

LES Scotland – “A Renewables IP Green Tea” May 2010

The Renewables IP Green Tea provided an excellent platform to discuss current IP and general trends within the renewables sector. The event was hosted by recently inaugurated LES Scotland Chair Stephen Robertson, who welcomed the audience and introduced the speakers who gave an insight into the IP and broader issues facing renewables. A lively debate saw the participants discuss the extent to which time should be spent protecting IP and whether more could be done to formulate an IP policy within the sector.

Speakers:

Mervyn Jones of Aquamarine Power, the wave energy developer whose Oyster 1 wave power device was installed at the European Marine Energy Centre (EMEC) in Orkney, Scotland in the summer of 2009.

Mervyn briefly summarised the global challenge the world faces in relation to energy consumption, including: climate change, security of supply, and the historically low growth rates of new energy technology. He then went on to describe tensions that exist in trying to develop new renewable technology: the difficulty with deploying machinery, the time it takes to carry out R & D, the way in which regulatory regimes struggle to keep pace with developments, the availability of capital and the length of time it takes to secure IP.

Mervyn explained the nature of the renewables sector, and the divergent nature of technologies, which means the related IP currently paints a vast and complex landscape and poses problems in its management. By way of illustration, consider that, notwithstanding other forms of renewable energy, there are more patents relating to wind energy than in the mobile phone sector!

With so many competing technologies in the energy market, Mervyn considers it hard for Companies to identify their direct competitors and to become more competitive versus other forms of technology, and therefore more collaboration maybe necessary in the renewables space.

Alex Reid, part of the Scottish Government’s Offshore Renewables Team and involved with the Saltire Prize Competition. The Saltire Prize is a £10 million challenge prize for technological advances in wave and tidal energy.

Alex highlighted the huge opportunity for Scotland to become the “Saudi Arabia of the marine world” by harnessing the estimated 21.5 Gigawatts (GW) of commercial marine energy capacity from the waters around Scotland. He also reinforced the Scottish Government’s commitment to building confidence and assisting companies overcome hurdles to initial deployment of renewable energy devices.

Based in Orkney, the European Marine Energy Centre (EMEC), is the worlds only grid connected wave and tidal test centre. EMEC, receiving around £20m of government funding is illustrative, Alex said, of the governments commitment to renewables. He highlighted some of EMEC’s work and stated how the centre was designed to work closely in partnership with industry to develop marine and tidal technology.

Alex received a number of questions about the Government's Saltire Prize to be awarded to the team that can demonstrate in Scottish waters, a commercially viable wave or tidal stream energy technology that achieves the greatest volume of electrical output over the set minimum hurdle of 100GWh over a continuous 2 year period using only the power of the sea.

Alex suggested this was a great initiative to capture imaginations and encourage renewable development in Scotland much like the Ansari X Prize of \$10 million which led to \$200 million in R&D in the field of space exploration.

Robin Smith of 4C Design is a design engineer, business owner and innovation specialist. His consultancy business has helped over 200 UK companies turn their ideas into viable products.

"Houston we have lift off!". Robin talked us through his experiences in developing new products and coming up with novel solutions for clients in the renewables sector, likening his team's methodology to NASA's problem solving expertise used on the Apollo 13 mission.

Robin recounted how AWS Ocean Energy approached 4C Design to help solve a tricky and detailed design problem within their new wave power generator. Robin described 4C Design's process for reaching solutions to challenges within the renewable energy space and the satisfaction his team derived from working for clients in the sector.

Ian Phillips, has gained over 27 years experience in the oil and gas industry and is a founding Director of CO₂DeepStore Limited, one of the first companies specifically seeking to provide the service of the deep geological storage of CO₂.

After outlining the extent of the climate change problem, Ian explained that renewable energy was currently not in a position to provide the world's energy needs and that the reliance on hydrocarbon fuels was likely to continue for the foreseeable future. In response to this situation he and the other three directors set-up CO₂DeepStore Limited to realise the aim of capturing and storing CO₂.

The Company's solution is to take captured CO₂, then, using conventional oil field technology, inject the CO₂ deep underground to store it safely and indefinitely. Although much of the IP is not new and has been adapted from the oil and gas industry, Ian explained that there is value in the Company's methodology and the trade secrets it holds. This value has recently been recognised with the company being bought by Petrofac group.