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The Australian Marine Conservation Society commissioned this report to provide expert advice to the World Heritage Committee on the protection and management of the Great Barrier Reef (Australia).

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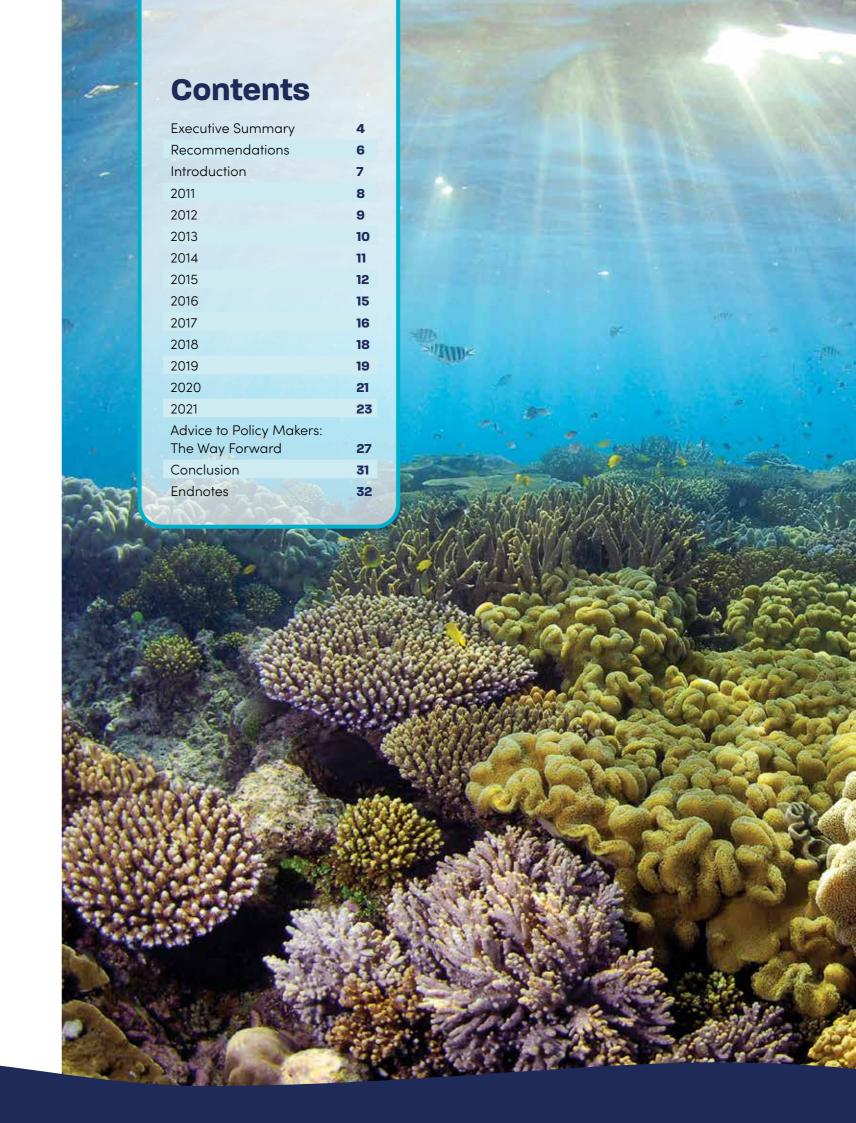
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## **Executive Summary**

The Great Barrier Reef is one of the seven natural wonders of the world. Comprising 10 per cent of the world's coral reefs, this vast and beautiful region meets all four World Heritage natural criteria and was inscribed on the List of World Heritage in 1981. The Reef is part of Australia's national identity and part of the cultural and spiritual identity of its Traditional Owners.

While some World Heritage values of the Great Barrier Reef are still in good condition, many are declining due to the cumulative impacts of climate change, agricultural pollution and a range of in-water threats. IUCN has classified the property's outlook as **critical**.

The Committee's work in the first half of the last decade was highly influential. Part of the reason was the Committee's willingness to consider In Danger listing for this iconic World Heritage site, if the requests made by the Committee were not fulfilled by the State Party. A key request was for the Australian Government to develop a long-term sustainability plan to address coastal development and poor water quality.

The resulting Reef 2050 Long-Term
Sustainability Plan was a major policy
achievement and demonstrated the power of
the World Heritage Convention to effect positive
change. In 2015 the Committee welcomed
the plan and urged Australia to implement all
commitments.

A year later, a marine heatwave in the Great Barrier Reef resulted in a severe coral bleaching event that killed 29 per cent of shallow water corals. The following year, and again in 2020, the property experienced further severe heatwaves. These three events in five years affected the entire length of the Reef and caused mass coral mortality.

Much work has been done to implement the Reef 2050 Plan. The Australian and Queensland Governments have provided additional investment, the Queensland Government has passed new and stronger laws, and both governments have instituted new policies and programs to reduce threats inside the property and in the adjacent catchment. Despite this, the water quality targets have not been met and many actions are still in progress.

This report examines the events that led to the development of the Reef 2050 Plan and whether Australia has been successful in effectively protecting and managing the property since the plan's inception.

It also urges the Committee to once again consider inscribing the Great Barrier Reef on the List of World Heritage In Danger if Australia does not commit to a new round of protection measures within the Reef 2050 Plan, including:

- accelerated action and increased investment in existing measures and
- new actions to mitigate greenhouse gas pollution and put Australia on a 1.5°C pathway to protect the Outstanding Universal Value of the property

A revised Reef 2050 Plan that includes actions tackling all threats (climate change, water quality, coastal development and fisheries) will ensure that, in a warming world, the Great Barrier Reef retains some of the values for which it was inscribed forty years ago.

## **Recommendations**

This report recommends that at its 44th session, the World Heritage Committee:

- 1. Requests Australia to revise the Reef 2050 Plan to commit to ambitious domestic emissions reduction compatible with a 1.5°C pathway, thereby helping to limit the global average temperature increase to 1.5°C above pre-industrial levels in order to protect the Outstanding Universal Value (OUV) of the Great Barrier Reef.
- 2. Requests Australia to develop a detailed plan to achieve the above, containing:
  - Clearly **defined criteria for success**, i.e. time-bound greenhouse gas pollution reduction targets across the economy compatible with a 1.5°C pathway and measurable targets to increase native vegetation sinks in the Reef catchment;
  - Concrete measures, e.g. actions and investments that deliver on the targets and timelines.
- 3. Recalls its decision of 41 COM 7 in relation to Climate Change and reiterates the importance of all other State Parties undertaking the most ambitious implementation of the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) to protect World Heritage.
- 4. Urges Australia to allocate additional resources to fully meet the time-bound water quality targets in the Reef 2050 Water Quality Improvement Plan 2017-2022, including adequate funding for education, extension and regulatory compliance.
- 5. Requests Australia to accelerate efforts in response to the poor or deteriorating status of biodiversity and species considered vulnerable to fishing, as outlined in the GBRMPA<sup>1</sup> 2019 Outlook Report; in particular fully implementing and funding the Queensland Sustainable Fisheries Strategy 2017–2027, monitoring and reducing bycatch of endangered wildlife, reducing gillnet fishing effort and establishing more extensive commercial net-free zones along the Great Barrier Reef coastline.
- 6. Requests Australia to submit to the World Heritage Centre an updated report by 1 December 2022 on the state of conservation of the property, including on the implementation of the requests outlined above.
- 7. Agrees that, without substantial progress to achieve the above requests, it would consider the inscription of the property on the List of World Heritage in Danger at its subsequent session.

i Great Barrier Reef Marine Park Authority (GBRMPA)

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## Introduction

In 2011, the World Heritage Committee expressed extreme concern about industrial development along the Great Barrier Reef coastline. For the following four years, the Committee kept Australia's management of the Great Barrier Reef under close scrutiny.

