

Tasmania's energy crisis

Referral

1.1 On 25 June 2014, the Senate resolved to establish the Select Committee into the Abbott Government's Budget Cuts. The committee was established to inquire into the effect of cuts or changes in the Commonwealth budget and provide a final report to the Senate on or before 20 June 2016, with particular reference to:

- (b) any reductions in access to services provided by the Commonwealth;
- (c) the provision of other services, programs or benefits provided by the Government affected by the budget;
- (d) Commonwealth-state relations and the impact of decreased Commonwealth investment on service delivery by the states;
- (e) the fairness and efficiency of revenue raising;
- (f) the structural budget balance over the forward estimates and the next 10 years;
- (g) the reduced investment in scientific research and infrastructure and its impact on future productivity;
- (h) public sector job cuts;
- (i) the impact of the budget on retirement incomes and pensions;
- (j) intergenerational mobility;
- (k) the impact of the budget on young people and students;
- (l) the impact of the budget on households; and
- (m) other matters the committee considers relevant.

Committee name change

1.2 On 11 August 2015, the Senate agreed to change the name of the committee to the Senate Select Committee into the Scrutiny of Government Budget Measures to more accurately reflect the ongoing work of the committee.

Area of inquiry for this report

1.3 As per Terms of Reference c, e, f and h, the committee agreed to investigate infrastructure financing and expenditure by the Australian government and its effect on the broader economy, including:

- current trends in the levels of public infrastructure and private capital investment;
- changes to productivity and well-being projected to result from public infrastructure investment;
- long-term economic impact of public infrastructure investment, including private sector investment that leverages off public infrastructure provision;

- capacity for the budget to absorb debt to fund infrastructure;
- potential funding mechanisms for public infrastructure investment, including infrastructure bonds and sovereign wealth funds; and
- potential funding sources for public infrastructure investment, including superannuation funds.

1.4 As a case study to inform this investigation, the committee decided to produce this interim report, highlighting the 2016 Tasmanian energy crisis. A hearing was held in Hobart on 14 April 2016 to gather evidence on this matter.

The Tasmanian energy crisis

1.5 The 2016 Tasmanian energy crisis was caused by a combination of two primary issues: record low water levels in Hydro dams (in part, a consequence of below-average rainfall starting in September 2015) and an outage in the Basslink cable connecting Tasmania with the Australian mainland (which occurred on 20 December 2015). A further factor included the state government's decision in August 2015, to decommission the natural gas-based power generating station in the Tamar Valley, thus reducing the speed with which that facility could help meet energy shortfalls.¹

1.6 This combination was described by Tasmania's Minister for Energy, the Hon. Matthew Groom MP as:

...extraordinary circumstances—in essence, an extreme weather event combined with the first substantive outage of the Basslink cable—and it is important to put that into context. What we saw through the course of spring last year was the lowest rainfall recorded in Tasmania's history, in over 100 years of record keeping...²

1.7 As of 2015, approximately 74% of Tasmania's power generation came from Hydro, with the remainder being made up of: gas turbine (12%); wind (10%); and embedded generation (4%).³ Supplementing Tasmania's own generation of energy is energy imported via the Basslink cable, which was estimated in the months leading up

1 See, for instance, 'Tasmania power crisis: Avoiding shortages will be costly, experts say', *ABC News*, 31 March 2016, <http://www.abc.net.au/news/2016-02-23/tasmanias-energy-crisis-explained/7194234> (accessed 27 April 2016); 'Power in spotlight', *The Mercury*, 26 April 2016, <http://www.themercury.com.au/news/politics/power-in-spotlight/news-story/c4650660fd2ebe99eb5ef031e6c05948> (accessed 27 April 2016); 'Tasmania's energy crisis: Keep calm and carry on', *Energy Matters*, 25 March 2016, <http://www.energymatters.com.au/renewable-news/tasmania-electricity-crisis-em5399/> (accessed 27 April 2016).

2 *Committee Hansard*, 14 April 2016, p. 52.

