

# Wärtsilä Contributes to Wave Energy Project



Wärtsilä will support the development of the WaveRoller wave energy convertor, designed by Finnish company AW-Energy, with a series of sub-assemblies for a prototype. The patented WaveRoller device harnesses the energy of ocean waves and turns it into electricity. It consists of a submerged steel panel, which is located near an ocean shore. As waves move back and forth, the mass of water moves the steel panel.

Then hydraulic piston pumps transfer fluid inside a closed circuit into a hydraulic motor that drives an electricity generator, creating an energy output between 500 and 1,000kW per panel, depending on the intensity of the waves. The device needs no fuel, which makes it attractive from both an ecological and an economical point of view.

Wärtsilä is supporting AW-Energy by providing technology and marine industry expertise to develop the WaveRoller into a commercially viable product. The project itself involves installing a single WaveRoller unit off the coast of Portugal, at Peniche, for a year.

The crucial components to be supplied by Wärtsilä include metallic bearing housings, composite bearings, lip seals and hydraulic couplings. Wärtsilä will also provide the necessary installation services for the sub-assemblies. In addition to these products and services, Wärtsilä can also offer its experience and knowhow in marine solutions, including wave and tidal power, to support the product development of the WaveRoller; with both AW Energy directly and its project partners, such as Lloyds Register.