**AGL Energy Limited**
ABN: 74 115 061 375
Level 24, 200 George St
Sydney NSW 2000
Locked Bag 1837
St Leonards NSW 2065

**f:** 02 9921 2552
agl.com.au

**Committee Secretary**

**Senate Standing Committees on Environment and Communications**

**PO Box 6100**

**Parliament House**

**Canberra ACT 2600**

**Submitted online: http://www.aph.gov.au/**

**13 March 2018**

Dear Committee Members,

**Senate inquiry into the Clean Energy Finance Corporation Amendment (Carbon Capture and Storage) Bill 2017**

AGL Energy (**AGL**) welcomes the opportunity to provide a submission to the Senate Standing Committees on Environment and Communications inquiry into the Clean Energy Finance Corporation Amendment (Carbon Capture and Storage) Bill 2017 (**Amendment**).

As one of Australia's leading integrated energy companies and the largest ASX listed owner, operator and developer of renewable generation, AGL is well placed to provide comment on the issues presented. AGL operates across the supply chain and has investments in coal-fired, gas-fired, renewable and embedded electricity generation, upstream gas production and provides energy solutions to over 3.5 million customers.

The diversity of our portfolio has allowed us to develop a detailed understanding of the risks and opportunities presented by energy and climate policy. AGL economists have published a range of peer reviewed research on impacts associated with energy and climate policy.

AGL in principle supports the Amendment. We consider that removing the prohibition on the Clean Energy Finance Corporation (**CEFC**) investing in carbon capture and storage (**CCS**) technologies would enable a more technology neutral policy framework for investment decisions.

In our view, a technology neutral approach to investment decisions provides Australia with the best prospects of attracting the scale and diversity of investments required to decarbonise the Australian economy consistent with Australia's commitments made under the Paris Agreement. In addition to continued investment in renewable energy and low emissions technologies, we consider that CCS technologies will play a critical role in addressing the challenges associated with climate change. We also consider that the development of CCS technologies in Australia could deliver important benefits in the context of Australia's international policy.[1]

[1] AGL has reviewed the relationship between Australia's energy and international policies and considers that Australia could strengthen its international standing as a technology champion and leader in the global economy's transition towards a carbon constrained future. See further Tim Nelson, 'Australian Climate Change Policy – Where to From Here?' (2015) 34(4) Economic Papers, 268-271, Available at http://onlinelibrary.wiley.com/doi/10.1111/1759-3441.12114/abstract, and Nelson, T., McNeill, J., Siriwanda, M., and Meng, S., 'After Paris: now what for Australia's climate policy?', The Conversation, 16 December 2015, Available online at http://theconversation.com/after-paris-now-what-for-australias-climate-policy-51981.

Nevertheless, we consider that the Amendment should not serve to dilute the CEFC's important mandate to finance and invest in renewable energy, low-emission and energy efficiency technologies.

Accordingly, we would urge the Government to provide appropriate incremental funding to facilitate investments in CCS technologies. With an appropriately expanded budget to focus on CCS, we consider that the CEFC would be well placed to make investment decisions that support both renewable energy and low emissions technologies and CCS technologies, in accordance with its investment mandate and guidelines.

We also note that the *Clean Energy Finance Corporation Act 2012* (Cth) currently prohibits the Minister from giving any direction under the CEFC's investment mandate requiring the CEFC Board to invest in a particular investment.[2] We would strongly urge against any changes that would have the effect of circumventing this prohibition, including the preferential treatment of investments into CCS technologies above finance to renewable energy and low emissions technologies.

As we observed in our recent submission in response to the Energy Security Board's National Energy Guarantee Consultation Paper[3], Australia remains in serious need of a long-term national carbon policy that drives investment in low-emissions sources and can steer the electricity sector smoothly through the process of replacing aging thermal plant with less emissions-intensive generation. While incentives under the current Renewable Energy Target (**RET**) and other State-based targets have delivered investment in new renewable generation, the absence of long-term policy certainty creates risks that Australia will not deliver on its long-term ambitions and magnifies uncertainties for investors looking to make long-term financial commitments in the National Electricity Market (**NEM**).

**AGL's approach to climate change**

AGL accepts the Intergovernmental Panel on Climate Change (**IPCC**) conclusion that the risks associated with climate change are reduced substantially if warming is limited to less than 2 degrees Celsius above pre-industrial levels. Achieving this outcome would require complete decarbonisation of the world economy by 2100 and emission reductions of up to 70 percent by 2050.

Beyond the projected physical impacts of climate change, AGL has also given serious consideration to the transitional risks and opportunities associated with energy sector's transition towards a low-carbon economy. AGL believes that decarbonisation is a fundamental imperative that will drive the future of energy generation in Australia.

The electricity sector has an important role to play in meeting Australia's emission reduction targets and its long-term commitments under the Paris Agreement. Whilst electricity generation currently accounts for approximately one third of Australia's greenhouse gas emissions inventory and represents the single largest source of domestic emissions, technological substitutes to fossil fuels are available and increasingly cost effective. Electricity generation also has the potential to facilitate emission reduction in other sectors, notably transport with electrification powered by renewable energy.

