

Environment and Planning Law Committee

Submission on the *Energy Green Paper*

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Energy White Paper Taskforce
Department of Industry
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About Us

NSW Young Lawyers is a division of the Law Society of NSW and is made up of legal practitioners who are under the age of 36 or in their first 5 years of practice, and law students. It is the largest body of newly practising lawyers and law students in Australia, with a membership comprising of some 15,000 members. NSW Young Lawyers supports practitioners in their early career development in numerous ways, including by encouraging involvement in its 15 separate committees, each dedicated to a particular area of practice.

The Environment and Planning Law Committee brings together a network of the State's young practitioners to discuss a shared interest in our environment. It focuses on environmental and planning law issues, raising awareness in the profession and the community about developments in legislation, case law, and policy. The Committee also concentrates on international environment and climate change laws and their impact within Australia.

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Introduction

This is a submission by members of the Environment and Planning Law Committee ("Committee"). The Committee welcomes the review of the Federal Government's Energy policy and is grateful for the opportunity to make a submission on the *Energy White Paper: Green Paper*. This submission is structured as follows:

1. Attracting energy resources investment;
2. Electricity Prices;
3. Building gas supply and improving market operation; and
4. Security, innovation and energy productivity.

It focusses on the need to invest in renewable energy sources for the benefit of the economy, the community, and the environment.

List of Recommendations

The Committee makes the following recommendations:

- Increased focus on supporting renewable energy and reduced focus on fossil fuel generators.
- Consideration of the reduction of daytime tariffs to account for the additional generating power that rooftop solar photovoltaic (PV) arrays are contributing toward the energy mix for the grid.
- Maintenance of the Renewable Energy Target (RET) in order to minimise the impact of excess carbon dioxide in the atmosphere and the kWh cost of electricity.
- Imposition of a more stringent process of approval for new expenditure on poles and wires through statute.
- Commitment to the principles of ecologically sustainable development.
- Establishment of gas reservation policies in order to provide certainty to both the domestic market and the industry.

1. Attracting energy resources investment

The Committee supports the Federal Government's intention to attract investment into energy resources. The sustainability and development of a strong energy sector in Australia is important to our economy now and into the long term future.

Australia is a country rich in renewable energy sources. Renewable energy currently makes up ten percent of Australia's electricity generation.¹ Australia is arguably one of the best placed countries in the world to rely on renewable energy due to the availability of renewable sources – with strong and regular winds along the south of Australia and abundant distribution of solar radiation. Solar radiation in Australia per square metre is the highest of any continent in the world, with 58 million petajoules falling on Australia each year, which is approximately 10,000 times Australia's annual energy consumption.² Despite this, solar is still a largely underutilised resource in Australia, and in 2007-08 electricity generated from solar in Australia was only 0.1TWh.³

In light of Australia's unique position, the Committee recommends that the Federal Government move towards supporting renewable energy. One model that may be of use to the Federal Government in formulating renewable energy policy is that of California in the United States. The Californian Government legislated that a third of its energy should come from renewable energy sources.⁴ This has helped to provide certainty for investors, and California now has 50,000 employees in the solar industry, a 50% increase in the last three years.⁵

Overall, the Committee strongly supports the Federal Government's push to increase growth in the energy sector. However, the Committee recommends that more focus is placed on renewable energy sources, and that the Government look to other jurisdictions as an example of the benefits that a growing and developing renewable energy sector to the economy can bring.

Convincing arguments have been made in support of the consideration of environmental and climate change impacts in energy markets,⁶ including the ability of mitigation efforts to deliver long-term savings, and the stimulation of competition and innovation by policy levers as fossil fuel prices rise.⁹ However, rather than encourage investment in renewable energy, a recent report has shown that investment in Australian renewables has dropped 70% in 2014 compared to 2013,⁷ while global investment in renewable energy actually exceeds fossil fuel investment.⁸ The Committee recommends that the Australian

¹ Clean Energy Council, 2012 Report.

² Australian Renewable Energy Agency, 'Australian Energy Resource Assessment' (2010), 261.

³ *Ibid.* 262.

