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Energy Efficiency Inquiry  
Productivity Commission  
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To Whom It May Concern:

**EUAA Comments on PC's Issues Paper – Inquiry into Energy Efficiency**

The Energy Users Association of Australia (EUAA) appreciates the opportunity to provide a submission to the Productivity Commission (PC) on its Issues Paper – Inquiry into Energy Efficiency (Issues Paper).

The attached submission sets out our views on the Issues Paper. The views are formed solely on the basis of what is in the best interests of energy users. The EUAA is uniquely placed to provide the PC with such a view, given its involvement in both national and state issues and its position as the national association of energy users.

If you have any queries regarding our comments you can contact Renate Vogt, Manager, Policy and Regulation on telephone number (03) 9898 3900 or e-mail [renate.vogt@euaa.com.au](mailto:renate.vogt@euaa.com.au).

Yours sincerely

A handwritten signature in black ink, appearing to read "Roman Domanski".

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Executive Director



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## **PC Energy Efficiency Review**

### **1 Introduction**

The Energy Users' Association of Australia (EUAA) is pleased to make this submission to the Productivity Commission (PC) in response to the PC's inquiry into energy efficiency.

The EUAA is a non-profit organisation focused entirely on energy issues. Members determine EUAA policy and direction. The EUAA represents a wide spectrum of end-users in all Australian States and has over 75 Members (and growing), predominantly business end-users with activities across all states and many sectors of the economy. EUAA activities cover both national and sub-national issues. [See <http://www.euaa.com.au/> for more information on the EUAA.]

The EUAA has, in forming comments to the PC's Issues Paper, consulted with our members – a number of them intensively. This will help to ensure that the PC is provided with a view on energy efficiency, which is relevant to large users in Australia. This should be important to the PC, given that large users of energy deal with the costs and benefits of cost-effective efficiency improvements every day.

EUAA members include many of the largest energy users in Australia and they are fairly and squarely caught in many of the current Australian policies on energy efficiency. For example, the Energy Efficiency Opportunity Assessments initiative announced in the 2004 Australian Government *Energy White Paper* will impact on nearly all EUAA members.

The PC should note that many EUAA members already have a commitment to undertake energy efficiency within their organizations and have done so in the past. Some have deliberate strategies and energy saving targets. These are mainly set for commercial reasons such as saving costs, although a number also take into consideration their desire to save energy for environmental reasons (eg as part of the *Greenhouse Challenge* program or similar State programs).

The adoption of such measures also means that numerous EUAA members have already made significant inroads into saving energy and have made good progress down that path. One concern they have is that their past actions in this area need to be recognised and not penalised by being ignored in policy responses. It would not be sound policy to ignore or penalise such 'first movers'.

Naturally, this is not to suggest that more cannot and should not be done in the area of saving energy.

The PC is required to examine and report on the “economic and environmental potential offered by energy efficiency improvements which are cost-effective for individual producers and consumers”. The PC is also asked to consider the barriers and impediments to improved energy efficiency.

This submission will attempt to address the three major questions raised by the PC:

- *What are the environmental and economic costs and benefits of cost-effective energy efficiency improvements?*
- *What are the barriers and impediments to adopting cost-effective energy efficiency improvements?*
- *Would government intervention to address these barriers and impediments produce net benefits to the Australian community? What form should the intervention take?*

We also comment on our members’ experience with energy efficiency and audits, on the need for policies to work in harmony with internal company approaches and on the need to develop a company culture on energy efficiency.

## **2 What are the environmental and economic costs and benefits of cost-effective energy efficiency improvements?**

The PC defines energy efficiency as the least cost technically efficient combination of inputs, which produce a given output. The EUAA supports this definition and considers that the need to assess energy efficiency decisions in a business should be along the same criteria and hurdle rates as any other proposed project. This is, in fact, how EUAA members view this matter and how decisions on it are based, notwithstanding that some have a ‘corporate commitment’ to implement sensible energy efficiency measures. A business must weigh the benefits against the costs in assessing whether or not they should adopt an energy efficiency improvement such as developing new technology or implementing a demand management program.

The environmental and economic benefits of implementing energy efficiency improvements are wide-ranging. If a business through energy efficiency improvements is able to reduce its use of resources such as electricity, water, motor fuel, etc this will have a positive impact on the environment and a financial benefit with a reduction of the associated costs of using that resource.

