

19 February 2016

Submissions
Climate Change Authority
GPO Box 1944
MELBOURNE VIC 3001

Sent via email to: submissions@climatechangeauthority.gov.au

Dear Sir/Madam,

As a leading authority for the electrotechnology industry, Master Electricians Australia (MEA) is grateful for the opportunity to contribute to the discussion on Australia's climate change policy options.

We have chosen to limit our responses to the issues we are most qualified to comment on.

CHAPTER 1: PRINCIPLES FOR ASSESSING POLICIES

Questions

Q.1. The Authority proposes assessing policies primarily on their cost effectiveness, environmental effectiveness and equity. Are these principles appropriate? Are there any other principles that should be applied, and if so, why?

MEA agrees with the principles applied to assess climate change policies. We welcome the inclusion of vertical equity as a consideration in policy development. In the context of feed-in tariffs for renewables, the impact on lower income households needs to be a factor in decision making.

An example of government policy that did not adequately consider the interests of households was the Federal Government's solar incentive scheme. The scheme, which has now been phased out, provided a generous multiplier mechanism for consumers who installed solar PV systems in their homes. While achieving the objective of increasing the uptake of solar PV technology, the excessive rebate resulted in higher electricity bills for consumers not in the financial position to install solar PV systems. Those utilising the technology already enjoyed lower bills simply by virtue of being able to access solar power. Government needs to consider the alternative strategies available that would encourage the uptake of solar PV technology to ensure the costs of grid backed-up distributed energy systems are equitably distributed. An assessment of policies which included vertical equity would be a welcome measure to minimise the impact of climate change policies.

CHAPTER 3: POLICY OPTIONS

Question

Q.10 What lessons can be learned from Australia and overseas on the effectiveness of information programs and innovation support, and their interaction with other climate policies?

➤ **GREEN LOANS SCHEME AND ENERGY AUDITING**

The benefits of a comprehensive home energy efficiency assessment performed by a skilled tradesperson are far reaching for both householders and the environment.

Unfortunately, the federal government's failed Green Loans scheme, which was introduced in 2009, significantly damaged the emerging market and reputation of energy auditing. This subsidised program was generally delivered by underqualified and inexperienced auditors; was limited and inadequately considered energy savings measures (principally advising on light bulbs); and had a poor record of customer service and for providing inadequate advice. However, despite the failure of this specific program there is no doubting the potential for energy auditing performed by qualified technicians to facilitate real change in consumer behaviour.

Recognising the growing demand for energy efficiency expertise, industry developed a nationally accredited qualification to support the skills needed to be a competent energy auditor - the Certificate IV in Energy Efficiency and Assessment. The Certificate IV stands out from other energy auditing qualifications requiring a current electrical licence as pre-requisite. This ensures that only technicians with a high level of skill and experience will receive the qualification, resulting in more comprehensive, practical and effective energy audits and advice for consumers. The Certificate IV qualification should be entrenched as the minimum level any person completing an electrical energy audit should complete.

A government endorsed energy auditing qualification would restore consumer confidence in the energy auditing industry and would be welcomed by MEA.

MEA acknowledges that householders may be reluctant to make the initial financial outlay for an accredited auditor to perform a full audit on their home. The funds required to apply the changes, which could include the purchase of new appliances or engaging an electrical contractor, may also deter consumers from implementing an auditor's recommendations. These costs act as a significant barrier to the success of energy auditing.

In order to overcome these obstacles, we propose that the Government adopt a policy whereby a consumer who pays for an energy audit performed by an accredited energy auditor will be able to reclaim the full audit fee against the costs incurred in implementing the changes. An additional incentive for a consumer would be the offer of a low interest loan to ease the initial financial burden of making their home more energy efficient. These policies would not only encourage more households to engage an energy auditor, but would also provide the incentive for consumers to invest in actual changes.

➤ **NSW Greenhouse Gas Abatement Scheme (GGAS)**

From 2003 - 2012, the NSW Greenhouse Gas Abatement Scheme (GGAS) was in place. GGAS was a mandatory emissions scheme for the state's electricity sector which was aimed at reducing greenhouse gases, setting an annual state-wide per capita greenhouse gas emission target for the electricity sector. These targets could be met by either directly reducing the average emissions intensity of the electricity sold or by purchasing accredited offsets and surrendering them to the schemes compliance regulator. Offsets that could be used included NSW Greenhouse Gas Abatement Certificates (NGACS)

In the early stages of the scheme there was overly generous deemed values for demand side NGACs which saw the market flooded with players offering free energy audits to residential households. During these "audits" they would provide (and sometimes but not always install) a six pack of compact fluorescent lamps (CFLs) and very rarely was a full and proper audit done. They would then create and sell NGACs from this activity.

Whilst the Independent Pricing and Regulatory Tribunal (IPART) did eventually crack down on this and tighten up the requirements, by the time this occurred the damage to the market had already been done. The outcome being that consumers were sceptical about the value and validity of undertaking an audit. This was a direct result of the experiences with these free, low quality audits used to create NGACs in the early stages of the GGAS scheme.

GGAS is a further example of the need for a government endorsed qualification for energy auditors that would facilitate consumers not only gaining information on energy efficiency opportunities but also obtain targeted advice and guidance from a trained electrotechnology professional on what strategies they can employ in their own environment.

