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Draft Energy Strategies
Ministry of Economic Development
PO Box 1473
WELLINGTON

This submission is made on behalf of the Pacific Institute of Resource Management. It covers the Draft New Zealand Energy Strategy (NZES) and Draft New Zealand Energy Efficiency and Conservation Strategy (NZEECS) independently while noting that bringing these two Strategies together in one document raises the question of why they exist separately. Efficiency of use and conservation of energy resources are such fundamental aspects of energy policy that they should be integral rather than supplementary. With the Strategies proposed, the NZEECS appears merely to offer scant mitigation of the worst consequences of the NZES.

The Strategies are both informed by the overarching goal of the Government to maintain and accelerate economic growth. This goal is not tenable in a world where the physical and biological limits to growth are increasingly manifest. There is convincing evidence also that economic growth beyond a level where the economy provides for the needs of society is without advantage and that the likely result of increasing inequality is socially detrimental. Economic growth inevitably depletes natural resources and damages the natural systems upon which our lives and livelihoods depend, threatening prosperity and reducing security.

Neither of the Strategies engage appropriately with the most pressing issues of global climate change and peak oil. The means by which we harness energy and the aggregate quantities that we expend are critically entangled with these two issues. Yet climate change seems to be addressed largely in terms ensuring that we are perceived to be acting responsibly by our international customers and investors. Indeed, the environment appears to be treated merely as a source of utility or amenity rather than having any intrinsic value or being recognised as the context in which all of our activities take place.
Peak oil is largely subverted as an issue by the emphasis on exploitation of fossil fuel resources.

NZES
The proposed development of fossil fuel resources is inappropriate in the context of global climate change directly attributable in large part to use of these energy sources. Until these resources can be used without the production of greenhouse gases or other major environmental hazards, there should be no new exploitation, allowing only for the rundown of those sources already in production. Only if there is an expectation that fossil fuels will be shortly unavailable, will the economy shift toward alternative energy sources in an orderly fashion.

The development of renewable resources should be given top priority but not in a manner that reduces consideration of the environmental and social impacts that this development may entail. Where regulatory barriers exist to protect environmental and social values, they should not be removed. Consideration of whether a resource should be developed should not be reduced to a matter of economic calculation. The application of the Resource Management Act (RMA) to furthering the development of renewable resources should be enabled by the development of National Policy Statements (NPS) on Greenhouse Gas Emissions/Climate Change, Freshwater and Biodiversity Conservation. This is preferred to a Renewable Energy NPS which might result in a technology focus rather than effects-based assessment in the operation of the RMA. We recommend the early development of National Policy Statements addressing these issues to protect the environment from inappropriate development and to guide planning for future energy requirements.

The problem of peak oil warrants investigation by a Parliamentary Select Committee Inquiry into the social and economic impacts to inform the development of the Energy Strategy and we recommend the establishment of such a Committee.

The close relationship of energy use with both climate change and peak oil demands that the overarching goal of energy strategy should be to develop renewable, low-emission sources of energy to provide a secure and sustainable supply into the future. We recommend the adoption of such a goal rather than one based on further resource depletion and greenhouse gas emissions.

The focus on embracing new technology must not become a blind faith that new technology will be forthcoming and provide ideal solutions to problems of energy supply and inefficiency in use. Action in response to climate change is urgently required if there is to be any reasonable chance of avoiding dangerous climatic effects. This means that we must use technology that is at hand and proven in order to reduce aggregate greenhouse gas emissions as quickly as possible. We recommend that programmes to employ available technology more widely in the cause of reducing emissions and fossil fuel consumption be developed and funded.

The focus on competitive markets to deliver affordable and secure energy is an approach that is not well supported by the functioning of such markets to date, especially the electricity market. Interventions and special provisions in the electricity market are such that any benefits of 'free' market operation cannot be operative and the transaction costs of the market itself are burdensome. It is especially alarming that the recent Ministerial Review intends to further complicate operations by establishing a market in hedge contracts for electricity supply. It would be better to combine the SOE Generators and Transpower in a single entity that could ensure that generation results in the lowest emissions possible at lowest cost. Asset devaluation and avoidance of transaction costs that would follow the abolition of the artificial electricity market should ensure cheaper and much less volatile electricity prices.

The oil security and transport focus is very important but there is very little effective action proposed in the Draft Strategy even though problems such as relative inefficiency of the NZ vehicle fleet are recognised. It is important that the transport and fuel programmes included in the present NZEECS are not abandoned but are reinforced and accelerated.

