



WAH KWONG
MARITIME TRANSPORT HOLDINGS LIMITED

FRAMING THE CHALLENGES TO ACHIEVING ABSOLUTE ZERO

2023-08

Private & Confidential



Founded in 1952

- 71-year track record of investing in, owning and operating shipping assets through market cycles
- Long history of safety meeting Charterers' requirements through “in-house” management



Based in Hong Kong

- Unique blend of understanding eastern culture with an international perspective
- Founding member of the HKSOA in 1957



Family Owned

- Third generation, family-owned shipping company
- Proud ship owning heritage combined with a modern, forward-thinking approach



Global Outlook

- Long-standing relationships with Asian and international counterparties
- Internationally recognised ship-owner

Shipowner, Drybulk Operator and Shipping Services Group



One-Stop-Shop

We offer a comprehensive range of services, tailored to customer needs.



INTEGRATED SHIPPING ASSETS MANAGEMENT

Full Life of Ship

Our services cover the full ship life from design to vessel disposal or retirement.

BRIGHT VENTURE
Bulk
81,486 DWT
LOA: 229m
3 years old



RIGI VENTURE
Bulk
63,500 DWT
LOA: 200m
8 years old



WISDOM VENTURE
Oil Tanker
112,186 DWT
LOA: 237m
6 years old



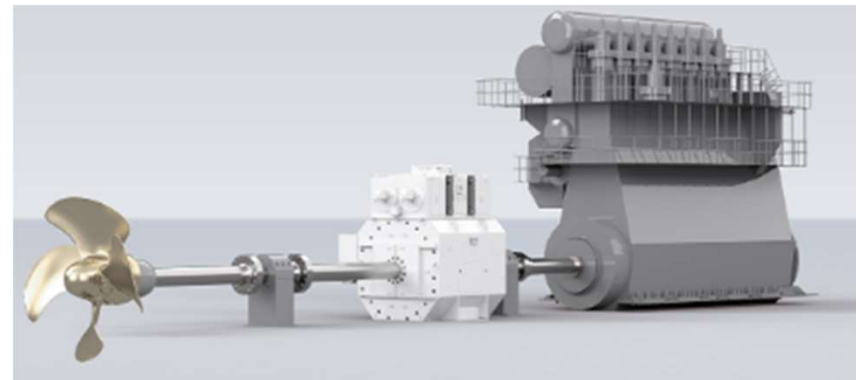
TRIKWONG VENTURE
Oil Tanker
297 DWT
LOA: 330m
11 years old

HOW DO WE REDUCE OPERATIONAL EMISSIONS?



Propulsion

- Propeller fittings
- Speed management
- Weather Routing
- Fuels– alternative / additives



HOW DO WE REDUCE OPERATIONAL EMISSIONS? ctd

Hull:

