KE programmes: strategic approach

To ensure NERC funded research generates beneficial impact for the economy, environment and society

- Policy needs
- Business needs
- Society needs

Knowledge Assets

NERC’s investment

BUT HOW
To make it happen ????
> 100 UK marine environmental scientists interested in marine renewable energy research

- NERC centres / HEIs
- Testing centres
- Supergen
HOW to achieve IMPACT?

User needs & challenges
application
adaptation
creation
Science excellence

IMPACT
NERC Marine Renewable Energy Knowledge Exchange (MREKE)
Mapping Environmental Research Needs and Issues

• Inventory of research needs developed at NERC – Energy Generation and Supply KTN workshop in Liverpool (Sept 2010)
• Current version is working draft (in development with DECC, DEFRA, TCE, RUK, SRF and RCEP)
• Proposal is to maintain this as a working document to promote collaboration, avoid gaps and overlaps
• Regularly review and update
• Post on MREKE portal to promote engagement with end users
MREKE portal – what will you find?

- Environmental research status ‘briefing papers’
- Environmental ‘research needs and issues’ inventory
- Workshop / conference / technology demonstration reports
- Case studies eg. Strangford Lough monitoring
- Hyperlinks to research funding calls and data archive centres, international research clusters, testing centre updates, new technology updates.....etc.
End user engagement for environmental research roadmap

- Regulators
- Developers
- Commission data collation and research
- Project 1
- Project 2
- Project 3
- ORRSG*
- NERC
- MREKE**
- RCEP
- UKCMRE
- ORETIC
- Marine Data Exchange
- NaREC EMEC Wave Hub devt sites
- Project 4
- Project 5
- Project 6
- Investors insurers
- Business managers
- NGOs
- Regulators
- Policy makers
- Consultants
- Business managers
- NGO
- Investors insurers
- Insurers
- NGOs
- Policy makers
- Marine Data Exchange
- NaREC EMEC Wave Hub devt sites
- Project 4
- Project 5
- Project 6
NERC – DEFRA Marine Renewable Energy Research Programme

**Response** How do energy arrays influence fine scale habitat use and behaviour of marine vertebrates?

**EBAO** Optimising Array Form for Energy Extraction and Environmental Benefit

**FLOWBEC** – Flow, Water column & Benthic Ecology in 4D (involves co-location of a variety of sensors to better understand physical and biological interactions)

**QBEX** Quantifying benefits and impacts of fishing exclusion zones on bio-resources at energy sites
In summary we will aim to:

• Showcase what is already available through the portal
• Find ways to adapt existing data / information
• Advocate the commissioning of what is needed
• Play our part in coordinating / joining up

Contacts:  
Paul Bell – psb@noc.ac.uk  
Annie Linley – anli@noc.ac.uk