



ALISON BYRNES MP
MEMBER FOR CUNNINGHAM

SUBMISSION

**PROPOSED OFFSHORE WIND AREA:
PACIFIC OCEAN OFF ILLAWARRA
REGION, NSW**

14 NOVEMBER 2023

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Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
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ACT 2601

INTRODUCTION

The release of the proposed zone which would allow for the establishment of an offshore wind development in the Illawarra has started a very hard conversation in our local community about the future of our local economy and how we provide affordable power to households and industry.

Our stunning Illawarra coastline is a special and magical place for all of us.

This consultation process has involved some very difficult conversations and generated a huge amount of feedback and questions within and beyond the formal process.

I have valued these conversations and compiled the following submission based on thousands of conversations, emails, the Department's six consultation sessions attended by over 1200 people, and the additional two community forums that I convened, and that was attended by 750 people online and in person.

We currently have approximately 36 per cent renewable energy in the grid and it is going to be a huge task to lift this to 82 per cent by 2030 – it will involve a mix of solar, onshore wind, offshore wind, hydrogen, pumped hydro, batteries and other forms of renewable energy.

This is a significant task and one that must be shared fairly across our nation, and a task that we are required to tackle to protect our bushland from devastating fires, our beaches from erosion and our farmers from drought and floods.

RECOMMENDATIONS

I write in support of the proposal for the Illawarra Offshore Wind Zone; however, this support comes with a number of conditions.

This submission provides additional detail on elements of the proposal that my community and I believe must be addressed.

I recommend:

<i>1. Based on strong community feedback, I recommend that the Government move the nearest point of the zone to the coast from 10kms to 20kms from shore.</i>
<i>2. To address concerns about the visual impact of an offshore wind farm, that developers and the Department aim to minimise the height of any future development while allowing generation capacity to be met.</i>
<i>3. That only projects that meet the strictest environmental protections including strict requirements for marine, bird, wave, fishing and reef protections should be considered.</i>
<i>4. That a strong and fair Community Benefit Dividend be incorporated as a requirement of the licencing structure.</i>
<i>5. Any offshore wind generation proposal must include remediation and end of life provisions so that materials used are either reused or recycled once it has reached end of life.</i>
<i>6. That any licensee has the highest local content provisions ensuring that local workers and businesses benefit in building and maintaining local power generation. We need to look at making turbines locally, building local industry capacity, local jobs and training our local workers.</i>
<i>7. The establishment of an Illawarra offshore wind local advisory committee that allows the Department of Climate Change, Energy, the Environment and Water, and any future developers and researchers, to work with business, industry, unions, First Nations and community organisations to ensure that local community expectations and standards are upheld in any future development.</i>

There is also a task of ongoing communication required to answer questions and concerns that have been raised through the discussions with the community, industry and business since the announcement of the proposed zone in August 2023 - and by doing so providing the community with factual, accurate, relevant and reliable information.

I acknowledge and thank the Minister for Climate Change and Energy, Chris Bowen MP, for approving my request to extend the period of community consultation and allowing submissions to be made up until 15 November 2023.

BACKGROUND

The initial legislation for an offshore wind zone was put forward by the former Morrison Government in 2021.

For more than a decade the local union movement and other stakeholders have been advocating for investments of this kind. Business Illawarra have been advocating for an investment since 2021, NSW Labor secured the Illawarra as a Renewable Energy Zone in 2021 and the Federal Labor Government announced the consideration of an offshore wind zone for the Illawarra in August 2022.

Since my election, as the Member for Cunningham in 2022, I have not shied away from discussing with the community the opportunities and challenges that face us as we seek to reduce emissions and decarbonise our economy, coupled with the need to sustain and create well-paid jobs.

Considering an Illawarra offshore wind zone and how we prepare for the estimated close to 2,500 construction jobs and 1,250 ongoing jobs for local workers that could come with it is a large part of that community conversation.

Wollongong is recognised as a *City of Innovation* – one that uses the world's best science together with industry collaboration to overcome the transformational challenges we face. We have seen innovation and technological change adopted by local industry over many years and that has led to safer and less polluting methods of production that not only the workers involved but the entire region has benefitted from.

There are still many parts of this endeavour yet to be determined and the community has a direct role in shaping our future energy production should it progress. I would encourage everyone to seek their information from reputable sources –not blogs, websites or social media seeking to sow seeds of doubt or fear and spread misinformation.