In response, the Australian Government developed a plan to protect the property through to 2050. The plan addressed coastal development, poor water quality and a range of other issues.

In 2015, the Committee welcomed the plan and requested Australia to rigorously implement all commitments. The Committee also decided to revisit Australia's management of the property in 2020. The global pandemic, however, led to the deferral of the meeting to 2021.

This report looks back over the last decade to examine what the World Heritage Committee requested of Australia and what the Australian and Queensland Governments have done in response.

The questions asked by this report are:

- Has Australia effectively protected and managed the Great Barrier Reef since the inception of the Reef 2050 Plan?
- Are many of the values and attributes that comprise the property's Outstanding Universal Value continuing to deteriorate?
- Should the Committee consider the property for inscription on the List of World Heritage In Danger?

This report looks back over each year from 2011 to answer these questions. It also provides advice on the way forward.

In October 2010, the Australian Government approved a Liquefied Natural Gas (LNG)
Processing Plant on Curtis Island within the Great Barrier Reef World Heritage property, along with infrastructure associated with the plant.

Having been informed of the approval, UNESCO's World Heritage Centre and the International Union for the Conservation of Nature (IUCN) prepared a State of Conservation report on the matter to the 35<sup>th</sup> session of the World Heritage Committee in 2011.

#### The report:

- recalled "the World Heritage Committee's clear position in relation to oil and gas exploration and exploitation, that these activities are incompatible with World Heritage status", and
- considered "that the Liquefied Natural Gas facility approved on Curtis Island within the property could represent a clear potential danger to the property's OUV and integrity, as defined in paragraph 180(b)(ii) of the Operational Guidelines" (WHC-11/35. COM/7B.Add)

The Committee expressed "extreme concern" about the approval of the LNG processing plant and port facilities (35 COM 7B.10) and requested the Australia Government to invite the Centre and IUCN to undertake a Reactive Monitoring mission to the Great Barrier Reef.

The Committee also urged Australia to undertake a comprehensive strategic assessment of the whole property and to develop a long-term plan to protect the property's Outstanding Universal Value (OUV).

The 2011 decision had profound implications for the Reef. For the following four years, the World Heritage Committee kept a close watch over Australia's management of this natural wonder.

i According to the Operational Guidelines for the Implementation of the World Heritage Convention, a Reactive Monitoring mission is foreseen in reference to a World Heritage site being inscribed on the List of World Heritage in Danger. Operational Guidelines, IV.A.169.



## 2012

The mission arrived in Australia in March 2012. Two senior officials from IUCN and the World Heritage Centre toured the Reef coastline, meeting with government officials and non-government organisations and individuals.

They found a rapid and recent increase in the number of proposals along the Reef coastline for coal and gas development, industrial port expansion and dredging and dumping of dredged material in the World Heritage property.

The resulting report<sup>1</sup> from the Centre and IUCN to the World Heritage Committee called for:

- No new port development or associated infrastructure outside existing major ports
- An independent review of all environmental concerns associated with the Gladstone Harbour and Curtis Island development
- A fully integrated approach to the planning, protection and management of ports and shipping affecting the property (via a shipping policy, a ports strategy and individual port plans)
- A comprehensive strategic assessment of the Great Barrier Reef
- A long-term plan for the sustainable development of the property
- Sustained and increased investment in improving Reef water quality
- Scientifically based targets for the conservation of the Reef
- An independent review of the overall institutional and legal mechanisms that provide coordinated planning, protection and management of the Great Barrier Reef, and
- The Outstanding Universal Value of the property to be clearly defined and used as the central element within the protection and management system for the property

In early July, the World Heritage Committee considered the mission report and made a highly consequential decision (36 COM 7B.8). The Committee:

- Requested Australia, "in collaboration with its partners, to maintain, and increase where necessary financial investment" to address poor water quality
- Requested Australia "to address the mission recommendations in its future protection and management of the property"
- "Noted with great concern the potentially significant impact on the property's Outstanding Universal Value resulting from the unprecedented scale of coastal development"
- Requested Australia "to not permit any new port development or associated infrastructure outside of the existing and long-established major port areas within or adjoining the property"
- Requested Australia "to ensure that development is not permitted if it would impact individually or cumulatively on the Outstanding Universal Value of the property"
- Requested Australia to "complete the Strategic Assessment and resulting longterm plan for the sustainable development of the property for consideration by the World Heritage Committee at its 39th session in 2015"
- Requested Australia to submit an update report on the property by 1 February 2013, "for consideration by the World Heritage Committee at its 37th session in 2013, with a view to consider, in the absence of substantial progress, the possible inscription of the property on the List of World Heritage in Danger".

The Australian Government was very concerned about the possibility of an In Danger listing for the Reef. Yet, the measures taken in the next 12 months by the Australian and Queensland Governments were not sufficient to allay the concerns of the Committee.

In 2013, the Committee (**37 COM 7B.10**) welcomed the fact that the Australian and Queensland Governments had:

- Initiated a comprehensive strategic assessment of the Great Barrier Reef
- Established an independent review of the management arrangements for Gladstone Harbour
- Made a renewed commitment to the Reef Water Quality Protection Plan

However, the Committee:

- Reiterated that the comprehensive strategic assessment and the resulting long-term plan for the property should be completed against defined criteria for success, fully address direct, indirect and cumulative impacts on the reef and lead to concrete measures to ensure the conservation of the OUV of the property
- Found that the Australian Government had made limited progress in implementing the requests it had made in 2012 and the recommendations of the mission report.
- Expressed concern about ongoing coastal development.

The Committee urged Australia to strengthen its efforts to:

- Ensure that development is not permitted if it would impact individually or cumulatively on the OUV of the property, or compromise the Strategic Assessment and resulting longterm plan for the property
- Ensure that no port developments or associated port infrastructure are permitted outside the existing and long-established major port areas within or adjoining the property

 Ensure that legislation protecting the property remains strong and adequate to maintain and enhance its OUV

The Committee requested Australia to report again to the World Heritage Centre the following year on the implementation of the all the requests and recommendations.

It concluded that, in the absence of substantial progress, the Committee would again consider the Great Barrier Reef for inscription on the List of World Heritage In Danger.

Two important documents were released in 2013:

- The Scientific Consensus Statement on Reef water quality which found that:
   "key Great Barrier Reef ecosystems are showing declining trends in condition due to continuing poor water quality, cumulative impacts of climate change and increasing intensity of extreme events"<sup>2</sup>
- The Reef Water Quality Protection Plan (Reef Plan)<sup>3</sup> endorsed by the Australian and Queensland Governments.

