



HUNTER OFFSHORE WIND FARMS

questions and answers

EcoNetwork-Port Stephens is a not-for-profit, politically unaligned, 100% volunteer-run organisation with a membership base of over 30 community groups, businesses and individuals. It has been advocating, taking action and supporting education for the environment since 1993. EcoNetwork is affiliated with the Nature Conservation Council and Better Planning Network.

EcoNetwork Port Stephens took a public position on the proposal for Hunter Offshore Wind Farms in early September 2023 – see <https://www.econetworkps.org/2023/09/econetwork-port-stephens-official-statement-on-offshore-wind-proposal/>

We now offer the following answers to Frequently Asked Questions, to assist in ongoing public discussion.

Are we having a rational debate about offshore wind?

- No – political parties with no proven commitment to the environment or climate action are driving a wedge into the community and unnecessarily polarising opinion.
- There are many genuine environmental concerns and unanswered questions, but we are only at the beginning of a long process during which there will be multiple opportunities for public input before any final decisions are made.
- Emotional reactions may override scientific evidence.
- Misinformation is being used to distort the debate about offshore wind so that the most important issue, climate change, will be lost in the morass.

Has there been enough community consultation?

- There was an initial 65-day community consultation period, in which many of the critics were involved.
- As a result, the size of the proposed zone was reduced by a third and moved further offshore.
- There will be several more rounds of consultation and investigation once licences are issued in 2024, and before any final approvals are given.
- It is too early to fully assess the costs and benefits – that's why there is a process of investigation, studies and consultation which will take 7 - 10 years.

What is the biggest threat to our environment and well-being today?

- Climate change remains the primary threat, and that needs to be addressed urgently.
- This includes transitioning to renewable energy as soon as possible.
- The implications of reaching the predicted 2.5°C of warming by 2100 are terrifying. This is only 77 years away, within the lifetime of today's children and grandchildren, who currently have no say about the short-term policies and attitudes that will determine their long-term future.

Why do we need offshore wind?

- We might not, but we need to keep all our options open to ensure sufficient electricity supply as fossil fuels are phased out, as they must be.
- 100 turbines will produce more energy than Eraring, Australia's largest coal-fired power station (ANCOR University of Wollongong)
- Placing wind turbines offshore has some advantages over onshore sites, including more consistent wind at night and less impact on human communities, such as the long transmission lines that will be required for onshore developments.
- Placing wind turbines offshore from the Hunter Coast may well prove too expensive or difficult, and/or have unacceptable environmental impacts.

Why not put the wind farms onshore?

- Onshore wind farms are already being developed. While they are cheaper and easier, they are less efficient and have serious constraints.
- More onshore turbines will be needed to meet the same targets with more complex and intrusive transmission links. Land-based wind is more intermittent and is disturbed by the land effect and thermals.
- Offshore turbines at altitudes above 30 m will not be affected by the sea surface effect providing a more consistent and stronger wind than found onshore, and available at different times of the day and night.

Can the proponents of offshore wind be trusted?

- No more and no less than other corporate interests and they may prove as untrustworthy as other large corporate interests such as the fossil fuel industry.
- The energy and engineering companies that will propose offshore wind farms will be self-interested on behalf of shareholders.
- Therefore, better regulatory, oversight and compliance systems are needed with transparent oversight and compliance, which should be monitored closely by the community.

Can we trust the assessment processes?

- People are justifiably suspicious – too many environmental assessments have simply delivered the findings required by the development proponents who have paid for the studies.
- Environmental and other assessments of wind farm proposals (on land as well as offshore) should be paid for by proponents but undertaken by independent experts such as Universities or CSIRO. At the least these trusted institutions should provide oversight and be monitored by concerned communities.
- As the process develops, research will uncover new concerns and address existing ones. We should be willing to accept the science as it unfolds and check the facts.

Will the wind farms impact marine life?

- To date, there is no evidence of wind farms impacting on whale populations. However, a precautionary approach should be taken at all levels. Research about the possible impact on local whale migration, and on other marine life will be critical to the decision process.
- Climate change is an existential threat to whales. The Antarctic sea ice that krill depend on has not formed this winter. The whales depend on the krill. No krill, no whales. nor other fauna.

