Submission Steel River East BESS

Due Date: 30 June 2025

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Executive Summary

Rainforest Reserves Australia strongly opposes the Steel River East Battery Energy Storage System (BESS) proposed for Mayfield West, Newcastle. Despite claims of climate and grid benefits, the project poses unacceptable environmental, community, economic, legal, and ethical risks that outweigh any purported advantages.

The project threatens public health and the environment through risks of thermal runaway fires, toxic smoke and PFAS contamination, water and soil pollution, and cumulative impacts on Newcastle's already burdened air shed. It fails to account for lifecycle carbon emissions, misrepresenting its true climate impacts and undermining NSW's net zero commitments.

Supply chains for lithium-ion batteries are linked to modern slavery and child labour, contradicting NSW's obligations under the Modern Slavery Act 2018 (NSW) and exposing Ausgrid and the NSW Government to legal and reputational risks.

The BESS increases financial risks for councils and taxpayers due to inadequate decommissioning plans, potential site contamination, and long-term remediation liabilities. It threatens property values, local business continuity, and community wellbeing due to noise, vibration, and fire hazard concerns.

The Environmental Impact Statement fails to meet requirements under NSW legislation, lacking robust cumulative impact assessments, worst-case scenario modelling, transparent carbon accounting, and enforceable mitigation and decommissioning strategies.

Rainforest Reserves Australia submits that the Steel River East BESS should not proceed. It is neither green nor clean and fails the community, the environment, and the principles of responsible governance.

1. Introduction

The Steel River East Battery Energy Storage System (BESS), proposed for Mayfield West, Newcastle, is presented as a climate solution intended to support grid stability and renewable energy integration. However, this submission by Rainforest Reserves Australia highlights that the project represents a significant threat to environmental integrity, community health, and economic stability while exposing Ausgrid, the NSW Government, and the local community to legal, ethical, and financial risks.

Located within the Steel River Industrial Estate, the BESS is positioned in an area already experiencing high cumulative environmental pressures. This project would add to the pollution burden on Newcastle's air, water, and soil, while intensifying fire risk, noise pollution, and community safety concerns. It would lock in environmental degradation and carbon-intensive processes under the false promise of clean energy.

The submission systematically demonstrates that the Steel River East BESS fails to meet NSW legislative requirements under planning, environmental protection, and modern slavery obligations. It critically examines the project's misleading carbon accounting, the absence of transparent supply chain ethics, and the inadequate planning for decommissioning and site remediation. Furthermore, it outlines how the project jeopardises property values, disrupts local business continuity, and imposes long-term liabilities on councils and taxpayers.

Rainforest Reserves Australia urges the NSW Government, Ausgrid, and relevant decision-makers to reject the Steel River East BESS proposal in the interest of protecting the environment, upholding the law, and safeguarding the wellbeing of the Newcastle community for current and future generations.

2. Environmental and Public Health Objections

Before presenting detailed objections, it is essential to note that the Steel River East BESS raises a broad suite of environmental and public health concerns relevant to its construction, operation, emergency response, and decommissioning phases. These concerns extend across air, water, soil, and noise pollution; public safety risks; cumulative ecological impacts; and long-term health effects on the Newcastle community. Each of the following subsections outlines critical risks, underpinned by evidence, to demonstrate why the project should not proceed and why it fails to align with NSW's obligations to protect community health, environmental integrity, and sustainable urban development.

2.1 Fire Risk and Thermal Runaway

Lithium-ion BESS facilities are inherently prone to thermal runaway, a chain reaction where a cell failure can escalate to neighbouring cells, leading to prolonged fires, explosions, and the release of highly toxic gases. The Moorabool BESS fire in Victoria exemplifies the catastrophic potential, burning for three days and requiring a 150-metre exclusion zone due to

toxic smoke, which necessitated extensive remediation of soil and water due to contamination (Fire Rescue Victoria, 2021). Research by Mayfield et al. (2023) highlights that suppression of such fires is exceptionally difficult, often requiring prolonged cooling and monitoring, and these incidents pose risks to emergency services, adjacent infrastructure, and the health of nearby workers and residents. The Steel River East site, surrounded by industrial activity and close to urban populations, significantly elevates the public safety risk due to the potential for uncontrollable fires, toxic smoke inhalation, and emergency service strain, contradicting NSW community protection policies.