Much of the focus on efficient use of energy seems to rely on supplying information to consumers to enable better choices to be made. This approach is based on the idealised market model in which perfectly-informed consumers optimise their utility by independent choice. This is of course far from the nature of real markets and also overestimates the ability of consumers and businesses to process large volumes of complex information and make logical choices in the face of many known and unknown contingencies. Consumers are already overburdened with having to make choices relating to everything from support of local industry to animal welfare, often with detrimental results. In matters as important as energy security and planetary welfare, there is surely a place for decisions to be made by informed authorities rather than delegated.

Under the priority for environmental responsibility it is alarming to see 'best practice' defined by the perceptions of other countries rather than any objective environmental benefit or harm mitigation. There is also cause for concern in the repeated use of the term 'responsibility' given that this term has been used to define New Zealand's response to climate change under the Kyoto Protocol. In this context it means that, rather than reduce emissions, NZ will buy carbon credits internationally to meet much of its obligation under the Protocol. If this is the form that 'responsibility' takes, there seems likely to be further assumption that money can substitute for environmental wellbeing where the impacts of energy projects are concerned. This would be completely unacceptable. The undervaluation of the environment is also implicit in the fact that while access to and allocation of natural resources is mentioned, there is no mention of conservation of resources as part of an optimal outcome for the country.

Local Government is charged with responsibility to assist emissions reduction by improving access to public transport, walking and cycling. However, in Christchurch, the City Council has had to shelve some plans for public and alternative transport because of reduced central government funding for these purposes as a result of the present priority given to major arterial roads. An explicit programme of action is required to be in the Strategy to prevent such a conflict of rhetoric with practice.

The target for greenhouse gas emission reductions of 50% by 2050, in accord with the G8 group of nations, is laudable but meaningless unless backed up by a plan for achieving this target with a series of intermediate steps against

which progress may be judged. The Emissions Trading Scheme (ETS) is given as the primary means to reduce emissions in the energy sector. This is a plan for failure given the virtually complete ineffectuality of the ETS in this role as shown in the detailed analysis of the ETS by Bertram and Terry (1). Other policies, standards and regulations are required for there to be any chance of NZ playing a part in addressing climate change. Many of these should be explicit in the NZES.

NZEECS

The Draft Strategy is grossly deficient in the absence of any specific and measurable means by which the goals and policies of the document are to be achieved. This is in breach of the EECA Act. There must be no implementation of the new Strategy until these specifics, most already part of existing EECA programmes, are included. The existing programmes should be supported and funded although some modifications are suggested to incorporate conservation of material resources as well as energy. For example, replacement/ product retirement programmes need to be accompanied by a dedicated pathway for recovering and recycling obsolete goods and materials and no retirement programme of any significant size or duration should proceed without a comprehensive and effective material recovery scheme being in place.

Apart from this restoration and reinforcement of existing programmes there are some additional points that should be included in an EECS or combined Energy Strategy.

The root causes of energy use inefficiency and increasing total consumption need to be identified and specifically addressed. For example, it is well recognised (e.g.2) that the increase in average house size is a major driver of increased energy and materials consumption, all materials of course including embedded energy from their manufacture. The trend for larger houses creates a public burden to provide energy and other services and this warrants the use of a levy or other discouragement in compensation.

There should be a programme to progressively reduce energy losses and valueless greenhouse gas emissions caused by the flaring of natural gas and by fugitive emissions of volatile fuels.

Although efficiency is commendable in itself, it must be explicitly recognised that increase in total energy consumption will still occur with increases in population and affluence – such as the increased use of electrical services, heating and air-conditioning of larger houses, etc.

While enhanced public transport is an important component of increasing energy efficiency and possibly reducing total usage, investment decisions must be closely guided to ensure optimum outcomes. For example, the current upgrade of the Wellington rail network will result in greater energy use even measured as intensity per passenger-kilometre because the new Matangi trains incorporate more energy-consuming 'bells and whistles' and because there was insufficient funding made available for a system with regenerative braking locomotives to be built.

(1) "The Carbon Challenge" Geoff Bertram and Simon Terry, (Wellington, Bridget Williams Books 2010)
(2) "Time to eat the Dog? The real Guide to Sustainable Living" Robert and Brenda Vale, (Thames and Hudson, London 2009)

Thank you for the opportunity to make this submission. The Institute wishes to make further oral submission to clarify and expand upon these points in the event of any hearings being convened.

Yours sincerely,

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