
From: Tim Buckley
Sent: Monday, 6 November 2023 10:58 AM
To: Portfolio Committee 7
Subject: Re: Climate Change (Net Zero Future) Bill 2023 - Post-hearing responses - 27 October 2023

Sarah

Thanks for following up, sorry I had a busy week and only saw your first email FRI evening, after the response deadline.

As to the additional questions.

NSW has a clear opportunity to develop its world leading potential for low cost zero emissions firmed renewable energy as a way of decarbonising our existing industry, as well as new zero emissions industrial and refining opportunities.

For existing industry, the most obvious opportunities are for NSW to decarbonise the Tomago aluminium smelter, 10% of the total electricity demand load in NSW. As Rio Tinto and CSR - the major shareholders - have flagged, Tomago's existing electricity supply contract with AGL expires in 2028, and this is a perfect example of where industry can work with their energy suppliers to lock in low cost, near zero emissions firmed renewable energy supply for the long term, removing the fossil fuel commodity price exposure that has at times smashed the profitability of Tomago. This would position Tomago as a potential world leader in supplying near zero emissions green aluminium for both domestic and export markets, leveraging and repositioning the existing port infrastructure at Newcastle to pivot away from its excessive exposure to thermal coal exports. Likewise BlueScope in Port Kembla and Molycop's EAF at Waratah, Newcastle could benefit from the decarbonisation of their scope 2 emissions in terms of lower cost electricity supply.

It is really encouraging to see the development of the Energy Renaissance GW pa scale battery manufacturing facility at Tomago in Newcastle. This is a major new NSW user of electricity that could leverage lower cost zero emissions renewable energy to power its battery manufacturing operation, and in turn provide domestic employment and enhanced supply chain security for Australian developments of battery energy storage systems as well as for local electric vehicle assembly and manufacturing, particularly if the NSW government better coordinated new bus procurement and put in a local content requirement to underwrite off take certainty.

I mentioned in my earlier comments to the Committee No. 7 the opportunities for a \$1.7bn proposed critical minerals mining and refining in Dubbo with Australian Strategic Minerals.

NSW is also a technology leader in terms of research and development, for example Uni of NSW had lead the world's development of ever-better solar cell technology for the last four decades, lead by Dr Martin Green. SunDrive also this past week received a \$11m investment from the Federal Government ARENA to accelerate its Pt Botany pilot solar module manufacturing facility, to build out domestic solar manufacturing capacity and reduce Australia's strategic over reliance on Chinese imports, as well as to demonstrate the new technology opportunities to replace the over reliance on silver in current global solar module manufacturing.

Cheers

Tim