#### Introduction

The proposal to develop an onshore wind farm in Nundle, NSW, Australia, has ignited concerns among local residents, farmers, business owners, and conservationists. Given Nundle's unique attributes, its rich historical background, agricultural productivity, and ecological biodiversity the proposed development demands a careful assessment. Additionally, as Australia increasingly embraces renewable energy, the strategic choice between onshore and offshore wind farms becomes pivotal and what my objection is largely based on as detailed below. It is important to note as a precursor that Australia is in the process of progressing numerous offshore wind areas, which as my objection will show has many benefits over onshore, therefore any future approvals of onshore wind farms that affects any community in Australia, including Nundle, would be short-sighted given the information and technology we now have.

### **Environmental Impact**

- **1. Landscape and Heritage Conservation:** Nundle's historical significance and natural beauty are vital for local identity and tourism. The construction and presence of large wind turbines will irreversibly alter the landscape, overshadowing the town's heritage and natural aesthetics. In contrast, offshore wind farms, located out at sea, preserve the integrity of historical landscapes and maintain the visual appeal of rural and historical sites.
- **2. Wildlife and Ecosystems:** The potential threat to local wildlife, particularly birds and bats, from turbine collisions is a significant concern for onshore wind farms. Moreover, the construction and maintenance activities will disrupt local ecosystems. In contrast offshore wind farms tend to have a reduced impact on terrestrial wildlife, with careful planning minimising effects on marine life and bird migration patterns.

#### **Social and Community Impact**

- **1. Social Cohesion and Community Well-being:** The introduction of an onshore wind farm has and will lead to more social divisions within Nundle, affecting community cohesion. Concerns over landscape changes, noise pollution, and shadow flicker effects may lead to community opposition, unlike offshore developments which are removed from immediate community settings.
- **2. Cultural and Recreational Impacts:** Nundle's cultural heritage and outdoor recreational activities will be negatively impacted by the visual and auditory presence of wind turbines, reducing the attractiveness of the area for residents and visitors alike.

### **Economic Considerations**

- **1. Economic Benefits vs. Local Disruptions:** While wind farms can contribute to regional economic development through job creation and infrastructure investments, onshore wind farms often offer limited long-term economic benefits to local communities after construction is completed. Offshore wind farms, however, have shown a greater potential for sustaining long-term employment in maintenance, operations, and associated maritime industries.
- **2. Property Values:** Concerns exist that the presence of an onshore wind farm could negatively affect property values in Nundle due to perceived nuisances and altered landscapes, potentially harming local homeowners and future investment in the area, this concern is all but abolished with offshore wind farms.

## **Technical and Efficiency Aspects**

- **1. Wind Resource and Efficiency:** Offshore wind farms benefit from higher wind speeds and consistency over the ocean, translating to greater energy generation efficiency and reliability. This efficiency advantage underscores the potential for offshore wind to contribute more significantly to Australia's renewable energy mix with fewer turbines compared to onshore sites.
- **2. Innovation and Global Trends:** Globally, there is a trend towards exploiting offshore wind resources due to their lower environmental footprint and higher energy yield. By focusing on offshore wind, Australia can align with global best practices, leveraging advancements in technology and reducing the cost of offshore wind energy production over time.

# **Re-evaluating Onshore Wind Farms in Context**

1. Environmental and Social Impact: The deployment of large-scale onshore wind farms, as proposed in Nundle, poses significant environmental and social risks. Research has illuminated the extensive land requirements for onshore wind farms and their potential to alter local climates and ecosystems. Such changes could have irreversible effects on Nundle's rich biodiversity, agricultural productivity, and historical heritage. Given these potential impacts, it is crucial to consider the long-term consequences of altering such landscapes.

(https://news.harvard.edu/gazette/story/2018/10/large-scale-wind-power-has-its-down-side/)

**2. Climatic Considerations:** The climatic impact of onshore wind farms, including localised warming effects and alterations in local hydrometeorology, further complicates their viability. These effects can disrupt local agricultural practices, water resources, and biodiversity, raising concerns about the sustainability of onshore wind farms in regions like Nundle.

(https://www.nature.com/articles/nclimate1505)

#### Conclusion

The proposed onshore wind farm development in Nundle poses several challenges, including environmental impacts, social and community concerns, economic uncertainties, and technical limitations. A careful analysis suggests that offshore wind farms offer a more sustainable alternative, aligning better with environmental conservation efforts, community well-being, and long-term economic benefits. It is imperative for decision-makers to consider these factors comprehensively, prioritising renewable energy solutions that harmonise with community values, ecological preservation, and economic development. In doing so, Australia can achieve its renewable energy targets while maintaining the unique character and vibrancy of places like Nundle across Australia.

Therefore, I fervently ask the Independent Planning Commission to carefully consider the <u>facts</u> when making their determination, as in my view all the facts lead to the outcome that this development should not proceed.

Thanks for taking the time to read my s	submission.
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Sincerely

Roland Reid