We need to look at ways to ensure that genuine conversations can occur and genuine questions can be raised without the volumes of misinformation, fake emails and social media accounts spreading misinformation.

I believe that as a city of steel, renewable energy generation, manufacturing, a sustainable marine environment, tourism and other industries can co-exist in the region as they have done for decades.

VISUAL AMENITY

RECOMMENDATION 1: Based on strong community feedback and on advice from the Port Authority, I recommend that the Government move the nearest point of the zone to the coast from 10kms to 20 kms from shore.

RECOMMENDATION 2: To address concerns about the visual impact of an offshore wind farm, that developers and the Department aim to minimise the height of any future development while allowing generation capacity to be met.

One of the most common questions I get from members of the community about the proposed zone is: ‘what will it look like?’ Answering this question has been challenging given that there is not a proposal or licensed developer at this point.

I acknowledge the Department of Climate Change, Energy, the Environment and Water (DCCEEW) for listening to the concerns of the community in the Illawarra about what a proposed wind farm may look like and developing a visualisation in late October.

Although the visualisation is for reference only, and does not represent the turbine layout, size, orientation, spacing or any other particulars of a future project, it has sought to contextualise what the turbines may look like from certain distances from shore.

Until the release of the visualisations, the only point of reference were ships at anchor off the coast. However, this does not provide an accurate picture with the anchorage approximately three nautical miles (around 5km) off the coast.

Following months of conversations with our community and listening to people’s concerns I am of the view that the visual amenity of any wind farm based on their proximity to the coast remains a significant concern to the Illawarra community. Our community takes great pride in our stunning local environment and our role as custodians to protect it for future generations.

The community has also asked “why can’t the turbines be placed further out to sea?”. It should be acknowledged that there are some practical and technical constraints in doing so, including that floating platforms are currently viable for depths of several hundred metres; the continental shelf is outside the eastern boundary of the proposed zone; and the depth starts to drop to one kilometre up to four kilometres, which makes floating or fixed platforms unviable with current technology.

Nonetheless, the strong community feedback is that visual amenity is a key concern and I strongly recommend that they be located at least 20 kilometres from shore and that developers and the department thoroughly consider height options during the licensing process.

MARINE AND ENVIRONMENT PROTECTION

RECOMMENDATION 3: That only projects that meet the strictest environmental protections including strict requirements for marine, bird, wave, fishing and reef protections are to be considered.

Scientific evidence and international experience confirms a vibrant, safe marine environment and ecology can co-exist with offshore wind.

Organisations such as the Australian Conservation Foundation, Electrify 2515, Greenpeace, and Sea Shepherd have all provided conditional support for the establishment of offshore wind zones noting this.

Many of the community conversations I have had always raise concerns about the windfarm conflicting with whales and other marine plants and animals. I recognise raising this concern is legitimate. We must undertake the proper and localised research to better understand what the impacts may or may not be.

Any renewable energy project off the Illawarra coast must be suitable to our local conditions and environment; it will not be the same as what we see overseas as the technology in offshore energy generation is constantly evolving and improving, and any developments will need to be tailored to our conditions.

When it comes to protecting the environment, we must be guided by science. We will need to draw on our best and brightest in the Australian scientific community to provide their assessment on how we achieve this endeavour safely and with minimal impact on our local environment.

I note that this work has already commenced locally with University of Wollongong researchers providing in-principle support for offshore wind energy in the Illawarra.¹ Our local university has a wealth of knowledge and connections nationally and globally to help develop and refine best practice standards and seek to find solutions to challenges that we face in this endeavour.

Greenpeace, which has been campaigning for the protection of the marine environment since the 1970s, has made a clear and definitive statement about the coexistence of offshore wind and whales:

Washington, DC (June 16, 2023) –In response to reports of a spate of whale deaths off the North East Coast of the United States, Arlo Hemphill, Greenpeace USA’s Senior Oceans Campaigner, said: “There is no evidence whatsoever linking offshore wind to whale deaths. The manufactured hysteria is the result of fake news promoted by politicians, big oil, and their cronies to save the oil and gas industry, which is fuelling the climate crisis, destroying biodiversity, harming people’s health, and hastening social injustice. We must

¹ <https://www.uow.edu.au/media/2023/uow-researchers-provide-in-principle-support-for-offshore-wind-energy-in-the-illawarra.php>

not allow baseless accusations to stall the transition to green, renewable energy or address the true threats to whale populations.”²

When it comes to onshore and offshore renewable energy production it should not be viewed as an ‘either-or’ proposition. To meet our climate target of 82 per cent of renewable energy into the grid by 2030 we must assess all possible sites for energy production and consider any land-use conflicts that might be created with other activities such as food production. One challenge that is not faced with offshore renewable energy in the Illawarra will be connectivity to grid infrastructure with many of the lines and transformers already in place.

