TOTAL ENVIRONMENT CENTRE INC.
National Electricity Market Campaign

Suite 2, 89-97 Jones Street, Ultimo, NSW 2007
Ph: 02 9211 5022 | Fax: 02 9211 5033
www.tec.org.au

Submission to DCCEE

Consultation on a national Energy Savings Initiative

Issues Paper

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Jeff Angel
Executive Director

Glen Wright
National Electricity Market Researcher
glenw@tec.org.au

Total Environment Centre would like to thank the Department of Climate Change and Energy Efficiency and the National Energy Savings Initiative Working Group for the opportunity to provide input to this important process.

Total Environment Centre's National Electricity Market Campaign

Established in 1972 by pioneers of the Australian environmental movement, Total Environment Centre (Total Environment Centre) is a veteran of more than 100 successful campaigns. For the last forty years we have been working to protect this country's natural and urban environments: flagging the issues, driving debate, supporting community activism and pushing for better environmental policy and practice.

Total Environment Centre has been involved in National Electricity Market (NEM) advocacy for eight years, arguing for greater utilisation of energy efficiency and demand side participation to meet Australia's electricity needs.

Introduction

Energy efficiency and demand reduction can play a pivotal role in the transition to a low carbon economy and provide a range of benefits to electricity consumers. A National Energy Savings Initiative (NESI) can help capture the benefits available from improved efficiency and reduced demand.

Total Environment Centre is aware of the strong support for a NESI across a wide range of stakeholder groups and wishes to add its voice in support of a NESI.

Our submission does not focus in detail on policy design, but instead on the principles and objectives of a NESI, which we believe are of paramount importance if a NESI is to be successful.

1.6. Policy Options

1. Costs and benefits in the context of a carbon price

Total Environment Centre believes that an appropriately designed NESI can help build an energy efficiency industry in Australia by overcoming market failures and correcting distortions that have to date prevented greater uptake of energy efficiency opportunities and products. These opportunities and products have previously been undervalued as compared with the supply-side ethic that has historically pervaded the Australian energy supply industry.

A NESI has the potential to provide a price signal for households and businesses that increases their awareness of energy efficiency and provide energy efficiency service businesses with a substantial and sustainable revenue stream.

Ideally a NESI would foster 'deep' energy efficiency savings, such as retrofitting houses, that can drastically reduce a home's energy usage, rather than shorter-term and smaller-scale options, such as installing energy efficient light bulbs, that require mass adoption in order to be effective. As demonstrated by the showerhead replacement program in NSW, administration of small-scale efficiency savings can be cumbersome and time consuming, and there are difficulties with accurately verifying the reductions made.

Nonetheless, small-scale savings options must be retained to some extent because they can build trust with consumers and give the government a 'foot-in-the-door' which can later be leveraged to effect deeper savings. Smaller scale reductions may be available to consumers that are unable to take advantage of options that deliver deeper cuts. It is therefore important to maintain the smaller energy savings, but also to cap or otherwise appropriately manage the numbers.

2-4. Support for national scheme

Total Environment Centre supports a national scheme and believes that a national scheme will be more conducive to meeting environmental and energy saving objectives. Experience with voluntary harmonisation has shown that the process is flawed and complex. For example, feed-in tariffs for distributed generation have been plagued in Australia by disparate and differing schemes. It is much simpler to promulgate a strong national scheme at the outset.

As an example of the difficulties in harmonisation, we note that NSW and Victoria have recently announced their intention to harmonise their respective energy savings schemes. However, the two schemes use different metrics to measure energy savings (total energy consumption in NSW, avoided emissions in Victoria) which is likely to make harmonisation difficult. Implementing a national scheme at the outset will ensure consistency and simplicity.

2.1. Objectives

Clear and focused objectives are crucial to the success of a NESI. There is an array of objectives that could be supported by a NESI, so it is important to narrow down the core objectives of the scheme to ensure that it is targeted and that resources are not spread too thinly.

13. Possible objectives

We propose that the core objective of a NESI should be to reduce Australia's energy use.

There are a number of subsidiary objectives that Total Environment Centre feels would be appropriate, including:

- Greenhouse gas emissions reduction, as a corollary to reducing energy usage;
- Peak load reduction, in order to curb current overinvestment in networks and the focus on the supply-side. This objective is important because the flow-on effects will benefit all consumers, not just those making the energy savings;
- Increasing energy efficiency;
- Lowering the cost of energy to households and business through reduced usage and efficiency;
- Enhancing security of supply without costly network investment and excessive security standards;
- Developing a long-term Australian energy efficiency industry that can support jobs; and
- Assisting consumers to absorb increasing electricity prices.

15. Electricity prices as an objective

Total Environment Centre advocates for caution in using a NESI primarily as a vehicle for containing rising electricity prices. Price is a factor affecting energy consumption, and rising prices seem to be partly responsible for plateauing demand in recent years. However, any price reductions resulting from a NESI would clearly be welcomed, in particular any reduction in prices resulting from decreasing network investment due to lower peak demand.

One caveat to be made in relation to prices is that a strategy must be in place for protecting vulnerable consumers from price rises; a NESI can be part of this strategy by helping such consumers reduce or manage their energy usage.