The Reef Plan's goal was that by **2020**, the quality of water entering the Reef from broadscale land use has **no detrimental impact on the health and resilience of the Reef**. The Plan contained some highly consequential water quality targets to be met by 2020 for priority areas:

- At least a 50 per cent reduction in anthropogenic end-of-catchment dissolved inorganic nitrogen loads
- At least a 20 per cent reduction in anthropogenic end-of-catchment loads of sediment and particulate nutrients
- At least a 60 per cent reduction in end-ofcatchment pesticide loads



The draft Strategic Assessment<sup>4</sup> by the Great Barrier Reef Marine Park Authority (GBRMPA) found the condition of the Reef had **declined seriously** in recent years. Climate change was the most serious threat to the Reef's future and management was not keeping up with the cumulative effect of multiple impacts. Its conclusion: **business as usual was not an option.** 

Importantly, the 2014 State of Conservation report by the Centre and IUCN to the Committee advised that the long-term plan for the Reef needs to result in **concrete and consistent management measures** sufficiently robust to ensure the overall conservation of the property and its OUV, in particular addressing major drivers of reef decline such as **water quality** and **climate change**.

The Committee:

- Expressed concern about recent approvals for coastal development
- Expressed "regret" at the approval of the dumping of 3 million cubic metres of dredge spoil in the Great Barrier Reef for the future development of Adani's Abbot Point coal port
- Once again, called on Australia to ensure that no port developments or associated port infrastructure are permitted outside the existing and long-established major ports within or adjoining the World Heritage property. This request was to take effect immediately and be permanent.
- Called on Australia to ensure that any development within existing major ports did not impact individually or cumulatively the OUV of the property

The Committee kept the pressure on the Australian Government by requesting Australia to report the following year to the World Heritage Centre, responding to all the recommendations and requests since 2012.

The report was to be examined by the World Heritage Committee in 2015, with a view to considering, in the case of confirmation of the ascertained or potential danger to its Outstanding Universal Value, the possible inscription of the property on the List of World Heritage in Danger.

Later in 2014, the Australian Government released GBRMPA's second Outlook Report<sup>5</sup> and the North East Shipping Management Plan<sup>6</sup> which covered the whole property.

GBRMPA's first Outlook Report<sup>7</sup> was released in 2009 and found that "the overall outlook for the Great Barrier Reef is poor and catastrophic damage to the ecosystem may not be averted. Ultimately, if changes in the world's climate become too severe, no management actions will be able to climateproof the Great Barrier Reef ecosystem."

The 2014 report had an even more sombre conclusion: "Even with the recent management initiatives to reduce threats and improve resilience, the overall outlook for the Great Barrier Reef is poor, has worsened since 2009 and is expected to further deteriorate in the future."

Climate change, poor water quality, impacts from coastal development and some remaining impacts of fishing were found to be the major threats to the property's future health. The report was submitted to the World Heritage Centre.

2015 was a climactic year for the Great Barrier Reef.

For years, the Australian Government had claimed that the Great Barrier Reef was the best managed Reef in the world. The government was therefore determined to avoid an In Danger listing, which it felt would be an ignominious judgement on its credentials and an international embarrassment. The government undertook an intensive global lobbying exercise with State Parties to avert this outcome.

The intention of the List of World Heritage In Danger, however, is not to shame countries whose properties are inscribed on the List, but to help them undertake corrective actions.

In March, the final Reef 2050 Long-Term Sustainability Plan<sup>8</sup> was submitted to the World Heritage Centre, containing 151 actions.

While noting with concern the findings of the 2014 GBR Outlook Report, the Committee

welcomed the Reef 2050 Plan as a major technical and policy achievement. It recognized that the Plan responded to many of the recommendations and requests over the last few years. Highlights were:

- Pollution reduction targets to improve water quality and an initial \$200 million investment to accelerate actions to meet targets
- 2. Restriction of port development and capital dredging to four existing major ports along the Reef coastline
- Reversal of the Australian Government's decision to permit the dumping of capital dredge material from Abbot Point Coal Terminal inside the World Heritage property
- 4. A permanent ban on the dumping of capital dredge spoil inside the property
- 5. Protection of the Fitzroy Delta by ensuring no future port development
- 6. Establishment of three net-free fishing zones along the Reef coastline
- i While this was a major reduction in one of the pressures facing the GBR, both the Australian and Queensland Governments retained the ability to dump maintenance dredge spoil in the World Heritage property. This practice continues today and comprises thousands of tonnes of fine dredged material being dumped every year that also has major impacts on World Heritage values and attributes, especially seagrass and corals and their dependent wildlife species



In their State of Conservation report to the meeting, the World Heritage Centre and IUCN stated that "It is essential that the 2050 LTSP delivers its anticipated results in order to confirm that the property does not face ascertained or potential danger to its OUV."

The Committee requested Australia to rigorously implement all commitments and noted that:

- many are the responsibility of the Queensland Government and are yet to be implemented, for example, strengthening Queensland's native vegetation laws (to restrict sediment runoff) and the restrictions on port development
- the Australian Government's promise to develop an investment framework was essential for the Plan's effective implementation.

The Committee requested Australia to report to the World Heritage Centre twice more in the next four years:

- The first was a December 2016 update on progress in implementing the Reef 2050 Plan and investment framework. The Committee made it clear that if the Centre and IUCN did not think sufficient progress was being made, the Reef would again be on the agenda of the Committee in 2017.
- The second was a report in December 2019 that demonstrated effective and sustained protection of the Reef's Outstanding Universal Value, and effective implementation of the targets in the Reef 2050 Plan. The Committee stated that it would examine Australia's performance at its 44th session due in 2020 (now deferred to 2021).

The 2015 Committee meeting was a landmark for the Great Barrier Reef and for the World Heritage community. Comments from Committee members included:

- "This shows that the World Heritage Convention is powerful and we need to use its power for the sake of the protection of our joint World Heritage." (German delegation)
- "The symbolic importance of the Great Barrier Reef as World Heritage is of utmost importance to the entire world. We must not lose this heritage for our future generations and the global ecosystem." (Korean delegation)

While the Reef 2050 Plan was a historic leap forward for the conservation of the Great Barrier Reef, it did not address the existential threat of climate change, which had yet to wreak havoc on this global icon.<sup>iii</sup>

The Plan simply reiterated a highly inadequate emissions reduction target that bore no relationship to the survival of the Reef for future generations and even for generations alive today.

It is worth repeating that the 2014 State of Conservation report by the Centre and IUCN to the Committee advised that the long-term plan for the Reef needed to result in **concrete and consistent management measures** sufficiently robust to ensure the overall conservation of the property and its OUV, in particular addressing major drivers of reef decline such as water quality **and climate change**.

In September, the Australian and Queensland Governments released a Great Barrier Reef water quality report card. The sobering document revealed the extent of the challenge to halt and reverse the decline of the inshore environment.

The first two widespread coral bleaching events occurred in 1998 and 2002, however, these were not as devastating as the events that subsequently occurred in 2016, 2017 and 2020.

