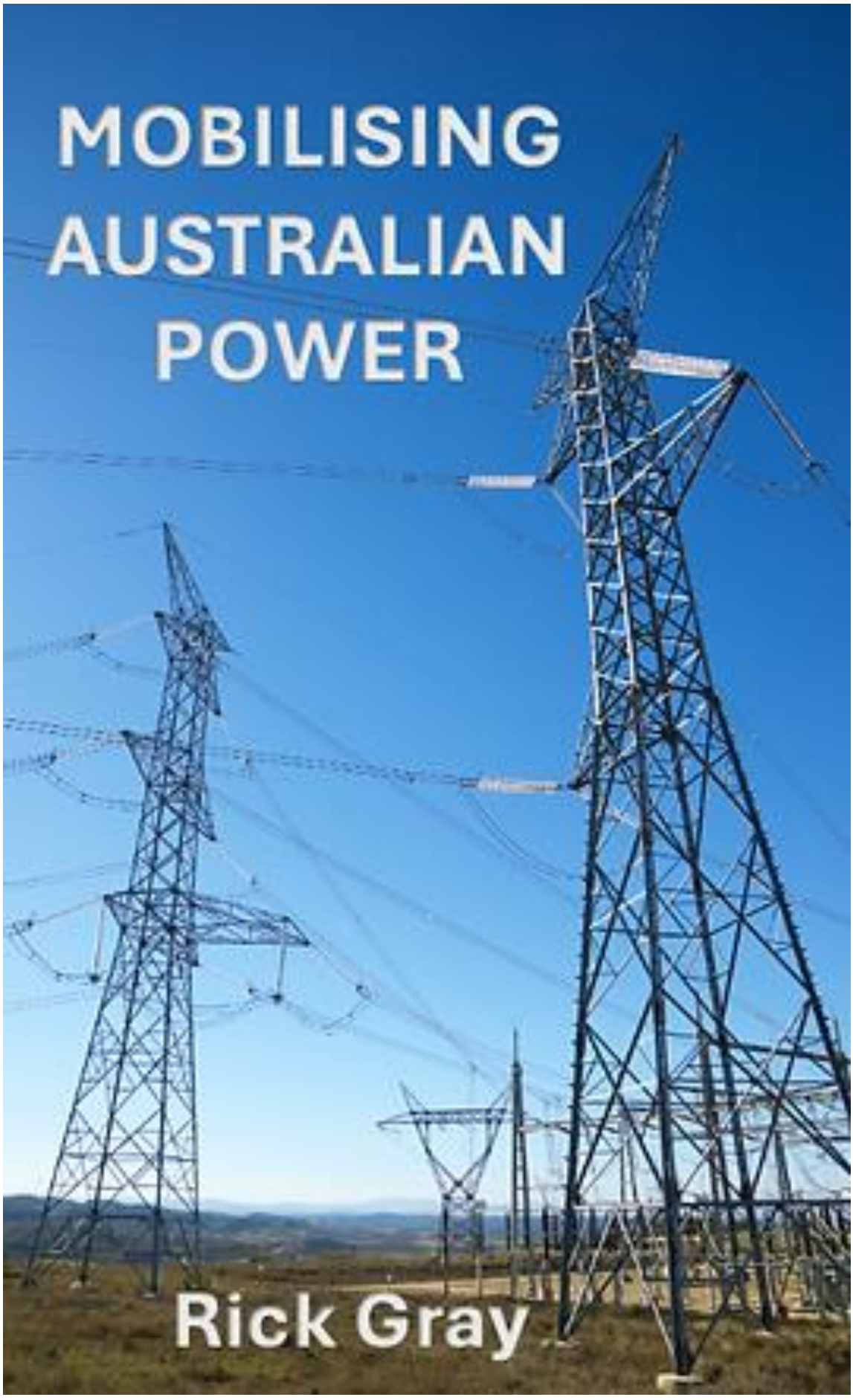

MOBILISING
AUSTRALIAN
POWER
Rick Gray

Contents

Mobilising the Australian Power Industry

It's the Economy Stupid

Bill Clinton's iconic mantra during the 1992 US presidential campaign was," ***It's the economy, stupid*****"** The slogan helped him become the US President. It was true of the USA in 1992 and is even more relevant to Australia in 2025.

The major challenge facing Australia today and into the future is the fragile state of its economy. Today, Australia has effectively deindustrialised, with manufacturing now contributing just 5.1% to GDP (World Bank, 2024), down from 25-30% after World War II (WW2). The economy now lacks diversity, complexity, and resilience, and is dangerously exposed to supply chain and strategic shocks, as the COVID pandemic and the current oil crisis caused by the war in the Middle East clearly demonstrate. Australia is also increasingly dependent on a narrow export base of raw materials, particularly to the People's Republic of China (China). What could possibly go wrong?

The focus of this paper, therefore, is on restructuring the Australian economy, with particular emphasis on the industrial base.

One of the fundamental building blocks of any economy is the supply of affordable, reliable power. This paper will review the Australian power industry and, based on the facts, propose a way ahead to re-establish power security, reliability, and affordability for the future.

It is also apolitical and does not seek to promote any specific political ideology; instead, it maintains a long-term perspective focused on the country's best interests. In fact, the measures outlined will be seen as radical and opposed by most Australian political parties, given the current political landscape.

Whether we like it or not, we now live in turbulent times, and the current economic decline and strategic threats are making what may seem inconceivable today a necessity for tomorrow.

This paper, therefore, offers a template or contingency plan for the future. In doing so, it unapologetically challenges Australian political sacred cows and vested interests.

It is also intended to serve as a model applicable to other sectors of the Australian industrial base.

Energy and Power

Any discussion of the Australian power system must first tackle the contentious issue of climate change.

Central to this discussion is an understanding of what Energy and Power are, terms that link theoretical ideas with economic impacts.

- ***Energy is defined as the capacity to do work.***
    - **Wind** is kinetic energy in the form of the motion of air, which you can feel when the wind blows – and it is free!

- **Solar radiation** is electromagnetic energy from the sun that you can feel when the sun shines – and it is free!

- ***Power is the rate at which work is done or energy transferred over time.***
  - Power is energy delivered in a form that has a practical application.
    - **Wind energy** driving turbines that generate electricity - that is then transmitted over power lines to commercial and industrial users.
    - **Solar energy** converted by solar panels into electricity - that is then transmitted over power lines to commercial and industrial users.

The key point is that Power is not free - it has a dollar value in terms of the resources (material, manpower, land, capital) required to convert energy into power and transfer it to users.

> ***Energy is FREE. Power is EXPENSIVE.***

This difference between ***FREE*** energy from the wind and sun and the ***EXPENSIVE*** conversion of that energy into a useful product for consumers in the form of electricity or heat is the new reality that now confronts all Australians. The mantra of ***FREE*** energy is now inflicting serious economic harm on all Australians through their electricity and gas bills, the cost of living and deindustrialisation.

> ***The renewable energy deception is now central to Australia's economic and strategic future.***

Fossil Fuels

Modern humans have existed for about 300,000 years, and throughout 99.99% of that time, they relied on wood fires for survival. Life was short and brutal. It is only in recent history, arguably starting with the Industrial Revolution around 1750, that fossil fuels such as coal, gas, and oil have allowed this longstanding pattern to evolve into the lifestyle we now take for granted.

Most people flick a switch and expect the light to turn on or the heater or air conditioner to operate. They also expect many industries to provide employment, produce the appliances essential to our comfort and lifestyle, and provide medicines and medical technology to support our health.

Fossil fuels are the backbone of modern society. The prosperity of the world and Australia relies on affordable, reliable electricity and heating supplied by extensive coal, gas, and oil reserves. Recently, nuclear energy can now deliver nearly limitless, pollution-free power.

Just 35 years ago, Australia had some of the cheapest electricity and gas in the world, providing a significant competitive advantage to industry and ensuring a comfortable

> ***Australia's current standard of living is directly related to the burning of fossil fuels.***

standard of living for the nation. Today, however, crippling high electricity and gas prices are major factors in the deindustrialisation of the country, the cost-of-living crisis, and are threatening the Australian way of life.

The IPCC

What caused the shift from a utopian state of affairs to an impending dystopian disaster? There are many layers to the answer. The trigger event, however, was the release of the ***First Assessment Report (FAR***) (FAR, 1990) of the ***Intergovernmental Panel on Climate Change*** in 1990 (IPCC, 1990). Based on the FAR, successive Australian governments decided to move away from fossil-fuel electricity generation and gas heating, aiming to replace them with "renewable" power sources, mainly wind and solar.

Affluence and Security

Why did Australian governments allow themselves to be seduced by what can best be described as a modern-day variation of the ***Flat Earth Theory***? There are many layers to the answer; however, the short answer is affluence and 80 years of relative security since WW2.

Australia's current prosperity has largely stemmed from the good fortune of sitting on vast reserves of coal, iron ore, gas, and numerous other minerals, whose export has made Australia one of the world's wealthiest nations. However, this affluence is fragile because it relies heavily on exporting mineral resources, mainly to China, rather than on a diverse, complex, resilient, and sustainable economy. It's also worth noting that Australia isn't alone in this mistake, as much of the Western world has been similarly tempted.

Affluence has also proved to be a double-edged sword. The "medical diseases" associated with affluence are well documented. Equally disruptive, however, are the societal aberrations made possible by both national affluence and the long-term absence of existential threats, such as war or natural or economic disasters.

Australia has been seduced by the apparent Goldilocks state of the economy and a relatively benign geopolitical outlook in our region, and in denial that it could ever end. It has abandoned the conservative values and policies of the past that built the foundations of our current standard of living and, in turn, would have laid the foundation for future prosperity for our children and grandchildren.

Australian politics is also in chaos. Labor governments are now led by a new wave of hard-left socialists with little effective conservative opposition. This ideological dominance has triggered a rejection of traditional economic realities and led to the adoption of numerous left-wing policies that rely on public funding. The most damaging of these has been the hypothesis of ***catastrophic human-caused climate change***.

Given the now fragile state of our power industry, it would be reasonable to expect that Australian Governments would be keen to future-proof Australia against the inevitable economic disaster that would follow if power security, reliability, and affordability were compromised.

Perversely, despite the dismal evidence of economic decline experienced by all other nations that have embarked on the renewable energy crusade (Germany, Spain and the UK) and the utter rejection by the nations that truly drive carbon emissions (USA, China, India and Russia), Australian governments remain fixated on the blind pursuit of renewable energy. It is only now, as power prices and the cost of living rise and productivity and wages decline, that the general Australian public is becoming aware of the economic effects of dysfunctional renewable energy policies.

Australia is at a historical juncture regarding its sovereign power industry. We are confronted with the stark and unequivocal fact that we are now on a trajectory that has been rejected by all of the major emitters, and to which most other countries now only pay lip service. If not quickly corrected, we are on the way to Paul Keating's Banana Republic.

The time has now come when the nation must answer a simple question. Does Australia want or need a secure, reliable, sustainable, resilient, and affordable power industry?

- If the answer is NO, then we are almost there, and no further action needs to be taken.
- If the answer is YES, then now is the time for decisive action.

This paper proposes a way ahead to support the YES decision.

The Australian green energy experiment has successfully transitioned the nation from low-cost fossil-fuel power - to high-cost renewable power. Few countries have done it better!

Structure

Australia, as a middle power and economy, is driven by World events. Probably the most significant economic development over the last 35 years has been the transition from fossil fuels to renewable energy. Therefore, examining the power industry, one of the fundamental building blocks of the Australian economy, cannot be done in isolation and must be done within the context of the strategic influences that shape the nation.

Part 1 - of this paper, therefore, looks at the bigger picture driving Australian politics and the economy, including:

- The **Military** Outlook.
- The **Economic** Outlook.
- The **Political** Outlook.
- The Concept of **Mobilisation.**

Part 2 - examines the key questions that need to be addressed and resolved to find the best way forward for the Australian power system. These are:

- **Climate Change.** To what extent should "Climate Change" influence the structure of the electricity grid?
- **World Response.** What is the rest of the world doing about climate change and energy?

- **Australian Response**. What is Australia doing and why?
- **The best option for the way ahead**.

Part 3 - builds the framework for the future. This includes:

- **Mobilising** the power industry, based on the best option.
- **Summary and Conclusions.**

Aims

The aims of this paper are listed below.

- **Review** the current state of the Australian power industry.
- **Highlight** how rejecting fossil fuels and embracing renewable energy have influenced Australia's economy**.**
- **Recognise** that the power industry and its related economic hub are essential to the growth of Australia's industrial base and economic complexity.
- **Raise** the power industry mobilisation flag.
- **Outline** a practical and viable way ahead to revive the Australian power industry that serves the best interests of the nation.

Part 1 - The Big Picture

The Military Outlook

The strategic outlook for Australia today is more uncertain than it has been since the end of WW2, eighty years ago. The rise of a confrontational China, both militarily and economically, has alienated its neighbours and most Western nations. China often proclaims its plan to reunify the Republic of China (Taiwan) with China by military force if needed.

Essentially, China sees itself on a historic mission to avenge past injustices, reassert its dominance over Asia, and establish itself as a World superpower. If Xi Jinping's rhetoric is to be believed, the time frame for achieving these goals is during his presidency, with a horizon of perhaps 10 years. If China were to attack Taiwan, then the US and its allies, including Australia, would be drawn into the conflict.

The dilemma for Australia is that in 2025, China is Australia's largest customer for exports, its largest source of imports and its largest strategic threat. This stark reality has all the ingredients of a perfect storm. What could possibly go wrong?

In addition, the present ***Russia-Ukraine*** "Special Operation", now in its fourth year, is one of the most violent conventional wars since WW2 and is a stark reminder of how peace can abruptly change to war at short notice.

The recent ***Palestinian-Iran-Israel-US*** conflict also clearly demonstrates how quickly war can erupt and the serious consequences that follow. This conflict is escalating and now threatens the flow of oil to Australia, already impacting the economy.

In February/March 2025, a Chinese naval flotilla circumnavigated Australia and conducted live firing exercises in the Tasman Sea. China's strategic intent was to telegraph to Australia in no uncertain terms, Chinese naval capabilities. They achieved their aim.

However, they have done Australia an unintended favour. This gunboat diplomacy has dramatically demonstrated Australia's vulnerability to Chinese naval incursions should they choose to act, and Australia's impotence to resist them. Perhaps this will be the trigger event required to shock Australia out of its military complacency.

The only positive is the election of US President Trump. He is, without doubt, the biggest catalyst for change in the Western World since WW2. His muscular leadership style, determination to restore the US military, and his commitment to ending the wars in Ukraine and Israel could be key in discouraging China from its expansionist plans. He has already pressured NATO into nearly doubling its defence budgets, and Australia, often seen as geopolitically naive, will likely follow suit in time. Only time will tell.

The Economic Outlook

Australia has traditionally lived off the sheep's back. It has additionally been blessed with enormous reserves of iron ore, coal, bauxite, natural gas, uranium, rare earths and other minerals. Since the 1950s, mining and primary products have increasingly provided a bonanza of export income, making Australia a wealthy country.

While this has been good fortune, it has also been a poisoned chalice, as it has made the nation complacent and in denial that it could ever end. The mineral bonanza has also masked the deterioration of the nation's industrial base to the point where today Australia must import almost all industrial and consumer products.

Beyond mining and agriculture, Australia has become a nation dominated by importers and service industries, with little remaining manufacturing capacity. This shift has led to the loss of thousands of jobs and associated economic benefits. Other global influences include the Just-in-Time trend with minimal inventory and the rise of e-commerce purchasing. As a result, there are often very limited local stock holdings, long lead times for imported products, and expensive spare parts.

