Australia's Bramble Cay melomys is extinct because of anthropogenic climate change, yet Australia continues to approve projects that contribute to warming.

Australia's harmful fossil fuel approvals

In 2020, an independent review determined that Australia's Environment Protection and Biodiversity Conservation Act was ineffective (*1*). Since taking office in 2022, the current administration has worked on revising the act (*2*) but has also continued to approve fossil fuel extraction projects (*3*). In November 2025, the government passed the Environment Protection Reform Bill, which aims to deliver stronger environmental protection and faster project approvals (*4*). However, gaps in the bill make it unlikely to improve outcomes for biodiversity. There is no requirement for decision-makers to consider the effect of estimated greenhouse gas emissions of proposed projects on climate change or biodiversity, nor does the bill require disclosure of indirect emissions, such as fossil fuel burning overseas (*4*). To meet its climate and biodiversity goals, Australia must implement regulations that limit approvals for projects that will produce substantial emissions.

The continuing approvals of fossil fuel projects contradict Australia's environmental obligations (*5*). National and international biodiversity targets include a commitment to prevent extinctions (*6*), yet each project contributes to warming temperatures (*7*), and warming temperatures drive extinctions (*8*). In July 2025, the International Court of Justice declared that nations have an obligation to prevent climate change and that the production and consumption of fossil fuels may violate international law (*9*).

Robust evidence shows that fossils fuels lead to biodiversity harm (*10*). In Australia, half of coral cover has been lost from the Great Barrier Reef (*11*), and the Bramble Cay melomys (*Melomys rubicola*) is likely the first documented mammalian extinction event attributable to anthropogenic climate change (*12*). Australia's government should swiftly amend the Environment Protection Reform Bill to explicitly consider the full suite of emissions resulting from fossil fuel projects, recognize the subsequent effect on biodiversity, and make approvals for new projects contingent on evidence that they will be implemented sustainably.

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Australian rare earth plans imperil biodiversity

Rare earth minerals are indispensable to the manufacture of high-performance magnets, batteries, and other materials that are vital to clean energy, communications, aerospace, and defense technology (*1*). The global demand for rare earth minerals is expected

to double by 2050 (*2*). China dominates the rare earth mineral market, but recent Chinese export restrictions have motivated the countries that rely on China to increase the development of domestic supplies (*3*). On 20 October 2025, Australia signed an agreement with the United States to strengthen the supply chains for rare earth mineral mining and processing (*4*). Although the US-Australia rare earths framework (*5*) may bolster Australia's domestic processing capacity, the economic benefits could come at a cost to global biodiversity.

Rare earth mineral processing is environmentally intensive and often results in habitat loss, soil erosion, and waterway contamination—factors that can substantially threaten biodiversity (*6*). The risks are high in Australia, a megadiverse country that harbors between 600,000 and 700,000 native species, many of which are not found anywhere else (*7*). The country's landscapes and ecosystems, including extensive marine and Indigenous protected areas, are home to a disproportionately large share of the world's biodiversity (*8*). Australia also faces one of the highest extinction rates globally (*8*).

As the US-Australia rare earth mineral agreement progresses, Australia should integrate environmental stewardship into its implementation. The harmful environmental legacy of rare earth mineral processing underscores the need for comprehensive environmental and biodiversity impact assessments, robust remediation strategies, and strong protections for Indigenous lands and threatened habitats from the outset. Australia's ongoing development of national environmental standards, as part of recent reforms to the Environment Protection and Biodiversity Conservation Act, provides an opportunity to move forward responsibly (*9*). Balancing development with conservation efforts is essential to meet Australia's commitments under the Paris Agreement (*10*), the Convention on Biological Diversity (*11*), and the Kunming-Montreal Global Biodiversity Framework (*12*).

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Next steps for WTO fisheries agreement

The future of global fisheries—which provide 1 in 10 jobs and primary protein for 3.2 billion people—is at risk (*1–3*). Each year, US$22 billion in harmful subsidies incentivize overfishing that depletes fish stocks—a third of which are now exploited beyond sustainable amounts—undermining marine ecosystems and the livelihoods of coastal communities (*4–6*). After nearly 25 years of negotiations, the World Trade Organization (WTO) Agreement on Fisheries Subsidies (known as Fish 1) entered into force in September 2025 (*7*). It is the first binding, multilateral treaty on ocean sustainability that prohibits subsidies to vessels that engage in illegal, unreported, and unregulated fishing; fishing of overfished stocks; and fishing in the unregulated parts of the high seas (*7*). The agreement has the potential to protect vulnerable fisheries, but additional action is required to ensure its effectiveness.

Fish 1 establishes a framework for transparency and accountability, requiring annual reporting of subsidies and offering governments a concrete tool to advance global sustainability goals, such as the Kunming-Montreal Global Biodiversity Framework (*8*, *9*). However, challenges remain. The agreement includes a "sunset clause" that requires a next step in the WTO agreement (Fish 2) by 2029, or the entire treaty will be terminated. Because the agreement does not fully apply in areas without regional fisheries management organizations, such as the Southwest Atlantic—one of the world's most productive fishing areas—these waters are still vulnerable to subsidized overfishing (*10*). Uneven national capacities may create gaps in compliance, particularly in developing countries and nonratifying states. Entrenched political and economic interests continue to defend harmful subsidies.

Overcoming these challenges requires the full implementation of the agreement, adopting and ratifying the second step by 2029, aligning national legislation with WTO commitments, closing legal loopholes, and advancing the progressive phaseout of harmful subsidies, supported by technical assistance and effective monitoring mechanisms. Although WTO members must implement these steps and ensure accountability, scientists and civil society play a critical role in holding governments to account.

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