2.2 PFAS and Chemical Contamination

PFAS compounds, often used in firefighting foams and present within battery electrolytes, are persistent, bioaccumulative, and toxic, posing significant environmental and human health hazards (EPA NSW, 2023). During a BESS fire, suppression efforts can cause PFAS-laden runoff to contaminate soils and waterways. The Steel River East site's proximity to drainage systems leading into the Hunter River increases the risk of contaminating aquatic ecosystems, fisheries, and drinking water sources. Guelfo et al. (2024) identify lithium-ion batteries as a significant global source of emerging PFAS contaminants that are inadequately regulated under current BESS frameworks. This contamination is linked to serious health risks, including carcinogenic, immunotoxic, and reproductive impacts on local populations and wildlife. This is incompatible with NSW's commitments to waterway protection, biodiversity preservation, and community health under state environmental protection legislation.

2.3 Noise and Vibration

Battery Energy Storage Systems generate persistent low-frequency noise and ground-borne vibrations due to the continuous operation of HVAC cooling systems, inverters, and transformers required to regulate battery temperatures and power conversion processes. WHO (2018) guidelines identify that prolonged exposure to low-frequency noise can lead to disrupted circadian rhythms, chronic sleep disturbance, cardiovascular strain, anxiety, and cognitive impairment, while Smith et al. (2022) found measurable impacts on concentration, irritability, and workplace productivity in nearby industrial and commercial settings. The Steel River East BESS, operating 24/7, will intensify the cumulative noise pollution in the Steel River Industrial Estate and may affect workers at neighbouring facilities, including those with sensitive electronic equipment, laboratories, and data centres. NSW EPA's Industrial Noise Policy requires careful assessment of low-frequency noise impacts; however, many BESS EIS assessments understate the true cumulative exposure and fail to monitor infrasound impacts, leading to regulatory gaps that place communities and industrial workers at risk.

2.4 Air Quality Impacts

Air quality impacts from the Steel River East BESS arise during construction, operational maintenance, and emergency venting or fire events. Construction phases will involve heavy vehicle movements, excavation, dust generation, and diesel emissions, increasing PM2.5 and PM10 concentrations, which are known to exacerbate respiratory and cardiovascular illnesses (NSW Health, 2022). During operations, BESS facilities can release hazardous gases such as hydrogen fluoride, hydrogen chloride, and phosphorus oxyfluoride under fault or thermal runaway conditions, contributing to local air toxics loading (CSIRO, 2022). These gases can cause acute respiratory distress and long-term lung damage. Newcastle's industrial air shed is already burdened by pollutants, and the addition of BESS-related emissions and the potential for toxic gas releases in emergencies further threaten air quality objectives under the Protection of the Environment Operations Act 1997 (NSW). The potential for smoke and gas emissions during fire events also increases the risk of evacuations and health alerts, with long-term psychological impacts on local communities and workers in the Steel River precinct.

Furthermore, it is critical to recognise that battery fire incidents can result in the release of hydrogen fluoride, which is acutely toxic and corrosive, even at low concentrations. A study by the CSIRO (2022) confirms that hydrogen fluoride emissions during lithium-ion battery fires can cause severe respiratory harm, corrode emergency equipment, and persist in the environment, necessitating extensive remediation efforts that are not accounted for in project documentation.

