

April 26, 2018

Ms Christine McDonald
Secretary
Senate Environment and Communications Legislation Committee
PO Box 6100, Parliament House
Canberra ACT 2600

Dear Ms McDonald,

Re: *Inquiry into the Clean Energy Finance Corporation Amendment (Carbon Capture and Storage) Bill 2017 - Questions on notice and proof Hansard*

CO2CRC Ltd appreciates the opportunity to have been able to provide a submission and deliver evidence to the Senate Environment and Communications Legislation Committee on this important topic.

I have examined my evidence to the Committee and do not have any alterations.

Further evidence:

In the matter of further evidence I would like to refer to Senator Urquhart's comment on page 31 of the transcript which states, "We also heard earlier today—and I'm not sure whether you were tuned in or not—from the CO2CRC that a suite of regulatory measures, possibly including a carbon price, is needed to make carbon capture and storage for coal-fired power plants viable."

I would like to reiterate that the position of CO2CRC is that a price on carbon is one of a number of potential instruments that could be used in combination with others to attract investment in CCS. Not that it was inferred by Senator Urquhart, but CO2CRC does not single out carbon pricing, our position is to work pragmatically with the Government of the day.

As requested by Senator Urquhart I have also included further information about the application of CCS technologies in Australia including costs and retrofit studies. Enclosed are copies of:

- *Australian Power Generation Technology Report (2015)* – this is an Executive Briefing with the complete highly detailed report available on the CO2CRC website, co2crc.com.au
- *Retrofitting CCS to Coal: Enhancing Australia's Energy Security (2017)*
- *Retrofitting Australian Gas Power Plants with Post Combustion Capture (2017)*



I can further advise that there are industries in Australia that already utilise CO₂ as an existing technology's emissions and repurpose it. The Kwinana aluminium smelter in Western Australia infuses its highly alkaline red slurry with 70,000 tonnes of CO₂ per-annum which neutralises the treated waste to make it suitable for road product and other industrial uses. The CO₂ comes as a waste product from a nearby ammonia plant.

Enhanced oil recovery technologies, which enables declining gas fields to keep producing while simultaneously capturing CO₂ in existing wells, couples emissions reduction while also ensuring an asset the full productivity and longevity of the asset. CCS is used this way globally and its adoption will grow strongly over the next decade with particular interest in China. With Australia emerging as the leading gas exporter globally there are opportunities CO2CRC is already involved with and others we are aware of.

CO2CRC has further been undertaking the techno-economic analysis of retrofitting a steel plant with CCS. With industrial processes accounting more than 17 percent of global emissions, steel is one of the major contributors where CCS can pull emissions out of the system.

These make up just some examples of the opportunities existing and available to CCS if fairly and adequately supported. If there is more information that the Committee requires please feel free to contact Robert Hilkes, Marketing & Communications Manager at

Yours sincerely,

Tania Constable PSM
Chief Executive Officer