

OPINION

The beauty of offshore wind

Tim Flannery

Sep 30 2023



The Federal government has announced a consultation period on the proposed area for offshore wind developments in the Illawarra, which runs until October 16 this year. It's important to have your say.

The Illawarra has been chosen for offshore wind because we have excellent port and industrial facilities, as well as a superb wind source. The area where the wind farms will be situated covers 1641 square kilometres, located between 10 and 30 kilometres offshore.

Offshore wind turbines are a potent source of electricity. A single rotation of an offshore turbine's blades can provide as much electricity as a home solar array produces over an entire day. In all, the proposed Illawarra development could produce enough energy to power 3.4 million homes. And the wind is often blowing offshore, meaning that wind power is available both day and night.

The need for new clean energy is urgent. We need it in order to close down our polluting coal and gas plants. And if we fail to develop clean energy in time, climate impacts – from heatwaves to fires and floods and sea-level rise – will continue to grow. I believe that we must do everything we can do in order to hasten the transition, so I'll be supporting the wind development.

I understand that some people have concerns, particularly about the impacts of wind farms on the marine environment. The best guide to those impacts is a review, published last year in the world's leading science journal *Nature*, which documents both positive and negative effects of offshore wind farms.

During the construction phase, larger marine mammals may avoid the area, and birds can collide with the turbines during migration. But these negative impacts can be minimised (for example, by turning the turbines off during the seabird migration period).

The positive impacts are less well-known, and some are surprising. Everything from invertebrates to fish, seabirds and seals can benefit from the underwater structure of the wind turbines, meaning that once the construction is complete their numbers can increase. Interestingly, the fishing becomes better, with fish-catch increases of 7% occurring in the vicinity of wind farms. But some kinds of fishing, such as trawling, cannot occur near wind farms.

When I look out over the Illawarra coast today, I see flotillas of ships at anchor close to the shore, emitting pollutants into the air and water. Their enormous anchors also disturb the bottom, crushing marine life and tearing up delicate organisms. I know that the ships are necessary, so I don't complain about the devastation. But how much happier I'd be to see wind turbines at work, rather than coal freighters off our beaches.

I love wind turbines, and often stop near wind farms when driving just to admire them, and be calmed by their majestic movements. But offshore wind turbines are something very special. They are gigantic, and one of humanity's greatest engineering triumphs. Imagine turbine blades 130 metres long! When I encounter offshore wind farms overseas, I see them as symbols of hope in a world struggling with devastating climate impacts. I hope I'll be able to glimpse our own offshore turbines one day, if they are 10 to 30km out.

New South Wales is a laggard in developing clean energy, as the recent decision to keep our highly polluting coal plants running longer than preciously decided shows. We're lagging in part because of community opposition to wind and solar farms. If we in the Illawarra won't do our bit to help with the energy transition, then who will?

And what will we tell our children as the megafires of the future rage, and the sea rises?

About the author



Tim Flannery is a scientist, an explorer, a conservationist and a leading writer on climate change. He has held various academic positions including visiting Professor in Evolutionary and Organismic Biology at Harvard University, Director of the South Australian Museum, Principal Research Scientist at the Australian Museum, Professorial Fellow at the Melbourne Sustainable Society Institute, University of Melbourne, and Panasonic Professor of Environmental Sustainability, Macquarie University. His books include the award-winning international best-seller *The Weather Makers, Here on Earth* and *Atmosphere of Hope*. Flannery was the 2007 Australian of the Year. He is currently chief councillor of the Climate Council.

Acknowledgement

The publishers of The Illawarra Flame acknowledge Aboriginal and Torres Strait Islander Peoples and their cultural and spiritual connection to this land. Their stories are written in the land and hold great significance to Aboriginal and Torres Strait Islander peoples, from the mountains to the sea.