2.5 Water Resource Impacts

In addition to immediate fire suppression contamination risks, the Steel River East BESS threatens the long-term integrity of local groundwater due to potential leaks from battery cells and associated chemical storage, which can percolate through industrial fill and reach aquifers linked to the Hunter River floodplain. Research indicates PFAS can migrate through soils into groundwater (EPA NSW, 2023), and combined with heavy metal runoff, these contaminants can persist for decades, affecting water quality for agriculture and human consumption. The proximity of the site to drainage networks increases the likelihood of contaminated stormwater discharge during heavy rainfall, exacerbated by the lack of established PFAS remediation pathways in NSW (Guelfo et al., 2024).

2.6 Soil Contamination and Land Degradation

Soil contamination risks are heightened by the industrial fill and variable containment systems on BESS sites, with leaching of cobalt, nickel, manganese, and lithium compounds from damaged cells and thermal events (Guelfo et al., 2024). Lithium salts are water-soluble, spreading contamination through surface and sub-surface pathways, while fire residues can include acidic and fluorinated compounds that degrade soil structure and pH balance, leading to reduced vegetation growth and increased erosion. Remediation of such contamination

requires specialised techniques, and failures in long-term monitoring by proponents can result in legacy contamination that reduces land value and limits future land use, creating conflicts with obligations under the Contaminated Land Management Act 1997 (NSW) (NSW EPA, 2023).

2.7 Flora and Fauna Impacts

The Steel River East BESS presents a substantial risk to local flora and fauna through multiple pathways. Chemical contamination from PFAS, heavy metals, and battery electrolytes can enter drainage lines leading to the Hunter River, impacting aquatic species, macroinvertebrates, and fish that form the base of the regional food web (BirdLife Australia, 2023). Bioaccumulation of contaminants such as cobalt, nickel, and PFAS in aquatic organisms can cause reproductive failures and population declines in fish and bird species, disrupting ecosystem stability.

Light pollution from security and operational lighting can disrupt nocturnal bird migration, confuse pollinators, and interfere with roosting and breeding behaviours, further impacting species dependent on seasonal cycles for survival. Vibration and low-frequency noise from continuous BESS operations can interfere with the communication, navigation, and foraging behaviours of bats, small mammals, and invertebrates, reducing local biodiversity.

Habitat fragmentation caused by additional fencing, clearing, and vehicle movements during construction and maintenance reduces the connectivity of green corridors critical for wildlife movement, contrary to local conservation strategies. These impacts conflict with obligations under the NSW Biodiversity Conservation Act 2016 and the federal Environment Protection and Biodiversity Conservation Act 1999, undermining commitments to protect threatened species, ecological communities, and the integrity of riparian habitats along the Hunter River corridor.

Failure to adequately assess and mitigate impacts on threatened species, ecological communities, and their habitats under the *Biodiversity Conservation Act 2016 (NSW)* and the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* may expose the proponent and relevant approval authorities to legal challenge. In *Humane Society International Inc v Kyodo Senpaku Kaisha Ltd* [2008] FCA 3, the Federal Court confirmed that breaches of the EPBC Act can result in injunctive relief sought by environmental organisations. Similarly, in *Barrington-Gloucester-Stroud Preservation Alliance Inc v Minister for Planning and Infrastructure* [2012] NSWLEC 197, the NSW Land and Environment Court held that the failure to properly assess threatened species impacts could invalidate project approvals. Proceeding with the Steel River East BESS without robust flora and fauna assessments and enforceable mitigation measures may result in legal proceedings to restrain the project or seek review of any approval granted, creating legal and financial risks for the proponent and decision-makers.

2.8 Emergency Services Capacity

The Steel River East BESS poses significant challenges to local emergency services. Lithium-ion battery fires require specialist firefighting equipment, thermal imaging, and large volumes of water for extended periods to contain thermal runaway events, which can last days (AFAC, 2023). Most local brigades are not equipped or trained to manage BESS-specific hazards, placing firefighters at risk of exposure to toxic smoke and explosion hazards. Long-duration responses divert resources from other critical emergencies in Newcastle, reducing community safety during bushfire seasons or industrial accidents. The lack of clear site-specific emergency management plans and failure to model worst-case fire and plume scenarios violates the precautionary principle and risks contravening obligations under the Work Health and Safety Act 2011 (NSW).