On 15<sup>th</sup> October, the federal Minister for Environment Greg gave final approval for Adani's Carmichael thermal coal mega-mine. He had originally done so in July 2014, but the approval was successfully challenged in court and set aside. The scale of the mine was unprecedented: 60 million tonnes per annum with an expected lifespan of 60 years. The coal was destined for export through Adani's Abbot Point coal port on the Great Barrier Reef coastline, which would lead to a huge increase in shipping through the World Heritage property.

The new approval included 36 conditions addressing local issues. However, the issue of the carbon emissions that would result

from mining, transporting and burning the coal overseas was not addressed. The mine was the first "cab off the rank" in a yet to be exploited massive new coal reserve, the Galilee Basin, covering an area roughly the same size as the United Kingdom. It was and still is a highly controversial project. The mine is just one of many fossil fuel projects approved in Queensland and across Australia in the last decade.

The year concluded with the passage of the *Queensland Sustainable Ports Development Act 2015*, which put into law the port restrictions promised to the Committee. It was a huge achievement.





Everything changed in 2016.

Less than a year after the Committee had welcomed Australia's plan to protect the Outstanding Universal Value of the Reef through to 2050, a devastating marine heatwave fuelled by global warming led to coral mortality over huge swathes of the property.

GBRMPA reported that an estimated 29 per cent of shallow-water coral cover was lost.<sup>10</sup> Over 75 per cent of this mortality occurred in the far north — stretching 600 kilometres south from the northern boundary of the property. Previously, the northern third had been recognised by the World Heritage Committee as the healthiest part of the Reef, giving members confidence that the Outstanding Universal Value of the property remained intact.

Tourism operators, Reef scientists and conservationists, the whole Australian community were in shock. Media broadcast scenes of bleached and dying corals around the world. Many people felt upset and frightened that climate change could be happening so quickly, with such ferocity, affecting such a beloved part of the planet.

The event did not result in any new climate policy commitments from the Australian Government.

In December, the government submitted an "update on progress"<sup>11</sup> in implementing the Reef 2050 Plan and investment framework to the World Heritage Centre.



Incredibly, in early 2017 the Reef experienced a second severe coral bleaching event. The back-to-back event was unprecedented. This time the central third was the most severely affected. Together both events resulted in extensive coral mortality in the upper twothirds of the World Heritage property.

In response to the crisis, GBRMPA convened a Great Barrier Reef Summit called Managing for Resilience. The aim was "to help craft a blueprint to navigate a future characterised by uncertainty and accelerating change."

The result was a Reef Blueprint<sup>12</sup> which radically changed GBRMPA's management policy framework. Reducing threats and allowing the Reef to naturally recover from disturbance was replaced with support for active intervention to help restore ecosystem health.

However, without an equally radical change to Australia's climate policy - and global cooperation to act quickly - the efforts risked being for nought.

Meanwhile, the World Heritage Centre and IUCN were reviewing Australia's progress report. Clearly, they did not think sufficient progress was being made as they again placed the Great Barrier Reef on the agenda of the Committee meeting in 2017.

While the Committee welcomed the initial implementation of the Reef 2050 Plan, it strongly encouraged Australia to "accelerate efforts to ensure meeting the intermediate and long-term targets of the Plan, which are essential to the overall resilience of the property, in particular regarding water quality" (41 COM 7B.24).

The Committee also noted "with serious concern" the coral bleaching and mortality that occurred in 2016 and 2017.

This was not the only decision the Committee made that year about climate change and coral reefs. During the 10-day meeting, the World Heritage Centre released the First Global Scientific Assessment of the impacts of Climate Change on World Heritage Coral Reefs.<sup>13</sup> The projections were grim.

The assessment found that "drastic reductions in CO2 emissions are essential – and the only real solution – to giving coral reefs on the World Heritage List a chance to survive climate change."

The Committee adopted a decision expressing its "utmost concern" about the impacts of climate change on World Heritage coral reefs, calling on all countries "to undertake the most ambitious **implementation of the Paris Agreement**" and "to undertake actions that address Climate **Change** under the Paris Agreement ... **that are** fully consistent with their obligations within the World Heritage Convention to protect the OUV of all World Heritage properties".

On 28 July 2017, the Great Barrier Reef Ministerial Forum (comprised of Australian and Queensland Environment Ministers) "recognised that in light of the impacts of global coral bleaching and future climate projections" it "agreed to bring forward the immediate commencement of the mid-term review" of the Reef 2050 Plan, scheduled for 2018.14

The review was not completed until 2018 and, whilst it resulted in several updated targets relating to water quality, Australia failed to strengthen its emission reduction target, leaving its grossly inadequate target (5 per cent reduction in emissions by 2020 based on 2000 levels) untouched.



Now, with a majority on the floor of Parliament, the Queensland Government was able to pass stronger laws to protect forests and woodlands in the Great Barrier Reef catchment (and throughout the state) to reduce sediment and nutrient pollution entering the Reef and curb harmful coastal development.

Another promise to the World Heritage Committee delivered.

The Australian and Queensland Governments released a five-year Reef 2050 Water Quality Improvement Plan (WQIP) 2017-2022<sup>15</sup> which builds on previous Reef Water Quality Protection Plans.

The WQIP includes scientifically based targets to reduce agricultural runoff from each of the 35 sub-catchments that comprise the Great Barrier Reef catchment. The WQIP updated the 2015 Reef-wide targets welcomed by the Committee, using a bottom-up approach based on each of catchment.

In the second quarter of 2018, the Chair of the Great Barrier Reef Foundation's<sup>iv</sup> Board was called in by the Australian Prime Minister and offered AU\$443.3 million to deliver projects to protect the Reef. No public tender was called. The Foundation accepted the offer and the Government rapidly prepared a funding agreement, the Reef Trust Partnership.<sup>v</sup>

From a budgetary perspective, the intention was to expend funding as quickly as possible before the end of the 2017/18 financial year. In determining the size of the grant, the Australian Government was mindful of the decision due in 2020 by the World Heritage Committee concerning the government's management of the Reef.

Though a very large single figure, the funding was to be spread over six years and fell short of the scale of investment recommended by scientists and experts.

\$201 million was dedicated to improving Reef water quality and \$100 million was assigned for research which would normally have been distributed directly to research institutions.

Approximately \$60 million was set aside for Crown-of-Thorns Starfish control, given the Reef was experiencing yet another major outbreak of the coral-eating native animal whose plague proportions were linked to poor water quality and historic overfishing of its natural predators.

While the increase in federal funding for the Reef, and the earlier additional \$100 million from the Queensland Government over five years, were welcome, the total funding for the Reef has not been able to stem the deterioration of many of the values of the property.

