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# Productive use of energy resources: Act within a national framework for state benefits

Author: Tony Wood, Energy Program Director, and Guy Dundas, Energy Fellow, Grattan Institute

Response to the Discussion Paper “Kickstarting the productivity conversation” released by the NSW Productivity Commission in October 2019.

There are no restrictions on publication of this submission or requirements for anonymity. The submission contains no personal information of third party individuals.

# 1 Summary

The New South Wales (NSW) Government wants to improve the productivity of the state economy by identifying priority areas for policy action.

Our specific recommendations:

- Join with the other jurisdictions that make up the NEM to introduce an emissions reduction policy for the electricity sector without the Commonwealth. This could take one of several forms, including a modified version of the National Energy Guarantee abandoned in mid-2018. Such a scheme could be fungible with the Commonwealth's Climate Solutions Fund and Safeguards Mechanism to extend its coverage and lower overall costs.

- The existing national reliability framework exists to balance reliability and costs. If governments have concerns, they should raise them through the existing framework, rules and agencies. Sovereign governments can always revert to unilateral action such as imposing higher standards for reliability. If they do, the costs should be clearly identified, justified by the benefits that will be delivered and explained to those who pay for them.

- The NSW Government should establish an initiative to work with the retailers and network businesses to develop and implement a strategy for electricity tariffs that encourages efficient investment in distributed electricity and storage to reduce overall asset investment and increase asset utilisation.

- Past over-investment in network businesses should be remedied to improve the affordability of the network. This should be done through a combination of a voluntary government write-down of the regulatory asset base and rebates on network charges[1].

- The NSW Government should ensure that the processes for approvals for the Santos project near Narrabri are expedited, without compromising environmental standards. The Government should consider joining with the Commonwealth and other states and territories to develop national standards for gas development.

[1] https://www.accc.gov.au/system/files/Retail%20Electricity%20Pricing%20Inquiry%E2%80%94Final%20Report%20June%202018_0.pdf

# 2 Introduction

This note from Tony Wood and Guy Dundas of the Grattan Institute responds to the Discussion Paper released by the NSW Productivity Commission in October 2019 examining opportunities for policy actions to improve productivity in key areas.

Grattan Institute is an independent think-tank focused on Australian domestic public policy. It aims to improve policy outcomes by engaging with both decision-makers and the community.

We understand that the Productivity Commission is seeking responses to questions raised in the Discussion Paper. In doing so, this submission focuses on those elements of the Discussion Paper where we have specific and relevant views and knowledge. We have therefore focused entirely on Section 5 of the Discussion Paper that is seeking to address:

- Better electricity network asset utilisation, increased demand management and emissions policy certainty.
- Improved regulatory framework for energy, including gas.

Accordingly, we have not attempted to address all the matters raised in the paper.

There are several issues that provide a background to the issues addressed in the Discussion Paper:

- NSW is a key state in the national energy system and particularly in the National Electricity Market (NEM). It supports the largest generation fleet, is connected via transmission with Queensland and Victoria and there is a proposal under consideration for connection to South Australia.
- NSW has a mixed ownership model for electricity generation, networks and retail while the gas sector is privately owned.
- NSW has state-wide target for net zero emissions by 2050 although it has not adopted specific renewable energy targets and policy mechanisms in the way of Victoria or Queensland. This is despite NSW having hosted the NSW Greenhouse Gas Abatement Scheme from 2003 to 2012.
- As host-state for Snowy Hydro, NSW has a 30 per cent share of its capacity in renewables, although its share of rooftop solar PV, at 8 per cent, is well behind the other mainland states.
- Historically, NSW gas demand has been met from interstate sources and much of the state is excluded from coal-seam gas development.

# 3 Issues arising from the Discussion Paper

The Discussion paper identifies electricity price rises as a key issue and draws on various material, including two key Grattan Institute reports to support and illustrate these changes and their underlying causes. We do not elaborate on those issues in this submission.

## 3.1 Lowering prices through investment certainty

We strongly support the need for increasing predictability and stability in energy policy to deliver efficient investment at lowest cost. Our recent report, *Power play: how governments can better direct Australia's electricity market*[2], identified ad hoc market interventions as a major barrier to effective and efficient investment while recognising that governments will always carry responsibility for a reliable, affordable electricity supply.

