



MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Advanced Energy Technology Platform



session
2019



Agenda

AETP session 2019

WHAT

WHAT IS THE
ADVANCED ENERGY
TECHNOLOGY
PLATFORM

WHAT ARE WE
SEEKING TO FUND

WHAT FUNDING IS
AVAILABLE

HOW

HOW YOU APPLY

HOW FUNDING
PROPOSALS WILL
BE ASSESSED

HOW FUNDING
DECISIONS WILL BE
MADE
(+contracting &
monitoring)

DISCUSS

OPEN FORUM

KEY DATES

NETWORKING &
REFRESHMENTS



WHAT

is the Advanced Energy Technology Platform?

- What is Advanced Energy Technology?**
- How will the AETP connect with the energy landscape?**
- The Government's Investment Goals for the AETP**
- The expected outcomes and impacts of the AETP**



What is Advanced Energy Technology?

Advanced Energy Technology is technology at **the frontier of innovation**, with the potential to **advance and disrupt** global energy markets

We define advanced energy technology as:

engineering, physical and biological sciences research developing technologies at the frontier of transforming the way we produce, use, manage, and store energy

These technologies will have the **potential to radically shift the global energy landscape and develop market opportunities** for New Zealand

How will the AETP connect with the energy landscape?

- Wider landscape includes **energy researchers, service and product providers and international connections**
- AETP intends to:
 - **Raise the research capacity and capability** of New Zealand in energy science through **early stage research**
 - Respond to **domestic and international opportunities** which could contribute to New Zealand's and the global zero carbon future
- International setting is key:
 - New Zealand's **contribution to the global effort** to create low carbon energy
 - We won't solve all of the world's problems but we can make a **significant contribution in niche areas**
 - Interested in international collaboration with country's of strategic importance to New Zealand in this space e.g Japan, Germany

The Government's Investment Goals for the AETP

Deliver excellence

Invest in excellent, **transformative and novel research** that builds on New Zealand's strengths at the **frontier of innovation in advanced energy** technology research

Grow capability

Grow the **scale**, depth, excellence and impact of **New Zealand's advanced energy technology research community** and support emerging researchers

Deliver additionality

Deliver ambitious research, new people and collaborations, and impacts that would not have happened without this investment.
Create new opportunities for New Zealand to contribute to global efforts to reduce energy related greenhouse gas emissions

Leverage connectivity

Foster and grow international and national collaborations among energy technology researchers, and between researchers and end users
Collaborations should support research excellence, grow energy technology capabilities and operate in areas of **international relevance**

Enable future-focussed research

Provide stable longer-term funding to support future focussed research to **deliver a pipeline of new ideas and opportunities** which encourage the private sector to fund more industry-led research

Give effect to the Vision Mātauranga policy

The expected outcomes of the AETP

- Create deep **multidisciplinary expertise** in advanced energy technology research
- Establish new instances where advanced energy technology is **addressing New Zealand's energy challenges** and real world issues and challenges to benefit New Zealand
- People are **using new and improved advanced energy technologies** to generate commercial benefits
- New Zealand has a **bigger, more capable and strongly connected community of advanced energy researchers**, linked with end-users and industry
- New Zealand has more advanced energy technology talent in the work force beyond research organisations

The expected impacts of the AETP

- **New Zealand has world leading advanced energy technology research** that is translated into positive impact for New Zealand
- Advanced energy technology is widely used in New Zealand and **New Zealand research collaborations and our technologies are sought internationally**
- New Zealand has a **bigger and more productive advanced energy technology industry** with more relevant jobs and higher productivity

WHAT

are we seeking to fund?

The research focus of AETP programmes

What research can and cannot be funded under AETP?



The research focus of AETP programmes

The Platform will focus on research in the **engineering, physical and biological sciences**, and will prioritise **transformative**, creative and potentially **disruptive** research to help define future global energy opportunities and accelerate technology towards commercialisation

Each funded programme will:

- Focus on a major research challenge at the **leading edge of development** of advanced energy technology
- Support a variety of activities focussing on a common research challenge
- Contain challenge-inspired research
- Focus on **transformative outcomes**, which may be high-risk/high-return research, embracing **new techniques for tomorrow's energy** technology needs
- Demonstrate the potential for research outcomes to provide a **pipeline of new ideas** and opportunities for the private sector to fund more commercially orientated research



What research can and cannot be funded under AETP?

Fundable under AETP

- Research programmes with a primary focus or outcome related to the production, use, management or storage of energy
- Costs associated directly with the project; this may include:
 - Costs of personnel
 - Personnel-related costs
 - Material and consumables directly related to the research programme
 - Research programme operational costs

Not fundable ...

