

**Submission  
No 27**

## **THE ELECTRICITY OUTAGES AFFECTING FAR WEST NSW IN OCTOBER 2024**

**Organisation:** Rainforest Reserves Australia

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# **Submission to the Committee on Environment and Planning of the Parliament of NSW**

## **NSW Electricity Outages Affecting Far West NSW – October 2024**

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### **1. Abstract**

The widespread electricity outages in Far West NSW in October 2024 are a direct consequence of reckless government energy policies prioritizing unreliable, expensive, and environmentally destructive so-called “green” energy. The push for rapid decarbonization without regard for energy security, affordability, or infrastructure resilience has placed entire regions at risk.

This submission outlines the failures of intermittent renewables—solar and wind—highlighting their negative carbon footprint, destruction of vital ecosystems, and inability to deliver consistent power. Instead of reducing emissions, this energy transition is increasing overall environmental harm while driving up energy prices, crippling industry, and imposing economic hardship on regional Australians.

Lessons from Germany and the UK show how relentless pursuit of net zero has led to skyrocketing energy costs, grid instability, and economic decline (Jenkins, 2023). If NSW and more broadly Australia continues down this path, it will suffer the same fate. This submission demands an urgent course correction to restore energy security, reliability, and affordability.

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### **2. Introduction**

In October 2024, widespread electricity outages swept across Far West NSW, leaving businesses, hospitals, and households without power for extended periods. The root cause? The same flawed energy policies that have failed elsewhere Germany, the UK, California all blindly chasing net zero without a viable plan for stable, dispatchable energy (Dixon, 2024).

The implementation of unreliable renewable energy sources without adequate backup or grid stabilization mechanisms has left NSW in an increasingly vulnerable position. Unlike traditional baseload power stations, which can generate continuous electricity regardless of weather conditions, wind and solar power depend on intermittent and unpredictable environmental factors (Lu et al., 2020). This has led to supply shortages, increased reliance on imported fossil fuels, and frequent price surges that burden consumers.

The failure to plan for long-term energy security has resulted in an energy network that is neither sustainable nor resilient. Power shortages have exposed the inherent flaws in relying

solely on renewables while simultaneously shutting down reliable coal and gas infrastructure. These policies have exacerbated grid instability, increased costs for households and businesses, and placed rural and regional communities at significant risk (Kohler & Wright, 2023).

This submission provides a comprehensive analysis of how the NSW energy crisis was entirely predictable, the devastating impact on local communities, and what must be done to prevent a full-scale collapse. Without immediate intervention, NSW will continue to suffer from energy poverty, economic downturns, and widespread environmental destruction under the guise of sustainability.

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### 3. Key Issues

#### 3.1 The Myth of “Green” Energy: High Carbon Footprint, Environmental Destruction, and Unreliable Supply

Governments continue to sell wind and solar as “clean,” yet the reality is the opposite:

- **High Carbon Footprint** – Manufacturing solar panels, wind turbines, and batteries requires massive amounts of fossil fuels. Mining for rare earth metals destroys landscapes, contaminates water supplies, and produces more emissions than traditional energy. The process of extracting and refining these minerals, such as lithium, cobalt, and rare earth elements, is highly energy-intensive and often results in severe environmental damage. Countries like China and the Democratic Republic of Congo, which dominate the supply chain for these materials, have reported widespread deforestation, water pollution, and hazardous working conditions linked to renewable energy production (Wu, 2023). The irony is that in the pursuit of net zero, governments are outsourcing pollution and environmental harm rather than addressing it effectively.
- **Environmental Destruction** – Wind and solar projects require vast land clearing, annihilating forests, displacing wildlife, and fragmenting ecosystems. The scale of land required for renewable energy infrastructure is staggering, surpassing that of traditional fossil fuel plants by several orders of magnitude. Wind turbines have been linked to significant bird and bat mortality, particularly species that are already under threat from habitat loss. Solar farms, on the other hand, result in soil degradation, increased surface temperatures, and disruptions to local weather patterns (CSIRO, 2023). The environmental costs of these so-called “green” technologies far outweigh their claimed benefits.
- **Grid Instability** – Unlike coal, gas, nuclear, or hydro, wind and solar cannot provide consistent, 24/7 power. Wind generation fluctuates depending on weather conditions, and solar power is ineffective at night or during cloudy days. The lack of large-scale energy storage solutions means that power supply frequently fails to meet demand, resulting in rolling blackouts and energy rationing (Garnaut, 2023).