People have said to me “won’t building wind turbines use energy and create a carbon footprint?” The answer is ‘yes’ based on current production methods, but the environmental payback period – the amount of time it takes for a wind turbine to generate the amount of energy used during manufacturing and installation – is estimated to be 5-8 months for a 4.2MW turbine and this is in the context of what might be a 30-40 year working life.

Further and more detailed collaboration also needs to occur between DCCEEW, any future developer and the local recreational, charter and commercial fishing businesses and organisations as to how local fisheries and future renewable energy generation can co-exist.

While I note that recreational fishing will not be impacted by the declaration of a zone, local fishing and maritime businesses have shared with me directly their concerns and therefore I am of the view that any proposed zone must take into consideration the number of fishing licences, locations and that licencing for development of the site to require developers to proactively work with the fishing community to coexist with minimal adverse impact.

I have given a commitment to the local fishing industry to advocate strongly on their behalf during any future process and have already raised the need for research around migratory patterns of crustaceans and fish and whether an offshore wind development would affect these patterns.

Engagement will need to continue with other recreation groups that use the coastline such as paragliders and surfers. However, local experts have indicated the proposed zone will have no impact on either surf or wind conditions.

Professor Rob Brander, a geomorphologist at the University of New South Wales, who has been studying how waves are formed for decades told ABC Illawarra: *"[Offshore wind] is not going to impact the swell at all, I mean, the impact is literally zero."*³

² <https://www.greenpeace.org/usa/news/greenpeace-calls-for-ocean-protection-to-address-whale-deaths-2/>

³ <https://www.abc.net.au/news/2023-11-07/editor-blasts-fake-study-linking-whale-deaths-to-wind-farms/103069922>

Dr Kapil Chauhan, an expert in wind engineering and turbulence at the University of Sydney School of Civil Engineering also told ABC Illawarra that he anticipated there would be no impact on recreational activities that relied on coastal winds such as wind surfing and paragliding. *"I do not see a scenario where such a significant reduction can happen,"* he told the ABC.⁴

⁴ <https://www.abc.net.au/news/2023-11-07/editor-blasts-fake-study-linking-whale-deaths-to-wind-farms/103069922>

COMMUNITY BENEFIT DIVIDEND

RECOMMENDATION 4: That a strong and fair Community Benefit Dividend should be incorporated into the licencing structure of any proposal.

I am strongly of the view that there must be a strong and fair Community Benefit Dividend incorporated into the licencing structure of any proposal.

Communities like the Illawarra who are, and have for decades, undertaken the load of generating the power for the nation must receive a fair dividend for that generation.

The Community Benefit Dividend I am recommending would return a share of the capital investment value, or associated revenues of any projects, to the community to invest in community amenities and other improvements for the general benefit of the region, or significantly discounted electricity for residents and businesses.

A Community Benefit Dividend could include a discount on electricity for residents. Dr Saul Griffiths recently suggested that the community could insist that 1c/kWh of the project is returned to us. This would generate around \$150 million dollars a year. There are 129,000 households in the Illawarra and a population of 313,000 – this could equate to a subsidy of up to \$1,200 per year discount per household.⁵

A Community Benefit Dividend could also include investment in local schools through music, art, sporting or trades programs and equipment.

It could include additional investment in local community infrastructure like surf clubs, sporting clubs, community, multicultural, environmental, First Nations organisations or emergency services infrastructure.

The program could be modelled on the *Port Kembla Community Investment Fund* or the *Geelong Region Innovation Investment Fund* - both of which were local benefit schemes which focused on social, economic and environmental improvements with direct local impact.

It could include dedicated funds for local environmental improvement projects or to assist disadvantaged communities with their transition to zero carbon technologies. The Illawarra contains many suburbs which rank among the most disadvantaged in New South Wales.

However, any investment from the Community Benefit Dividend cannot be a substitute for government investment into community infrastructure - rather it should support additional investment.

