#### Political context - what lies ahead?

- Despite 2020 renewables targets, UK just ahead of Malta in European league table!
- Energy and climate change have been studiously avoided in run up to the May election – other than cost of energy to consumer,
- Nevertheless significant European investment in R&D in offshore renewables through H2020,
- President of World Bank Jim Yong Kim, UK / US Universities and philanthropic foundations (eg. Wellcome) calling for subsidies on fossil fuels to be withdrawn

Is a level playing field in sight? Withdrawal of subsidy could be a game changer for offshore renewables

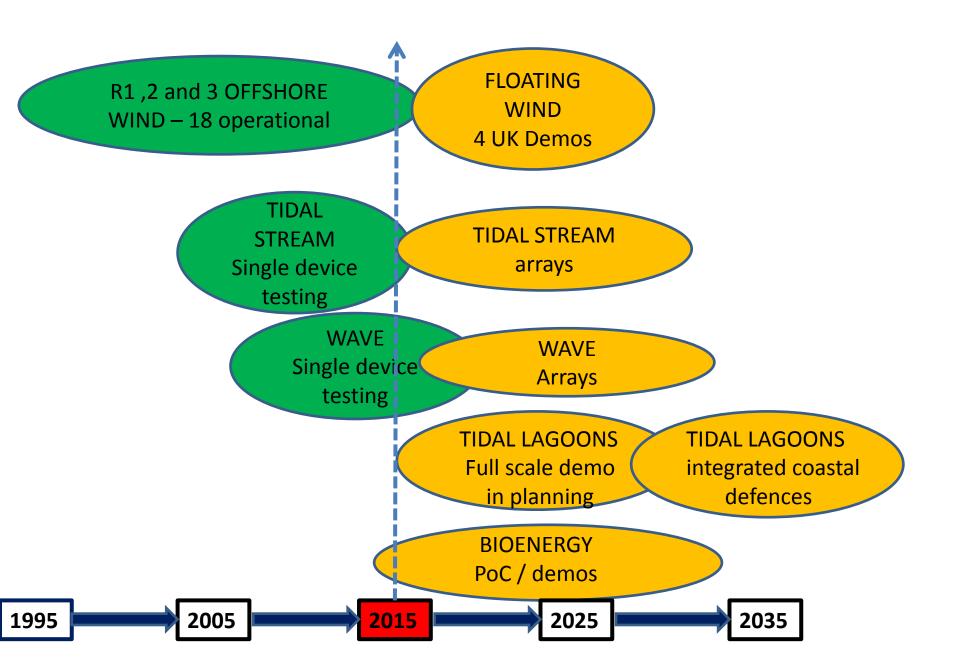
# Offshore and coastal marine system - rapidly changing!

Our economic footprint is moving offshore:

- Expansion of offshore energy wave and tidal arrays, floating wind, tidal lagoons and new grid infrastructure,
- Decommissioning oil and gas platforms and pipelines,
- Coastal defences for flood protection,
- Expansion of offshore mari / aquaculture,
- Consolidation / expansion MPA network,

Increasing intensity of space use against a background of ecosystem change

### **Development trajectory - offshore renewables**



# Common themes driving NERC business and policy innovation

- Sustainable use of natural resources offshore wind / wave / tidal energy, oil /gas, minerals,
- Low carbon innovation / translation leading to greater cost / fuel efficiencies, dematerialisation, and to de risk consenting and improve environmental management,
- Marine planning system / MSFD need to ensure coordination / shared knowledge as basis for innovation / translation.

COLLABORATIVE
OFFSHORE
RENEWABLE
ENERGY
RESEARCH

TCE
TCE
CATAPULTS
Carbon Trust
Innovate UK
EPSRC
NERC
MS
WG
EU

PIPELINE OF STRATEGIC
PRIORITIES FOR
INNOVATION /
TRANSLATION

Technology modelling & tools

Research, Demo & Development projects Data
repositories /
archives / data
products

Best practice,
Position Papers
/ guidance

### Future NERC programme strategy?

To maximise impact of NERC investments:

- Continue processes of innovation and translation in offshore renewable energy to support:
  - scaling up to wave and tidal arrays ,
  - development of offshore grid
  - de risking deployment of floating wind / tidal lagoons .
- Integrate with other infrastructure to ensure sustainable use of marine system:
  - Oil and gas focussing on decommissioning platforms, pipelines etc.
  - Coastal engineering / flood defences .