At the international level, the IPCC released its Special Report on 1.5°C which found that **coral reefs, are projected to decline by a further** 70–90% at 1.5°C (*high confidence*) with larger losses (>99%) at 2°C (*very high confidence*).<sup>16</sup>

Yet in the same month as the IPCC report was released, the Queensland Government approved Adani's plans to expand the capacity of the Abbot Point coal port from 50 to 60 million tonnes per annum (mtpa). Adani announced it was scaling back the size of its Carmichael thermal coal mine to 10 mtpa for the time being, but holding on to its federal approval of 60 mtpa.



that called for urgent action. The statement said:

2019

- "Climate change is the greatest threat to the Great Barrier Reef.
- Only the strongest and fastest possible actions to decrease global greenhouse gas emissions will reduce the risks and limit the impacts of climate change on the Reef.
- For the Reef and coral reefs worldwide, there is growing recognition that limiting the increase in global average temperature to 1.5°C and ideally less, is critical to minimise significant environmental and societal costs from the loss of reef habitats."

The call to action was backed up by the key findings of the 2019 Outlook Report,<sup>17</sup> namely:

the overall outlook for the Reef was now "very poor"  the integrity of the World Heritage property is being increasingly challenged; and

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 the size of the property is becoming a less effective buffer to broadscale and cumulative impacts

The report found ten threats that were *very high* risk to the Reef's ecosystem and heritage values. Most of these relate to climate change or land-based run-off. Two relate to fishing (illegal fishing and poaching, and incidental catch of species of conservation concern).

The report stated that "Given the current state of the Region's values, actions to reduce the highest risks have never been more time-critical."

By looking to the future, the Outlook Report is intended as a guide to where changes in policy are needed. Yet the report elicited no change in climate policy, despite the two recent back-to-back coral bleaching events, the 64,000 jobs that depend on a healthy Reef and the AU\$6 billion it generates every year.

iv The Great Barrier Reef Foundation is a small, private, not-for-profit charity whose Board comprises some of Australia's most senior businessmen and women.

v https://www.environment.gov.au/marine/gbr/publications/reef-trust-gbrf-partnership-grant-guidelines

vi \$100 million was allocated to the Reef Restoration and Adaptation Program



In August, the Australian and Queensland governments released the latest Reef water quality report card covering two years up to mid-2018.<sup>18</sup>

The water quality targets promised to the World Heritage Committee in 2015 were not met and, given the slow pace of improvement, the same fate lay ahead for the 2020 targets.

As a result, in September 2019, the Queensland Government passed a package of Reef water quality regulations that drew considerable pushback from some sectors of the farming community, but strong support from scientists, conservation groups and some individual farmers.

The regulations are to be implemented in a staged fashion through to 2022. It is critical that adequately funded and effective compliance and enforcement efforts are rolled out to ensure the regulations achieve measurable reductions in pollution. At present, there is a major disconnect between funding for compliance and the compliance task.

In December, the Australian Government submitted a State Party report to the World Heritage Centre, as requested by the World Heritage Committee in 2015.<sup>19</sup>

The report claimed that Australia is taking strong action on climate change. It says: "To meet the goals of the Paris Agreement Australia, like all other Parties to the Agreement, will put forward new commitments every five years."

Yet, in 2020 Australia submitted the same Nationally Determined Contribution<sup>20</sup> to the UNFCCC as it submitted in 2015, including an emission reduction target that is so weak as to be compatible with a global temperature rise over 2°C and up to 3°C.<sup>21</sup> Such a rise would devastate World Heritage coral reefs.

An independent expert review<sup>22</sup> of the Australian Government's report found that the continued deterioration of the overall health of the Great Barrier Reef demonstrates that management measures currently in place are insufficient to "provide effective and sustained protection of the property's Outstanding Universal Value" as requested by the World Heritage Committee in 2017.

The review found that:

- The major flaw in Australia's stewardship of the Great Barrier Reef is the Australian government's failure to adequately address climate change
- Australia must do its proportionate share, both nationally and globally, to limit the extent of climate change
- Of primary importance is for Australia to align its climate change policies and programs with the 1.5°C goal of the Paris Agreement.

The review also found that the Australian and Queensland Governments have invested \$826 million over 10 years from 2014/15 to 2023/24 to improve Reef water quality.

While this represents an increase in funding, the report concluded that is significantly less than the estimated \$4.5 billion investment needed to meet the 2025 water quality targets in all Reef catchments.<sup>23</sup> The review was submitted to the World Heritage Centre and IUCN in February 2020.

## 2020

In Australia, 2020 will be remembered for two things: firstly COVID-19 and secondly the summer of bushfires and coral bleaching.

The fires of 2020 were unprecedented in their scale and ferocity. The extent of the area burnt in two forested World Heritage properties is shocking:

- Greater Blue Mountains: 82 per cent (approx. 853,977 hectares)
- Gondwana Rainforests of Australia: 53 per cent (approx. 196,000 hectares) (initial assessment)

Later in the year the Fraser Island (K'gari) World Heritage also suffered a major fire: 47 per cent, approx. 87,000 hectares, of forest was burnt.

While the early 2020 fires dominated national and international headlines, the Great Barrier Reef suffered another severe coral bleaching event - the third in five years. Due to the bushfires and global pandemic, the bleaching event did not receive extensive media coverage. The fear is that the frequency of bleaching events is starting to become normalized.

The 2020 event was the most widespread ever recorded and this time it impacted the southern third of the property. Twenty-five per cent of coral reefs throughout the property were severely affected and another 35 per cent of reefs had moderate levels of bleaching.

The Great Barrier Reef is no longer too big to fail. Since 2016, it has changed forever.

The vision of the Reef 2050 Plan endorsed by the Committee in 2015 – To ensure the Great Barrier Reef continues to improve on its Outstanding Universal Value every decade between now and 2050 to be a natural wonder for each successive generation to come – is no longer achievable.

The Australian and State and Territory
Governments steered Australia well through
the pandemic of 2020. However, as European
member states and other countries around
the world began to develop a green economic
recovery, the Australian Prime Minister
announced a "gas-fired recovery".





The fossil-fueled recovery involved setting new gas supply targets, unlocking new gas basins and boosting the gas transport network. A recent UNEP report found that during 2020, Australia (along with the US, Canada and Mexico) announced investments supporting oil and gas.<sup>24</sup>

In November, IUCN released its third global World Heritage Outlook Report.<sup>25</sup> The Great Barrier Reef was downgraded from Significant Concern in 2017 to **Critical**.

Of the 252 natural and mixed sites on the World Heritage list, IUCN considered 18 to be in Critical condition. Sixteen of these are on the List of World Heritage in Danger. vii

To many, the Reef's Critical status was both shocking and unsurprising.

IUCN made this decision because many of the values for which the Reef had been inscribed on the List of World Heritage had been declining, but the result of the 2016, 2017 and 2020 coral bleaching events saw "a further dramatic decline".

IUCN also noted declining trends in:

- some of the Reef's most iconic species loggerhead, hawksbill and northern green turtle populations, scalloped hammerhead sharks, many seabird populations and possible declines in some dolphin species
- some ecological processes critical for the Reef's survival - reef building and coral recruitment

IUCN's analysis made clear that while the Reef 2050 Plan was a significant step, it was not sufficient to protect the Outstanding Universal Value of one of the world's most iconic World Heritage sites.