The environmental and economic costs of implementing energy efficiency improvements are also wide-ranging. The technologies available in reducing energy consumption can be expensive. Further, there are a wide range of implementation costs covering project management, production distribution, contractor/equipment selection, health and safety and contractual arrangements.

### **3 What are the barriers and impediments to adopting cost-effective energy efficiency improvements?**

The EUAA has received feedback from members who have identified two main barriers to energy efficiency uptake mainly:

- High capital costs. There is often a long payback period from when the cost of implementing the project has been made and when the actual benefits, both environmental and economic, are realised. In addition, these costs are the least recognised by regulatory and advisory bodies that sometimes overestimate the net impacts of energy efficiency measures.
- The existence of information failure in the market. Information failures can mean that both consumers and suppliers of energy are unsure of what technology is available, and also whether or not there is available funding to implement such technology.

The next section outlines EUAA's preferred approach in overcoming these barriers.

### **4 Would government intervention to address these barriers and impediments produce net benefits to the Australian community? What form should that intervention take?**

In addressing whether or not government intervention would address the barriers and impediments as outlined above, it is worth assessing the existing regimes already in place.

There are a plethora of existing Australian and state government energy efficiency programs. Many of these programs rely on some sort of audit process being imposed on users. They involve a mixture of sound and unsound public policy.

It is also worth noting that currently there is a lack of co-ordination between these programs that results in duplication of requirements and costs imposed on large users of energy. The EUAA would prefer that all Governments work together to improve/remove regulatory barriers and improve co-ordination between programs and jurisdictions in order to achieve greater energy efficiency uptake in a more economic way. The MCE appears to provide the best forum for this to occur through the national framework for implementing an energy efficiency program.

The EUAA would like to comment specially on the Victorian Environmental Protection Authority (EPA) program.<sup>1</sup> The EUAA considers that the EPA audit program is arbitrarily applied. For example it does not require the state government to publish any external audited figures on its own energy consumption covering electricity, natural gas, petrol, diesel, LPG and other fuels. Further, it is applied to small industries that consume about \$100,000 worth of electricity but not to major commercial businesses whose expenditure can be over \$100 million. In saying, this

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<sup>1</sup> The EPA program focuses on environmental rather than energy efficiency issues; however, some of the objectives of the programs are similar.

the EUAA does not advocate that the EPA program should be extended to commercial businesses but be scrapped altogether.

Of further concern is the EPA program's inability to recognise progress made by businesses through avenues other than those prescribed by the EPA, i.e. house management programs, Australian Greenhouse Office's greenhouse challenge and general production efficiency measures.

The EUAA considers that the use of arbitrary regulatory measures, such as those imposed by the EPA, can turn a potentially positive business improvement initiative into an administrative burden. A preferred course is to provide industry with incentives to adopt energy efficiency programs through market mechanisms and benchmarks. This should be implemented on a Federal level to ensure that the administrative burden of multiple schemes is minimised and that a nationally consistent policy is adopted.

The EUAA believes the Federal Government's Energy Opportunity Assessment Program (EOAP) as part of last year's Energy White Paper could be a step in the right direction, provided it is sensibly implemented. The focus of the White Paper is to provide industry with a tool to better understand their energy consumption patterns and to potentially identify programs. This approach provides better incentives to achieve energy efficiency outcomes rather than imposing fines, penalties or burdensome regulations.

#### *Market mechanisms*

Governments involved in energy efficiency should introduce market mechanisms, which provide incentives to drive greater uptake of energy savings. This could be achieved through tax breaks or financial incentives, as opposed to penalties such as environmental levies.

The EUAA is encouraged by the policy direction of the National Energy Efficiency Target (NEET) which implies that businesses might have the opportunity to acquire 'energy savings' to meet their own targets. The EUAA considers that if energy savings could be traded amongst businesses, this would help energy efficiency improvements to be met at least cost. As the PC mentions, schemes such as NEET are being developed in some countries in Europe and come under the general description of 'White Certificates'.

The EUAA believes that if governments impose levies, then they should target them on groups who are directly affected by them. If this is too difficult then the government should abandon levies all together. The EUAA believes levies applied generically and indiscriminately are extremely distortive and often fail to achieve desired outcomes.