The reality is clear: so-called “green” energy is neither green nor sustainable. Instead, it is an expensive, environmentally destructive, and fundamentally unreliable power source that has placed the stability of the NSW energy grid at risk. Unless policymakers acknowledge these

flaws and shift towards a more balanced energy mix, the state will continue to experience worsening energy crises, increased costs, and a diminished quality of life for its residents.

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### 3.2 Energy Poverty: Unaffordable Electricity and Economic Collapse

Germany and the UK have led the world in “green” energy policies—and both are now suffering economic devastation. The critical question is: why does the Australian Labor government believe that it can succeed where Germany and the UK have catastrophically failed? The arrogance of assuming that Australia can defy economic realities and engineering limitations while repeating the same mistakes is staggering.

Despite clear evidence of failure, the Australian government continues to push misleading narratives regarding the feasibility and affordability of renewable energy. Aidan Morrison’s research has exposed the flawed assumptions underpinning Labor’s renewable agenda, demonstrating that the actual efficiency of wind and solar is far lower than what is publicly claimed. The government has misrepresented capacity factors, ignored storage shortfalls, and concealed the full economic cost of transitioning away from reliable baseload power (Morrison, 2023).

The consequences of these policies are already visible:

- **Germany’s Energy Collapse** – After shutting down nuclear and coal in favor of renewables, Germany’s electricity prices have soared, industries are shutting down, and the country is now reliant on imported coal and gas (Jenkins, 2023).
- **The UK’s Winter Crisis** – The UK’s over-reliance on wind led to a disaster when wind output plummeted, forcing emergency coal-fired power reactivations. Millions of households faced unaffordable energy bills.
- **Australia’s Future?** – NSW is heading down the same path. The October 2024 outages are a warning sign. Energy prices are skyrocketing, and industries are closing due to unreliable supply (Kohler & Wright, 2023).

What Labor fails to acknowledge is that renewables alone cannot sustain an advanced economy without **massive energy storage, reliable backup systems, and diversified generation sources**. Wind and solar have proven insufficient in every country that has aggressively transitioned to them without maintaining baseload energy security. Instead of admitting these failures, the government continues to **manipulate data and push misinformation** to the public, misleading Australians into believing that wind and solar are economically viable alternatives.

Aidan Morrison’s essential research has highlighted how flawed modelling and politically driven energy policies have exaggerated the effectiveness of renewables, concealing the true costs associated with grid instability, transmission losses, and economic repercussions. His findings demonstrate that **intermittent renewables will never replace dispatchable power sources without a catastrophic impact on reliability and cost**. Yet, despite these realities, Labor remains committed to an energy plan that is destined to fail.

The evidence is clear, blindly chasing net zero without a plan for energy reliability is not only economically reckless but a betrayal of the Australian people. Unless the government

acknowledges these failures and course-corrects, Australians will continue to bear the brunt of misguided and ideologically driven energy policies.

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### **3.3 Transmission Failures and the Illusion of Renewable Energy Reliability**

The October 2024 blackout in Far West NSW has exposed significant weaknesses in the state's transmission infrastructure, particularly in relation to the integration of large-scale renewable energy projects. The government's push to replace coal and gas-fired power stations with wind and solar farms has placed immense strain on the grid, which was never designed to handle widespread, intermittent generation sources.

#### **Aging Infrastructure and Inadequate Upgrades**

One of the primary causes of the outage was the failure of long-distance transmission lines, many of which are aging and require significant upgrades. Renewable energy projects are often located in remote areas far from population centres, requiring vast networks of new transmission infrastructure. However, funding and construction of these projects have not kept pace with the expansion of renewable energy generation, leading to grid instability and increased vulnerability to extreme weather events.

#### **The Overreliance on Interconnectors**

As traditional baseload power plants have been decommissioned, NSW has become increasingly reliant on interconnectors to import electricity from neighbouring states. However, interconnectors are not a reliable substitute for local generation. They are prone to failures, congestion, and inefficiencies, often leading to supply shortfalls during peak demand periods. This overreliance on external energy sources has placed NSW at the mercy of external market fluctuations and transmission constraints.

#### **The Risks of Overloading the Grid**

The rapid deployment of large-scale wind and solar projects has led to an oversupply of electricity during peak production periods and severe shortages when the wind isn't blowing or the sun isn't shining. Unlike coal or gas plants, which can be ramped up or down based on demand, wind and solar generation is highly variable, making it difficult to maintain grid stability. Without sufficient energy storage capacity, excess electricity is often wasted, while demand surges lead to rolling blackouts.

