Submission No 122

INQUIRY INTO IMPACT OF RENEWABLE ENERGY ZONES (REZ) ON RURAL AND REGIONAL COMMUNITIES AND INDUSTRIES IN NEW SOUTH WALES

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In my submission of April 2021 on NSW REZs I made numerous points. I resubmit that submission for this inquiry, but with a couple of updates in red. What I wrote in 2021 is even more valid today as subsequent events support what I wrote nearly four years ago.

What is the point of all these inquiries if the facts and inputs from those with knowledge and lived experience of the issues are ignored in favour of a misguided ideology.

I hope that the Committee members approach this inquiry with an open mind and consider all submissions, not just those that support the current government policies.

Policies can change, but once the damage is done to our wildlife, our food producing capability, our regional and rural communities, our electricity system, our energy-dependent industries and businesses and budgets, it will take decades to repair.

We need a moratorium on further industrial developments in REZs, and elsewhere, until a thorough Royal Commission is held into the future of development of our energy system.

Original submission on 30/04/2021 with updates as 31/01/2025

Submission on CWO REZ Access Scheme Issues Paper 30 April 2021

You have encouraged people to respond to the proposed plan for the NSW Central West REZ. I accept your offer.

Since the 'questionnaire' is basically aimed at investors and how you can best attract their business with a financial inducement that best suits them, the questionnaire basically leaves out the general population of the regions. For this reason I cannot respond directly to the questionnaire. However, I'd like to submit issues and observations that are relevant to the larger regional population.

The executive summary reads a little like a marketing document. **I am confused that you suggest that:**

"*NSW Government plans to develop our **world–class** renewable energy resources, **modernise** the State's electricity system and provide NSW consumers with a more **affordable**, **reliable**, **secure** and **sustainable** electricity supply."*

for the following reasons:

1. World-class
Renewable Energy is not really successful anywhere in the world. Germany is regularly put up there as the poster boy but they rely on backup from France, who run predominantly on nuclear for electricity, Russia for gas, and I'm pretty sure that Spain is in the mix too. They also emit high levels of CO2 with their Biomass power plants, powered by timbers shipped in from around the globe, more CO2. And of course they still use coal fired power and some nuclear too. How long have they been working on their renewables industry? It must be a couple of decades now because they have 5,700 wind turbines coming up for decommissioning and disposal this year. That's going to cost them dearly. I hope that 'we' are thinking about these future problems, all part of a good business plan after all. Full life cycle plans and costing, as opposed to dumping this infrastructure on the regions for future generations to deal with. Landfill must not be an option, solar panels have been declared as E-waste in many states in the US, the EU and in Victoria. Nor should it be dumped on developing nations under the pretence that it is still useful. These countries are less equipped to recycle renewables than we are, and we are yet to come up with a proven and costed plan.

Texas is autonomous, their grid is completely separate from nearby states so they have no one to fall back on when the renewables go haywire or shut down due to weather events such as snowstorms. Sadly, more than a hundred people died there during their last serious renewable energy shut down. The scale of this power outage would never have occurred with traditional power such as coal, gas or nuclear.

How do such global disasters fit in with your suggestion of a **'world class'** renewable energy system? This infrastructure hasn't successfully delivered on promised power, or been

commercially viable 'stand alone' anywhere in the world. It can never be stand alone. It is in no way sustainable. There are the rarer mined materials that won't even stretch as far as a first time round 100% global renewables push, let alone the necessary replacement a few decades down the track. This pointless venture will send Australia bankrupt. This waste of resources globally is criminal. You are simply handing over our money over to multinational conglomerates. We don't even own the infrastructure or the asset. How does Australia benefit?

2. 'Modernise'.
Really? You do know that windmills have been around for many centuries don't you? The Dutch at least recognised their limitations up until recently. Even they seemed to forget that the wind just doesn't blow all the time. All the marketing in the world won't change that. They too, are propped up by neighbouring countries. Solar panels were invented in the 1800's, they are not a new technology. Though the technology of wind and solar has improved significantly, they are both low density energy, still weather dependent, turbines on wind, and solar panels on intermittent sunshine and only during daylight hours. They cannot function at other times without the backup of fossil fuels. A duplicate system. Complicated, does not equate to modern, and in will never equate to cheap reliable energy for the general public or for manufacturing.

