3rd CORER Workshop 22 July 2014, Foresight Centre, Liverpool:
'Overcoming the Obstacles to deployment of Tide and Wave Marine Renewable Energy'

CORER centre for offshore renewable energy research

We held the last in our series of 2014 Liverpool CORER workshops on 22nd July. Earlier workshops were for internal consumption within the CORER group and then for the wider University of Liverpool community. This time we extended the invitation externally and had over 40 attendees, including representatives of academia, industry and public organisations. Prof Judith Wolf of the National Oceanography Centre (NOC) in Liverpool introduced the workshop, identifying 4 key areas presenting obstacles to MRE deployment: technical, environmental, financial and survivability. We then had presentations from 3 invited speakers: Prof Mike Cowling, Chief Scientist for the Crown Estate (TCE); Dr Alejandro Gallego from Marine Scotland Science (MSS) and Mike Case of Tidal Lagoon Swansea Bay as well as 3 members of the CORER team: Dr Paul Bell of the National Oceanography Centre (NOC) in Liverpool; Dr Luke Myers of Southampton University (US) and Dr Ian Walkington of Liverpool University (UL). Plenty of lively discussions happened over lunch and coffee and we had a panel discussion to wrap up the afternoon.

Mike Cowling (TCE) suggested that some key areas, where there is need for further studies, include measurement and monitoring, environmental impacts on biology and understanding of sediment-related impacts. Low-cost sustainable energy is the over-riding societal need and the early-stage industry in wave and tidal stream devices needs innovative solutions to overcome some technological challenges to improve reliability and also to obtain regulatory consent with a minimum requirement for monitoring. He pointed out the resources on the Crown Estate web site.

Dr Alejandro Gallego (MSS) presented the wide range of work in support of marine renewables in Scotland where there are ambitious targets: 30% of total energy demand from renewable sources by 2020, comprising 100% of electricity demand, 11% of heat demand and 10% of transport fuel from renewables. There are statutory targets of at least 42% emissions cuts by 2020, and at least 80% by 2050. MSS seeks to facilitate the sustainable development of a successful Marine Renewable Energy industry in Scotland through providing advice to the licensing process, supporting the Sectoral Plan within the National Marine Plan and in-house and commissioned research work.

Mike Case showed the exciting progress of the Swansea Bay Tidal Lagoon project which is now submitted for planning consent (decision due in November 2014), supported by Liverpool University modelling (Ian Walkington).

Paul Bell (NOC) presented his work on marine radar monitoring for the Orkneys and Pentland Firth, with interesting results in observing bathymetry, currents, marine mammals, fish and birds. Luke Myers (US) presented the work of the engineering group with observations and modelling around the Channel Islands and Solent. Finally Ian Walkington presented some thoughts on how the range of expertise in CORER could address the obstacles facing the nascent MRE industry, leading into a wide-ranging discussion. Thanks to everyone who attended for their enthusiastic participation.

This workshop programme has been supported by a pump-priming grant from the University of Liverpool. For further information on CORER please visit the website: www.corer.org