⁴ *California Renewable Energy Resources Act.*

⁵ ABC Four Corners, Interview with David Hochschild, California Energy Commissioner, *Power to the People*, dated 7 July 2014.

⁶ See for example, Garnaut Climate Change Review 2008, Chapter 11, at: <http://www.garnautreview.org.au/>; State of the Environment Report 2011, 'Headlines', at <http://www.environment.gov.au/soe/2011/summary/headlines.html>; Maria van der Hoeven, Executive Director, International Energy Agency, 'Energy security: looking towards uncertainty' (8 March 2012), *OECD Observer* in ANEDO Submission on the Energy Green Paper 2014:

https://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/1767/attachments/original/1415076622/6622/141104_ANEDO_Submission_on_the_Energy_Green_Paper.pdf?1415076622

⁷ Climate Council of Australia, 'Lagging Behind: Australia and the Global Response to Climate Change':

<<http://www.climatecouncil.org.au/uploads/211ea746451b3038edfb70b49aee9b6f.pdf>>

⁸ In 2013, US\$ 192 billion was invested in new renewable power, whereas US\$ 102 billion was invested in fossil fuel plants (Frankfurt School of Finance and Management 2014: Climate Council of Australia, 'Lagging Behind: Australia and the Global Response to Climate Change':

<<http://www.climatecouncil.org.au/uploads/211ea746451b3038edfb70b49aee9b6f.pdf>>

Government take advantage of the global shift towards investment in renewable energy, which would not only benefit the environment, but also the economy, and has the potential to see Australia as a world leader on climate change.⁹

⁹ Climate Council of Australia, 'Lagging Behind: Australia and the Global Response to Climate Change':
<<http://www.climatecouncil.org.au/uploads/211ea746451b3038edfb70b49aee9b6f.pdf>>

2. Electricity Prices

The Committee supports the *Energy White Paper: Green Paper's* focus on equitable cost-sharing on the investment into the expansion of grid infrastructure. As the majority of poles-and-wires investment in recent years has been to accommodate very isolated spikes in demand, such as very hot afternoons in peak summer causing increased air conditioner usage, it has been argued that those consumers not contributing toward these demand spikes are unfairly saddled with the same rise in cents/KWh.

In response to the proposal that pursue tariff reform, the Committee recommends that consideration be given to the reduction of daytime tariffs to account for the additional generating power that rooftop solar PV arrays are contributing toward the energy mix for the grid. Modelling by the Energy Networks Association shows that the uptake of rooftop solar installations on a year to year basis is reducing the daytime load on the grid at a high rate.¹⁰ Indeed, there may be a point in the not-too-distant future where the entire grid demand will be met by renewable energy, as has already happened on multiple occasions in South Australia.¹¹

The Committee also recommends that the Federal Government maintain the RET in order to minimise the impact of excess carbon dioxide in the atmosphere and the kWh cost of electricity for all Australians, given the parity that renewable energy now enjoys in many parts of the country.¹²

The Committee supports the goal of ensuring that there is no further unnecessary investment in electricity networks, and recommends that a more stringent process of approval for new expenditure on poles and wires be introduced through statute.

The Committee supports the goal of improving national efficiency of energy use. Through a combination of building retrofitting programs, lighting and appliance efficiency standards (such as the elimination of halogen down lights and the promotion of LED alternatives), smart meter usage and an awareness program around the best time of day to perform energy intensive tasks, the load on the grid could be significantly reduced. An example of how a combination of the factors above can reduce the peak (and in many cases, the overall) demand on the grid can be found in University of Melbourne and Melbourne Energy Institute's report on Australia's Stationary Energy Plan¹³ and Buildings Plan.¹⁴

Significant debate has been had on the impact that the Clean Energy legislation had on emissions reductions in Australia. The Committee urges the Federal Government to consider a polluter pays style of Direct Action as has recently been proposed,¹⁵ and as discussed above, to retain and raise the RET given the positive impact it has had and, if

¹⁰ Energy Networks Association (2014) 'The Road to Fairer Prices' April 2014 pg.3 Fig.5.