Coal, gas and nuclear can and are in fact being improved also. The difference is that they can supply power 24/7 and don't require a duplicate system to make them function, as with renewables. They also would not require extra thousands of kilometres of new transmission lines.

3. 'Affordable'
Affordable energy and renewables simply do not fit in the same sentence. You were joking right? The countries, and states like South Australia that have high levels of renewables and backup batteries, are also up there with the highest electricity prices in the world. Californian businesses and families are leaving that state in droves due to the exorbitant cost of electricity. It has among the highest levels of renewables in America.

You can suggest that people here are currently able to save $150 but that's only if you change providers or plans. This is also simply a 'one off' benefit. It's also only temporary, we know that you are going to tax feed in tariffs and have the option to manipulate our power usage. Rooftop solar has already been capped to 5 KW in our area. We know that the providers can reduce tariff benefits too, ours were reduced twice in less than six months of starting our contract, and our electricity charges were increased. People only install rooftop solar because they are desperate to reduce their power bills. My son is installing it because his bills (in northern NSW) are $300 per month! It wasn't like this here in Australia 15 years ago, before renewables started to proliferate.

4. 'Reliable'.
We had an 87MW solar plant commissioned near us in 2019. The original owners sold it in the first year, the current owners were looking to sell off half of the asset, unsuccessfully, and it's up for sale again now. They had to do a write down on this asset, they committed the projected power supply 99% and had an 18% shortfall in one quarter. Of course the fact

that it was struck by lightning last year wouldn't have helped, and the fact that they had inverter problems which affected their output. They also own solar at Manildra, that had inverter problems too and it's also up for sale. We had eight blackouts here last year and only two of them were planned. When the power goes out in the country and you depend on electric pumps for your tank water supply, a blackout means no power or water. You will never convince me that renewable electricity is reliable. Nor is it likely that you care. [Update 31/01/25: Beryl and Manildra solar works have since been sold for 1/3 of their original capital cost and are up for sale again, which will make a 5th owner since 2019. How are projects at all viable when the market discounts their value so much and change owners so often?]

5. 'Secure'

In what way is renewable energy 'Secure'? You are selling off this infrastructure to all and sundry. Is there a country out there that doesn't own a part of our infrastructure? You call that secure? Even the companies that call themselves Australian are predominantly owned by multinational conglomerate parent companies. China owns Energy Australia outright and I'm not sure about recent years but up until 2018 they had paid no taxes in Australia. China also own extensive grid infrastructure, coal mines, a fly ash repository, wind and solar farms and major shipping ports around Australia. Oh and don't forget the water rights too, and property, rural and residential. On top of all this the NSW state government saw fit to gift China's largest wind farm manufacturer 10 million dollars recently! Why? This money came from the taxpayers! You are not only selling out our country, you are gifting them 'our' money!

Where is the 'Security' for Australians in regard to renewable energy? We throw away Australian's hard earned money by way of subsidies, money handed over to overseas developers to purchase a finished imported product, and to install the infrastructure. What is to stop the major players from creating serious mischief to our country? What benefit comes back to Australian's in all of this? AGL and Origin have written down their organisations to the tune of billions of dollars due to renewables. Australia's oldest engineering company RCR Tomlinson, founded in 1898 folded in 2018 due to it's venture into the renewables industry. Around 3,400 jobs were lost.

For the communities in the regions who have all this infrastructure dumped on us, the negatives are overwhelming!

6. 'Sustainable'.

In relation to renewable infrastructure is absolutely untrue! And this is a big subject. The only thing renewable about this infrastructure is that it needs to be frequently renewed. The so called experts and lobbyists of renewable energy claim that solar lasts for thirty years, that's because it takes them up to 2050!. The solar farms that are being currently decommissioned in America, and at a high cost I might add, last an average of 21 years. One small 20MW solar installation in America was decommissioned and the land fully restored at a cost of more than two million US dollars. That was 'after' recycling payouts. And after all that, they were told that they could not return to growing peanuts because of the high levels of zinc in the soil which had leached out from the solar panels. Zinc is one of the more

innocuous materials, but still a problem in large quantities. There are many different ways to make a solar panel work.