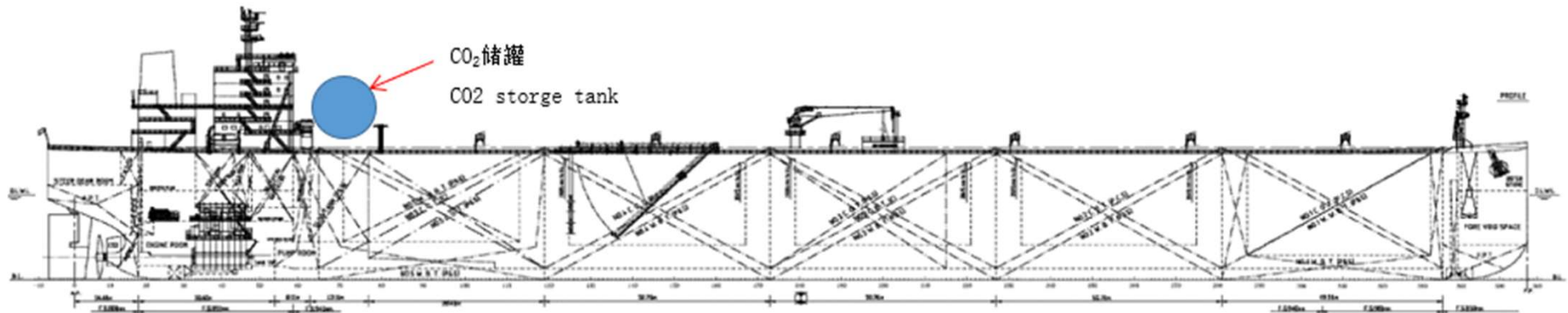
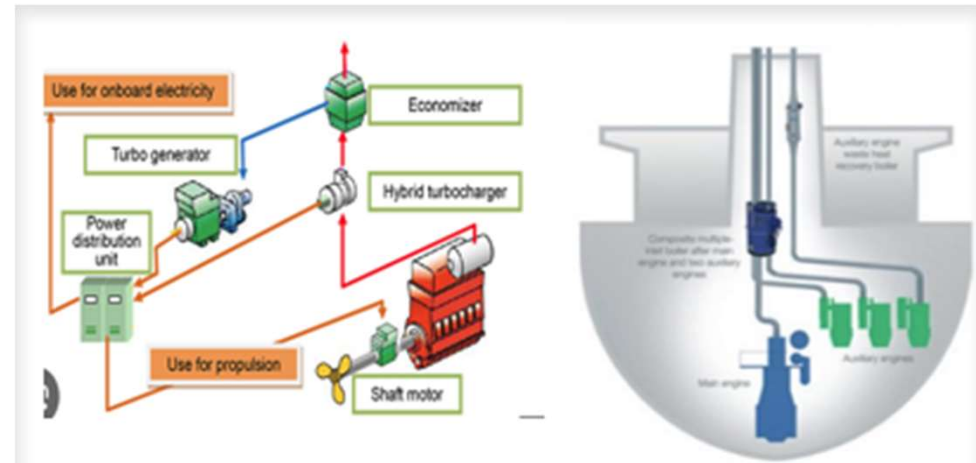
- Blasting
- Painting



HOW DO WE REDUCE OPERATIONAL EMISSIONS? Ctd