3 *TasNetworks Annual Planning Report 2015*, <http://www.tasnetworks.com.au/TasNetworks/media/pdf/our-network/2015-Annual-Planning-Report.pdf> (accessed 27 April 2016), p. 22.

to that cable's outage to account for approximately 30% of the energy supply in Tasmania.⁴

1.8 According to Hydro Tasmania, as at Monday 25 April 2016, total energy in storage was 12.8%.⁵ In other words, Tasmania has been left in a perilous situation in terms of its energy security.

Response to the crisis

1.9 Hydro Tasmania, the government-owned enterprise responsible for the majority of energy generation in Tasmania, outlined the response to the unfolding energy crisis:

- from October 2015, given the low levels of Hydro storage, additional energy was imported via Basslink;
- in November, the combined cycle gas turbine (CCGT) began the process of returning to functional production (service began on 20 January 2016);
- the Tamar Valley Power Station is being restored to full capacity;
- voluntary load reductions have been made by major industrial users; and
- temporary diesel generation has been added to the network.⁶

1.10 The Tasmanian Government's response to the crisis has been insufficiently transparent, particularly in terms of the government's expenditure. Despite speculation in the media that the cost of the crisis is \$400 million or more, the responsible minister, the Hon. Matthew Groom MP, was unwilling or unable to provide an up to date figure for the costs associated with the crisis. In response to a question from the committee about the costs to date, he answered:

I appreciate the question and I think that is why it is important that we ensure a proper process for collating all of these financial impacts and ensure that they are put into the public domain. We have been very upfront that this will be significant and the costs that are being incurred at the moment by Hydro Tasmania are necessary costs.⁷

4 'Tasmania power crisis: Avoiding shortages will be costly, experts say', *ABC News*, 31 March 2016, <http://www.abc.net.au/news/2016-02-23/tasmanias-energy-crisis-explained/7194234> (accessed 27 April 2016).

5 Hydro Tasmania, *Energy supply situation and response*, <http://www.hydro.com.au/energy/energy-supply-situation-and-response> (accessed 28 April 2016).

6 Combined Cycle Gas Turbines produce electricity and capture waste heat from the gas turbine to increase efficiency and electrical output. - See more at: <https://powergen.gepower.com/resources/knowledge-base/combined-cycle-power-plant-how-it-works.html>; Hydro Tasmania, *Energy supply plan update: current as at 11 April 2016*, http://www.hydro.com.au/system/files/www.hydro.com.au/News/Energy_Supply_Plan_-_updated_11_April_2016.pdf (accessed 28 April 2016), p. 3.

7 *Committee Hansard*, 14 April 2016, p. 53.

1.11 Similarly, the committee was told that major industrial users of energy were not consulted or informed in advance of the Tasmanian Government's decision to decommission the Tamar Valley Power Station in August 2015, shortly before the period of below-average rainfall began.⁸

1.12 The Hon. Bryan Green MP, Leader of the Opposition in the Tasmanian Parliament, argued that the entire situation had been poorly – and secretly – handled by the Tasmanian Government:

The decision making has been secretive. I do not think they engaged with their major industrials in the first place—I understand that that has been evidence that has been given today—that people were not told effectively that the Tamar Valley Power Station was to be decommissioned and that decision had been made. They were not told of the impact on gas prices as a result of that happening, and then, from that point on, since Basslink went down. Of course, remember, the failure of Basslink became public as a result of a tweet by a person using the name of the fake 'Don Challen', informing the Tasmanian people in the first place that there was a problem with Basslink.⁹

Long-term planning

1.13 A key issue to emerge as a consequence of the 2016 energy crisis is that of ensuring better long-term infrastructure planning in order to avoid a repeat of the confluence of events which caused the crisis.

1.14 Beyond the immediate effects of shortfalls in power supply, the committee heard evidence that longer-term economic problems could arise for Tasmania as a result of the voluntary reductions in power use agreed to by several of the state's largest industrial groups. For instance, Mr Raymond Mostogl of Bell Bay Aluminium and the Tasmanian Minerals and Energy Council, estimated that Bell Bay Aluminium's reduced production would equate to approximately \$22 million in lost revenue; further, in being unable to fulfil international contracts in the competitive aluminium market, they will 'have to re-earn the right' to those contracts in the future.¹⁰

1.15 Minister for Energy, the Hon. Matthew Groom MP, acknowledged the importance of forward planning to ensure Tasmania's ongoing energy viability and the role the Tasmanian Government could take in this planning:

It is important that we recognise these circumstances as an opportunity to reflect on Tasmania's energy requirements and make judgements about the

8 Mr Greg Zooeff, Tasmanian Minerals and Energy Council, *Committee Hansard*, 14 April 2016, p. 31; Mr Raymond Mostogl, Tasmanian Minerals and Energy Council, *Committee Hansard*, 14 April 2016, p. 32.