- Research programmes where the proposed research covers commercial demonstration or deployment of technology
- Research programmes where the proposed research covers the use or production of fossil fuels or nuclear energy
- Research programmes where the proposed research covers evaluating the commercial viability of near commercial technologies
- Capital expenditure for any equipment or assets with life beyond the term of the research programme

WHAT

funding is available?

The funding available

Who can apply

The funding available

- Up to \$50 million across 7 years to fund up to 4 research programmes
- This investment will be funded through the Strategic Science Investment Fund (SSIF)
- 7 year programmes
 - Contracts will start **on** or **after 1 July 2020**
 - Anticipate contracts will **finish** by **30 June 2027**, subject to negotiation

Who can apply?

- Applicants must be a New Zealand-based legal entity with established research capability
- The majority of the research, science or technology, or related activities are to be undertaken in New Zealand, unless MBIE agrees there are compelling reasons not to
- The applicant organisation is not a department of the public service listed in Schedule 1 of the State Sector Act 1988



HOW

do you apply?

The application process

The assessment process

How funding decisions will be made

Contracting

Monitoring and reporting requirements



The application process: 2 stage

2 stage application process

REGISTRATION

- A summary of your proposed research along with key programme details and team members
- Enables us to align assessment expertise
- Compulsory. You must register to submit a proposal

PROPOSAL

- Use the proposal template in the Call for Proposals
- Address each question clearly and be guided by the instruction given

Registration and the entering and submission of proposals is performed in our Information Management System – the IMS portal



The application process: top tips

- Clearly articulate how your proposal addresses the Government's investment goals for the AETP and the assessment criteria
- Demonstrate your pathway to impact to deliver expected outputs
- Demonstrate progress towards the outcomes over the life of the proposed project
- Consider how your research may evolve over the project lifetime
- Write your public statement for the public and the media not MBIE



The application process: privacy

- We may make the following publicly available if you are funded:
 - The title of your research programme
 - Your public summary
 - The funding amount
 - The Science Leader
 - The Host institution
- You are responsible for ensuring all parties mentioned in your proposal:
 - Have confirmed their personal details
 - Agree with the nature and level of their involvement in the work described in the proposal
 - Are aware of the IMS privacy statement



HOW

are proposals assessed

The assessment process

The AETP assessment criteria



The assessment process

- An expert panel aligned to the registered proposed research will be formed
This panel will:
 - assess how well your proposal meets the assessment criteria and the Government’s investment goals for AETP
 - make recommendations to MBIE
- A Vision Mātauranga panel will be formed to advise where and how relevant Vision Mātauranga is to the proposed research
- We will post the names of these panel members on our website before the closing date for proposals.
Please check to see if there are any conflicts of interest

The AETP assessment criteria

The Assessment Criteria

All eligible proposals will be assessed against the following criteria, their alignment with the Government's investment goals for the advanced energy technology platform, and where applicable how your proposal will give effect to the Vision Mātauranga policy.

ADVANCED ENERGY TECHNOLOGY PLATFORM RESEARCH PROGRAMME ASSESSMENT CRITERIA	Weighting
<p>EXCELLENCE</p> <p>The research programme will deliver excellence by delivering leading internationally connected, cutting edge advanced energy technology research for New Zealand</p> <p>When assessing this criterion, assessors will consider the proposal's potential to:</p> <ul style="list-style-type: none"> align against the Government's investment goals and vision for the Advanced Energy Technology Platform; create additionally, provide ambitious fresh thinking, new people, new and expanded research, new collaborations and impacts that would not happen without this investment; demonstrate how the proposed research will deliver excellent engineering, physical and/or biological science and outcomes to support New Zealand's contribution to global efforts to develop advanced energy technology, and how the method and high level approach/methodology will enable the delivery of the research aims; demonstrate the skills and knowledge the team has to deliver the proposed activities, including leadership expertise and experience, relevant collaborations, and; develop new innovative and novel approaches in energy technology. 	30%
<p>IMPACT</p> <p>The research programme will create direct and indirect benefits for New Zealand by generating opportunities in emerging energy technologies with international relevance</p> <p>When assessing this criterion, assessors will consider the proposal's potential to:</p> <ul style="list-style-type: none"> deliver future focused engineering, physical and/or biological science research with the potential to create or facilitate disruptive technologies for New Zealand and the global market; create new opportunities for New Zealand to contribute to national and global efforts to reduce energy related greenhouse gas emissions; develop advanced and innovative energy technology approaches that can help solve key challenges for New Zealand, and international markets and users; support a pipeline of research so that new ideas can be developed and applied to solve problems, and; where relevant, address the themes of the Vision Mātauranga Policy. 	20%
<p>INVESTING IN PEOPLE</p> <p>The research programme will grow the scale and depth of advanced energy technology research capability in New Zealand</p> <p>When assessing this criterion, assessors will consider the proposal's potential to:</p> <ul style="list-style-type: none"> attract researchers, teams and institutions not well placed and sufficiently skilled to do the research and to grow future capability, with regulations for high-quality work, and who are well based internationally and domestically; bring collaboration, attract top researchers to New Zealand and support New Zealand emerging researchers, provide support for PhD and post-graduate and where possible encourage them to gain international experience; develop deep expertise and world class science leadership; and where relevant, develop Māori capability in advanced energy technology. 	30%
<p>DOMESTIC AND INTERNATIONAL COLLABORATION</p> <p>The research programme will have international relevance and significance, and will grow domestic and international science connections and collaborations</p> <p>When assessing this criterion, assessors will consider the proposal's potential to:</p> <ul style="list-style-type: none"> demonstrate relevance of proposed research to international efforts in the advancement of clean and/or advanced energy technology; grow international and national collaborations, and develop leading and strategic collaborations with and users, draw on a range of industry, science and government expertise to enhance the relevance of the research. 	20%

