



Energy Efficiency and
Conservation Authority
Te Tari Tiaki Pūngao

New Zealand Marine Energy Deployment Fund Fund Definition Document



Introduction

The Marine Energy Deployment Fund (the Fund) has been established as a Government initiative to support innovative new and emerging renewable energy technologies.

The Energy Efficiency and Conservation Authority (EECA) administers the Fund on behalf of the Minister of Energy and Resources.

This document, entitled the Fund Definition Document, sets out the details of the Fund including scope, principles, project eligibility, assessment criteria and definitions. This document will help to inform decision making for Funding Round Three (2009/10).

Other relevant documents are:

- **Application form**

Applicants will need to be familiar with the Fund Definition Document before making an application to the Fund.

- **Draft grant contract**

To assist applicants, a draft grant contract is available on the EECA website:
www.eeca.govt.nz/marine-energy-fund

It will provide a preliminary indication of the type of contractual arrangements which EECA envisages entering into with the successful applicant or applicants. However, as a negotiation process will be involved, aspects of the draft grant contract may change.

Timetable for Funding Round Three

July 2009

- Funding Round Three opens on Friday 31 July 2009.

November 2009

- Applications for Funding Round Three close at **noon** on Monday 23 November 2009.

December/January 2009

- Funding panel assesses applications. EECA then makes recommendations to the Minister of Energy and Resources.

February 2010

- Contract negotiation.

March/April 2010

- Minister of Energy and Resources formally announces the successful applicant(s).
- First disbursement of funds.

The timetable for Funding Round Four (which will occur in the Government financial year 2010/11) will be set following the completion and review of Funding Round Three.

All applications should be sent to:

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Purpose

The purpose of the Fund is to bring forward the development of marine energy in New Zealand by facilitating early deployment and adaptation of the technology.

Objective

The objective of the Fund is to provide capital grants to developers who wish to deploy wave and tidal stream energy devices in New Zealand.

Principles

The principles of the Fund are as follows:

- To support projects that will install and deploy wave and tidal stream energy devices in New Zealand.

What is wave and tidal stream energy?

Wave energy can be defined as the extraction of useful energy from the motion of water in surface water waves on the sea.

Tidal-stream energy (sometimes referred to as tidal current) can be defined as the direct extraction of kinetic energy from the motion of water in naturally occurring tidal currents in the sea.

A device is defined as a single machine that converts wave or tidal stream energy into electricity.

- To support projects that are **pre-commercial** in nature.

What is a pre-commercial device?

Pre-commercial projects/devices are those that **could not** be deployed in New Zealand on commercial terms and may include:

- Projects that seek to test or adapt working devices to site-specific conditions for subsequent deployment.
- Projects that deploy working pilot devices and scaled up prototypes provided that the electricity generated can be exported to a **useful load** (see below for the definition of **useful load**).
- Imported wave and tidal stream technologies that have been commercially deployed overseas due to Government subsidies (e.g. feed-in-tariffs and/or capital grants).
- Projects that seek to develop or test marine energy devices that will not be deployed in the ocean and connected to a useful load are not considered to be pre-commercial for the purposes of this Fund and will not be eligible for the Fund. An example would be a project that seeks funding for wave tank testing. Funding for such projects and/or projects that are in the basic and applied research and development phases may be available through the Foundation for Research, Science and Technology funding streams www.frst.govt.nz

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- To support projects that have a high probability of being commissioned and are likely to result in the deployment of device(s) that will generate electricity that can be exported to a **useful load** within three years of signing the grant contract.

What is a useful load?

A **useful load** is where the electricity generated from the project is used for a useful purpose. Examples could include situations where the electricity generated from the project is exported to power electronic monitoring equipment onshore (or offshore), to power a nearby house or milking shed or to power a remote island or coastal community.

- To support projects where the capital grants from the Fund will be a key element in the success of the project's commissioning.

What is project commissioning?

A project is considered commissioned once the applicant has verified to EECA's satisfaction that the device or devices and associated equipment and/or infrastructure (including electricity export cables) are fully operational.

- To support, but not necessarily be limited to, projects near islands or coastal communities currently reliant on diesel-fuelled electricity generation, and/or where grid/local network or direct standalone electricity user connections exist.
- To support, but not necessarily be limited to, projects that will help to inform the Government and the wider marine energy industry of the key technical challenges and the economic, environmental and social benefits and costs associated with deploying wave and tidal stream technologies in New Zealand.

