

PILOTS, NOT ONLY ENVIRONMENTAL PROTECTION, A SPANISH APPROACH.

When we talk about Pilotage services, we think about merchant navy Captains who climb up a rope ladder with wooden steps from a small boat approaching a ship that is entering or leaving port. Once on board, they advise the ship's Captain by guiding him through narrow ports, canals, or rivers as experts in navigation and ship handling for their defined geographical area.

Delving deeper into their advisory role, Pilots carry out an essential function in the public's general interest: environmental protection. With their extensive knowledge of their operating areas and the means available on board, Pilots guide ships to prevent any incidents that could damage the environment during navigation and manoeuvring in ports. The provision of Pilotage services is, in itself, a risk prevention measure.



Piloting on the Guadalquivir. Picture by Marcos Pacheco Morales-Padró

Advice on the safest waterways, speed over shallow water, authorised anchorages close to environmentally sensitive areas and the efficient use of tugs during berthing manoeuvres are some examples of this service contributing directly to protecting the environment. On this last aspect, in March 2023, the European Tugowners Association (ETA) and the European Maritime Pilots' Association (EMPA) promoted the document "Recommendations for energy efficient harbour towage", which establishes basic premises for the responsible and efficient use of tugboats in port.

In addition, and according to national and European regulations in force, Pilots are required to report any ship defect, event, or dangerous occurrence that takes place during the provision of the Pilotage service, and which could affect maritime security, human life at sea or in the marine environment. Consequently, the Pilot becomes a guardian against possible damage in Pilotage areas. For example,

several recent reports have been made of ships using the open cycle scrubbing system to remove Sulphur oxides from engine emissions. These systems comply with current emissions regulations but deposit the waste generated directly into the sea, creating a layer on the surface that then sinks and remains on the seabed over time. The Pilots of several ports, having observed this waste, have brought it to the attention of the maritime and port authorities. Several ports worldwide already have banned the use of this open-cycle system while the ship is in port or at anchorage.

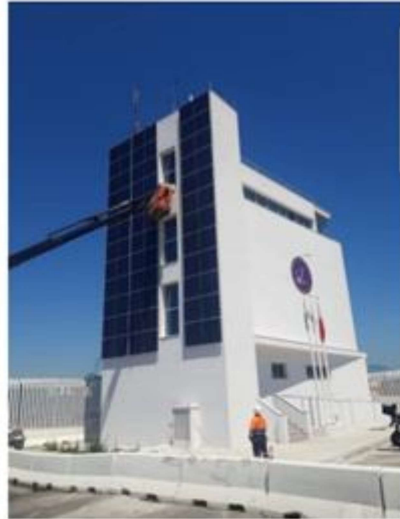
In the country of Spain, the process of licensing Pilots involves corporations granting permission to Pilots to operate in specific districts. These Pilots then become members of the Spanish Pilots' Association, which is a professional organisation dedicated to representing and supporting Pilots in the country. This association serves as a valuable resource for Pilots, providing them with access to essential information and opportunities for professional development. Overall, the licensing and membership process for Pilots in Spain is carefully regulated and designed to ensure that Pilots are well-trained and equipped to operate safely in their respective districts.

Up to now, we have talked about the influence of the Pilot in the exercise of his functions; now, we need to talk about the corporations that encompass these professionals in each of the ports of Spain. It is here where the concept of Sustainability takes on a broader scope, given that as the independent private professional societies that they are, they develop their involvement with this aspect more thoroughly.

The Pilotage corporations know that sustainable development requires an integrated approach. They achieve this by utilising various management systems, each developed in accordance with the specific conditions and prescriptions of each port authority.

One example is compliance with the standard ISO 14001 Environmental Management Systems. The measures taken by each of the Corporations/Organisations prioritise protecting our environment. Some of the most common actions are:

- Monitoring energy consumption (electricity, water, fuel, etc.)
- Carbon footprint measurement
- Use of low-energy lighting and household appliances
- Recycling of waste in offices and Pilot boats
- Electronic waste management
- Waste management plan on board Pilot boats
- Removal of single-use plastics from offices
- Purchasing of sustainable products
- Environmental sustainability training
- Environmental assessment of external suppliers
- Raising awareness to reduce energy consumption
- Use of renewable energy at Pilot stations