Manufacturing peaked as a share of the Australian economy in the early 1960s, when the sector accounted for about 30% of the economy and employment. In 2026, the figure is about 5%.

Deindustrialising Australia

Since the end of WW2, all sectors of the Australian manufacturing industry have steadily declined almost to the point of non-existence. The Australian aircraft, vehicle, electronics, telecommunications, electricity, steel, power, defence and most other manufacturing industries have now become historical anecdotes of what might have been. Australia has now effectively de-industrialised.

This lack of economic diversity is now significantly affecting our economic complexity, resilience, job markets, training opportunities, and has important defence implications during conflicts. The decline of the Australian power industry cannot be viewed in isolation, nor can the revival of the power sector and the national industrial base; these must be considered within Australia's strategic outlook, the broader economy, and our vulnerability to import and export disruptions. Industry must, therefore, serve as the foundation for a long-term vision of national self-reliance, sustainability, and survival in an uncertain world.

This paper, therefore, not only suggests a way forward for the rejuvenation of the Australian power industry but also offers a model that could be adopted by other sectors of the Australian industrial sector.

The lights are nearly out for the Australian power industry. The one positive, however, is that the nation can now start with a blank sheet of paper, upon which to chart the way ahead.

Economic Complexity

Economic Complexity is a measure of the number of capabilities and know-how that go into the production of any given product. The more complex the product (aircraft vs shoes), the more complex is the infrastructure, supply chain, skill base and workforce.

The Harvard Growth Laboratory's (Harvard Lab, 2024) ***Atlas of Economic Complexity*** data tool generates an ***Economic Complexity Index*** that **r**anks 145 countries by economic complexity. According to the latest profile, Australia is on a downward slide, with its ranking falling from 63 in 2000 to 74 in 2026, behind economic powerhouses such as Moldova, Kyrgyzstan, and Uruguay!

The Index highlights that Australia is a high-income country, ranking 9th wealthiest per capita among 145 surveyed economies, with a per capita GDP of around A$65K. While exports have increased in value by nearly 10% annually over the past five years, the main exports are low and moderate-complexity products. Australia is considerably less complex than expected, given its income level.

As a result, Australia's economy is expected to grow at a slow pace. The Growth Lab's 2034 Growth Projections predict an annual growth rate of 1.24% for Australia over the next decade, placing it in the lower half of countries worldwide. This lags behind our usual peer nations – Japan, Germany, the UK, and the US. These data will change over time; however, a troubling picture of both a lack of diversity and economic vulnerability is already clear.

Productivity Sea Anchors

Much has been written about Australia's declining productivity, especially lately, as the cost of living begins to bite, affecting not only the average worker but all sectors of the economy. This will be addressed in another article; however, here is a brief overview of key issues.

- **Electricity:** Australian electricity has shifted from being some of the cheapest in the world to some of the dearest, driven by the climate change scare campaign and ideology. The solution is a return to coal, supported by gas, and an eventual transition to nuclear.

- **Gas:** Australia sits on a vast supply of gas; however, we have managed to make gas prohibitively expensive and scarce, especially in Victoria, once again driven by climate change and ideology rather than economics. The solution is to ensure that Australian industry and the public have access to affordable gas through a national pipeline network.

- **Water:** Water is costly, as we have chosen desalination over dams whenever possible.

- **Over Government:** Australia is burdened with three levels of government- Federal, State and Territory and Local. There are 227 Federal politicians, 666 State and Territory politicians, and approximately 5670 Local Government

politicians (Parliament, 2025). Australia can no longer afford the cost, waste, duplication, and political machinations of three levels of government.

With modern communication systems, a single level of government combining Federal, State, and Local functions can manage the job today. Republicans often talk about changing the Constitution, which will eventually occur. However, the real issue - the need to eliminate at least one level of government, and preferably two - is deliberately avoided.

- **Bureaucracy:** One of the few growth industries in Australia over the past 50 years has been bureaucracy, with its associated red, green, and black tape, which have collectively acted as a sea anchor on development. The handmaiden of over-governance is bureaucracy. The enlightened purpose of bureaucracy is to enable the most efficient use of people and resources through a structured administrative framework. Although a degree of bureaucracy is essential for society to function, bureaucracy has become an end in itself, with a tendency for perpetual growth and excessive regulation.

- Across Federal, State, and Local Government, Australia now has an army of bureaucrats - including the ADF - totalling about 2.5 million, nearly 1 in 6 of the total workforce (ABS, 2024). The solution is to reduce the size of the Public Service through natural attrition. It must also reverse the surge in red, black, and green tape by implementing a two-for-one rule that removes two regulations for every new administrative regulation introduced.

- **Industrial Relations:** One factor contributing to the high cost of Australian labour is the influence and militancy of unions. Their demands have effectively driven many Australian industries out of existence, with the shipping and oil industries serving as clear examples. Union power needs to be restricted, and they must become part of the solution rather than the problem. This, of course, presents a dilemma for the unions and the Labor Party; however, the issue must be addressed and accepted if there is any hope of reviving the Australian oil industry and, by extension, the Australian industrial base.

The lawn bowls fraternity sums up the game as ***"Line, Length and Luck,"*** suggesting that to win, you need to master the basics and then rely on a bit of luck. In reality, this analogy closely reflects a nation's fortunes. The book ***"The Lucky Country"*** by Donald Horne (Horne, 2008) has become a nickname for Australia and is generally used positively. However, Horne intended to show that Australia's rise to power and wealth was mainly due to luck rather than the strength of its political or economic systems, which Horne believed were "second-rate."

What went wrong, you may well ask, and what is the answer? As one federal politician once quipped, "We all know what is required to fix the economy, however, if we did that, we would never get elected!"

Therein lies the dilemma and the moral challenge for Australian politicians.

Australia has two options:

Option 1: Dramatic productivity improvement.

Option 2: The default option – that is to wait until the economic wheels fall off - and hope that it doesn't occur on our watch! Unfortunately, this could also be described as the national suicide option, and Australia appears to be sleepwalking in this direction.

Improved productivity is fundamental to the resurgence of the Australian economy. We are now faced with a simple choice:

- ***Wait for the economic wheels to fall off in which case Australia will become the Banana Republic that Paul Keating warned of many years ago. We are currently on this trajectory.***
- ***Walk away from economic suicide and institute the necessary but painful changes that can Make Australia Great Again.***

The Political Outlook

The Australian political landscape is now dominated by hard-left socialist Labour and Green ideologies and their activist agendas. This has occurred for several reasons.

- The Nation has not experienced an existential event since WW2, and the current generation has no comprehension that the fragile military and economic status quo can change literally overnight.
- There is no coherent conservative opposition. The LNP coalition is equally divided between left and right sentiments and has lost its conservative values. Consequently, they are regarded as a vanilla reflection of the Labor Party and are currently unelectable.
- The majority of Labor and Green politicians have little practical commercial and industrial experience. They, almost without exception, emerge from a leftist university system, then a work life in a trade union or Government. They consequently have no appreciation of business realities and view the economy as a magic pudding.
- There remains an archaic class war view in federal, state, and local governments that private enterprise, as the wealth-generating part of the economy, is controlled by gouging capitalists intent on exploiting the working class. This has fostered the belief that private enterprise, industry, and commerce have endless capacity to absorb ever-increasing taxes, charges, and bureaucratic imposts without suffering harm.

The overall impact of politically opportunistic agendas, such as the recent Voice Referendum, and a lack of understanding of real-world economics, exemplified by the renewable energy agenda, is rising national and state debt, steep increases in the cost of living, declining productivity, and higher taxes in various forms.

It seems that the only definite outcome from the recent Labor "productivity conference" will be a road user charge for electric vehicles, which will inevitably be passed onto all other vehicles and become another pseudo tax. The new synonym for "productivity" is "tax".

Mobilisation

Mobilisation is a whole-of-nation effort, usually linked to a major existential threat such as war, a pandemic, a natural disaster, or an economic crisis. It concentrates on what is needed to confront the challenge and keep the nation going for as long as necessary.

It reallocates national resources with this purpose in mind, away from social and welfare agendas. By definition, it will be accompanied by unaccustomed austerity and economic belt-tightening. Therefore, it can only be implemented with the willing acceptance and support of the people; thus, the psychological conditioning of citizens to accept the necessary economic changes is a critical element.

This, in turn, can only be achieved through visionary political leadership and strong bipartisan agreement, without which nothing can be accomplished. The concept of mobilisation is foreign to Australia today, as the nation has not faced an existential threat since WW2. However, such threats, both military and economic, and the storm clouds are now clearly visible on the horizon.

If ever there was a compelling case for mobilising national resources to address a problem of critical importance, then the resurrection of the Australian power industry is it.

Part 2 - Climate Change

No review of the Australian power system can be done without considering the impact of the hypothesis of climate change.

Weather events and climate change have always been a bogeyman lurking in the shadows of mankind's fears, and rightfully so. Floods, droughts, fires, hurricanes, volcanic eruptions, ice ages, meteor strikes and extreme weather all add to the pantheon of possible catastrophic events. Man has, however, learned to live with these naturally occurring events and has adapted as necessary to survive.

It was only a few decades ago that a new ice age was the popular disaster hypothesis. Today, a potential ice age has morphed into catastrophic anthropogenic climate change due to global warming.

So where did this new hypothesis originate? Arguably, it began forming in the mid-1800s and gradually gained support. By 1988, a "consensus" that human-caused emissions, particularly Carbon Dioxide (CO2), were warming the planet to potentially dangerous levels, prompted the United Nations (UN) to establish the Intergovernmental Panel on Climate Change (IPCC).

The Intergovernmental Panel on Climate Change

The IPCC is the ***authoritative scientific body*** on climate change (IPCC, 2026). It operates independently and was established under the auspices of the ***World Meteorological Organisation*** and the ***United Nations Environment Programme***. The IPCC is best known for its assessment reports, which include a synthesis report with summaries for policymakers and contributions from three Working Groups, and are regarded as the most reliable sources of scientific information on climate change.

The stated role of the IPCC is to assess, in a comprehensive, objective, open, and transparent manner, the scientific, technical, and socio-economic information relevant to understanding the risk of ***human-induced climate change***, its potential impacts, and options for adaptation and mitigation. IPCC reports are intended to be neutral regarding policy and are meant to objectively address scientific, technical, and socio-economic factors relevant to the implementation of specific policies.

Note that the IPCC focus is on ***human-induced climate change***. This does not specifically exclude natural causes; however, the inference is that natural causes are of lesser importance and immediacy.

The UN Framework Convention on Climate Change

The UNFCCC, established in 1992 at the Rio Earth Summit, is the political framework that promotes international cooperation to address climate change and its impacts (UNFCCC, 2025).

The specific goal of the UNFCCC is to stabilise greenhouse gas concentrations "at a level that would prevent dangerous anthropogenic (human-induced) interference with the climate system."

It states that "such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed sustainably." Its intent is to bind member states to act in the interests of human safety ***even in the face of scientific uncertainty.***

Investigating Climate Change

Appreciating the Situation

The military of all Western nations has a process known as ***"Appreciating the Situation****," or "Appreciation"* for short (Military, 2026). This process provides military commanders with a structured way to make the correct decision amid the ***"fog of war".***

It is applicable, however, to nearly any situation, military or civil, that requires a decision and involves considering many aspects, analysing a multitude of data or facts, and evaluating various options for the best solution. Clearly, a wartime scenario tends to focus the mind remarkably, creating a critical need for a logical process through which military commanders can make the correct tactical or strategic decision under extreme time and situational pressure.

The process is relatively simple, structured and logical. It starts with an outline of the situation, establishes an aim, identifies the key facts that influence the aim, makes deductions based on the facts, lists all possible options and then selects the best option that achieves the aim.

It is a decision-making approach that has stood the test of time, simply because it works.

Situating the Appreciation

There is a common trap, however, which is the human element of the process. All humans have inherent biases and prejudices that, unless recognised and actively challenged, will subconsciously influence their actions. Other human weaknesses also bias the process. These include the desire to seek approval from others, prior conditioning to conform to politically correct conclusions, or simply deliberately tailoring outcomes to justify a particular course of action based on a "***gut feel***" or intuition.

This bias reduces impartiality, amplifies arguments that support your "gut feel," and dismisses logical objections and inconvenient truths. The outcome is often the wrong decision.

This completely human tendency when conducting an Appreciation is called ***Situating the Appreciation.***

The UN is Guilty of - Situating the Appreciation

The UN directions to the UNFCCC and the IPCC on climate change are a classic case of ***situating the appreciation***. Instead of conducting a balanced and logical investigation into all causes of climate change, including natural forces and human influences, the UN ignored natural factors and relied on its "gut feel" when shaping the IPCC Charter.

The UN is the ultimate international body with the charter to make decisions in the best collective interests of humanity. Climate change is also considered a potentially existential threat to mankind. Given this profound responsibility and the serious consequences of making wrong decisions about climate change, for the UN to deliberately avoid an unbiased investigation and to attempt to manipulate the outcome of climate change studies towards the catastrophic anthropogenic climate change conclusion can only be seen as a gross dereliction of duty.

This deliberate focus on human-caused climate change and greenhouse gases, especially CO2, has hindered a more balanced investigation that would recognise many natural factors influencing global climate change. It has also infused the review process with evangelical zeal and fostered an ideology that is now more like a religious cult than a serious scientific pursuit.

The baseline for any UN-sanctioned discussion about climate change is therefore based on an unproven assumption that greenhouse gases, principally CO2 produced by human activities, will cause dangerous interference with the Earth's climate.

Another, more unfortunate but predictable consequence, has been the creation of a climate change industry that thrives on the vast funding provided by governments of all persuasions. There is now a virtuous or vicious cycle involving the UN, national and state governments, politicians, bureaucrats, scientific and academic institutions, industry, journalists, and other vested interests, all seeking to make a comfortable living from the flow of funds linked to climate change policies. Challenging this feeding frenzy is therefore inherently risky and draws a fierce reaction. Don't get between a dog and its bone!

Notably, the IPCC has never definitively stated that humans are causing catastrophic climate change and now carefully qualifies its predictions to maintain plausible deniability if needed. Likewise, the IPCC has also been cautious about drawing a conclusive link between the frequency of extreme weather events and rising CO2 levels and temperatures.

The mantra of "the science is settled" is intended to stifle contrary views and to perpetuate a global gravy train. Science is always evolving, and the term "the science is settled"- must be considered the ultimate scientific oxymoron.

The IPCC and UNFCCC climate change campaign also conveniently makes catastrophic predictions for the distant future, the veracity of which cannot possibly be checked until after the passage of a long period of time.

It is now possible, however, to compare the predictions made 35 years ago in the IPCC FAR against actual observations from 1990 to 2025. This comparison will then validate or challenge the accuracy of the original predictions made by the IPCC.

If the IPCC predictions have been accurate, then they will have validated their claims. If their predictions have been inaccurate, then the significant mitigation actions taken so far have not been justified. Furthermore, IPCC claims should not then be relied upon as the scientific basis for planning the future Australian power system.

The three physical climate changes that have been the subject of so much noise over the last 35 years are the projected global increases in CO2 levels, sea levels and temperatures. These are discussed separately with a focus on the actual changes that have occurred since 1990.

Global CO2 Levels

Carbon Dioxide is a greenhouse gas (GHG), along with Methane, Nitrous Oxide, Fluorinated gases, Ozone and water vapour. CO_2 is, however, the most emitted GHG by humans, especially from burning fossil fuels, cement production, and deforestation. This makes CO2 a significant driver of long-term warming, even if others are more intense in the short term. CO2 can linger in the atmosphere for many years.

CO2 was, at least initially, the primary focus of the IPCC. After the release of the FAR in 1990, the level of media attention and its predicted long-term catastrophic effects caused much public concern, verging on hysteria. This was a precursor to the "COVID" panic.

