Submission No 89

INQUIRY INTO IMPACT OF RENEWABLE ENERGY ZONES (REZ) ON RURAL AND REGIONAL COMMUNITIES AND INDUSTRIES IN NEW SOUTH WALES

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Portfolio Committee No. 4 – Regional NSW
Legislative Council, Parliament of New South Wales
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Submission to Parliament of New South Wales: Inquiry into the impact of Renewable Energy Zones (REZ) on rural and regional communities and industries in New South Wales

To whom it may concern,

My name is Phebe Fidge, and I am a marine ecologist based in the Illawarra Renewable Energy Zone. I am supportive of largescale investment in renewable energy projects in my region because of their projected socioeconomic, cultural, and environmental benefits. As a young science professional, I understand that developments like proposed offshore wind farms will be crucial for achieving state and national emissions reduction targets. Transitioning to net-zero before 2050 using Renewable Energy Zones (REZ) will mitigate against global climate change, protecting Australia's unique natural environments; increase employment opportunities as new clean-energy industries emerge; and move towards intergenerational equity. In this letter, I will demonstrate that the magnitude of these benefits will far outweigh any financial and social costs associated with the construction and maintenance of the zones in question. In doing so, I will address the following terms of reference: (a) current and projected socioeconomic, cultural, agricultural and environmental impacts of projects within renewable energy zones in New South Wales including the cumulative impacts; (c) the historical, current and projected future financial costs associated with construction and maintenance of large scale projects within Renewable Energy Zones; (g) projected impact on visitation to regional areas with renewable energy zones resulting from changes to land use; (h) suitable alternatives to traditional renewable energy sources such as large-scale wind and solar; and (i) adequacy of community consultation and engagement in the development of Renewable Energy Zones, and associated projects.

(a) Current and projected socioeconomic, cultural, agricultural and environmental impacts of projects within renewable energy zones in New South Wales including the cumulative impacts

Renewable energy projects within REZs will deliver urgent climate action, helping to limit global warming to 2°C by 2100 and prevent devastating impacts on Australia's natural systems and the communities that depend on

them. I will use proposed offshore wind development in the Illawarra REZ as a case study to discuss the benefits of projects in NSW renewable energy zones in the context of potential environmental, socioeconomic, and cultural impacts. This case study is presented, in detail, in my recent article for Renew Economy. In this article, I argue that potential collision risks for whales and seabirds are manageable; increased local fish densities may actually enhance fisheries production; impacts on the physical environment would be unlikely to disrupt ecological processes and flows; tailored First Nations engagement could ensure equitable benefit-sharing, increasing opportunities for Australian Indigenous communities; and that the construction of offshore wind farms and accompanying purpose-built port facilities represents a substantial opportunity for regional employment and growth. In the article, I acknowledge potential negative effects of offshore wind development on trawl fishing, tourism, and maritime industries, suggesting monetary compensation for fishers as well as a Tourism and Recreation Impact Assessment and continued consultation with the Australian Maritime Safety Authority to minimise these impacts. I also highlight the psycho-social risks associated with peoples' connections to place, suggesting we manage these like any other, more tangible risk. Considering the best available evidence and with due consideration of expected impacts on biological systems, the physical environment, economies, and communities, I demonstrate that offshore wind development can be expected to have a net positive effect on the Illawarra.

Considering proposed offshore wind development in the Illawarra REZ as a case study, projects within REZs will deliver net positive socioeconomic, cultural, and environmental impacts on affected regions. Furthermore, REZs are a great way to concentrate the myriad benefits of such projects in regional communities. Offshore wind development in the Illawarra REZ would be expected to deliver 1,740 jobs during the construction of a wind farm and adjacent port facilities as well as 870 jobs ongoing. However, wind and solar projects across NSW have the potential to generate over $715 million in contributions to communities and councils.

(c) The historical, current and projected future financial costs associated with construction and maintenance of large-scale projects within Renewable Energy Zones

According to CSIRO's draft GenCost 2024-25 Report, renewable energy projects such as wind and solar have the lowest cost range of any new electricity generation projects, despite varied inflationary impacts across technologies. In many parts of the world, energy generated by renewable technology is more affordable in every part of the supply chain, with costs for wind-powered energy now in the range of 4 cents per kWh. Considering households in NSW are currently paying around 34 cents per kWh for their electricity, projects in REZs have the potentially to substantially decrease household electricity bills.