9 The Hon. Bryan Green MP, Leader of the Opposition, Tasmanian Parliament, *Committee Hansard*, 14 April 2016, pp 45-6.

10 Mr Raymond Mostogl, Tasmanian Minerals and Energy Council, *Committee Hansard*, 14 April 2016, pp 32-3.

future. That is why we have announced the establishment of the Energy Security Taskforce to undertake an assessment of things like the impact of climate change on inflows; the potential for renewable development in Tasmania; the energy supply and demand profile that is likely to exist into the future; our approach to prudent water management; and issues such as gas price risk. These are all matters that are going to be looked at as we undertake an energy security assessment to identify the steps that need to be taken in order to ensure that we do not confront these circumstances ever again.¹¹

1.16 Asked about potential future risks to Tasmania's energy supply, Minister Groom noted that the state's capacity to generate energy would have to consider, amongst other factors, the implications of climate change:

I am extremely concerned, and I think the extreme weather event that Tasmania has experienced in recent months should be a wake-up call for everyone in relation to the issue of climate change... We need to understand it more and we need to respond to it better, and that is one of the reasons why I have asked the Energy Security Taskforce to look at that issue.¹²

1.17 The committee also received evidence that the opportunities for private companies to invest in clean energy sources in Tasmania are limited because of the government's control of the energy market. Mr Jack Gilding, Executive Officer of the Tasmanian Renewable Energy Alliance, noted that:

...because the market is so heavily controlled by government instrumentalities in Tasmania, a lot of private developers have concerns about making investments which do take decades to generate an income or to repay the investment. Unfortunately, we do not have a competitive market. In the absence of a competitive market, the government does need to take action to provide the certainty that would allow the private investment on every scale—from solar panels on people's houses to the Granville Harbour Wind Farm.¹³

1.18 Dr Vicki Gardiner, General Manager, Tasmania, of Engineers Australia, reflected on the likelihood of another energy crisis in years to come and suggested that failure to prepare now for such an eventuality would be short-sighted:

11 The Hon. Matthew Groom MP, Minister for Energy, Tasmanian Parliament, *Committee Hansard*, 14 April 2016, p. 52; see also the Minister's Statement announcing the Taskforce: Matthew Groom, Minister for Energy, *Ministerial Statement on Energy Security*, 8 March 2016, http://www.premier.tas.gov.au/releases/ministerial_statement_on_energy_security (accessed 28 April 2016).

12 The Hon. Matthew Groom MP, Minister for Energy, Tasmanian Parliament, *Committee Hansard*, 14 April 2016, pp 61-2.

13 Mr Jack Gilding, Executive Officer of the Tasmanian Renewable Energy Alliance, *Committee Hansard*, 14 April 2016, p. 9.

...can we afford not to change the way we think? We need to look at government energy strategies at both state and federal levels and develop both mid- and long-term plans in order to protect the community.¹⁴

1.19 Professor Michael Negnevitsky, Director of the Centre for Renewable Energy and Power Systems, noted his 'surprise' at the failure to plan contingency solutions to possible crises such as the 2016 energy crisis: 'It is a failure in making decisions. As a result, they made decisions which were not informed decisions'.¹⁵

Need for an independent inquiry

1.20 The Leader of the Opposition in the Tasmanian Parliament, the Hon Bryan Green, argued:

...there should be a full independent inquiry into the energy crisis, what has led to it—and I do not care how many years that goes back—and what we need to do into the future. I say that in the context that in my humble opinion the government has played Russian roulette with the state's economy and has potentially put at risk our major industrials and, therefore, our economy overall.¹⁶