- The proposed semi-submersible systems will be anchored to the seabed using taut cables, with minimal risk of entanglement.
- Similar technology is already in use in the offshore oil and gas industry around the world and starting to be used for wind power.

How much noise will be generated by offshore wind power?

- Semi-submersible systems will generate considerably less underwater noise during investigations and construction than turbine towers that are fixed to the seabed and have minimal operational noise when compared to oil and gas exploration.
- The constant stream of bulk carrier and container ships moving through the area has a greater noise impact than a semi-submersible wind turbine will have.

Will increased shipping to service wind farms impact marine life?

- While there will be a risk of collision between wind farm support vessels and whales, it can be mitigated by onboard marine mammal observers and operating during daylight hours.
- The busiest shipping lane in Australia lies off Port Stephens. The bulk carriers and container ships are noisy and fast-moving and are more likely to pose a severe threat to whales than the smaller vessels used to service the wind turbines, or the wind turbines themselves.
- Globally an estimated 20,000 whales are killed annually by collision with shipping and entanglement in fishing gear.

Are bulk coal carriers a threat to the local marine environment?

- While bulk carriers offshore from Port Stephens may look benign, they can carry up to 2,000 tonnes of Bunker C Heavy Fuel Oil, an extremely toxic and persistent oil which in the event of an accidental spill would have a catastrophic impact on the shoreline of Port Stephens and beyond. We've been lucky so far.
- Global shipping produces around 3% of annual global CO₂ emissions, for context, Canada produces 1.6% of the global annual emissions. Seawater becomes more acidic when CO₂ is absorbed which has extremely adverse effects on marine life.
- If global shipping were a country, it would be the 6th largest producer of greenhouse gas emissions, and just 15 of the largest ships emit more greenhouse gases per year than all the world's cars put together (The Economist). There can be up to 30 coal ships offshore from Port Stephens waiting to enter Newcastle presenting a current and real risk to Port Stephens.

Will the wind farms affect fishing?

- The government has committed that there will be no "industry displacement" and that commercial and recreational fishing interests will be consulted before the approval of any lease sites.
- The seabed in areas such as the game fishing 'Car Park' is probably incompatible with anchoring semi-submersible wind turbines, so it is unlikely a wind farm will be placed on top of it.

Will wind farms damage tourism?

- It is difficult to see why a few wind turbines on the horizon would deter any tourists from visiting our area, on the contrary in places in the UK they have become a tourist attraction.
- An offshore wind industry serviced out of Newcastle would not interfere with any Port Stephens tourist businesses and may offer new opportunities.
- Climate change is the biggest existential challenge to the tourism industry – temperatures regularly above 45° C and a decline in the health of marine ecosystems will be a greater deterrent to tourists than distant wind farms.

Will wind farms be subsidised?

- The Renewable Energy Target (RET) assistance is designed to encourage investment in renewables of all varieties – wind, solar and hydro. Eligible companies could receive up to \$500,000 per turbine per year.
- The renewable energy industry will receive \$2.8 billion per year until 2030 to help achieve the renewable energy target.
- Meanwhile, fossil fuel subsidies have increased to a record \$57.1 billion over the forward estimates, circa \$19 billion per year (The Australia Institute).

Are small modular nuclear units the answer to clean renewable energy?

- No. After 80 years of nuclear power, there is still no solution to nuclear waste. This is the most expensive source of energy and will leave a massive toxic legacy for future generations.

Will the wind farms be there soon?

- No – Realistically, it will take 7 + years of preparatory work including environmental and regulatory assessments before approvals are given which allows plenty of time for further community consultation.

Will the declared zone be covered by wind turbines?

- No – Developers will bid for defined areas within the zone and wind farms would only ever cover a portion of the zone, with separation between individual turbines of at least 1km. Once the leases have been allocated, the environmental and other regulatory assessments can be commenced.

How visible will the turbines be from onshore?

- Now that the declared zone has been pushed out to at least 20km offshore, turbines in any windfarms will appear, at most, like matchsticks on the horizon on a clear day.
- We accept that some people will not be happy with any visibility, but we suggest that the visual impact is being massively overstated and that it needs to be balanced alongside all other pros and cons.

More information is needed before any rush to conclusions, creating tensions and division in the community.