

# INNOVATIVE WAVE-ENERGY CONVERTER

## LEAD ORGANISATION

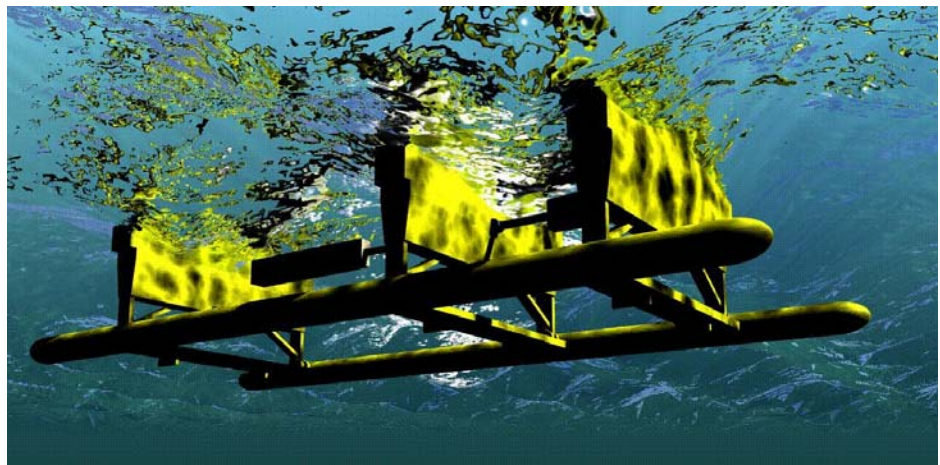
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## COST AND DURATION

The Carbon Trust contribution towards this project is £161,195. The project started in June 2006 and is due for completion in February 2007.

## PROJECT REFERENCE NUMBER

051-319



Artist's impression of a C-Wave system floating just below the water surface

## OBJECTIVES

The objectives of this project are to:

- Reduce the technical risk associated with implementing the C-Wave technology in a pre-commercial trial
- Provide 'independent validation' by experienced subcontractors of technical, cost and performance to substantiate a business plan, and give confidence to investors to go forward to a pre-commercial trial and, ultimately, a commercial phase
- Cement existing, and develop new, technical, commercial and investment partnerships required to take the project to pre-commercial trials
- Build the core strengths of the C-Wave organisation to take the project to the next stages.

## SUMMARY

C-Wave is developing innovative wave-energy converter technology that has the potential to achieve generating costs that are competitive with established renewables, such as wind power. The technology will be used to build floating wave farms in deep water 5-10km offshore.

Using a unique operating mode, it efficiently extracts energy from normal waves and dissipates the forces of storm waves.

C-Wave believes that its current cost projections are substantially better those predicted in the Carbon Trust report *Future Marine Energy* (published Jan 06), with large-scale costs of <£1,500/kW installed capacity being achievable within five years. The technology has been demonstrated in 1:20 scale trials where the system was shown to have high energy capture, and low structural and mooring loadings in simple and complex wave patterns. This project will take the C-Wave technology to the next stage of pre-commercial proof.

C-Wave has a solid engineering and business plan to attain pre-commercial proof of the technology by 2008, and this project is the first stage of that plan.

C-Wave engineers will lead and be heavily involved with all aspects of the technical studies. However, the implementation of the work will be subcontracted to experts in the respective fields to benefit from their experience and to provide a 'respected industry validation' of the results.

