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Energy Efficiency and Conservation Authority
Wellington

By email: levyconsultation@eeca.govt.nz

EECA 2018/19 LEVY CONSULTATION

Background

The National Energy Research Institute (NERI) is a Charitable Trust incorporated in New Zealand. Its primary purpose is to enhance New Zealand's sustainability and to benefit the New Zealand community by stimulating, promoting, co-ordinating and supporting high-quality energy research and education within New Zealand.

Its research members are Victoria University of Wellington, Auckland University of Technology, Scion, and the University of Otago, and its industry association members are the Bioenergy Association, BusinessNZ Energy Council, and the Energy Management Association of New Zealand.

This submission is made by NERI itself and may not necessarily represent the particular view of individual members.

Relationship with EECA

NERI has a longstanding relationship with EECA particularly focusing on some of the longer-term issues that arise in energy use. EECA is aware that NERI has just recently released "*Energy Research Strategy for New Zealand: The Key Issues*"¹ and that NERI is actively working on its implementation.

Comments on the proposed levy-funded activities

In this context much of the substance of the proposed levy-funded activities align with themes in the Strategy, but are more short-term.

In particular the Strategy sees the adoption of EVs, improved building energy efficiency, and improvements in large industrial energy users' energy efficiency as consistent with the work we have undertaken. Our focus has been rather more on the longer-term and more intractable issues e.g. heavy-duty cycle transport.

Both approaches are essential.

¹ Available for download at www.neri.org.nz/strategy.

However there is one suggestion we would make that relates to the detail of the work programme with large energy users. The key outputs for this work are set out on pages 23 and 24. The focus here is on improving energy efficiency within existing business systems.

In looking at the opportunities to reduce the greenhouse gas emissions for the major industrial users in the context of the research strategy we rapidly realised there were diminishing returns from this approach. Instead we felt that the need was to explore alternative markets where clean energy earns a premium and the products and supply chains to service them².

Specifically in the main emitting industrial sectors we recommended seeking new clean energy markets in bio-chemicals, food and low emissions products from the petro-chemical industry. If existing major producers in these areas could be encouraged to start to think about new markets and products using their existing capabilities the impact could be significantly greater than working within their existing paradigm.

Recommendation

We therefore recommend that the outcomes for the programmes be expanded as follows:

Large energy user engagement programme

Second bullet point:

*“Support and funding for energy audits, operational efficiency improvements such as boiler tuning, energy monitoring and targeting, ~~and~~ optimisation of critical energy systems, **and projects to scope cleaner energy products and their potential markets; ...**”*

Technology demonstration programme

First bullet point:

*“Providing co-funding to demonstrate proven, yet under-utilised energy efficient technologies or processes, **or potential untapped markets for new cleaner energy products** with the aim of promoting at least four projects to increase uptake; and ...”*



Simon Arnold
CEO

² We note that this addresses what is sometimes referred to as the “effectiveness of energy use” rather than energy efficiency, but the *Energy Efficiency and Conservation Act 2000* has a broad interpretation (Section 3) *energy efficiency means a change to energy use that results in an increase in net benefits per unit of energy*. Thus helping businesses to change products to give better output per quantum of energy use is consistent with the purposes of the Act. It also conserves energy.