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Committee Secretary Senate Standing Committees on Environment and Communications PO Box 6100 Parliament House Canberra ACT 2600

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RE: Clean Energy Finance Corporation Amendment (Grid Reliability Fund) Bill 2020

Thank you for allowing us to make a submission on this important issue.

First let me introduce ourselves: we are Jason Thomas and Amy Lambalk. We live and work in . We are parents who are not aligned to any particular party. We are concerned about the future our child could inherit.

The short version of what we have to say is this:

We take issue with the Clean Energy Finance Corporation (CEFC) funding carbon capture and storage (CCS) and gas technologies.

The recommendations to use the CEFC to fund fossil fuel projects, and related technologies like CCS, is merely an attempt to further slow the transition to a future with more low-carbon energy. Many of the technologies the government wants to fund via the CEFC are not proven to be economical and could be a waste of taxpayers' money.

There is current existing capacity in Australia's National Energy Market (NEM) that Australia could use, if the necessary infrastructure was built; there are solar and wind farms in many places that have had their outputs cut because the necessary electricity transmission lines have not been met. Energy storage and synchronous condensers could provide enhanced stability.

There might be a good time in future to invest in CCS, but it would make more sense to reduce our emissions first. Technology for producing energy with fewer emissions is proven and it's cheap; technology for achieving CCS is expensive and has not been viable in Australia so far. Let our country invest in the affordable and effective option.

It is disingenuous to claim that gas is clean. If the full life cycle of gas is considered, and not just the emissions counted when it is burned, then gas can be seen as a dangerous contributor to climate change.

Please note, we provide references below and each number has a relevant footnote and the very end.

Concerning the need for this bill

Australia's Prime Minister Scott Morrison, in justifying the need for this bill, has said solar and wind technology are now viable [1]. The implication appears to be that non-renewable energy projects are not viable. Fossil fuel projects have been viable for decades and are mature technologies.

Around the world, fossil fuels are becoming less viable because wind and solar are providing power at more affordable rates than fossil fuels [2]. Fossil fuel's reducing viability is due to a simple truth: there are available technologies that are more affordable and more resilient.

For a political party that champions free market ideals, this move to sandbag the fossil fuel industry, which is having a hard time competing with disruption, is extraordinary.

CCS is not viable and more money will not change that

One of the technologies this bill would allow the CEFC to fund would be CCS. This is a pretty broad definition, and could include technologies that fossil fuel companies would like to promote as a way to offset their emissions. The major flaw with that idea is that it would be better to not use fossil fuels in the first place.

Australia's only existing CCS project, run by Chevron in Western Australia, has so far not been successful. Despite their promises to use CCS to offset their emissions Chevron has been allowed to continue releasing emissions without sanction [3]. This project has broken the agreement they made for the project to be accepted and it does not appear any authorities intend to penalise them for this.

Australia has many, many examples of technologies that are proven to reduce emissions. Those include wind, solar, bio-gas, hydrogen and various storage capabilities, such as pumped hydro and big batteries. Synchronous condensers and big batteries are effective at providing grid stability.

We have affordable technologies to lower our emissions and we do not need to fund expensive snake oil.

Gas is not a clean fuel

The federal government has often made the misleading claim that gas is cleaner than coal. Angus Taylor is on record as saying:

"our LNG exports are dramatically reducing emissions in customer countries such as Japan, South Korea and China — the equivalent of up to 30 per cent of our emissions each year" [4].

Saying that gas is good because it lowers emissions where it is burned, and not considering fugitive emissions in the country where it is produced, is dishonest.

Claims that gas is cleaner than coal is naive at best. If you take the full life cycle (extraction, processing, distribution) into account then gas would have the same, if not worse, effect as coal. The global energy monitor says:

"The results of the life cycle comparison, including fugitive methane emissions, show that current proposals for new LNG terminal capacity, if fully developed, would lock in global warming impacts that are roughly equivalent, when considered on a 100-year horizon, to those of current proposals for new coal-fired power plants." [5]

Despite what we know about how harmful gas is, the explanatory memoranda for this bill reflects the government's dishonesty, saying that some kinds of gas-fired energy will be eligible for the low-emissions technology label [6].

Then there is the concern that gas is going to be a stranded asset as renewable energy becomes even more affordable, as will storage technologies. When companies walk away from their stranded assets, it will be the taxpayers who will pay to maintain the abandoned assets. This is already happening; there are millions of gas wells leaking methane. This either exacerbates climate change, or payment for the cleanup is put on the public's tab [7].

[1] <u>https://www.theguardian.com/australia-news/2020/sep/17/coalition-to-divert-renewable-energy-funding-away-from-wind-and-solar</u>

[2] <u>https://www.euractiv.com/section/energy/news/renewables-overtake-fossil-fuels-in-eu-power-generation/</u>

[3] <u>https://www.abc.net.au/news/science/2020-09-19/angus-taylor-carbon-capture-storage-gorgon-chevron/12676732</u>

[4] <u>https://www.theguardian.com/australia-news/2019/dec/31/fact-checking-angus-taylor-does-australia-have-a-climate-change-record-to-be-proud-of</u>

[5] <u>https://globalenergymonitor.org/wp-content/uploads/2019/06/NewGasBoomEmbargo.pdf</u>
[6] <u>https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r6581_ems_aa4238fe-3dd8-48bc-affb-d97f40f466b8/upload_pdf/746428.pdf;fileType=application%2Fpdf</u>

[7] <u>https://www.popularmechanics.com/science/energy/a34095748/abandoned-gas-wells-leaking-methane/</u>