Auxiliary systems:

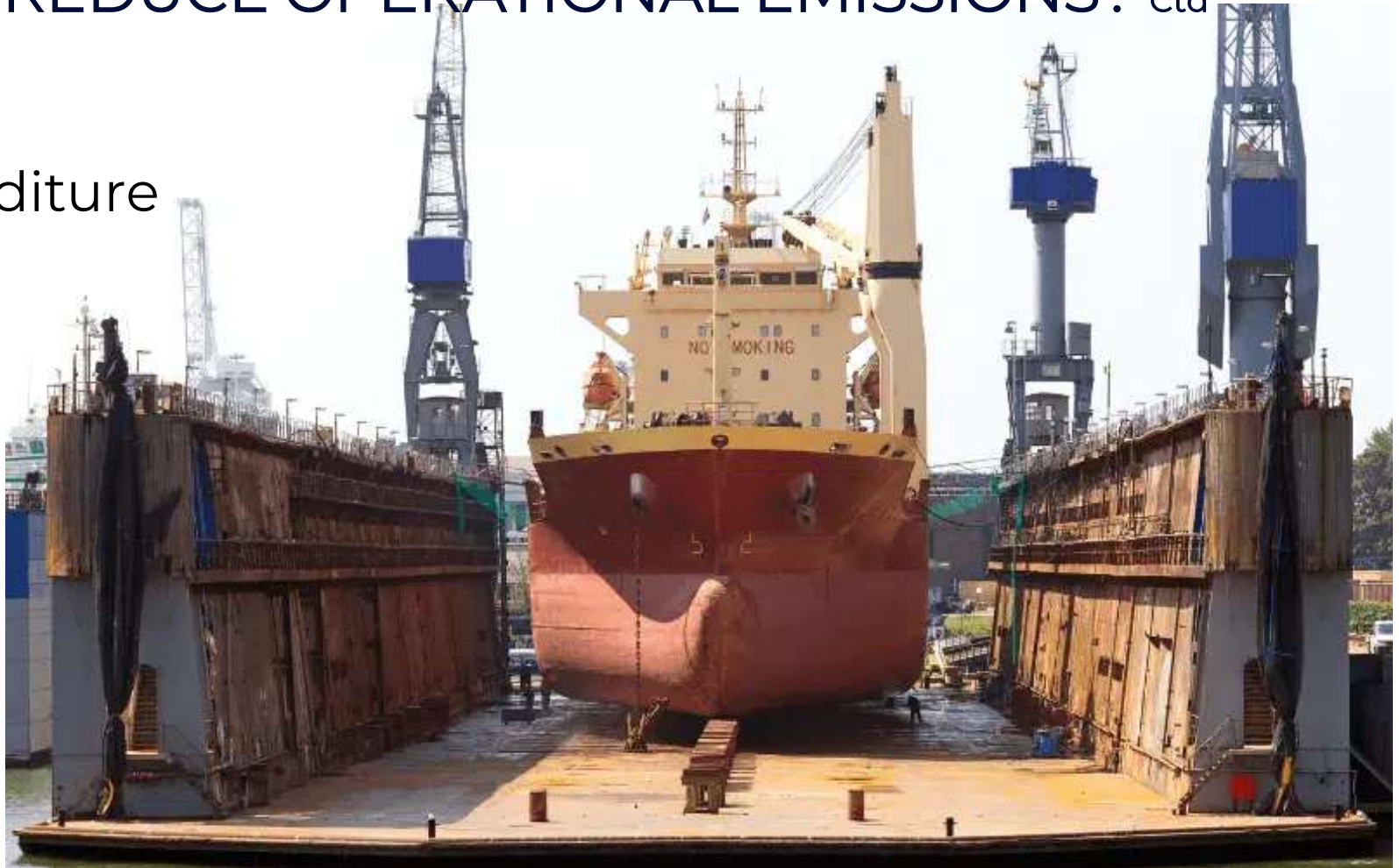
- Waste Heat Recovery
- Power management
- Carbon Capture



