



South-West Coast Scientific Group

Common Myths Against Offshore Wind Farms



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Myth#1: Wind Farms kill Whales.

There is no evidence from anywhere in the world that suggests that wind farms kill whales. By contrast, seismic blasting for oil and gas exploration is known to be harmful to all marine life.

Myth #2: The Whales won't come.

The proposed offshore wind farm is clear of the migration corridor, which whales use to access the feeding and nursery areas. It is also clear of the Bonney Upwelling, which drives the food production that feeding whales require. The whales will still come.

Myth#3: The noise will drive whales away.

Surveys for locating offshore wind turbines use smaller airguns, since they need only penetrate 50-100 metres into the bedrock in a localised area around where the piles are to be placed. In addition, these surveys will only take a few days of data collection.

Seismic surveys for gas and oil exploration, on the other hand, use large airguns whose bubble explosions generate intense sound impulses of 250 dB or more continuously every 10 seconds or so all day long (except when the survey ship is reversing course) for up to 200 days. Such explosions are needed for the sound to penetrate several kilometres into the seabed to locate the strata containing the oil and gas. They also kill all krill, the keystone species that is the food for whales.

The high-frequency sonar used in mapping surveys is harder for whales to hear and has been shown not to harm them. The sonar is short range and a whale would need to be close to the ship for the noise to matter. Such exposure is unlikely as the ships carry marine observers to warn of the presence of whales.

There may be some disruption to marine animals during the construction phase, but these effects can be mitigated, for example by using "bubble curtains".

During operation, wind farms generate low frequency noise from the vibrations of the tower that is transmitted down the pile leg to the seabed. This low-frequency sound does not propagate well, limiting the impact to a few hundred metres. The noise is relatively benign for animals, sounding more like a low frequency rumble.

The wind farms will not drive the whales away but seismic surveys for oil and gas will.

Myth#4: It will damage fishing.

The supporting wind-farm piles will create an artificial reef that will be colonised by a range of fish species that will flourish because the restricted access will create a virtual marine park refuge. The fishing will get better.

Myth#5: It will damage the Eel population.

When the eels leave the river mouths, they swim well within 10km of the shore, well away from the wind farm. It will not damage them.

Myth #6: The wind farm will be so unsightly that no one will want to come to the Logan's Beach whale viewing platform or to Port Fairy.

Most of the turbines will be up to 50km offshore and so over the horizon. The nearest ones, 15–20km away from Logan's Beach or Port Fairy, might be visible on the horizon during the day. Their navigation lights might be visible during the night.

Myth 7: Wind farms cause ill health.

Wind farms have been around for hundreds of years, in the Netherlands, for example. There is no evidence over that long period of time that they damage human health.

Myth 8: There will be catastrophic numbers of bird deaths.

In general, birds will fly around wind turbines, although some will fly into the blades, especially if visibility is poor in bad weather. The numbers are much less than mortality already caused by tall buildings and power lines.

Myth#9: Damage to marine life from electromagnetic fields

Electromagnetic fields from power cables are unlikely to bother whales just as the plethora of power lines snaking across the landscape, at both low- and very-high-voltage, do not bother humans. As the cables are on the bottom, the field will be much weaker at the surface, where the whales swim. It is possible that the fields might impact skates, rays, and bottom feeding sharks, which have good electromagnetic sensors.

The South-West Coast Scientific Group of the Clean Ocean Foundation comprises three retired academics, a Marine Biologist, a Medical Academic and a Physicist. We have a combined 50 years' experience in Marine Sciences and 35 years in evaluation of research for policy development.

We declare an interest as surfers, whale and bird watchers, and recreational fishermen. We have a strong interest in our marine environment and recognise the urgency of halting global warming.

Along with others, we made the case successfully to the Minister for Climate Change and Energy for the wind farm not to include the Bonney Upwelling, an area of unique ecological importance for all marine life, and especially for Blue Whales and seabirds.

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14 May 2024

Further copies of this report are available from swcrg@cleanocean.org

Cover Photo. The *Cape Petrel*.
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