Eligibility

Successful projects will need to be aligned with the Fund's purpose, objective and principles. Projects will also need to meet **most or all** of the following **eligibility** criteria:

- Applicants must be legal entities that are registered in New Zealand¹.
- Applicants must provide evidence that the project has all of the necessary third party finance to proceed to commissioning at the time of applying for funding². Exceptions may be made in those instances where third party financing is contingent upon securing funding from the Fund. In these situations a letter of intent from all third party funders would be required. All private sector funding³ must be secured and unconditional at the time of acceptance of the grant contract⁴. Projects that maximise sources of private funding will be ranked higher.
- Applicants must provide evidence that the project has sufficient technical resources and capacity to successfully deliver the project as proposed.
- Applicants must provide evidence and/or confirmation that they can provide the Government with device performance data on an annual basis over the first two years of the project's operation. This would also include evidence that the project can operate a credible management accounting system to record all costs of the project.
- Applicants must provide evidence that all of the necessary resource consent applications for the project will be lodged with the relevant consent authorities within three months of successfully securing a grant from the Fund. Applicants must also provide evidence that any easements and agreements associated with the physical deployment (e.g. network connection agreements) of the project can be obtained within three months of securing a grant from the Fund.

Resource consents

As there is only three years between the time of signing the grant contract and the required time of commissioning, it is highly recommended that applicants commence the resource consent process as early as possible. It is preferable that all of the necessary resource consent applications are secured at the time of applying to the Fund, or that the applicant at least has the resource consenting process underway. However it is acknowledged that for some projects it may not be possible for the necessary resource consents to be secured or to have the process underway at the time of applying to the Fund.

If resource consent has not been secured within one year of signing of the grant contract then the grant may be withdrawn and the money put back into the pool to be used in future rounds of the Fund.

¹ A grant contract can be with a single entity or a consortium. Any application from a consortium will need to provide evidence that members have a collaboration agreement or a joint venture agreement in place prior to making their application to the Fund. Any change in ownership, and therefore transfer of funding, will require the agreement of EECA.

² This would be evidenced by firm unconditional commitments from all sources of finance (including in-kind contributions).

³ Applicants may be able to source funding from other public funding sources. Applicants should attach evidence of such funding to their application form, in particular if they have current funding from FRST for the project.

⁴ For avoidance of doubt, third party finance that is conditional upon achieving project milestones will be acceptable.

All applicants must identify and state any implications for Maori arising from the project, and provide documented evidence of consultation with relevant or affected Maori.

In addition, applicants are expected to provide a certain amount of technical information on their proposal as part of their application, such as:

Project work plans

The project scope and description including device type; evidence of any previous demonstration/deployment experiences and performance; site location; and anticipated environmental effects.

Energy generation information including post-installation capacity; anticipated capacity factors; and the anticipated annual average power output.

Methodology for the device deployment including plans for export cables, maintenance, monitoring and decommissioning; details of mooring structures, cables, anchors, risk mitigation and any potential health and safety factors.

The **Application Form and Notes** and notes provides further details on what information is expected to be provided to EECA when applying to the Fund.

Basis for applications

Applicants should apply on the express understanding that EECA makes no contractual or any other commitment prior to entering into a formal contract or contracts with successful applicants. Specifically, EECA gives no commitment, promise or representation that applications will be dealt with in any particular way, and EECA will not be liable for any loss of any sort whatsoever incurred by an unsuccessful applicant.

Project assessment criteria

A **Fund Evaluation Panel** will assess each project. The panel will consist of a combination of experts from the marine energy industry, the wider electricity industry and business development industry. The panel will be appointed by the Minister of Energy and Resources.

The panel will base each of its project assessments on **assessment criteria including but not limited to the following:**

Project overview

- The project's consistency with the purpose, principles and eligibility criteria of the Fund.

Technical approach and merit

- The status and nature of the technology to be deployed, and the ability of the project to generate electricity and export electricity to the grid/local network or a direct standalone electricity user within two years of receiving grant funding.
- The future deployment and expansion plans for the project and of the applicant.
- The technical management and performance monitoring resources and capabilities of the applicant.

Delivery capability (for the project)

- The financial management and governance capabilities of the applicant.
- The environmental and socio-economic benefits/costs of the project including, but not limited to, potential reductions in greenhouse gas emissions, ability to raise public awareness of marine energy and climate change issues, and short or long term national, regional or local business benefits.
- The ability to return the project site to its original condition in the event of device decommissioning.
- The level, type and nature of the third party finance secured for the project.
- The status of the project's resource consents, easements and grid access agreements.

Business plan assessment

- The benefits/costs associated with the project's electricity export connections into the grid/local network and/or to a direct standalone electricity user.
- The type and nature of the non-financial support for the project, including community support
- Potential effect on Maori taking into account the evidence and outcomes of the applicant's consultation with relevant Maori.
- Evidence of consultation required as part of the Resource Management Act consenting process.

