

Submission  
No 40

## INQUIRY INTO CLIMATE CHANGE (NET ZERO FUTURE) BILL 2023

**Organisation:** Beyond Zero Emissions

**Date Received:** 25 October 2023

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25 Oct , 2023

**To The Director, Portfolio Committee No. 7 – Planning and Environment, Parliament House, Macquarie Street, Sydney NSW 2000.**

The **NSW Climate Bill (Net Zero Future)** is an extraordinary opportunity to position NSW as the clear leader in climate action among the states and propel NSW industry to a highly competitive international position. In order to achieve this, the following modifications to the 2023 Climate Change (Net Zero Future) Act are essential:

- 1) It is critical that the Bill adopts science-based targets.**
- 2) The Bill needs to include a moratorium on all new fossil fuel projects and expansions on existing projects such as new gas infrastructure.**

We provide important context to these modifications based on our research portfolio and engagement with affected communities in NSW in the following letter, and welcome the opportunity to present more detail on this work.

### **Beyond Zero Emissions**

[Beyond Zero Emissions](#) (BZE) is an independent think tank creating solutions for a prosperous zero-emissions future. We have been actively working on decarbonisation for more than a decade, and have a range of publications relevant to this submission including [National Supergrid](#), [Deploy, Export Powerhouse](#) and [Renewable Energy Industrial Precincts](#).

### **A Hunter Renewable Energy Industrial Precinct**

Beyond Zero Emissions has staff and volunteers with industry expertise embedded in the Hunter region of NSW. BZE has worked closely for almost three years with Hunter industry on advocating for a region-wide [Hunter Renewable Energy Industrial Precinct](#) (REIP).

A REIP is a cluster of energy-intensive manufacturing facilities powered by 100% renewable energy that has shared common user infrastructure. BZE's latest report "[Safeguarding our Future](#)" shows that clusters of industry powered by renewable energy can create economies of scale that can save taxpayers money and speed up emissions reduction.

With the legacy infrastructure from the coal industry, the deep ties between research and industry and the emerging cleantech and hydrogen cluster, the Hunter has the potential to be a global cleantech manufacturing and export hub. A Renewable Energy Industrial Precinct in the Hunter would ensure Australia's biggest regional economy is the best place in the world to buy energy and cleantech. BZE's proposed changes in the Bill can make this happen.

Our advocacy for a Hunter REIP has the support of many Hunter businesses and organisations, such as the Newcastle Institute of Energy and Resources, Hunternet, Committee for the Hunter, and the Hunter Jobs Alliance, as well as businesses such as Ampcontrol, Energy Renaissance, 3ME Technology and many more.

Economic modelling by ACIL Allen commissioned by Beyond Zero Emissions and WWF-Australia demonstrates that a dedicated Renewable Energy Industrial Precinct in the Hunter has the potential to:

- unlock new capital investment of \$28 billion
- create 34,000 new ongoing local jobs in new manufacturing and service industries
- generate \$11 billion in revenue per annum by 2032
- protect existing manufacturing activities and the jobs they provide by repowering them with renewable energy

In our Hunter REIP research, BZE found that significant benefits also flow to sectors beyond industry, providing low-cost, firm renewables for households, transportation and support for the broader grid. Further, our 2023 case studies of clustering industry for electricity and green hydrogen modelled by ACIL Allen found that the economies of scale can reduce costs of infrastructure investment by 50-75%.

In NSW, significant groundwork on the benefits of industry clustering to accelerate decarbonisation has already been undertaken by the independent consulting firm ERM. ERM has been retained by, and is supporting the OECC to create low carbon industrial regions informed by science based targets. The Hunter Industrial Decarbonisation Plan is in the final stages of development and there is also a plan for the Illawarra.

The "fast decarbonisation" scenario roadmaps for 100% renewable energy for industry by 2035 is one of the scenarios being contemplated and analysed. It indicatively shows that under a fast transition scenario, the state can conceivably meet its net zero targets. For that to happen, there needs to be a significant amount of capital investment to build out renewable energy capacity and technologies.

Fast decarbonisation requires shared infrastructure and achieving social licence for renewable energy, and cleantech breakthroughs and deployment. Cleantech is a niche where the Hunter has deep capability and can excel. The fast decarbonisation scenario for industry is extremely important groundwork that can deliver science-based ambition into the bill.

It is well understood by Hunter Industry that international markets are rapidly changing. Industrial policies such as the USA's Inflation Reduction Act (IRA), EU's Carbon Border Adjustment Mechanism

(CBAM) and The Net Zero Industrial Act (NZIA) Japan's Green Transformation Act (JGTA) legislate the reduction of greenhouse gas emissions by promoting the use of renewable energy and cleantech solutions and shifting away from fossil fuels.

### **Cleantech evolution now means economic prosperity for NSW**

**The Hunter is evolving to become a centre of cleantech manufacturing excellence that can deliver the products that NSW, Australia and the world need to decarbonise, for example green hydrogen, and innovations such as solar film, lithium-ion batteries, electric mining vehicles and equipment, small wind turbines, redox flow batteries, thermal energy storage and more.**

In the Hunter right now, fossil-based companies like Idemitsu, AGL and Port of Newcastle are all developing industry precincts that are low carbon or fossil free. These businesses understand that structural economic change is already happening. NSW business and industry will be left stranded if rapid decarbonisation doesn't happen right now. We have a limited window to get it right with ambition, speed and scale.

