

## Challenge

Moving toward net zero is an ambition Asset Information Services fully supports, and our work with Vattenfall in surveying their European Offshore Wind Demonstration Centre turbine is one step along that path.

Vattenfall, with support from ORE Catapult, set out to explore how digital twin technology could be used to reduce crew transfer vessel costs, minimize unexpected downtime for the asset, and improve troubleshooting and safety for crews on the asset.

## Solution and results

- High-definition photogrammetry to include drone capture was performed on the turbine in situ, then using R2S digital twin platform, images were linked to existing client systems
- Calculations around cost-savings were undertaken to show significant possibilities of 10-20% reduction in visits and downtime based on gains made in planning and monitoring exercises
- Additional coverage included onshore substation and high-voltage components for realtime condition monitoring of operating parameters from the remote office environment

10-20% reduction

10-20% reduction in site visits and downtime