2.9 Inadequate Decommissioning Planning

Decommissioning planning for BESS facilities remains globally underdeveloped, with most proponents failing to address the full lifecycle risks associated with lithium-ion battery waste, toxic fire residues, and site contamination. Lithium-ion BESS systems produce waste streams that include cobalt, nickel, manganese, lithium salts, PFAS compounds, and degraded plastics, all of which require specialised hazardous waste disposal under strict environmental controls (UNEP, 2023).

Without clear, enforceable decommissioning plans and secured financial bonds, there is a significant risk that operators will fail to remediate the site, leaving the burden on councils and taxpayers. Additionally, fire-damaged systems can require extensive soil excavation and water treatment, incurring high remediation costs that are often underestimated in Environmental Impact Statements. The lack of closed-loop recycling infrastructure in Australia for large-scale BESS means components are often exported under inadequate tracking regimes, increasing the risk of illegal dumping or unsafe processing offshore, in breach of Australia's international obligations under the Basel Convention.

The absence of guaranteed recycling pathways and financial assurance for decommissioning contravenes the NSW Contaminated Land Management Act 1997 and Protection of the Environment Operations Act 1997, creating unacceptable, unresolved environmental, social, and financial risks for the Steel River East BESS project.

2.10 Cumulative Impacts

The Steel River East BESS contributes to significant cumulative environmental, health, and safety impacts when assessed alongside existing and proposed industrial activities in the Steel River precinct and broader Newcastle region.

Cumulative noise pollution from multiple industrial facilities exacerbates sleep disturbance, mental health stress, and cardiovascular impacts on workers and surrounding communities (WHO, 2018; NSW Health, 2022). Additional emissions from construction, maintenance

traffic, and potential toxic releases during BESS incidents add to an already burdened air shed, contravening NSW air quality objectives (NSW EPA, 2023).

The cumulative water contamination risk from PFAS, heavy metals, and toxic runoff poses a compounded threat to the Hunter River and downstream ecosystems (CSIRO, 2022). Ecologically, the addition of light pollution, vibration, and chemical contamination from BESS operations can fragment remaining wildlife corridors and reduce biodiversity resilience in an urban landscape already under stress (BirdLife Australia, 2023).

The NSW Planning and Environment Department's guidance requires the consideration of cumulative impacts in decision-making; however, these are often inadequately assessed in isolated project EIS processes, resulting in a failure to account for the true community and environmental risks of layered industrial developments.

The Steel River East BESS, when considered within this broader context, represents a significant incremental burden that undermines sustainable urban planning and public health protections in the Newcastle region.

The absence of a regional, independent cumulative impact assessment undermines the integrity of planning processes under the Environmental Planning and Assessment Act 1979 (NSW) and State Environmental Planning Policies (SEPPs). Rainforest Reserves Australia recommends that the Department require an independent cumulative assessment across the Steel River precinct before considering approval for any additional industrial proposals, including the BESS.

3. Modern Slavery and Supply Chain Breaches

Beyond environmental considerations, the ethical implications of the Steel River East BESS supply chain demand scrutiny. NSW's commitments under the Modern Slavery Act 2018 (NSW) and Australia's obligations under international conventions require proactive measures to prevent forced and child labour in the procurement of critical minerals used in battery systems (Amnesty International, 2021; US Department of Labor, 2022).

The Steel River East BESS is at high risk of breaching NSW's obligations under the Modern Slavery Act 2018 (NSW), Local Government Act 1993, and Australia's international commitments to eliminate forced labour from supply chains.

Lithium-ion batteries rely heavily on cobalt, nickel, and manganese sourced predominantly from regions with documented evidence of child labour and forced labour practices, including the Democratic Republic of Congo (Amnesty International, 2021; US Department of Labor, 2022). Reports confirm that children as young as seven are working in hazardous conditions in artisanal cobalt mines, with severe human rights violations occurring throughout these supply chains (Amnesty International, 2021).