The EUAA considers the development of new technology and equipment offers one of the greatest potential improvements in energy efficiency. However, once equipment is installed and a process is commissioned, the possibilities of improving energy efficiency are limited in comparison to installing the next generation of equipment that has been developed. If we view this question over a longer horizon,

then incentives to replace existing equipment and/or reduce the cost of developing new technology would be worth consideration.

However, a business does not always have to adopt new technologies in order to achieve greater uptake of energy efficiency improvements. The EUAA has undertaken a great deal of work in addressing the role of demand management in the National Electricity Market (NEM) and how it might achieve these goals. Policy makers, regulators and providers of energy must facilitate a greater use of demand management in order to encourage consumers to respond to price signals and consume less energy.

In this regard, we welcome the support for demand side response provided by the MCE. This is positive in terms of saving energy and also improving the competitiveness and efficiency of the NEM.

The EUAA notes that the commercialisation of demand side response is occurring and has the potential to significantly curb the rate of demand growth in the long term. A company called Energy Response has been established to implement the outcomes of the EUAA Demand Side Response (DSR) Trial. Overall, the EUAA's DSR Trial was very successful. The Trial results suggested that a DSR 'market' could release up to as much as \$2 billion/year in value – or around 10% of retail turnover. Energy Response's commercial negotiations to date have confirmed that there is an excellent business case for DSR.

### *Benchmarks*

It is difficult to establish meaningful measures of energy efficiency by trying to compare firms that have few similar characteristics. The EUAA is attracted by the NSW benchmark scheme, which deals with this problem by allowing businesses to set their own targets in reducing greenhouse emissions and choosing how it will meet those targets.

Many large energy users already use benchmarks to help them determine and measure how they are using energy more efficiently. Typically they rely on measures that show the amount of energy used per unit of output measure. Although not perfect, this approach has the attraction of being familiar to industry and is already used. Government policies need to recognise this and be pragmatic enough to respond to it.

## **5 Energy Audits and Auditors, and an Energy Efficiency 'Culture'**

As mentioned above, the EUAA is sceptical about the benefits to be had through mandated energy audits. Whilst such schemes are often well meaning, the practice tends to not live up to the expectations.

Our members report a mixed range of experiences with such schemes. Generally, they are better when they are done 'voluntarily' and with active internal support rather than because the firm "has to". Members report that when there is a forced nature to such schemes they often suffer in terms of not having the necessary internal support, being poorly targeted, lacking knowledge of the specific industry/process involved, not getting to terms with the real processes/activities where energy can be saved and

not being implemented fully. On the other hand, initiatives that have the full support of the firm are far more productive and achieve a lot more and for a longer period.

This also starts to turn on the need to create an internal energy efficiency culture within the firm and to have both 'tops down' and 'bottoms up' support. This can involve a combination of support from the highest level (eg Board and CEO), adequate funding and resources, employee training and commitment over a sufficient period of time to make a difference. Policies that support such commitments are likely to meet with greater success as they work with rather than against the firm required to undertake the energy saving initiatives.

Recently some attention has been given to the need to create a certification scheme for energy auditors. Certainly the experience of our members with energy auditors is a mixed one with the quality of the advice they give and work they do quite varied. One problem is that they need to have an understanding of the industry that they are dealing with. For example, if they fail to understand a process they are more likely to overlook this and focus on more generic saving measures (eg lighting) perhaps at the expense of more lucrative measures.

Although we do not oppose a certification scheme for energy auditors, we are also wary that it needs to be well designed and to overcome the deficiencies that exist at the moment. A scheme that merely benefits certified practitioners and not their customers would be of limited use.

## **6 Conclusion**

The EUAA concludes that businesses should be provided with incentives rather than penalties in order to achieve greater efficiency outcomes. The EUAA is encouraged that the PC is reviewing schemes, such as the 'white certificates market' that enables energy savings to be traded. If schemes and initiatives such as these are adopted rather than environmental levies and burdensome audit programs there will no doubt be a better climate for reductions in energy consumption by energy users. Finally, it is important for energy efficiency measures to work in harmony with internal company processes rather than against them if they are to succeed.