The original Reef 2050 Plan included commitments to reform fisheries and reduce the impact of fishing on threatened species. The 2018 update specifically committed to implement the *Queensland Sustainable Fisheries Strategy 2017-2027.*<sup>26</sup>

The strategy represented comprehensive reform. Amongst other things, it responded to the very high risk posed by illegal fishing and poaching and the incidental catch of species of conservation concern, as identified in successive GBRMPA Outlook Reports (2014, 2019).

Despite the Queensland Government approving nearly \$21 million over three years in 2017 for the implementation of the fisheries strategy, implementation had stalled badly. Three years later, the government <u>announced</u> a package of regulations that would implement some key elements such as dividing fisheries into smaller management regions.

Vital components of the strategy, however, are still missing, including independent monitoring of fishing operations and measures to stop threatened species such as dugong and sawfish being caught in gillnets.

vii Dja Faunal Reserve (Cameroon) is classified Critical by IUCN but is not on the List of World Heritage In Danger

## 2021

In February, the Australian and Queensland Governments released the latest Great Barrier Reef water quality report card, showing results up to June 2019.<sup>27</sup>

The report card assesses progress against targets in the Water Quality Improvement Plan (WQIP). While there is progress in some catchments for some pollutants, there is a long way to go to meet the Reef-wide targets promised the World Heritage Committee. For example:

- WQIP: 90 per cent of land in priority areas under sugarcane to adopt best management practices by 2025
  - Latest report card: cumulative adoption 12.7 per cent
- WQIP: 60 per cent reduction in end-ofcatchment dissolved inorganic nitrogen by 2025
  - Latest report card: cumulative reduction of 25.5 per cent

Overall, the report card gave a D for the condition of the Reef's inshore marine environment, the same as the previous year.

There is no doubt that improvements in inshore marine condition will take some time to become evident, but it is also the case that progress needs to be much faster if targets are to be met.

The additional \$100 million from the Queensland Government provided in 2015 has expired at the time of writing, and the \$443.3 million from the Australian Government to the Great Barrier Reef Foundation does not extend to 2025, the target date for the updated water quality targets.

The importance of new funding to ensure the regulations work on-the-ground cannot be overstated. Areas of great need are:

- Adequate education and extension
- Compliance

- Enforcement where there is non-compliance
- Fine scale monitoring and reporting

The Australian and Queensland Governments are currently redrafting the Reef 2050 Plan. In recognition that the Vision of the 2015 Plan<sup>viii</sup> is now unattainable, the Vision in the draft plan<sup>28</sup> is silent about the Outstanding Universal Value of the Reef.

The draft plan released for public consultation in 2020 states:

"Australia's commitment under the Paris
Agreement is to reduce emissions by 26
to 28 per cent on 2005 levels by 2030. This
represents a halving of emissions per person in
Australia, or a two-thirds reduction in emissions
per unit of gross domestic product (GDP).
Australia is on track to meet its 2030 target."

However, per capita emissions and emissions per unit of GDP are irrelevant to the Great Barrier Reef. What matters is an urgent and substantial quantitative reduction.

As UNESCO's First Global Scientific Assessment of the Impacts of Climate Change on World Heritage Coral Reefs stated: "this assessment finds that drastic reductions in CO2 emissions are essential – and the only real solution – to giving coral reefs on the World Heritage List a chance to survive climate change".

New fossil fuel projects are continuing to advance in Queensland and Australia. For example, the Queensland Government has moved a proposed 10 million tonne per annum coal mine 10 kilometres upstream of the Great Barrier Reef coastal boundary to a more advanced stage of environmental impact assessment.<sup>ix</sup>

This year, the World Heritage Committee will once again assess whether Australia has delivered on its promises. Has the Australian Government met the 2020 targets promised the Committee?

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viii The 2015 Vision was: To ensure the Great Barrier Reef continues to improve on its Outstanding Universal Value every decade between now and 2050 to be a natural wonder for each successive generation to come.

ix https://www.theguardian.com/australia-news/2021/feb/27/clive-palmer-coalmine-near-great-barrier-reef-must-be-blocked-conservationists-say

Table 1 is a snapshot of progress to achieve some of the targets in the Reef 2050 Plan, as presented to the World Heritage Committee in 2015. The table focuses on **very high risks** identified in the GBRMPA 2019 Outlook Report.

### **Reef 2050 Plan: selected targets**

Threat	Target promised the WHC (as of 2015)	<b>Updated Target</b> (in the Reef 2050 WQIP 2017-2022)	Result	2019 GBR Outlook Report
Climate Change	By 2020, Australia's emissions are 5% below 2000 levels <sup>x</sup>		Achieved, though likely assisted by COVID economic downturn in 2020.  Australia's emissions were -5.7% below 2000 levels.	Corals and coral reefs: Grade: Very poor Trend: Deteriorated Sea surface temperature: Grade: Very poor Trend: Deteriorated Reef building: Grade: Poor Trend: Deteriorated Recruitment: Grade: Poor Trend: Deteriorated Symbiosis: Grade: Poor Trend: Deteriorated Invertebrates: Grade: Poor Trend: Deteriorated
Water Quality	By 2018, at least a 50 per cent reduction in anthropogenic end-of-catchment dissolved inorganic nitrogen loads in priority areas, on the way to achieving up to an 80 per cent reduction in nitrogen by 2025	By 2025, 60 per cent reduction in anthropogenic end-of- catchment dissolved inorganic nitrogen loads	By June <b>2019</b> , <b>25.5 per cent</b> (GBR Water Quality Report Card 2019)	Nutrient cycling: Grade: Poor Trend: Stable Sediment exposure: Grade: Poor Trend: Stable Seagrass meadows: Grade: Poor Trend: No consistent trend Invertebrates: Grade: Poor Trend: Deteriorated
	By 2018, at least a 20 per cent reduction in anthropogenic end- of-catchment loads of sediment in priority areas, on the way to achieving up to a 50 per cent reduction by 2025	By <b>2025</b> , <b>25 per cent reduction</b> in anthropogenic end-of- catchment fine <b>sediment</b> loads	By June <b>2019, 14.6 per cent</b> (GBR Water Quality Report Card 2019)	
	By 2018, at least a 20 per cent reduction in anthropogenic end-of-catchment loads of particulate nutrients in priority areas	By 2025, 20 per cent reduction in anthropogenic end-of- catchment particulate nutrient loads	By June 2019: 13.4 % particulate nitrogen 16.6 % particulate phosphorus (GBR Water Quality Report Card 2019)	
	By 2018, at least a 60 per cent reduction in end-of-catchment pesticide loads in priority areas	To protect at least 99 per cent of aquatic species at the end-of-catchments	97.2 % of aquatic species protected at the end-of- catchments (GBR Water Quality Report Card 2019)	

ustralia's emissions vere -5.7% below 2000 vels.	temperature: Grade: Very poor Trend: Deteriorated Reef building: Grade: Poor Trend: Deteriorated		
	Recruitment: Grade: Poor Trend: Deteriorated		
	<b>Symbiosis:</b> Grade: Poor Trend: Deteriorated		
	Invertebrates: Grade: Poor Trend: Deteriorated		
y June <b>2019</b> , <b>25.5 per</b> <b>ent</b> GBR Water Quality eport Card 2019)	Nutrient cycling: Grade: Poor Trend: Stable Sediment exposure: Grade: Poor Trend: Stable		
y June <b>2019, 14.6 per</b> ent GBR Water Quality eport Card 2019)	Seagrass meadows: Grade: Poor Trend: No consistent trend Invertebrates: Grade: Poor Trend: Deteriorated		
y June 2019: 3.4 % particulate itrogen 5.6 % particulate hosphorus GBR Water Quality eport Card 2019) 7.2 % of aquatic species rotected at the end-of- atchments GBR Water Quality			

