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## PRESS RELEASE: IT Power Awarded FCO Contract to Develop UK-China Ocean Energy Co-operation

London and Beijing, September 29<sup>th</sup>, 2011:

IT Power has been awarded a contract by the British Foreign and Commonwealth Office (FCO), as part of its China Prosperity Strategic Programme, to establish co-operation between the UK and China on Ocean Energy. Working with the Sustainable Energy Research Group (SERG) at the University of Southampton and Chinese partners including the China National Offshore Oil Corporation (CNOOC) and the China Ocean Energy Society, the team will study the wave and tidal energy resources of China's seas and prepare a Road Map for development and deployment. Technology co-operation between British manufacturers, researchers and developers will be facilitated.

The Project was launched today in Beijing.

The Launch Meeting was chaired by Mr. Li Baoshan, of the Ministry of Science and Technology (MOST) and Secretary General of the China Renewable Energy Society (CRES.)

Prof. Bernard McNelis, co-founder and Managing Director of IT Power said: "IT Power has been developing Ocean Energy solutions for over 25 years, and coincidentally we have also worked in China for the same length of time. We opened our Beijing Office 10 years ago and have long been discussing tidal and wave energy with Chinese colleagues. It is a fantastic development that the FCO is now supporting this work."

Additionally, Mr. Sebastian Wood, HM Ambassador to the People's Republic of China commented that: "The UK-China co-operation on clean and low-carbon energy is high on the agenda of our bilateral relations. There are enormous possibilities for collaboration to develop and use new renewable energy technologies, and ocean energy is one of the most exciting."

Prof Bahaj of the University of Southampton and head of SERG, indicated that "the UK is currently a market leader in the development of ocean energy, having ambitious targets to install about 2 giga-watts of generation capacity by 2020 and up to 30 giga-watts by 2050. It will be interesting to see Chinese targets being set for this important field of low carbon technology and the FCO project should help in refining policy that could lead to target setting and provide support for UK-China Ocean Energy Co-operation in this field of ocean energy". The project will have important outcomes that will establish how much electricity can be generated from China's ocean resource as well as identifying investment needs that will promote low-cost manufacturing capabilities for ocean energy devices and balance of systems.

China already has ambitious installation targets to achieve by 2016 for onshore wind (60 giga-watts) and solar PV (5 giga-watts) as set out in its 12<sup>th</sup> Five Year Plan published In February 2011. The plan also stated that China will develop ocean energy technologies and set up commercial demonstration projects for tidal and wave energy, in combination with offshore wind. Currently there are no targets for potential electricity generation capacity. The UK-China Ocean Energy Co-operation project will provide the necessary preliminary resource and economic data to enable the Chinese Authorities to set provisional targets and develop the necessary policies to meet them. The team will work closely with the National Energy Administration (NEA), the Ministry of Science and Technology (MOST) and the National Ocean Administration (NOA).

Mr. Liang Zhipeng, Deputy Director General for New and Renewable Energy said: "The NEA is promoting the deployment of renewable energy across China and we want to harness the power of our seas. We look forward to the results of this project which will enable us to better assess the economic potential for tidal and wave power."

The first activity of the Project was a Study Tour by Chinese experts to the UK, in combination with the European Wave and Tidal Energy Conference (EWTEC), at the University of Southampton 7-17<sup>th</sup> September 2011, with visits to key projects and test centres, including Pelamis in Edinburgh, SeaGen in Belfast, Narec in Newcastle and EMEC in Orkney.

There will be a Project Launch in London on 13<sup>th</sup> October.

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Notes to editors:

Partner information:

IT Power is celebrating 30 years in business. The firm was founded by Anthony Derrick, Peter Fraenkel and Bernard McNelis is 1981, after the three had already been working together for 3 years under the banner of the Intermediate Technology Development Group (ITDG). Since then IT Power has successfully completed more than 1,500 renewable energy and carbon projects in 120 countries. IT Power is at the forefront of ocean energy and was the UK's pioneer in tidal stream energy. Peter Franekel presented a paper proposing the harnessing of tidal water flows using turbines at the *Future Energy Concepts* Conference in London in 1979. It took nearly 15 years to realise the first tidal turbine which IT Power installed in Loch Linnie in Scotland in 1993. This generated only 10 kilowatts, but it proved that the concept was feasible. It then took 10 years of research, development and fundraising before IT Power installed the World's first demonstration-scale tidal turbine, the *SEAFLOW*, rated at 300 kilowatts, off the North Devon Coast in 2003. This is now being taken to commercialisation by a spin-off company, Marine Current Turbines Ltd. (MCT), which is operating a 1.2 MW full-scale machine near Belfast in Northern Ireland. <u>http://itpower.co.uk/</u>

The University of Southampton (SOTON) has Research Councils' grant income amongst the highest in the UK with a current portfolio in excess of £169M. The University is at the forefront of ocean energy conversion research and development addressing fundamental studies, development of devices and understanding of the wave and tidal resources. Marine energy research and development is conducted within the *Energy and Climate Change Division* (ECCD) encompassing the Sustainable Energy Research Group; SERG, which was established in 1990 (http://www.energy.soton.ac.uk). ECCD work includes fundamental understanding applicable to 1<sup>st</sup> and 2<sup>nd</sup> generation device design, array interactions (experimental and numerical modelling), performance data collection, device modelling tools, performance guidelines & technical specifications. ECCD is led by Professor Bahaj who is internationally known for his research in a number of areas of offshore renewable energy, has over 230 publications many of these in the field of wave and tidal energy and is the PI for a number of EPSRC/RCUK/TSB funded consortia in the energy and environmental fields. He is currently supervising co-supervised 9 PhD/EngD students, half of these in the research areas marine energy.

The China National Offshore Oil Corporation (CNOOC) is a state owned enterprise and is the largest offshore oil development corporation in China, with 30 years experiences in ocean engineering. CNOOC has now set up its renewable energy development department, and ocean energy technologies and project development is one of its main strategies. CNOOC will be the partner as project developer on ocean energy and will provide expertise and experiences on ocean engineering and resource assessment. <u>http://en.cnooc.com.cn/</u>

The China Ocean Energy Society (COES) is the only industrial and academic association on ocean energy in China. It has 54 members, including R&D research institutes, project development companies, as well as related industries. COES will contribute to the ocean energy network, resource assessment, policy consultation and output dissemination for this project.