

# **Energy Consumers' Council's Comments on the Productivity Commission's Inquiry into Energy Efficiency - Draft Report**

## **1. General Comments**

- 1.1. The Energy Consumers' Council (ECC) welcomes the opportunity to respond to the Productivity Commission's (PC) Inquiry into Energy Efficiency – Draft Report.
- 1.2. The ECC believes that the PC has selectively chosen from its terms of reference, to ignore consideration of broader economic and environmental concerns, and to define a narrow scope for their inquiry. Consequently, the ECC considers the recommendations of the draft report to be flawed, and that if implemented, they would further exacerbate problems within the electricity market.

## **2. Terms of Reference:**

The inquiry's Terms of Reference State: "The Commission is to examine and report on the economic and environmental potential offered by energy efficiency improvements which are cost-effective for individual producers and consumers"

- 2.1. The ECC notes the narrow focus of the Scope of the Inquiry, in particular, that the inquiry has been limited to the potential of measures which are 'cost effective for individual producers and consumers'. The ECC considers energy efficiency to be one method of addressing a range of actions including demand management issues, greenhouse gas emissions and affordability for low-income households. Accordingly, the ECC considers the scope of the inquiry needs to be expanded.
- 2.2. Additionally, the ECC is disappointed that the PC has chosen to define its scope even more narrowly than was intended by the Terms of Reference.
  - 2.2.1. The PC considers its first task to be to "examine the nonadoption of measures that appear to be privately cost effective" (Page XXII).
  - 2.2.2. Consequently, the PC has noted throughout its report that consideration of greenhouse issues is not within the scope of the inquiry.
  - 2.2.3. The ECC is of the view that the PC has failed to address its terms of reference to consider the 'economic and environmental potential' of those improvements that may be cost effective. Consideration of economic potential should include the consideration of externalities such as net public benefits such as improving welfare and social costs such as those imposed by increased greenhouse emissions.

- 2.2.4. The ECC notes that would not be a strong case for government intervention in energy efficiency if the sole objective is to increase uptake of privately cost effective solutions. The ECC believes the purpose of the inquiry is to assess how cost effective energy efficiency solutions can affect the economy as a whole, and what interventions are necessary to achieve improved economic welfare and environmental outcomes.

### **3. Environmental Objectives**

- 3.1. The ECC reiterates its views highlighted in Section 2, that the PC has selectively chosen from its terms of reference to ignore the environmental potential of energy efficiency.
  - 3.1.1. Increased consumption of electricity through less efficient use of energy imposes a cost on society that is currently unaccounted for.
  - 3.1.2. As a common good, the environment is a classic example of ‘the tragedy of the commons’. While no-one is charged to for their pollution of the environment, there is no incentive for individuals to reduce energy consumption (and hence greenhouse emissions), thereby causing uneconomic over production and significant environmental damage. The ECC believes that there is a strong case for Government intervention in regards to protection of the environment.
  - 3.1.3. In managing common resources, the setting of property rights is generally considered to be the best solution. However the atmosphere is not easily sub-divided and pollution in one area cannot be isolated.
- 3.2. The PC has noted in its report the need to compare the cost of pursuing environmental objectives through energy efficiency with other policies. Studies performed internationally and within Australia have shown that the cheapest solutions to reducing greenhouse emissions are via energy efficiency, where in many cases the costs are negative.
  - 3.2.1. While the ECC agrees with the PC, that an emissions trading system may be the most effective way to deal with greenhouse issues, such a system is currently unavailable. An alternative solution to the ‘tragedy of the commons’ problem is rationing. The ECC believes energy efficiency is the most economical form of rationing of greenhouse emissions.
  - 3.2.2. The ECC believes that until an emissions trading regime is available, policies to achieve greenhouse objectives through energy efficiency would achieve similar initial outcomes at similar costs.

### **4. Demand Management**

- 4.1. The PC should include consideration of negative externalities such as the costs imposed on society due to inefficient energy practices.