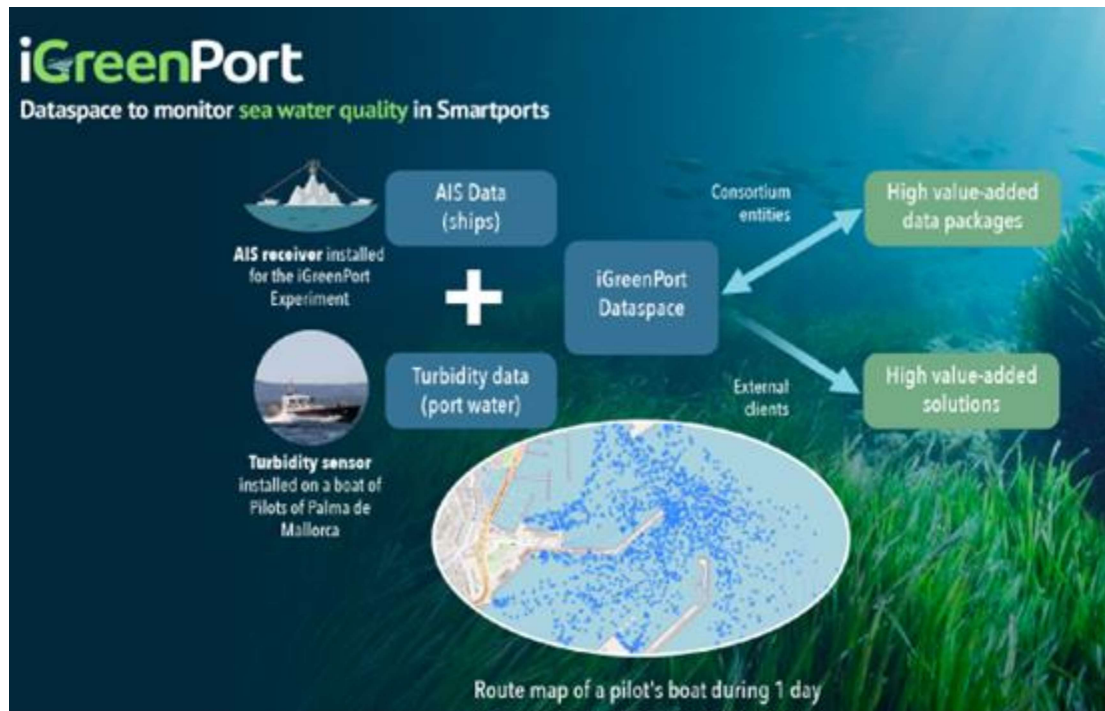
Algeiras Pilot Station, Photo supplied by Pilots Corporation Algeiras

On the mobility side of the service, sustainability initiatives are developing quickly, with many projects underway. Due to the investments and impetus provided by the port authorities, organisations are changing their vehicles to electric or hybrid engines when transporting Pilots by land. As for boats, several corporations are refitting the Pilot boats with more efficient and eco-sustainable engines and studying more advanced hulls and stabilisation systems to reduce vessel consumption.

On the operational side, the corporations work with procedures in which Pilot boats have a specific weight, given their environmental influence. For this reason, studies are ongoing on the efficiency of Pilot boat services for embarking and disembarking to optimise Pilot boats' use, thereby reducing fuel consumption.

On the other hand, active participation in several projects together with other port community stakeholders, including the corresponding authorities, keeps Pilots at the forefront of actions to minimise the environmental impact. The Pilotage service pays attention to the study of the use of alternative fuels, such as hydrogen, or the electrification of Pilot boats and participates in national and international projects to develop effective solutions in the propulsion of Pilot boats while avoiding "Greenwashing".

In line with the broad concept of Sustainability, joint projects developed with port authorities in which Pilot boats are equipped with specific sensors for real-time monitoring of the turbidity of port waters, sending systematic information for detecting possible pollution incidents.



Project: iGreenport Graphic supplied by Palma Pilots Corporation.

Regarding social responsibility, Corporations have their code of conduct in which they must protect the environment and people.

Achieving gender equality is a goal of the maritime sector, as female personnel in our profession are becoming more prevalent nationally. Five female Pilots throughout Spanish ports receive their colleagues' continuous support.

The Corporations get more and more involved in the port community's associations or initiatives to promote activities committed to social and environmental responsibility and economic growth. With the aim that this commitment reaches the base of our profession, the Spanish Pilots' Association is carrying out its technical conferences in the Nautical Schools, inviting all its students to the talks where industry professionals lecture on different subjects.

The Spanish Pilots' Association promotes and supports projects, activities or events that strongly focus on sustainability. Those projects of the members who have requested its support, for example, the Ports 4.0 Innovation Model of Puertos del Estado, have received the help of the Association for what they needed in line with the policy of the collective.

In addition, it is worth highlighting the international event held in March at the Faculty of Nautical Studies in Barcelona with other European Pilots whose central theme revolved around the EU Green Deal and the impact of European measures. This event was attended by senior officials from Puertos

del Estado, the Directorate General of the Merchant Navy (DGMM), the European Maritime Safety Agency (EMSA), lecturers from the University of the Balearic Islands (UIB) and of the Valencia Port Foundation. Among the subjects discussed were the repercussions of climate change on our service, international measures on ship emissions, the "EU Fit for 55" package, the actions planned by Puertos del Estado in the Strategic Plan and the studies carried out by the port community to mitigate the effect of climate change on port facilities.



Southern European Pilots Meeting Barcelona

The Pilotage community is passionately committed to sustainability in all its activities, in cooperation with the rest of the port community and administrations, nationally and internationally.

José Antonio Pérez Lorente

Palma port Pilot

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EMPA Vice-President