HOW DO WE REDUCE OPERATIONAL EMISSIONS? Ctd

Considerations:

- Capital expenditure
- Off-hire



ALTERNATIVE FUELS

- Energy source
- Availability
- Distribution
- Health and safety
- Commercial viability



ALTERNATIVE FUELS Ctd

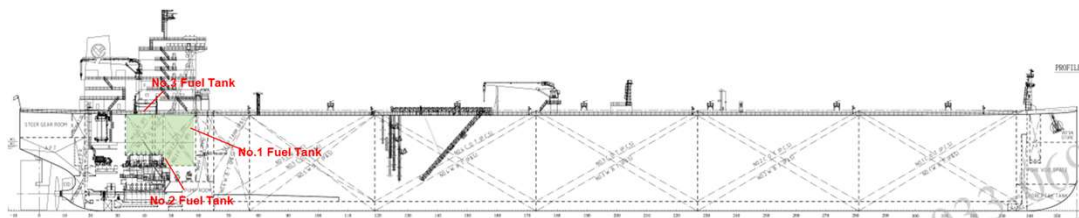
Low Carbon Fuels

e.g. LNG, Methanol, Biofuels

Retrofit?



- Implications for existing engines
- Bunker volume requirements

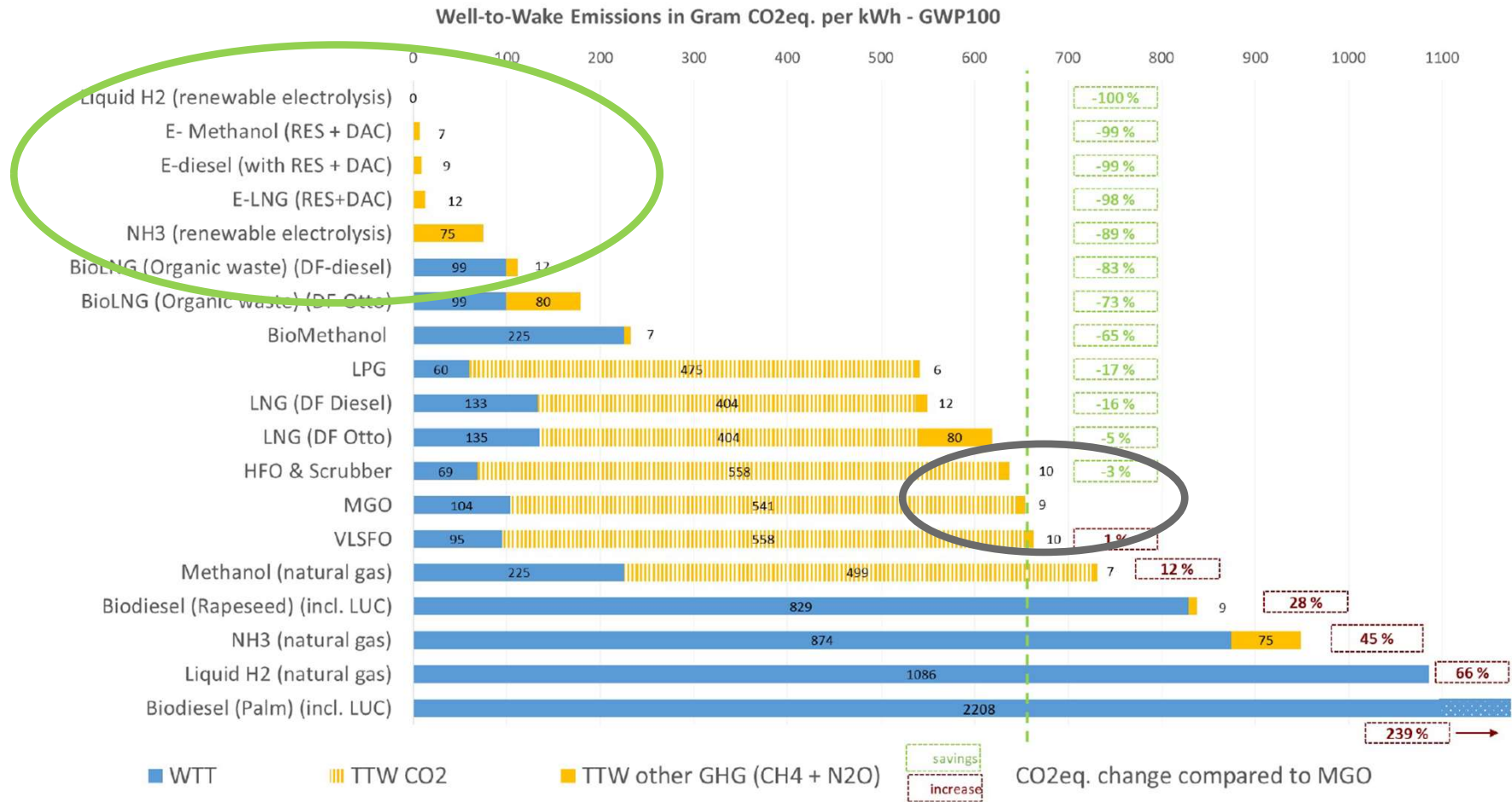


Zero Carbon Fuels

e.g. Hydrogen, Ammonia, Nuclear, Wind

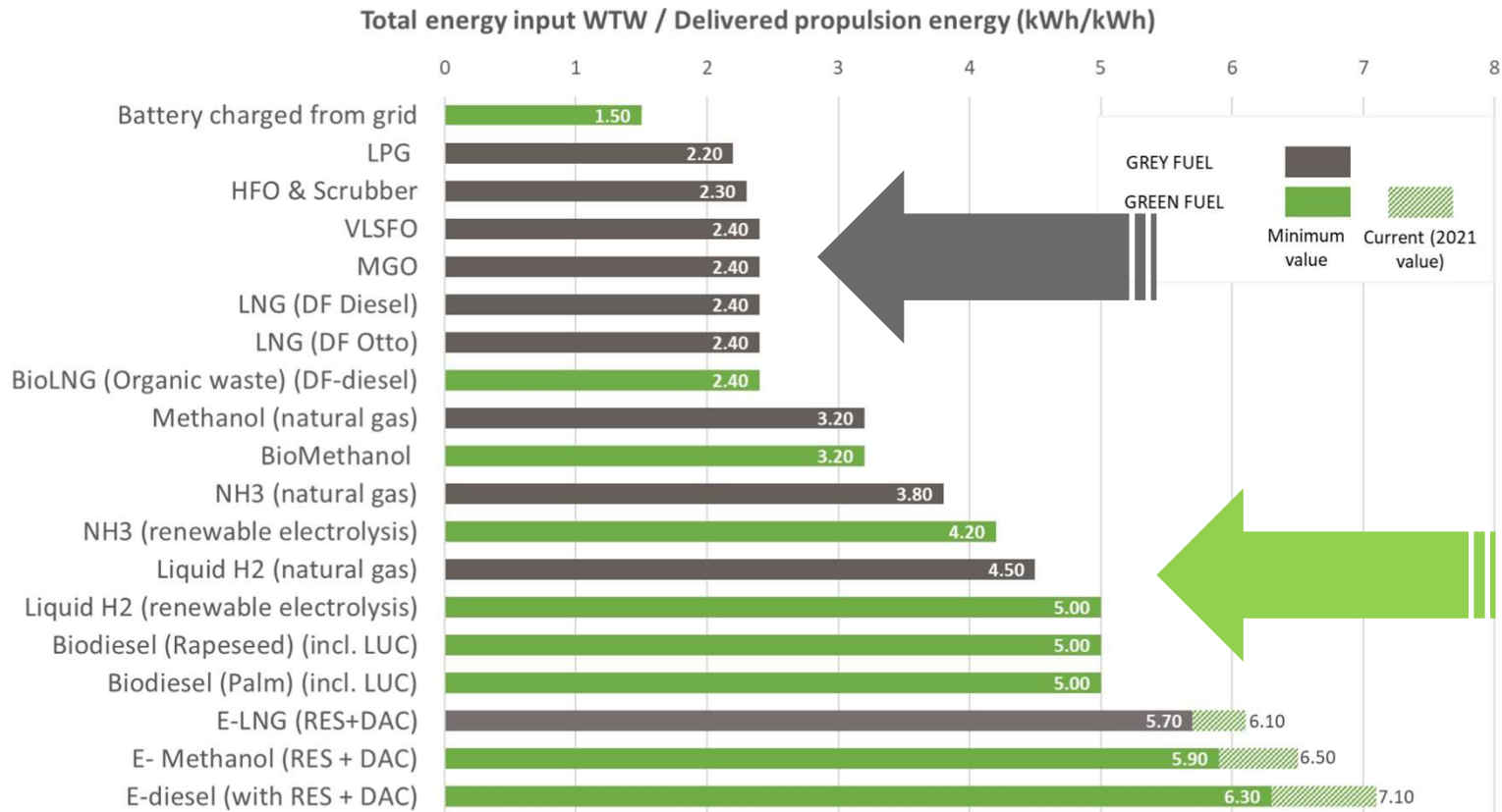
- Retrofit or newbuild?
- Scalability?
- Impact on bulk cargo volumes...

