



CO-EVOLVE

Promoting the co-evolution of human activities and natural systems for the development of sustainable coastal and maritime tourism

FACTSHEET #20

Eco-Cruise toolkit

SUMMARY:

An ECO-cruise evaluation toolkit has been designed for measuring aspects related to the socio-economic and environmental impact of cruise tourism. In addition to its theoretical description, a practical application has been conducted to assess the cruise tourism impact on the city of Valencia in Spain. Taking into consideration the economic and environmental results, the cruise community of Valencia carried out an analysis in order to define an Action Plan to reduce the environmental impact and to optimise the economic impact of the cruise industry on the city.

Valencia is the third-largest city in Spain after Madrid and Barcelona, with around 800,000 inhabitants and extends to nearly 138km².

The area's development is influenced by economic, environmental and Mediterranean touristic dynamics. Valencia shows a quite positive trend in terms of tourism development and market. This condition is quite different from the nearby Regions, characterised by coastal destinations hosting a relatively low number of tourists than the Mediterranean average but with a good potential for attracting more tourist fluxes. Valencia's Region shows high potential for strengthening its market share, paying attention not to exceed its carrying capacity and the negative externalities that could affect it.

Valencia has an important commercial port, known as Valenciaport. Cruise traffic at the Port of Valencia has grown 125% in numbers of passengers over the last 10 years. At the end of 2018, there were 194 calls and 421,518 cruise passengers. This traffic will continue increasing

according to the cruise industry trends and its growth perspectives in the Mediterranean area.



Fig 1. Pilot Area Limits in Valencia (Source: Terrasit)

The City of Arts and Sciences and the old city are the most demanded tours for cruise passengers.

Cruise tourism is a key source of tourism in Valencia City, but this kind of tourism is also identified as a source of pressure and environmental impacts. The presence of ship cruises at port and high concentrations of cruiser passengers in certain parts of the city, could affect negatively the city in terms of environment. In this sense, the coexistence between ports and cities has many problems related to territory sharing.



Information regarding the environmental and economic aspects associated with the cruise tourism activity in Valencia was largely lacking, and it was very convenient to establish, integrate and strengthen the information channels that make it possible to collect quantitative data from the cruise activity in relation to its sustainability, in order to determine a sustainable model for development of this traffic.



Fig 2. Main areas of analysis included in the eco-cruise port/city tool (Source: VPF own elaboration)

The proposed ECO-cruise tool was designed in order to evaluate the impact of cruise activities within ports and city areas in a 3-step approach:

- 1) Definition of parametres to measure (WHAT), the best way to do it and their metrics (HOW);
- 2) Measurement and analysis in order to evaluate the starting point (AS IS);
- 3) Establishment of an action plan (TO BE) including recommendations to minimise its negative impact.

The tool focuses on 5 aspects related to the environmental impact of cruise ships' activity i.e.:

- **Air emissions.** Measuring GHG emissions;
- **Noise.** Evaluating noise produced by cruise ships when berthed at port;
- **Waste.** Evaluating waste management policies on cruise ships;

- **Mobility.** Identifying availability of sustainable low-carbon mobility options for cruise passengers;
- **Resource consumption.** Promoting resource efficiency policies.

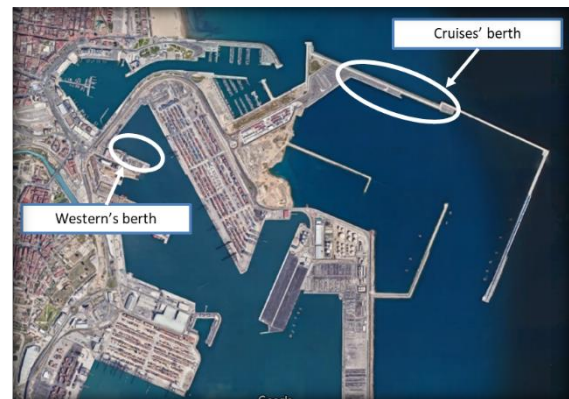


Fig 3. Noise measurement points at Valenciaport. (Source: Google Maps)

Regarding to the economic impact, an accounting tool was used, which makes it possible to quantify the number of jobs, wage income, surplus and tax burdens generated corresponding to the management of cruise ship activity itself. Once the baseline scenario was analysed, an Action Plan was defined, including recommendations for increasing the economic impacts of cruise activities and reducing their associated carbon foot print.

