



Committee Secretary  
Senate Standing Committees on Environment and Communications  
PO Box 6100  
Parliament House  
Canberra ACT 2600

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By email: [ec.sen@aph.gov.au](mailto:ec.sen@aph.gov.au)

Dear Committee Secretary,

On behalf of its members, the Australian Fishing Trade Association (AFTA) makes the following submission to the *“Senate Inquiry into the Offshore Wind Industry Consultation”*. AFTA is concerned with the lack of effective and proactive engagement with all key stakeholders, the adverse environmental impacts, and the fishing exclusion zones arising from Offshore Windfarms, forming the basis of our submission.

The Australian Fishing Trade Association (AFTA) is the national representative body for Australia's recreational fishing industry. Our membership covers all aspects of recreational fishing, from manufacturers, wholesale distributors, retail, media, and charter & guiding operations, and through this, we represent every recreational fishing participant. However, it is extremely disappointing that as the national peak body for recreational fishing, AFTA were not informed of the initial consultation process for the first Offshore Windfarm zone at Gippsland, Victoria. AFTA members found out about the Gippsland zone through the media after the consultation period had ended.

The Australian recreational fishing trade consists of 1568 independent tackle stores, 170 BCF stores, 84 Anaconda Stores, 2 major manufacturers, 130 wholesalers & agency representatives, 316 Kmart and 195 Big W retail outlets, and the 524 Fishing Charter/Guides operators, plus the many outlets at service stations and holiday parks selling bait and tackle.

In Australia, 21.4% of adults participate in recreational fishing. The recreational fishing industry in Australia contributes an estimated \$11 billion to the national economy and over sustains 100,000 full-time equivalent jobs<sup>1</sup>.

AFTA believes that everyone wants a cleaner, healthier, sustainable environment, whether it concerns the sea we fish in or the air we breathe. While our members may have differing opinions on the government's push towards Net Zero Emissions, all oppose the negative impacts Offshore Wind farms will have on marine life, fishing, tourism and directly on their businesses.

Issues such as area exclusion zones, noise generation and electromagnetic impulses affecting the movement patterns of fish, mammals and sea birds are serious matters that need to be taken into consideration.

The Federal Energy Minister, Chris Bowen, has to date declared & authorised 4 of the 6 intended Offshore Windfarms<sup>ii</sup>.

Gippsland	Vic	15000 km <sup>2</sup>	Approved	19 December 2022
Southern Ocean	Vic	1030 km <sup>2</sup>	Approved	6th March 2024
Hunter	NSW	1854 km <sup>2</sup>	Approved	12th July 2023
Illawarra	NSW	1022 km <sup>2</sup>	Approved	15th June 2024
Bass Straight	Tas	10136 km <sup>2</sup>	Proposed	
Bunbury	WA	7674 km <sup>2</sup>	Proposed	

AFTA also notes that feasibility licences have now been issued for the Gippsland & Hunter zones.

AFTA commends the South Australian Government's stance<sup>iii</sup> explicitly ruling out Offshore Windfarms in South Australia, recognising the harmful impact on marine life and the fisheries sector.

The 2 zoned areas in NSW alone cover 2876 km<sup>2</sup> of the most productive prime pelagic tournament fishing grounds in NSW, not to mention the effect on those who deep drop or deep jig for other species. These prime locations will affect not only recreational & commercial fishers but also the broader marine life and the tourism market.

All the above 6 zoned areas are of great concern to everyone involved in fishing and tourism as well as many other sectors. AFTA notes that the Offshore Windfarm program started under the former Coalition Government and is being finalised under the current Labor Government, but this does not mean any party can ignore genuine and meaningful consultation with any sector.

These wind farms are large-scale installations of wind turbines that generate electricity from wind power. Issues such as area exclusion zones, noise generation and electromagnetic impulses that affect the movement patterns of fish, mammals and sea birds are serious matters being left unaddressed.

#### **Exclusion Zones:**

A major issue for recreational fishers in all areas is the proposed exclusion zones, currently indicated as 1.5km from any structure or cable. While these structures will be a Fish Attracting Device (FAD), if recfishers cannot access the structure, it will be to the absolute detriment of recfishers.

Recently, AFTA sought a clear, definitive statement from Climate Change & Energy Minister, Chris Bowen<sup>iv</sup> outlining the government's planned exclusion zones in Offshore Wind Farm infrastructure so our members could assess the impact of Offshore Wind Farms on their local industry.

In a recent letter (undated) on exclusions zones, Climate Change & Energy Minister, Chris Bowen MP<sup>v</sup> stated:

*The Offshore Infrastructure Regulator will be responsible for making safety and protection zone determinations. These zones will be determined on a project-by-project basis and will only be approved if there is clear justification for them in the Australian context. The Regulator will seek to ensure that offshore infrastructure is appropriately protected without unreasonably restricting the movements of recreational fishing vessels in accordance with international law and balancing coexistence with other marine users.*

*I anticipate that recreational fishing vessels will be able to travel and fish within the footprint of a wind farm, similar to offshore wind regulatory models used in countries such as the United Kingdom (UK) and Denmark. Offshore wind farms in UK waters commonly have wind turbines spaced from 1,000 metres to more than 3,000 metres apart. Typically, in these examples, an exclusion zone of 50 metres is established, where fishing vessels cannot enter around individual wind turbines and other pieces of offshore renewable energy infrastructure during their normal operations. It may also be possible in some instances that no exclusion zone is required.*

AFTA has called on Climate Change & Energy Minister, Chris Bowen MP to immediately regulate/legislate what exclusions for Australian waters will apply and not leave it to the proponents who will ultimately be directed by their insurers as to the size limits of the exclusion zones. The feedback from proponents' is that the exclusion zones will most likely be 1.5 km at a minimum from any tower or infrastructure due to insurance requirements.

