



## **Commercially viable levels of electricity generated**

Electricity generated by wave power will be supplied to the national grid by early 2011, at a briefing in Galway by OceanEnergy Ltd it was disclosed that commercially viable levels of electricity had been generated over the last number of months by a wave energy device developed by OceanEnergy Ltd, which is moored off Spiddal Co. Galway.

The briefing coincided with a visit from the members of the Joint Oireachtas on Climate Change and Energy Security Committee who today began a two day trip to an OceanEnergy test site in Galway Bay and to the Marine Institute, Rinville, Oranmore, Co. Galway which was organised by the Irish Marine Institute.

The Government has committed to deliver 75 mega watts of electricity from wave energy by 2012. Ocean Energy plans to deliver a significant proportion of those 75-mega watts.

Tests carried out this year by Ocean Energy Ltd under the supervision of Dr. Tony Lewis and his research team at the Hydraulic and Maritime Research Centre at University College Cork have proved conclusively that electricity can be produced in commercial viable quantities.

Ocean Energy Commercial Director, John Keating said commencement of a full-scale commercial pre-production prototype is scheduled for design, construction and testing later this year. Full-scale commercial production will commence in 2010/2011.

*“The primary purpose of the development phase over the last few years was to prove our unit has the ability to survive and endure severe sea conditions and the capacity to deliver requisite power of a sufficient quantity to ensure commercial success. We have achieved this;”* said Mr Keating.

*“Ocean Energy is absolutely delighted with the results to-date and the level interest they have generated in wave energy. We have always felt that all the conditions existed for the successful generation of energy from the sea and our views have been strongly validated since we began testing off the west coast in 2006,”* said Mr Keating.

Dr Tony Lewis of UCC is also very excited by test results and the potential of wave energy. He is delighted that the Government has recognised the potential of OceanEnergy for Ireland and invested a €23 million programme of activity, grants and supports. He believes Ireland has incredible potential for wave energy generation. *“If Ireland can capture this opportunity we have the potential to create a substantial number of jobs, solve our energy problems, and become a world leader in the production of wave energy devices,”* he said. Dr Lewis sees no reason why OceanEnergy should not become a world leader in the production of wave energy generation devices: *“This business is in its infancy. You can’t go out and buy a*

*commercial wave energy device. It's a whole new industry, similar to the car industry when Henry Ford started."*

The OceanEnergy sector has the potential to create:

- Up to 4,000 new jobs in Ireland
- Earnings potential of over €1 billion for Ireland
- Up to 750,000 tonnes reduction in our annual CO2 emissions.

### **Note**

Ocean Energy is the most advanced wave energy technology company in Ireland and one of the top three in the world. The company has pioneered wave technology in Ireland over the last six years with the help of UCC, the Irish Marine Institute and Queens University Belfast. UCC's Hydraulic Marine Research Centre has worked with Ocean Energy from the outset and captured and analysed the Galway Bay data from the Ocean Energy's OE Buoy over the last two years. The results confirm previous findings obtained in earlier tank tests carried out by HMRC staff at *Ecole Central de Nantes*, France and in the UCC.

Ocean Energy was founded in 2002 by Michael Whelan and John McCarthy.

Michael Whelan has over 30 years experience working in an offshore environment as a commercial diver and salvage expert operating his own towing and salvage company. John McCarthy is an accountant by profession and has been heavily involved in the development of onshore wind generation. John Keating holds a degree in Business Studies specialising in Accountancy and Finance. He is a Director of Firestone Developments Limited a specialist services company with particular skills in the areas of tax based property transactions and was recently appointed to the board of OceanEnergy Limited.

The OE Buoy is a floating system which has a high wave energy capture efficiency. It has a robust shape, which ensures full seaworthiness and good survivability. The hull is well suited to conventional shipyard production techniques. The device is barge shaped and is easy to tow and moor on station and is designed to operate in water depths of between 30 and 50 metres.

The 32 tonne OE Buoy was assembled at Cork Dockyard and after stability trials in Cork Harbour was towed to Galway, where it was moored off Spiddal on Christmas Day 2006. The device has been subjected to a wide range of wave conditions including a severe storm on New Year's Eve 2006 when a wave height of 8.2 metres was experienced. The mooring system had no difficulty coping with these conditions and the whole system did not suffer any ill effects from the extreme waves.

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