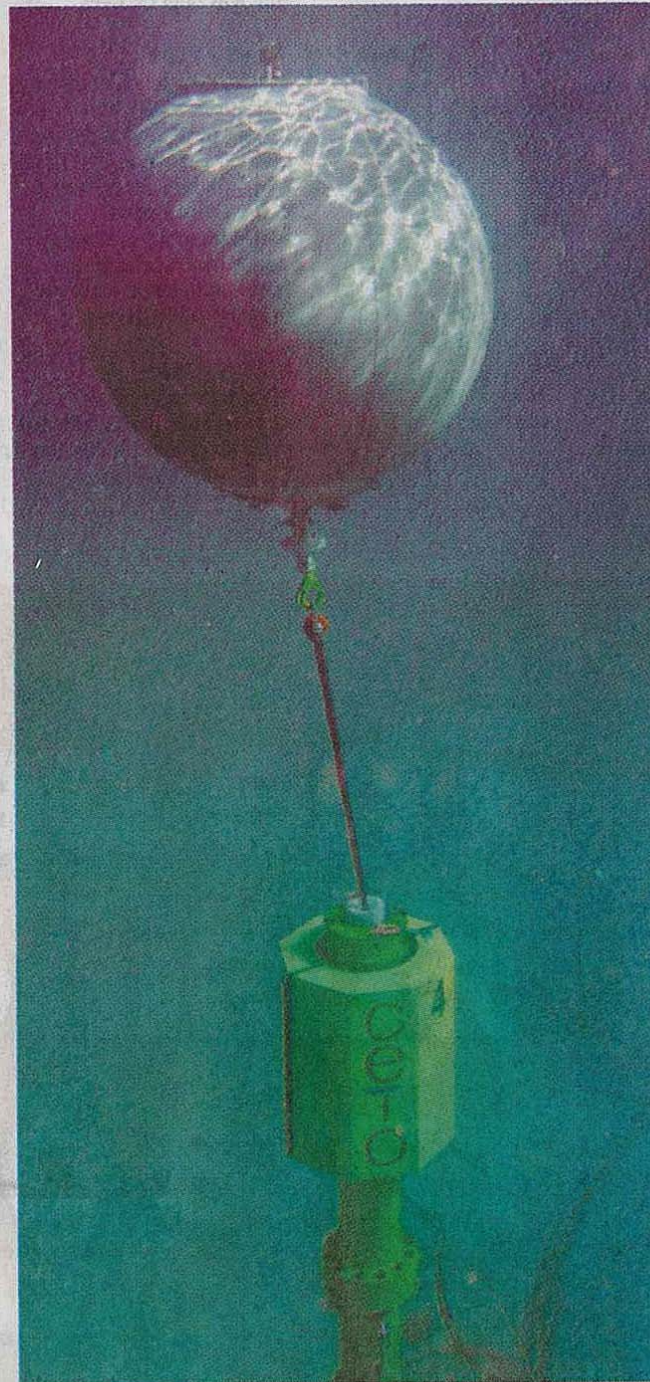
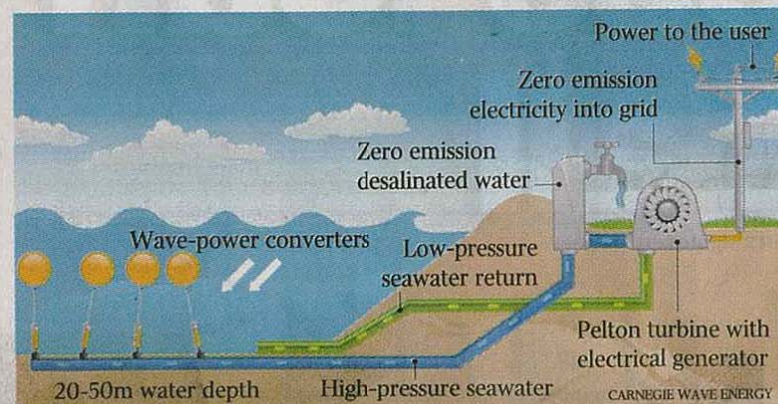




Mike Ottaviano, managing director of Carnegie, says the CETO wave-power converter uses high-pressure seawater to produce zero-emission electricity and desalinated water



A CETO unit off the coast at Fremantle

West ready for clean energy's new wave

A \$50m wave farm will be powering thousands of homes in Perth from 2011

AMANDA O'BRIEN

CONSTRUCTION of Australia's first commercial-scale wave-energy farm will start within weeks after the West Australian government signed an audacious plan to power thousands of Perth homes from the ocean.

Australia's Carnegie Corporation, which developed the technology, said the \$50 million project would take a year to ramp up but would be feeding electricity into the power grid from 2011, creating enough energy to power 3500 homes.

Carnegie chief Michael Ottaviano said the success of the wave-power project in Perth would immediately trigger the construction of a string of plants in Australia and overseas as the world moved to lift renewable energy and cut emissions.

"The world is watching, there's no doubt about that. Every large power company globally is watching what's happening here off Perth over the next six to 12 months," he told *The Australian*.

Wave power produces no greenhouse emissions and Dr Ottaviano said it was so highly valued in Europe that the British government was prepared to pay five times the price of other energy sources to attract wave projects.

Carnegie's technology is

unique because it is the world's only fully submerged system.

The licence signed by the West Australian government gives Carnegie three years' access to the seabed around Garden Island, 50km from Perth, for an initial 5mW plant.

A specialist rig is on its way from the northwest to start laying the underwater footings to anchor the submerged buoys and pumps that will generate the wave power.

"We've just been waiting for the green light on the licence, for them to push the button on that, and we were ready to go. It will start before Christmas," Dr Ottaviano said.

State Energy Minister Peter Collier said only 3.8 per cent of Western Australia's electricity came from renewable energy and the state was "looking down the barrel" trying to reach Australia's target of 20 per cent renewable energy by 2020.

"At the moment, most of what we have in WA is wind power, which is intermittent, so wave power is very exciting," he said. "We have a decade to quadruple our renewables, and it's exciting that Carnegie is already talking about a 50mW plant once the 5mW plant is finished."

Dr Ottaviano said the waves around Garden Island were non-stop, ensuring reliable power supply.

He said the technology had been tested in 8m of water at one-third scale in a pilot project in Fremantle, and it was now a matter of proving it worked at depths of 25m around Garden Island, before the technology went global.