#### **The Illusion of a Renewable-Only Future**

The government has long touted renewables as the key to a sustainable energy future, but the October 2024 blackout has proven otherwise. Wind and solar alone cannot provide the dispatchable power required to maintain a stable grid. Even the most optimistic projections for battery storage fall woefully short of what is needed to compensate for the variability of renewables. Countries like Germany and the UK have already faced similar issues, forcing them to reactivate coal and gas plants to prevent widespread energy crises.

## What Needs to Change?

- **Invest in Modernizing Transmission Infrastructure** – The NSW grid must be reinforced with modernized transmission lines and regional substations that can better handle fluctuations in renewable energy generation.
- **Increase Local Dispatchable Generation** – The government must prioritize investment in baseload energy sources such as nuclear, gas, and hydro to ensure that reliable electricity remains available at all times.
- **Reduce Reliance on Interconnectors** – Strengthening NSW’s self-sufficiency in energy generation will reduce vulnerability to external market disruptions.
- **Improve Energy Storage Solutions** – While batteries provide some level of backup, more extensive and scalable storage solutions such as pumped hydro must be developed to address renewable intermittency.

Unless these issues are addressed, the NSW energy grid will continue to face worsening outages, price hikes, and reliability concerns. The government must take immediate action to prevent future blackouts and restore public confidence in the energy system.

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## 3.4 The Economic and Social Cost to Regional Communities

The October 2024 electricity outages have had profound economic and social consequences for regional communities in NSW. The reliance on an unreliable energy system has left these communities vulnerable, with widespread disruption to essential services, businesses, and day-to-day life. The direct and indirect costs associated with energy insecurity are devastating, exacerbating financial hardships and deteriorating community resilience.

### Loss of Essential Services

One of the most severe consequences of the blackout was the failure of critical infrastructure, including hospitals, emergency services, and water supply systems. Many regional hospitals were forced to rely on backup generators, some of which failed due to fuel shortages. Patients requiring life-supporting medical devices faced heightened risks, while emergency services struggled to respond efficiently in the absence of reliable communication systems. Water treatment plants also suffered power failures, leading to contamination concerns and boil-water advisories across affected regions.

### Business Closures and Economic Decline

Local businesses, particularly small enterprises reliant on refrigeration, production equipment, and digital payment systems, experienced significant financial losses. Many were forced to shut down operations entirely during the outage, losing perishable inventory and revenue. The agricultural sector, already struggling with high operational costs, suffered as irrigation systems failed and cold storage facilities became inoperable.

With industries such as manufacturing and mining being highly energy-dependent, prolonged blackouts have led to job losses, reduced productivity, and the relocation of businesses to states with more reliable power supply. The cumulative economic effect on regional NSW is

substantial, with estimates suggesting hundreds of millions of dollars in losses from a single prolonged blackout event.

### **Increased Cost of Living and Financial Hardship**

Regional communities already bear a disproportionate burden in terms of energy costs. The October 2024 blackout highlighted how energy insecurity directly contributes to increased financial hardship. Many households faced additional costs from replacing spoiled food, acquiring alternative energy sources (such as diesel generators), and making urgent home repairs due to power-related damages. Furthermore, rising electricity prices, exacerbated by grid instability and the costs of subsidizing renewables, continue to disproportionately impact lower-income families and pensioners.

### **Psychological and Social Impacts**

The mental and emotional toll of energy insecurity should not be underestimated. Prolonged blackouts create significant stress, anxiety, and uncertainty among residents, particularly those with young children, elderly relatives, or chronic medical conditions. The inability to heat homes in winter or cool them during extreme summer temperatures exacerbates health risks and reduces overall quality of life. The social fabric of communities is also affected, as businesses close, job losses increase, and residents leave for areas with better infrastructure stability.

### **What Needs to Change?**

- **Reinforce Energy Security for Essential Services** – Ensuring that hospitals, emergency responders, and water treatment plants have priority access to stable energy infrastructure, with robust backup solutions in place.
- **Support Local Business and Agricultural Resilience** – Providing financial relief and incentives for regional businesses affected by energy insecurity, along with investment in microgrid and off-grid solutions.
- **Address Rising Energy Costs** – Implementing policies that cap excessive electricity price hikes and reviewing subsidies that artificially inflate costs for regional consumers.
- **Improve Public Awareness and Emergency Preparedness** – Increasing government-led initiatives to educate communities on energy conservation, backup power options, and emergency response protocols.

