

The Valletta Grand Harbour Clean Air Project

Greening Up Cruise Operations

Shore to Ship Supply

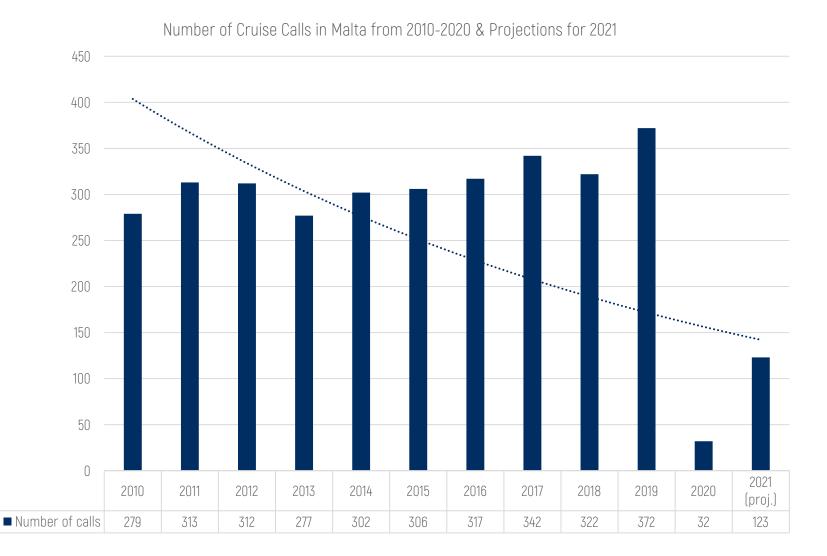
- The Grand Harbour is not just a passenger port: it is a multi-use destination. It is home to many residents, the workplace of many others and a place of relaxation for locals and tourists alike - there are age-old historical sites, walking promenades, entertainment zones, office buildings and even beaches in this strategic port.
- A project spearheaded by Infrastructure Malta and the Ministry for Transport, Infrastructure and Capital Projects, Transport Malta and supported by Valletta Cruise Port.
- Fulfilling an International and European objective: MARPOL Annex VI, Energy Efficiency Design Index (EEDI), Noise Emissions (WHO), Directive 2012/33/EU, Directive 2014/94/EU, Blue Growth Strategy.
- Valletta's Grand Harbour will be one of the European leaders in shore supply provision for cruise ships. This service will be extended also for Ro-Ro vessels.



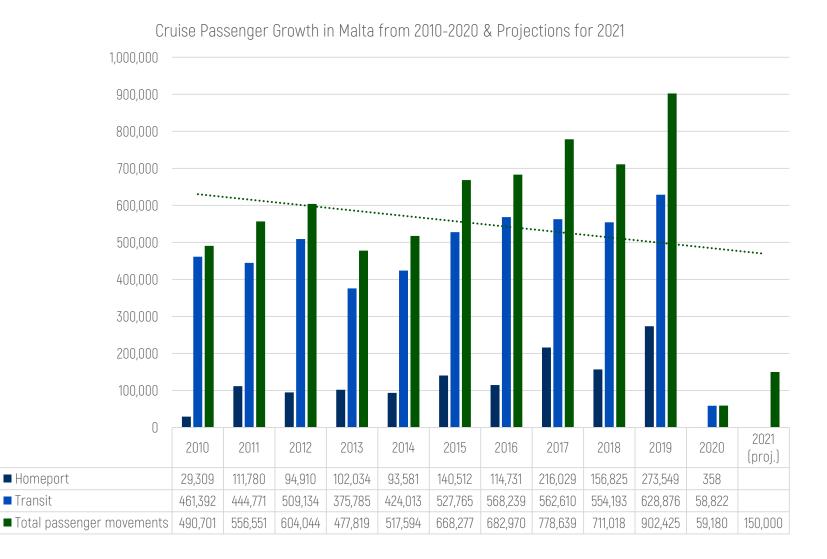




The Cruise Industry in Malta



The Cruise Industry in Malta



Contribution of the Cruise Industry to the Maltese Economy

€83.36 million

in 2019 in direct expenditure by the cruise industry in the Maltese economy of which:

€31 million

expenditure by the cruise passengers

€52 million

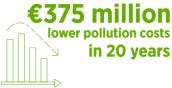
expenditure by cruise liners

The Shore to Ship Supply Project in Numbers: Phases 1 & 2





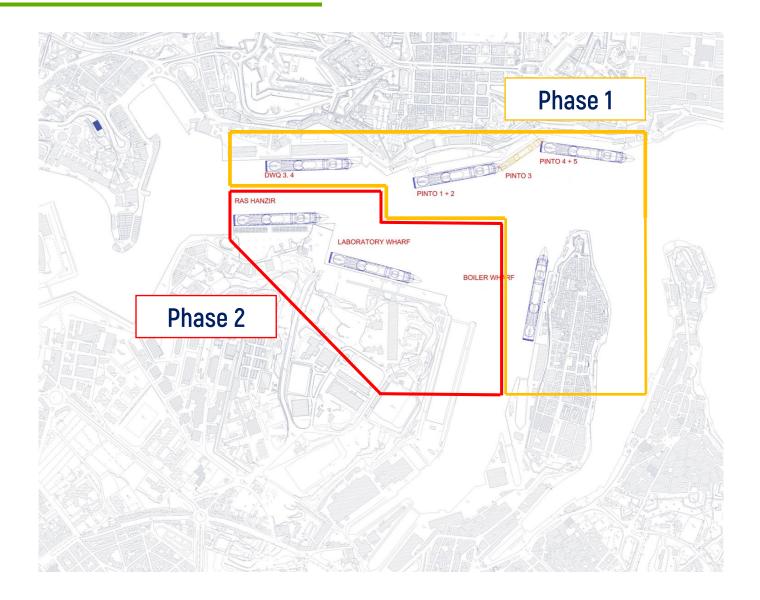
93% less nitrogen dioxide 92.6% less particulate matter 99.6% less sulphur dioxide







The Shore to Ship Supply Project: Phases 1 & 2



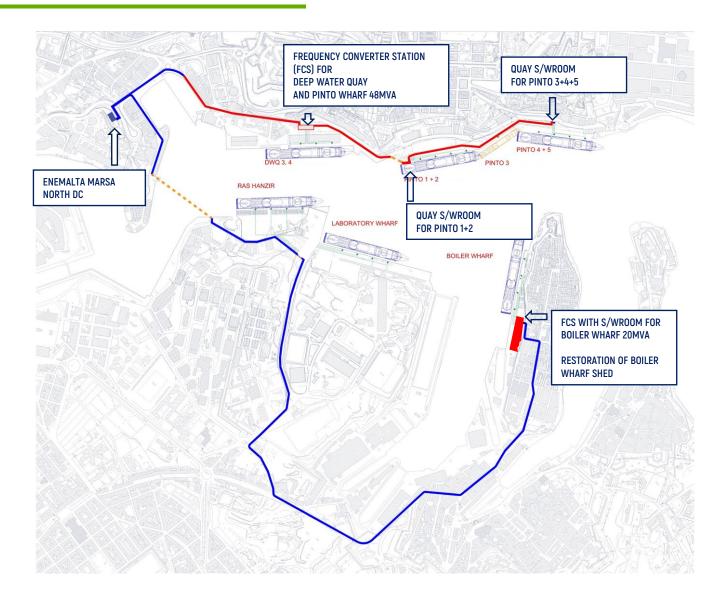
The Shore to Ship Supply Project: Phase 1

- €37m investment in shore side electricity
 on 5 quays (to be supplied by 2023)
- 2 frequency converter buildings (33kV to 11kV)
- Selectable output (11kV or 6.6kV @ 50/60Hz)
- 22km underground/subsea cables
- Restoration of industrial shed (Boiler Wharf)





The Shore to Ship Supply Project: Phase 1



The Shore to Ship Supply Project: Progress

- Work commenced in November 2020. A trench of a metre in depth was cut, through which cables with a voltage of 33kV will pass and supply electricity to the wharfs. It is estimated that a total of about 22 kilometres of cables will be laid. Well over eight kilometres is already in place.
- Work is ongoing in earnest on Quays Pinto 4/5, Gun Wharf and Wine Wharf.





The Shore to Ship Supply Project: Benefits

- A major air quality improvement: Drastic reduction in emissions in the Grand Harbour. This innovative system will make it possible to reduce the emissions of pollutant gases by over 40 tons a year, the equivalent of continuous circulation of over 4 million vehicles.
 Specifically, the port will be able to reduce S0x, N0x, C02 and PM emissions.
- **Reducing noise pollution and vibrations:** By switching off their engines during their stay in Malta and switching to shore power, ships will be able to cut most of their noise pollution and related vibrations, contributing to an enhanced quality of life in this region.
- Improved quality of life for the port users: residents, workers, visitors.
- Protecting a historical port: Millions of Euros are invested annually in the restoration of the numerous historical buildings and fortifications surrounding the Grand Harbour. This project is also contributing to the long-term conservation of these invaluable buildings.
- **Reducing the port's carbon footprint:** The carbon dioxide emissions reduction will have a positive impact on the Grand Harbour's carbon footprint, helping Malta reach its greenhouse gases reduction targets.
- Quantifiable benefits: Within 20 years from the implementation of this project, Malta will save up to €375 million in costs linked to the measurable consequences of air pollution, such as savings on medical expenses related to respiratory illnesses and other related conditions, savings on air pollution mitigation measures to protect the natural environment, savings on infrastructure maintenance, including cleaning and restoration of building facades and improvements in agriculture.

Thank you!