Threat	Target promised the WHC (as of 2015)	<b>Updated Target</b> (in the Reef 2050 WQIP 2017-2022)	Result	2019 GBR Outlook Report
Biodiversity impacted by fishing	By <b>2020</b> , <b>incidental catch</b> of species of conservation concern is declining.		No discernable trend observed. In 2019 – 173 marine turtles, 3 dolphins and 3 dugongs reported. (QLD Government open data portal) Impacts may be underestimated even though mandatory reporting is in place. GBRMPA Position Statement on Fishing	Marine turtles: Grade: Poor Trend: No consistent trend  Both dolphin species: Grade: Good Trend: Deteriorated  Dugong: Grade: Poor Trend: Improved
	By 2020, populations of Australian humpback and snubfin dolphins, dugong, and loggerhead, green, hawksbill and flatback turtles are stable or increasing at Reef-wide and regionally relevant scales.		Dugong – Southern GBR population declining, other QLD populations stable. (Commonwealth SPRAT database)  Australian humpback dolphin – No range wide abundance estimate available (Commonwealth SPRAT database)  Australian snubfin dolphin – No range wide abundance estimate available. Decreasing population size is likely. (Commonwealth SPRAT database)  Loggerhead turtle – Decreasing population size is likely. (Commonwealth SPRAT database)  Loggerhead turtle – Decreasing population, recently uplisted to Critically Endangered by IUCN (IUCN Red List)  Green turtle – Northern GBR thought to be decreasing. Southern GBR stable/increasing. <sup>29</sup> Hawksbill turtle – Decreasing population. <sup>30</sup> Flatback turtle – Data deficient population but thought to be stable (Hof, pers. comms)	Both dolphin species: Grade: Good Trend: Deteriorated  Dugong: Grade: Poor Trend: Improved  Marine turtles: Grade: Poor Trend: No consistent trend

Table 1: Reef 2050 (2015) progress to targets

x This target is inconsistent with the protection of the Great Barrier Reef's OUV.



## **Advice to Policy Makers: The Way Forward**

The values and attributes for which the Great Barrier Reef was inscribed are in far worse condition now than the early part of the decade when the Committee considered the possible inscription of the Great Barrier Reef on the List of World Heritage In Danger.

At the time, the Committee was deeply concerned about industrial coastal development and water quality on the OUV of the property. Fortunately, due to the Committee's engagement and the high-profile Fight for the Reef campaign, industrial development was constrained.xi

IUCN now assesses the outlook for the property to be "Critical" and GBRMPA "very poor". The most significant threat is climate change. It would seem logical, even inevitable, that the Committee should inscribe the Great Barrier Reef on the List of World Heritage In Danger.

Traditionally, however, the Convention has addressed only local threats that occur within the property or adjacent to it, rather than domestic greenhouse gas pollution over which a State Party has control.

Despite the slow pace of improvement in water quality, IUCN found that Australia's protection and management of the Great Barrier Reef is "mostly effective" and gave it a "light green" traffic light rating. This reflects Australia's efforts within and adjacent to the property to improve protection.xii

Every other site that IUCN deemed Critical had a protection and management regime that scored either "significant concern/orange" or "serious concern/red" because the threats they face are local (for example, invasive species, poaching or logging).

This poses the question: What should the World Heritage Committee do when the local protection and management measures are mostly effective but values are declining and the outlook is Critical?

### **Lessons from the Recent Past**

In 2013 the Committee requested Australia to develop a long-term sustainability plan for the Reef that:

- Contained clearly defined criteria for success
- Addressed the direct, indirect and cumulative impacts on the Reef
- Contained concrete measures to ensure the conservation of the OUV of the property

The Committee also agreed that, in the absence of substantial progress by Australia, it would consider listing the Great Barrier Reef on the List of World Heritage In Danger at the subsequent meeting.

Australia took the Committee's concerns seriously and by 2015 produced the Reef 2050 Plan, which addressed cumulative impacts (except climate change) by setting clear actions, targets, objectives and outcomes.

The Plan led to a further plan addressing one key threat: the Reef 2050 Water Quality Improvement Plan. The latter contains:

Clearly **defined criteria for success**, e.g. improved coral condition, improved seagrass condition, improved wetland condition

**Concrete measures** to ensure the conservation of the OUV of the Reef, e.g. time-bound ecologically relevant pollution reduction targets, time-bound best management practice adoption targets, actions and investments

In 2014 the Centre and IUCN advised the Committee that the long-term plan for the Reef "needs to result in concrete and consistent management measures sufficiently robust to ensure the overall conservation of the property and its OUV, in particular addressing major drivers of reef decline such as water quality and climate change."

With the water quality measures in place and working, albeit slowly, the Committee now has the opportunity to follow the same approach with respect to climate change.

xi Some adverse activities such as the dumping of maintenance dredge spoil inside the property continue to occur.

xii For example, the North East Shipping Management Plan was developed and implemented and is continuing to meet the challenge of reducing the risks of shipping to the property.

### **Recommendations**

This report recommends that at its 44<sup>th</sup> session, the World Heritage Committee:

- Requests Australia to revise the Reef 2050
  Plan to commit to ambitious domestic
  emissions reduction compatible with a 1.5°C
  pathway, thereby helping to limit the global
  average temperature increase to 1.5°C above
  pre-industrial levels in order to protect the
  Outstanding Universal Value (OUV) of the
  Great Barrier Reef.
- 2. Requests Australia to develop a detailed plan to achieve the above, containing:
  - Clearly defined criteria for success, i.e. time-bound greenhouse gas pollution reduction targets across the economy compatible with a 1.5°C pathway and measurable targets to increase native vegetation sinks in the Reef catchment;
  - Concrete measures, e.g. actions and investments that deliver on the targets and timelines.
- Recalls its decision of 41 COM 7 in relation to Climate Change and reiterates the importance of all other State Parties undertaking the most ambitious implementation of the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) to protect World Heritage.
- 4. Urges Australia to allocate additional resources to fully meet the time-bound water quality targets in the Reef 2050 Water Quality Improvement Plan 2017-2022, including adequate funding for education, extension and regulatory compliance.
- Requests Australia to accelerate efforts in response to the poor or deteriorating status of biodiversity and species considered vulnerable to fishing, as outlined in the GBRMPA 2019 Outlook Report; in particular

- fully implementing and funding the Queensland Sustainable Fisheries Strategy 2017-2027, monitoring and reducing bycatch of endangered wildlife, reducing gillnet fishing effort and establishing more extensive commercial net-free zones along the Great Barrier Reef coastline.
- Requests Australia to submit to the World
   Heritage Centre an updated report by 1
   December 2022 on the state of conservation of
   the property, including on the implementation
   of the requests outlined above.
- Agrees that, without substantial progress to achieve the above requests, it would consider the inscription of the property on the List of World Heritage in Danger at its subsequent session.