Since 1990, however, counterarguments against the harmful effects of CO2 have matured, and as a result, there is now little discussion about CO2 levels in the atmosphere. Climate change debates now avoid mentioning CO2 levels, which are somewhat obscure, and instead focus on more emotive weather events such as floods, droughts, and hurricanes, along with images of polar bears or coral reefs. This emotional approach creates excellent journalistic headlines that are free from detailed facts. It aims to influence public opinion in the short term and to maintain the momentum of catastrophic climate change narratives. After fuelling the hysteria, the story is quickly overshadowed and forgotten in the relentless 24-hour news cycle.

The IPCC FAR 1990 CO2 Predictions. (Table 1)

The IPCC predicted an effective doubling of CO2 in the atmosphere between 1990 and 2025 to 2050.

Comparing the IPCC prediction against actual observations shows:

- The 1990 level was 353ppm. If doubled, then 706ppm in 2050. This is about 6ppm/yr.
- At 6ppm/yr then for 2025 should be 563ppm – a change of 210ppm.
- The 2025 level is 422ppm – a change of 68ppm. This is about 2ppm/yr.

- **The IPCC prediction for CO2 levels in 2025 was overestimated by about 300% (see Table 1)**

CO2 data

- At the start of the Industrial Revolution, about 1850, the CO2 level in the atmosphere was about 250 ppm. In 2025, the level is about 422 ppm. A large percentage of this increase can be attributed to the burning of fossil fuels.
- Over geologically time frames, current CO2 levels are near record lows and not far above the level when plants die of CO2 starvation.
- CO2 is plant food, a fact utilised by the horticultural industry where the CO2 level in greenhouses is increased to promote plant growth. According to NASA, satellite observations indicate that the increase in CO2 levels has had the beneficial effect of greening the planet.

- Estimates of the manmade CO2 level in the atmosphere range from 3**%** to 40% of total annual emissions. Whatever the level, to suggest that the manmade contribution is of more importance than that from natural sources is illogical.
- Analysis of the current CO2 level is revealing:
  - Current global level: 422 ppm 0.04% of the atmosphere
  - Ratio of man-made vs natural levels of CO2: 3% man-made - 97% natural
  - Man-made CO2: 12 ppm 0.0012% of atm.
  - Australian emissions are about 1% of global emissions:
  - Australian emissions: 0.12 ppm 0.000012% of atm.
- Irrespective of the ratio of man-made vs natural levels of CO2, the conclusion is that Australian emissions are vanishingly small, almost unmeasurable and effectively irrelevant to the global picture. What Australia does to mitigate emissions will have a "Net Zero" practical effect in reducing global emissions.
- It has been suggested that Australian mainland vegetation and continental shelf plant forms absorb about 10 times the amount of CO2 released, meaning that Australia is already at "Net Zero". Australia is a CO2 sink, not a CO2 source.
- Australia contributes about 1% of global emissions. China and India account for about 40% of global emissions.

Global Sea Levels

Catastrophic global sea level rise caused by global warming is another forecast from the IPCC. Sea levels have always varied over geological times, especially during ice ages. Local sea level changes also happen due to storms and daily tidal effects. Past global warming has also likely contributed to this phenomenon.

As temperatures rise, sea levels will also rise; however, this will happen gradually enough to allow mankind to adapt, as has happened in the past.

The IPCC FAR 1990 Sea Level Rise Predictions (Table 1)

The IPCC predicted that "Under the business-as-usual emissions scenario, an average rate of global mean sea level rise of about 6 cm per decade is expected over the next century (with an uncertainty range of 3 – 10 cm per decade), mainly due to thermal expansion of the oceans and the melting of some land ice. The predicted rise is about 20 cm by 2030, and 65 cm by 2100. There will be significant regional variations. Over the same period (100 years), global sea level has increased by 10 to 20 cm. These increases have not been smooth with time, nor uniform over the globe".

The IPCC predictions were:

- Estimated over the last 100 years (1890-1990), a rise of 100-200 mm / 100 yrs (1-2 mm/year).
- Predicted a sea-level rise of about 0.3-0.5 m (300-500mm) by 2050. (5-8mm/yr).
- Predicted a mean sea level rise of 6cm/dec, **(6mm/yr)**
- Predicted rise by 2030 of 20cm (200mm) / decade. (5 mm/yr)
- Predicted rise of 65cm by 2100 = 650mm / 110 yrs. (6mm/yr)

- An uncertainty range of 3-10cm/decade (30-100mm)/decade. (3-10 mm/yr).

Actual observations at 2025 put the sea level rise at about 1.5-1.8 mm/year. **(say 2mm/yr)**

- If the IPCC 6mm/yr figure is used, then their predictions are about 300% above observations.
- If the IPCC 3-10mm/yr range is used, their predictions are between 50% and 800% above observations.

Conservatively, the IPCC prediction for 2025 is a minimum of 50% above observations (see Table 1).

Sea Level Data

- Measuring sea level rise is complicated by the concurrent subsidence of land.
- 20,000 years ago, there was about 2 km of ice covering New York and average temperatures and sea levels were much lower. Sea levels have been rising on average ever since.

Global Temperature

Catastrophic global temperature rise due to global warming is another of the IPCC's predictions. Temperatures have always fluctuated dramatically on a geological time scale, due to orbital variations, the seasons, latitude and day and night.

In the past, mankind has demonstrated a great capacity to adapt to different temperatures, and today, technological advances in heating and cooling have greatly improved this capacity to tolerate extreme temperatures.

IPCC FAR 1990 Temperature Rise Predictions (Table 1)

Predicted that under a "business as usual" (BAU) scenario, global mean temperature would increase by about 0.3 °C per decade during the 21st century, with an uncertainty range of 0.2 to 0.5 °C per decade.

Global mean surface air temperature had increased by 0.3 to 0.6 °C/decade over the last 100 years, broadly consistent with the prediction of climate models, but also of the same magnitude as natural climate variability. This is greater than that seen over the past 10,000 years.

This will result in a likely increase in the global mean temperature of about 1°C above the present value by 2025 (about 2°C above that in the pre-industrial period), and 3°C above today's value before 2100 (about 4°C above pre-industrial). The rise will not be steady because of other factors.

The actual temperature increases from 1990 to 2025.

- Over the last 35 years, global temperature has increased by about 0.2 degrees centigrade.
- Global temperature in 1990 was about 13.9°C - in 2025 it was about 15.1°C - which is close to the 0.3°/decade increase predicted.

- Predicted an increase of global mean temperature in the range of 1.5°C to 4.5°C (by 2100?). The calculated increase is 2.25°C.

The IPCC prediction is reasonably consistent with observations in 2025 (see table).

IPCC FAR 1990 Predictions

- An effective doubling of CO2 in the atmosphere between now and 2025 to 2050.
- A consequent increase of global mean temperature in the range of 1.5°C to 4.5°C.
- An increase in global mean temperatures to be about 1°C above the present value by 2025 and 3°C by the end of the next century.
- A sea-level rise of about 0.3-0.5 m by 2050 and about 1 m by 2100,
- An estimated sea level rise of about 20 cm by 2030 and about 65 cm by the end of the next century.
- An average rate of global mean sea-level rise of about 6 cm per decade over the next century (with an uncertainty range of 3-10 cm per decade)

Accuracy of Predictions

The original IPCC First Assessment Report, released in 1990 and now 35 years old, made predictions about CO2 levels, global temperature rise, global sea level rise, and many other observations. The accuracy of these predictions can now be assessed against today's observations.

- **The predicted temperature rise - is reasonably consistent with observations in 2025, but at the lower end of the range of uncertainty hypothesised in the FAR.**

- **The predicted rise in CO2 - is about 300% above observations in 2025. The rise in CO2 is far below the range of uncertainty hypothesised in the FAR.**

- **The predicted rise in sea level - is at least 50% above observations in 2025. The rise in sea level is well below the range of uncertainty hypothesised in the FAR.**

This comparison clearly shows that the IPCC predictions for CO2 and sea levels have been significantly overestimated.

The reason is that computer models, with their inherent biases, have formed the basis of future climate projections. In addition, these predictions typically concern events - such as rising sea levels, temperature changes, and extreme weather - set far enough in the future (25, 50, or 100 years) to be impossible to either prove or disprove, yet dramatic enough to provoke public alarm.

The predictions made in the IPCC FAR 1990, for sea level and CO2, are inaccurate. Over time, the IPCC has recognised this over-estimation and has backpedalled in later

reports to more conservative positions. The fact remains, however, that they are in the business of selling catastrophic anthropogenic climate change, and it is not in their interests to headline conservative projections. In their reports, they always provide a range of scenarios, the more extreme of which appear in tabloid headlines. Invariably, real-world observations are at the bottom, or even below, their range of scenarios.

Based on this comparison between real-world observations and the IPCC FAR 1990 predictions, it is a reasonable proposition that the catastrophic anthropogenic climate change scenario should no longer influence decisions regarding Australia's future power system.

Most of the IPCC's past predictions have been overstated, and its future predictions should be treated with equal scepticism.

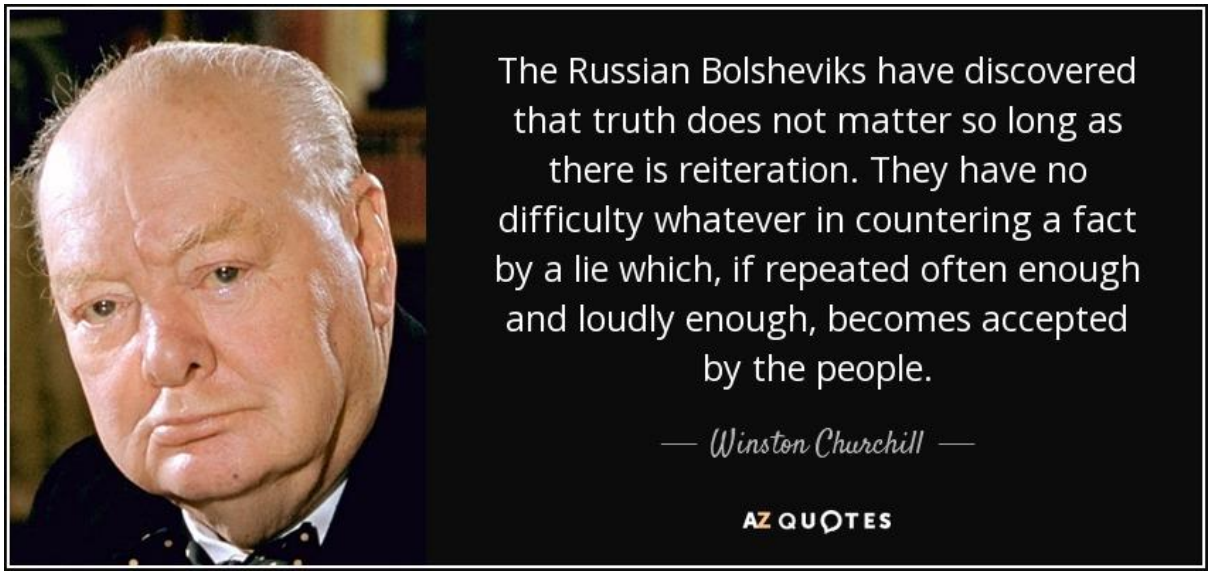
The catastrophic bogyman theory, if not discredited, remains unproven and should, at the very least, be met with scepticism. The time has also come to move away from the current fashionable mitigation approach based on the IPCC models and shift towards an adaptation strategy that the nation can afford.

The IPCC FAR 1990 projections overstate real-world observations. The catastrophic climate change scenarios should be treated with scepticism - and should no longer be considered as a scientific basis for the structure of the Australian power system.

Table 1 - Observations versus IPCC Predictions

Year	Rate of Increase	1750	1890	1990	2025	2050	2100
CO2 Level ppm Actual	2ppm/yr	280		353	422	472	
IPCC FAR Pred inc/yr	6ppm/yr			353	563	706	
IPCC Over estimate					308%		
CO2 long-term average	about 2ppm/yr						
Global Temp Actual °C				13.9	15.1		
IPCC Pred Temp Rise °C	0.3C/decade			13.9	15.1	15.85	17.4
IPCC Uncertainty °C	0.2-0.5C/decade			13.9	14.6	15.8	
	0.2-0.5C/decade			13.9	15.7	16.35	
IPCC Overestimate					4%		
Temp long-term average	About 0.3C/decade						
Sea Level Rise Actual mm/yr	1.5-1.8 mm/yr Use 2mm/yr			0	70	120	220
IPCC predicted rise/yr	200mm by 2030: 300-500mm by 2050: 1000mm by 2100			0		300 - 500	1000
IPCC Est of the last 100 years	100-200mm 1-2mm/yr		-100 -200	0			
IPCC predicted rise/yr	6mm/yr 3-10mm/yr range			0	210	360	660
IPCC overpredicted the rise/yr					300%	300%	300%
Sea level rise long term av mm/yr	About 2mm/yr						

Climate Change Propaganda



Winston Churchill got it right.

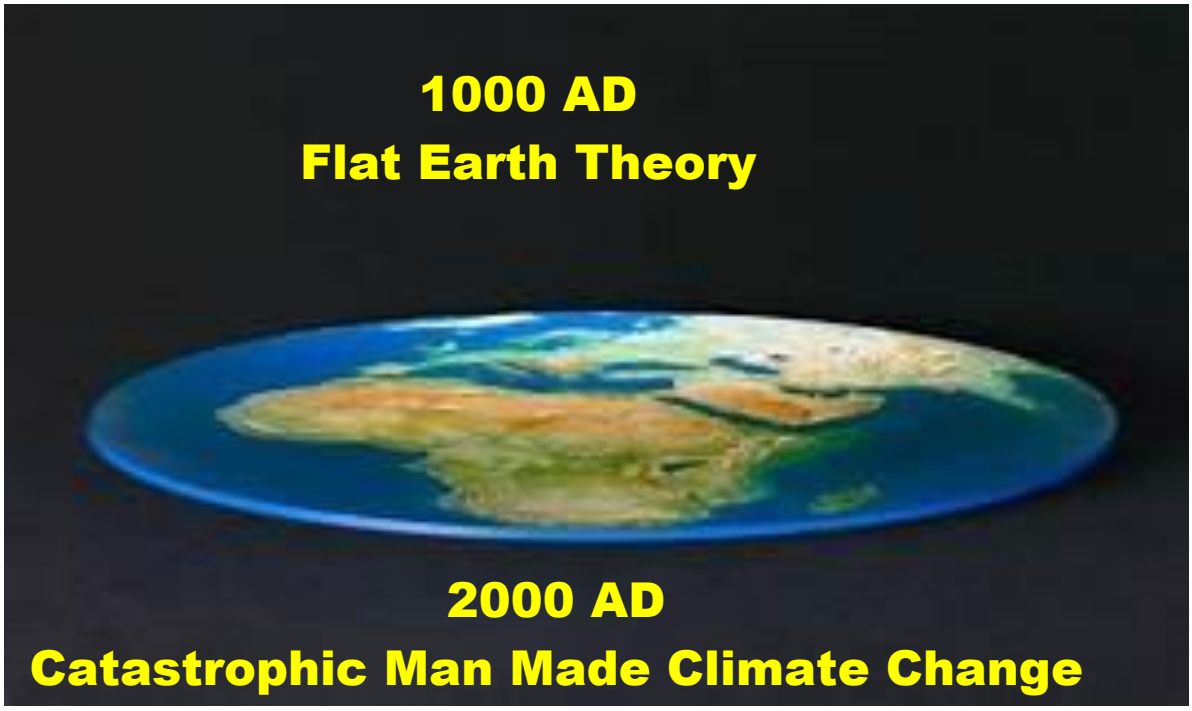
Propaganda is the art and science of spreading misinformation. It aims to influence public opinion and can be presented in the form of facts, arguments, rumours, half-truths, or outright lies. It is always biased and designed to be deliberately misleading.