The 87MW solar works a few kilometres from us is of the thin film cadmium/tellurium variety. A severe hailstorm would leach these materials straight into the soil and waterways. There are two waterways under this installation, and an aquifer that lies under the entire region. I wonder what damage was done during last years lightning strike? Who is going to pay for the decommissioning and restoration of this site? These particular panels require specialist recycling, which also happens to be toxic, and I believe the nearest facility is in Malaysia. Who is going to pay for the decommissioning and restoration of the 400MW solar installation planned just up the road from me assuming that goes ahead. The developer told us that the panels would be pretty much made of 'glass'. They also thought that cadmium/tellurium panels were only used in space. You trust everything they say but many of them know nothing about the technical nature of renewables, or the risks they present. [Update: 31/01/2025: Beryl solar works has been plagued with problems since, including significant generation downtime due to heavy rain, component failures, equipment fire and a major fire under the solar arrays on 24/04/2013 reportedly damaging 18ha of panels at a cost of about $7 million. The Dept of Planning and the Proponent refused to do any soil or water sampling, or if they did they did not make the results public despite several requests from a resident. Also, what happened with disposal of the damaged panels have not been divulged despite several requests from a resident]

Wind turbines don't even last as long as solar, we are currently subsidising them to the tune of $600,000 to $700,000 per turbine, per annum! And they are so costly to decommission that some wind farms in the US are being abandoned, rusting away. The blades are not easily recycled and thousands of those have been cut into sections and simply buried. When are you going to get someone to look at how other countries are dealing with this infrastructure at end of life, because burying it is not sustainable, and the backup batteries have to be replaced even more often. How about you send all this to the city centres for them to deal with, they're the ones who think it's such a wonderful idea.

Do you really think solar panels are 'sustainable'? Do you even know how they are made? Do you have any idea how much C02 is created just to make the silicon solar wafers? Did you know that apart from mined quartz, the other two main ingredients in making silicon wafers is coal and hardwood timber? And that it's likely that China ship the hardwood timber from Brazil and Indonesia, some of it from virgin rainforests. Did you know that it's also likely that China use coal fired furnaces for the three separate thermal processes necessary to make these silicon solar wafers and that just one of the processes requires the heat to be held at 1100C for five days? And that somewhere along the line, by agreement, it was decided that the CO2 would 'not' be declared in certain processes. Though, it may contribute somewhat to the 60% increase in CO2 that China declared between 2005 to 2018! And it's even higher now. On top of all that, **half** of the crystalline silicon brick is lost, thrown away, when they cut it into wafers. The copious by-product of these processes is highly toxic and dangerous to both flora a fauna. Does this sound sustainable? Check out the following link, I encourage you to click on the blue PDF box as it's easier to read. It's not very long and includes photographs.

https://www.researchgate.net/publication/335083312_Why_do_we_burn_coal_and_trees_to_make_solar_panels

You also need to consider the aluminium frames, the steel posts, the plastics used and the copper wiring. It also does not include the material required to make the solar cells produce power, the semi conductors and doping materials. All of these materials require mined raw materials, many of which require toxic processes to achieve the refined end product. China imports large quantities of ore or refined materials from countries around the globe, many of them developing countries, which is how they keep their renewables prices down. Shipping is one of the highest contributors of emissions produced globally. How much of this CO2 is also omitted from the audits?

Just one 400MW solar works being proposed to be installed around 8 kilometres from our home will have 800,000 to 900,000 solar panels and will include backup batteries. This **one** 400MW capacity solar works will level a greater part of 18 square kilometres of quality agricultural land of every almost every tree, shrub, blade of grass and small native animal. We have just been informed of another solar works in the planning stages and a wind farm too. These will also be around 8 kilometres away, in a different direction.

If these Renewable Energy Zones go ahead there will be tens of millions of solar panels across the regions, and conservatively, hundreds of wind turbines, many of them close to small historic towns and farms. You say you're going to put this infrastructure where it's wanted, knowing the truth about renewables as I do, this is nothing short of devastating to me. And I am not alone in these feelings.

