



AURA/Prosperity Partnerships

Professor Simon Hogg
Ørsted Professor in Renewable Energy
Durham University, UK.

3rd April 2019
SuperGen Wind Showcasing Session
WindEurope 2019, Bilbao, Spain.

Shaping the future
of low-carbon energy

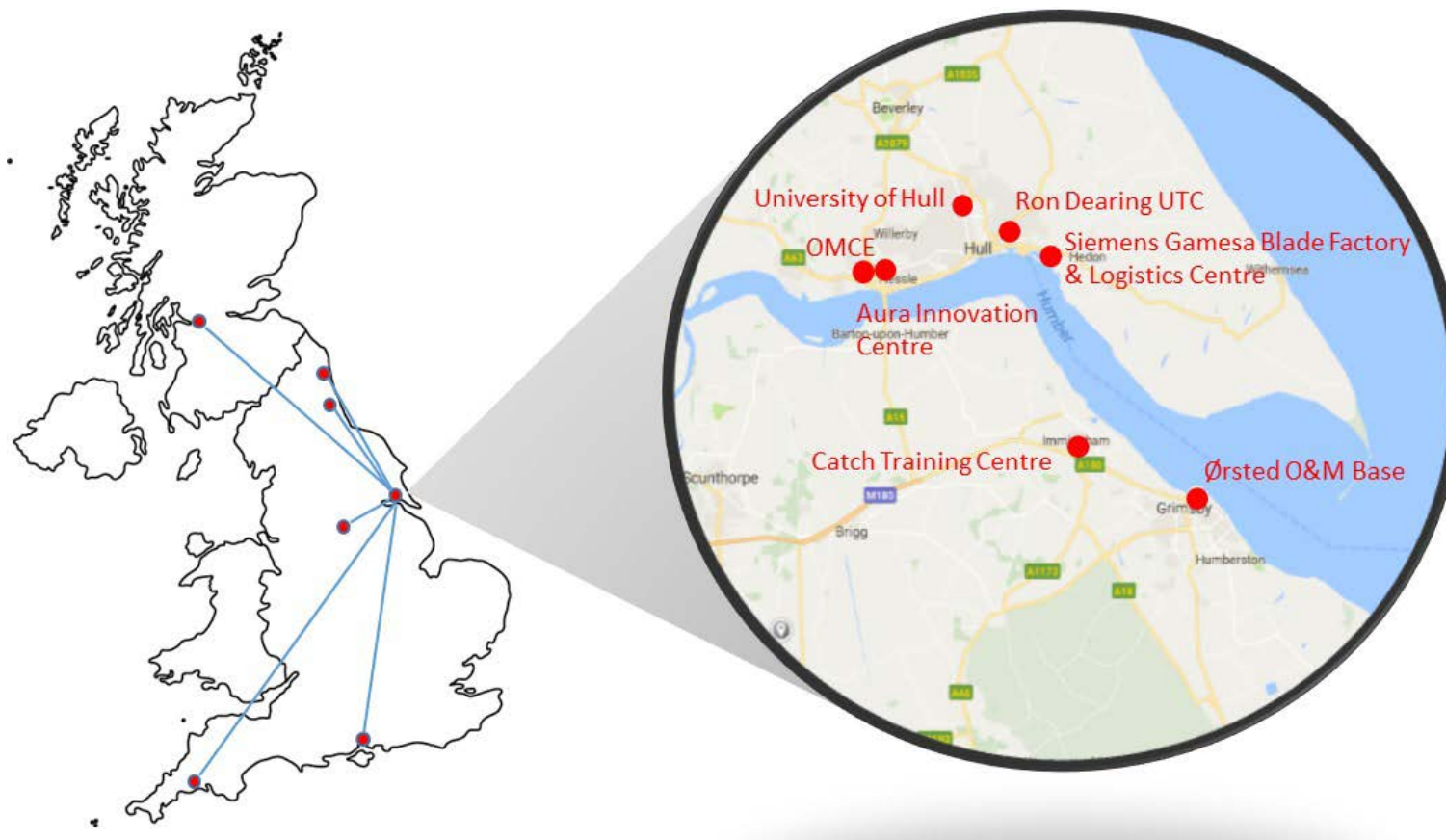


Aura: A New Collaborative Cluster Rooted in the Humber Region.

SIEMENS Gamesa
RENEWABLE ENERGY



**National
Oceanography Centre**
NATURAL ENVIRONMENT RESEARCH COUNCIL

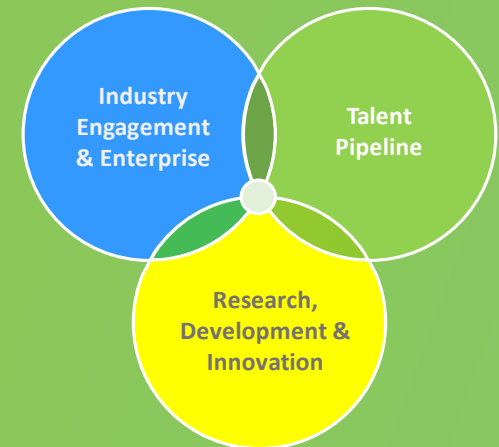


Aura Innovation Centre (AIC)



£12m innovation and engagement space (under construction, opening late 2019/early 2020) including:

- Innovation Accelerator
- Technology Demonstrator
- Collaborative RDI space
- Meetings and conferences





RDI Going forward

- Centred around Offshore *Wind* Science and Engineering, but
- Broader low carbon agenda accessing broader university skills.
- Combination of industry led and Research Council projects.
- Small (eg SME prototype) to Large (EPSRC Prosperity Partnership).
- The commercial conduit - Aura directs industry in and academia out.



