Submission No 118

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

Name: Mr Anthony Morrison

Date Received: 31 January 2025

Climate Change, Renewables and Nuclear Power. 1

Australia is at an energy crisis crossroads. Once upon a time, Australia had the cheapest energy in the world that drove economic development, prosperity and high living standards. We now have some of the world's highest energy costs thanks to our transition to renewables, and we have barely started on the path to become 'A Renewable Energy Superpower'.

Planet Earth is a wondrous miracle, floating in space. It has a climate and oceans of water which support complex life systems that have evolved over millions if not billions of years, all of which evolved from a simple single cell amoeba. Planet Earth is 4.5 bn years old. Earth's climate science and history (geology) is as fascinating and interesting as it is complex. We should be concerned and care about our miraculous planet, it is a miracle, but it seems a bit simplistic to lay the blame for any change in the climate on human emissions of carbon dioxide, which are 3% of global emissions.

Earth's climate has always been driven by natural events, and it is still driven by the same random processes that have been present for billions of years, such as astronomical forcings, solar activity, plate tectonics, ocean forcings and volcanics. Temperatures have been hotter and cooler, and polar ice caps have come and gone, only being present for 20% of time.

Carbon dioxide levels have been higher and lower. It is obvious that man-made carbon dioxide wasn't a factor then and there is no proven research to confirm that it is now. Generally speaking, if something has happened before and it occurs again, it happens for the same reason.

A different causation, and one that does tie in with earth's previous climate history, is convection. 71% of the earth's surface is covered by oceans, equatorial oceans are warmed directly by the sun where most of the incoming (radiation in the visible spectrum) heat is absorbed, and it is that flow of energy back to the atmosphere in the form of heat and latent heat, where that latent heat is contained in water vapor, that heats the atmosphere

Bill Kininmonth, former employee of the BOM, focuses on how the oceans warm the atmosphere and via the atmosphere, the polar regions.

He makes three points, using publicly available data.

1) The temperature of the tropical atmosphere is regulated by the tropical oceans which has been increasing at a rate of 1.1C/ 100 years but global temperatures have increased by 1.7C/100 years.

2) The physical mechanism linking the tropical atmosphere to the tropical oceans is convection. Not radiative transfer.

3) While global temperatures have increased by 1.7C/century, most of the recent global warming is over the poles during winter, transported from the tropical oceans via winds in the troposphere and ocean currents. While global temperatures have increased by 1.7C/century, Arctic temperatures have increased by 6.8C/century and Antarctic temperatures by 3.1C/century. In the dark months, arctic temperatures have increased by 8.1C/century, which is greater than the 4.2C/century for the months of sunlight. By comparison, equatorial warming has been 1.1C/century

Tropical convection is key and the reason why tropical oceans are the engine room of climate change and why the atmosphere never gets too hot, despite the increase in carbon dioxide levels.

The planet is warming within acceptable limits, the warming is caused by the above and certainly not carbon dioxide and not by nearly as much as carbon dioxide models predict. The problem with computer generated models lies in a substantial error in the general circulation computer models (GCM's) used to predict climate. This has been pointed out by Chritopher Monckton in 'Why Climate Models Fail', and why they have led to wild official exaggerations of the high end of future manmade global warming. The fundamental error of control-theoretic strengths from the models' outputs, the feedback response, and consequently the 'equilibrium doubled-carbon dioxide sensitivity' (ECS) itself, is that they are overstated. After correction, the climate emergency ceases to exist.

Artificial intelligence, in conjunction with artificial neural networks (ANN) and machine learning models are proving to be vastly superior to physical models, such as GCM's, but they are not being used, partly due to the massive investment in GCM's aa well as their importance to the theory of anthropogenic global warming. (This point is made by John Abbot in conjunction with Jennifer Marohasy in the article, 'Using Artificial Intelligence to Forecast Rainfall, Separation of Natural and Anthropogenic Components of Climate Change, and to Forecast Cyclone Trajectory and Intensity'.)

There are questions about anthropogenic climate change. Firstly, there is no valid research supporting the theory that CO2 does play a part in global warming. Not only has the theory that a doubling of anthropogenic emissions results in 4C to 5C warming, been discredited, but extensive and complex work in the physics of climate change and CO2 saturation, carried out by a team of Taiwanese scientists led by Professor Peng-Sheng Wei, found that the sensitivity to a rise in CO2 atmospheric levels from 100ppm to 400ppm was negligibly small at 0.3C, and the atmosphere is fully saturated with Co2 at 500ppm.

