



Climate Council of Australia

Submission to: Energy Security Board regarding National Energy Guarantee Consultation Paper

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Submission from:

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About the Climate Council

The Climate Council is an independent non-profit organisation that provides authoritative, expert advice to the Australian public on climate change.

To find out more about the Climate Council's work, visit www.climatecouncil.org.au

About the Climate Councillors

Professor Andrew Stock

Andrew Stock is a Climate Councillor and energy expert with over 40 years experience in executive roles in energy businesses, spanning traditional energy suppliers, emerging energy technologies and renewables, including managing billion dollar energy developments.

Andrew is a present and past director of numerous energy companies and Chair of resources and energy Institute Advisory Boards at the University of Adelaide and University of Melbourne. He was the founding National President of the Australian Business Council for Sustainable Energy (now Clean Energy Council) and has served on numerous research and energy advisory committees. Andrew is a former Board Member of the Clean Energy Finance Corporation.

With an honours Chemical Engineering degree from the University of Adelaide, Andrew has completed postgraduate courses at IMD, Switzerland, and the University of Western Australia. He is a Fellow of the Institution of Engineers Australia, and a Graduate Member of the Australian Institute of Company Directors.

Greg Bourne

Greg Bourne has worked at the nexus of climate change, energy business and policy for over 30 years. With BP he lived and worked in the UK, Middle East, USA, Canada, Ireland, Brazil, China, Venezuela and Australia. For two years he was Special Adviser on Energy and Transport to Prime Minister Margaret Thatcher. He returned to Australia in 1999 as Regional President, BP Australasia and worked with business and governments on the climate change agenda.

Greg was CEO of WWF Australia for six years and later a non-executive director of Carnegie Wave Energy. He is the former Chair of the Australian Renewable Energy Agency.

A Fellow of the Australian Institute of Company Directors and a Member of the Australian Institute of Energy he was awarded the Centenary Medal for services to the environment and an Honorary Doctorate from the University of Western Australia for services to international business.

Executive Summary

Australia is already experiencing the many consequences of a changing climate, from worsening heatwaves, droughts and bushfires, to devastating coral reef bleaching, and most of our population centres being exposed to sea-level rise (Climate Council 2017). Quick, decisive national action is required by Australia to tackle climate change effectively.

Australia lacks an enduring, credible, national policy to reduce greenhouse gas pollution from the electricity sector. The proposed National Energy Guarantee (NEG) attempts to address this policy gap by proposing two separate, disconnected policy mechanisms referred to as the “Emissions Guarantee” and a “Reliability Guarantee”.

However, the proposed NEG falls short when it comes to delivering reliable, affordable power while tackling climate change. In the interests of constructively addressing these shortcomings, the Climate Council proposes twelve policy principles that can be applied to any climate and energy policy. These principles are detailed in the attached Climate Council report “Clean & Reliable Power: Roadmap to a Renewable Future” and summarised below.

Any policy designed to tackle climate change should as a minimum:

1. Accept the need for deep greenhouse gas pollution cuts from the electricity sector in order to limit global temperature rise to 1.5 to 2°C and tackle climate change.
2. Reduce carbon pollution from the electricity sector by 60% by 2030 (on 2005 levels).
3. Set emissions reduction targets beyond 2030 towards reaching net zero emissions well before 2050. This is in line with National Electricity Market state and territory commitments to reaching net zero emissions economy wide by 2050.
4. Any emissions reduction target must act as a floor, not a ceiling for greenhouse gas pollution cuts. Any target must be able to be easily ramped up in the future (not locked in until 2030). This is important for investor certainty.
5. Achieve a minimum of 50 - 70% renewable energy across Australia by 2030.
6. Meet or exceed the aggregate level of state and territory renewable energy and emissions reduction targets, to have any effect on reducing greenhouse gas pollution (and not just add bureaucratic red tape).
7. Encourage investment in new clean, renewable power supply - when and where needed - well in advance of coal closures to deliver real emissions reductions in Australia. Disallow the use of “offsets”, as these will not achieve or contribute materially to the electricity industry transition in Australia.
8. Be workable and underpinned by straightforward, regular and transparent tracking and reporting of emissions.

Any policy designed to address reliability of supply should as a minimum:

9. Only credit value for reliability to power generation that performs in high temperatures. Operating records show ageing coal and gas plants do not meet this test.
10. Ensure new capacity for the purposes of reliability focuses on zero emission solutions such as renewable energy and storage.
11. Carefully consider existing and planned measures for reliability and the considerable

amount of renewable energy and storage projects in the pipeline.

12. Demonstrate the need for the policy, consider alternatives, be proportional to the issue and avoid undue effects on competition and trade.

The Climate Council outlines key concerns regarding the proposed NEG on the following pages.

The NEG proposes inadequate emissions reduction targets for the electricity sector.

Under the NEG, the Federal Government proposes an emissions reduction target for the electricity sector of 26% by 2030 (on 2005 levels). No further emissions targets are set beyond 2030. The NEG emissions proposal is a woefully inadequate response to the urgent threat of climate change. The electricity sector should reduce carbon pollution from the electricity sector by at least 60% by 2030 (on 2005 levels) (ClimateWorks 2017).

Furthermore, the NEG's low emissions reduction target would be effectively locked in through to 2030, requiring five years advance notice for any future changes beyond 2030. This limits the ability to ratchet up greenhouse gas pollution cuts over the next ten years.