- 4.1.1. Using inefficient air conditioning or designing housing with poor insulation/shading, increases consumption of energy during peak demand periods, resulting in significant external costs.
  - 4.1.2. This increases the cost of electricity due to the need for expensive peaking generation and increased network capacity.
  - 4.1.3. Consumers, however, pay an average cost for power, not the marginal cost of their consumption. This results in a negative externality as society pays for the cost of an individual's consumption.
  - 4.1.4. It is understood that larger customers such as manufacturer's have opted for pool exposure, purchasing power at the true wholesale price. This provides the manufacturer incentive to switch off during peaks when the price is high. Most consumers, however, do not have the flexibility to do this.
- 4.2. Most consumers do not pay the actual 'time-of-use' cost of electricity. The use and 'cost effectiveness' of an energy efficient product would change significantly if the user paid the real cost, instead of the retail price. For example, when operating an air conditioner at peak times the real payback would be shorter than that calculated under a consistent pricing policy.

## **5. Low Income Households**

- 5.1. Energy Efficiency is one method of addressing affordability of energy in low-income households.
- 5.2. The PC should consider an additional barrier faced by low-income households – that of liquidity constraint (affordability).
  - 5.2.1. Many consumers do not have sufficient capital to make an energy efficient improvement even if they wish to (as the upfront costs are higher than the ongoing costs). This difficulty rebounds on the consumer over the life of the alternative item, as the running costs outweigh the capital costs. Furthermore, in some cases the costs are also passed on to the consumer's neighbours and on society through increased electricity and network costs (see demand management comments).
  - 5.2.2. While the ECC sympathises with the difficulties faced by low-income households in saving to pay for the upfront costs of more efficient equipment, in many cases this will result in overall savings over the life of the system. The ECC suggests that subsidization or low/no interest loan schemes for energy efficiency improvements are an effective approach to overcoming this difficulty.
  - 5.2.3. Consequently, the ECC believes that programs such as Minimum Energy Performance Standards (MEPS) in conjunction with reasonable social policies could reduce the burden on low-income households. The ECC notes that an increased cost of supply of energy efficient goods is likely to stimulate the industry to develop cheaper more efficient products and to offer more easy payment schemes to offset any higher initial costs.

## **6. Minimum Energy Performance Standards (MEPS)**

- 6.1. The ECC notes that Box 7.2 of the PC report describes examples where the benefits of MEPS standards are more than double their costs.
  - 6.1.1. While the PC commission states MEPS has the potential to reduce consumer choice, the ECC believes that the number of consumers affected by this would be small, and that benefits from maintaining MEPS far outweigh the costs.
  - 6.1.2. Even without MEPS, consumer choice is limited to design of goods made available by manufacturers due to availability, expectations, production quantities required for economies of scale, affordability and the influence of marketing (which may highlight features and hide flaws).
- 6.2. The ECC notes that MEPS are developed in conjunction with industry and set at levels which are not higher than those set within other countries. Furthermore, significant time/notice is given to industry ensure products meet this standard.
  - 6.2.1. The ECC believes that the PC has understated the effect of information asymmetries and negative externalities associated with energy efficiency, and the costs imposed on others by individuals choosing inefficient heating/cooling.
  - 6.2.2. Consequently, the ECC supports the MEPS program as it addresses market and information failure while assisting in reducing the costs imposed on society by removing worst products from the market.
  - 6.2.3. In particular, the ECC notes that a number of manufacturers have been dumping relatively cheap, but very inefficient air conditioners in Australia which they are unable to sell in other world markets due to higher performance standards in other countries. The ECC notes that, due to the significant information asymmetries, many low-income households purchase these systems without knowing that they would have higher running costs, and escalating their difficulties in paying bills.
- 6.3. The ECC notes that the majority of appliances affected by MEPS are those with consistent demand e.g. refrigeration, water heating, and lighting. In these cases the ongoing running costs are usually greater than the capital costs, thus an increase in efficiency results in lower total costs.
  - 6.3.1. In the case of air conditioners, it is likely to be small number of people who would purchase an air conditioner and operate it infrequently enough to achieve overall cost effectiveness. Experience has shown little variation in consumption between sub-groups in the community, as most people switch on their air conditioners depending on the weather. In South Australia, an air-conditioning survey performed by McGregor Tan Research found the average outside temperature at which air conditioners were turned on to be consistent across a number of subgroups between 32.5 –33.1°C.

