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Submission to South Australian Greenhouse Strategy

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ATA is a consumer organisation that was established in 1980. It stimulates uptake of sustainable technologies in order to protect our environment. The organisation provides service to over 3000 members who are actively walking the talk in their own homes by using good building design, and installing water conservation and renewable energy. ATA advocates in both government and industry arenas for easy access to these technologies as well as continual improvement of the technology, information and products needed to change the way we live.

1. What ATA is doing?

ATA has delivered extensive public training programs for over 20 years and are currently developing a national training program for the AGO's Your Home Technical Manual. ATA has also delivered a number of projects which involve energy and sustainability audits and assessments at the domestic scale. Cool Communities and Green Home Action projects were funded through Environment Victoria while two Energy Task Force projects in Broadmeadows and Ashwood, Ashburton and Chadstone were funded through collaborations with SEAV and Neighbourhood Renewal. ATA is currently delivering assessments for local councils and a commercial venture called Easy Being Green. ATA has also offered assessment services to energy and water utilities.

These projects focused on building capacity and expertise among residential householders. ATA's submission therefore focuses on the barriers and impediments to domestic householders in implementing cost effective energy efficiency.

3. Priorities

Deep cuts are required to avoid dangerous climate change. These will be achieved only through strong leadership and action now.

ATA wishes to encourage innovative and ambitious emission reductions targeting the largest energy consumers and greenhouse gas emitters. However, ATA's experience shows that great potential exists among residential Australians to reduce emissions.

This can be achieved through the adoption of renewable energy and energy efficiency.

ATA believes that a holistic, long term and wide ranging policy approach is required which acknowledges the complexity of human behaviour and decision making.

This should include:

- Control or regulation such as minimum equipment performance standards (MEPS) and building standards.

- Support mechanisms such as information provision and education.
- Market mechanisms which ensure cost reflective energy costs and provide price signals to allow the implementation of cost effective energy efficiency improvements. The electricity market currently suffers from negative externalities that ensure discrimination against renewable energy generation and limit the financial benefits of energy efficiency. This market failure must be corrected.

5. Key Barriers

ATA believes that key barriers to achieving these reductions can be summarised as follows:

- **Political Courage and Leadership.** Averting dangerous climate change and reducing emissions requires strong government leadership. While ATA's submission highlights the many benefits of addressing climate change and acting now, some measures may be less politically popular. However, with significant net public benefits, these measures are undoubtedly in the best interest of all South Australians. Governments must act for the collective good even when the individual good may be – at least in the short term – sacrificed for the public good.

Further, business and residential consumers require clear signals that ensure confidence and certainty that enable the investment and commitment to adopt measures to deliver the necessary reductions.

- **Public awareness.** Climate change is no longer contentious science. Despite global agreement on its impact, there remains a clear role for government to increase the awareness and understanding of the causes and impacts of climate change. This includes highlighting the many practical solutions that individuals can undertake to contribute.

The following section explores some of the key barriers in each of the areas that are key to delivering reductions in emissions necessary to avoid dangerous climate change.

Energy Efficiency

ATA's experience delivering energy efficiency programs has illustrated the many technologies and practices which are cost effective in achieving energy efficiency. This experience has however highlighted many barriers and impediments that have prevented energy consumers from undertaking these improvements.

Research from a wide range of sources shows that increased building standards have a net economic, social and environmental gain. This information, coupled with scientific research that highlights the

impacts of climate change if it is not addressed urgently and effectively has led ATA to the opinion that facilitation of this change, through regulation and other policy measures available to government, is appropriate, important and a matter for urgent and priority attention.

A study for ATA called Reaching for the Stars has explored the great possibilities of high-level domestic energy rating systems. The research paper, which investigated Victoria's energy star rating system - found that as the star rating of a house went up, both the state-wide economic benefits and environmental benefits increased. In developing an eight star rating system, ATA believes that a 'whole of house' rating is most appropriate for the residential sector and that a rating scheme needs to combine water and energy efficiency as well as incorporate major appliances and the building shell. ATA also recommends that disclosure of rating should be mandatory for all houses for either sale or rental.

