

## Innovation group.

Workstream Lead: Andrew Jamieson

### Objectives-overview (these are detailed in the targets – next section below)

- 1. CENTRAL OBJECTIVE: Build business case to recommend the establishment of a dedicated innovation funding source that links industry, RTOs and academic institutions through active windfarm developments including via Scotwind**  
Accelerate business collaboration with Research and Technology Organisations, academic institutions, and industry, via proposal for innovation programme to boost R&D activity, innovation, development and demonstration of Scottish and UK products and services.

Liaise closely with successful winners of ScotWind ‘option agreements’ to design funding mechanisms that de-risk the technologies associated with these projects or encourage new approaches that could benefit the sector’s broader delivery, e.g., around procurement.

Key technology themes within this include:

- **Floating Offshore Wind in Scotland:** Target innovative floating wind solutions to meet Scottish-specific requirements. This must centre on strategic technologies that Scottish needs, including but not limited to that of green ports and associated infrastructure developments, ensuring that Scottish port ‘hub’s are innovative and future proofed.
- **Lean low-carbon manufacture for fixed & floating offshore wind:** Decarbonisation of the sector is an important driver for the wider Net Zero ambitions in the UK. Supporting Scottish innovation in this space will help develop a future-proofed, competitive local supply chain.
- **Energy Transition in Scotland:** Ensure Scotland takes a targeted approach to capturing and re-deploying skills, experience, technology and assets from the O&G sector (and others) to enable success in offshore renewables, encouraging low carbon energy system integration. To be delivered via prioritisation of innovative cross-sector technology transfer opportunities that most align with industry needs, and where possible existing Scottish capabilities. Clear link to SOWEC SIA Recommendation #5.

- 2. Innovation in Scotland’s supply chain process (support to SC&C workstream)**

Work with Supply Chain & Clusters Workstream and Scottish Government where appropriate to encourage strategic changes to the supply chain engagement and procurement process in Scotland. Ultimately the aim being to devise and propose a strategy to BEIS and other stakeholders to make necessary changes to the offshore wind system (for example, CfD’s and consenting process), that will increase investor confidence in the SC. Key alignment with SOWEC SIA activities and Recommendation #1.

- 3. Communicate to SOWEC the latest innovation developments on key themes**

Regular communication of key innovation developments to the SOWEC membership, by the innovation group lead, on conclusions of work from other key Scottish-centric innovation initiatives (including work of the ETA (Energy Transition Alliance), NZTC (Net Zero Technology Centre) and the FOWCoE (Floating Offshore Wind Centre of Excellence)) and progress towards the building of a truly innovative offshore wind industry in Scotland.

## 1. Build business case to establish a dedicated innovation funding programme that links industry, RTOs and academic institutions through active windfarm developments including via ScotWind

### Targets

- **31/03/22:** Develop business case content with aim to advance technologies through establishment of dedicated funding sources, with strict stipulations around eligibility of projects such that they align with sector priorities and business capabilities. For example, eligible R&D projects must include support from RTOs and industry, and centre on key themes such as floating wind, energy transition and decarbonization.
- Support will cover:
  - Low-medium TRL concepts through collaboration with academia and start-ups, support to PhDs
  - Mid TRL technologies through funding for R&D projects
  - Higher TRL technologies through demonstration activities
- Investigation and subsequent action to be taken in establishment of critical link with winners of ScotWind option agreements, to ensure a tangible connection is made between supported technologies and the future market demand
  - Innovation challenges could be set by such ScotWind winners, and managed by established process of the Offshore Wind Innovation Hub's 'OWiX' competition. Potential link to SOWEC SIA Recommendation #2 in supporting Scottish supply chain
- Initial mapping of public/private innovation funding sources to be done in alignment with Scottish Enterprise 'cluster builder' work, OWGP 'Innovation calls' and O&G technology innovation funding programmes

Key themes to be detailed as part of eligibility will include:

- Floating Offshore Wind:
  - Alignment with FOWCoE and members regarding floating wind priorities
  - Include consideration of innovations to be designed into strategic port and infrastructure developments catering to floating wind construction and assembly.
  - Alignment with SC&C workstream and results of SIA where possible
- Lean low-carbon manufacture for fixed & floating offshore wind:
  - Consider strategic methods and technologies that Scottish businesses can employ to develop a low carbon manufacturing sector that is expected to be of growing importance in the future.
- Energy Transition:
  - Prioritisation of innovative cross-sector technology transfer opportunities that most align with industry needs, and where possible existing Scottish capabilities
  - (Input to work of SC&C workstream on using prioritisations noted above to support businesses in energy transition)
  - (Input to work of Skills workstream on identifying future skills need for key innovations)

Potential separate channel of funding proposal to facilitate the development of novel technologies and approaches which could tackle system-level challenges such as those investigated in Target#2 below.

### Deliverables

- Complete initial engagement and alignment with key stakeholders to assess feasibility (timing: February 2021)
- Note: Key outcome of 'SOWEC endorsed proposal put forward as recommendation to SG for public innovation funding mechanisms, backed by industry commitment and collaboration' will occur in following roadmap period. Estimate June 2022.

### How contribute to SOWEC Strategic Goals?

This work will contribute to SOWEC goals #2,3 and 4 in particular, where grass roots development of Scottish IP and new businesses will lead to local job creation.

## 2. Innovation in Scotland's Supply Chain Process

### Targets

- **31/03/22:** Build on guidance and recommendations of *Innovation in Supply Chain Processes and Engagement* report (ORE Catapult for SOWEC) and *Floating Offshore Wind in Scotland - Immediate Priorities to Accelerate the Scottish Supply Chain* report by NIRAS for Crown Estate Scotland/SOWEC to ultimately increase investor confidence. Cooperate with Supply Chain Workstream to plan a proposed trial of strategic changes to supply chain system in Scotland that will increase investor confidence and increase likelihood of Scottish businesses winning work.  
[It should be noted this target is NOT the responsibility of the Innovation Workstream but is noted here for reference to SC&C workstream activity. Progress will depend upon agreement with SC&C workstream lead]

### Deliverables

- Draft scope with SC & C workstream relating to the trialling of systemic changes in supply chain process in Scotland (timing: March 2022).

### How contribute to SOWEC Strategic Goals?

This will contribute to SOWEC's strategic goals #2,3 and 4 in particular, as driving a step change in the way that the development community and major OEMs select their supply chain will mean more Scottish contracts and more local jobs. This may also contribute to SOWEC goals #1 and 5 if local content requirements have enough bearing on hitting the 8GW target.

## 3. Communicate to SOWEC the latest innovation developments on key themes

### Targets

- Ongoing: Review and provide updates to membership of SOWEC on conclusions of work from other key initiatives in this space including work of the ETA (Energy Transition Alliance), NZTC (Net Zero Technology Centre) and the FOWCoE (Floating Offshore Wind Centre of Excellence).

### Deliverables:

- Ad-hoc updates and correspondence (timing: throughout the year)

### How contribute to SOWEC Strategic Goals?

This will contribute to SOWEC strategic goal #2 'Innovation'.

## Key Milestones – Innovation Group

Milestone	Date	Comment/Further Detail
Engagement with all ScotWind 'winners'	28/02/21	(Or 1 month after Scotwind winners announced)
Initial agreement on scope of Supply Chain process cooperation	31/03/21	Pending feasibility of collaboration / resources in SC&C workstream

## Budget Innovation Group 2021/22 (No budget required)