Wind turbines, backup batteries, and batteries for EV'S use some of the same materials as solar, but obviously the turbines requires massive amounts of steel. The blades are oil based. They each also require more in the way of rare earth materials and cobalt. Copper is a big one across the whole renewables infrastructure. Most of the rare earth materials are mined and processed in China.

Rare earth mining and processing is among the most toxic on the planet. Acids and a variety of other chemicals are used in refining the ores, which aren't all rare, just difficult to extract. The by-product of mining and refining these materials also has varying levels of radiation. I believe that though we mine these materials here in Australia for other purposes, we send them off to Malaysia to be processed and refined. I also believe that the locals there do not support it, and are protesting against it. There has been extensive environmental damage done to farmland in areas where these materials are processed. I know that one of the rare earth processing plants in China has a black toxic sludgy lake which was reported to be ten square kilometres in size, and has been banked up and is increasing in depth annually. The farmers have been relocated. Their stock died and the people were having serious health issues. The following link is just one of many articles that are available on this tragedy.

https://www.bbc.com/future/article/20150402-the-worst-place-on-earth

The environmental damage being done in developing countries around the globe in the name of 'clean and green' energy for virtue signalling wealthy Westerners is bad enough.

But I do not understand how people can turn a blind eye to the humanitarian issues and the degradation that people are suffering so that a relatively small number of ideologists can follow a pipe dream. Sadly there are growing numbers of people who are simply consumed by greed and will not let other people's tragedy get in the way of making a lot of money.

There are many articles about the artisanal mines in the Congo. No one seems to care. You need to look at the following link. It's about a researcher, a scientist who returned to the Congo to follow up on people he'd connected with on a previous visit. During this visit he found out that people he knew lost family members in a mining accident, apparently 30 were lost in that particular incident. We only know these details because they were reported, most aren't. While he was there on his second visit, a mine collapsed around 100 metres from where he was standing. He tried to get close but was moved on by local police. He subsequently found out that 63 people were crushed to death in that mining incident. When this article was written in 2019, there were around 35,000 children working in these artisanal mines, now there are around 40,000. Cobalt is predominantly mined in the Congo and most of the mines there with modern technology are foreign owned, these make up around 80% of the cobalt mining there. The labour intensive 'artisanal mines' employ many more people, and for very little money. The adults receive a few dollars a day, yet this is more than they can earn otherwise. These tunnels are dug by hand with a few simple tools and some of them are quite deep. There is no bracing in these tunnels. The following link is from the scientist's first trip.

https://www.theguardian.com/global-development/2018/oct/12/phone-misery-children-congo-cobalt-mines-drc

This is his second trip.

https://www.theguardian.com/global-development/commentisfree/2019/dec/16/i-saw-the-unbearable-grief-inflicted-on-families-by-cobalt-mining-i-pray-for-change

This does not just equate to slavery, it's child slavery too! Refugees from other parts of Africa are coming here for work which is exacerbating the problem. If the adults die in mining accidents their children have no choice but to work in the mines, and the children of refugees have no family to fall back on. There are no social services. It's difficult for people to protect mining territories and violence and corruption is a problem. Girls who are not much more than children themselves are falling pregnant, the orphans must make money to be able to eat.

In summary we have established that:

1. **'World Class'** renewable energy is an oxymoron.

2. Wind and Solar energy are not **'Modern'**, they are old technology revisited, and they overly complicate the production of power.

3. **'Affordable'** and renewable energy do not belong in the same sentence. Affordable in reference to what? It's cheaper for 'the developers' to purchase the product? That's just more money in their pockets, and at the expense of the 'unseen' slaves in developing countries. And you've created Financial Compensation Models to benefit the developers? Seriously?

It personally cost us $30,000, mainly for the transformer, just to connect the grid to our boundary fence. That's what we pay out here in the regions. I know three other people who had to each pay $50,000 because it involved a transformer plus extra power poles and wires.

Get real, we pay through the nose for the privilege of having access to whatever electricity you deem to force on us and we're supposed to sit down and shut up?