Even if CO2 is a causative agent, the claim that fossil fuels, make up 40% or so of global emissions, is false. The fact is that total man-made emissions themselves, only account for 3% of total global emissions and fossil fuel emissions account for 40% of those man-made emissions, 40% of 3% or 1.2% of total global emissions. Not, 40% of 100%, which is the message climate activists and associated organisations would have us believe.

The other 97% are natural emissions sequestered by natural processes. It's called the carbon cycle. This is brushed aside with the claim that the 97% of natural emissions really don't count, because they pre-exist man-made emissions or they are sequestered, or it's C12 not C14 and anyway, it's that extra 3%, additional to natural processes which is the problem, which ignores the fact that earth is a living planet and plant life readily sequesters any additional CO2, a plant nutrient. Satellite images show that the planet is greening and food production has increased as much from CO2 driven plant growth as from genetics etc. to feed its rapidly increasing population over the last 25 years.

Different technology is used to measure temperatures today and temperature records have been homogenised (altered) downwards, so comparisons with the past are meaningless. Temperatures are now measured with electronic sensors, whereas previously they were measured using mercury thermometers. Electronic sensors are much more sensitive and will react instantly to a brief change in temperature, but mercury thermometers react more slowly and may not catch a brief temperature spike and they weren't calibrated.

Homogenisation, theoretically, is a process by which previous individual temperature records in similar locations in a region are combined and adjusted to give an average temperature for the whole region. But the thing is, apart from the fact that some of the locations were in distinctively different climatic zones, temperatures have always been adjusted downwards so that yesterday's normal hot day or year becomes today's hottest on record, as we hear so often on our ABC. No one knows what the previous temperatures were because they have been extinguished from the record.

It is similar for Carbon dioxide levels which are said to have risen from 280ppm to 400ppm since the industrial revolution. Throughout the ages CO2 levels have varied enormously from 180/190 ppm in ice ages to 15,000ppm 60 million years ago to 400 ppm today. The claim that CO2 levels today have risen by 40%, from 280ppm to over 400ppm since industrialisation is questionable because readings over the preceding 150 years, using the Pentekoffer method, ranged from 280ppm to 400ppm. 280ppm was the lowest, not the most recent, not even the average.

60% of the world's CO2 is contained in the oceans. Warming oceans emit and absorb CO2. Sea level rises are constantly being blamed on human emissions, not that sea levels have risen. Since Fort Denison was built, they have hardly risen at all. But if oceans had warmed, they would have released CO2, which should obviously be included in any modelling and which confirms the fact that rising CO2 levels, far from causing global warming, follow increasing temperatures.

As previously stated, human emissions account for 3% of global emissions of Co2. Australians are being shamed and brainwashed into believing that because we contribute 1.3% of total global emissions, we should stop burning fossil fuels, stop cows farting etc and go renewables. But once again, truth goes missing; the reality is that Australia's share is 1.3% of the 3% of anthropogenic emissions, or 0.04% of total global emissions. Not 1.3%

It is also claimed we are a big emitter on a per capita basis, so we have an even greater responsibility, as global citizens, to stop burning fossil fuels: 'The greatest moral challenge of our times'. But the fact is that Australia is a thinly populated continent that sequesters more Co2 than it emits. Australia is a carbon sink. Farmers are already being paid carbon credits in dodgy sequestration schemes which, allegedly, offset emissions, so, if CO2 is such a problem why shouldn't the rest of the world to pay us for all the CO2 we sequester and stop squandering all our 'hard earned' on renewables.

A recent CSIRO article is additional proof that so called facts aren't facts at all. In answer to the rhetorical question, 'What are the sources of carbon dioxide in the atmosphere?' The reply was that '90%, of the world's carbon emissions come from the burning of fossil fuels. So, using the same logic by ignoring the fact that human emissions are only 3% of total global emissions, they create the false fear laden idea, even ifCo2 was the culprit, that we humans are responsible for imminent catastrophic global warming.