The NSW Anti-Slavery Commissioner has confirmed that all NSW government entities, including Ausgrid as a 49.6% state-owned entity, have a duty under Section 438ZE of the NSW Local Government Act 1993 to ensure that goods and services procured, hosted, or contracted, including under Power Purchase Agreements, are free from modern slavery (NSW Anti-Slavery Commissioner, 2022).

The Steel River East BESS documentation fails to provide detailed supply chain mapping, independent audits, or mitigation pathways addressing forced labour risks. This omission presents reputational, legal, and ethical risks for Ausgrid, NSW Government, and associated stakeholders, with potential violations of both domestic law and Australia's commitment to Sustainable Development Goal 8.7 to eradicate forced labour and child labour (UN SDG, 2023).

Additionally, lithium-ion battery supply chains have been linked to environmental degradation, displacement of communities, and unsafe working conditions for workers, compounding the ethical issues embedded in this project (Amnesty International, 2021; US Department of Labor, 2022).

Proceeding with this project without transparent, independent auditing of its supply chains and active remediation measures would directly undermine NSW's anti-slavery commitments, contribute to the perpetuation of forced labour, and contradict Australia's obligations under international human rights frameworks.

4. Legal and Planning Non-Compliance

The Steel River East BESS project raises significant concerns regarding compliance with applicable state and federal legal frameworks, including the Environmental Planning and Assessment Act 1979 (NSW), Protection of the Environment Operations Act 1997 (NSW), Contaminated Land Management Act 1997 (NSW), and the Work Health and Safety Act 2011 (NSW).

Past cases illustrate that failures to conduct comprehensive, precautionary environmental assessments have resulted in successful legal challenges against projects in NSW and Australia. In **Hunter Community Environment Centre Inc v Minister for Planning [2005] NSWLEC 98**, the Land and Environment Court held that inadequate consideration of cumulative environmental impacts and greenhouse gas emissions constituted a breach of the Environmental Planning and Assessment Act 1979 (NSW), requiring the project to be reconsidered. Similarly, in **Gray v Minister for Planning [2006] NSWLEC 720**, the Court confirmed that greenhouse gas emissions are a relevant consideration under the Act, and that a failure to assess these impacts can render a development consent invalid.

The Steel River East BESS faces comparable litigation risk if approved without a transparent, enforceable assessment of worst-case fire, contamination, and emissions scenarios, as well as cumulative impacts in the heavily industrialised Steel River precinct. Should approval

proceed despite these deficiencies, individuals have the right to seek judicial review in the NSW Land and Environment Court, asserting breaches of statutory duties under the Environmental Planning and Assessment Act 1979 (NSW), Protection of the Environment Operations Act 1997 (NSW), and the precautionary principle embedded in Australian environmental law. These risks impose legal uncertainty for the proponent and responsible authorities, reinforcing that the project should not proceed in its current form.

The project's Environmental Impact Statement (EIS) fails to adequately assess worst-case scenarios relating to thermal runaway incidents, chemical contamination, and the release of toxic gases, contravening the precautionary principle embedded in Australian environmental law (Preston, 2006). The absence of detailed risk assessments on fire plume dispersion, soil and water contamination pathways, and health impacts on adjacent industrial workers and communities constitutes a breach of the statutory duty to protect the environment and human health under NSW legislation (NSW EPA, 2023).

Additionally, the Steel River East BESS is proposed within an industrial zone but is in close proximity to sensitive receptors, requiring stringent assessment under the NSW Industrial Noise Policy and the State Environmental Planning Policy (SEPP) provisions for air and noise pollution (NSW Planning, 2023). The documentation provided lacks robust cumulative impact analysis, failing to consider the existing pollution load in the Steel River precinct, in breach of the requirements for comprehensive cumulative impact evaluations under NSW planning law.

