



Energy Policy
INSTITUTE OF AUSTRALIA



Public Policy Paper

Paper 1/2019

WHY NO ENERGY POLICY?

John McDonnell

February 2019

The Energy Policy Institute of Australia (EPIA) is Australia's only independent and apolitical energy policy body. EPIA focusses on high-level policy, governance and regulatory issues affecting the national interest, the economy as a whole, the environment and the community.

The Institute advocates that Australia must maintain a secure investment climate and be internationally competitive, whilst moving towards and contributing as much as it can to global efforts to build a low-carbon society.

The views expressed in this paper do not necessarily represent the official position of the Institute or any of its members.

For further information, please visit the Institute's website

<http://energypolicyinstitute.com.au/>



Key Points

- *Populist policy interventions have destroyed political consensus and given rise to unsustainable energy policy in Australia.*
- *At the present time, neither of the major Australian political parties has an energy policy that can last past one electoral cycle.*
- *Politicians have to make difficult choices between the destruction of sectors of the Australian economy and minimising the risk from climate change. They need reliable evidence about costs to enable them to make these choices without causing unnecessary harm. They need to know the least-cost way of achieving the agreed level of emission reduction while producing reliable and stable energy flows.*

Introduction

Since the late 1990s, when climate change emerged as a significant issue on the political horizon, Australia has not had a politically sustainable energy policy. Energy policy has been driven instead by the vagaries of political posturing, giving rise to investor uncertainty and a consequently fragile energy market. There is one clear reason for this: successive governments have failed to procure the necessary economic and engineering analysis to underpin solid evidence-based policy and win political consensus.

Energy policy is not a component of the science of climate change. As former Prime Minister Malcolm Turnbull astutely observed at one point, energy policy is a function of engineering and economics. Unfortunately his government, along with all others since the advent of the Howard government, failed to undertake the analysis that would determine the best engineering solutions that could be implemented at the least cost. There was an ostensible reason for this: supporters of market-based energy policies mistakenly believed that, given the right parameters, the market would deliver least-cost, best-practice outcomes. A major flaw in this logic was that the cost of populist policy interventions had never been explicitly identified and there was, and still is, no bulwark against such interventions

To appreciate how we arrived at the 2019 energy policy position, it is necessary to look at the various economic policy paradigms that have been adopted over the last twenty years.


The Pure Competition Model

In 2000, the energy market was largely privatised and highly competitive. Australia had among the lowest electricity prices in the world. This had boosted productivity and investment in energy-intensive industry and lowered the cost structure of the Australian economy generally. There was an assumption that Australia would transition to gas fired electricity generation because gas was ubiquitous and cheap. As Margaret Beardow and Harry Schaap of Benchmark Economics, consultants to the Electricity Supply Association of Australia, pointed out at a Productivity Commission Workshop on Micro-Economic Reform held in 2000:

“The gas-based scenarios will see a decline in electricity-related emissions intensity of around 871 tonnes per gigawatt hour in 2000, to 719–755 tonnes per gigawatt hour in 2010 and 645–674 tonnes per gigawatt hour in 2020. This shift to gas would lead to carbon intensities approaching current high-cost electricity countries such as the Netherlands, Portugal and the United Kingdom and would lead to a fundamental change to the Australian economy.”

At the same workshop Clive Hamilton and Richard Denniss of the Australia Institute disputed the competitive market approach on the basis that externalities such as the cost of greenhouse gas emissions were not included in the cost of production of energy:

“The erroneous assumption that competition always leads to more efficiency has been especially dominant in the process that resulted in the National Electricity Market. As this paper will show, competition policy in the electricity market has been associated with a loss of efficiency because it has imposed large additional costs on the community in the form of increased greenhouse pollution. Unfortunately, this simple point, powerful as it is, appears to have failed so far to dent the faith of reformers in the benefits of competition.”



By 2007, the Productivity Commission had come to the conclusion that the absence of a price on carbon emissions represented a partial market failure.

