

24 April 2015

Ms Kelly Pearce
Head
UNFCCC Taskforce
Department of Prime Minister and Cabinet
1 National Circuit
Barton ACT 2600

via online portal

Dear Ms Pearce

Department of the Prime Minister and Cabinet
Setting Australia's post-2020 target for greenhouse gas emissions
Submission to Issues Paper – March 2015

Introduction

The Energy Networks Association (ENA) welcomes the opportunity to make a submission to the Australian Government on the issue of setting Australia's post-2020 target for greenhouse gas emissions.

The Energy Networks Association (ENA) is the national industry association representing the businesses operating Australia's electricity transmission and distribution and gas distribution networks. Member businesses provide energy to virtually every household and business in Australia. ENA members own and operate energy network infrastructure assets valued at over \$100 billion.

ENA believes that finding economically efficient as well as environmentally effective solutions to climate change is one of the most important policy challenges facing Australia. As a developed nation, Australia will need to play a significant part in setting international targets that are based on robust scientific evidence, the best available data and that are proportionate to Australia's contribution to greenhouse gas emissions globally. In examining potential greenhouse gas emissions targets it is appropriate that the Australian Government include consideration of:

- Australia's contribution to global emissions abatement;
- the potential long-term global warming scenarios; and

- the social, environmental and economic impact of proposed greenhouse gas emissions targets

An effective carbon emissions target for Australia should include a holistic consideration of all Australian sources of emissions. The associated implementation measures should be economically efficient and focussed on achieving least cost abatement.

Whilst a range of potential options exist that will reduce emissions, sequester carbon, or acquire recognised emissions offsets, policy developed without undertaking robust economic evaluation risks developing economically inefficient emissions reductions measures. Effective emissions reduction measures require transparent and predictable long term targets which allow for the development of least cost responses in an economically efficient merit order.

It will be important to acknowledge at the target-setting stage, the significantly higher costs of abatement with policy measures which are not technology neutral; volatile or unpredictable; or subject to frequent review.

Post-2020 emissions target setting will need to consider the costs to 10 million grid connected consumers of electricity, 4.5 million gas connected customers as well as investors in infrastructure that include "mum and dad" investors and the superannuation funds of Australian workers. Targets and associated policy measures that suggest radical changes in large infrastructure assets such as networks will not be possible without imposing significant costs on consumers.

Networks, climate change adaption and mitigation

ENA members acknowledge the challenges climate change will bring to the management of utilities. To understand impacts of climate change such as increasing intensity and frequency of bushfires, ENA member businesses commissioned the ENA Climate Resilience Manual in 2012. This tool will assist utilities operators to develop adaptive responses to ongoing climatic changes and increase the resilience of networks to the impacts of climate change.

ENA members are also assisting to develop climate change mitigation efforts. Trials of large scale grid connected batteries along with ENA's research work with the Clean Energy Council and ARENA put networks at the forefront of real investment into understanding how new technologies may reduce emissions.

Additionally ENA members are working to encourage electric and gas fuelled vehicles which create lower emissions than conventional transport options.

The commitment by ENA members in developing tools to assist adaption to climate change and mitigate its effects has potential benefits for millions of energy consumers.

A holistic approach to policy setting on emissions targets

ENA has made a number of submissions on government policies that will affect the size of Australia's emissions reduction task. A key part of that task will be to encourage business and householders to use a range of low emissions technologies.

Emissions reduction policies that focus exclusively or preferentially on specific technological solutions limit the capacity of market participants and investors to examine the full range of

potential economic solutions. Allowing for technological neutrality in emissions reduction programs and policies is more efficient and effective than singling out specific technologies and allows for flexibility should new technologies emerge.

In examining a future energy scenario based solely on providing electricity through technologies such as renewables for example, the CSIRO found that:

The cost of limiting the centralised generation technology set to only renewables is a wholesale electricity price that is 31 per cent higher... by 2050¹

Regulating the choice of emissions reductions technologies, rather than supplying a price signal through a market, has resulted in perverse outcomes. Experience with the Small-scale Renewable Energy Scheme (SRES) shows that programs designed to foster the uptake of specific technologies can create market distortions that are counter-productive to effective and lasting climate change solutions.

