

# **Slot cost comparison between a conventional Container Ship and PERFECT Ship Concept.**

**- Based on AIS Round Voyage data Europe/China/Europe -**

*EVALUATION OF VOYAGE DATA FROM 2022*

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**GMW Consultancy**

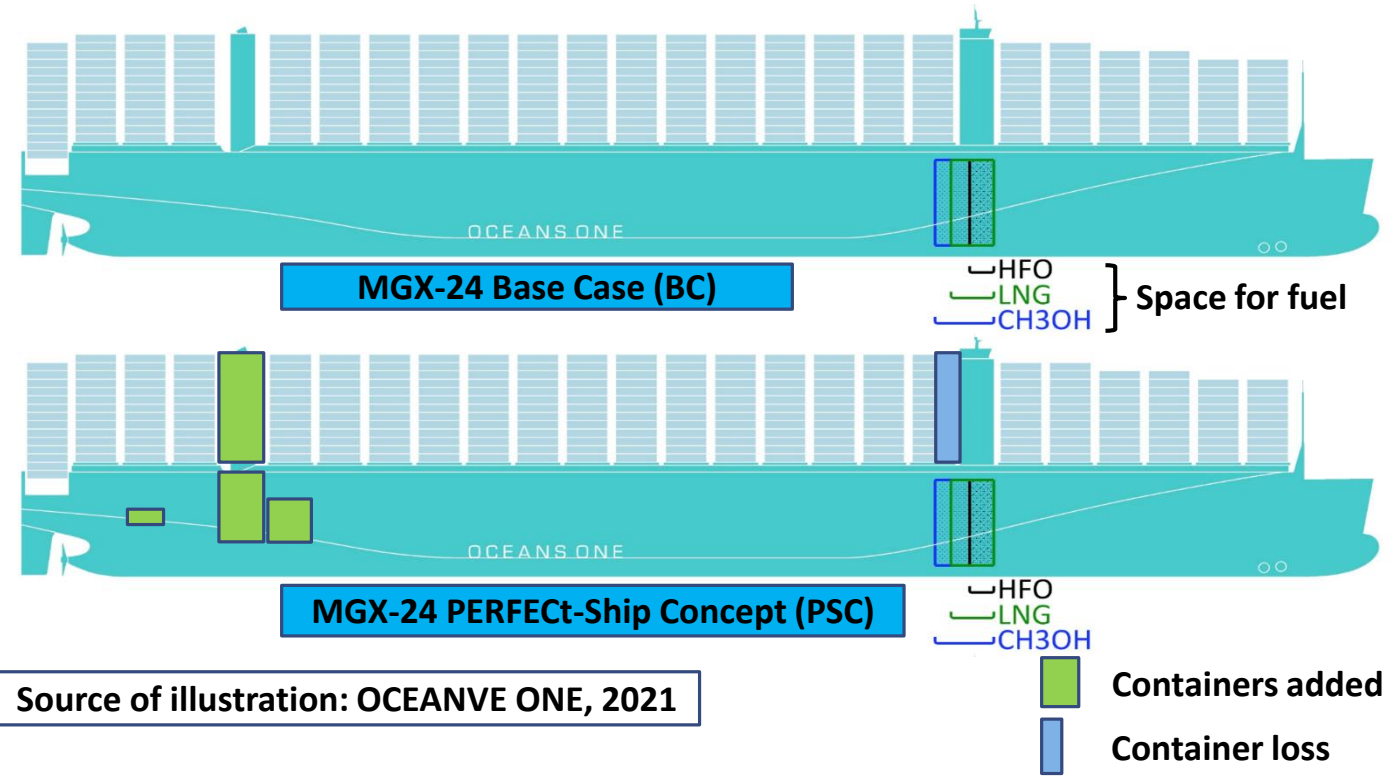
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# Concept comparison MGX-24 with 2-St engine and PERFECT Ship Concept