The Carbon Price Approach

In December 2006, the Howard government established the Shergold Task Force on Emissions Trading. In a submission to the task force, the Productivity Commission argued for a carbon price to be established, based on an emissions reduction mechanism, without derogations or exemptions. It said that this approach would be optimal if it was adopted on a multilateral basis. If that was not possible, then it argued that governments should adopt a modest approach to greenhouse gas reduction. Above all it recommended that:

“There is a need for an informed, transparent assessment of the costs and benefits to Australia of independent, group and global action, as well as of the particular regulatory alternatives available. Considerable attention should be directed at the development and design of a suite of consistent measures to target the best mix of abatement and adaptation, within a framework that is flexible enough to respond to changes in the state of knowledge and international developments.”


The Commission also argued strongly for a national approach as opposed to interventions by different jurisdictions. The Howard government did not, however, ask the Productivity Commission to undertake a cost-benefit analysis of greenhouse gas abatement, nor did the Rudd government (although the Hawke government had commissioned a similar review in 1991).

It is also worth remembering that the Howard government intervened in the previously open electricity market by establishing the mandatory renewable energy target in 2001. It did not commission any analysis of the economic impact of this policy.

The Garnaut Recommendations

Professor Ross Garnaut produced reports on climate change policy for the Rudd government in 2008 and the Gillard government in 2011. Both reviews by and large adopted the approach outlined in the Productivity Commission submission of 2007. Garnaut argued strongly for a market-based approach, as opposed to an interventionist approach which, he said, would be far more expensive. In the 2011 report he said:

“The threat that the 21st century return of the anti-productive Australian political culture will be long lasting is much greater if regulatory approaches are taken to reaching emissions reduction targets. The opportunities for vested interests to influence the policy process are much greater because the government must negotiate individual solutions to mitigation challenges as they arise. The difficulties of establishing a basis for international trade in entitlements are greater. The technical difficulties of assessing assistance levels through objective and independent processes are greater. And the danger that vested interests in other countries will persuade their governments to punish Australia for not doing its fair share in mitigation is greater. The largest cost of mitigation through regulation is the



damage that it will do to productivity-raising reform. Expansion of regulatory intervention will entrench the pressure of vested interests on the political process and the anti-productive political culture of the early 21st century. Strong productivity and flexible markets are the cushions upon which the eventual bust will fall.”

Garnaut acknowledged the need for intervention in the energy market. He estimated that his proposal for an initial fixed carbon price would raise \$12 billion a year but emphasised that this should be distributed to mitigate the impact of the carbon price and to assist research into and development of new technologies. However he was emphatic that any distribution should be undertaken by an independent authority based on clear principles and rigorous cost-benefit analysis.

The weakness of policymaking following the Garnaut reviews was that neither the Rudd nor the Gillard governments commissioned analysis that would provide hard evidence to support his contention that a market-based approach would produce the least-cost, most-efficient energy market, taking into account the need for emission reductions. This left the way open for the interventionist approach that Garnaut warned about, based on imperfect knowledge and the influence of vested interests.

The Interventionist Approach

The interventionist approach currently characterises Australia’s energy policy. It consists of regulation, subsidies and government purchase of carbon abatement. The real cost and benefits of each of these measures to the Australian economy has never been determined.

The first intervention in the energy market was the introduction of the mandatory renewable energy target by the Howard government in 2001. This specified that retailers should source 10% of their electricity from renewable sources by 2010. In September 2009, the Rudd government increased the target to 20% by 2020. The Rudd government also introduced subsidies for household roof-top solar.

In January 2011, the Gillard government split the renewable energy target into two parts: the large-scale renewable energy target at power station level and a small scale renewable scheme, mainly for solar installations at the household level.

In June 2011, the Productivity Commission released a report that highlighted the problems associated with determining the cost of abatement in Australia in relation to electricity generation because of the paucity of data. The Commission continued to maintain that a market-based approach was the most cost-effective way to reduce carbon emissions.

In June 2012, the Gillard government established the Clean Energy Finance Corporation and provided it with \$10 billion to invest in ‘clean energy’. At roughly the same time it created an unlimited number of carbon units that could be purchased at \$23 a unit, the so-called carbon tax.

In July 2014, the Abbott government abolished the carbon tax. At the same time, it established the emission reduction fund that appropriated \$2.25 billion to purchase carbon abatement using a competitive bidding process. It also increased the renewable energy target to 23.5% of generation by 2020.

