

**FORM 1C : MREKE PROGRAMME : EVENT REPORTING FORM
(max 4 pages)**

Event lead (inc name & contact details):

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Title, date and location of event:

Workshop: Bio-fouling and Renewables: Latest research, legislation and commercial applications. Friday 4th May, 2012. The International Conference on The Environmental Interactions of Marine Renewable Energy Technologies, Orkney, Scotland

Main participants (inc names of individuals and the organisations they represent):

Dr Elizabeth Cook (SAMS)

Adrian Macleod (SAMS)

Dr Tom Vance (PML Applications Ltd)

The audience consisted of approximately 30 participants, predominantly representing academia (both national and international), but there were a number of individuals from the commercial sector including; Northern Lighthouse Board and a sensor development company. Unfortunately, detailed information regarding the names and organisations were not collected for this workshop.

Programme and main activities :

The placement of energy extraction devices in offshore waters will provide new hard substrate for 'bio-fouling'. Many species will be benign, even beneficial to the surrounding environment, but certain species have the ability to form dense aggregations, which could to interfere with the operation of the device. Understanding the type of bio-fouling that is likely to attach to a device, methods by which fouling can be reduced and the recent legislation regarding the notification of invasive non-native species is, therefore, critical in planning and executing a maintenance regime. This workshop aimed to showcase the latest research and legislation on this subject including:

Presentations by Adrian Macleod on "Colonisation of Offshore Marine Renewable Energy Structures: The effects of deployment time, tidal flow and geographical region", Dr Tom Vance on the latest developments in the ReDAPT project and Dr Elizabeth Cook on the 'Implications for the marine renewables energy sector of marine non-native species' in particular recent new legislation (WANE Act 2011).

The presentations were followed by a question and answer session and a site visit to see the benthic landers that had been fitted with small test panels treated with various anti-fouling coatings.

Synthesis of feedback from participants :

The participants found the workshop extremely useful, particularly the opportunity to hear about the latest scientific developments. A number expressed their amazement at not realising quite how serious an issue biofouling can quickly become if left untreated.

Main deliverables and outcomes :

To present the latest developments in research in the area of biofouling and marine renewables.

Outcomes: Three presentations and a site visit delivered at the workshop. Raised awareness amongst attendees from the industrial sector regarding potential issue of biofouling once the marine renewable devices are deployed.

Likely Impacts:

Potential for future collaboration between academia and the marine renewables industry.

Follow-on activities (*Explain what now needs to be done to increase impact of the science*)

Incorporate session on biofouling into the 2nd EIMR conference (Date TBC).

Further workshops to be held to disseminate research on novel anti-fouling systems to the marine renewables industry.

Support of Knowledge Exchange Officer to develop closer ties between academic and industrial partners, particularly in the area of marine biofouling.