

## PORT MACDONNELL WAVE ENERGY CONVERTER

Name of person filing the form

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Project name: Port Macdonnell Wave Energy Converter

Project description

*Project Developer:* Oceanlinx Ltd.

*Technology type:* Fixed Device, Oscillating Water Column

*Resource:* MHK (wave)

*Project scale:* Commercial demonstrator

*Installed capacity (MW):* 1 MW (installation 2013)

*Additional Description:* The 20m by 20m shallow water variant floating greenWAVE device is a rigid structure with no contaminants onboard and no moving parts under water. Two thirds of the structure is underwater.

*Project Website:* <http://www.oceanlinx.com/projects/south-australia>

Location: Up to 4km off the Port Macdonnell coastline in South Australia (38°3'S 140°42'E), where the wave resource is one of the best along the southern margin. The local region has a population of just over 1000 of which the main industries are forestry, fishing, and agriculture. Port Macdonnell is one of the busiest fishing harbours along the Limestone Coast and contributes significantly to the rock lobster industry of South Australia which has an annual commercial catch in the region of 2500 tonnes and export revenue in the order of \$110 million per year.

Process status: The Australian government has awarded funding of \$3,970,450 from the Emerging Renewables Program (ERP) for this \$7,242,550 project. The project is anticipated to take 12 months, with grid connection in late 2013. Oceanlinx have developed a consultation process, third party verified to follow best practice, which has been engaging local stakeholders in the project since late 2010. Oceanlinx representatives first addressed the local council, District Council of Grant, in October 2011, and will do so again in the near future. The first public meeting was held in Port MacDonnell on 2nd August 2012 where the project was presented and issues and concerns were addressed by Oceanlinx CEO Ali Baghaei and Project Analyst, Sean Barrett. Support for the project was measured at 64% with the remainder undecided and no objections were recorded.

Licensing information: N/A

Environmental issues: As there are no contaminants on board and no moving parts under the water line it is safe for marine life to move in and around the device. The device acts in a similar way to a natural sea cave and is expected that the impact on the local flora and fauna will be minimal, if not beneficial by acting as an artificial reef and encouraging growth. The devices will be deployed at distances that are far enough offshore to have minimal visual impact in its surroundings and standard industry level noise emissions that will pose no threat to marine mammals or birds. We hope to play a significant role on contributing to reducing Australia’s carbon footprint and meeting the Federal Government’s Renewable Energy Target.

<http://www.oceanlinx.com/technology/environmental-benefits>

Baseline and project effects studies: Port Macdonnell Wave Energy Converter				
General description		Studies conducted prior to installation.		
Receptor	Study description	Design and methods	Results	Status
Socio-Economics	Commercial Fishing Restrictions.	Meet with local fishermen to discuss concerns.	Device design ensures there is no conflict with fishing activities in the area, such as the imposition of exclusion zones, which would further reduce the available fishing area.	Completed
Reports or papers	-			
Research projects	-			

Monitoring and adaptive management: Port Macdonnell Wave Energy Converter				
General description		Post-license monitoring plans		
Receptor	Study description	Design and methods	Results	Status
N/A	N/A	N/A	N/A	N/A
Reports or papers	-			
Research projects	-			