It is worth noting that Mark Howden, CSIRO's head of climate change, is also vice chair of The International Panel of Climate Change (IPCC). The IPCC's name: The International Panel for Climate Change, says it all. Its mission is not to question whether or not or how the climate is changing, but to prove that it is and that humans are responsible because we burn fossil fuels. (which have ironically, through industrialisation, delivered today's unimaginably high living standards, health and longevity)

Its 5th annual report similarly massaged the truth. It stated categorically that "Fossil fuels – coal, oil and gas – are by far the largest contributor to climate change, accounting for over 75% of global greenhouse emissions, and nearly 90% of all carbon emissions". Not 75% or 90% of the 3%. Once again, the same fear laden message.

To solve the problem, the world, and particularly Australia, are spending massive amounts on renewables in the quest for clean energy. But renewables fall down on that most basic claim: that they are clean. They may look clean and shiny, but the fact is that massive amounts of energy are used in the mining and processing of minerals, manufacture, shipping, road construction, transport, construction and batteries for baseload. It takes at least 40% of their life to repay that carbon footprint, while some claim that they never repay it. Not to mention the environmental damage or the human rights and child abuse issues in the Congo and China.

The evidence doesn't support the claim that renewables are cheaper either. Germany's experiment with renewables is an ongoing economic disaster. In Australia, formally a country with the cheapest energy in the world, prices have almost doubled and we now have some of the highest energy costs in the world. Additionally, the government has been forced into providing financial relief for cash strapped consumers to relieve them from some of the cost-of-living pressures caused by sky rocketing power prices because the heavily subsidised and protected renewables have destroyed coalfired generators business plan putting further upward pressure on prices. This is being exploited by ridiculous accusations that coal fired power can't compete with renewables.

The true cost of renewables is unknown. Costs are subsidised, 'off budget' or have been ignored. For example, the costs of batteries and transmission lines have largely been ignored in CSIRO's Gencost figures. The massive costs of decommissioning have been brushed under the carpet.

There is no effective legislation compelling investors to decommission them. How do you force a $10 company to spend anywhere from $450,000 - $600,000 per turbine, or $135,000 per megawatt for solar factories (source, NSW Renewable Energy Planning Framework, Solar Decommissioning Calculator) which, on that basis, would cost $56 million to decommission a 400MW, 708 Ha solar factory, such as Gundary, near Goulburn, or $80,000 per H/a. 10 times more than the land is worth. In the absence of any effective compulsion, Local Government will be forced to decommission them. Such an unthinkable disaster defies description. The green dream is turning into a nightmare.

If solar and wind factories aren't decommissioned, in years to come, the environmental damage will be disastrous; a landscape littered with countless thousands of wind turbines, millions of solar panels, all leaking toxic waste into the environment, together with dumps of toxic waste. Additionally, the government has knowingly overridden the property rights of host landholders who got tricked into these schemes, on the basis of confidentiality, and who will be left with severely environmentally degraded, devalued land, that won't even get close to making up the gap between the after-

tax royalties they were paid. It has fractured once solid relationships with their neighbours and the rest of the community. It is an absolute scandal.

Everybody knows that renewables aren't reliable. They are intermittent, they can't supply baseload and require battery backup. The technology to provide 24/7 baseload from batteries doesn't exist.

Transmission lines of 10,000 kms or is it 20,000 kms or 30,000 kms, no one seems to know exactly, will come at huge financial, environmental and social cost. There is no coherent plan, any idea about when it will be completed, or how much it will cost. Some sources estimate the total cost of renewables will blow out to $1.5 trillion by 2030 and $7 trillion by 2050.

Snowy 2 is a classic example. It was originally estimated to cost $2bn with a completion date of 2024. The estimated cost is now $12bn, which doesn't include transmission costs of $6bn, up from $2bn, and a completion date, previously 2024, is now 2029. The transmission line, Humelink1, is called Humelink 1 for a reason. It is only the first of two, possibly three massive overhead powerlines to connect The Snowy with Sydney. Rural communities have made the case for undergrounding them, which is world best practice, thus avoiding environmental damage as well as bushfire risk. The government turned it down on the advice of the operator, Transgrid.

Politically, there are three different scenarios.

1) Renewables, which are backed by progressive governments, particularly The Australian Government, The IPCC, climate lobbyists and rent seekers who can smell the money. By far and away 'THE' most expensive, and environmentally economic destructive of them all.