Assessment of Fuels based on GHG reduction potential



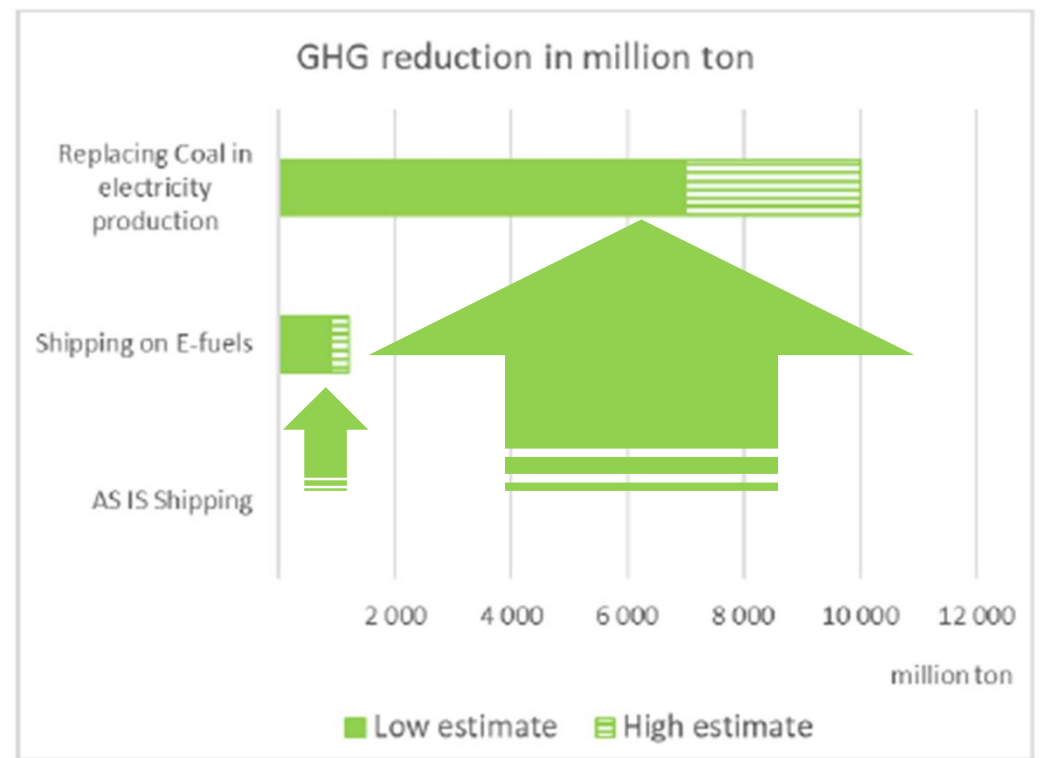
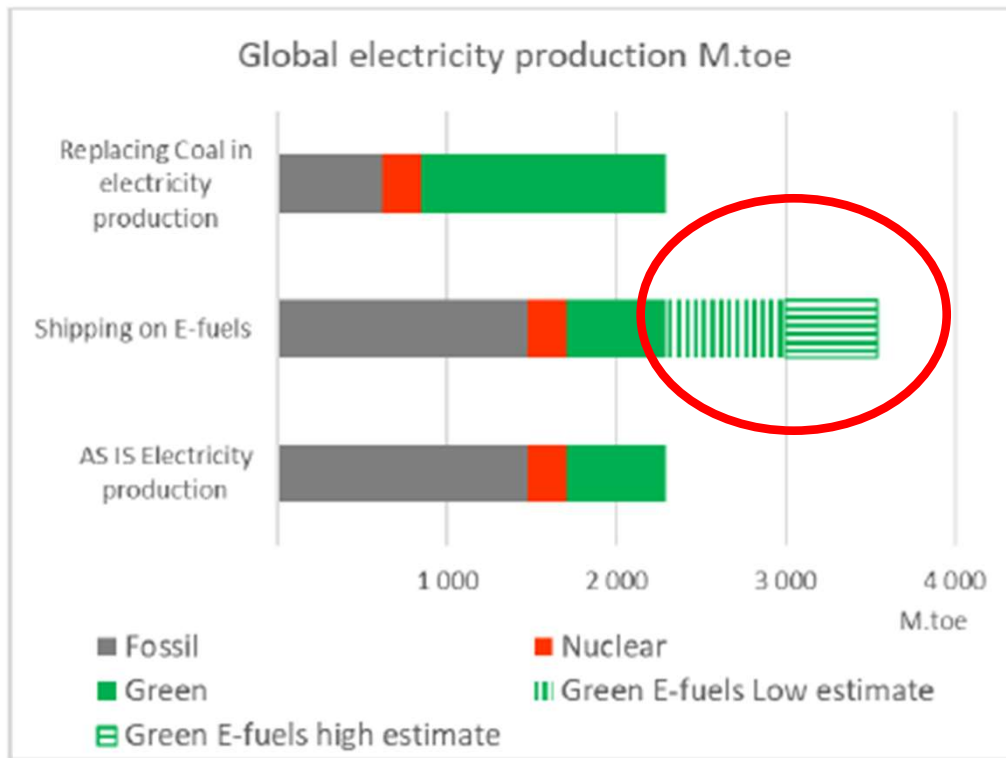
Source: Dr. E. Lindstad, Chief Scientist SINTEF Ocean AS

Assessment of Fuels based on energy used WTW per kWh delivered for propulsion



Source: Dr. E. Lindstad, Chief Scientist SINTEF Ocean AS

Effectiveness of substituting renewable electricity for coal fired power stations vs. E-fuels for shipping



Source: Dr. E. Lindstad, Chief Scientist SINTEF Ocean AS

FRAMING THE CHALLENGE

- Energy source
- Fuel availability and distribution
- Commercial viability
- Impact of decarbonization on cargo demand
- Regulatory and Safety backdrop





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