Unless these issues are addressed, regional NSW will continue to suffer from worsening economic instability and reduced quality of life due to the failures of current energy policies. Immediate action is necessary to safeguard these communities and restore confidence in the energy system.

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## **3.5 The False Promise of Battery Storage**

The Australian government has repeatedly promoted battery storage as the solution to renewable energy intermittency. However, the reality is that current battery technology is woefully inadequate for providing large-scale, long-duration backup power. Despite billions

of taxpayer dollars being funneled into battery storage projects, the outages in October 2024 demonstrated that batteries alone cannot stabilize the grid.

### *Insufficient Capacity for Grid Stability*

Even the most advanced battery storage facilities have limited capacity, often only providing power for a few hours at best. Large-scale energy crises, like the one NSW faced, require storage solutions that can sustain electricity supply for days or even weeks. At present, no battery system available globally can achieve this level of reliability, making them an expensive and ineffective band-aid solution.

### *The High Cost of Battery Infrastructure*

Lithium-ion battery projects come with an exorbitant price tag, with costs significantly higher than maintaining baseload coal, gas, or nuclear power plants. Furthermore, the mining, processing, and disposal of battery materials such as lithium and cobalt are resource-intensive, leading to significant environmental degradation. The push for large-scale battery installations does not consider the long-term financial and environmental costs associated with their production and limited lifespan.

### *Fire Risks and Safety Concerns*

Lithium-ion batteries pose significant fire risks, as evidenced by multiple battery storage site explosions worldwide. Once ignited, these fires are extremely difficult to control, releasing toxic fumes and posing serious health risks to nearby communities. The reliance on an energy solution that introduces new hazards only compounds the risks associated with NSW's flawed renewable energy strategy.

### *Recycling and Waste Management Challenges*

The disposal of large-scale battery systems remains a major unresolved issue. Current recycling processes for lithium-ion batteries are inefficient, with most expired batteries ending up in landfills. This creates yet another environmental disaster that contradicts the government's claim that renewables are the sustainable path forward. Unless significant advancements in battery recycling emerge, Australia will soon face a battery waste crisis of its own making.

### *What Needs to Change?*

- **Reevaluate the Role of Battery Storage** – Governments must recognize that battery storage alone cannot provide the level of energy security needed to sustain the grid. A diversified energy strategy is required.
- **Invest in Alternative Storage Solutions** – Long-duration energy storage methods such as pumped hydro, hydrogen storage, and molten salt storage must be explored as more viable and sustainable alternatives.
- **Shift Focus to Reliable Energy Generation** – Instead of over-relying on expensive and ineffective batteries, policymakers should invest in reliable energy sources such as nuclear and gas peaking plants that can provide dispatchable power on demand.



- **Implement Proper Risk Assessments** – Fire risks associated with battery storage facilities must be thoroughly assessed before large-scale deployment, with stringent safety protocols enforced.
- **Develop Recycling and Disposal Infrastructure** – Investment in battery recycling technology must be prioritized to prevent an impending environmental crisis caused by battery waste.

Battery storage has been presented as a silver bullet for Australia’s renewable energy ambitions, but the evidence clearly shows it is not a scalable, long-term solution. The NSW government must rethink its energy policies and focus on sustainable and reliable solutions that ensure long-term grid stability and energy security for all Australians.

## 4. Case Studies and Evidence

### 4.1 Germany’s Economic Collapse Under Green Energy Policies

Germany was once considered the global leader in renewable energy transformation. However, its “Energiewende” (energy transition) strategy has resulted in catastrophic economic and energy consequences. The aggressive shutdown of nuclear and coal plants in favour of wind and solar has left the country reliant on intermittent power sources, which have failed to provide stable electricity when needed.

#### *Soaring Energy Prices and Economic Consequences*

Germany’s electricity prices are now among the highest in the world, burdening households and industries alike. The cost of electricity has more than doubled in the past decade due to heavy subsidies for renewables and the lack of affordable, dispatchable energy to back up unreliable wind and solar production. The result has been industry closures, job losses, and the relocation of major manufacturers to countries with more stable and affordable energy markets.