Furthermore, the lack of enforceable decommissioning bonds and end-of-life management planning contravenes obligations under the Contaminated Land Management Act 1997 (NSW), risking the abandonment of a contaminated site with significant public health and financial consequences (UNEP, 2023).

Proceeding with this project without addressing these legal and planning deficiencies risks litigation, community opposition, and reputational damage to Ausgrid and the NSW Government.

Identified Breaches

- Breach of the **Environmental Planning and Assessment Act 1979 (NSW)** due to inadequate assessment of worst-case environmental and human health impacts.
- Breach of the **Protection of the Environment Operations Act 1997 (NSW)** through insufficient mitigation for pollution, emissions, and contamination risks.
- Breach of the **Contaminated Land Management Act 1997 (NSW)** due to lack of enforceable decommissioning and remediation planning.
- Breach of the **Work Health and Safety Act 2011 (NSW)** by failing to assess and mitigate risks to workers and emergency services.
- Breach of **NSW Industrial Noise Policy and SEPP air and noise provisions** due to lack of robust noise and air quality assessment.

- Breach of the **Precautionary Principle** in Australian environmental law by proceeding without full risk analysis.
- Breach of the **NSW Local Government Act 1993 (Section 438ZE)** and the **Modern Slavery Act 2018 (NSW)** by failing to address forced labour in supply chains.

These breaches collectively demonstrate the project's non-compliance with statutory obligations, risking legal challenges, reputational damage, and community opposition if the project proceeds.

5. Economic, Property, and Community Impacts

The Steel River East BESS presents significant risks to local and regional economic stability, property values, and community wellbeing. Large-scale BESS projects have been shown to reduce nearby property values due to perceived and actual risks associated with fire hazards, toxic smoke releases, noise, vibration, and visual impacts (Energy Policy Institute, 2023). These risks deter investment and can lead to property market stagnation within the industrial precinct and adjoining residential and commercial areas.

Insurance industry reports indicate that properties near BESS installations may face higher premiums due to fire risk, hazardous materials storage, and emergency response challenges, increasing operational costs for businesses and property owners (Insurance Council of Australia, 2023). Business operations within and surrounding the Steel River Industrial Estate may be disrupted during construction and in the event of emergencies, impacting productivity, staff safety, logistics, and compliance costs. The potential for long-duration fire events requiring exclusion zones can result in business shutdowns, road closures, and substantial economic losses for nearby industries (AFAC, 2023).

From a community perspective, the cumulative impacts of noise pollution, vibration, air quality degradation, and the fear of fire incidents undermine community wellbeing, creating stress and anxiety that affect health and productivity. Community trust is further eroded when projects proceed without transparent risk mitigation, leading to social fragmentation and the erosion of social licence to operate.

Newcastle communities are already burdened by industrial pollution, with vulnerable populations, including children and the elderly, facing disproportionate health and safety impacts. These socio-economic impacts are not adequately assessed in the EIS, representing a failure to consider the full community costs associated with the project.

Furthermore, the project risks creating future financial liabilities for councils and taxpayers due to inadequate decommissioning plans, the potential for site contamination, and the costs of emergency response and remediation should the proponent default or fail to meet obligations (UNEP, 2023). This contradicts principles of sustainable economic development and responsible governance, shifting environmental and financial burdens onto the public while allowing private entities to profit from projects that externalise risk.

It is also important to highlight that the NSW Planning and Environment Department's guidance recognises property devaluation risks and economic disruption as valid considerations in assessing the impacts of major projects. The Energy Policy Institute (2023) has documented property value reductions of up to 15% near large-scale battery installations due to perceived and real fire and contamination risks, underscoring the financial risks for councils and residents.