Knowledge enhancement

- The project's strategic importance for development of the marine energy sector.
- The ability of the project to enhance the Government's, and the wider marine energy industry's, knowledge of wave and tidal stream energy.
- In addition, successful projects will also need to be able to demonstrate consistency with the capital grant payment provisions of the Fund.
- All final funding decisions will be made by the Minister of Energy and Resources.

Capital grant payment provisions

The Government has allocated approximately \$8m⁵ to the Fund over a four year period. \$2 million will be available in Round Three.

The maximum capital grant available per project is 40% of its **eligible capital costs** up to a maximum of \$2 million per project in Round Three.

Applicants who have successfully secured a grant from a previous funding round may reapply for new funding in subsequent funding rounds; however they will need to demonstrate clearly why such additional funding is justified.

Eligible capital costs

Eligible capital costs are those costs incurred after signing of the grant contract, and up to and including commissioning of the project (which needs to occur within three years of acceptance of the grant contract⁶). Eligible costs include:

Costs of goods and services necessary to build, install, commission and monitor the device.

Compliance costs for those resource consents, easements and other infrastructure access agreements and conditions deemed to be eligible by the Fund Evaluation Panel.

Costs associated with connections to the grid/local network and/or a direct standalone electricity user.

Device performance monitoring costs.

⁵ Less EECA's administration costs for each funding round.

⁶ The last milestone payment will include a lump sum payment for ongoing device(s) performance monitoring. There is no pre-determined monitoring protocol (ie applicants will need to set out the details of how they will monitor the performance of their device(s)).

Ineligible capital costs

Ineligible capital costs include the following:

The costs of preparing and submitting an application to the Fund (see the Application Form and Notes).

The costs associated with obtaining resource consents, easements and other infrastructure access agreements.

Project decommissioning costs (a decommissioning plan will need to be submitted with the application).

In-kind contributions to the project (for which no charge is being levied against the applicant(s)).

Project costs incurred after commissioning of the project including business cessation costs, bad debt and ongoing operational costs (exemptions may be sought for unusual circumstances – see below for further details), with the exception of the costs for ongoing monitoring and reporting on the project to EECA (which will be part of the final milestone payment).

Special exemptions for ongoing operational and maintenance costs

Applicants will be able to seek operational and maintenance payments for costs post the three year commissioning period. However, as a rule of thumb, exemptions will not be granted unless the applicant(s) is(are) able to demonstrate clearly that such payments are crucial to the overall success of the project.

Applicants will need to provide project cost information as part of their application. The application form and notes sets out the details of what project cost information is expected to be provided to EECA.

Payment methodology

Each grant contract will set out the methodology for how the grant will be disbursed to the successful applicant. Applicants are expected to provide information on how they wish their grant to be paid. It is anticipated, however that grants will be allocated according to specific project milestones such as project commencement, physical site preparation, device manufacture, installation, grid connection, commissioning and monitoring.

Project commissioning

Project commissioning will be required within three years of signing of the grant contract.

If the project has not been fully commissioned within three years of signing of the grant contract, a request to EECA can be made to extend the commissioning period⁷. An example of such a request might be for a situation where the necessary resource consent conditions require extended monitoring and this has delayed the achievement of other project milestones.

EECA will review the request and make a recommendation to the Minister of Energy and Resources as to whether an extension for the project should either be granted or declined. All final decisions on the extension application will be made by the Minister of Energy and Resources.

⁷ An application for an extension will need to be received by EECA prior to the completion of the three year commissioning period.

Information to be published

Announcement of successful project

When announcing the successful applicant(s), the Minister of Energy and Resources will publish the following details on the successful project:

- Identity of the applicant(s);
- Number of devices;
- Device(s) installed capacity;
- Type of technology involved in the device(s);
- Project's geographical location;
- Size of the grant;
- Expected commissioning date; and,
- Expected annual output.

Commissioning of project

On commissioning of the project, the following details on the **capital costs** will be published by the Minister of Energy and Resources:

- Physical site preparation;
- Grid connection;
- Device manufacture;
- Installation and commissioning; and,
- Project management.

Two year performance information

The following project performance information is expected to be provided annually by the successful applicant for the first two years after commissioning of the project:

- Operating and maintenance costs
- Availability of the devices;
- Amount of power generated; and,
- Full characterisation of the site in terms of energy input to the devices including measurements made during the course of the project.

The above information will be used to enhance the Government's understanding of how wave and tidal stream devices perform over 12 months of operation (e.g. to assess seasonal variations). It is considered that it will be necessary to provide performance data for at least two years in order to provide a '12 month operating picture' of the project.

The information provided by the applicants may be used for case studies that EECA may wish to publish on the projects that the Fund supports.

Any information deemed to be commercially confidential by EECA and the applicant will be agreed to within the grant contract and will not be announced and/or published. Applicants are expected to set out their confidentiality requirements in their application to the Fund (see the Application Form and Notes).



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