#### *Dependence on Imported Energy*

Despite its push for renewables, Germany has been forced to rely on imported coal and natural gas to meet its energy needs, particularly during periods of low wind and solar output. The 2022-2023 energy crisis further exposed this vulnerability when the country had to reactivate coal power plants to prevent widespread blackouts. This reliance on external energy sources undermines Germany’s supposed commitment to energy independence and emissions reduction.

#### *Implications for Australia*

Germany’s failure should serve as a warning to Australia. The blind pursuit of net zero policies without a reliable energy transition plan will lead to similar consequences—higher electricity costs, economic decline, and increased reliance on fossil fuel imports. NSW policymakers must learn from Germany’s mistakes and adopt a balanced energy mix that prioritizes reliability and affordability over ideology.

## 4.2 The UK's Energy Crisis and Blackout Risks

The United Kingdom has faced repeated energy crises due to its over-reliance on wind power. The nation's push to transition away from fossil fuels has resulted in a dangerously fragile grid, susceptible to price spikes and electricity shortages whenever wind output drops.

### *The 2021-2022 Wind Power Shortage*

In 2021, the UK experienced one of its worst energy crises when a prolonged period of low wind speeds significantly reduced electricity generation. This led to a dramatic increase in energy prices, with costs surging by more than 250% in some areas. Households and businesses faced record-high electricity bills, forcing the government to intervene with subsidies to prevent mass energy poverty.

### *The Role of Gas and Coal in Preventing Blackouts*

Despite efforts to phase out fossil fuels, the UK was forced to restart coal-fired power plants to prevent rolling blackouts. The National Grid had to rely on emergency backup generators, exposing the deep flaws in a system that depends too heavily on intermittent renewables without sufficient backup capacity.

### *Implications for Australia*

Australia's energy policies are mirroring the UK's approach, with increasing dependence on wind and solar while neglecting investment in baseload power sources. If NSW follows this path, it will inevitably face the same issues, skyrocketing energy prices, unreliable power supply, and emergency reliance on fossil fuels that were prematurely phased out.

NSW must recognize that wind and solar alone cannot sustain a modern economy. Instead of repeating the UK's mistakes, Australia should diversify its energy sources by incorporating nuclear, gas, and pumped hydro to ensure grid stability and affordability.

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## 4.3 NSW's October 2024 Blackout: A Warning Sign

The electricity outage in Far West NSW in October 2024 was not an isolated event but a direct result of misguided energy policies that have prioritized political ideology over practical energy solutions. This blackout should serve as a stark warning of what lies ahead if NSW continues to push unreliable energy sources at the expense of grid stability and economic security.

### *Failure of Transmission Infrastructure*

The renewable energy transition has placed an overwhelming burden on the state's transmission infrastructure. Designed to support a centralized power system with baseload energy sources, the current grid is ill-equipped to handle the erratic nature of wind and solar power (Australian Energy Market Operator, 2023). The 2024 blackout was caused, in part, by transmission failures exacerbated by overreliance on long-distance renewable energy

transport. When the system failed, there was no immediate backup to fill the void, leading to widespread outages.

### *Lack of Dispatchable Energy Generation*

Coal and gas plants that once provided stable, reliable electricity have been decommissioned without viable replacements. The state has gambled on batteries and interconnectors, both of which failed to prevent the blackout. The inherent intermittency of wind and solar means that when conditions are not optimal, energy generation plummets—often at peak demand times. The result is a grid that cannot cope with fluctuations, leaving businesses, hospitals, and homes without power.

### *Economic and Industrial Consequences*

The blackout had dire consequences for local industries, many of which rely on constant energy supply for production, refrigeration, and essential operations. Farmers lost produce, manufacturing plants were forced to halt operations, and small businesses suffered financial losses they may never recover from (Institute for Public Affairs, 2023). When energy is no longer affordable or reliable, investment disappears, and economic stagnation follows.

### *Environmental Devastation in the Name of “Green” Energy*

The blackout was not just an economic failure—it symbolized the devastating environmental toll of misguided energy policies. The so-called “green” revolution has come at a catastrophic cost to Australia’s natural ecosystems.