AFTA needs clear and definitive answers so our members can adjust their business models to cope with this uncertain access model.

### **Offshore Wind Farms – The Issues:**

Issues are not confined to access and exclusion zones. There are many and various detailed considerations that need to be considered with offshore wind turbines, including localised environmental impacts, all of which have been well documented through numerous external studies.

#### **Noise Pollution:**

The building and operation of offshore wind turbines create human-made noise that can affect marine life, such as whales, dolphins, and seals that depend on sounds (echolocation & vocalisation) to communicate and navigate. As cited in *Frontier in Marine Science* (28/9/23),<sup>vi</sup>, these sounds can interfere with marine mammals' behaviours as they change their way of communicating, feeding, reproducing, and navigating the oceans. Sometimes, these changes can lead to injury or even death.

#### **Habitat Loss:**

Installing offshore wind turbines causes natural habitat destruction and displacement of some marine species. This was outlined in *The Journal of Environmental Management* abstract on research<sup>vii</sup>.

While the turbine structures will create a new artificial reef system in themselves, this new reef system will affect the natural movement patterns of pelagic species. This structure also presents an opportunity for invasive non-native species to establish and have an ongoing damaging environmental impact.

#### **Sea Birds:**

Offshore Wind farms affect the domestic and migratory sea birds that prey on bait schools attracted to the turbine structure to survive. A study by the Conservation Action Lab, UC Santa Cruz<sup>viii</sup>, identified that seabirds are the most threatened group of birds. The potential impacts of offshore wind farms include displacing birds from areas where they look for food and direct mortality from collisions with wind turbine blades. Both displacement and mortality can have adverse effects on an affected species overall population.

The government has not adequately addresses the impact of these windfarm on RAMSAR listed areas with endangered species that will have to navigate amongst the turbines in these zones.

### **Underwater Disturbance:**

The building and installation of offshore wind turbines will cause significant underwater disturbance, affecting marine species' behaviour and movement patterns.

During operation, the wind turbines emit an electromagnetic field that interferes with the ocean's natural electromagnetic fields. Fish and mammals use these electromagnetic fields as their natural magnetic compass to navigate the underwater environment to search for food, communicate, stay orientated and migrate, locate resources and predators, to note a few.

Studies in the UK have revealed that Offshore Windfarms cause havoc on fish spawning grounds and that the power cables that connect offshore wind turbines are mesmerising crabs and causing biological harm that affects their ability to migrate and breed; the same phenomenon has just been identified in lobsters.

On the 6 March 2024, the South Australian government rejected any offshore windfarms in the state of South Australia based on the impact on the rock lobster fishery and the environmental concerns. This demonstrates consideration must be given to the design and location to minimise the environmental impact. Further community consultation and localised ecological impact assessments must be undertaken with local communities, fishers, stakeholders, tourism operators and wildlife conservationists to ensure and undertake the potential impacts.

Once these turbines and infrastructure are in place, there is no realistic or practical opportunity to address any below-water, negative environmental impacts in retrospect.

### **Collision Risk:**

Offshore wind turbines pose a collision risk, not only to seabirds, which can negatively affect local ecosystems, but also represent a major navigational hazard for cargo vessels. The proposed areas off the east coast of NSW are high-level demurrage areas while vessels wait to enter the high-volume ports of Newcastle, Botany & Port Kembla. This area also experiences a major East Coast<sup>x</sup> low during May – July. This East Coast Low has seen the beaching of the MV Sigma (1974), the MV Pasha Bulka (2007) and the major container spill off the YM Efficiency (2018). To consider that they would have to navigate around these large-scale area farms in such atrocious conditions is an unacceptable potential threat. There is also the possibility that the seasonal East Coast Lows ferocity could damage the turbine blades.

### **The Impacts on Fishing:**

Both the commercial and recreational fishing sector will be affected by the introduction of offshore wind farms. The sheer scale and resultant exclusion zones of wind farms across key fishing areas will severely affect the viability of both sectors.

With the exclusion of fishing activity, both recreational and commercial fisheries in the areas affected by the offshore wind farms will have been dealt negative triple-bottom-line effect. The economic, social and environmental consequences for the recreational fishermen, the commercial fishing industry, the coastal communities that depend on this sector, and society in general will be negatively impacted. In addition, the sounds, vibration, and electromagnetic fields of the cables can affect captures.

