

To whom it may concern,

I hereby make my submission to the parliamentary committee inquiry Australia's transition to green energy. I approach this from a background of 40 years' experience in coal-fired electricity generation, first as an apprentice Fitter and Turner, Tradesperson, AMWU Union Delegate, Leading Hand, Foreman, Supervisor and Trainer. Whereas this soon-to-be-extinct industry trained, clothed and fed me for all those years, I am not opposed to the pure principles of producing energy from other sources in order to extend the potential for life on this earth. I do, however, have great concerns when I ask myself the questions, "who wins and who loses from this transition" and "how well planned and implemented will it be, and who will be disrupted the most." So I ask that you take into account my cautions, as well as my positives toward this transition. I will address each of your terms of reference from my experience and opinion.

*The Joint Standing Committee on Trade and Investment Growth shall inquire into how trade and investment can support Australia's transition to a green energy superpower. In conducting its inquiry, the Committee shall have particular regard to:*

- *where trade and investment activities are already having a positive impact;*

A case of trade and investment in energy from my experience could be the Callide "C" Coal Fired Power Station. When it was built in the early 2000's it was half financed by the Queensland State Government, and half by the Shell Company, a multinational corporation. (The previous Callide "A" and "B" Power Stations were fully state owned). This in itself may have been a sound source of investment and international trade. However, the Shell half of "C" was later sold off to a Chinese company. Whereas Callide "A" and "B" station broke records with their availability, reliability and profitability, and there were no secrets kept from the employees about production and profit figures, at "C", however, these figures became much more of a closed shop. This prompted questions about - was it profitable, and if so, were the profits shared evenly between the state and the investor? These indications were necessary in order to appropriately maintain the reliability of the plant, which was my sphere of involvement. So I ask the question, with the proliferation of new companies popping up financing windmills and solar farms in my area, who actually owns them, and where will the profits from this new source of energy generation go? I find it hard to comprehend that this very week while we are seeing a large fleet of B52 American Bombers being deployed at Tindal Airforce Base in the NT to "deter Chinese pressures", and we are supplying more Bushmaster armoured vehicles to Ukraine, we may be expanding Chinese and Russian investment in our Essential Service power supplies that keep our lights on and our industries running.

- *emerging and possible future trends;*

So who wins, and who loses from these future trends in our transition to being a green energy superpower? Who are the investors, and who are the potential profits being shared with? Have we considered enough "demand side management" where our greed to have, in each house, three air-conditioners, two refrigerators, three computers, two TV's and twenty lights, how they can be moderated?

- *the role of key commonwealth agencies including Austrade, in identifying new trade and inward investment opportunities, and assisting Australian companies to access these opportunities, including through whole of government coordination of investment;*

Let's not make the same mistakes as in the past, where each Australian State goes its own way to the detriment of the others. Surely the job of the Australian Government is to unify all the states in their approach to energy production and utilisation. I once attended an interstate Union conference where I learned of the privatisation of essential service electricity generators in NSW, Victoria and South Australia, in the name of "competition" and "lower prices" and shook my head. The result was higher and higher prices, and the need, eventually, for Queensland generators to bail out other states to prevent blackouts when there were shortages. When I learned about the implementation of the National Energy Market, where the load on my generating plant, that I maintained, was dictated and controlled by bids received by a computer in Melbourne, it made me hang my head in shame. George Orwell's 1984 had arrived! In contrast, I had grown up with the real ethic and desire to get plant back on line for the evening peak, so mothers could make their evening meal by "cooking better electrically", as the jingle went.

- *areas of growth, and how can these be accelerated and/or assisted, including through the use of Commonwealth Special Investment Vehicles; and how Australia can capitalise on existing and future trade agreements and economic frameworks with countries or regions around the world.*

Some existing trade agreements seem ludicrous to me where overseas interests dictate to Australians our levels of ownership and benefit from our natural resources and technical skills and abilities. Future trade agreements must tip the balance toward benefiting Australians in order to maintain our standard of living and our sovereignty, given the extent of our natural resources and abilities.

*In inquiring into this topic, the Committee will have particular regard to the areas that play to Australia's strengths, as identified by the Australian Government in consultation with the states and territories including: renewable energy, battery storage, energy supply and infrastructure, electric vehicle industry, infrastructure; advanced manufacturing, and services and technology.*

This, to me, is an extremely important part of the energy transition. As Australians, it is critical we have the greatest involvement in our own investment opportunities toward the energy transition in order to maintain and increase our standard and equity of living, and best utilise the natural resources and people skills of our country. We have just about every commodity, mineral and technology needed to manufacture and maintain the green energy sources ourselves. From my experience in maintaining Callide "A" Power Station, when we had a breakdown, because of our high commitment and ownership of the plant, we did not just "parts swap", and wait weeks for overseas replacements, we either refurbished or manufactured the parts ourselves. This was done way out in the bush, separated from ready external capital city input. These are the same "in the bush" places where much of this new infrastructure will be located. We need to manage our own affairs to be able to survive.

Australians, given the chance, have a high potential for innovation and ingenuity. This must be fostered and grown, rather than relying on other overseas interests to dictate our responses. I am yet to be convinced that existing technology batteries can provide the load backup when the inevitable happens, and the “sun goes down and the wind stops blowing”! Pumped hydro is a good option where the water and the gravity are available. In Queensland, however, there are few rivers that flow from a high altitude, thus giving the gravitational power to drive water turbines, and also have the potential for re-pumping for repeated use. Take the Fitzroy River for example. I have flown a light aeroplane over this river and most of its tributaries. Rarely is there an altitude difference above sea level of over 500 feet from its sources to its mouth. Victoria, NSW and Tasmania have an advantage here where rivers flow from higher mountains. Will the other states provide Queensland’s pumped hydro capacity at night if we send them our sun power in the day?

A critical part of the new infrastructure is our manufacturing, installation and maintenance workforce. During my days as an AMWU Union delegate, we observed a negative employer trend that was termed “Divide and Conquer”, where people of the same trades and skills were pitched against each other, in order to “compete”! Thankfully, I also experienced, during my early involvement with Callide “B”, a unifying philosophy implemented by a new manager who regularly consulted with all levels of his staff. He looked after them, and encouraged them. This led to high levels of ownership, reliability, productivity and as a result, profitability. How will the installation and maintenance workforce for all of the new wind, solar and energy distribution inter-relate. Will it be “divide and conquer”, or will it be a unified workforce where information is shared readily and freely for the most expedient and efficient production, installation, and repairs of equipment? Will the workers be treated evenly, fairly and with respect, thus contributing to ownership and productivity in electricity generation?

In conclusion, I ask again, who will gain and who will loose from this energy transition, and who will ensure that this transition will benefit, and allow contributions, from all Australians?