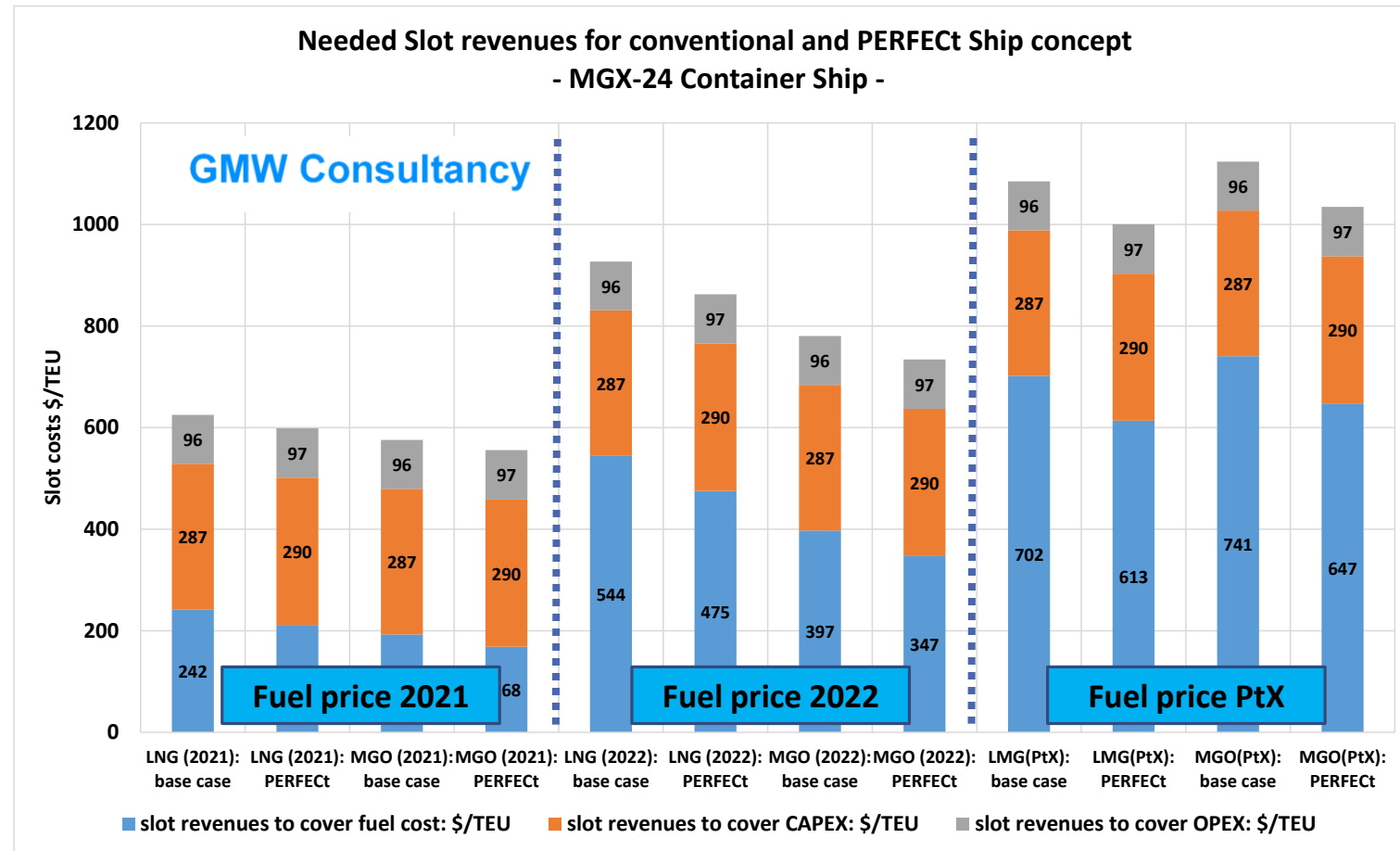
- Base case: Megamax 24 ship type (MGX-24)
- PERFECT Concept (PSC):
  - PERFECT Ship: joint industry project (JIP) with project partners: ABB, OMT, GTT, Caterpillar's Solar Turbines, CMA CGM, DNV GL
  - search for "you tube PERFECT ship" or use <https://www.youtube.com/watch?v=vM2HkJkv-5s>
- MGX-24: 23.112 TEU;
  - Total power: 78.840 kW at shaft
- PSC: 24.384 TEU;
  - Total power: 74.103 kW at e-generator
  - Added TEU: funnel area, engine room space
  - Loss TEU: deck house area



Comparison using speed, distance data from AIS in 2022 for a fleet of 9 CVs (Asia/Europe) on more than 10 round voyages

# Slot cost comparison for fuel prices in 2021, 2022 and PtX fuel based on GMW Consultancy cost calculations

- CAPEX assumed (LNG propulsion)
  - BC: 170 mio \$; OPEX: 5% of CAPEX
  - PSC: 181 mio \$; OPEX: 5% of CAPEX
- Interest rate 8 %, pay back time 10 years.
- Definition used for SLOT:
  - Nominal TEU\*RV(year): RV=Round Voyage
  - Gross value only one direction considered!
- Fuel prices from GMW Consultancy fuel price overview: (2022 until August)
  - <https://www.gmw-consultancy.com/fuel-price-overview>



	LNG (2021)	MGO (2021)	LNG (2022)	MGO (2022)	LMG(PtX)	MGO(PtX)
\$/kWh; lhv	0,065	0,052	0,147	0,107	0,189	0,200

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**Any Questions?  
Here you can get the answers.**

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