4. **'Reliable'** and renewable energy also do not belong in the same sentence. That is simply made up, see some details for point 4 above. These are all simply marketing words used in marketing sentences and backed up by nothing.

5. **'Secure'**. Now that just makes me want to laugh out loud! You're selling out our country to all and sundry like there's no tomorrow with taxpayers money, and somewhere along the line you talk about 'Managing Financial Risk'. You must know that there are huge security risks in all this. You are robbing Peter (the taxpayers), to pay Paul (outside interests) for a product that works sometimes. A few months ago there were 15 industrial Solar installations up for sale and a number of Wind projects too. The problems associated with this infrastructure is being hidden from you. Why would they want you to know? After all Australia is the biggest cash cow around at this point in time in regards to renewables, and they want to keep it going for as long as possible.

6. Renewables and EV's are not **'Sustainable'**. Mining has increased on a massive scale globally due to renewables, predominantly coal. These resources are finite and renewables resource materials mine 82% of the total different mined materials. In other words, a wider variety of materials are necessary, many with complex and toxic processes, to build the infrastructure. There is 300 times more toxic waste from the manufacture of renewables than for nuclear power plants, that's without taking end of life renewables disposal into account. And nuclear power plants last more than 3 times longer than renewables infrastructure. Nuclear can operate 24/7 and supply reliable power for homes and industry, from a relatively small footprint of land.

Even the coal fired power plant Liddell has now been operating for 50 years, and would continue to provide a reliable source of power for many years to come with proper maintenance. This is not taken into consideration, renewables infrastructure needs to be replaced two to three times over the life of coal, gas or nuclear. Renewables require obscene amounts of land and the equivalent amount of land needs to be available so that the infrastructure can be replaced before the original solar and wind reaches end of life. This is essential for continuous supply of energy. There are already hundreds of square kilometres of quality agricultural land earmarked for wind, solar and backup batteries for the first roll-out. And the replacement renewables need to be in place before the end of life

of the original infrastructure. Double the amount of land! None of this has been thought through!

Our region was named in the top ten destinations by Trip Advisor, for good reason. The last time we went to Europe many years ago now, and after many visits, we swore that we'd never return. If the scenery and rural ambience draws you to a destination, renewables destroys all that. We have never been back.

Some of the mines in developing countries are encroaching on pristine wilderness, such as the Congo for cobalt and copper, the call of the western dollar is too tempting. Unfortunately it comes at a high cost to the environment and to humanity. There is a similar situation in Brazil and Indonesia in regard to virgin rainforests. People are told that these forests are being decimated for agriculture. The reality is that large quantities of hardwood timber are a necessary ingredient in the manufacture of silicon wafers for the manufacture of solar panels.

How is any of this 'Sustainable'? How can you 'justify' any of the above six categories as benefits?

Do you seriously think that renewables and EV's will save the planet? From what?

The UN, IPCC or whatever other combinations of letters you want to throw out there, have never proven conclusively that CO2 emissions from human beings is doing anything to 'cause' whatever catastrophic climate event is your flavour of the month. The pseudo scientists are using whatever weather event that nature throws at us, and claim that anthropogenic emissions have caused it!

And worst of all, this catastrophising, is purely to market renewables and EV's! Yet they are not 'clean', 'green', 'sustainable' or 'free'. They are causing unacceptable humanitarian issues and destroying the Environment globally! They come at a great cost.

No, we do not trust 'the science'. Science is not static. It is certainly never 'settled'! There is no such thing as 'consensus science'. Science without challenge is not science, it is pure dogma! The same dogma has been spouted for more than 30 years now and none of their catastrophic predictions have ever come true. People are living longer and fewer are dying as a result of severe weather events. The very same advisors that wasted billions on useless technology in past decades are still giving advice to government bodies.

Science is so politicised that they only get paid for following the chosen script. Even those that don't agree dare not speak up. They see what happens when you speak up, you lose your job and have to go to the highest court to fight for you integrity.

We do not trust the media either. They have destroyed many a career to further their own agenda. Truth is dead. They sold us out long ago, truth in journalism do not belong in the same sentence. There is only a small section of the Media here in Australia who are willing to speak the truth, and trust me, their audience is growing.