The NSW Government is already following this principle in developing its own program around the Central-West Orana Renewable Energy Zone; with the

⁵ <https://electrify2515.org/news-events/saul-griffith-wind>

government investing \$128 million over the next four years to deliver community projects and employment opportunities⁶ including:

- public infrastructure upgrades
- housing and accommodation,
- training and employment programs,
- health and education programs,
- support for energy efficiency and local rooftop solar, and
- initiatives for First Nations people.

Our community should be consulted on what they expect from the Community Benefit Dividend and its design.

⁶ <https://www.nsw.gov.au/media-releases/funding-for-communities-central-west-orana#:~:text=%24128%20million%20downpayment%20for%20communities%20in%20Central%2DWest%20Orana%20REZ,-Published%3A%2020%20Oct&text=Minister%20for%20Energy%20Penny%20Sharpe,community%20projects%20and%20employment%20opportunities>.

REMEDICATION AND END OF LIFE PROVISIONS

RECOMMENDATION 5: Any offshore wind generation proposal must include remediation and end of life provisions so that materials used are either reused or recycled once it has reached end of life.

We must start planning for the stewardship of our renewable energy generation now.

When we plan for the commissioning, we must also be planning for the decommissioning, replacement, life extension or upgrade.

Major equipment manufacturers such as Vestas have a 'zero waste' approach and are developing a circular economy for all materials and components.⁷

In February 2023, Vestas announced that they had developed a technology to make epoxy-based turbine blades circular and recyclable. This technology means that future, current and decommissioned turbines will be able to be recycled.⁸

Conditions of recyclability, circular solutions and planning for decommissioning must be made conditions of any licensing for developing a proposed offshore wind zone in the Illawarra.

Just as we expect resources companies to engage in ongoing rehabilitation and restoration of mine sites, offshore wind proposals should face similar requirements around remediation and end of life management of their generation assets. It cannot be left to the taxpayer to manage end of life aspects of any proposals. The requirements for this should be established at the start of the project assessment, and reviewed and audited periodically by environmental regulators as a means of ongoing compliance.

⁷ <https://www.vestas.com/en/sustainability/environment/zero-waste>

⁸ <https://www.vestas.com/en/media/company-news/2023/vestas-unveils-circularity-solution-to-end-landfill-for-c3710818>

LOCAL CONTENT AND LOCAL JOBS

RECOMMENDATION 6: That any licensee has the highest local content provisions ensuring that local workers and businesses benefit in building and maintaining local power generation. We need to look at making turbines locally, building local industry capacity, local jobs and training our local workers.

I want local Illawarra families to have good, secure, long term and well-paid jobs and to be able to live and work right here without the need for long daily commutes.

We need not only look at how we are leaving the planet for future generations, but also what jobs we will be leaving our future generations.

My dad was a coal miner who was in and out of work during the tough economic conditions in the 1980s and 1990s when I was growing up. We nearly lost our house on numerous occasions. This was terrifying for mum and dad and they never ever really felt secure.

I don't want to see any coalmining, steel working, manufacturing or other family go through what my family went through.

Building offshore renewable energy generation will not only provide opportunities for our local businesses in manufacturing and construction, it will also provide cleaner, cheaper energy, attract new investment to our region and provide job security.

Strong and reliable renewable energy will help drive investments into the next generation of steel manufacturing and entirely new industries like hydrogen production, which has already commenced in Port Kembla.

Not just jobs in the construction, but jobs in all the industries that will benefit from strong, reliable, and renewable energy.

BlueScope steel recently indicated that they will need fifteen times the current amount of electricity to transition the Port Kembla steelworks to make the same volume of steel using hydrogen-powered direct reduced ironmaking (DRI) technology.⁹

To achieve this BlueScope will require substantially greater volumes of purchased renewable electricity at the Port Kembla Steelworks. BlueScope has foreshadowed that the existing Illawarra transmission network has insufficient capacity to support these greater volumes.

BlueScope currently uses 750,000 Mega Watt Hours (MWH) of grid supplied electricity across the steelworks per year – this equates to the usage of about 150,000 households. For context, in Wollongong, we have approximately 130,000 households.

⁹ <https://www.illawarramercury.com.au/story/8366008/leading-environmentalist-says-bluescope-blast-furnace-plans-frustrating-but-wind-offers-another-solution/>

The offshore wind proposal for the Illawarra – if implemented at the current proposed size – would generate enough electricity to power 3.4 million houses.

