



**Turning the  
tide on  
offshore oil  
and gas in  
Australia**



Sweep over seaweed forest in the Great Southern Reef, Australia  
© Stefan Andrews / Ocean Image Bank

## Iconic southern waters

Australia's South-east oceans are home to some of the most unique and ecologically rich marine life on the planet. Within these waters, majestic blue whales, southern right whales, whale sharks, sea turtles and southern bluefin tuna live alongside threatened kelp forests and the fragile deep-sea corals of the Great Southern Reef.

The convergence of three oceans – the Pacific, Indian and Southern Oceans – creates an upwelling of deep, nutrient-rich water that provides a turbocharged life support system for marine life in the region. Krill and other plankton are plentiful, resulting in rich feeding grounds for whales, dolphins, seals and seabirds. Much of this habitat lies within the South-east Marine Parks Network.

Approximately 85% of fish, 95% of molluscs (like squid and octopus), 90% of echinoderms (like sea stars and sea urchins) and 65% of seaweeds found in Australia's South-east oceans are found nowhere else on Earth.<sup>1</sup> If we lose them here, they vanish forever. Unfortunately, these species and their habitats are under threat from seismic blasting and fossil fuel exploration projects.

## The fossil fuel threat

Our biodiverse South-east seas are in the crosshairs of the oil and gas industry, with multiple companies proposing to conduct harmful seismic blasting and test drilling for fossil fuels expansion.

A seismic blasting proposal by TGS/SLB-Schlumberger spans 45,000 square kilometres of ocean between Victoria and Tasmania, including parts of the Zeehan Marine Park. If approved, this would be the world's largest 3D seismic blasting project on record. Another company, CGG, wants to conduct seismic blasting over calving grounds for endangered southern right whales just 7 kilometres from the Victorian coast.

Seismic blasting is used by the industry to locate pockets of oil and gas beneath the sea floor. Airguns fire loud blasts of compressed air into the water every 10 to 15 seconds, 24 hours a day, for months on end. These blasts are louder than an atomic bomb and have a devastating effect on marine life.

Seismic blasting has been connected to temporary and permanent hearing loss, habitat abandonment, mating and feeding disruption and possible death in marine mammals

like whales.<sup>2</sup> The blasts lead to scallop deaths by compromising their immune systems<sup>3</sup> and have been found to irreversibly damage the organs of lobsters.<sup>4</sup> Tasmanian research found seismic blasting also triggers extensive death in plankton, like krill, from more than a kilometre away – removing crucial foundations of marine food webs.<sup>5</sup>

Drilling for gas and other fossil fuels puts marine life at risk, including endangered and protected species. Modelling for a gas test drilling project between Victoria and Tasmania proposed by ConocoPhillips shows a spill from a wellhead blowout could spread to marine habitats and beaches in South Australia, Tasmania, and

New South Wales.<sup>6</sup> According to modelling by ConocoPhillips, impacts of a spill could reach the Tasmanian Wilderness World Heritage coast and Macquarie Harbour, the last refuge of the endangered Maugean skate.<sup>7</sup>

In 2009, a wellhead blowout in the Montara oil field off Western Australia's Kimberley coast led to more than 34 million litres of oil spewing into the Timor Sea for 74 days. The oil washed up on West Timor, destroying seaweed farms, disrupting fisheries and negatively affecting people's health.

It is clear that risks to the South-east's iconic marine life are too great to allow these fossil fuel projects to go ahead.



Southern right whale nursing her calf

Maps are not to exact scale and are subject to change. Based on information supplied by proponents at the time of publication.



Large oil rig in the North Sea venting flare

## Greenwashing climate pollution: carbon capture and storage

The Australian government is currently considering allowing the fossil fuel industry to pump greenhouse gas pollution under the seabed, including in our south-east oceans. This process is called Carbon Capture and Storage (CCS), and is used by oil and gas companies to extend the life of depleted fossil fuel wells. CCS allows these companies to claim offsets of their carbon emissions and continue extracting fossil fuels, prolonging the climate crisis and delaying the desperately needed shift to renewable energy.

The risks of leaks and pollution occurring in from CCS are very real, as shown by the world's biggest CCS plant in operation at Chevron's Gorgon project off the coast of Western Australia. Each year, the plant leaks millions of tonnes of greenhouse gas pollution that it promised would be sequestered below the ocean floor.

CCS is also a favoured way for fossil fuel companies to extend the life of old oil and gas fields, despite the urgent need to transition away from fossil fuels. Pumping CO<sub>2</sub> into depleted wells increases the pressure, forcing out any remaining oil and gas and risking a leak from oil infrastructure.

CCS is an unsafe, unproven and unviable technology that distracts from the need to end fossil fuel exploration. Even worse, Australia's oceans are being considered as dumping grounds for greenhouse gas pollution from around the world. Recent changes to Australia's 'Sea Dumping' legislation (*Environment Protection (Sea Dumping) Act 1981*) are approved, other countries would be able to send their carbon pollution to be pumped under Australia's seabed. Our oceans, marine life and climate need to be protected from the threat of CCS.





## Breaking a bad habit

Every year, the Australian government releases new areas of our oceans for oil and gas companies to explore with seismic blasting and risky test drilling. There is no legislative requirement for the government to release areas of our oceans for fossil fuel exploration; the Australian government is just responding to the industry's demands for continued expansion. Once companies secure permission to conduct harmful seismic blasting and test drilling, our marine life pays the price of this bad habit.

In a global climate crisis, unlocking new fossil fuel deposits is the opposite of what Australia should be doing. Marine life in Australia's South-east oceans is already being hit by the double threats of overfishing and climate change. These oceans are warming at an alarming rate, at 3 to 4 times the global average.<sup>8</sup> A strong heatwave off south-western Australia in 2011 devastated kelp forests and seaweeds, many of which have still not recovered.

The Australian government has the power to stop unlocking new areas of our oceans for fossil fuel development. Ending the bad habit of annual acreage release is a crucial step to providing a better future for Australia's iconic marine life and our global climate.



Weedy sea dragon in Portsea, Victoria

## Turning the tide

Australia must stop approving new offshore oil and gas projects to protect our climate, oceans and iconic marine life.

The oil and gas industry wants more seismic blasting and drilling in marine parks off the coast of Victoria and Tasmania. We need to strengthen the protection of our marine parks to stop these damaging projects and prevent more fossil fuels from being released during a global climate crisis.

By ending the bad habit of acreage release, the Australian government can directly prevent the destruction of marine life, protect our oceans, and start the rapid phase-out of fossil fuels to take real action on climate change.

### References

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