The language surrounding climate change is full of slogans used to support the cause and discredit opponents. Some of these slogans and their logical responses are included below. Asking tough questions about climate change often leads to accusations of spreading misinformation, being a climate denier, or a right-wing crackpot. Reasonable discussion is always avoided.

The marketing of climate change has transitioned from a small-scale effort to an industrial level, reminiscent of George Orwell's 1984, where the manipulation of facts and truth became an art form. Nudge tactics to steer the public towards renewable energy and away from fossil fuels are now a fundamental part of many climate change reports, studies, media outlets, and activist publications.

The Mantra	The logical response
Wind and solar power are free.	• **If so**, then there is no further need for subsidies to support free power. • **If not**, then what is the cost?
Wind and solar power are the cheapest forms of power.	• **If so**, then there is no further need for subsidies to support the cheapest form of power. • **If so**, then why have consumer electricity costs increased fourfold over the last 10 years? • **If not**, then what is the cost?
The science is settled.	• **If so,** then there is no further need for government grants to further investigate climate change, renewable power or Net Zero. • **If not**, then we have plenty of time to adapt. • By definition, science is never settled. • The mantra, "the science is settled", is the ultimate scientific oxymoron.
Coal and gas are destroying the planet.	• **If so**, then why is Australia one of the World's largest exporters of coal, gas and uranium ore? • **If so**, then Australia is happy for other countries to destroy the planet, as long as we make a dollar out of the transaction? • **If so**, then why do other countries ignore or pay lip service to Net Zero? • **If not,** then we should opt for the cheapest power based on coal and gas.
We must strive to achieve net zero to save the planet.	• **If so,** then why have the major emitters walked away from Net Zero, and most of the others pay only lip service to it? • **If not**, then we must revert to power policies that promote Australia's future, not endanger it.
Nuclear power is too dangerous and expensive.	• **If so**, why is the rest of the world increasingly opting for nuclear power? • **If so**, why are there at least 444 nuclear reactors in the World? • **If so**, why have we opted for nuclear-powered submarines that will be based in or near our capital cities? • **If not,** then why does Australia not adopt the only viable emissions-free source of base load power?

Is History Repeating Itself



The elephant in the room, with power in its various forms, is climate change, and having a reasoned, evidence-based position on the issue is central to any discussion about future power generation. As the drawing above shows, until only a few hundred years ago, the majority of public and scientific opinion believed the Earth was flat, and suggesting otherwise was career-limiting.

Although there were always dissenting voices, the popular hypothesis was that the Earth was flat, and much "evidence" to support that "fact" was presented. Indeed, ***the science was settled***. Even today, the theory still has its followers!

Today, we have another equally compelling "hypothesis" based on much learned opinion, published papers, and computer projections. This is that man-made climate change, caused by ever-increasing CO2 levels, will result in catastrophic changes to the planet's climate. Similarly, many dissenting voices today argue the opposite. They have also faced the same public ridicule, professional exclusion, and financial loss as their ancient counterparts.

Today, climate change has taken on the sanctity of religion. It has also given rise to a huge global industry backed by scientific communities, political groups, big corporations, and many vested interests, all of whom profit from it. Inconveniently, it is almost entirely funded by large public grants and subsidies, without which the whole charade would fall apart.

As with the Flat Earth Theory, catastrophic manmade climate change has become the new religion and challenging the popular view that the "science is settled" – the ultimate scientific oxymoron - is always going to be dangerous. History is repeating itself!

Climate Change Summary

In hindsight, the following conclusions can be made with reasonable confidence.

- The climate has been changing for 4.5 billion years and is not going to stop any time soon.
- Man has contributed to climate change; however, the extent of the impact is increasingly disputed.
- The original IPCC FAR 1990, now 35 years old, made predictions about CO2 levels, global temperature rise, and global sea level rise. A comparison between what was predicted in 1990 and actual observations in 2025 clearly shows that the IPCC predictions for CO2 levels and sea level rise have been significantly overestimated; however, the temperature rise prediction is reasonably accurate to date.
- The catastrophic anthropogenic climate change scenario has been greatly exaggerated and does not justify switching from fossil fuels to renewable energy for electricity generation.

The science is not settled, and mitigation strategies that promote the removal of the cheapest form of power based on coal and gas are not justified. Adaptation strategies are more appropriate.

The reasons for this overestimation include reliance on computer models and assumptions that were biased towards the “catastrophic” man-made climate change scenario.

The IPCC projections have always focused on events such as sea-level rise, temperature increases, and extreme weather, extending far into the future (25, 50, 100 years), so they can't be verified or refuted, yet are sufficiently dramatic to alarm the public.

It is only after 35 years that it is now possible to compare the IPCC 1990 predictions with 2025 observations and say with reasonable confidence that the catastrophic climate change scenario, at best, remains an unproven hypothesis. The effects have been exaggerated.

Catastrophic anthropogenic climate change - remains an unproven hypothesis - based on computer models - about something that might happen - in the distant future - and for which there is sufficient time to adapt.

“Prediction is very difficult—especially if it’s about the future.”

Niels Bohr

World Reaction

The world's reaction to climate change is key to lowering global carbon emissions. So far, despite all the talk and posturing since 1990, every year except the COVID interruption has seen an increase in worldwide emissions. Australia makes up about 1% of the global total and can do little to alter the overall CO2 levels. Cutting emissions from the remaining 99% depends on the rest of the world doing its fair share for the rest of the century. This isn't happening.

Firstly, the majority of nations claim to be developing countries under the Paris Agreement and use this to justify minimising their commitment to reducing emissions.

Secondly, the major emitters, China (33%), US (13%), India (7%) and Russia (5%), have all walked away from any commitment that restricts the development of their own economies and are not cutting emissions. Together, these nations create 58% of global emissions (Ritchie, 2023).

Even smaller nations such as those in the EU, Canada, Japan, Korea, etc., although initially alarmed, are now sceptical and only give lip service to the idea of reductions.

World Data

- The climate has been changing for about 4.5 billion years and will continue to do so, whether man is present or not.
- For the last 2000 years, global economic development has been glacial. In the last 250 years, since the industrial revolution, fossil fuels in the form of coal, oil and gas have supercharged development, health, standards of living and longevity.
- Fossil fuels are essential to the modern way of life.
- Power demand is greater now than at any time in human history as nations seek to advance their economies and standard of living.
- Since 1990 and after all the global pledges to cut fossil fuel use, in 2024, the world burned more coal, oil and gas than ever before.
- Climate change has been hijacked by political parties for short-term political gain.
- Renewable power evangelist nations, Spain and Portugal, have the highest installed wind and solar capacity in Europe. They suffered a catastrophic power outage in 2024, plunging 60 million people into chaos and darkness. They were saved by an umbilical power cord to France, which generates 70% of its electricity from nuclear energy.
- The claim that renewable power would push down power prices has been proven wrong.
- No country with significant renewable power installed has cheap electricity.
- What is happening in Australia has also failed everywhere else. Germany, Britain, Canada and California are now reversing their previous renewable policies and reverting to coal, gas and nuclear.
- Deaths from climate-related events have declined 97% over the last century. More people die from cold rather than from heat.

- Unbelievably, the UK burns massive amounts of wood chips imported from North America and touts it as renewable energy. Where are the environmentalists?

USA

The US emits about 13% of the world's emissions (DOE, 2025).

The US is also one of the world's largest consumers of power generally and has 99 nuclear reactors, the highest number in the World.

The USA under President Trump is walking away from the hypothesis of catastrophic anthropogenic climate change and has withdrawn from the Paris Accord.

In July 2025, the US Department of Energy published a report titled ***A Critical Review of Impacts of Greenhouse Gas Emissions on the US Climate (DOE 2025)***. This refutes many of the exaggerated claims of climate alarmists and is now one of the base documents for the US position on climate change.

The Trump administration has introduced a broad suite of policies that move away from renewable power and back to fossil fuels, as a driver to re-industrialise the US.

Some of these policy settings are below.

- Encourage power exploration and production on Federal lands and waters.
- Become a leading producer and processor of non-fuel minerals, including rare earth minerals.
- Ensuring reliable power is readily accessible in every State and territory of the USA.
- Remove the electric vehicle (EV) mandate.
- Review all government agency actions that impeded the development of domestic power.
- Stop all funding for green power in any form.
- Aim for power dominance.
- Aim for mineral dominance.

The US has the World's largest economy, and its pragmatic approach to power is one of the reasons it is in that position. It is also leading the World away from renewable energy and back towards fossil fuels and increased use of nuclear energy. It is the model that Australia should and will eventually follow.

Russia

Russia contributes about 5% of global emissions (Zagoruichyk, 2022).

Russia's approach to power generation combines environmental needs, economic practicality, and geopolitical aims. Russia views climate policy and renewable energy mainly as tools to serve its strategic goals. Its power sector is vital to both its economy and foreign policy, making any major change unlikely.

Russia approved a new Climate Doctrine in October 2023, signalling a formal commitment to ecological security and sustainable development. While the doctrine outlines broad goals, it lacks binding enforcement mechanisms. Russia has also pledged to cut greenhouse gas emissions by 30% by 2030 compared to 1990 levels. However, this target is quite modest and allows for ongoing reliance on fossil fuels, especially natural gas, which Russia depends on for much of its export income.

Russia's current focus is the war with Ukraine, with all other priorities on hold until this conflict is resolved. The economic impact of the war on Russia has been severe and will require many years to recover from. Coal, gas, oil, and fossil fuels in all forms will remain central to the country's economic recovery and will be given priority over renewable energy for the foreseeable future.

India

India contributes about 7% of global emissions (Timperley 2019).

India's priority is on economic development, with climate change and renewable energy considered secondary. India has claimed developing nation status under the Paris Accord and has used this as a strategic move to avoid emissions constraints.

Fossil fuels dominate the energy mix, with coal making up about 64%. Both coal and gas usage are rising as industry develops and the population continues to grow. Nuclear power is also expanding, with around 22 reactors operating and many more in planning.

India's climate policy in 2025 demonstrates strong momentum for renewable energy but remains limited by ongoing reliance on fossil fuels, particularly coal. Wind and solar capacity have increased significantly, making it the third-largest producer of wind and solar power globally.

India is rapidly becoming a diverse, high-tech, and complex economy. It has a strong IT sector and is now favored as a global manufacturing hub over China. A pragmatic approach to energy needs, environmental concerns for better air quality, and urban renewal efforts are guiding India towards nuclear energy as an affordable, emissions-free solution. However, coal and gas remain the cheapest options in the short term.

China

China accounts for about 33% of global emissions and is the largest emitter (Liu et al., 2023).

- China burns about 58% of the world's coal.
- Most of China's power comes from burning coal, and it starts construction of 2 new coal-fired power generators every week. It is building more coal-powered stations each year than the entire Australian power grid.
- China has also installed massive amounts of wind and solar arrays, and they deliver about 13% of total generation.
- Nuclear power produces 5% of total generation. China has 58 nuclear reactors with 28 under construction and plans to build 118 more by 2035.

China has designated itself as a developing nation, allowing it to bypass the emissions reduction commitments of the Paris Agreement. This has permitted China to operate coal-fired power stations without restrictions.

China is often seen as leading the world in adopting renewable energy. This is true, as they are now the top global manufacturers and exporters of wind and solar systems. Ironically, they have achieved this by burning Australian coal, which we criticise, to support their own manufacturing sector.

The world's confected outrage about climate change has been an economic windfall for China, allowing the country to dominate the market in solar panels, wind turbines, and batteries. It serves as a strong economic model for China.

Case Study 1: Germany and Renewable Energy

In 1992, the economies of the USA and the EU were roughly similar (Statistics, 2025). By 2025, the EU economy is only about 75% of the US's. What happened? Since 1990, the EU has pursued green dreams, socialist governments, and a rush from fossil fuels to renewable energy. It has also introduced the Euro currency and added extra layers of bureaucracy, both of which have stifled the economy.

The result is that in 2025, the median disposable income in the US is 25% higher than in Germany and 60% higher than in Italy. Germany is now in recession.

In 2000, Germany launched ***Energiewende*** (power turnaround), its plan to decarbonise the economy by shifting away from coal, gas, and nuclear towards renewables. Germany is estimated to have spent at least $1.5 trillion on this effort. The hype was that Germany would become Europe's first green, solar-powered superpower!

In the real world of 2025, Germany has deindustrialised, depowered and enjoys the highest electricity costs in Europe, twice that of the US and nuclear-powered France and 3 times that of China. Despite all of this, 78% of Germany's power still comes from fossil fuels.

After Russia's invasion of Ukraine, there was a collapse in gas supplies from Russia, prompting Germany to urgently reopen coal mines, import oil, and establish LNG facilities to import natural gas.

When the sun doesn't shine, and the wind doesn't blow, Germany suffers from ***Dunkelflaute*** **(**dark doldrums).

Luckily for Germany, it can import power from neighbouring countries, particularly France, which has 70% of its power nuclear-based, and Sweden and Norway that rely heavily on hydro. This has upset the neighbours, as they are now suffering economically due to the massive drain on their own power systems, which is driving up their domestic prices and inflation.

Since 2021, Germany's industrial output has decreased by at least 10%, and many manufacturing firms are struggling to stay viable, with even Volkswagen threatening to close domestic plants.

Despite all this, Australian politicians and bureaucrats still cite Germany as an example for Australia to follow.

Germany's green power experiment has turned out to be a complete disaster. They are now in a recession, with renewable energy playing a major role in this downturn. They now have the highest electricity prices in Europe, leading to significant job losses and de-industrialisation.

The German renewables experiment has been an unmitigated disaster. Germany is the classic example that if you get the power policy wrong, the economy will soon follow. Germany is now deindustrialising, and the nation has pushed the panic button to reverse the economic decline by reinvesting in coal, gas and nuclear energy.

Nuclear

Nuclear power is the most reliable and lowest-cost source of non-carbon power. The rest of the World is accelerating the construction of nuclear power plants; however, Australia remains ideologically opposed and continues to demonise nuclear power whilst being one of the World's largest exporters of uranium ore. **Hypocrisy thou art, Australia!**

Australia's geographic neighbours are aggressively pursuing nuclear energy, with Korea, Japan, India, and China already well-established and increasingly reliant on it. Additionally, Singapore, the Philippines, and Vietnam are close to committing to nuclear power. Australia will be the only developed country in the region without a nuclear industry, risking the loss of associated technological advances, training, and industrial opportunities.

The nuclear renaissance bodes well for the uranium mining industry, as Australia has a third of the world's uranium deposits and is a major exporter of uranium ore, known as Yellowcake. There is also a significant opportunity for Australia to move beyond simply exporting uranium ore and to develop an enrichment facility to supply the US and other countries with enriched uranium. Of course, this is currently illegal in Australia.

Some further data is revealing.

- Today, 419 nuclear reactors are operating in 38 countries, a further 339 plants are under construction, and 270 are planned.
- China has 58 reactors in operation, another 28 are under construction, and it plans to build 118 more by 2035.
- At the last global climate conference in Dubai, 25 countries signed a pledge to triple nuclear power capacity by 2050. Australia refused to endorse this initiative.
- Australia is the only G20 country to maintain a nuclear ban, whilst of course exporting uranium ore. Truly a gold medal performance in hypocrisy.
- Australia accepts the need for nuclear-powered submarines but not nuclear power generation.
- Renewables cannot achieve the net-zero target as coal and gas must be retained to provide backup base load power. If net zero is to be achieved without coal and gas, then nuclear is the only option.
- The US and the UK are now aggressively advancing the collaborative development of Small Modular Reactors as a major component of their commitment to meeting their nations' future power requirements.