Talent Pipeline

Skills analysis and alignment

- Qualitative review of wind and low carbon industry workforce requirements in the UK.
- Identify the synergies in the industry.
- Determine what the HE sector can do to help align offerings.
- Progress diversity solutions.
- Develop cultures that make people want to engage with low carbon industries.



Industry
Engagement
& Enterprise



Actual engagement

- Small to medium businesses looking to expand/ get into low carbon industries through innovation in product or service.
- Big business looking to solve their issues.
- Priming the pump – active now, before the AIC opens.
- Work at all industry levels.
- ***Collaboration*** requires ***Participation***.



Aura RDI Focus Areas



Next Generation Blade Design and Manufacture	Whole Life Supply Chain Modelling	Marine Data
Materials, Coatings and Surfaces	Operations, Maintenance, Logistics and Risk	Environmental Interactions and Sea Bed
Generators and Converters	Management of Assets	Added Value including Aquaculture



EPSRC Prosperity Partnership

A New Partnership in Offshore Wind

£7.64M, 5-year programme launched Nov 2017.

Funding split between EPSRC, Siemens Gamesa, Ørsted & Universities.

20 PhD level projects split across the University Partners.

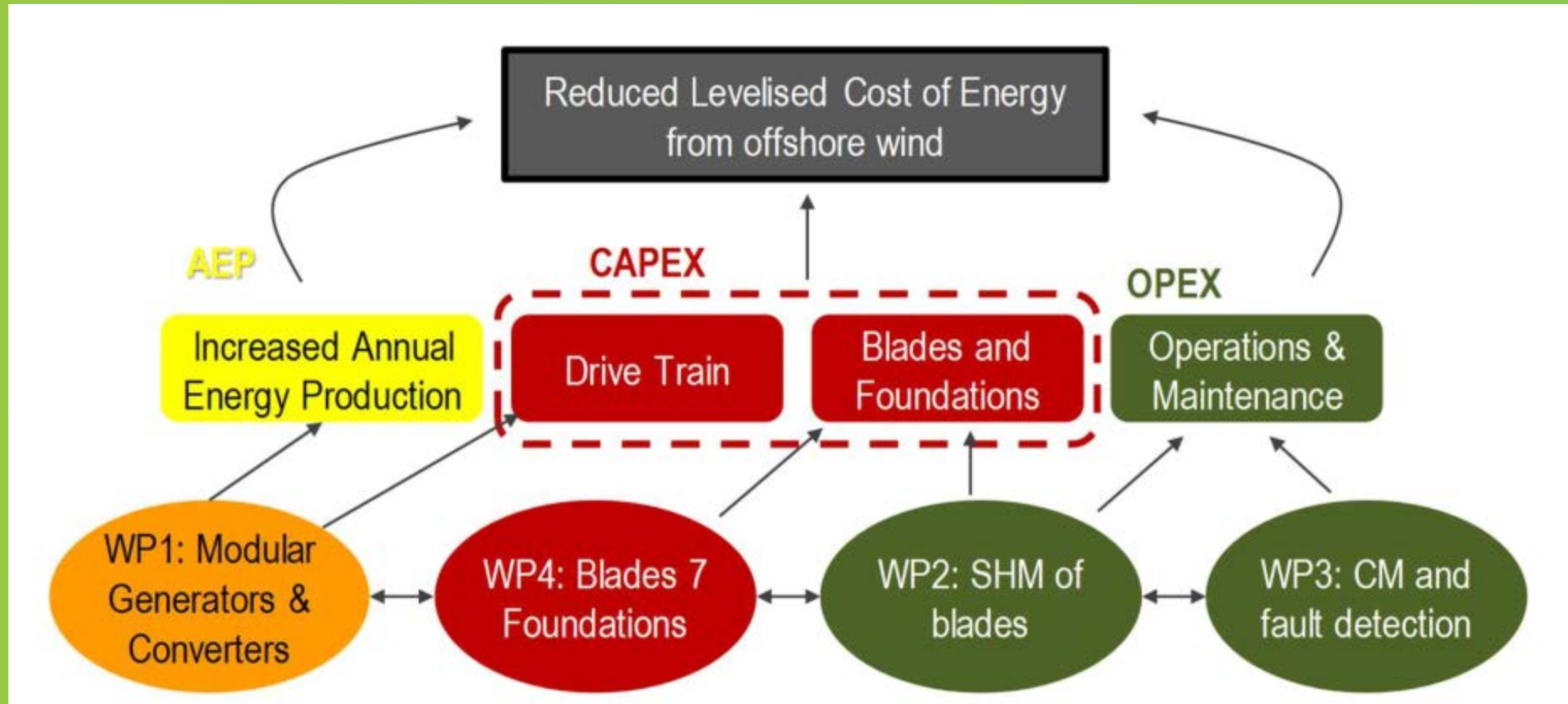
Industry Led – All projects linked to the development roadmaps of Siemens-Gamesa or Ørsted.

See www.npow.group.shef.ac.uk



EPSRC Prosperity Partnership

A New Partnership in Offshore Wind



The Aura Centre for Doctoral Training in Offshore Wind and the Environment.

£5.5m NERC & EPSRC funding with > 20 Industry partners.

75+ PhDs over 5 cohorts

Industry co-created research:

- Environment Interaction
- Logistics Safety & Risk
- Marine Data
- Next Generation Materials & Manufacturing
- Operations and Remote Autonomous Monitoring
- Aquaculture & Other Added Value

<http://auracdt.hull.ac.uk/>

