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Halcrow

Llywodraeth Cymru
Welsh Government

Welsh Government – Marine Energy Infrastructure Study

In 2010 the Welsh Government launched its Energy Policy Statement: A Low Carbon Wales. The Statement centres on three main strands - energy savings and efficiency, low carbon energy generation and the maximisation of the opportunities for practical skills and green jobs. Based on our natural advantages in areas such as wind and marine renewable resources, the Statement sets out our aim to produce more renewable electricity than we consume as a nation by 2025.

The Welsh Government see great potential in developing the marine resource around its coasts and strongly supports the development of a Marine Renewable Energy Industry in Wales. Facing the Atlantic and the Irish Sea, it has enviable Wave and Tidal energy resources. A rich marine heritage means that Wales can offer ports and supply-chain infrastructure that may be adapted to meet the needs of this nascent industry. In March 2011, the Welsh Government published the results of its Marine Renewable Energy Strategic Framework (MRESF) project. This was a three year study that collated and mapped a broad range of marine environmental data throughout Welsh Territorial Waters. This included the available energy resources that could be extracted by current technologies, together with physical and environmental constraints that may apply to development. The project was led by consultants RPS on behalf of the Welsh Government with the information presented in a report and as a GIS mapping tool.

For further information on the MRESF Study, follow this link http://mresf.rpsgroup.com .

The Infrastructure Study

To follow on from MRESF, the Welsh Government has commenced the Marine Renewable Infrastructure Study. This involves preparation of a number of options for marine energy development and particularly the associated marine infrastructure that needs to be provided to support energy developers. In understanding the 'Infrastructure' required, we need to consider everything that supports the actual energy generators themselves, ranging from foundations, moorings, navigational marks and lights, cables, connecting hubs, communications, landfall and grid connection, highway access, ports services and even proximity to demand and consenting requirements.

Stage 1 - We will engage with stakeholders to identify industry needs. In order to promote discussion we have proposed a number of alternative non-site-specific development concepts that could be used to support the Marine Renewables Industry. These could be small scale test facilities for single devices, multi-device arrays, or full-scale commercial deployment sites. These outline concept proposals cover both wave and tidal energy. Stage 1 is due to be completed in February 2012.

Stage 2 - Having determined industry requirements and understood the appetite for provision of infrastructure to support marine energy development, the second phase will consider the MRESF data in detail to allow us to find suitable sites for the short-listed development concepts within Welsh Waters, taking into account energy resources, grid connection and landfall arrangements, environmental sensitivities, consenting requirements, local ports and supply chain. It is anticipated that the project will recommend one or several individual projects within specified deployment zones to be taken forward to more detailed feasibility studies and eventual construction. The final report is due for delivery by our consultant, Halcrow, in May 2012.

How you can help

We are keen to understand the infrastructure requirements of the marine renewable energy industry going forward. In order to ensure that the project meets the needs of the marine renewables industry, our consultant, Halcrow, is consulting with industry and interested parties during these initial stages. If you would like to take part in the study, whether you are a device developer, part of a potential supply-chain to construct devices, a provider of support services, or if you are just interested in what we are doing and would like further information, please contact our project manager Chris Green at greenca@halcrow.com