You talk about CO2 as if it was 'the environment'. There are more than 50 volcanoes all going off right now. Are you going to try to mitigate their emissions? The arrogance, that any human being that thinks that they can control the climate!
What do you consider 'the environment'?

Production of renewable technology and EV'S are destroying the environment to a greater extent and at a faster rate than any other power source. And even worse, the people who promote it turn a blind eye to the death and human misery that is occurring now, and on a daily basis in developing nations.

Your 'cheap' renewables have come down in price off the backs of degraded families and children in developing countries and that doesn't even bother you. And all this simply to make a handful of global elites even more wealthy.

China has been labelled a developing nation by the UN. As such it has no emissions targets set, not till 2060 and who will be around then to hold them to account? Developing nations do not have space programs. Developing nations do not send manned rocket ships into space. Neither do they have nuclear power or nuclear weaponry. Developing nations do not own large swathes of international property and infrastructure, including strategic ports. Developing nations do not have the world's largest number of armed forces and associated war infrastructure. Developing nations do not have tens of thousands (likely more) of vacant, brand new apartments, bullet trains and many of the most modern cities in the world. Developing nations can't even get loans to build coal fired power plants, to help lift them out of poverty. So why, as a 'developing nation', is China currently building coal fired power plants at a greater rate than the west can decommission theirs? Why are we helping them in their goal to become the most powerful nation on earth. Developing nations do not threaten their trading partners, nor bully them. China is not a developing nation.

Have the politics of the left, including the State and Federal Liberal governments, totally betrayed us? The Liberal Party has certainly lost its way, their values, the very reason their constituents voted for them have gone. Why are there so many 'Greens' represented as Liberals? Let's face it there are few moderates or right of centre politicians left any more, have you really sold us out completely?

Benefits to the regions

This is simply a statement. Apart from a handful of landholders, who else benefits? This is not 'drought proofing' the regions, it's simply propping up those handful of landholders. The thousands of other farmers are still going to struggle during times of drought. And on top of that their property values have gone down due to the visual impact of the renewables. They don’t get any compensation for that.

The local roads around the proposed wind or solar installations 'have' to be upgraded, to carry the heavy vehicles travelling to and from the site everyday. This is not a benefit, it's a necessity.

Sending developers into schools, and taking children on excursions to wind and solar installations to talk about renewables is not a benefit. It's propaganda, it's an opportunity for them to market to future generations. These children are not being told the truth about renewables.

When you buy a plot of land from a developer in the city, a powered site means that when you build your house the builder simply connects to the supply. It doesn't work that way in the country once you're outside the town boundary. The real estate sign might say 'power available', but you need to purchase a transformer to be able to connect to the grid if you want to connect to that power supply. If you are lucky you can share this transformer with another property. Unfortunately for us, we could not. Our transformer cost us close to $30,000. Shared or not, once this transformer is in place you don't own it. We had to hand ownership of ours over to Essential Energy. It may be different in other regions, but here you have to set back your house 60 metres from the road. This meant that to connect power from the transformer we no longer owned to our new shed and home required around a hundred metres of trenches and wiring. Before we knew the truth about renewables, we had decided to put solar on our shed. Because of the distance from the road, we had to put in heavy duty wiring. This cost us around $11,000.

We spent more than $41,000 just to take advantage of our 'available power'. People in the city don't have these costs. I wanted to help you understand that people in the regions are already paying a premium price for their electricity. Next we had to pay for the solar system on the shed, more than $5,000 which was capped at 5KW. Our feed in tarrif was reduced twice in the first year and our electricity charges were increased. We have changed providers, but that is just a one off temporary saving.

We know that there a plans afoot to tax feed in tariffs, and that ultimately we will receive nothing. This is designed to force people to purchase batteries. Knowing what I know now about renewables, I refuse to pay to kill people in third world countries. But assuming I paid for batteries too, what would that bring up the cost of just **my** electricity infrastructure? $60,000 maybe $70,000? And you talk about benefits to the people living in the rural regions?

There are no benefits to the people of the regions!

Yours sincerely

Upset resident of Central West NSW