

Time running out for Great Barrier Reef: scientists

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Stretching along more than 2,000 km (1,200 miles) of Australia's eastern coast is one of the world's foremost natural wonders - The Great Barrier Reef as shown in this file NASA satellite image

Time is running out for Australia's iconic Great Barrier Reef, with climate change set to wreck irreversible damage by 2030 unless immediate action is taken, marine scientists said Thursday.

In a report prepared for this month's Earth Hour [global climate change](#) campaign, University of Queensland reef researcher Ove Hoegh-Guldberg said the [world heritage site](#) was at a turning point.

"If we don't increase our commitment to solve the burgeoning stress from local and global sources, the reef will disappear," he wrote in the foreword to the report.

"This is not a hunch or alarmist rhetoric by green activists. It is the conclusion of the world's most qualified coral reef experts."

Hoegh-Guldberg said scientific consensus was that hikes in [carbon dioxide](#) and the average global temperature were "almost certain to destroy the coral communities of the Great Barrier Reef for hundreds if not thousands of years".

"It is highly unlikely that coral reefs will survive more than a two degree increase in average global temperature relative to pre-industrial levels," he said.

"But if the current trajectory of carbon pollution levels continues unchecked, the world is on track for at least three degrees of warming. If we don't act now, the climate change damage caused to our Great Barrier Reef by 2030 will be irreversible."



A barren section of Australia's Great Barrier Reef, which scientists have warned could be killed by global warming within decades, is shown in this Great Barrier Reef Marine Park Authority image from 2009

The Great Barrier Reef, one of the most biodiverse places on Earth, teems with marine life and will be the focus of Australia's Earth Hour—a global campaign which encourages individuals and organisations to switch off their lights for one hour on April 29 for climate change.

The report comes as the reef, considered one of the most vulnerable places in the world to the impacts of climate change, is at risk of having its status downgraded by the UN cultural organisation UNESCO to "world heritage in danger".

Despite threats of a downgrade without action on rampant coastal development and water quality, Australia in December approved a massive coal port expansion in the region and associated dumping of dredged waste within the marine park's boundaries.

The new report "Lights Out for the Reef", written by University of Queensland coral reef biologist Selina Ward, noted that reefs were vulnerable to several different effects of climate change; including rising sea temperatures and increased carbon dioxide in the ocean, which causes acidification.

It found the rapid pace of global warming and the slow pace of coral growth meant the [reef](#) was unlikely to evolve quickly enough to survive the level of [climate change](#) predicted in the next few decades.

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