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Excellence

The research programme will deliver excellence by delivering leading internationally connected, cutting edge advanced energy technology research for New Zealand _____ Weighting: 30%

Impact

The research programme will create direct and indirect benefits for New Zealand by generating opportunities in emerging energy technologies with international relevance _____ Weighting: 20%

Investing in People

The research programme will grow the scale and depth of advanced energy technology research capability in New Zealand _____ Weighting: 30%

Domestic and International Collaboration

The research programme will have international relevance and significance, and will grow domestic and international science connections and collaborations _____ Weighting: 20%

A close-up photograph of a hand holding a silver pen, writing on a white document. The background is blurred, showing a person in a white shirt. A dark blue vertical bar is on the left side of the image, and a dark blue horizontal bar is in the center, containing the main title.

HOW

Decisions, Contracting, Monitoring and Reporting



How funding decisions will be made

- The DCE, Labour, Science and Enterprise, MBIE makes the final decisions
- Final decisions will consider:
 - The Assessment Panel recommendations
 - How each proposal complies with the eligibility criteria and fundable research
 - How well the mix of investments and the resulting total portfolio meet the investment goals
 - The portfolio balance, in particular, the concentration of publicly funded research in a given area, the value offered by the largest proposals, and the risk profile of the portfolio as a whole
 - Any other information MBIE deems relevant
- We may decide not to invest at any point along the process



Contracting

- AETP is funded through the Strategic Science Investment Fund and will be a negotiated purchase by MBIE of science activities and outputs
- We anticipate contracting successful applicants in June 2020
- A Contract template will be provided
- For successful applicants, we may;
 - Set pre-contractual conditions that must be met before entering into a contract
 - Add additional terms and conditions
 - Vary the funding amount from that proposed and require that the proposed research programme plan be negotiated to our satisfaction to reflect the changed funding



Monitoring and reporting

- Comply with SSIF reporting and monitoring requirements
- We will negotiate KPIs and an outcomes framework with successful applicants to monitor success
- Reports:
 - An annual progress report covering achievements the funding year
 - An annual forward looking work plan for the next funding year
 - A mid-way review in the 4th year of funding
- Your reporting will need to address the performance areas in the SSIF performance framework

Key Dates

20 November 2019 Registration period
until 12 noon, 18 December 2019

20 November 2019 Submission period for proposal
until 12 noon, 11 March 2020

March – April 2020 Assessment of proposals

April – May 2020 Assessment Panel meeting

June – July 2020 Investment decisions announced

from 1 July 2020 Contracts begin



Key Takeaways

Government's investment goals

Clearly articulate how your proposed research meets the Government's Investment goals and assessment criteria for the Advanced Energy Technology Platform

International relevance

Demonstrate how your proposed research is relevant to the international energy technology research landscape and how this research will help build international connections

Additionality

Make sure you clearly articulate how this investment will deliver impact which would not have been possible through existing funding mechanisms.

Capability development

Research programmes should deliver a pipeline of opportunities to increase the capacity and capability of New Zealand in the energy technology research space.

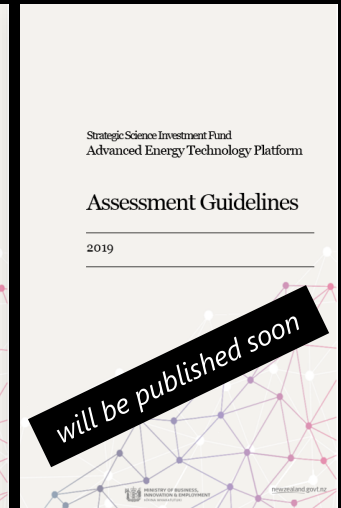


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For more



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www.mbie.govt.nz/science-and-technology/science-and-innovation
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