## **7. National Framework for Energy Efficiency (NFEE)**

- 7.1. The ECC is disappointed with the PC's recommendation to defer Stage One of the NFEE.
- 7.2. The PC's primary reason for deferring the NFEE is the PC's view that jurisdictions have not provided sufficient information evaluating existing programs.
- 7.3. The ECC believes that this it is unreasonable to defer the NFEE for this reason. The ECC has been informed that the NFEE's key programs, MEPS and Energy Efficient Housing Standards have been the subject of much evaluation and modelling. In fact, changes to MEPS have not proceeded unless they have undertaken a Commonwealth Regulatory Impact Statement (RIS). The ECC notes that different stakeholders have philosophical differences in how these assessments are made, which are unlikely to be resolved through further evaluation.
- 7.4. On this basis, the ECC considers that the PC has not performed sufficient work to justify inaction.

## **8. Housing**

- 8.1. The PC suggests that the split incentives problem could potentially be addressed by contracts between landlords and tenants to share the costs/benefits of an energy efficiency improvement.
  - 8.1.1. The ECC suggests that even if the difficulties and transaction costs in achieving such a contract were overcome, renters and property owners do not enter contracts on equal grounds. In many cases landlords hold the power, and tenants have little choice but to accept inefficient premises.
  - 8.1.2. The ECC notes that many rental agreements are limited between six months to one year, while many energy efficiency improvements in excess this achieve a payback.
- 8.2. The PC debates in its report that house rating tools are not fully indicative of household energy efficiency.
  - 8.2.1. The ECC notes the common criticism that house rating tools do not prevent the use of inefficient appliances and practices by the householder. The ECC would like to emphasize the point that such systems are not designed to prevent a person from being inefficient, but to improve the potential of a house to be more efficient.
  - 8.2.2. Energy inefficient housing often requires greater use of high load heating and cooling resulting in increased peaks in demand. This imposes costs on others as noted in the demand management comments.
  - 8.2.3. The ECC agrees that the standards that are currently in place could be improved, however, the ECC does not believe that minimum housing standards should be removed for only going halfway.

- 8.2.4. The ECC supports the minimum energy rating systems for houses, as they are a good first step in improving household efficiency.
- 8.3. The ECC notes that many of the issues noted regarding housing also affects small businesses, in particular where there are landlord-tenant issues.

## **9. Government Intervention**

- 9.1. The ECC believes that the PC has understated the effect of market failures such as information asymmetries and split incentives, and has overemphasized costs and need for consumer choice. The effect of these failures is enhanced as they usually occur in combination with each other.
- 9.2. The PC's consideration of costs and benefits is flawed as the PC notes all costs, including rebound/feedback effects, but fails to consider all benefits including social/environmental.
- 9.3. The PC report suggests that the presence of market failure and barriers does not necessarily justify government intervention. The ECC argues that some Government intervention is necessary to resolve these failures where the benefits outweigh the costs, including consideration of all externalities.
- 9.3.1. The PC has been provided with much information noting that total benefits of several interventions outweigh the cost.
- 9.3.2. The ECC believes that Government action is required to preserve common good resources such as the environment as private markets provide no incentive for individuals to do so.
- 9.4. The PC suggests that Governments do not necessarily need to be the ones providing advisory services for energy consumers, and that private bodies could intervene.
- 9.4.1. Considering the presence of information barriers identified by the PC, and noting that the private market has little incentive to provide these services due to the public goods nature of such services, the ECC believes Government should assist in the provision of information on energy efficiency.
- 9.5. The PC mentions the rebound effect where savings gained by increased efficiency are used up by consumption elsewhere. While this often occurs, it does not result in decreased efficiency, as suggested by the PC. More outputs are gained for the same amount of energy consumed. The ECC considers this to represent an increase in total welfare for the consumer.