1.21 Professor Negnevitsky agreed that an independent inquiry into the circumstances of the crisis should be undertaken, and that this inquiry should also provide the basis for longer-term planning:

We need to have a plan, not just to fix this particular problem today and hope it will never happen again, because it will happen again. It is guaranteed—maybe not tomorrow, but in five years' time you will have the same crisis if you do nothing now. So it has to be planned now. I really see this as a good opportunity for all of us.¹⁷

Committee view

1.22 The committee has grave concerns that Tasmanians will suffer from excessively high energy prices as a result of the emergency measures necessitated by the current energy crisis. In addition to this direct impact on Tasmanians, it was clear from the evidence provided to the committee that the voluntary load reductions made by major industrial users have damaged the commercial reputation of important Tasmanian businesses.

1.23 The committee is concerned that these serious effects of the Tasmanian energy crisis have been exacerbated by the Tasmanian Government's lack of transparency on a range of issues including its plans to decommission the Tamar Valley Power Station, the timeframe for repairs to the Basslink cable and the costs

14 Dr Vicki Gardiner, General Manager, Tasmania, Engineers Australia, *Committee Hansard*, 14 April 2016, p. 65.

15 Professor Michael Negnevitsky, *Committee Hansard*, 14 April 2016, p. 67.

16 The Hon Bryan Green MP, Leader of the Opposition, Tasmanian Parliament, *Committee Hansard*, 14 April 2016, p. 45.

17 Professor Michael Negnevitsky, *Committee Hansard*, 14 April 2016, p. 68.

that will be borne by Tasmania as a result of the emergency spending required to deal with the crisis.

1.24 The importance of a full independent inquiry is further supported by the fact that this committee was barred from questioning relevant organisations, specifically the energy businesses. Minister Groom's appearance before the committee on behalf of the Government and all of the energy businesses frustrated the hearing process which would have been best served by being able to direct questions to the relevant organisations. In the interests of transparency and accountability these organisations must be able to provide evidence to an independent inquiry.¹⁸

1.25 The committee has not had the opportunity to forensically examine all of the factors which contributed to the current crisis though it seems clear that, in addition to the factors beyond the Tasmanian Government's control, the government made a range of miscalculations which both contributed to the crisis and prevented it being managed effectively. The committee is convinced that only an independent inquiry into the factors that contributed to the crisis and the Tasmanian Government's response will ensure that this crisis is not repeated and that a durable, long-term plan to secure Tasmania's energy future can be identified.

1.26 Finally, the committee considers that the energy crisis clearly demonstrates the need for Tasmania to bolster its generation capacity and thus reduce reliance on power sourced via the Basslink cable. As a result, the committee considers that the Tasmanian Government should give a high priority to supporting projects which would increase renewable energy generation in the state. This should include the state government facilitating the negotiation of a successful power purchase agreement with the proponents of the Granville Harbour wind farm in order to allow the company to secure investment and move into the construction phase of the project.

Recommendation 1

1.27 The committee recommends that the Tasmanian Government be fully transparent with respect to the factors which have caused the current energy crisis in Tasmania, the steps being taken to resolve it and the associated costs.

Recommendation 2

1.28 The committee recommends that the Tasmanian Government commission an independent inquiry of the Basslink breakage and other circumstances leading up to the energy crisis.

Recommendation 3

1.29 The committee recommends that the Commonwealth and Tasmanian Governments commission an independent review to consider the financial and practical feasibility of laying another interconnector between Tasmania and mainland Australia.

18 Tasmanian House of Assembly, *Proof Hansard*, 5 April 2016, 10:46 am, p. 14.

Recommendation 4

1.30 The committee recommends that the Commonwealth and Tasmanian Governments work together to identify and implement a long-term strategy for development and management of electricity infrastructure to avoid any repetition of the Tasmanian energy crisis, and look at all options for the future energy security of Tasmania.

Recommendation 5

1.31 The committee recommends that the Tasmanian Government support projects which would increase renewable energy generation in the state including facilitating the negotiation of a successful power purchase agreement with the proponents of the Granville Harbour wind farm.

Senator Peter Whish-Wilson

Chair