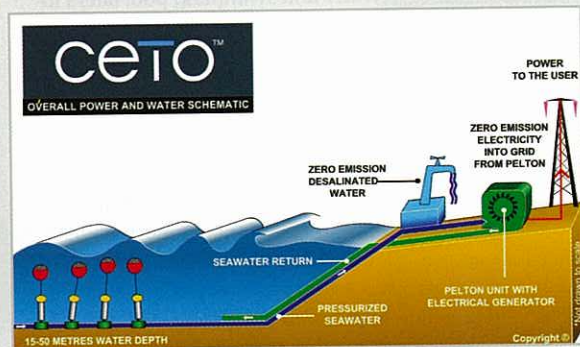
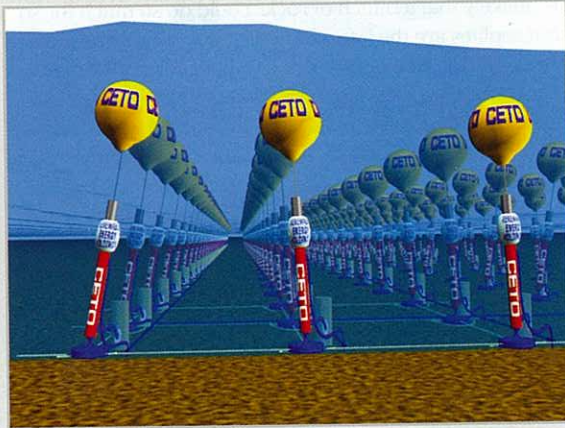


## Waving it in



After the oil crisis of the 1970s, wave energy technology was touted as an alternative energy form with a big future. Large, platform-mounted power generation systems were modelled and built, but nature's ferocity saw many literally sink to the ocean floor in the first storm.

Lessons were learnt and R&D continued, and today Perth-based Carnegie Corporation is at the forefront of wave farm technology with CETO, a unique wave power converter.

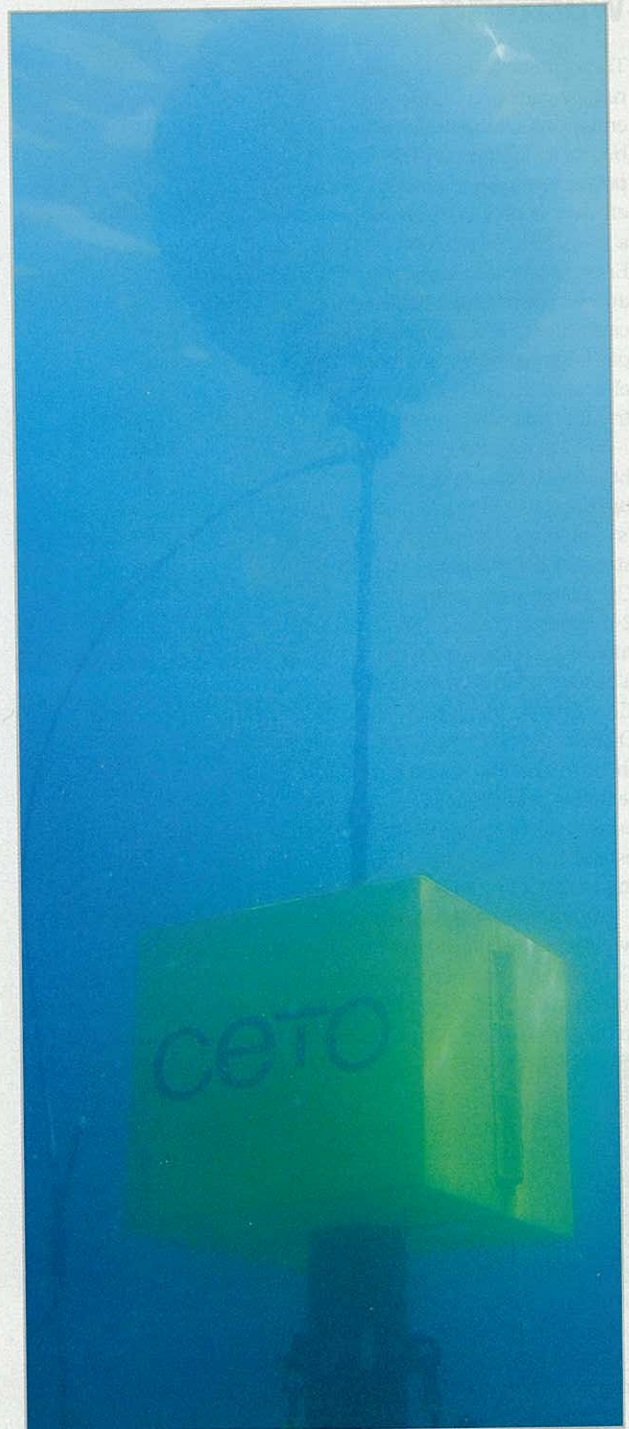
"CETO is the only wave technology to be fully submerged and that doesn't generate electricity offshore. It's actually just a pumping technology. It has a buoy that's moved up and down by the swell under the ocean surface, which drives a pump sending high-pressure sea water ashore. Onshore, the water spins a hydro-electric turbine," says Carnegie Corp CEO Michael Ottaviano.

The pressurised sea water can be used for zero-emission power generation or desalinated via reverse osmosis to produce zero-emission fresh water, depending on demand.

With a test bed in Fremantle producing positive results, Ottaviano expects to roll out full-scale commercial wave farms, consisting of hundreds of CETO buoys, from 2010. Carnegie Corp will build, own and operate all southern hemisphere farms, while the world's largest power company, EDF, has rights to the northern hemisphere.

"We expect hundreds of megawatts of installed capacity to be operational in the next decade. So, we'd sell to governments and power companies, and do bi-lateral off-takes to industrial users, for power and water."

Unlike other forms of renewable energy, Ottaviano says wave power has the capacity to provide base load power.



"Wind resources produce energy 30-35 percent of the time, solar 25 percent. The best wave sites, from Brisbane right around the southern coast to Geraldton, offer 500,000 megawatts of recoverable wave energy. The total installed capacity of Australia is 50,000 megawatts. Ten times what we currently generate is available in the ocean."

[www.carnegiecorp.com.au](http://www.carnegiecorp.com.au)