During the course of the Coalition government’s term in office, many of the states have adopted renewable energy targets. None of these has been subjected to proper enquiry and report.

The Finkel Review

Shortly after the re-election of the Turnbull government in 2016, the Council of Australian Governments (COAG) Energy Ministers commissioned a review of the national electricity market. The objective of the review was to develop a plan for the market that would ensure reliable and affordable electricity while, at the same time, meeting whatever emissions targets were imposed by the government of the day. The review was deluged by interested stakeholders with data about the electricity market but lacked the capacity to analyse the data it received. It also commissioned modelling but this was limited to modelling its own proposals for reform of the electricity market within a limited context. Such modelling was of questionable value.

The key recommendation of the review was the Clean Energy Target. This was a mandatory target that compelled energy retailers to provide a certain amount of their electricity from “low-emissions” generators – sources that produce emissions below a threshold level of carbon dioxide per megawatt.

Crucially, Dr Finkel did not make a recommendation as to the precise threshold or the amount of ‘clean’ electricity that had to be sourced, which made meaningful modelling pointless. The Turnbull government declined to accept the recommendation for a Clean Energy Target and instead opted for a policy called the National Energy Guarantee which incorporated many of the suggestions of the Finkel review but substituted the Paris Agreement emission reduction targets for the clean energy target.


The absence of analysis of the costs and benefits of the National Energy Guarantee proved fatal for its policy future. Had it been the subject of proper enquiry and report, it may have been shown that its objectives could be achieved without significant disruption to the Australian economy. Instead, it died on a political whim.

The Present Situation

The state of the national energy market was described in the most recent five yearly productivity review of the Australian economy released by the Productivity Commission in August 2017:

“The Australian energy sector, especially in the east coast, is in a fragile state. While the past reforms that injected competition into the sector and radically altered its structure have served Australia well, the sector has undergone significant change in the last decade. – Technological change is radically altering the economics and structure of the sector, particularly in the electricity industry. – The construction of five LNG trains in Queensland have linked the east coast gas market to the international market. – Government policies, particularly those mandating the uptake of renewable sources, have significantly altered the mix of technologies being used.

“In electricity, a lack of stability and uncertainty in climate change policy has created an uncertain environment for investment. – This has resulted in insufficient investment in new generating capacity that complements renewable generation. Sharp rises in the cost of gas prices and supply concerns are limiting the ability of gas-fired generation to complement the uptake of renewables and constraining the sector’s ability to reduce carbon emissions by



replacing coal-fired generation. No one jurisdiction can fix the issues currently confronting Australian energy markets. – Australian governments need to work cooperatively to resolve the issues. – Fixing these issues will require sustained commitment from governments, including to an emission reduction strategy.”

Why Are We In This Situation?

In its 2017 review, the Productivity Commission made a series of recommendations for reform of energy policy:

“• Australian governments should set a clear and considered long-term strategic vision for energy markets. – This should include a clear transition path from current arrangements. – Energy consumers should be central to this vision. – A balance will have to be struck between reliable, affordable and sustainable energy. Governments need to be clear about the trade-offs that they are willing to make. – Governments should avoid ad hoc policy fixes.

“• A market-driven national emission reduction policy should replace the myriad of existing Australian and state and territory government policies. – Governments and opposition parties should commit to an agreed emission policy for a specified period of time to provide much needed investment certainty. – This will enable emissions reduction targets to be met at the least overall economic cost.


“• The uptake of renewables is having unintended implications for network security and reliability. – The renewable generators should bear the costs of ancillary services that the characteristics of their supply impose on the network.

“• More effective stakeholder engagement processes should be adopted to allow the moratoria on gas supply to be overturned.

“• The cost of not fixing the current mess will be significant, as indicated by the problems that beset South Australia in September 2016.”