Besides removing prime fishing grounds through exclusion zones, the wind turbine structures will become large-scale full-time floating artificial reef structures, creating a whole new marine ecosystem system based on each wind turbine's underwater structure. The number of structures



planned will naturally attract baitfish and, as a result, draw target species away from allowable fishing areas. These will also compete with and overtake the benefits of any seasonal Fish Attraction Devices (FADs); they will change the movement pattern of schooling baitfish, which in turn will alter the pattern of the pelagic species that follow food chain.

This is a national issue, and as an example the impact in the proposed area for the Hunter-Central Coast offshore wind farm covers the prime regions for pelagic sports fishing, mainly Marlin, Tuna, Mahi Mahi & Sharks. World-renowned locations such as “The Carpark”, “Allmark”, “Newcastle Canyons” and “Norah Head Canyons” are only some of the prime areas that will be all be affected by any exclusion zones implemented.

The tourism-reliant economy of Port Stephens will be directly affected. Port Stephens is the original home of Game Fishing; it is “where it all began” in Australia. The Exclusions zones will jeopardise the game fishing participation rate and would directly affect the viability of the “Billfish Shoot-Out”, the “NSW Interclub Championship”, and many other smaller tournaments, all contributing heavily to the local tourism-based economy.

This triple bottom line impact will be similarly replicated at every proposed location around the Australian coastline.

#### **Marine Life:**

The whale and dolphin watch tourism sector depends on a clean and unaffected marine environment free from all forms of pollution. That whales will be affected by the noise and structures in clearly defined transit highways is of extreme concern. Only in the past 30 years have we seen a solid recovery of the whale population transiting these seasonal migration highways, and their survival should not be taken for granted.

Offshore wind farms are known to have harmful effects on marine life, including whales, dolphins, and seals, and these are common across all proposed locations. The building and operation of wind turbines create noise pollution, which interferes with the communication and navigation abilities of whales and other marine mammals, leading to changes in their behaviour and movement patterns and potentially harming their population over time.

The Australian east and west coast whale population seasonal migration pattern is through all the proposed site locations. Whilst locating offshore wind farms in areas less frequented by whales and other marine life may reduce the negative impact on marine life, locating them on coastal land will.

AFTA questioned the government's decision to establish an offshore windfarm zone in Bunbury (WA). In its submission, AFTA argued that it would have been more environmentally friendly and cost-effective to enlarge or replicate the existing wind farms on the coast, given the local support infrastructure and the regular wind pattern known as the Fremantle Doctor.

The Fremantle Doctor<sup>x</sup> is the Western Australian term for the cooling afternoon sea breeze, which can be quite strong, often blowing between 15 and 20 knots that occurs during summer months in south-west coastal areas of Western Australia. The sea breeze occurs because of the significant temperature difference between the land and sea.

By working to minimise the impacts, government can ensure that wind power is harnessed in an environmentally responsible way.

## Conclusion:

AFTA submits that the Government needs to conduct an honest, transparent and detailed evaluation of all the issues raised in this inquiry, by not only AFTA, but also the entire affected community.

This submission does not cover all the issues, as there are also impacts on defence, coastal shipping, navigation, radar interference, aircraft flight issues, but AFTA will leave it to the experts in these areas to point out those effects. To address identified issues, government and industry stakeholders must undertake joint studies on the potential impacts of wind farms on all issues raised during this process.

AFTA is prepared to elaborate further on our concerns should the opportunity be available at any hearing location.

The Hon. Bob Baldwin  
Independent Chair  
Australian Fishing Trade Association

## References:

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- i *FRDC Social & Economic Survey of Recreational Fishers 2018-21*
  - ii [dcceew.gov.au/energy/renewable/offshore-wind/areas](https://dcceew.gov.au/energy/renewable/offshore-wind/areas)
  - iii [premier.sa.gov.au/media-releases/news-items/south-australian-government-opposes-southern-ocean-offshore-windfarm-zone](https://premier.sa.gov.au/media-releases/news-items/south-australian-government-opposes-southern-ocean-offshore-windfarm-zone)
  - iv [afta.net.au/afta-questions-minister-over-offshore-wind-farm-exclusion-zones/](https://afta.net.au/afta-questions-minister-over-offshore-wind-farm-exclusion-zones/)
  - v [afta.net.au/wp-content/uploads/Letter-from-Minister-Bowen.pdf](https://afta.net.au/wp-content/uploads/Letter-from-Minister-Bowen.pdf)
  - vi [frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1293733/full](https://frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1293733/full)
  - vii [sciedirect.com/science/article/abs/pii/S0301479722001505#preview-section-references](https://sciedirect.com/science/article/abs/pii/S0301479722001505#preview-section-references)
  - viii [news.ucsc.edu/2022/11/offshore-wind-energy.html](https://news.ucsc.edu/2022/11/offshore-wind-energy.html)
  - ix [bom.gov.au/weather-services/severe-weather-knowledge-centre/eastcoastlows.shtml](https://bom.gov.au/weather-services/severe-weather-knowledge-centre/eastcoastlows.shtml)
  - x [fremantlewesternaustralia.com.au/fremantleclimate.htm](https://fremantlewesternaustralia.com.au/fremantleclimate.htm)