In short, electricity prices provide a price signal to consumers about the cost of producing electricity. These prices signals should be strengthened and made more cost-reflective in the future. A NESI should aim to help reduce consumers' energy usage and therefore help them to cope with rising prices, rather than having price reduction as a primary objective.

17. Protection of vulnerable customers

Total Environment Centre does not consider the protection of vulnerable customers to be an objective of, but rather a prerequisite to, a NESI. Vulnerable consumers must be protected in the pursuit of the primary goals of a NESI, namely reducing energy usage and greenhouse gas emissions. However, the protection of vulnerable consumers must not lead to increases in their energy usage, a perverse outcome for a NESI. Some non-governmental organisations have experienced and increase in energy consumption in energy poor households as the receipt of assistance allows them to use more electricity than they could previously afford.

19. Greenhouse emissions reduction as an objective

Total Environment Centre firmly believes that greenhouse gas reductions, alongside the broader aim objective of reducing energy usage, should be at the heart of a NESI.

20-21. Complementarity with the carbon price

While the carbon price aims to curb the emissions flowing from big business, a NESI can ensure that Australia takes a whole-of-society approach to emissions reduction by enabling small and medium enterprises and households to play their part. The carbon price will not exhaust all of Australia's opportunities for energy efficiency and a NESI can expand the range of opportunities that are readily available.

22. Principles

The benefits from a NESI should be shared by all consumers — i.e., energy savings opportunities that result in benefits accruing to all consumers should be preferred to those that primarily only provide a benefit for the implementing consumer.

We note that there seems to be a 'dangerous obsession with least cost' in Australian greenhouse policy,[1] which can result in broader concerns being obscured and better-quality, longer-term energy savings being overlooked due to their cost, even though they may be more efficient in the long-term. We urge the government to consider all options for a NESI, not only a white certificate scheme approach or market-based approach; regulations and standards may also be appropriate.

3.3. Sectoral Coverage

When considering sectoral coverage, there is an inherent tension between focusing primarily on the industrial/commercial sector, which consumes the vast majority of electricity in Australia and therefore could allow large savings to be made, and the residential sector, which bears more responsibility for growing peak demand. However, reducing the industrial and commercial sectors' need for energy during peak times could also reduce price of energy.

Given the nuances of choosing where to focus the NESI, sectoral coverage should be as broad as possible. Broad coverage would also unlock a wider range of energy savings opportunities.

In addition, broad sectoral coverage is sensible because many of the barriers to energy efficiency affect all sectors, and a NESI can assist all sectors in removing these barriers. For this reason, the International Energy Agency recommends broad coverage. In its 25 recommendations[2] to members regarding energy efficiency, it states that it is important to coordinate energy efficiency policies so as to addresses barriers across all sectors.

Particular attention should be paid to ensuring that system-wide benefits are achieved. This will likely require some focus on the commercial and industrial sectors, assisting businesses to reduce their demand, while also attending to domestic consumers, helping them to manage their load so as to reduce peak demand and complement the reductions made in the commercial and industrial sectors. Both of these actions can result in lower system costs overall.

3.5. Units of Measurement

The measurement unit chosen for a NESI will largely depend on the other parameters ultimately chosen. For example, a focus on peak demand reduction would suggest that savings should be measured in MW or MVA to increase the likelihood of reducing peak demand and infrastructure investment. However, if a NESI is to include gas consumption, such units of measurement would be inappropriate.

3.6. Targets

The overarching principle for testing and setting targets is that any target must be stringent enough to effect behavioural change, lower energy usage/increase efficiency, and, ultimately, lower emissions.

1 Prest, J., 'A Dangerous Obsession with Least Cost? Climate Change, Renewable Energy Law and Emissions Trading' in Gumley, W. and Daya-Winterbottom, T. (eds) Climate Change Law: Comparative, Contractual & Regulatory Considerations (Thomson Reuters 2009).

2 IEA, Energy Efficiency Policy Recommendations (2008).

4.5. Networks

A NESI is not the appropriate mechanism for achieving efficiency in the electricity network sector. The approach to regulation of these monopoly businesses in Australia provides a perverse incentive to massively (over)invest in infrastructure, as profits are tied to capital expenditure (capex). For example, Total Environment Centre recently engaged with the process for setting Powerlink's revenue cap for the next regulatory period. Powerlink is seeking profligate increases in its regulated profit due to its excessive capex.

The Regulator is currently proposing changes to the National Electricity Rules due to this problem, however, the changes do not go far enough as they do not change the fundamental supply-side focus of the National Electricity Market.

The appropriate method for improving efficiency in this sector is to provide incentives through the regulatory framework for innovation and efficiency, as the UK has recently done in its overhaul of network regulation. The new RIIO model[3] provides such incentives within the regulatory framework and profits are not tied to capex.

6.3. Peak Demand

As suggested above, Total Environment Centre's preference would be for a NESI to incorporate both overall demand reduction and peak reduction. This is because peak demand reduction has the potential to lead only to load shifting, rather than an overall reduction in demand which lowers greenhouse gas emissions.

Jeff Angel
Executive Director

Contact:

Glen Wright
National Electricity Market Researcher
glenw@tec.org.au

3 Regulation = Innovation + Incentives + Outputs