2) Nuclear with some renewables and gas. The Opposition's policy. It is cheaper and cleaner than renewables, but the opposition is yet to spell out the details. It would be feasible if nuclear was used on its own and renewables and gas were used in conjunction, gas being the baseload component. Nuclear IS baseload power. It doesn't need additional power. Renewables would render it less viable.

3) Coal. This is where the split lies in the Coalition. A dissident group of NP MP's who support keeping coal. They don't support the theory of anthropogenic climate change and can't see any valid reason to ditch coal, or any fossil fuels, for that matter, in favour of renewables. They are right, but telling the truth is a huge political risk. No one in their wildest dreams could imagine going back to coal. That is why very few politicians here are keen to back it. However, there is a move back to coal in Germany. The U.S, China and India consume half the world's coal at an increasing rate.

The Government's plan is for a 98% renewables grid, with batteries and some gas. The opposition's plan is for a combination of 29% nuclear, 40% renewables and gas. But, until they spell the details out, it could suffer from the same fundamental flaw that a coal renewables combination suffers from. Economics. Coal and nuclear powers' business models depend upon operating for 90% of the time. Costs for coal, without carbon sequestration, are $63MWh, half the price of nuclear power. Renewable energy (Frontier Economics) is more expensive still.

If the battle to ditch fossil fuels is won, nuclear power should be on the table. Even though it is more expensive than coal, it makes sense. It 'IS' clean and already supplies 10% of the world's energy needs. James Hansen, Goddard Institute of space sciences, stated in his book, 'Storms of our Grandchildren', that nuclear power is the only option to replace fossil fuels. Not one of the only, but the only option. Countries with the cheapest power all have nuclear power. Australia is the only country in The G20 not to have a nuclear power component in the mix. It's simply amazing how any government can write nuclear power off, ignore what the rest of the world is doing and think we know best, when the complete opposite is obviously the case. It is abundantly clear that the transition is being driven by ideology and political opportunism rather than by engineering know how or critical analysis.

Australia has some 30% of the world's uranium resources, which we hypocritically mine, process and export to other countries, yet refuse to use it ourselves. It's a bit like our attitude to coal. We have some of the world's most stable geology for storage which we could turn into a thriving industry. The fear campaign about storage is absolute rubbish. The antinuclear lobby, which includes Australia's current Prime Minister, an anti-nuclear activist in his student days, is violently and ideologically opposed to all aspects of nuclear power.

It is laughable to see a government condemning nuclear power on the basis of cost and construction times, when they don't even know how much renewables will cost or when the roll out will be completed. The claim that time is against nuclear power is reckless, but time is a massive problem for renewables. Before the last ones are completed, the first ones will have come to the end of their life. The roll out may never be completed, or if it is, it will start all over again in a never-ending cycle of economic, environmental catastrophic disaster.

Opposition to nuclear power is driven by fear, cost and time. Hiroshima, Nagasaki, Chernobyl, Fukushima and Three Mile Island, form the basis of the fear driven negative arguments. Hiroshima and Nagasaki were dreadful acts of war and together with Fukushima, one of the world's most serious nuclear accidents, they all occurred in

Japan. But amazingly, Japan, of all the countries on earth, you would think would be the last to even consider nuclear power, has become one of the world's biggest nuclear powers because they recognise it as the cheapest, cleanest and most sustainable form of energy. On top of that, Japan has just announced the reopening of Fukushima. What courageous decisions. Decisions based purely and simply on fact. What a miserable bunch of gutless, ideological, political 'do nothings' have our representatives become. We could take a lesson out of their book, but what can you expect when we can't even tell the difference between a male and a female.

There is a nuclear reactor, slap bang in the middle of Sydney, at Lucas heights, 1000metres away from houses, which has been there for over 50years. We have just ordered 6 nuclear powered submarines, whose crew will be living adjacent to a reactor powerful enough to power a city the size of Newcastle.

If nuclear power is so bad, why doesn't the federal government, in conjunction with the states, repeal legislation banning it and let the market decide.

The politicisation of the climate and energy debate is by far the most disappointing feature, which threatens our very future. It is being driven by unquestioning ideology, ignorance, rent seekers and political survival on both sides, rather than critical thinking, engineering know-how and economic analysis. In other words – the truth.

Tony Morrison