

Submission on the National Energy Guarantee: Draft Detailed Design for Consultation: Commonwealth Elements

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Healthy planet, **healthy people.**

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Doctors for the Environment Australia (DEA) is an independent, self-funded, non-government organisation of medical doctors and students in all Australian States and Territories. Our members work across all specialties in community, hospital and private practice. We work to prevent and address the health risks - local, national and global - caused by damage to our natural environment. We are a public health voice in the sphere of environmental health with a primary focus on the health harms from pollution, environmental degradation, and climate change.

DEA welcomes the opportunity to submit to the Draft Detailed Design of Commonwealth Elements of the National Energy Guarantee².

Recommendations

Setting and reviewing the electricity emissions target

DEA believes the 26% electricity emissions reduction target is too low and should be increased to encourage the continuing transition to renewable energy. Without strong action from each and every nation, Australia and the global population will be unable to curb global warming and climate change with its attendant threats to human and biological health.

Implementing the exemption for emissions-intensive trade-exposed activities

DEA opposes exemptions for EITE activities because there are increasing examples of such activities being addressed effectively by renewable energy and storage.

External offsets

DEA opposes the use of offsets because they provide a mechanism to avoid effective and real emissions reduction.

Introduction

To this stage DEA has not supported the NEG because it fails to place the necessary emphasis on reduction of carbon emissions³ which are still rising overall in Australia.⁴ Adequate emissions reduction is crucial if the world is to avoid run-away global warming with its adverse consequences on human and biological health. Sound climate science has predicted global-warming for the last three decades, predictions which are unaccountably being ignored by many in positions of power. Currently we are seeing but glimpses of what this will mean for the health of humans⁵ and the biosphere, and without adequate action these effects will only progress relentlessly. Heat waves⁶, devastating bush-fires⁷ and drought, more-severe floods and storms⁸ will all affect lives of humans, animals and flora and impose huge restructuring costs on affected communities. Accentuation of biodiversity loss opens up unknown outcomes of biological survival.⁹

Progressive loss of polar ice-caps¹⁰ will be non-reversible for thousands of years leading to sea-level rise which will devastate the lives of millions of coastal dwellers, including Australians. These are not idle predictions as the first stages of these effects are appearing and they will only progress without strong climate action. The destruction of the Great Barrier Reef is one of the first major casualties of ocean warming to impact Australia's shores, albeit with contributions from other causes.¹¹

The adverse health effects from pollution derived from burning fossil fuels must be factored in for a mature debate on the merits of prolonging coal-fired power generation. The health implications of coal are significant¹², with an estimated 3,000 early deaths annually in Australia from air pollution, about half from coal mining and combustion, causing asthma attacks, chronic lung disease, lung cancer, dementia, heart attacks and stroke. Multiple independent sources of evidence, overseas and in Australia, show that the incidence of low birth weight babies can be related to their pregnant mothers living downwind from coal fired power stations and these babies have seriously impaired outcomes.¹³ Dangerous fine particle emissions are showing no signs of abating.¹⁴

Section 2: Setting and reviewing the electricity ERT

Inadequacy of Australia's Emissions Reduction Target

Analysis by many energy experts indicates that Australia has to take much more ambitious measures to fulfil its duty as a global nation and as a signatory to the Paris Agreement.¹⁵ To reduce emissions by 26% on 2005 levels by 2030 in the electricity sector alone is not an unalterable part of the Paris Agreement. The target Australia has chosen (its nationally determined contribution), when considering the need for

proportionality of emissions throughout the world, is inconsistent with our share of carbon emissions,¹⁶ and will contribute to failure to achieve the Paris goal of limiting global temperature rise. Australia's target completely ignores the pledge of ambitious efforts contained within the Agreement.¹⁵

For action on climate change to succeed, Australia has to accept the doctrine that every nation and every state must adopt an equitable approach. It is not acceptable to consider that our emissions are so small that they do not matter. If all of the small emitting countries took this approach, 45% of all the world's emissions would not change. This is the reason why action on climate change is such a challenge and deserves the most serious and responsible approach.

The current emissions target for the electricity sector is so inadequate and unambitious that it is close to fulfilment already as the states (SA, Vic, ACT, Qld, and more recently WA and Tas) have been working with the market to install renewable technologies which allow for reduction in fossil-fuel generated power. With ever increasing renewable sources to replace fossil-fuel electricity generation, there is incentive for more storage technologies to enter the market, such as batteries, pumped hydro and concentrated solar-thermal. The government can work with other jurisdictions to further expand storage facilities thereby allowing a higher and more responsible emissions reduction target.