Reaching for the Stars focused on research and an assessment of the impact of an extension to Victoria's five star energy rating scheme for residential buildings and provides a range of valuable analysis and comparisons. ATA advocates for an aggressive adoption and increase in the mandatory rating scheme. ATA believes that South Australia (and indeed Australia) should move rapidly towards a mandatory eight-star scheme.

A more aggressive mandatory rating scheme would also ensure that innovation is stimulated in a wide variety of energy savings measures which should also encourage ratings to consider and attempt to curb the rapid increase in housing sizes as well as consider the mode of occupancy in ratings. These issues require more research and consideration ahead of any conclusions and policy which will ultimately increase the energy efficiency of domestic housing.

Distributed Generation

The ATA has recently completed a survey and research on the experiences of residential consumers negotiating grid connection of renewable DG that indicates many of them face very frustrating experiences. This research highlighted the great inconsistencies in the process and technical details that distributors apply to small renewable DG's. In addition to frequent delays in connecting the installation (which in some cases merely requires activation of a switch on the customers Inverter), this includes technical guidelines such as wiring and inverter requirements which exceed Australian Standards (and industry agreed best practice).

ATA's research revealed that this treatment varies significantly across jurisdictions and clearly highlights the failure of jurisdictional regulation to protect these consumers from being discriminated against by distributors.

ATA advocates for the development of standard grid connection agreements in all jurisdictions, and has welcomed the recent proposal to develop these in SA. However, as per ATA's submission to the

ESCoSA¹, ATA has expressed disappointed that the proposed connection agreement fails to address many of the concerns of ATA and permits ongoing discrimination against solar PV system owners connecting to the electricity network.

9. Potential Costs and benefits.

ATA believes that the costs of implementing and achieving these emission reduction measures are often overstated, while the benefits are understated. There is a wealth of information and evidence that supports this position and ATA wishes to highlight just two:

- Henley homes are a good example of the ease to which the industry has responded. Since 2000 all of their new homes were built in accordance with 5 stars. This has been a key marketing feature of their homes and the benefits of 5 stars has been realised by prospective owners.
- The city of Portland has implemented an aggressive and innovative program to cut greenhouse emissions and achieved these ambitious targets while 'booming economically'².

But it is about more than mere economics. ATA believes that energy efficiency and renewable energy is important to all Australians for three key reasons:

1. The Business as Usual (BAU) forecasted growth in energy demand, and more significantly in the summer peak demand attributable to air conditioning (AC) is going to require significant investment in supply to satisfy. This rapid increase in peak summer demand – with NEMMCO predicting shortfalls in supply as early as 2005/06 in Victoria and South Australia - is placing increasing pressure on the electricity supply industry. The result is, and will if left to market mechanisms (for reasons outlined below) be continued investment in new fossil fuel electricity generation. The cost of this to meet future demand is predicted by the Electricity Supply Association Australia to be many billions of dollars. The cost of this supply is ultimately borne by energy consumers. And given, current energy tariff structures (explored further below) this cost is absorbed by all energy consumers. ATA believes that these billions of dollars would be better spent on removing the current barriers and encouraging cost effective energy efficiency. Society would benefit not only through lower energy costs but also through the increased comfort and standard of living of Australians generally.
2. Australia currently has among the highest level of emissions of greenhouse gas (GHG) per capita, which requires immediate and deep cuts to minimise the impacts of global warming. ATA believes that energy efficiency is the most cost effective means of achieving these necessary reductions in GHG emissions. While Australia must commence an immediate

¹ Available at <http://www.ata.org.au/policy/escosa.pdf>

² See http://stcwa.org.au/journal/080705/1120739604_28819.html

transition to cleaner and renewable fuel sources for our energy generation, such as solar photovoltaic (PV), ATA believes that energy efficiency can also achieve significant reductions in emissions.

3. The implementation of energy efficiency measures and development of an energy efficiency services industry will provide a clear net social benefit to Australia. Strong commitment to policy and program implementation would stimulate the development of much needed (and currently absent) skills and expertise necessary to deliver energy efficiency. This would translate to jobs within the trade and services sector of the economy as well as research, development and distribution of new and innovative energy efficiency technology. These will result in a strong and positive contribution to the economic well being of Australia.