The problem with this rational policy advice is that it has no hope of being accepted in the current populist political environment. The public is reluctant to accept prognostications from experts unless they are backed by hard evidence. In its report, the Commission acknowledged how difficult it was to demonstrate the efficacy of its policy conclusions. It pointed out that there had been a multiplicity of studies of the energy sector but that these were not comprehensive enough for the development of a sustainable energy policy:

“These industries are in transition. In the case of electricity, governments have legislated significant uptake of renewable energy, and rapid technological change is materially altering the economics of the entire industry. In the case of gas, the development of export facilities in Queensland now link the eastern Australia grid to world markets. These changes have prompted a significant number of official reviews into the electricity and gas industries. The recent review into the future security of the National Electricity Market (the Finkel Review) identified 23 separate studies or reviews that were then currently underway or that had been completed in the last five years. Further reviews have been commissioned in the wake of



recent electricity and gas market difficulties. These studies deal with complex technical and economic issues, are frequently lengthy and often deal with aspects of markets”

...

“Evidence-based policy requires access to comprehensive, coherent, reliable and timely data for the entire energy sector. Data collected according to a consistent framework can support analysis of the sector at different levels and for different jurisdictions. Time-series data can support the identification of longer term trends. Australian energy data is of mixed quality. There is a lot of very detailed and useful data collected for parts of the sector and some useful aggregate data as well. Much of the data is granular and becoming increasingly fragmented over time. The official data sources used in this supporting paper do not make it possible to provide a consistent overview of the energy industry in Australia at a single point in time (such as for 2015-16 or 2016-17). Furthermore, the most recent year for which data are available varies between sources, ranging from a dated 2013-14 to 2017. This makes it difficult to gauge recent industry developments, particularly in a broader historical context. This is particularly an issue for electricity.”

Once again, the Productivity Commission asked the government to task it with undertaking a comprehensive analysis of the Australian energy sector as well requesting the establishment of a comprehensive and consistent data base for the sector.


How Can We Get A Politically Sustainable Energy Policy?

At the present time, neither major political party has an energy policy that can last past one electoral cycle. The Coalition’s policy is vulnerable to the charge that it does not do enough to reduce emissions. Labor’s policy is vulnerable to the charge that it has no plan for the structural adjustment it will impose on the economy through its high emission reduction target and no plan for the transition of the electricity market from fossil fuels to low-carbon generation.

The public has unreal expectations that Australian governments can reduce the impact of climate change solely through national measures and that greater renewable generation will lead to lower electricity prices. These unrealistic expectations are likely to continue until evidence to the contrary is produced or materialises in the form of a crisis. In these circumstances, the only way to achieve sensible energy policy is for the political leadership to be convinced by analysis that will show the maximum amount of emission abatement that can be achieved at an acceptable level of economic cost. This should be accompanied by analysis that reveals the least-cost way of achieving the agreed level of emission reduction while producing reliable and stable energy flows.

In its report to the COAG Energy Council in December 2018, the Energy Security Board emphasised the need for the Commonwealth and the states to adopt the ‘Strategic Energy Plan’. This would be a good first step in locking in the political leadership to agreed parameters for energy policy reform. Once the plan has been adopted then a new round of analysis could be mandated to establish the costs and benefits of the range of policy options for emission abatement and the least-cost approach to achieving the outcomes which the Finkel review, the Energy Security Board and the Strategic Energy Plan have stipulated for a national energy policy.

In the view of this author, there are two steps that should be carried out as essential elements of any analysis: the first would be the establishment of an eminent persons group, with extensive



experience in industry, to analyse all the material developed in the Finkel review and subsequent reports of the various authorities involved in energy policy in order to develop a reference to the Productivity Commission for the analysis required. The second would be a full enquiry and report by the Commission into a national energy policy which would model a range of policy outcomes and the impact on consumers including the long term competitiveness of industry sectors.

In the end, politicians will have to make difficult choices between the destruction of sectors of the Australian economy and minimising the risk from climate change. If they have reliable evidence that enables them to make these choices without causing unnecessary harm, it will be easier for them to agree on those choices, free from the impact of vested interests.

February 2019

About the Author

John McDonnell has over forty years' experience as a policy adviser. He was an adviser to Prime Ministers Fraser and Hawke as well as the governments of Papua New Guinea, Pakistan, Mongolia, Kazakhstan, Sri Lanka and the Republic of Korea. He has worked as an economic and legal consultant for the World Bank and the Asian Development Bank. From 1986 to 1989 he advised the Government of the Peoples Republic of China on the entry of China into the WTO. For the last fifteen years he has been working with various state governments on aspects of micro-economic reform. He is also widely published as a journalist commenting on economic policy matters.