The incentive provided to householders that install heat pump water heaters under SRES creates a perverse climate change outcome. These systems use non-renewable electricity in their operation and generate 13% more emissions than an efficient gas continuous water heater yet the gas water heater receives no support under SRES.

Gas appliances utilise an energy source with less than one sixth of the greenhouse emissions intensity of electricity in Victoria and one quarter of the greenhouse gas emissions in most other States. In 2013 natural gas networks provided more energy than all the brown coal fired power stations in Australia yet there are no Australian Government incentives for appliances that use gas.

Technologically focussed incentives can also produce unintended consequences such as the smearing of costs across users that can not afford the technology. A case study for the Australian Energy Market Commission (AEMC) found that the incentive led uptake of solar PV systems created a situation where, when installed, other network users were subsidising the PV owner by \$117 per year².

Alternatively, the development of more neutrally focussed incentives programs such as the Emissions Reduction Fund (ERF) often requires the development of a 'safeguard' limit such as the proposed ERF Safeguard Mechanism. Inappropriately applied limits on emissions risk placing a limit on networks even if these networks deliver energy in the most efficient way.

In recognition of the difficulty in applying efficiency limits on networks, the Energy Efficiency Opportunities (EEO) program decided not to include gas or electricity networks after a series of trials. ENA notes that the Australian Energy Regulator concluded in 2008 that it would not be appropriate to apply a new efficiency mechanism to distribution losses in the absence of *"...evidence that distribution losses are deviating from efficient levels."*³

Other options to reduce emission include programs designed to allow for the provision of greater information on energy consumption and emissions to the consumer. Nation-wide energy labelling programs such as the Minimum Energy Performance Standards (MEPS) have played a role in lowering emissions by providing information to customers at the point of sale.

¹ Page 42, Change and choice, CSIRO, 2013.

² NERA, Economic Concepts for Pricing Electricity Network Services, A Report for the Australian Energy Market Commission, 2014

³ Page 17, Explanatory Statement to the Proposed Electricity Distribution Network Service Providers Efficiency Benefit Sharing Scheme, AER 2008.

In its 2014 report on progress of emissions reduction the Climate Change Authority reported that:

The most significant contributor to emissions reductions in the residential sector between 1990 and 2012 was gas heating. Gas replaced emissions-intensive electric heating as the gas network expanded⁴.

The success of programs that support energy efficient technologies such as MEPS demonstrates that encouraging lower emissions technologies does not necessarily require the development of prescriptive incentive programs or legislatively enforced limits on growth.

Certainty for investment

Emissions reduction policy and measures that place a potential financial burden on the economy should be developed in consultation with business and the community. Transparent policy development with clear long term goals will serve to mitigate investment uncertainty around emissions policy development and thus reduce costs to the consumer.

To encourage transparency, effective emissions targets could include clear milestones that occur at regular intervals with specific actions that occur if those milestones are not reached (such as a review for example).

Federal and State emissions policies designed to meet a national target must be complementary. The development and implementation of a transparent and effective emissions policy requires the coordination of all levels of Government in Australia.

Summary

ENA believes that the development of effective emissions targets should:

- be based on scientific evidence and the best available data;
- be proportionate to Australia's contribution to greenhouse gas emissions globally;
- consider all Australian sources of emissions; and
- consider the social, environmental and economic impact of any proposed greenhouse gas emissions target.

The development of poor emissions reduction policies will result in:

- perverse outcomes such as less efficient technologies being supported;
- costs being smeared across users that can not afford technologies to reduce emissions.

Policies to achieve targets should:

- prioritise least cost abatement options first;
- be technologically neutral;

⁴ Chapter 6, Reducing Australia's Greenhouse Gas Emissions: Targets and Progress Review—Final Report, Australian Government Climate Change Authority, 2012

- provide consumers with enough information to make effective emissions reduction choices;
- be transparent and predictable long term targets that do not impose significant costs on consumers; and
- be effectively coordinated through COAG.

The ENA looks forward to the opportunity to participate in the development of this proposal. If you have any questions please contact me on 02 6272 1555 or Dougal Torrance on 02 6272 1511.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Bradley', with a stylized, flowing script.

John Bradley
Chief Executive Officer