



Background

Hann-Ocean Technology has developed a patented Wave Energy Converter, designed to absorb, concentrate and convert wave energy into electricity whilst reactively cancelling or reducing the reflective wave energy of sea waves.

Project Objective

Narec has collaborated with Hann-Ocean to conduct a series of controlled evaluation tests of their Drakoo III Wave Energy Converter device.

The device was suspended in the purpose built Wave Flume Test tank under controlled conditions where it was exposed to a variety of simulated sea states. This included being bombarded with a series of waves of up to 1m high. The device was then evaluated to test the power conversion efficiency and predict how it would react in marine conditions.

The performance of the device was measured both at the shaft and at the output of the electrical convertor in order to gain a true understanding of its behaviour and to establish potential future improvements. Analysis of the power performance generated an accurate power curve profile.

Project Outcome

The Drakoo III device successfully completed sea trials in Singapore in May 2011.

The prototype test identified a number of areas for further improvement and Narec's engineers are now working with Hann-Ocean Technology to help refine the device ready for further trials in September 2011.