As the biggest polluter with solutions available, the electricity sector should shoulder a higher proportion of Australia's greenhouse gas pollution reductions. With off the shelf technologies like renewable energy and storage, the electricity sector can reduce emissions more rapidly and cost effectively than other sectors of the economy such as transport and agriculture. There are as yet limited or no policies (either in place or planned) from the Federal Government addressing greenhouse gas pollution in these other sectors.

Both these factors increase investment risk for the transition to a low carbon economy. In the electricity sector, the low "locked in" emissions reduction target to 2030 will likely increase investment risk over the decade to 2030. Astute investors recognise that the NEG's proposed emissions reduction is insufficient to address global climate change and will anticipate future change in the period to 2030, which the NEG scheme makes uncertain. By pushing more emissions reduction load onto other sectors of the economy, the investment risk in these sectors will increase as well, as investors will anticipate the electricity sector will be asked to do more, and will choose to defer other sector investment until they "see what happens".

A greater degree of investment certainty would be achieved by an emissions policy and scheme design which anticipates a steep decline in emissions intensity for the electricity sector from current levels of approximately 0.82 tCO₂/MWh (Finkel 2017) to emissions free by 2040.

The NEG restricts renewable energy uptake in Australia and limits state and territory action.

The proposed NEG would effectively set an upper limit on state and territory government action on renewable energy, with the Federal Government stating these policies would be able to contribute to, but not exceed the NEG emissions target (AFR 2018). This is

unacceptable, as states and territories have been leading the energy transition in the absence of Federal Government climate and energy policy.

State and territory renewable energy targets are already in place and being implemented in Victoria (40% by 2025), Queensland (50% by 2030), South Australia (50% by 2025), Tasmania (100% by 2022) and the Australian Capital Territory (100% by 2020).

All states and territories in the National Electricity Market have announced net zero emissions targets for 2050. The proposed NEG is inconsistent with these commitments. The pathway to 2030 is patently not on track to achieve a smooth transition to zero sector emissions well before 2050, and the NEG provides no indication of further emissions reductions beyond 2030.

By setting such a low emissions reduction target for 2030, and no longer-term target, it is unclear whether the NEG will achieve anything with regards to emissions reductions beyond existing state and territory policies. Indeed, the proposed NEG could actually lead to less renewable energy in 2030 than under “business as usual” conditions, i.e. if the Federal Government were to do nothing.

The proposed implementation of the NEG is highly complex and will result in additional bureaucratic red tape for the electricity sector while serving no useful or practical purpose to adequately reduce emissions, and potentially leading to a worse outcome than business as usual.

New reliability measures should consider existing measures in place, be proportionate and tackle the source of the problem.

Australia’s electricity supply is highly reliable. The NEG layers additional supply reliability requirements on electricity retailers, despite numerous reliability measures already in place and further Finkel Review reliability measures adopted by the COAG Energy Council for implementation.

The critical issue relating to future reliability of supply in the electricity sector, is ensuring ageing and inefficient coal and gas fired power stations are replaced with a mix of clean renewable energy and storage - where and when needed - before these fossil fuel power stations close or fail.

Relying on ageing and inefficient coal and gas power stations creates a false sense of security.

Australia’s electricity supply is highly reliable. Power outages and interruptions, when they do occur, are overwhelmingly the result of transmission and distribution issues.

On the rare occasions where there are issues with reliability of supply (and unserved energy does occur), this is often the result of unplanned outages at coal and gas power stations.

Relying on these ageing and inefficient power stations for reliability under the NEG may lead to a false sense of security, increasing the vulnerability of all consumers who rely on the electricity sector.

Lack of competition and impacts on power prices must be addressed.

The National Electricity Market is already dominated by a few large energy companies. Electricity policies such as the proposed NEG must not further entrench the market power of these “gentailers” (owning both retail and generation businesses). The Energy Security Board (2018) have acknowledged “that the Guarantee should make sure that it does not unintentionally further entrench market power and create barriers to entry for smaller players”, but makes no serious suggestions as to how that concern would be addressed. Advancing policy design in the absence of addressing this critical point risks seeing any “last minute” steps introduced later be wholly inadequate. The Climate Council agrees that design to re-enforce effective wholesale and retail market competition is critical.

It remains unclear how the NEG will address concerns relating to competition and power prices.

Now is the time to engage in a proper consultation process.

Policies which play a role in determining the future of Australia’s electricity system - whether it is clean or polluting; expensive or affordable; reliable or fallible - will impact directly on the lives of every Australian for decades to come.

The development of an enduring, credible, national policy to reduce greenhouse gas pollution from the electricity sector is too important to rush into a poorly designed policy.

In contrast to the extensive public engagement undertaken by the Finkel Review (e.g. consultations in every state and territory of the National Electricity Market; over 120 individual meetings; three months to respond to the Finkel Review’s preliminary report; over 390 written submissions) - there has been very little consultation or public input into the development of the NEG.

The Climate Council is concerned that the Energy Security Board’s draft consultation paper is open for comment for just three weeks. Furthermore, there has only been one stakeholder forum on 26 February 2018 that did not provide any opportunity for questions and the stakeholder presentations did not include any scientists or climate experts. This is particularly concerning considering that a core aspect of the NEG is its “emissions guarantee” component.

The public deserves a proper public engagement process, informed by more details about the central policy problem - the lack of a credible climate and energy policy. This would involve further information on the operation of the proposed NEG, and a comparison with alternative policies and approaches such as the Clean Energy Target, an Emissions Intensity Scheme as well as successful operating schemes in international electricity markets.

As power consumers, Australians pay for and rely on the electricity system, and as such will benefit from or pay the costs resulting from policy choices. It is therefore vitally important that such policies are informed by evidence and due process, particularly allowing for sufficient public engagement.

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