¹¹ Renew Economy, 'South Australia hits 100% renewables – for a whole working day' (7 October 2014) <<http://reneweconomy.com.au/2014/south-australia-hits-100-renewables-whole-working-day-86069>>

¹² 702 ABC Sydney, 'Solar industry celebrates grid parity' (20 June 2012) <<http://www.abc.net.au/news/2011-09-07/solar-industry-celebrates-grid-parity/2875592/?site=sydney>>

¹³ Beyond Zero Emissions and University of Melbourne, *Zero Carbon Australia Stationary Energy Plan*:

http://media.bze.org.au/ZCA2020_Stationary_Energy_Report_v1.pdf

¹⁴ Beyond Zero Emissions *Zero Carbon Australia Building Plan*, Executive Summary <http://bze.org.au/download-zero-carbon-australia-building-plan>

¹⁵ <http://www.nickxenophon.com.au/blog/proposed-amendments-to-emissions-reduction-fund/>

retained, would continue to have on electricity prices, investment,¹⁶ and the environment.¹⁷

The Committee supports the goals outlined in the Electricity Prices focus area, and strongly recommends focusing efforts to meet these goals through continued investment in renewable energy and reduced focus on fossil fuel generators.

¹⁶ Deloitte's projection of \$25bn in investment in renewable energy sources by 2030 if the RET is continued at 41TWh, <http://www.bca.com.au/publications/assessing-the-impact-of-the-renewable-energy-target>

¹⁷ The Climate Institute, *Submission: 2014 Review of the Renewable Energy Target*: http://www.climateinstitute.org.au/verve/resources/TCI_Submission_RETReview_FINAL_May2014.pdf

3. Building gas supply and improving market operation

The Committee supports the Federal Government's proposal to increase transparency and improve gas market functions. With the long term effects of unconventional gas exploration still unknown, the Committee recommends that the Federal Government commit to the principles of ecologically sustainable development. Ecologically sustainable development in its most basic formulation is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".¹⁸ The Committee recommends that the principles of ecologically sustainable development as defined in the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) should be promoted to ensure that the development of the gas industry complies with domestic and international obligations:¹⁹

- a) "decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
- e) improved valuation, pricing and incentive mechanisms should be promoted."

The Committee strongly encourages the Federal Government to commit to the principles of ecologically sustainable development as it governs the gas sector in Australia.

The Committee notes that the Federal Government does not propose to pursue any form of policy restricting the sale of gas to international markets. The Committee recommends that the Federal Government consider establishing gas reservation policies as has been done in Queensland and Western Australia domestically, and in the United States and Canada internationally, in order to provide certainty to both the domestic market and the industry.

¹⁸ *Telstra Corporation Ltd v Hornsby Shire Council* [2006] NSWLEC 133, [109].

¹⁹ *Environment Protection and Biodiversity Conservation Act 1999* (Cth), Chapter 1, Part 3A.

4. Security, innovation and energy productivity

Proven and scalable models show that Australia can transition away from reliance on internal combustion powered cars and trucks and towards electric and low emission gas-powered alternatives within decades.²⁰ Given the plentiful access to solar energy in most parts of Australia, such a transition could be made without impacting amenity and competitiveness of the Australia economy. This may also ensure complete energy security for those sectors of the Australian economy that still rely on international imports of energy.

The Committee sees the need to ensure that Australia's future energy demands can be provided at a competitive price to the average consumer. As above, the amount of solar and wind power capable of being harnessed and distributed within Australia's territorial borders is more than sufficient to meet the vast majority of Australia's energy demands (and as is already the case in many parts of Australia such as South Australia²¹ and south eastern Queensland²²) it is more cost-effective to source electricity from renewable sources than fossil fuel sources. With continued investment in the renewable industry through the maintenance of the RET, it is foreseeable that electricity prices would drop by 2020 and continue to drop over the next decade.