Australia must develop a civil nuclear industry to support the AUKUS nuclear submarine fleet it has committed to.

Case Study 2: France and Nuclear Energy

The 1970s oil crisis was a pivotal moment in France's power history. The oil shock, caused by geopolitical tensions in the Middle East, resulted in a fourfold rise in France's oil bill over two years (1972-74). This crisis highlighted France's vulnerability to external power shocks. The French Government recognised the need for energy security, which drove the development of nuclear power.

Since the mid-1980s, nuclear power has been the main source of electricity in France. In 2025, around 70% of the country's electricity is produced by nuclear energy, the highest proportion in the world.

Today, it has 57 operating reactors, with plans to build 6 new ones and a further 8 under consideration. It has also shut down 14 reactors over the years due to technology upgrades or safety concerns.

Nuclear power is currently France's third-largest industrial sector. Additionally, France makes significant investments in nuclear propulsion for naval surface vessels and submarines, as well as in nuclear weapons.

The sector provides 200,000 skilled jobs distributed across 2,600 companies. The economic hub it supports employs 400,000 people in total and adds $12 billion annually. It is also estimated to save about $20 billion each year in imported fossil fuels, mainly oil. France has been very active in advancing nuclear technology and reactors, making nuclear technology one of its major exports. Around 17% of France's electricity comes from recycled nuclear fuel.

France is the world's largest net exporter of electricity due to its very low cost of generation. It earns significant income from electricity exported to the EU, especially Spain, Portugal, the UK, and Germany, all of which invested heavily in renewable power that has not proven sufficient to supply reliable power 24/7 for their own nations. France's example is now being followed by many other countries.

World Reaction Summary

A review of global efforts to cut carbon emissions and slow climate change reveals that there has been plenty of rhetoric and posturing, but no real progress in reducing

emissions. Global emissions continue to rise each year, except during the COVID pandemic.

The major emitters, which together account for 58% of global emissions - China, the US, India, and Russia - have walked away from efforts to reduce emissions.

The question then arises: if the major emitters are not serious about reducing emissions mainly for economic reasons, why should Australia, almost alone in the world, willingly commit to moving away from fossil fuels and, in doing so, deindustrialise, impoverish the country, and risk its economic and strategic interests?

It can be concluded that the major emitters have no intention of reducing their reliance on fossil fuels, as they are crucial to their economic and strategic strength. Given these circumstances, the only sensible decision for Australia is to follow suit. To do otherwise is to condemn the nation to rising power bills, deindustrialisation, and energy poverty, leading to economic decline and strategic weakness.

On this basis alone, there is enough justification to stop pursuing renewable energy and switch back to fossil fuels.

Australian Reaction

The Importance of Fossil Fuels

Global energy demand increased by 2.2% in 2024 (IEA 2025), almost twice the average annual growth of 1.3% from 2013 to 2023. Electricity use alone jumped by 4.3%, the biggest annual rise outside the post-COVID rebound. Non-OECD countries lead both in market share and annual growth. Fossil fuels still dominate the power system, making up 86% of the global energy mix.

As economic realities bite, previous global commitments to renewable power have now plateaued and, in many countries, are in decline, if not over. Australia will eventually follow suit when cost-of-living pressures force a reappraisal of renewable power dogma.

Power Security

The foundation of Australia's current standard of living has been built on burning its plentiful fossil fuel reserves, such as coal and gas, and exporting them. Australia has previously enjoyed energy security; however, it has now squandered this benefit. Paradoxically, other countries now profit from cheap energy through our exports of coal, gas, and uranium, while Australia dismisses these opportunities due to ideological reasons. You couldn't make this up!

Similarly, tomorrow's prosperity also depends entirely on the continuation of affordable and reliable 24/7 base load electricity and gas for both consumers and industry. Australia cannot achieve national security without power security. To suggest otherwise is to deny history, economics, and logic.

Australia is an energy superpower in coal, gas, and uranium, so if logic prevails, the nation must capitalise on this good fortune. The Australian Government has, in the past, adopted a policy of minimal interference in the power sector; however, with the emergence of the climate "crisis," this has shifted. Pragmatism, not ideology or wishful thinking, should be the guiding principle for the future.

Electricity is Australia's life support system.

The Challenge

The Australian response to the climate change challenge has been dramatic. It has followed the lead of several other nations, such as Germany, the UK, and Spain, and has decided to move away from fossil-fuel power and towards renewable electricity.

The response has been multifaceted, involving federal and state governments, the introduction of extensive legislation, the creation of numerous bureaucratic bodies responsible for managing the change, academic institutions conducting studies, and private enterprise developing wind, solar, and transmission lines.

When the IPCC FAR was released in 1990, Australia enjoyed cheap electricity and gas, which gave the nation a comparative energy advantage for local manufacturing. At that time, about 80% of electricity came from coal, 10% from gas, and the rest from hydro. By 2025, wind and solar will provide roughly 30% of electricity needs, gas will remain around 10%, and coal will decrease to about 50%.

Over the same period, electricity prices have roughly doubled in real terms and are now about twice those in the USA.

Relevant Data

- During the 2022 Australian federal election campaign, Labor famously promised that its renewable power policies would cut household electricity bills by $275. Over the subsequent 3 years, electricity bills increased by about $1000.
- In September 2016, South Australia experienced an electricity outage that left some parts of the state almost a week without power. Relief came only because of a power link to Victoria. The ideological SA government imported 9 large diesel generators for $600 million to offer emergency backup, which notoriously consumed fossil fuel. This expense was not included in the cost of the renewable energy system; however, SA taxpayers will eventually bear the cost.
- Offshore wind farms have been promoted by Labor governments as a replacement for coal, base-load power. However, offshore wind power is proven to be prohibitively expensive and has faced Australian regulatory, environmental, and financial barriers to entry. As a result, offshore projects are now regularly being cancelled and are unlikely ever to be built.
- Victoria aims to have 95% of electricity from renewables by 2035, an impossible target.
- “Snowy2”, touted as the ultimate renewable hydro power resource, was estimated to cost about $4 billion in 2020. The cost has now soared to at least $15 billion, and counting. When transmission and other costs are included, the total cost of the system will be at least $25 billion. Similarly, the completion date has moved from 2026 to at least 2030 and counting.
- Spending on climate change and net zero in the 2024 federal budget reached about $9 billion annually, up from $600 million a decade earlier.
- Labor governments are now panicking as the importance of coal-fired power stations becomes clear, and they are taking both open and covert measures to keep coal power stations operating into the future.

- Synthetic fertilisers based upon oil and gas are essential for agricultural production to feed the planet.
- The more renewables, the higher the electricity price and the lower the reliability. The more coal, the lower the price and the higher the reliability.

Inconvenient facts about the climate change debate are ignored.
The debate runs on faith, not reason.

Legislation and Reports

Labor governments have been diligent in establishing a legislative framework that not only advocates for renewables and the phase-out of fossil fuels but also seeks to prevent any reversal of these efforts. The legislation includes the following measures and is being expanded as swiftly as the numerous ideologically driven bureaucratic bodies dedicated to renewables can organise.

- **The Climate Change Act 2022.** Sets a government-wide target to reduce Australia's emissions by 43% below 2005 levels by 2030 and to net zero by 2050. It has a significant influence over the interpretation of other legislation and the duties of ministers and regulators under administrative law.

- **The Safeguard Mechanism.** This mandates that large projects and facilities reduce their emissions or purchase carbon credits to continue to operate. This is a tax on heavy industry.

- **Future Made in Australia.** This policy mandates extensive government subsidisation for the renewables sector to offset the diminished role of other critical industries under net-zero policies.

- **Renewable Energy Target (RET)**. The goal of the RET is to deliver 33,000 GWh of renewable electricity annually from 2020 to 2030. To achieve this target, there are 2 major schemes:
  - **Large-scale Renewable Energy Target (LRET):** Supports wind farms, solar plants, and other utility-scale projects. This is a major direct subsidy that creates an artificial demand for wind and solar electricity companies and transfers money from electricity consumers to the renewable power operators.
  - **Small-scale Renewable Energy Scheme (SRES):** Incentivises rooftop solar, solar water heaters, and small wind systems.

- **Future Gas Strategy**. Labor Governments have belatedly recognised the value and need for gas, and the Future Gas Strategy confirms natural gas will remain essential through 2050 and beyond, whilst supporting energy security, affordability, and the net zero transition.

- **The New Vehicle Efficiency Standard.** This is intended to force the transition from internal combustion engines to electric vehicles.

- **Capacity Investment Scheme (CIS).** The CIS is a federal subsidy that guarantees long-term income for renewable energy and dispatchable storage projects (like batteries), reducing investor risk and accelerating deployment. It aims to support 26 GW of renewable generation and 14 GW of dispatchable capacity by 2030 - enough to power every home on Australia's main grids and support peak loads for 13 million households.

- **Integrated System Plan (ISP).** The ISP is the Labor strategy to decarbonise the electricity grid by 2050, prioritising renewables, storage, and transmission upgrades while phasing out coal. Developed by the Australian Energy Market Operator (AEMO), the ISP guides the transformation of the National Electricity Market (NEM).

- **GenCost Report (GCR).** Produced by the CSIRO under AEMO directives, the 2024–25 GenCost Report confirms that wind and solar, backed by storage, remain the lowest-cost new-build electricity generation technologies in Australia, while small modular nuclear reactors (SMRs) are the most expensive. The report has been widely discredited, but it provides the ISP with the intended scientific cover.

- **Levelised Cost of Electricity (LCOE)**. This is the accounting method used by the CSIRO in its annual GenCost Reports to estimate the average electricity price that a new generating asset must deliver throughout its operating life to break even. It has been discredited and is heavily biased towards renewables.

- **National Adaptation Plan.** Australia's first NAP, released in September 2025, outlines a coordinated national response to escalating climate risks, prioritising resilience across infrastructure, ecosystems, health, and vulnerable communities. The NAP is paired with the National Climate Risk Assessment (NCRA). It marks the "prioritise and plan" phase of Australia's climate adaptation cycle, shifting from reactive responses to proactive, system-wide resilience strategies.

- **National Climate Risk Assessment**. The NCRA, released in September 2025, identifies 63 nationally significant risks across eight systems and eleven regions, warning that climate hazards will intensify and compound by mid-century. The NCRA models climate risks under three warming scenarios: +1.5°C, +2°C, and +3°C above pre-industrial levels. It uses five risk levels: low, moderate, high, very high, and severe. It claims that without strong action, Australia is projected to reach +2.7°C by 2100, triggering cascading hazards.

- **Carbon Adjustment Border Mechanism.** Australia is now assessing a CABM to prevent carbon leakage and protect domestic industries, with final recommendations expected in late 2025. A CABM would impose tariffs on imported goods based on their carbon intensity, ensuring that foreign producers face similar carbon costs as domestic ones. It aims to prevent carbon leakage, where companies shift production to countries with weaker climate policies, undermining global emissions efforts

Stakeholders

Australian governments, particularly Labor, have established numerous bureaucratic bodies to both guide and implement climate change policy. Other scientific organisations, such as the CSIRO and Australian universities that rely heavily on public funding, also advocate for renewables. They are all strongly biased towards renewable energy and generally exclude or minimise fossil fuels. Some of these are listed below.

- **Climate Change Authority.**
- **National Power Market**
- **Australian Energy Market Operator (AEMO).** The brief of the AEMO is to deliver Labor's legislated climate targets.
- **Clean Power Council**
- **CSIRO**
- **Australian Power Regulator**
- **Environment Defenders Office.** Funded by the federal Labor government, this has become the mouthpiece for activist lawfare groups opposed to coal, gas, and nuclear power generation.
- **Australian Renewable Energy Agency (ARENA).** This is Australia's leading public funder of clean energy innovation, intended to accelerate the shift to Net Zero through strategic investments in renewables, storage, hydrogen, and electrification.

Coal

Historically, low-cost and abundant brown and black coal powered Australian industry. If the goal of an electricity system is to deliver affordable and reliable power to industry and households, then coal baseload power supported by gas and hydro if available is undoubtedly the best choice. This was once the case in Australia, especially in Victoria. As coal-fired power has declined, so has the manufacturing sector, particularly in Victoria. In the 1960s, manufacturing made up about 25% of the Victorian Gross State Product; in 2025, it is roughly 5%.

If there are concerns about efficiency and emissions from old coal-fired power stations, they can be replaced with new ***high-efficiency, low-emission*** technology that offers at least 30% improvements in both areas and is widely adopted overseas.

If emissions reductions are the top priority and reliability and affordability come second, then high implementation and ongoing expenses are unavoidable, and public subsidies are vital to shield the power industry and consumers from the true costs. This is currently the case.

The unintended consequences of this policy are that costs flow on to consumers, increase the cost of living, deindustrialise the nation and contribute significantly to the national debt. What could possibly go wrong?

Australia displays the height of hypocrisy in energy policy, deserving an Olympic gold medal for posturing and sanctimony. On one hand, we demonise coal, gas, uranium ore, and nuclear power; yet, we are among the world's top exporters of these resources.

Apparently, Australia is happy for other countries to destroy the planet with our coal, gas and uranium ore, as long as we can posture on the World stage and make a dollar out of it!

Coal Data

- It is planned to shut down the nation's largest coal-fired generator plant in Eraring, NSW, by 2027, 90% of coal-fired generation by 2035, and the last coal-fired plant by 2038.
- There are 10 coal-fired plants in the national market scheduled to remain open beyond 2030, 3 in NSW, 6 in QLD and 1 in Vic.
- All of the Victorian, coal-fired generating plants are programmed to close, Yallourn and Loy Yang A by 2035 and Loy Yang B by the mid-2040s.
- As these plants are on the chopping block, owners have no intention of upgrading facilities, and as a result, maintenance-related outages are increasing, and the plants may well close much earlier than programmed. Such an eventuality would cause both the NSW and Victorian electricity grids to collapse.
- Australia hosts 23 GW of coal plants, about 1% of the world's capacity.
- Globally, 611 GW of new coal plant capacity is planned or under construction.

Gas

Since the 1960s, natural gas has supplied Australian homes and industry, with local demand and supply in balance. In 2015, exports began, and by 2024, about 75% of the available gas on the East Coast was being used to meet export demand. Foreign customers now enjoy the benefits of Australian gas, while local consumers are being left at a disadvantage!

The absence of a long-term vision for the nation, magic-pudding economics, and "progressive" ideology have led not only to consumers feeling the squeeze from high domestic gas prices but also to industry losing what should be a competitive energy edge for Australian manufacturing.

Australia is a major source of natural gas, and Victoria also possesses considerable potential gas fields. The Victorian Labor government, however, halted all onshore gas exploration and drilling from 2014 to 2021.

Fracking and coal seam gas remain permanently banned. However, the moratorium on conventional onshore gas was lifted in 2020, and exploration has been allowed again since July 2021. Offshore exploration has recently resumed after a lengthy pause.

This has caused a gas supply crisis in Victoria that can now only be eased by either importing expensive LNG or building a new gas pipeline network. Discussions on the

best solution are underway. Labor's anti-gas ideology has created the crisis and it is only after many years and crippling increases in gas prices, that sanity has returned. You couldn't make this up!

The answer that will eventually be adopted, when economic pain is high enough, is to embrace a long-term strategic vision for the use of an abundant natural resource. The vision must include the use of gas as a low-cost energy input for industry and as a low-cost heating source for consumers.

Since 2006, WA has maintained a reservation policy requiring LNG producers to set aside 15% of their LNG exports for the WA domestic market. The policy has been successful and serves as a good model for nationwide implementation.