While all Australia's states and territories have targets for net zero emissions by 2050, there is an absence of policies to meet those targets. The Commonwealth doesn't have a policy to deliver its target of a 26-28 per cent reduction by 2030 against 2005 levels. This is unlikely to change during the term of the current Coalition Government although the electricity sector is likely to deliver its proportionate share of that target.

Australia has made attempts to deliver a national emissions reduction policy, either economy-wide or electricity-specific on several occasions since about 2007 and the election of the Labor Government led by Kevin Rudd. As examples, the Discussion Paper describes two sector-specific mechanisms explored by the Finkel Review.

NSW has several options that it could pursue to meet its 2050 target and deliver greater policy predictability:

1. Introduce a sector-specific scheme on a state basis such as the Greenhouse Gas Abatement Scheme it had used previously, or direct support mechanisms such as announced last week by the NSW Energy minister, Matt Kean[3] or some form of renewable energy target as adopted by Victoria and the ACT using reverse auctions and government-backed offtake agreements.

2. Join with the other jurisdictions that make up the NEM to introduce an emissions reduction policy for the electricity sector without the Commonwealth. This could take one of several forms, including a modified version of the National Energy Guarantee abandoned in mid-2018. Such a scheme could be fungible with the Commonwealth's Climate Solutions Fund and Safeguards Mechanism to extend its coverage and lower overall costs.

3. Join with all the Australian states and territories to develop a national, economy-wide emissions policy. This could also take one of several forms and could follow the precedent of work done on a state-based, national

[2] https://grattan.edu.au/wp-content/uploads/2019/10/922-Power-play.pdf

[3] https://www.smh.com.au/national/this-is-how-you-do-climate-nsw-unveils-plans-for-a-renewable-energy-short-cut-20191122-p53d25.html

emissions trading scheme on which much design work was done in the period prior to the 2007 federal election.

Whichever of these approaches is adopted, it is always important to separate the policy mechanism from the emissions target it is intended to deliver.

We recommend that Option 2 be adopted. It would connect the aspirations of the other states and could use a reasonably well-developed mechanism, while being broadly consistent with future developments towards a wider approach. It also deals with the current impasse at a federal level, that is surely likely to be temporary.

Option 3, while theoretically more efficient, is likely to be politically more challenging. Option 1 continues a process of unilateral actions by state and territory governments when they are supposedly committed to national energy and climate policy. The result would be higher cost and harder to entangle in the future.

## 3.2 Efficiently determining electricity reliability standards

NSW consumers are paying the cost of inappropriate government responses to concerns about reliability of its electricity networks. Yet, over the last three years, some government ministers (Commonwealth, Victoria and NSW) have expressed concerns about the reliability of the generation sector. This arises from the closure of some plants, imminent closure of others, evidence of lower reliability of ageing plants in more challenging circumstances and greater coincident peak demand with climate change.

One response to these concerns is the Retailer Reliability Obligation as described in the Discussion Paper and introduced earlier in 2019. This mechanism sits alongside the Reliability and Reserve Trader (RERT) Mechanism which is used by AEMO to address more immediate concerns. Currently, there are proposals from Victoria for an extended RERT, the proposal from AEMO for an enhanced Reliability Standard, the recent agreement by the COAG Energy Council for the ESB to review the current reliability Standard and the decision by NSW to introduce an Energy Security Target.

All the above take place in an environment where almost all outages are caused by problems in transporting electricity and have nothing to do with whether the power was generated from new renewables or old coal or some other technology. [4]

The political focus on power outages caused by a lack of generation is skewed and is likely to lead to expensive and unjustified measures. This is true both in general, and in the case of NSW – despite the expected closure of the Liddell power station the reliability outlook for NSW remains benign. The reliability outlook in AEMO's 2019 Electricity Statement of Opportunities is clearly better than in the same document from a year earlier.[5] As further investment occurs the reliability 'gap' will close from modest – NSW is currently projected to be close to, but within, the reliability standard post-Liddell – to negligible.

[4] https://grattan.edu.au/report/keep-calm-and-carry-on/

[5] https://grattan.edu.au/wp-content/uploads/2019/10/922-Power-play.pdf

Another example of the skewed focus on outages caused by a shortfall of generation is provided by the recent disconnection of consumers by South Australia's distribution company to reduce the risk of bush fires being caused by power lines in extreme weather.[6] The human and economic cost of this type of outage is substantially greater than any outage likely to arise from generation shortfalls, and yet the political focus remains on shortfalls.