As our Greenhouse Gas Policy elaborates[4], we have made a strong commitment to a range of measures that will drive the decarbonisation of the energy sector, including the closure of all of our existing coal-fired

[2] *Clean Energy Finance Corporation Act 2012* (Cth), section 65.
[3] See AGL, Submission to the Energy Security Board on the National Energy Guarantee Consultation Paper, (8 March 2018) Available at http://aglblog.com.au/2018/03/submission-to-the-energy-security-board-on-the-national-energy-guarantee-consultation-paper/.
[4] For further information see https://content.agl.com.au/wp-content/uploads/2017/04/AGL_Greenhouse_Gas_Policy.pdf

power stations by 2050 and continued investment in new renewable and near-zero emissions technologies. A clear example of the impact of this strategy and as a result of the policy is to place clear time limits on the operation of our fossil fuel plants, providing certainty to communities and the market as to our decarbonisation pathway. Our NSW Generation Plan is a recent example of our continued leadership in driving Australia's clean energy future.[5]

AGL considers that CCS technologies will also play an important role in reducing greenhouse gas emissions and meeting Australia's international commitments under the Paris Agreement. AGL notes that both the IPCC and International Energy Agency have acknowledged the potential role for CCS.[6] In particular, we consider that CCS technologies present important opportunities for industrial processes beyond the power generation sector where other mitigation alternatives are limited.

**The role of public policy in supporting the decarbonisation of Australia's economy**

Nevertheless, the Australian economy cannot effect a low-carbon transition in isolation of government and public policy settings.

AGL considers that the projected current and future impacts of climate change are inextricably linked to the effective design of Australia's energy and climate policies. All sectors of the Australian economy have an important role to play in meeting Australia's emission reduction targets and its long-term commitments under the Paris Agreement.

Public policy settings should establish investment certainty in a carbon constrained future. For the energy sector, more than 80% of electricity generated in Australia is sourced from the combustion of fossil fuels, the majority of which is provided by coal-fired generation. The transition to a decarbonised and modernised generation sector requires large scale investment, much of which will be less than half way through its asset life at the end of the current RET scheme and Government current 26-28% target under the Paris Agreement.

Investment will be best supported by emissions reduction policy that provides macro level certainty as to the timeframe and operating life of incumbent plant and reduced levels of uncertainty as to the market environment within which current investments will operate in post 2030. Greater certainty in these areas will support a more efficient transition, guiding decisions on new investments, management of existing capital stock, policy development, community transition and energy market development.

Integrated policies are required to ensure that these objectives can be jointly pursued over time. As the decarbonisation and modernisation of the electricity sector will span several decades, a long-term vision and trajectory for this transition is essential to provide investors with confidence to develop the long-lived and often capital-intensive projects that will enable Australia to reduce its emissions efficiently over time, and at least cost.

To ensure the sector's smooth transition and ongoing delivery of secure, affordable and sustainable energy, AGL believes that energy policy should be guided by the following principles:

- where feasible, using **competitive markets** to deliver and value energy services;

[5] See further, AGL NSW Generation Plan, Available at https://www.agl.com.au/-/media/AGL/About-AGL/Documents/Media-Center/ASX-and-Media-Releases/2017/171209NSWGenerationPlanDecember2017.pdf?la=en&hash=529E1A89370A33DA8F378D761CEEF1D919C9C91D.
[6] See IPCC, 'Summary for policy makers', *Climate change 2014: mitigation of climate change,* Cambridge University Press (2014); IEA, *Carbon capture and storage: the solution for deep emissions reductions* (2015); IEA, *Energy Technology Perspectives 2017* (2017).

- utilising **price signals** to encourage efficient investment and operational decisions;
- **allocating risks** to parties that are best able to manage them;
- introducing **regulation only where necessary** to address a market failure, including to ensure system safety, security and reliability;
- ensuring an **equal playing field** where different providers of products and services must compete openly on their merits;
- establishing policy, regulatory and market frameworks that are **technology neutral**;
- establishing **appropriate standards** that support competition, the uptake of new technologies, and economies of scale; and
- ensure a framework that is **inclusive of all customers** including vulnerable customers.

Open, competitive markets and technology neutrality provide businesses the impetus and latitude to pursue technology and service delivery innovations that meet system needs at efficient cost.

AGL continues to engage with the Energy Security Board, the Australian Energy Market Commission (**AEMC**), the Australian Energy Market Operator (**AEMO**), governments and relevant stakeholders to support the appropriate design and implementation of important policy reforms to ensure the sustainability of Australia's energy market into the future.

Should you have any questions in relation to this submission, please contact Kurt Winter, Manager, Policy and Research, on or myself on .

Yours sincerely,

**Stephanie Bashir**

Senior Director, Public Policy