BZE knows from our Hunter engagement that there are a large number of manufacturers in Sydney being forced out by urban development and costs. These manufacturers want to relocate to the Hunter for access to renewable energy and the legacy infrastructure from the mines such as transmission, substations, water infrastructure, sheds, office facilities, roads, port, and rail. However, there is a bottleneck because the region is:

- landlocked by mines and mining buffer lands;
- constrained by the mine closure plans that require all legacy infrastructure to be removed.

So much existing infrastructure could be repurposed for zero-emissions manufacturing, data centres, large scale battery deployment and other industries. AGL, Idemitsu and Port of Newcastle are leaders in creating localised industrial precincts; however more scale and speed is needed. There are other regions that are ripe for a similar transformation, for example Lithgow and the Illawarra.

With increasing ambition, scale and speed, the 2023 Climate Bill has an extraordinary opportunity to propel NSW industry to a highly competitive international position. In order to achieve this, BZE sees the following modifications to the 2023 Climate Change (Net Zero Future ) Act as essential.

**It is critical that the NSW Climate Bill (Net Zero Future) Act is meaningful and adopts science-based targets. This includes a 75% emissions reduction of 2005 levels of CO2 by 2030 and 100% by 2035. Implementing a rapid decarbonisation strategy can deliver this for industry.**

- The purpose of the bill is to "give effect to" the commitment of the 2015 Paris Agreement, and the current targets have been set accordingly with the aim of achieving this. However, the past 8 years since that Agreement has seen temperatures across the world not only increase consistent with scientific predictions, but in the past 12 months in particular, increases beyond predictions, both on land and in the oceans and waterways. This has been accompanied by numerous extreme global weather anomalies. The Paris Agreement targets

are clearly out of date to limit global warming to 1.5°C, and even “well below 2°C”, without much more ambitious targets.

- Consistent with the current science, BZE recommends adoption of targets of 75% emissions reduction of 2005 levels of CO<sub>2</sub> by 2030, and 100% by 2035. As previously mentioned, there has been important groundwork undertaken already in industrial decarbonisation that provides a foundation for achieving these science-based targets with bold action that can bring investment.

**To be aligned with climate science, the Bill needs to include a “tools down” Moratorium on all new fossil fuel projects and expansions on existing projects such as new gas infrastructure. This Moratorium needs to extend until the Net Zero Commission is operational.**

### **Coal mine approvals and expansions**

In NSW, there are 13 mine expansions planned that, if approved, would emit more than 2,000 MtCO<sub>2</sub>e of lifecycle greenhouse gas emissions. Therefore, a moratorium on proposed fossil fuel expansions must be in place until the Net Zero Commission is established.

The 21 existing coal mines in the Hunter already have significant fugitive emissions. Allowing any mine expansion before the Net Zero Commission is in place would **increase Hunter’s fugitive emissions**. Fugitive emissions were 62% of the Hunter’s existing total mining emissions of 9.3Mt CO<sub>2</sub> in the FY 2022.

### **Gas is a fossil fuel and the aim of the energy transition is to completely replace fossil fuels with renewable energy.**

The Hunter Gas pipeline is planned for the Narrabri Gas project and to facilitate the transport of gas from Queensland to NSW. Designated a Critical State Significant Infrastructure, this project has been in development since 2009, and needs to be reconsidered in the 2023 context. The Hunter gas pipeline locks in the use of and dependence on gas for the long term and undermines:

- NSW’s capability to achieve science based targets
- Achieving the significant emissions reductions required for NSW’s rapid decarbonisation
- The ability of NSW manufacturers to deliver the zero-emission products the market requires
- The recognition by the NSW Parliament, as called up in the Bill, for **urgent action** “to reduce greenhouse gas emissions” and “address the adverse impacts of climate change”.

Projects such as the Hunter gas pipeline provide the gas industry with a level of investment certainty and correspondingly create a continuing level of uncertainty and risk to renewable energy research, piloting and commercialisation of cleantech projects.

Cleantech projects and manufacturing need to progress with a sense of urgency based on the most recent global climate change indicators. Confidence of investors is key to this, and by association the economic prosperity of the Hunter region and NSW.

## **Conclusion**

The Hunter is NSW's and Australia's biggest regional economy. As the world races to decarbonise there is surging global demand for green exports and clean energy, and the global market for our fossil fuel exports is disappearing. We need to act now or risk losing out on capturing market share for zero-carbon products.

It's critical that the 2023 Climate Bill positions the Hunter and NSW as a major global energy and cleantech manufacturing hub. By adopting science-based emission targets with a view to the fast decarbonisation pathway, the NSW 2023 Climate Change Bill can spur the Hunter's transformation into a zero-emissions manufacturing hub, which will power the Hunter's industry, workforce and economy, creating flow-on benefits for the whole of NSW.

Curtailing the expansion of fossil fuels in NSW is a critical market signal to ensure investment certainty for cleantech, thereby accelerating its growth and the energy transition, as opposed to supporting the continued expansion of fossil fuel projects. There is no time to lose. NSW must chart a new course now.

By proposing the right level of ambition, the 2023 NSW Climate Bill has an opportunity to show leadership and make an extraordinary breakthrough for NSW and the whole of Australia. Science-based targets, elevating and fast tracking cleantech, and a moratorium on fossil fuel expansion until the Net Zero Commission is operational would greatly strengthen this Bill.

Thanks again for the opportunity to comment on this critically important Bill.

Yours Sincerely,

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