BlueScope will need about two thirds of that amount of energy to keep our local steel works open and producing green steel in the future. BlueScope knows that to remain globally competitive it will have to transform its production methods, not only because it is the right thing to do for the planet, but its customers will demand steel that is decarbonised and of the highest quality.

BlueScope currently employs 3,500 people directly in the Illawarra and is responsible for around 9,000 jobs in the region including contractors and suppliers.

From a national sovereignty perspective, it is important that we do not constrain our steel production capacity.

Many people have asked why we don't we just put more solar panels on houses and on office buildings. We absolutely need to do more of that as well but for areas like the Illawarra – that is not going to provide the power that we need to continue to make things and support energy-intense local industries like BlueScope, Bisalloy, Hysata, BOC Gas, Manildra, MM Kembla, David Brown Santasalo, other major energy users and manufacturers in our community as well as new industries that may locate here as a result of available energy supply.

There are considerable opportunities for local manufacturers with the rollout of offshore wind, just in the steel space it is anticipated the floating structure of one turbine would need 6,000 tons of high-quality steel.

BlueScope's current yearly output is 400,000 tons of domestic plate. That means BlueScope's total output would produce enough steel to manufacture 66 platforms a year. But we are going to need hundreds of these platforms across the country and the region.

As a region the Illawarra is uniquely placed to use our existing capabilities to build an end-to-end offshore wind industry not just for our region but planned offshore wind infrastructure around the Australia and even into Asia and the Pacific.

Provisions of licensing should include local content provisions, a requirement for a local jobs plan, skills assessment and a small and medium enterprise engagement strategy similar to the Defence Capability Network to grow the capacity of smaller enterprises to be involved in the supply chain for construction, operation, maintenance and end of life.

ILLAWARRA OFFSHORE WIND ADVISORY COMMITTEE

RECOMMENDATION 7: The establishment of an Illawarra offshore wind local advisory committee that allows the Department of Climate Change, Energy, the Environment and Water, and any future developers and researchers, to work with business, industry, unions, First Nations and community organisations to ensure that local community expectations and standards are upheld in any future development.

Our community has a direct role in shaping our future energy production and the brand-new industry and job opportunities that come with that.

Social licence engagement needs to be about working within communities, understanding local perspectives and local values.

Any future of renewable energy production off our coast can only occur with proponents who will actively seek to partner with the local community, listen to the local community, become part of the community and for the long term.

I recommend establishing a local community advisory committee that can be a focal point for community engagement with business, industry, unions, First Nations and community organisations in the process as the development of a potential zone continues.

I would ask that the Commonwealth and State departments as well as relevant agencies, developers and researchers have a direct engagement with this committee.

It is important for such a body to be established now because the conversation with our community has only just begun.

PORTS AND SHIPPING

The community has also raised the impact any proposal will have on existing port operations and shipping and the future expansion of the port.

I note that both the Port Authority and Ports NSW have actively engaged with the Department and the Australian Maritime Safety Authority to ensure that both future energy generation and commercial activities will be able to operate in parallel.

I have also actively engaged with the Port Authority of NSW following community concerns put to me that the operations will be impacted.

The Authority advised that it is not aware of any likely impacts to current or future shipping. And they will continue to work with the various authorities to facilitate the optimal outcome for navigation safety and access.

CONCLUSION

I would like to thank the Department for their work on the proposed zone.

While there has been criticism about the process and the consultation sessions, I thank the many Departmental staff for being available for the initial six consultation sessions and then again to attend the additional two community forums that I convened in response to community feedback.

We need to improve and refine the consultation process and we have a lot to learn as our country develops new renewable sources of energy.

Finally, I would like to thank my local community for its passion in these discussions and for the feedback and questions that I have received.

My thanks extends to and includes the business community, fishing industry, local environmentalists, our First Nations community, the union movement, our tourism industry, housing industry, researchers and our next generation of young people who have all been active participants in the discussion.

I have valued the contributions and the genuine attempts by so many members of the community to engage in a respectful manner and to seek further information where legitimate concerns have been raised. These opinions and views have played a significant a role in informing the contents of this submission.

I would be more than willing to discuss or add to any aspect of this submission should Departmental staff require it.

Yours sincerely

ALISON BYRNES MP