Gas Data

- Gas provides 25% of our total power needs.
- Gas is essential for many production processes, particularly heating.
- If coal is phased out, gas is the only viable alternative, in the short term, for electricity generation.
- Recent analysis by KPMG found that the gas sector contributes $105 billion a year to the national economy and supports 215,000 jobs.
- Japan and South Korea have invested more than $20 billion in Australian LNG infrastructure since 2008.
- Gas is excluded from the Capacity Investment Scheme.
- A gas reservation scheme is needed that ensures gas is prioritised for our domestic power needs, both consumers and industry.
- In the 2024 financial year, the gas sector returned a record $30 billion to state and federal governments in taxes and royalties.
- There are more than 5 million commercial and private consumers using gas across Australia.
- In 2012, an administrative moratorium was placed on all onshore gas exploration and development in Victoria. This meant a temporary hold on onshore gas exploration permits and retention leases, and a suspension of approvals for any new applications while the moratorium was in place. This has now been rescinded.
- In 2017, the Victorian Government passed the *Resources Legislation Amendment (Fracking Ban) Act 2017*. Under this legislation, fracking and coal seam gas extraction were permanently banned, and the existing administrative moratorium on onshore conventional gas was replaced with a legislative moratorium that halted all exploration and development activities in Victoria until 30 June 2020.
- In June 2020, the *Petroleum Legislation Amendment Act 2020* was passed by the Victorian Parliament, which allowed for the restart of onshore conventional gas exploration and production.

Renewables

Labor governments have prioritised emission reductions over affordable and reliable electricity and gas. Experience now clearly shows that this policy has significantly raised the cost of power.

Discussion about total costs, especially the expense of new transmission lines connecting renewable power generators to consumers, has been deliberately avoided, concealed, or obscured where possible. All wind, solar, and hydro power generators are located far from existing transmission lines originally built for coal-powered systems and have proven extremely expensive to establish.

Renewables Data

- Most wind and solar systems are imported from China. If they were made in Australia, there would be a better economic argument to support the renewable industry, but that is not the case.
- To meet the Labor government's 82% renewables power target by 2030, it will require about 22,000 solar panels to be installed every day, 40 wind turbines every month, and at least 10,000 km of transmission lines to be built. This is utterly impossible within the time frames and prohibitively expensive.
- You could cover the Australian continent in wind and solar farms, and you would still need coal and gas backup for base load power.
- In 2025, about 70% of wind farms are foreign-owned.
- The need for backup base load power of coal or gas is an absolute necessity.
- All renewable power plants need to be replaced after about 15 years, whereas coal and gas plants have a much longer life span.
- Renewable power is not economically viable without massive public subsidies.
- “Snowy2” was touted as the ultimate renewable hydro power resource, was estimated to cost about $4 billion in 2020, has now soared to a minimum of $15 billion and counting. When transmission and other costs are included, the total cost of the system will be at least $25 billion. Similarly, the completion date has moved from 2026 to at least 2030 and counting.
- The Kurri Kurri gas-fired power station is intended to replace the Liddell coal-fired power station.
    - The Kurri Kurri was touted to cost A$600 million and was to be completed by 2023-24. Labor further proposed that hydrogen be used to run the plant. This has been quietly shelved as impractical.
    - The final cost will be at least $1.3 billion for the plant alone. In addition, the pipeline connecting the plant to the gas feeder lines will cost at least $450 million. The total cost is expected to be at least $2 billion.
    - The completion date will be sometime in 2026.
- Large-scale hydrogen projects have not proceeded beyond the concept stage as they are not economic. Green hydrogen consumes more power in production than it returns to the grid.
- Keppel Prince, Australia’s last wind tower manufacturer, has closed its business in Portland due to imported towers and steel from China, which is heavily subsidised by the Chinese government.

- All renewable projects are subsidised by taxpayers in off-budget confidential contracts.

Given that energy from the sun and wind is "free" - why are electricity prices now so high?

Zero Emissions Targets

In September 2025, the Australian government further pledged to reduce emissions levels. The targets, compared to 2005 levels, now include:

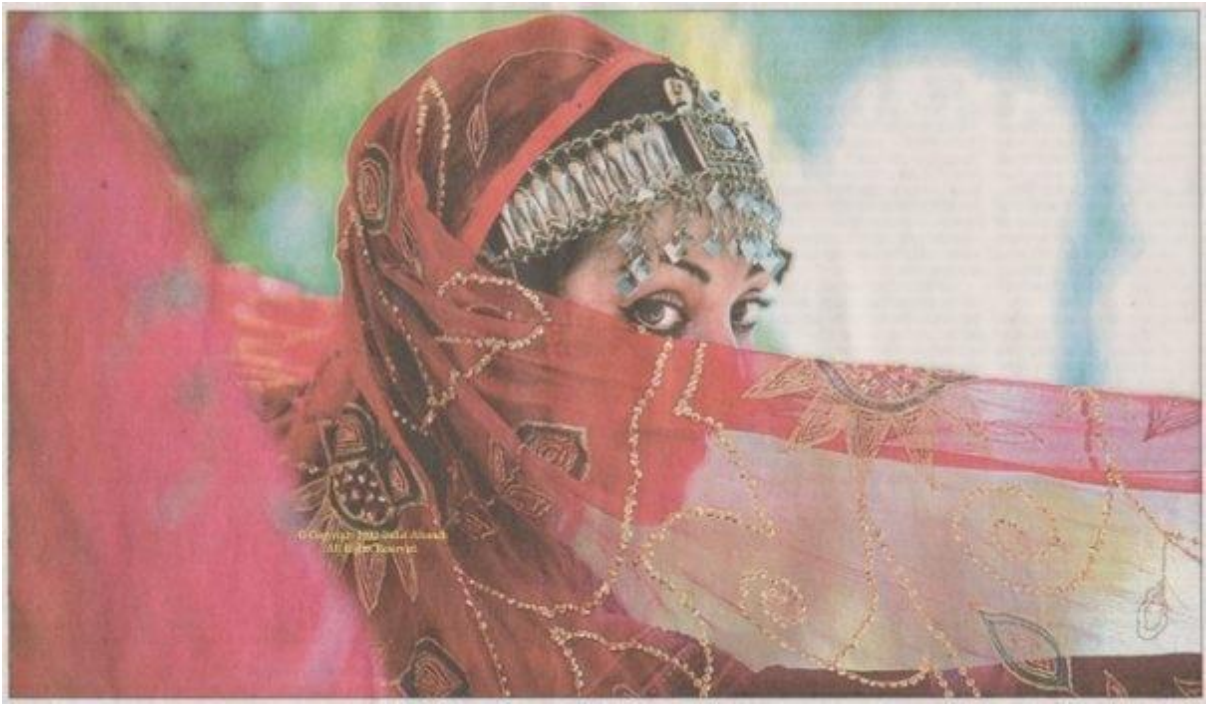
- 43% reduction by 2030 - legislated.
- 62-70% reduction by 2035 - announced.
- Net Zero emissions by 2050 - legislated.

To meet these targets, the government's ***Net Zero Plan*** focuses on the following strategy.

- **Clean electricity**: Scaling up renewables, transmission, and storage.
- **Electrification and efficiency**: Vehicle standards, home batteries, and energy upgrades.
- **Clean fuels**: Supporting green hydrogen and low-carbon liquid fuels.
- **New technologies**: Investment through the Australian Renewable Energy Agency and Future Made in Australia.
- **Carbon removals:** Land-based sequestration and robust carbon credit systems.
- **Transport:** Electrify light vehicles, expand EV charging, and develop clean fuels for freight.
- **Industry:** Decarbonise heavy emitters via the Safeguard Mechanism and a new $5 billion Net Zero Fund.
- **Households:** Support rooftop solar, batteries, and energy-efficient upgrades.

With China, India, Russia, and now the US stepping back from emissions targets, Australia's efforts seem insignificant and hard to measure. These actions are essentially a self-inflicted wound from which we might never recover.

Costs



Winston Churchill famously described the Soviet Union as ***"A riddle wrapped in a mystery inside an enigma,"*** emphasising its opaque and unpredictable nature. This description could equally be applied to the debate about the total costs of renewable energy in Australia today.

Accurate costs linked to climate change and renewable energy are hard to find or verify. Australian governments have intentionally concealed the real costs and subsidies because these expenses get passed on to consumers, are politically sensitive, clash with ideological beliefs, and threaten those who profit from the climate change gravy train.

True costs are now artfully hidden within a maze of various schemes, misleading and deceptive titles and terminology, and layers of bureaucracy, all intentionally created to obscure the truth.

Avoiding discussion about total system costs, however, is not only deliberately misleading but also counterproductive to the economic future of the nation and the well-being of all Australians.

Exposing the true costs of renewable energy is akin to a forensic investigation - a modern-day dance of a thousand veils.

Subsidies and costs

Subsidies in various forms are an essential feature of renewable energy. It is an inconvenient truth that wind and solar power cannot compete financially with fossil fuels. It has proven to be prohibitively expensive and must be heavily subsidised with taxpayer funds for it to be considered "commercially" viable.

There is now a vicious circle of subsidies that underpin "free" renewable power.

- Wind and solar farms are subsidised at the generation level via the ***Renewable Energy Target***.
- This, in turn, makes coal-fired power more expensive, so ***coal power is then subsidised*** to ensure the plants remain operating to provide essential base load power.
- As prices are forced up, ***consumers are then subsidised*** so that power bills are affordable, and to avoid the political pain.

In 2024, the IPA estimated that Australian consumers paid $660 million in subsidies to the 50 largest solar generation companies.

- 72% of these 50 companies are fully or partly foreign-owned, and just 28% are Australian-owned.
- In 2024, $1.7 billion was paid by consumers to wind and solar operators. Of this, $1.2 billion was paid to foreign companies.
- ABS data reveals that without taxpayer subsidies, power bills would be 66% higher.
- Chinese, Spanish and French wind farm operators earn up to $200 million per year from subsidies in Victoria. About $620 million in Large-Scale Generation Certificates is paid by local electricity retailers to wind farm power generation companies to subsidise their businesses.
- The cost of electricity is now a major driver of the rising cost of living in Australia.

Subsidies act as a tariff on the Australian economy. They inevitably make fossil fuels more costly, which in turn pushes up electricity prices, lowers economic output, hampers productivity, increases living expenses, and diminishes our standard of living.

Between 2006 and 2024, one estimate (CIS, 2024) put total Australian subsidies for renewable power at about $132bn. Government direct subsidies for free renewables are at least $7 billion per year.

Transmission costs.

Electricity needs to be transferred from the point of generation to the point of consumption. Extensive transmission lines for the coal-powered electricity industry have always been a significant part of the cost of electricity. However, for the coal-fired system, these lines have been in place for many years.

Renewable energy, especially wind turbines, must be positioned at geographic sites that are most exposed to windy conditions. These sites are usually different from traditional coal power locations.

Connecting dispersed renewable power sites now demands substantial new investment in transmission lines, with the costs passed on to consumers either directly or indirectly. There are various estimates for the extent of additional transmission required, ranging from 10,000 to 28,000 kilometres by 2050.

The new transmission lines are proving horrendously expensive and divisive.

- **VNI-West (Vic - NSW):** 500kV line connecting Victoria's west to the NSW Riverina.
  - The 2023 cost estimate: $1.8 billion
  - May 2025 estimate: $3.6 billion
  - Aug 2025 report estimate: $7.6 billion and possibly up to $11.4 billion.
  - Delivery dates have been delayed by 2 years.
  - The Victorian government has rammed through legislation that will fine land owners up to $12,000 for denying access to their property for the construction of the line.
  - These costs could increase consumer prices by 50% and industry prices by 350%.

- **AEMO estimates:**
  - New England Renewable Power Zone Transmission lines:
    - 2020 $1.5 billion 2024 $3.7 billion
  - Queensland Super Grid: 2020 $500m, 2024 $3.3 billion
  - QNI Connect (QLD - NSW):
  - Hume Link (NSW - Vic): 2020 $2.4 billion, 2024 $4.9 billion
  - Project Power Connect (SA-NSW):
  - Marinus link (Tas - Vic): 2025 $4 billion

Total System Costs

Total system costs must include the base load asset, such as the coal power plant, transmission costs from the power plant to the vicinity of the consumer, and final distribution costs to the point of consumption.

Existing coal and gas assets are already in place, and only maintenance and replacement costs need to be considered. Nuclear power will mainly utilise existing transmission and distribution infrastructure, but the construction costs of nuclear plants are high.

For renewable assets, the costs of wind or solar generator construction, transmission, distribution, batteries, or other storage and hydro costs must be included. This will significantly increase the overall cost of the wind or solar asset.

The following costs aim to give some perspective on the scale of different components of the electricity system. For existing systems like coal and gas, they are based on real-world data and are reasonably accurate; for much of renewable power, they are closer to estimates.

- Australian existing coal base load: $50 MWh
- International cost of electricity from new coal-fired power plants: $50 - $70 MWh
- Australian existing gas base load: $100 MWh
- New coal or nuclear power estimate: $100 MWh
- 2024 wholesale electricity price in the Australian National Electricity Market: $120 MWh.
- Offshore wind farms estimate: $135 - $175 MWh
- Mainly (>80%) renewable base load: $200 MWh
- Snowy Hydro 2 estimate: $217 - $303 MWh
- Base load coal transmission costs: $50 MWh plus $0
- Renewable estimated transmission costs: $200 MWh times 2 to 5 at least

The lowest-cost electricity system is the one we have, and the next-lowest-cost system is one built on new baseload plants, whether coal or nuclear.

The Labor Government refuses to disclose the full costs of the renewable energy rollout; however, some sources estimate that costs to date are around $150 billion, and costs by 2050 will be between $600 billion and $1 trillion.

It is an inconvenient fact that "free power" from wind and solar is prohibitively expensive. The irrefutable evidence for this assertion is your electricity and gas bills.

Renewable Energy footprint

Conventional coal-fired power stations, as unappealing as they are, are typically situated in rural areas near coal sources. By their design, these power stations are reasonably compact. Opencut coal mining is invasive and an unavoidable issue with coal extraction. However, it can be mitigated through the eventual restoration of the site once the resource is depleted. Underground coal mining, by contrast, has a very small land footprint.

The footprint of renewable energy wind and solar farms, however, is becoming increasingly obvious as they expand towards Net Zero. This is now being recognised, and there is increasing opposition to the visual pollution caused by wind and solar farms and transmission lines. The enormous ***footprint*** in terms of the physical space

they occupy and the associated ***environmental degradation*** and loss of farming land, and the decimation of bird life, has recently hit the news.

The physical footprint of a coal, gas or nuclear power station is about 5% of that of wind and solar farms.

Frequency Stabilisation

Coal and gas turbines run at a steady speed to maintain frequency stability during normal operation. With the phase-out of coal and gas, alternative stabilisation methods need to be developed. Battery backup is often suggested; however, its capacity is limited and it is very costly, which increases the overall expense.

Effect on Industry

Rising power costs are significantly impacting major Australian industries, with many now surviving mainly thanks to high subsidies. The manufacturing sector's share of Australia's GDP fell to a historic low of 5.0% in the June quarter of 2025, mainly due to increasing energy costs.

Some of those who struggle and require high levels of subsidy to continue are:

- **Tomago** aluminium smelter in Newcastle.
- Copper smelting in **Mt Isa**.
- Steel works at **Whyalla.**
- Ampol and Viva Energy **petroleum refineries**.

ASIC data shows that over 1,400 manufacturers have failed across Australia since 2022–23, with energy costs identified as a key factor. Additionally, some businesses have chosen to move their operations overseas where energy is cheaper, weakening Australia's industrial sector. Some of the high-profile closures linked to high electricity and gas costs are:

- **Kwinana smelter.**
- **Incitec Pivot.** One of Australia's largest fertiliser producers closed its domestic manufacturing facilities, citing unsustainable energy expenses.
- **Qenos.** Australia's last major plastics producer shut down in 2024, citing excessive energy costs. Australia is now totally reliant on imported polymers, mainly from China.
- **Oceania Glass.** A significant player in the glass manufacturing sector ceased operations amid rising energy prices.