➤ **HOME INSULATION PROGRAM**

The Federal Government's now defunct Home Insulation Program (HIP) is a tragic example of a climate change policy initiative gone wrong.

The HIP formed part of the Energy Efficient Homes Package and had a stated aim to install insulation into the ceilings of 2.2 million Australian homes over a period of two and a half years. Prior to the HIP's commencement, there were only 200 businesses retro-fitting installation for approximately 70,000 homes per annum. This exponential increase in work to be performed created a proportionate increase in the installers required to meet the target. According to the Report of the Royal Commission into the HIP, the number of installation businesses increased from approximately 200 before the HIP to 8,359 registered business with a total workforce of approximately 12,000 in October 2009. For a largely unregulated industry this was a recipe for disaster.

MEA began warning government from as early as May 2009 about the safety risks that were likely to accompany the surge in demand for roof insulation after the announcement of the government rebate. The massive demand generated by the HIP rebate scheme meant that traditional products such as batts or spray-in insulation were in short supply, and new installers

turned to other products, including metal foils and blankets. From an electrical standpoint, it is highly dangerous to lay products such as metal sarking or insulation blankets with foil layers directly over electrical cables and staple them in place, as is required by these types of insulation. Safety issues arise as once these cables are laid, it is extremely difficult to judge where the cables are located when stapling the metal sarking or blankets into place.

We were particularly concerned that the rebate program had attracted a large number of new installers who, while registered with the government scheme, were not trained or experienced in dealing with the electrical safety issues associated with laying insulation. The competency based training that was implemented should have been satisfactory, however the inconsistent delivery of this training, and the large amount of exemptions, meant that the training was not enough, particularly as many new entrants into the market had negligible experience to fall back on.

Mr Fuller's death in October 2009, more than five months after the risks of the program were identified to government, is a tragic example of what can happen when the dangers of electrical work are not taken seriously enough.

The flaws with the HIP were numerous and are outlined in detail in the Report of the Royal Commission into the HIP. In addition to the above, the report notes the lack of industry consultation in the lead up to the implementation of the program. Had such consultation occurred many of the flaws in the program could have been remedied; potentially saving the lives of the four young insulation workers who lost their lives while participating in the scheme.

We urge government to seriously consider the recommendations of the Royal Commission into the HIP in developing any future climate changes initiatives.

Q.11. How do information programs and innovation support perform against the principles of cost effectiveness, environmental effectiveness and equity?

➤ **SOLAR PV FEED-IN TARIFFS**

Solar PV performs well against the principle of environmental effectiveness, being a proven means for a household to reduce their reliance on coal based resources. However, as discussed above, innovation programs in the form of excessive feed-in tariffs can have an adverse impact on consumers who cannot afford the initial outlay for solar technology. Solar PV programs would perform better against the equity principle if feed-in tariffs were lowered to a more reasonable level so consumers who cannot afford the technology are not paying the price.

In the absence of a solar feed-in tariff, there is now an opportunity to invest more resources into ways to make solar technology more attractive to consumers. One of the main objections to the broad-scale uptake of renewable energy technologies such as solar PV is the issue of intermittency, i.e. solar technologies only produce power when the sun is shining. A solution to this problem could lie in the use of energy storage systems or "battery banks" for solar PV systems. These battery banks would allow excess solar power to be collected in batteries for

later use as required. However, currently the cost of storage technology can be prohibitively high making it quite unattractive for those who have the option to simply buy relatively cheap electricity from the grid. If more resources can be directed to refining this storage technology in order to make it more affordable, there is a likely to be a stronger uptake of solar power as an energy alternative. If this were to occur solar PV could perform against all three principles, making it a highly effective innovation to achieve climate changes objectives.

➤ SMART METERS

Smart meters are another information/innovation policy designed to make consumers more aware of their energy consumption and allow them to alter their behaviour in order to minimise their greenhouse gas emissions. For households in the position to alter their energy usage behaviour, smart meters perform well against the principle of environmental effectiveness. However, as with solar feed-in tariffs, those without the option of changing their electricity usage patterns, could pay the price.

The decision by the Victorian government in 2006 to introduce a mandatory rollout of smart meters is an example of an information/innovation policy that was not successful in meeting the equity principle. All Victorian households were obliged to pay upfront for a smart meter, whether they wanted it or not, with many who could not significantly alter their energy consumption, receiving higher electricity bills as a result. In the interests of equity, the decision about whether or not to have a smart meter should be made by the customer with retailers competing to offer the best meter/management packages.

➤ ELECTRIC VEHICLES

The long term benefits of innovations such as electric vehicles on the environment could be substantial. However, the high upfront cost to purchase these vehicles and the significant expense involved with the inevitable replacement of a battery is a deterrent to many consumers.

In order to overcome this obstacle, MEA recommends that a study be undertaken to investigate the new infra-structure that would be required to support the electric vehicle energy demand. Making the results of the study readily available to consumers could boost public confidence in the effectiveness and the long-term cost savings of an electric car. Such a study could also include a cost/benefit analysis of introducing tax incentives and rebates for drivers who purchase electric vehicles. This information would give consumers the information they need to be able to make the decision as to whether an electric vehicle is worth their investment both from a financial and environmental perspective.

CONCLUSION

MEA welcomes any further discussion on the development of Australia's climate change policies and would welcome the opportunity to contribute the perspective of the electrotechnology industry.

Yours sincerely,



Malcolm Richards
CEO