The Committee understands the need to ensure that Australia's energy supplies can be relied upon for consumers and industry, to ensure that our standard of living continues to improve and that industries can continue to grow their operations without fear of an intermittent supply of electricity or other forms of energy. As mentioned above, the move towards decarbonising Australia's electricity generation sector is of crucial importance, and a transition to a renewable energy nation must be undertaken as quickly as is feasibly possible. The Committee rejects the assertion that renewable energy is unreliable and has no base load generation capability. Proven and scalable models show that concentrated solar thermal and molten salt plants are capable of outputting reliable base load power with the necessary redistribution of Australia's peak energy demands away from the current evening peak towards the middle of the day, when solar generating capability is at its peak and is best able to supply the energy demand.²³

The Committee does not support the development of nuclear power in Australia. Given the exorbitant cost of constructing and maintaining these reactors in comparison to the relatively cheaper investment needed to generate the same energy output from the renewable sector, the extremely harmful radioactive waste that even thorium reactors inevitably create, the time necessary to bring a reactor online, and the excessive water requirement to operate a reactor, there is little economic or environmental sense in considering nuclear as an option. Nuclear energy should no longer remain a serious consideration for future low emissions energy; the detriments far outweigh any perceived benefit.

As has been discussed already, Australia's energy productivity could be increased significantly with continued investment in the renewable energy sector, and would allow the phasing out of all but the lowest emitting fossil fuel sources, thereby reducing greenhouse gas emissions intensity to a significant extent. The Committee submits that this goal is important not just in an economic sense, but also in an environmental sense. There is no longer any doubt that greenhouse gas emissions are having an extreme effect on the natural climate cycle of our planet, and that humans are the main cause of

²⁰ Part 2.3.3 of BZE Stationary Energy report, <http://www.mynrma.com.au/images/About-PDF/Fuel-Security-Report-Pt2.pdf>

²¹ <http://about.bnef.com/press-releases/renewable-energy-now-cheaper-than-new-fossil-fuels-in-australia/>

²² <http://reneweconomy.com.au/wp-content/uploads/2014/05/bernstein-parity.jpg>

²³ Beyond Zero Emissions and University of Melbourne, *Zero Carbon Australia Stationary Energy Plan*: http://media.bze.org.au/ZCA2020_Stationary_Energy_Report_v1.pdf

these emissions.²⁴ A nation such as Australia, which is one of the highest per-capita emitters in the world, cannot continue with business as usual with this scientific certainty.²⁵

It is a proven fact that we have an overcapacity in electricity generation in Australia. This overcapacity is not forecast to disappear until 2023-24.²⁶ The Committee encourages the Federal Government to use this as an opportunity to continue to invest in the renewable energy sector through a bolstered RET and encourage fossil fuel generators to begin to diversify their generating mix and scale back the operation of their higher emissions plants. The Committee realises that this will result in the need to assist in the retraining and relocating of Australians workers made redundant by such a shift; this is a task that has been successful in the past and will be made significantly easier given the sheer number of jobs that a burgeoning renewable energy sector will create.²⁷

The Committee supports the goal of the Federal Government in developing a better 'outlook' capacity, and recommends that the best way to ensure that our research and development in this sector remains world class is to ensure that peak scientific bodies such as the CSIRO have their funding substantially boosted in the form of research grants in this industry. This will give the Australian economy the cutting edge it needs to be a pioneer in the zero emissions future that the global community is beginning to transition towards.

The Committee recommends that the Federal Government legislate to encourage investment in the renewable energy sector as the future of Australia's energy security, innovation and productivity. Such a future is critical not only from a domestic and export economy viewpoint, but also our national and global environmental health.

²⁴ <http://theconversation.com/99-999-certainty-humans-are-driving-global-warming-new-study-29911>

²⁵ <http://www.climatechange.gov.au/international/international-action/global-context-australias-place>

²⁶ http://ewp.industry.gov.au/sites/prod2.ewp.industry.gov.au/files/egp/energy_green_paper.pdf

²⁷ <http://reneweconomy.com.au/2014/solar-boosting-jobs-cutting-electricity-costs-says-new-study-99717>

Conclusion

The Committee recommends stronger focus investment in renewable energy sources for the benefit of the economy, the community, and the environment. Please contact Emily Ryan at envirolaw.chair@younglawyers.com.au for any further comment.



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