

Star of the South Offshore Wind Farm – Detailed Submission Support Report

This document is a research and drafting aid intended to assist preparation of a formal submission opposing or seeking stricter scrutiny of the Star of the South offshore wind project. It focuses on evidence gaps, uncertainty, cumulative impacts, environmental risk, and matters that may warrant further assessment.

Executive Summary

The strongest concerns identified from the project materials reviewed to date are:

- Potential impacts on protected seabird species, particularly collision risk and reliance on avoidance assumptions.
- Potential impacts on Southern Right Whales and Blue Whales within biologically important areas.
- Uncertainty regarding benthic habitat disturbance, sediment transport, scour, and long-term seabed changes.
- Significant visual impacts on coastal communities from a large industrial development operating for more than 30 years.
- Reliance on predictive modelling and future adaptive management rather than demonstrated outcomes.
- Limited discussion of cumulative impacts from multiple offshore wind developments in Gippsland waters.

Birds and Collision Risk

Bird impacts appear to be one of the most vulnerable areas of the assessment. Offshore wind remains relatively new in Australia and uncertainty exists regarding how local seabird species will respond. Collision-risk models depend heavily on assumptions about avoidance behaviour, flight heights, movement patterns, weather conditions and population data.

Key concerns:

- Small errors in avoidance assumptions may produce large changes in mortality estimates.
- European offshore wind experience may not translate directly to Bass Strait conditions.
- Threatened species such as the Shy Albatross warrant a precautionary approach.
- Monitoring after construction does not prevent impacts that occur before a problem is detected.
- Cumulative impacts from multiple offshore wind projects may be underestimated.

Suggested question:

What empirical evidence demonstrates that collision predictions for Australian seabirds are sufficiently reliable to support approval?

Whales and Marine Mammals

The project overlaps areas identified as important for whale migration, feeding and other biological functions. Construction activities may generate underwater noise, vessel traffic and disturbance.

Key concerns:

- Overlap with biologically important whale habitat.
- Reliance on modelling to predict behavioural responses.
- Limited ability to predict long-term displacement effects.

- Construction noise and vessel activity.
- Cumulative effects from multiple projects in the Gippsland offshore wind zone.

Suggested question:

Has the project demonstrated that migration, feeding and communication behaviour will remain unaffected with a high degree of confidence?

Benthic Habitats, Seabed Disturbance and Sediment Transport

Installation of monopiles and associated scour protection will alter local seabed conditions. While proponents often describe these impacts as manageable, questions remain regarding long-term consequences.

Key concerns:

- Disturbance of benthic habitats during installation.
- Changes to current flow and seabed hydrodynamics.
- Long-term sediment transport effects.
- Artificial reef effects altering ecological communities.
- Potential attraction of invasive species.
- Uncertainty regarding long-term Bass Strait conditions.

Suggested question:

What evidence demonstrates that sediment transport and benthic habitat changes will remain localised over the life of the project?

Visual Amenity and Coastal Character

Visual impacts are a legitimate planning consideration. The project may include up to 147 turbines, heights of up to 350 metres and associated offshore substations.

Key concerns:

- Industrialisation of a largely natural seascape.
- Long-term impacts lasting 30 years or more.
- Potential effects on tourism and coastal character.
- Visibility under varying weather and lighting conditions.
- Night-time lighting impacts.
- Uncertainty regarding the final layout and appearance.

Suggested question:

Has sufficient weight been given to the social, recreational and tourism value of the existing coastal landscape?

Cumulative Impacts

One of the most important concerns is whether impacts have been assessed project-by-project rather than across the wider offshore wind zone.

Areas requiring cumulative assessment include:

- Bird mortality.
- Whale disturbance.

- Vessel traffic.
- Fisheries displacement.
- Visual impacts.
- Habitat fragmentation.
- Combined construction noise.

A project that appears acceptable in isolation may create different outcomes when assessed alongside other proposed developments.

Adaptive Management and the Precautionary Principle

A recurring theme is reliance on future monitoring, management plans and adaptive responses.

Common pattern:

1. Impact identified.
2. Mitigation proposed.
3. Impact downgraded.
4. Monitoring promised.

This can shift environmental risk from the assessment stage to the operational stage. Where uncertainty exists regarding protected species or sensitive ecosystems, the precautionary principle may support a more conservative approach.

Potential Submission Themes

Protected species and biodiversity.

2. Scientific uncertainty and evidence gaps.
3. Cumulative impacts across Gippsland.
4. Benthic ecosystem and sediment transport concerns.
5. Visual amenity and coastal character.
6. Reliance on adaptive management.
7. Application of the precautionary principle.

Key Tip

A strong submission generally focuses on uncertainty, evidence gaps and environmental risk rather than opposition to renewable energy itself is more likely to be accepted to the assessors of your submission.

Cliff Hall.