Development of Shore Power Systems in Maltese Harbours

MEDports Association
Green Transition Seminar

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State of Play of shore power systems in Malta

**Valletta**

- **Phase 1:** 5x16 MVA on 5 different quays
  - Status: On-stream in 4th quarter 2022

- **Phase 2:** Provision of Shore power to all other berths (including ship repair + container facility)
  - Status: Advanced planning/procurement

**Freeport**

- **Phase 1:** 2 x 7.5 MVA on 2 different quays at Freeports
  - Status: Start of construction in 4th quarter 2022
Why?.....Significant Reductions in Emissions to Air

The use of 0.1% Sox marine diesel is assumed Demand voluntary basis

The table shows the emissions per year (tonnes) for different scenarios:

**Emissions per year (tonnes)** | CO$_2$e | NOx | PM | SO$_2$
--- | --- | --- | --- | ---
Baseline scenario | 4,539 | 88.9 | 2.26 | 3.47
Project scenario | 2,744 | 6.2 | 0.17 | 0.01
Reduction through shore power project implementation | 1,795 | 82.7 | 2.09 | 3.45
Overall Gameplan for Freeport...

- **2022-24**: Build 2x7.5MVA on NQT1 & NQT2
- **2024**: Start offering OPS on a voluntary basis
- **2024-2030**: Ramp up to cater for 90% of ship calls by 2030
- **2030**: Supply all ships

Starting 2030 supply all ships
Main Directions in Environment Mgt at Malta Freeports....

- Bi-directional shore power (near future)
- Upgrading of terminal equipment. Electrification?
- 2.5MW pV farm (3600 MWhr p.a.)
- LNG Powered ships
- Navis Operating System to optimise logistics
- Oil Spill booms...