

The Aotearoa Wave and Tidal Energy Association (AWATEA) is a registered incorporated society. Its aim is:

“AWATEA will promote, aid and foster a vibrant and viable marine energy sector in New Zealand”.

www.awatea.org.nz

Role: AWATEA will be the national association for the representation of industry and research interests in marine energy and its uses.

Objectives: AWATEA has the following objectives:

- 1: to **promote the marine energy industry** in New Zealand, including research, energy generation, marine fabrication and marine services;
- 2: to **increase recognition and utilisation of marine energy** as another energy source in New Zealand's supply portfolio;
- 3: to act as a **centre for advocacy of marine energy**, including lobbying, drafting and making submissions to the Government and representing the views of the marine energy industry;
- 4: to assist in the **exchange of information about the marine energy sector** and to provide and publish statistics and informed commentary on issues affecting the uptake of marine energy in New Zealand;
- 5: to be a meeting place for marine energy industry participants; and
- 6: to **represent the New Zealand marine energy industry** to national bodies, including government agencies, non-governmental organisations and other industry bodies, as well as liaising with any relevant international bodies.



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blue energy :

making waves

19 May 2009



Icon Room
Te Papa Tongarewa
Wellington



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blue energy : making waves

Welcome to **blue energy: making waves**, AWATEA's third national conference on marine energy.

blue energy made waves in 2008. The first MW-scale tidal stream turbine produced electricity and the world's first commercial wave farm began operation. Here at home the first resource consents for a marine energy project were granted and others began the road through the Environment Court process. And the first award under the Marine Energy Deployment Fund was announced.

Will 2009 be as significant at home and overseas and what can we do to make it so?

Please note: we will start promptly at 08.45

blue energy: making waves

am

New Zealand Scene

To open proceedings, the **Hon. Gerry Brownlee**, new Minister of Energy and Resources, will give us the new Government's views on marine energy and renewables in the present economic context. This will be the first opportunity to hear the Government's plans for marine energy under its stewardship.

AWATEA's Executive Officer, **Dr. John Huckerby**, will review work undertaken by the Association in the last year and describe plans for the coming year.

Bryan Gundersen will put the future of renewables in their international context before **Anthony Hopkins** describes the past and present work on Crest Energy's tidal project in the Kaipara Harbour.

New Zealand's Resources

An understanding of our marine energy resources is fundamental to assessing the size of the opportunity and potential locations. **Peter McComb**, **Ross Vennell** and **Murray Smith** will each describe their work on wave and tidal energy resource assessments.

Viki Vaganov will describe the tidal energy resource of Cook Strait and its potential as a testing site will be discussed.

pm

Devices and Deployments

Deployments have always been a big theme at AWATEA meetings. **Neil Kermode**, Chief Executive of EMEC, to talk about the deployments at EMEC and the view from Scotland.

Jochen Weilepp of Voith Hydro will describe his company's very significant investments in tidal energy announced in March. **Matthew Seed**, Chief Executive of Wavegen, a subsidiary of Voith Hydro, will then describe Wavegen's projects, which includes LIMPET, the world's first grid-connected wave device. Lastly **Alister Gardiner** will describe progress with modelling of power flows for the home-grown WET-NZ device.

Planning and Connectivity

The last session is dedicated to infrastructural issues. **Ray Brown** will talk about grid connection of renewables and **Cushla Loomb** will talk about national and international planning issues. **Emily Rudkin** will describe her experiences of establishing marine energy projects in the UK.

Taming a Hostile Environment

Chris Laidlaw, Greater Wellington Regional Councillor, will lead a discussion with a panel drawn from the speakers, based upon questions submitted by the audience during the day.

Programme

			SPEAKER	SUBJECT AREA
am	08:45–09:00	30	Dr. John Huckerby Executive Officer, AWATEA	Welcome and Introductions
	New Zealand Scene			
	09:00–09:30	30	Hon. Gerry Brownlee Minister of Energy and Resources <i>Keynote Speaker</i>	
	09:30–10:10	40	Bryan Gundersen Kensington Swan, <i>Keynote Speaker</i>	Renewables as a Way Forward
	10:10–10:30	20	Anthony Hopkins Crest Energy Kaipara Limited	Lessons Learned (so far) in a Tidal Project
	10:30–10:45	20	Dr. John Huckerby Executive Officer, AWATEA	Report on AWATEA Activities
	10:45–11:10	25	MORNING COFFEE	
	New Zealand's Resources			
	11:10–11:30	20	Dr. Peter McComb Metocean Solutions Limited and Power Projects Limited	Marine Energy Resources in New Zealand
	11:30–11:50	20	Dr. Ross Vennell Otago University	How Much Power Can we Get from Cook Strait?
	11:50–12:10	20	Murray Smith NIWA	Oceanography of Tidal Stream Energy in NZ: Cook Strait and Beyond
	12:10–12:30	20	Viki Vaganov GNS Science	Cook Strait Ocean Tidal Current Resources – A Test Bed for Operational Systems
	12:30–13:30	60	LUNCH: SPONSORED BY TRANSPOWER	
	Devices and Deployments			
pm	13:30–14:10	40	Neil Kermode EMEC, <i>Keynote Speaker</i>	European Marine Energy Centre and the Scottish Perspective
	14:10–14:30	20	Jochen Weilepp Voith Hydro Holding GmbH	VH's Tidal Turbine Technology – Optimised to Achieve Minimal Maintenance Costs
	14:30–14:50	20	Matthew Seed Wavegen Limited	Concept to Commercialisation – Challenges for a Wave Energy Technology
	14:50–15:10	20	Alister Gardiner and David Findlay Industrial Research Limited and Power Projects Limited	Progress in Modelling of Power Flows in a Wave Energy Converter
	15:10–15:40	30	AFTERNOON TEA	
	Planning and Connectivity			
	15:40–16:00	20	Ray Brown Meridian Energy Limited	Lessons Learnt Connecting New Technologies to the NZ Power System
	16:00–16:20	20	Cushla Loomb and Deborah Robertson BECA Planning	Planning for 'Blue Energy'
	16:20–16:40	20	Emily Rudkin MWH	Marine Energy Developments and Associated Infrastructure – Lessons Learnt from the UK
	Panel Discussion – Taming a Hostile Environment			
	16:40–17:30	50	Chris Laidlaw Facilitator, Speakers' Panel	Questions submitted by audience ballot
	17:30–18:30	60	DRINKS: SPONSORED BY GARRAD HASSAN	