Misallocation of Resources

Probably the greatest tragedy in the misguided drive for renewable energy is the massive waste of public funds and resources poured into supporting the renewables gravy train.

No definitive figures are available; however, it is estimated that around $100 billion has been spent from 1990 to 2025 on funding research, subsidising construction, and protecting consumers against the crippling costs of electricity and gas. Some estimates suggest the cost of reaching net zero by 2050 is about $900 billion, an absolutely staggering figure.

Labor governments have studiously avoided revealing the true cost of reaching Net Zero, fearing a strong backlash from the Australian public.

The question must be seriously asked: is the outrageous expense of pursuing renewables justified when the rewards are trivial, the commitment is out of step with the rest of the developed world, the major emitters have walked away, the scientific justification has been discredited and the deindustrialisation of the nation? The logical answer is NO.

Australia now faces the stark realisation that pursuing renewables has been the worst ***misallocation of resources in the nation's history***. Not only has Australia dismantled a financially viable power sector and effectively deindustrialised, but it has also severely hampered future economic growth.

The greatest tragedy of all in the misguided pursuit of renewable energy has been the monumental misallocation of national finance and resources.

Australian Reaction Summary

With the release of the IPCC FAR in 1990, Australia discovered **FREE** energy from the wind and sun and embarked on a crusade against fossil fuels and committed to renewable energy. Where is the nation 35 years later? The results are clear.

- Renewable energy has not resulted in cheaper energy as promised; rather, electricity and gas are significantly more expensive.
- Without massive subsidies, electricity and gas would be unaffordable.
- Australian emissions are negligible on a global scale, and any mitigation measures will have a "Net Zero" effect on reducing global emissions.
- Australia is guilty of breathtaking hypocrisy. Whilst posturing on the World stage against fossil fuels, it remains one of the world's largest exporters of coal, gas and uranium ore.
- Increasing electricity and gas prices have been a significant factor in the deindustrialisation of the Australian economy.
- The renewable energy crusade can rightfully be condemned as the greatest misallocation of resources in Australian history.

Is the Commitment Justified

Climate Change

Catastrophic anthropogenic climate change remains an unproven hypothesis, based on computer models of potential events in the distant future for which there is ample time to adapt.

The IPCC FAR 1990 predictions overstate real-world observations, and the catastrophic climate change scenario can now be seen to be exaggerated.

The IPCC catastrophic climate change scenario should no longer be considered as a scientific basis for the structure of the Australian power system.

Global Reaction

A review of global efforts to mitigate carbon emissions and meaningful action on climate change shows that there has been much rhetoric and posturing, but no progress towards reducing emissions. Global emissions continue to increase. The major emitters, China, the US, India and Russia, that between them contribute 58% of global emissions, have walked away from reducing emissions. Most other countries now only give lip service to cutting emissions.

The question then arises: if the major emitters are not willing to reduce emissions solely for economic reasons, why should Australia, almost uniquely in the world, willingly commit to moving away from fossil fuels and, in doing so, deindustrialise, impoverish our nation, and jeopardise both our economy and strategic interests?

On the basis of the global response alone, there is no justification for the rejection of fossil fuels and the blind pursuit of renewable power.

Australian Reaction

Electricity and gas prices are now at record highs in Australia. Both businesses and households are struggling with the cost of electricity and gas. This situation is directly caused by the shift away from fossil fuels towards renewable energy.

The purpose of an electricity system is to provide affordable and reliable power to industry and households. Electricity is a fundamental input to industry, and coal baseload power, backed by gas and, if available hydro, is without doubt the cheapest option for Australia. The misguided pursuit of renewable energy has been the greatest misallocation of finance and resources in Australian history.

The Australian experiment with renewable energy has been an economic disaster and is no longer justified.

Best Option for Australia

In 1990, Australia had some of the cheapest electricity and gas in the world, which not only provided affordable energy to the average Australian but also gave a competitive edge to industry, created jobs, supported training, and boosted the economy. This should be the goal for the Australian power industry moving forward.

To achieve this, Australia must walk away from climate change ideology and renewable energy, revert to fossil fuels and plan for the introduction of nuclear power.

Climate change and renewables have been on the agenda for 35 years, building considerable momentum and resistance to change. Returning to fossil fuels and then to nuclear energy will also require many years to implement.

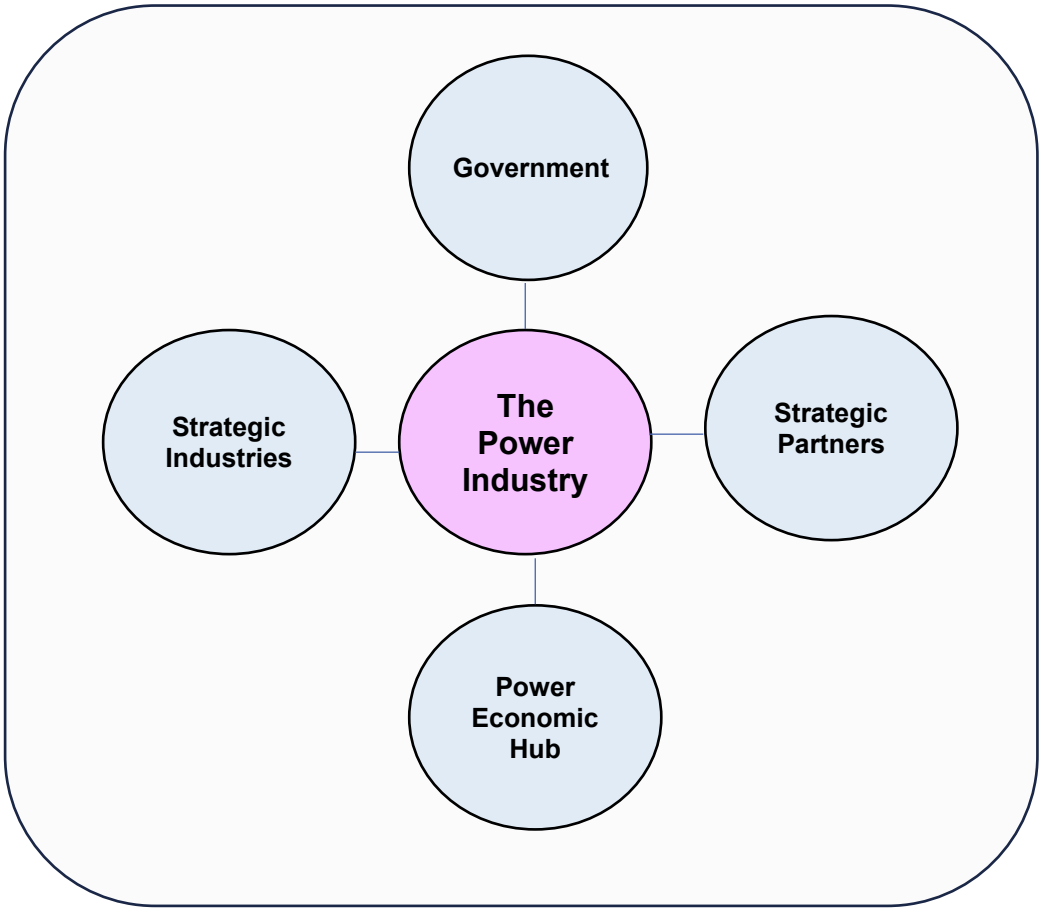
The power system is vital for the reindustrialisation of the Australian economy, and its resurrection should be considered within the context of the national strategic economic, military, and geopolitical outlook.

Failure to do so will condemn the nation to a second 11 status on the world stage, diminishing economic prospects and expose the nation to external supply chain shocks and strategic economic or military threats.

The purpose of a power industry is to provide the nation with a reliable, affordable, and sustainable supply of energy, while supporting economic growth, environmental goals, and national security.

Part 3 - Mobilising Australian Power

The Power Industry System



Government

Government action is key to the way ahead. Only the Government has the resources, budget and the ability to bring all stakeholders together for the common purpose of developing the most cost-effective power system for the nation.

For the last 35 years, Government policy has done precisely the opposite. Australia has gone from having some of the world's cheapest electricity to some of the most expensive. Government policy has been driven by ideology, not facts or real-world economics. The effect on Australia has been to effectively de-industrialise the nation and to exacerbate the cost-of-living crisis.

Government policy has been clear and often stated. It is that emissions reductions are to be the priority rather than a reliable, affordable, secure and sustainable power system.

Today, the facts have changed. It is clear that:

- The scientific arguments to support the catastrophic anthropogenic climate change hypothesis have been greatly exaggerated.

- The major emitters have walked away from emissions reductions and back towards coal, gas and nuclear.
- The Australian experiment with renewables has resulted in crippling high electricity and gas prices and has been a gross misallocation of resources.

A popular attribution to Albert Einstein is that:

Insanity is doing the same thing over and over again and expecting different results

On this basis, it can be safely argued that Australia must move back towards fossil fuels and then to nuclear power.

The following framework is proposed.

The Vision

The Government's core responsibility is to lead, inspire, galvanise the nation into action and to chart the way ahead. The vision for the power industry should therefore be based on facts, aspirational, achievable and measurable.

Proposal 1: The vision for the Australian power industry for the next 10 years is to:

- ***Aim for the most affordable electricity system in the world for consumers and industry.***
- ***Prioritise a reliable, affordable and secure electricity system.***
- ***Revert to coal base load power, backed up by gas and hydro if available.***
- ***Walk away from climate change ideology, the Paris Agreement, renewable energy, Net Zero and all forms of subsidy for renewable energy.***
- ***Commit to nuclear energy as the next-generation power source.***

Bipartisan Agreement

If the vision for the power industry is to become a reality, political differences must be set aside, and bipartisan agreement should be the foundation of the way forward. Foreign nations, almost without exception, recognise the strategic advantages of having a strong sovereign power industry and are doing whatever is necessary to achieve this goal. Australia has been naive over the past 35 years in this regard, and our lack of vision and ideology-based policies have brought the nation to the point it is at today.

Proposal 2: A bipartisan political approach on the way ahead for the power industry to be agreed.

Long Term Planning

Australia is a robust democracy that has survived and prospered as a nation. One of its fundamental flaws, however, lies within the constraints of its 3-year Federal electoral cycle, where long-term planning is often of secondary interest to political ideology and the exigencies of the next election. The power industry has taken 35 years to reach the point where it is today, and its resurrection cannot occur overnight. A long-term plan must therefore be agreed and executed.

Proposal 3: Develop a 10-year plan to create a reliable, affordable, sustainable and secure power industry, in 5-year stages.

Strategic Industries

A Strategic Industry is defined as one that the government deems essential for national security, economic development or societal reasons. The concept is not new and has been adopted in various forms by many countries, including the US, Japan, Korea, Singapore, Israel, and Taiwan, with great success. Apart from the US, none of these countries has the vast natural mineral and agricultural resources that Australia is endowed with.

These industries can play a crucial role in fostering economic diversity and complexity, technological progress, job creation and training opportunities, and they serve as a catalyst to boost demand and productivity throughout the economy.

If the nation is to commit seriously to Strategic Industries, there will inevitably be costs associated with the transition. Government financial commitments will be necessary, at least at the start. More importantly, there must be an ideological shift away from short-term populist agendas towards longer-term economic goals. One of the casualties will be the sacred cows of the Australian political landscape.

Characteristics

The following are the key features of strategic Industries.

- There must be a compelling economic, defence or social need.
- The industry should add significant value to the industrial base and be a catalyst to stimulate other sectors of the economy.
- The value added must justify the expenditure of financial and political capital.
- Targets set should be long-term, achievable and measurable.
- There must be bipartisan political agreement.
- Policy settings must enable the selected industries to be globally competitive, and for the industry goals to be achieved.
- The involvement of private enterprise and its entrepreneurial drive is essential to success.
- Government policy must provide long-term certainty to encourage private investment.
- Strategic industries should be a high-priority focus for research and development by publicly funded universities and scientific agencies.

- Must be supported with protectionist policies, to prevent foreign dumping, predatory tactics and any form of exploitation of the generous supporting measures that are involved.
- Government inducements to private enterprise, such as low-interest loans backed by the government, are key to success.

Characteristics of a Strategic Power Industry

In addition to the general features listed above, the following are the key features of a strategic power industry.

- Financial support would include grants, low-interest loans and government guarantees.
- The industry is to be operated on a commercial basis with a focus on long-term development.
- Minimal corporate tax where those profits are reinvested back into the enterprise.
- All Federal, State and Local Government taxes and charges, where possible, to be waived for the first 10 years. The aim is to remove all bureaucratic impediments to the maximum extent possible.
- Protectionism is to include shielding the industry from red, green and black lawfare. This is a strategic asset that will benefit all Australians and must be protected from ideological agendas.
- A new Federal Government Department to be created to foster the power industry.
- Industrial relations settings and union involvement must be supportive rather than destructive. This is fundamental to the long-term success of the concept.

Proposal 4: Identify the power industry as a Strategic Industry.

Private Ownership

The power industry is highly specialised and requires extensive knowledge to compete and survive. The industry also spans exploration, extraction, transport, generation, transmission, distribution, advanced technology, and retail sales.

Power industry economics must also consider ownership, operation, maintenance, stakeholders, workforce, international trade, law, finance, logistics, and the politics of the various countries involved in the supply chain. Mastering these elements is crucial for stakeholders to make informed decisions and manage risks in a complex and challenging sector. These skills form the foundation upon which a successful power business is built.

Only private enterprise possesses the skills, personnel, entrepreneurial flair, and drive needed to develop and manage the power industry. Therefore, private enterprise must be at the heart of the power industry's future.

Government Ownership

One weakness of private enterprise, however, is that registered companies can go bankrupt and their assets sold off, or the company may be taken over by competitors. As the aim is to develop a strategic power industry for the long term, there must be a reasonable certainty that the assets and infrastructure remain available to the nation if the parent company fails. Although there are no perfect solutions, government's partial ownership of the industry will ensure that assets and infrastructure cannot simply be sold off and will allow some control to keep the assets for the nation.

The government should not intervene in daily operations since this is not its strength. Its role is to establish the legislative framework and provide any support necessary to nurture and safeguard the industry until it reaches critical mass and becomes self-sufficient. As a strategic sector, this is a long-term endeavour, and the economic benefits for the nation will take years to materialise.

Proposal 5: Some form of Government ownership in the power industry be implemented.

Industrial Relations

In Australia today, the industry sentiment is that industrial relations settings are not conducive to economic growth, especially the kind of growth needed to rebuild a resilient industrial base. Current settings do not allow manufacturing and advanced industries to be competitive in the global market.

The current investigation by the Queensland Commission of Inquiry into CFMEU industrial actions has uncovered widespread, serious, and systemic misconduct. Such activities have been a major contributor to the high costs linked with Victoria's Big Build.

Some of the systemic industrial relations issues include highly prescriptive awards, complex enterprise bargaining rules, and substantial compliance and administrative costs, which drive up business expenses and lower competitiveness.

Industrial relations settings must become conducive to economic growth and not act as a sea anchor on progress.

Unions are organisations that represent workers' interests, especially about pay and working conditions. They have been particularly successful in Australia in achieving these goals.

The coal-based power industry was much larger 35 years ago, with about 10 major power stations, and industry staff were among the highest-paid workers in Australia. One of the factors in the decline of the power industry has been union activism. By their relentless pursuit of better pay and conditions, unions not only killed the Golden Goose that provided their well-paid livelihoods but also contributed to the erosion of the cost competitiveness of the coal and gas industry and Australian manufacturing

generally. Activist unions continue their self-interested and destructive behaviour today.