- **Deforestation and Habitat Destruction** – Vast areas of pristine bushland have been cleared to make way for wind and solar farms, destroying the habitats of countless native species (Australian Koala Foundation, 2023). Koalas, gliders, and other endangered fauna are being displaced and killed at an alarming rate.
- **Bird and Bat Fatalities** – Wind turbines are responsible for the deaths of thousands of birds and bats each year, including threatened species such as the wedge-tailed eagle (Bureau of Land Management, 2022). These machines are indiscriminate killers, yet their impact is routinely ignored by policymakers.
- **Soil and Water Contamination** – Solar farms alter local soil temperatures, disrupt groundwater flow, and contribute to erosion. Toxic chemicals used in solar panel production leach into surrounding environments, creating long-term contamination risks (CSIRO, 2023).

### *The Great Deception: Misinformation on Renewable Energy*

The greatest tragedy of this energy transition is the deception being fed to the public. Governments and media outlets continuously claim that renewable energy is “cheaper” and “cleaner” than fossil fuels, yet the evidence overwhelmingly disproves these claims.

- **The Myth of Cheap Renewables** – Proponents of wind and solar falsely claim these technologies are cost-competitive with coal and gas. However, they deliberately ignore the massive taxpayer subsidies keeping these industries afloat (Institute of Energy Economics, 2023). Without these artificial supports, renewables would collapse under their own inefficiencies.

- **The Illusion of Emissions Reduction** – Wind and solar require vast infrastructure, from mining rare earth minerals to constructing massive transmission networks, all of which have substantial carbon footprints (IEA, 2023). The supposed environmental benefits of renewables disappear when lifecycle emissions are properly accounted for.
- **The Political Agenda Behind Net Zero** – The push for net zero is not about the environment; it is about political control. Governments and corporate elites are using climate hysteria to justify massive wealth transfers, industry closures, and increased dependence on unreliable energy imports (Forbes, 2023).

### *A Legacy of Failure*

What will the legacy of this green energy revolution be? Will it be a thriving, sustainable energy sector? No—it will be blackouts, economic collapse, and a devastated natural landscape. The Far West NSW blackout is only a preview of what is to come unless NSW changes course.

The current energy trajectory will leave future generations with a broken system, an unaffordable grid, and irreparable damage to Australia’s unique ecosystems. The destruction we are witnessing today is being done **in the name of progress**, yet it is nothing more than a betrayal of Australia’s energy security, economic prosperity, and natural heritage.

**It is time to stop the destruction. It is time to put common sense back into energy policy. NSW must reject reckless net zero policies and restore reliable, affordable, and environmentally responsible energy generation before it is too late.**

## **5. Policy Recommendations for Energy Security in NSW**

### **5.1 The Need for a Balanced Energy Mix**

The failures of intermittent renewable energy have demonstrated the necessity of a diversified energy mix that includes baseload generation sources capable of providing stable, dispatchable power. A well-balanced energy strategy must prioritize reliability, affordability, and environmental sustainability without sacrificing economic stability.

#### **Reintegrating Coal and Gas with Modern Technologies**

Despite government efforts to phase out coal and gas, these sources remain essential for maintaining grid stability. Advanced technologies, such as high-efficiency, low-emission (HELE) coal plants and carbon capture and storage (CCS), can significantly reduce emissions while ensuring energy reliability (Garnaut, 2023). Australia has vast reserves of high-quality coal, and abandoning these assets prematurely would be both economically and strategically irresponsible.

#### **The Role of Nuclear Energy in NSW’s Future**

Nuclear power has been a proven solution in countries that have successfully transitioned to low-emission energy without compromising grid stability. Nations such as France, Canada,

and South Korea have demonstrated that modern nuclear reactors provide affordable, consistent power with a minimal environmental footprint (World Nuclear Association, 2023). Legal barriers to nuclear energy in Australia must be reassessed if NSW is to secure a reliable energy future.

### **Expanding Pumped Hydro and Alternative Storage Solutions**

While lithium-ion batteries have limitations, pumped hydro storage offers a viable large-scale storage solution. Australia's geography presents multiple opportunities for pumped hydro projects, which can store excess energy from intermittent sources and release it during peak demand periods (CSIRO, 2023). Investment in advanced hydrogen storage and molten salt storage should also be considered as complementary technologies.

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## **5.2 Reforming Renewable Energy Policy**

The current approach to renewable energy development has led to devastating environmental consequences and economic inefficiencies. If renewables are to play a role in Australia's future energy strategy, they must be deployed responsibly and without excessive reliance on taxpayer-funded subsidies.

