The Role of AHTS in an Emerging Market
Renewables Expertise
Track record & exposure

Source – Quest Floating Wind, Offshore Turbine Locator
Floating Wind

Large Growth Potential

- Projects that are well under way in planning are likely to see more activity from 2024 onwards.
- For the AHTS vessels, it is expected that demand for installation of suction anchors will be generated from 2024 onwards. Not all AHTS will be able to capitalize on this. The demand for these vessels will depend on the size of the wind farm, the type of suction anchor, the distance from land based infrastructure etc.

- For some of the Asian projects, the distances to shore are great and the numbers of turbines involved will necessitate dozens of anchors. Larger decks to transport the anchors will be an advantage.
Electrifying the Oil & Gas Sector

Odfjell Drilling’s WindGrind Concept

Mobile Offshore Wind Units (MOWUs) with WindGrid™

MOWUs – a flexible solution that meets the 2030 climate goals

- **Net power generation**: Generate new power
- **Fit-for-purpose**: A temporary solution for a temporary need
- **Shorter permitting**: No power production license required
- **Limited CAPEX**: Rental model allows for limited client CAPEX
- **Limited platform modifications**: Simple to connect – minimum topside modifications
- **Circular economy philosophy**: All assets can be reused, also as part of permanent wind farms
AHTS Vessels in Floating Wind

When & Where

Planning → Pre-Lay → Tow out → Hook-up → Cable Lay → O&M
AHTS Spot Activity

AHTS in North Sea above 18000 bhp

Fleet size & number of rig moves

Source – Pareto Shipbrokers
AHTS in Layup

Vessels over 16000bhp

- 25 AHTS in layup
- Average time in layup 1186 days
- Approx 5 are in class, the rest have an over due special survey
- Average age is 14 years
- Several vessels now been scrapped this year and some sold out of offshore market.
- Others rumoured to be close to being sold.

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Vessel Demand

Combination of O&G and Renewables leading to increased vessel demand
Offshore Vessels in Renewables

Wind overtaking O&G by middle of decade - Europe

Source – Rystad Energy
AHTS Day rates

Forecast for utilization & day rate

Source – Pareto Shipbrokers In house data
Global AHTS Fleet

Vessels over 18000bhp

By 2025 more than half of the world’s large AHTS vessels will be 15 years old+

Source – Pareto Shipbrokers In house data
The Energy Transition

How the vessel market will be impacted

- **Offshore Wind – Fixed Bottom**: Continued vessel demand for installation, maintenance and cable lay. Increasing share of offshore work going to wind.

- **H2, CCUS, more & more wind**: Vessels required for broader range of projects. A focus on reusing existing vessels rather than building new and the carbon footprint this results in.

- **Offshore Drilling**: Increased opportunity or energy transition momentum?

- **Roll over effect**: Increased drilling & sanctioning activity.

- **Sanctioning leads to subsea activity**: Is this the last boom in oil and gas construction?

- **Start of Market Recovery**: North Sea, then Brazil & WA. Significant Subsea activity.

- **2021**: Roll over effect

- **2022**: Increased drilling & sanctioning activity

- **2023**: Start of Market Recovery, Roll over effect

- **2023-2030**: Decommissioning North Sea, Brazil, WA

- **2024**: Sanctioning leads to subsea activity

- **2025**: Decommissioning North Sea, Brazil, WA

- **2026**: Fully Green Economy

Zero Emission future, Carbon neutral operations.
Advancements in mooring

Fewer vessels required?

- TBD
Conclusions

AHTS Market & Floating Wind

- Fields with large volumes of turbines in remote areas/far from shore will benefit from AHTS on term charter
- This is an ageing fleet
- Fuel efficiencies will be problematic for older vessels in this category
- Though smaller vessels may be able to carry out hook up and even tow out, load out of large volumes of anchors will require vessels with a larger deck
- Planning is key:
  - Soil conditions
  - Potential to minimize chain/fibre
  - Optimised anchor layout
- There are NO newbuild AHTS on order today above 18000 bhp. Without an obvious alternative vessel type, a shortfall of vessels could happen by the end of this decade.
Curveball Corner

*Or – famous last words?*

Source – Pareto Shipbrokers In house data
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• By any individual employee, director, partner or any other person or body acting on Pareto Shipbrokers behalf;

• In order to gain any commercial, contractual, or regulatory advantage for Pareto Shipbrokers in any way which is unethical or to gain any personal advantage, pecuniary or otherwise, for the individual or anyone connected with the individual or which in the circumstances is improper;

Or

• In order to influence the conduct of a position, office or duty in any improper manner.

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