6. Climate and Lifecycle Carbon Concerns

A comprehensive evaluation of the Steel River East BESS's climate claims must include a transparent, lifecycle-based carbon analysis, including Scope 1, 2, and 3 emissions. Without such an assessment, any assertion that the project aligns with the Climate Change (Net Zero Future) Act 2023 (NSW) or contributes to emissions reduction is unsubstantiated and risks misleading the community and decision-makers.

The Steel River East BESS raises critical concerns regarding claimed climate benefits versus its true lifecycle emissions and environmental impacts. Proponents frequently misrepresent BESS as inherently low-carbon, yet comprehensive studies confirm that the production, transportation, operation, and disposal of lithium-ion batteries involve substantial greenhouse gas emissions that are often excluded from project carbon accounting (IEA, 2022; Guelfo et al., 2024).

The carbon footprint of battery manufacturing is significant due to energy-intensive mining of cobalt, nickel, and lithium, often conducted in regions with coal-dominated energy grids and poor environmental practices (Amnesty International, 2021). These embedded emissions are rarely included in the claimed emissions savings of BESS projects, creating a false narrative that the project is "green" while ignoring Scope 3 emissions.

Operationally, BESS facilities often charge using grid electricity during off-peak periods when fossil fuels dominate generation, undermining claims of net-zero alignment (CSIRO, 2022). Additionally, continuous cooling, inverter operation, and auxiliary power needs further increase operational emissions, which are seldom factored into carbon benefit statements provided by proponents.

In the event of thermal runaway fires, BESS facilities emit toxic smoke and greenhouse gases, while the energy-intensive suppression efforts add to carbon costs that are excluded from lifecycle assessments. Moreover, end-of-life management for lithium-ion batteries lacks closed-loop recycling pathways in Australia, leading to offshore export with additional emissions, often resulting in environmental dumping in countries with weaker environmental controls (UNEP, 2023).

This misleading carbon accounting contradicts NSW's net zero targets and climate resilience objectives under the Climate Change (Net Zero Future) Act 2023 (NSW), as projects like

Steel River East BESS externalise true environmental costs while allowing proponents to claim unjustified climate benefits.

The project should not proceed without a transparent, independent lifecycle carbon assessment that includes full Scope 1, 2, and 3 emissions and accounts for environmental and social externalities associated with mining, processing, transport, operation, fire incidents, and disposal. Without this, the community is misled about the project's contribution to climate action, and the emissions reduction narrative becomes a tool for greenwashing rather than genuine emissions abatement.

7. Conclusion

The Steel River East BESS proposal represents an unacceptable threat to the Newcastle community, the environment, and the integrity of NSW's planning and climate frameworks. The project exposes residents and workers to heightened fire risks, toxic emissions, chemical contamination, and noise and vibration impacts, while placing further stress on the Hunter River and surrounding ecosystems already under environmental pressure.

Despite claims of delivering climate benefits, the project's misleading carbon accounting fails to acknowledge significant embedded and operational emissions, contradicting NSW's net zero objectives and undermining genuine climate action. The supply chain reliance on cobalt, nickel, and lithium sourced from regions with documented modern slavery and child labour practices exposes NSW and Ausgrid to ethical, legal, and reputational risks that are incompatible with Australia's human rights obligations.

The absence of transparent, enforceable decommissioning and site remediation plans risks leaving the community with a legacy of contamination, long-term health hazards, and significant public financial liabilities. Coupled with its negative impacts on property values, local business continuity, and community wellbeing, this project would externalise its risks while offering limited and overstated benefits.

Decision-makers are urged to recognise that the Steel River East BESS, in its current form, is neither green nor clean, and its continuation would fail the community, the environment, and future generations. On these grounds, the project should be refused.

In light of the above, we further recommend that any future energy storage proposals in NSW be subject to:

- A transparent, independent lifecycle emissions assessment,
- Full supply chain human rights audits to address modern slavery risks,
- Enforceable financial assurance bonds for decommissioning,
- Regional cumulative impact assessments prior to approval.
  These steps are essential to align energy projects with NSW's climate, environmental, and human rights obligations.

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