Instead of strengthening emissions reduction, the NEG places greater store on energy security and reliability. But these two requirements, necessary as they are, are being accommodated already by Australia's vast NEM which covers all types of geographic conditions which allow for more constant supply from renewables and storage. Although the AEMO assessed the chance of insufficient summer-time supply to be extremely small¹⁷, both South Australia and Victoria purchased diesel generators as emergency back-up to enhance reliability.^{18, 19} However these were not required to be used for even one-minute last summer.^{20, 21}

Thus, the claim (page 4 Consultation Paper) that the "*Guarantee will provide the policy certainty*" is misleading on several counts. The NEG only provides certainty for investment in the status quo, not for the multitude of renewable projects in the offing right now. Insecurity and unreliability have been over-stated and are more likely to be due to failure of incumbent fossil-fuel generators than renewables and storage.²²

Geographic neutrality, (page 7, Consultation Paper) ie. that special geographic advantages which some states can offer can be ignored, does not fit with advances that are taking place throughout Australia. One of the strengths of the Australian NEM is its extent and diversity. It covers a huge area and contains regions with access to high wind flows, high sun exposure and now is extending storage capability. For example, Tasmania, due to its high hydro capacity has far fewer emissions from

electricity generation and can provide the NEM with a huge storage capability.²³

Other states similarly can use their geographic differences to advantage to allow increased uptake of renewables to achieve their emissions reduction targets which are more ambitious than the NEG proposal. Therefore, the statement (page 7, Consultation paper) that electricity emissions targets of the NEG would not alter in these circumstances is flagrant obstruction to energy transition.

Furthermore, the NEG will impose restrictions on regions to supply their own renewable power as *"...the Guarantee would ensure that sufficient dispatchable generation is available across all jurisdictions, regardless of the impact of state-based targets ..."* in the pursuit of energy reliability. If 'dispatchable' in NEG documents is taken only to mean electricity from fossil-fuel generation, then electricity from renewables and storage should be acknowledged as just as dispatchable and reliable.^{22, 24} Moreover energy from renewables and storage does not result in emissions, unlike the continual wasteful burning of fossil-fuels when power stations are waiting to dispatch.

One additional problem stemming from inadequate reduction in emissions from electricity generation is that there will be a greater burden on emission reduction in other areas such as industry, agriculture²⁵, forestry and vehicular transport to achieve overall emissions reduction. Australia's total emissions are still increasing particularly in vehicular transport.^{26, 27}

Section 3: Implementing the Exemption for Emissions-Intensive Trade-Exposed (EITE) Activities

DEA has no special expertise in the field of Emissions Intensive-Trade Exposed (EITE) exemptions from emissions targets. However, there would appear to be two consequences of EITE exemptions. First, that the burden of emissions reduction is placed on smaller industries and other sectors of the economy such as agriculture and vehicle emissions, and second, that there is less incentive for large consumers to change their source of electricity supply. Therefore, detailed discussion of the actual administration and methodology of exemption processes is a distraction from more important considerations. Exemptions provided to these industries in effect are subsidies to the use of electricity from fossil-fuel sources. However, with cost of energy from renewables slightly below the cost of fossil-fuel derived power, large users are starting to benefit from moving to renewable sources without losing international competitiveness, dispatchability or reliability.^{28, 29, 30} Most notable is the case of Sanjeev

Gupta's Liberty OneSteel in Whyalla where the entire business will be run on renewable energy with battery and pumped hydro storage: a lesson surely for EITE industries.³¹

Thus, DEA believes there would be little value in continuing EITE exemptions.

Section 4: External Offsets

Although DEA does not have special expertise in the area of offsets, from first principles it would seem that offsets can be utilised to minimise true emissions reduction. The use of offsets has also been open to fraud and double counting. Rather than spend effort and funds on administering this mechanism, DEA believes that offsets should be scrapped.

Conclusion

Overall, the NEG does not appear designed to simplify and incentivise the transition to renewable energy but appears to foster extra complexity which interferes with effective and orderly emissions reduction.³²

As presented by the federal government so far, the essential mechanism of the NEG is business-as-usual. DEA along with the majority of Australians³³ urges the federal government to take a more pro-active approach to climate change mitigation, in order to safeguard human and biological health. Energy analysts also have widely condemned the NEG as presented.³² The mechanisms of EITE and Offsets are overly complex, and their lack of transparency allows unethical practices and financial gaming. EITE exemptions from emissions targets are surrogate fossil-fuel subsidies and only delay incentives and opportunities to transition to cleaner and cheaper energy sources. The federal government needs to review the National Energy Guarantee to ensure that it fulfils the aspirations of experts and lay consumers alike.

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