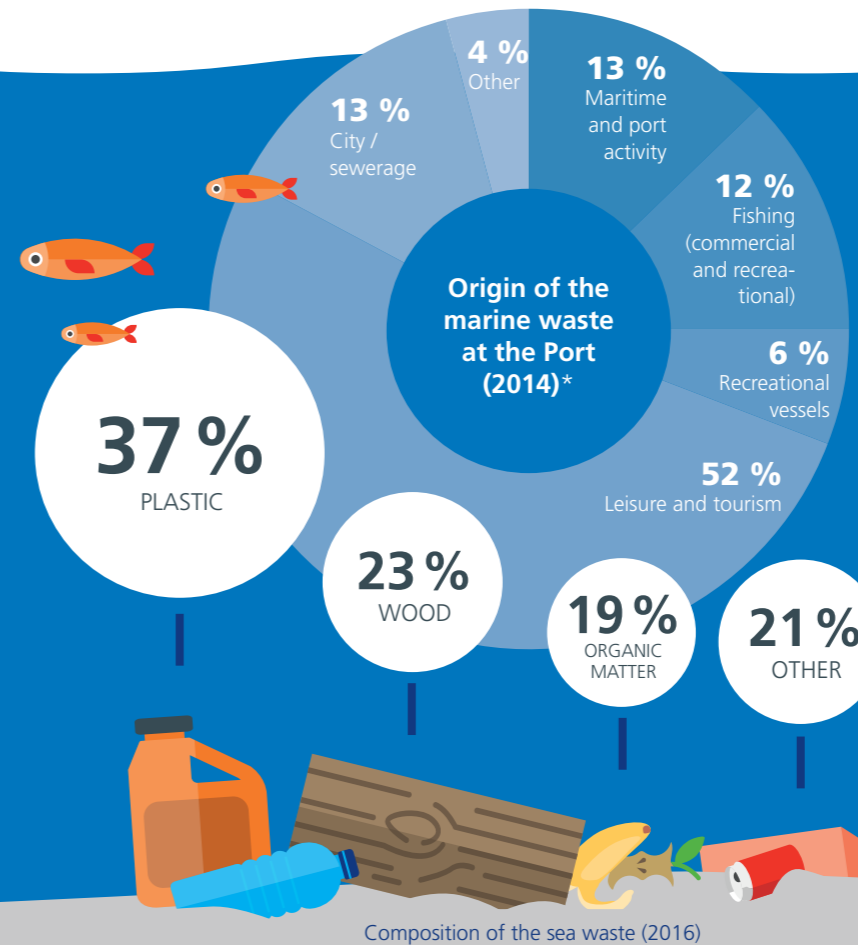
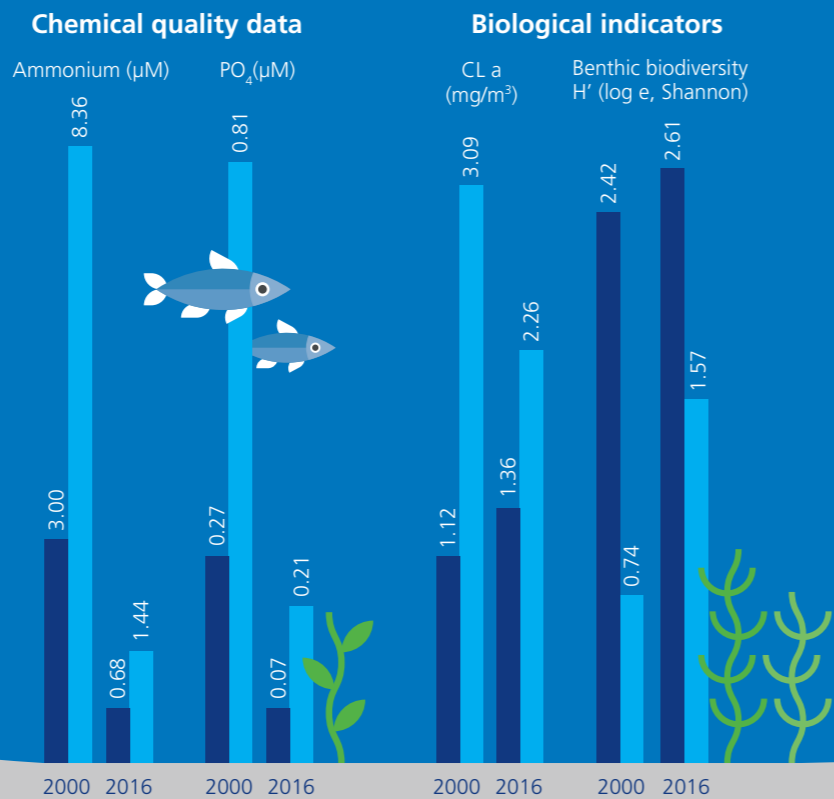


4.2 Hm³/year
WATER INPUT VIA ENTRANCE AND RUN-OFF



Results that benefit marine ecosystems

The Port of Barcelona constantly checks the quality of the Port's water and sediment at 6 sampling points, revealing the trends over the years. The comparative figures for 2000 and 2016 show a clear improvement in the water's chemical quality with a reduction in inorganic nutrients, namely ammonium, phosphates (PO₄), nitrates and silicates. This benefits the marine ecosystems, as indicated by the reduction in chlorophyll a (CL a) and the increase in the biodiversity of benthic communities (organisms that live on the seabed).



Marine waste, a priority for the Port

The solid waste floating in the water has been continuously collected since the 1970s. The three boats used daily for this work **collected over 400 m³ of waste** throughout 2016, a total which is **gradually decreasing** thanks to the efforts made to prevent waste and improve the situation.



■ Samples from outside the Port ■ Samples from inside the Port

*Matic Score technique, 2014 data