If the power industry is to be revived, unions need to change their behaviour and become part of the solution rather than the problem. This, of course, is unwelcome to the unions and the Australian Labor Party that shields them; however, the issue must be faced and accepted if there is to be any hope of success.

As a nation, we are all passengers in the same economic boat, and we sink or swim together.

Proposal 6: Industrial relations settings must be conducive to business competitiveness rather than acting as a sea anchor on progress.

Strategic Partners

Sun-Tzu was an ancient Chinese general who wrote The Art of War, an influential work of military strategy. He is often attributed with the quote:

If you do not seek out allies and helpers, then you will be isolated and weak.

By necessity, Australia has entered into strategic long-term military partnerships through the AUKUS and QUAD arrangements, which aim to strengthen the partners' combined military and industrial capacity and make supply chains more robust and resilient. Without these agreements, it is beyond Australia's economic capacity to acquire the weapons, technology, and manufacturing capabilities needed to maintain its sovereignty.

Likewise, the AUKUS and QUAD partners are crucial players in the global power sector and would be natural allies in Australia's vision for its energy industry. Australia cannot realise its goal of revitalising the power sector over a decade unless it partners with major international players in the industry.

It must therefore aim to identify strategic partnerships, especially regarding the introduction of nuclear energy.

Benefits to the Australian partner

- Access to technology, finance and expertise.
- Securing supply chains for both import and export markets.
- Reduced operational costs.
- Reduced logistic costs.
- Expanding the labour skills and training base.
- General savings flowing from economies of scale.

Benefits to the foreign partner

A partnership must, of course, be economically attractive to potential partners, who will presumably be foreign private enterprises, and the first question these partners will ask is - what's in it for us?

The benefits to the foreign partner are similar to those above; however, additionally, government-level economic incentives must be offered to foreign partners to encourage them to accept the arrangements. Some options include:

- Access to the Australian market.
- Reduced taxes and charges and minimal regulatory requirements.
- Buying into the existing power industry.

Proposal 7: Seek collaborative arrangements through strategic partnerships, potentially under the AUKUS or QUAD umbrellas, or with south Korea, Jaapn or Singapore.

Power Economic Hub

The real worth of a power industry lies in the wider economic centre it supports, which includes many related businesses and a workforce that develops around it over time. This point is often ignored by those who oppose coal, gas, and nuclear power.

Cheap coal and gas are the catalysts that could give the Australian industry a competitive edge against foreign competitors. Currently, we cannot compete on the basis of cheap labour. However, our extensive mineral reserves, when paired with affordable power, could serve as the foundation for adding value across numerous industries, especially on a large scale within the mining sector.

The current geopolitical outlook, especially regarding China, has increased interest in strategic minerals. This includes initiatives from the US in expanding uranium ore and other key rare earth minerals like lithium, cobalt, and platinum. Affordable electricity and gas are essential inputs for the value-adding processing of minerals across the sector.

Industrial hubs and strategic industries are vital drivers of diverse, resilient, and complex industrial bases for all major developed nations. Australia must follow suit. A clear industrial vision for the next 20 years is essential, one that capitalises on our abundant natural resources, cheap power, and gas to seize opportunities.

What will it cost?

The intent in this section is not to provide definitive costings, but rather to provide ballpark figures and an appreciation of the scale of the financial commitments that owners, operators, strategic partners and Government must undertake.

It can be safely said, however, that returning to the cheapest form of power, coal and gas, cannot be more costly than the failed renewables experiment and will gradually lead to cheaper electricity and gas for everyone.

Savings

Savings will include the following measures.

Removal of all subsidies.

- The scope of public subsidies for the so-called “free energy” from the sun and wind has been obscene, as outlined in the previous section on costs. This is conservatively estimated to be around $7 billion annually.
- Future subsidies can be removed immediately; however, existing subsidies can only be removed over time as contractual arrangements ramp down.
- Subsidies for renewable energy have not only harmed the nation but also unintentionally 'subsidise' China’s industrial base, as most of the wind and solar equipment is made in China.

Dismantling the Renewables Bureaucracy.

- Successive governments have created an almost impenetrable miasma of climate change agencies and legislation, aimed at maintaining climate change momentum, obfuscating the facts, and concealing the true costs.
- This, in turn, fostered a climate-change industry of fellow travellers and opportunistic entrepreneurs who all benefited from the lavish public funding available to advance the cause. All of this must be dismantled over time.
- Bureaucracy hampers economic progress and needs to be trimmed. In Australia today, national and state laws demand that all new projects meet strict air, water, and environmental standards, along with numerous building and labour requirements, while also addressing indigenous activism and union demands. While many of these rules are reasonable, others are excessive and show bureaucracy and activism pushed to extremes.
- Furthermore, the use of red, green, and black tape lawfare has frequently been employed to halt or delay new projects, often to the country's economic disadvantage. Ironically, many activists depend on public funds to support their causes - a classic case of biting the hand that feeds you.

This Australian tendency for self-harm is a major obstacle to future growth and must be changed if real progress is to be achieved in revitalising the energy sector, especially by adding nuclear power to the mix.

Costs

The costs so far for renewable energy have been described as the worst misallocation of national resources in the country's history – and this is probably an understatement. Future costs will also be substantial and will include funding the following measures.

- **New generation coal stations.** The remaining coal-fired power stations are aging and need to be replaced with new technology, such as high-efficiency low-emission generators. As Labor governments have reluctantly acknowledged, the remaining power stations must stay operational to provide reliable base load power when the wind doesn't blow and the sun doesn't shine!

- **Nuclear power.** As the rest of the world has realised, nuclear energy is an efficient, low-emission, low-footprint technology and is the way forward for Australia. Why shouldn't Australia benefit from its own uranium ore, as many other countries have? Additionally, Australia needs a domestic nuclear industry to support the future nuclear submarines to be acquired under AUKUS.

  The introduction of nuclear power is not cheap. However, the technology offers a fantastic opportunity for Australia to diversify its economy through uranium enrichment, nuclear waste treatment and storage in remote locations, as well as technology training and work opportunities.

- **Removing existing wind and solar farms.** As wind turbines, solar panels, and batteries are due for replacement, they must be either recycled, which is nearly impossible, or safely disposed of. Since they contain exotic and toxic materials, this process is costly and challenging, with burying likely being the most practical option. Most of this disposal will need to be funded publicly, and the expenses will be significant.

Summary

Climate Change

- **Is the climate changing? Yes.**
  The climate has been changing for 4.5 billion years and will continue to do so.

- **Is man affecting the climate? Yes.**
  The question remains, however, as to what extent.

- **Is man causing catastrophic climate change? No.**
  The idea that humans are causing catastrophic climate change is an unproven theory, mainly based on computer models that predict future climate changes, for which there is plenty of time to adapt if necessary. The forecasts made in the IPCC FAR in 1990 regarding CO2 levels and sea level rise have proved significantly overstated.

- **Is the sea level rising? Yes.**
  The sea level is rising at a rate consistent with long-term trends.

- **Is the global temperature rising? Yes.**
  Global temperatures are rising consistent with long-term trends.

- **Is man responsible for rising CO2 levels in the atmosphere? Yes.**
  CO2 levels have risen from about 250 ppm in 1850, at the start of the Industrial Revolution, to about 420 ppm in 2025. Much of this rise can be attributed to mankind, with estimates ranging from 3% to about 40%.

- **Are CO2 emissions responsible for catastrophic climate change? No.**
  There is no evidence that CO2 emissions are responsible for major climate change.

- **Are Australian emissions significant? No.**
  Australia produces about 1.1% of global emissions, and nothing Australia can do will have any significant impact on global CO2 emissions.

- **Is the Australian renewables crusade justified? No.**
  [RG1]The Australian experiment with renewable energy mitigation can be justly described as the greatest misallocation of resources in the nation's history.

- **Is the global community taking climate change seriously? No**
  The major emitters have either claimed developing country status (China, India), walked away (USA), or simply ignored (Russia). Most other minor emitters now pay only lip service to the notion of emission deductions. Australia is almost alone on its crusade against climate change.

- **Is it possible for Australia to reverse the damage done by climate change mitigation strategies to the power industry and the economy over the last 35 years? Yes**
  If there is political will, a clear way ahead exists to revive the Australian power industry, which will, over time, both lower electricity costs for consumers and give a major boost to the Australian industrial base.

Case Studies

Case Study 1: **France**
Case Study 2: **Germany**

Proposals

Proposal 1:	The vision for the Australian power industry for the next 10 years: • Aim for the most affordable electricity system in the World for consumers and industry. • Aim for the most affordable gas system in the World for consumers and industry. • Prioritise a reliable, affordable, sustainable and secure electricity system. • Revert to coal base load power, backed up by gas and hydro if available. • Walk away from climate change ideology, the Paris Agreement, renewable energy, Net Zero and all forms of subsidy for renewable energy. • Commit to nuclear energy as the next-generation power source. • Create appropriate policy settings, establish a Ministry for Power, minimise taxation and bureaucracy, and provide financial incentives.
Proposal 2:	A bipartisan political approach to the way ahead for the power industry to be agreed.
Proposal 3:	Create a 10-year plan for the power industry in 5-year steps.
Proposal 4:	Identify the power industry as a Strategic Industry.
Proposal 5:	Seek collaborative arrangements through strategic partnerships, potentially under the AUKUS or QUAD umbrellas.
Proposal 6:	Industrial relations settings must be conducive to business competitiveness rather than detracting from it.
Proposal 7:	Managed by private enterprise with some form of Government ownership and control to be implemented.

Conclusion

Only 35 years ago, Australia had some of the cheapest electricity and gas in the world, which relied on our abundant natural resources and gave industry a competitive edge over foreign rivals. Today, as a result of moving away from fossil fuels and towards renewable energy, the situation has reversed.

The renewable energy experiment has failed. The science has been proven overstated; the rest of the world has effectively walked away from the hypothesis of catastrophic manmade climate change and the related emissions reductions; and the Australian experience has led to expensive and unreliable electricity and gas.

The quest for free energy has not only been misguided but has also proven to be the greatest misallocation of money and resources in Australian history. Another unfortunate consequence has been the deindustrialisation of the nation.

Catastrophic anthropogenic climate change - remains an unproven hypothesis - based upon computer models - for events that might occur in the future - and for which there is time to adapt.

The time has come for Australia to move away from renewable energy, revert to fossil fuels, and plan for a switch to nuclear power. Affordable, reliable, and sustainable electricity and gas are crucial for revitalising the Australian industrial base, increasing economic complexity, and securing the country's economic future.

Australia is at a historic juncture where today's decisions or lack of them will have a profound impact upon our power security and economic future.

Australia now faces a simple question: Does the nation want or need affordable and reliable electricity and gas?

- If the answer is **NO,** then we are nearly there, and no further action needs to be taken.
- If the answer is **YES**, then the time for decisive and resolute action is now.

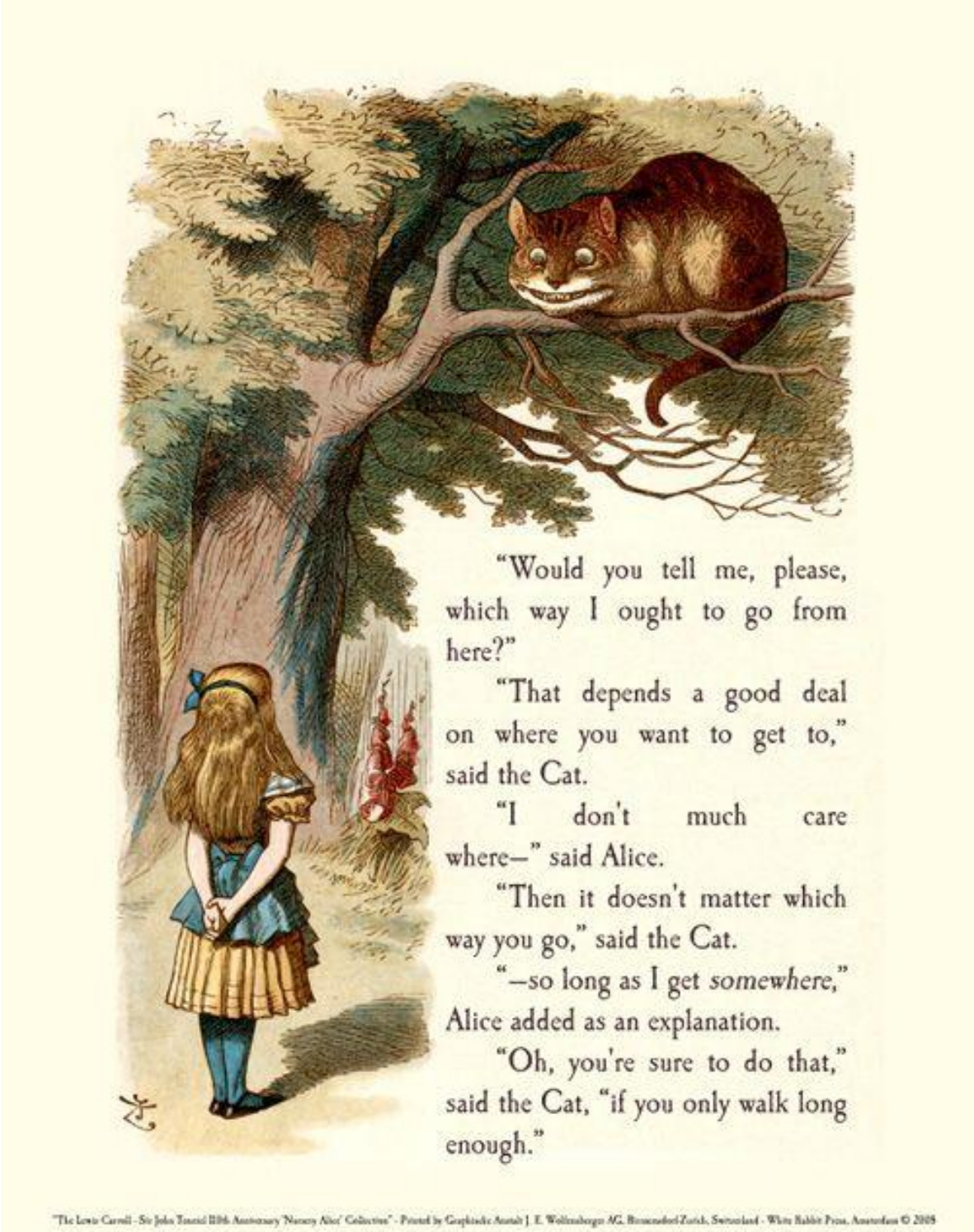
The only difference between where we are today and what could have been - or what is possible in the future - is a question of national will.

Tomorrows History Starts today.

The Final Word

The final word goes to Lewis Carroll and his “Alice in Wonderland”. Alice is lost in the forest, where she meets the Cheshire Cat and asks for directions. It is the perfect analogy for where we are today.

We are indeed at a crossroads for the future of the Australian power industry.



Supplementary Data

The Author

This paper draws on the author's experience in the Australian Army and his industry background in manufacturing, defence, and construction projects across Australia and overseas. He holds qualifications in Electrical Engineering, Systems Engineering, Management, and Operations Research. Now retired, he lives in Melbourne.

It continues the theme of previous papers, which highlight Australia's current economic and defence vulnerabilities and their possible outcomes. It will also be followed by other papers focusing on rebuilding the Australian industrial base, particularly in manufacturing.

This paper and others are available on his website: **https://www.rickgray.info**

He is a passionate Australian who wishes to see that Australia remains on the right side of history.

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