### **Eliminating Renewable Subsidies and Holding Developers Accountable**

Government subsidies for wind and solar have created an artificially inflated market that is unsustainable without constant taxpayer support. Developers must be required to cover the full lifecycle costs of their projects, including decommissioning and waste management. Additionally, stricter environmental impact assessments must be enforced to prevent widespread destruction of native habitats.

### **Placing Environmental Safeguards on Wind and Solar Projects**

Wind and solar farms must be subject to the same rigorous environmental regulations as other infrastructure projects. Current policies have allowed renewable energy projects to bypass key environmental protections, resulting in deforestation, wildlife habitat destruction, and soil degradation (Australian Koala Foundation, 2023). Stricter planning guidelines must be implemented to minimize these impacts.

### **Investing in Local Manufacturing and Supply Chains**

Australia's reliance on imported solar panels and wind turbine components, particularly from China, has created significant supply chain vulnerabilities. Local manufacturing of renewable energy infrastructure must be prioritized to ensure economic benefits remain within Australia and to reduce reliance on ethically questionable mining operations overseas (IEA, 2023).

## 5.3 Strengthening Transmission and Grid Resilience

The energy transition has exposed NSW's outdated and fragile transmission network. Future investments must prioritize grid resilience to prevent further blackouts and system failures.

### **Upgrading and Expanding Transmission Infrastructure**

The government must commit to modernizing the electricity grid by integrating smart-grid technology and upgrading aging transmission lines. A robust transmission network will reduce system congestion, improve energy distribution efficiency, and allow for better management of supply and demand fluctuations (Australian Energy Market Operator, 2023).

### **Reducing Overreliance on Interconnectors**

NSW has become increasingly dependent on electricity imports from other states, making it vulnerable to supply disruptions. Strengthening local energy production and storage capacity will reduce reliance on interconnectors and enhance energy independence (Energy Security Board, 2023).

### **Decentralized Energy Generation and Microgrids**

To enhance resilience, investments in microgrid technology should be expanded. Regional and remote communities should have access to decentralized power sources that reduce reliance on the broader grid, preventing mass outages during system failures (CSIRO, 2023).

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## 5.4 Ensuring Energy Affordability for NSW Consumers

The soaring cost of electricity has placed an unfair financial burden on NSW households and businesses. Policies must be implemented to protect consumers from unsustainable price increases.

### **Reviewing and Regulating Energy Market Pricing**

Electricity market reforms must be introduced to prevent price manipulation by energy providers. The transition to renewables has led to volatile pricing, with consumers bearing the brunt of supply shortages and wholesale market fluctuations (Institute for Public Affairs, 2023). A review of the National Electricity Market pricing structure is needed to restore affordability.

### **Reforming Retail Energy Pricing and Tariffs**

Current pricing models penalize consumers for using energy at peak times while providing minimal incentives for energy efficiency. A fair and transparent tariff system must be introduced to ensure affordability for low-income households and small businesses (Australian Competition and Consumer Commission, 2023).

## **Supporting Vulnerable Households**

Energy affordability policies must include financial assistance programs for pensioners, low-income families, and rural communities most affected by price spikes. Direct energy rebates and targeted subsidies for essential services should be expanded (Australian Council of Social Service, 2023).

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## **5.5 Long-Term Energy Policy for NSW's Future**

NSW must develop a long-term energy strategy that prioritizes resilience, affordability, and sustainability without compromising economic growth. This requires a comprehensive reassessment of energy policy frameworks.

### **Developing a National Energy Security Strategy**

Energy security should be treated as a matter of national importance, with a coordinated federal and state approach to planning, investment, and infrastructure development (National Energy Security Board, 2023). A bipartisan commitment to pragmatic energy policy is needed to prevent further politicization of Australia's energy sector.

### **Prioritizing Energy Independence**

Australia must reduce its reliance on foreign energy imports, particularly in the context of geopolitical instability and global energy market fluctuations. Strengthening local supply chains, enhancing domestic refining capacity, and expanding energy storage will ensure national energy security (Forbes, 2023).

### **Conclusion**

NSW stands at a crossroads. It can either continue down the path of intermittent, unreliable energy policies that have already led to blackouts, economic decline, and environmental destruction, or it can adopt a pragmatic, balanced energy strategy that prioritizes stability, affordability, and sustainability. The recommendations outlined in this submission provide a clear framework for restoring energy security in NSW.

It is time for policymakers to move beyond ideological commitments and make decisions that serve the best interests of all Australians. The legacy we leave must be one of resilience, prosperity, and a truly sustainable future.

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