Governments will feel compelled to act when things go wrong. The best approach for such action is via a rules-based system and through existing agencies responsible for the market. If the rules are ineffective or need to be updated, or the agencies have not been effective, the governments have the power through the COAG Energy Council and the Australian Energy market Agreement to make the necessary changes to address the problem. Going around the rules or the agencies or directly intervening in the market is a very poor approach and is unlikely to be effective even if it produces a short-term improvement.

In that context we note recommendation 7.3 of the Finkel Review[7]:

"By mid-2018, COAG leaders should agree to a new Australian Energy Market Agreement that re-commits all parties to:

- Taking a nationally consistent approach to energy policy that recognises Australia's commitment in Paris to reduce emissions and governments' commitment to align efforts to meet this target with energy market frameworks.
- Notifying the COAG Energy Council if they propose to take a unilateral action that falls within the scope of the Australian Energy Market Agreement prior to taking the action.

Within 28 days of notification, the Energy Security Board will provide advice to the COAG Energy Council on the impacts of the proposed action taking into account the objectives of the Australian Energy Market Agreement."

This recommendation was accepted by the COAG Energy Council but has not been implemented, and the electricity strategy announced by the NSW Government contains examples of exactly the concerns that were to be addressed by this recommendation.

The existing framework with its balanced and responsive processes exists to get a balance between reliability and costs. It remains the best framework for evaluation of generation and network reliability. That is not to say it is perfect or should not be improved. However, the recent and current initiatives taken by the Council and the agencies should address any concerns.

If governments have concerns, they should raise through the existing framework. Sovereign governments can always revert to unilateral action such as imposing higher standards for reliability. If they do, the costs should be clearly identified, justified by the benefits that will be delivered and explained to those who pay for them.

[6] https://www.sapowernetworks.com.au/data/306378/open-letter-to-residents-of-port-lincoln-and-lower-eyre-peninsula/

[7] https://www.energy.gov.au/publications/independent-review-future-security-national-electricity-market-blueprint-future

### 3.3 Improving asset utilisation and demand management

Current price signals do not reflect costs and that leads to inefficient asset investment and asset utilisation. This problem will get worse with the increased deployment of rooftop solar PV and the growth in electric vehicles.

There are various approaches to cost-reflective tariffs that could be adopted by NSW that would lead to lower investment, higher asset utilisation and more effective demand participation. Limited adoption of smart meters is a constraint that needs to be addressed. The Government should establish an initiative to work with the retailers and network businesses to develop and implement a strategy in this area. This will include addressing any adverse consequences on some consumer groups, particularly vulnerable consumers.

The ACCC supported a recommendation by Grattan Institute[8] that that the past over-investment in network businesses should be remedied to improve the affordability of the network. In NSW, this should be done through a combination of a voluntary government write-down of the regulatory asset base and rebates on network charges[9].

### 3.4 Ensuring secure and reliable supplies of gas

The NSW Government should ensure that approvals for the Santos project near Narrabri are expedited, without compromising environmental standards. The NSW Government should consider joining with the Commonwealth and other states and territories to develop national standards for gas development, including the use of technologies such as fracture stimulation. The results of such developments could be used a basis for reviewing the existing restrictions on gas development in the state.

For most NSW households and many small businesses, the use of gas is already more expensive than electricity and gas will become steadily more relatively expensive as emissions constraints emerge and the emissions intensity of electricity declines. The NSW Energy Minister has announced that “NSW will set a goal of requiring 10 per cent of the state's gas to come from green hydrogen by 2030.” The Government needs to be careful that this requirement does not become an example of technology favouritism.

For industrial use of gas as a feedstock or where high temperature heat is required, hydrogen may become a more cost-effective input than methane. This is likely to be long-term prospect. Any role of the NSW Government in this area should track the relative economics of hydrogen production.

[8] https://grattan.edu.au/report/down-to-the-wire/

[9] https://www.accc.gov.au/system/files/Retail%20Electricity%20Pricing%20Inquiry%E2%80%94Final%20Report%20June%202018_0.pdf