



# OEF - Technology Stream

Rémi Gruet

**Policy & Operations Director** 

**Ocean Energy Europe** 





# **Technology Workstream / TP Ocean**

Chair - Fiona Buckley — GDF SUEZ

Co-chair – Ken Street – Alstom

Co-chair – Kai Koelmel – Siemens

Secretary General – Rémi Gruet – Ocean Energy Europe





### **Working Groups**

- Measurements, data, modelling, assessments (standards, data sharing, cost modelling, resource...)
  - Chair Bjoern Elsaesser
  - Co-chair DNV GL Ed Mackay
- Logistics, installations, O&M, moorings, foundations
  - Chair Christophe Cognard DCNS
  - Co-Chair Gareth Davis Aquatera





## **Working Groups**

- Prime-mover/devices design, blades, materials, structural integrity, efficiency, performance improvement, reliability, survivability
  - Chair Andrew Scott Pelamis
  - Co-Chair Peter Fraenkel Fraenkel Wright
- 4. Components, sub-systems PTO, array, connectors, electrical equipment, reliability, survivability, performance improvement
  - Chair Andrew McDonald ORE Catapult
  - Co-Chair Mikael Sidenmark Ocean Harvesting





WG	Rank	Topics	What are the issues? Why do we need to work on it?	Objectives - What to do what to achieve
4		Ancillary services	need for increased consideration of ancilliray services by project developpers?	fault-ride-through network balancing use equipment to the benefit of the grid even not generating
4		multiple connection of several turbines subsea	technology must be developped	enable non-radial array connection avoid "ugly wind-like monopiles"
4		standardisation/qualif ication of components	testing needed before full-size	reduced LCOE
4		Power take off Power control/ smoothing	efficiency of PTO reliablity of PTO	meet the grid quality requirements, move from peak power to continuous delivery
4		Grid integration	lack of connection to best resources	Better use of existing grid Get to the best resource/open up connection possibilities Combining energy generation technologies





### Next steps – next meeting

- Next meeting
  - 1<sup>st</sup> week September
  - Hosted by PLOCAN
- Working group mission prior to meeting
  - Addition of potential new topics if appropriate
  - Ranking of topics by priority (criteria to be sent by the Steering Committee
  - First analysis of each topic's research needs
  - Contacts with topically relevant third parties





#### To Do list for Executive Committee

- Minutes of meeting
  - List of topics per Working Group
  - Information on TP Ocean
- Criteria for ranking of topics
- Information on online communication/work
- Additional relevant literature to TP Ocean work
  - SI Ocean reports
  - TP Wind, TP Solar... Strategic Research Agendas
  - SET-Plan Integrated Roadmap ocean submission