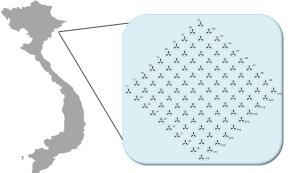
Vietnam Offshore Wind Insight

This country insight report summarises the expected durations and vessel costs for the installation of an offshore wind farm (monopiles and transition pieces), off northern Vietnam. The work was carried out using JBA's ForeCoast Marine Design Desk software.



Two vessel strategies were compared:

The first was based on the use of two Jack up Barges (JUB), with a day rate of \$180,000 / day and an operating threshold of 2.5 m significant wave height.

The second was based on the use of 2 Heavy Lift Vessels (HLV) supplied by 4 feeder barges, with a day rate of \$130,000 / day and an operating threshold of 1.6m significant wave height.

TURBINES 100

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CAMPAIGN DURATIONS

- Minimal seasonal variation.
- exception of campaigns starting in August), campaign durations are higher when using the more weather sensitive HLVs compared to the JUBs.

VESSEL COSTS

• Throughout the year, the vessel costs associated with the use of the JUBs are significantly higher compared to the HLVs.

N.B. Simulations were started at the beginning of each month. Each bar in the plots represents the expected cost/duration if the installation campaign starts in that

DOWNTIME CONTRIBUTIONS

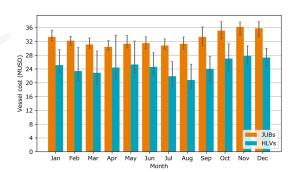
 This plot shows which operations contribute most to downtime.

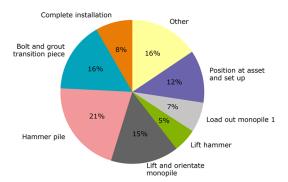
135 120 (skep) 90 uratior 75 60 npaign 45 30

HUB HEIGHT

120m

JBA





The findings shown are for illustrative purposes only and are based on a hypothetical case study.

Strategic and operational planning software for the design, • Throughout the year (with the optimisation and management of From planning to installation,

month.