The relatively low financial costs of constructing and maintaining renewable energy projects should be considered in comparison to the costs of delaying renewable energy rollout and continuing with 'business as usual'. The 2006 *Stern Review on the Economics of Climate Change* demonstrated that the benefits of strong and early action (such as largescale investment in renewable energy infrastructure) would far outweigh the

economic costs of not acting at a global scale. However, more immediate impacts are expected at national and regional levels, with a recent report by Nexa Advisory demonstrating that Australia's continued reliance on coal and gas-fired power could increase energy costs for NSW consumers by up to 88% in seven years.

(g) Projected impact on visitation to regional areas with renewable energy zones resulting from changes to land use

Based on the prevailing evidence from Australia and around the world, it is unlikely that projects in renewable energy zones will have significant impacts on visitation. However, projects in coastal zones may impact tourism and recreation, primarily due to perceived losses in visual amenity. These risks can be assessed and managed, specifically through project-specific Tourism and Recreation Impact Assessments. Accelerated climate change, which is inevitable without largescale renewable energy projects, represents a far more substantial risk to tourism and recreation in Australia, with a recent report by The Climate Council finding that climate change and climate-related disasters may heavily impact visitation to Australian areas of high tourism value and decrease associated revenue.

(h) Suitable alternatives to traditional renewable energy sources such as large-scale wind and solar

Solar and wind technologies are viable, scalable alternatives to fossil fuels that are more affordable and less risky than other clean energy technologies like nuclear and hydrogen. There is potential for these to be supported by other renewable energy infrastructure such as batteries and pumped hydro to enable storage and ensure reliable production. It is critical we focus on these practical strategies for climate change mitigation rather than continue to entertain proposals that depend on future innovations and delay the transition to renewable energy.

Nuclear energy is not a suitable alternative to traditional renewable energy sources. It is impossibly expensive, Taking into account the longer operating life of nuclear power plants compared to wind and solar farms, nuclear power is predicted to cost twice as much (per megawatt hour) as both solar PV and onshore wind technologies combined, now and into the future. Given the climate crisis, nuclear power will also take too long to implement, with CSIRO expecting that 10 - 15 years would be needed to upscale nuclear power in Australia, whereas upscaling wind and solar technologies could take as little as three years, enabling the kind of rapid climate action that is sorely needed. On a similar vein, Australia is not "hydrogen-ready", with developments like Energy Australia's proposed green hydrogen power plant at Tallawarra B Power Station in the Illawarra being stalled due to lack of demand and a poor supply chain.

(i) Adequacy of community consultation and engagement in the development of Renewable Energy Zones, and associated projects

Ongoing community consultation and engagement is vitally important for the success of projects in REZs. This consultation should begin early, be inclusive, and operate on the principles of free, prior and informed consent. The outcomes of a recent senate inquiry into the offshore wind industry consultation process will offer an

important case study for the adequacy of community engagement in the development of such projects. I believe the findings will agree with the submission put forward by the Labor MPs from Whitlam, Cunningham, and Gilmore, which claims that "the assertion that the community was not engaged [on the Illawarra offshore renewable energy zone] does not stand up to reasonable examination". This assertion stemmed not from a lack of consultation, but the perception that certain negative viewpoints were not listened to. However, the role of government is to respond to community concerns in a productive way that advances Australia's interests, not pander to unfounded anxieties and abandon plans that are met with any resistance.

There is a lesson to be learned from community resistance to the Illawarra offshore energy zone on how to conduct more meaningful engagement, and it starts with placing communities at the centre of the renewable energy transition through government-funded Local Energy Hubs. These would ideally offer tailored education resources designed for transparent and reliable communication of potential project impacts.

I feel that youth viewpoints are often under-represented in community consultation and engagement, and that many young people living in the Illawarra Renewable Energy Zone (like me) are supportive of largescale investment in renewable energy and are excited by the opportunities associated with projects in our region. Youth representation in consultation and decision-making processes relating to projects in REZs will be imperative going forwards. Young people will inherit the future, meaning they will be disproportionately affected by the impacts of REZs and should be prioritised for the sake of intergenerational equity.

Thank you for your attention and I look forward to seeing the outcomes of this inquiry.

Sincerely,
Phebe Fidge.