

Salamander Offshore Wind Farm

Innovation Progress Statement Outlook

August 2025



1 IPS Outlook

The Salamander project is a 100 MW floating offshore wind development located approximately 35 km east of Peterhead, Scotland. Developed by Salamander Wind Project Company Ltd, it is designed to act as a stepping-stone toward full commercial-scale deployment under ScotWind, enabling the Scottish supply chain to scale up and de-risk in preparation.

This IPS reflects the project's continued commitment to fostering innovation in floating wind. The project is deploying a range of novel technologies and practices to accelerate readiness, reduce costs, and enhance environmental and community outcomes. Key innovations include:

- **Novel Floating Foundation:** A semi-submersible foundation design tailored to Scottish fabrication capabilities to support scalable floating wind deployment. Enables local assembly and alleviates supply chain bottlenecks.
- **Efficient Connection Methodologies for Floater Assembly:** Exploration of alternative approaches to efficient floater assembly, including automated fabrication lines.
- **Mooring and Cable Quick Connector:** A connector for rapid offshore installation and retrieval of WTGs. Enhances safety, reduces marine operations, and supports efficient maintenance.
- **Mooring Load Optimisation Device:** A device designed to reduce peak loads on mooring lines, enhancing durability and allowing deployment in more challenging seabed conditions.
- **Get Up Safe:** A motion-compensated vertical hoist personnel transfer system adapted from fixed to floating wind use. Improves safety by eliminating traditional ladder transfers.
- **Fisheries Co-existence - Training Simulator:** A 3D simulator to engage fishers with offshore wind environments. Facilitates training and collaboration on coexistence protocols, promoting safety.
- **Wave Energy Integration:** Although not deployed, Salamander supports wave energy development by sharing metocean data and collaborating with WES.
- **Net-positive Biodiversity Impact:** Aims to deliver biodiversity gains through nature-inclusive design. Potential measures include reef structures and seabed enhancements, subject to ecological suitability. Monitoring will guide best practice.
- **PREDICT 2.0:** A collaboration with UHI and the University of Aberdeen to build predictive ecological models. Focuses on prey distribution and its link to predators (birds, mammals) to support evidence-based consenting.
- **Substructure Growth Sampling:** Monitoring biofouling and biodiversity on floating structures using passive sampling and ROVs. Provides data for maintenance planning and ecosystem insights.
- **Knowledge Partnerships:** Collaborations with academic institutions to embed research in project delivery. Includes joint studies, data sharing, and student involvement.
- **Community Benefit Fund:** A fund (administered by GrantScape) for local community initiatives. Aims to strengthen community links and deliver socio-economic benefits.
- **Offshore Demonstration Facility:** Development of a modular testbed for offshore innovation, offering real-world validation for SMEs. Complements test centres like EMEC.
- **FASTWIND:** Salamander's metocean data has been used to validate novel modelling approaches to determine wind measurements from satellite data.

Salamander continues to work closely with local suppliers through its Supplier Innovation Pathway and maintains a dynamic innovation pipeline, regularly issuing calls for new ideas.