#### **Rationale**

To protect the OUV of the Great Barrier Reef as much as possible within our rapidly warming climate, the goal of the plan should be Australia doing its fair share to limit global temperature rise to 1.5°C.

The IPCC identified this as a critical threshold for the world's coral reefs.

At present, Australia's Paris target of 26-28 per cent below 2005 levels by 2030 is insufficient to protect the Reef's OUV, being compatible with a 2-3°C rise in global temperature which would destroy all World Heritage coral reefs.

Australia is not even on track to meet the target, with the latest data from December 2020 showing Australia is on track to achieve only a **22 per cent reduction**.<sup>31</sup>

The government has not even committed to net zero emissions by 2050, despite more than 110 countries doing so.xiii

The above recommendations are consistent with the Operational Guidelines under the Convention that require Corrective Measures if a site is inscribed on the List of World Heritage.

However, if the Committee made such a request and Australia complied, an In Danger listing could be avoided.

The aim is not to inscribe the Reef on the List, but to ensure that concrete measures are put in place that allow this priceless ecosystem to survive the ages.

Some may argue that it is not the World Heritage Committee's role to deal with climate change mitigation at a national level, however, the above arguments do not duplicate the UNFCCC's role.

The suggested approach is consistent with the Convention and Operational Guidelines and State Party obligations to protect OUV. Below are some further arguments to consolidate this suggested way forward.

Scope of domestic action: The Reef 2050 Plan made commitments that went beyond the World Heritage property and Reef catchment, such as strengthening Queensland's native vegetation laws and (in the 2018 update) endorsing the implementation of the Queensland Sustainable Fisheries Strategy 2017-2027. If the OUV of the Great Barrier Reef is to have any hope of being protected, the scale of the corrective measures needs to match the scale of the threat.

Scope of international action: It is critical that all parties to the Convention undertake the most ambitious implementation of the Paris Agreement, through actions that are fully consistent with their obligations within the World Heritage Convention to protect the OUV of all World Heritage properties, as agreed at the 41st session of the Committee. This must be reiterated at the next meeting of the parties, as the spirit of the Convention is one of all parties having a common responsibility to protect the shared heritage of humankind.

**Sphere of Influence**: The UN Secretary-General has called on all countries to declare a State of Climate Emergency until carbon neutrality is reached. It is crucial that the World Heritage Committee, along with all other powerful international agencies, responds to the crisis within their own spheres of influence, in the Committee's case the protection of the world's outstanding natural and cultural treasures.

### **An Integrated Plan**

A different approach for the Committee could be to seek an integrated World Heritage response from Australia. Climate change is a current and very high threat not just to the Great Barrier Reef, but to four other natural World Heritage properties in Australia: the Greater Blue Mountains, Kakadu National Park, Heard and McDonald Islands and the Wet Tropics of Queensland.

The Committee had earlier expressed concern about Australia's project by project assessment of coastal developments along the Reef coastline, and urged Australia to take a more strategic approach, developing a plan that commits to the cumulative assessment of all coastal developments that could have an impact on the OUV of the Reef.

The Committee could request that Australia develop a long-term plan that addresses the cumulative impact of national greenhouse gas pollution on the OUV of all Australian World Heritage properties. A national World Heritage climate plan should contain concrete actions that specify how Australia will do its fair share to limit global temperature rise to 1.5°C to minimise future losses of Outstanding Universal Value.

xiii The latest science is advising that net zero emissions may be required by 2040 or sooner if the worst impacts of climate change are to be avoided.



### **Conclusion**

The Great Barrier Reef is priceless and irreplaceable.

In 2015, the World Heritage Centre and IUCN stated that "It is essential that the 2050 LTSP [Long-Term Sustainability Plan] delivers its anticipated results in order to confirm that the property does not face **ascertained or potential** danger to its OUV."

The Reef 2050 Plan and its consequential Water Quality Improvement Plan are major achievements and a testament to the power of the World Heritage Convention.

Despite some progress, the water quality results anticipated by 2020 have not yet been met. With accelerated action and more investment, they can be achieved.

However, the Reef has experienced three severe marine heatwaves in the last five years resulting in mass coral mortality. These events have changed the Reef forever.

The outlook is critical. The property **currently** faces ascertained and potential danger to its

At its 44<sup>th</sup> session, the World Heritage Committee can once again demonstrate the power of the Convention by requesting Australia to fully implement its legal obligations to protect the OUV of the Great Barrier Reef.

Specifically, the Committee can request Australia to develop a plan compatible with a 1.5°C pathway to address the Reef's greatest threat: climate change.

Ongoing decline of the Reef's beauty and biodiversity can be reversed but actions need to be taken now or it will be too late.

### **Endnotes**

- 1 Douvere, F. and Badman, T. (June 2012) UNESCO World Heritage Centre IUCN, MISSION REPORT Reactive Monitoring Mission to Great Barrier Reef (Australia) 6th to 14th March 2012. https://whc.unesco.org/en/documents/117104
- 2 Brodie, J., Waterhouse, J., Schaffelke, B., Furnas, M., Maynard, J.A., Collier, C., Lewis, S., Warne, M., Fabricius, K.E., Devlin, M., McKenzie, L., Yorkston, H., Randall, L., Bennett, J., Brando, V.E. (2013) Land use impacts on Great Barrier Reef water quality and ecosystem condition. 2013 Scientific Consensus Statement. Reef Water Quality Protection Plan Secretariat. https://www.reefplan.qld.gov.au/\_\_data/assets/pdf\_file/0018/46170/scientific-consensus-statement-2013.pdf
- 3 The State of Queensland (2013) *Reef Water Quality Protection Plan 2013*. https://www.reefplan.qld.gov.au/\_\_data/assets/pdf\_file/0016/46123/reef-plan-2013.pdf
- 4 Great Barrier Reef Marine Park Authority (2013a) *Great Barrier Reef Region Strategic Assessment.*Strategic Assessment Report. Draft for public comment. Great Barrier Reef Marine Park Authority,
  November 2013. Townsville. https://www.gbrmpa.gov.au/our-work/reef-strategies/strategic-assessment
- 5 Great Barrier Reef Marine Park Authority (2014) *Great Barrier Reef Outlook Report 2014*, GBRMPA, Townsville. https://elibrary.gbrmpa.gov.au/jspui/handle/11017/2855
- 6 North-East Shipping Management Group (2014) North-East Shipping Management Plan.
  Australian Maritime Safety Authority. https://www.amsa.gov.au/marine-environment/marine-pollution/shipping-management-plans/north-east-shipping-management-plan
- 7 Great Barrier Reef Marine Park Authority (2009) *Great Barrier Reef Outlook Report 2009.* GBRMPA, Townsville. https://elibrary.gbrmpa.gov.au/jspui/handle/11017/199
- 8 Commonwealth of Australia (2015) *Reef 2050 Long-Term Sustainability Plan.* https://www.environment.gov.au/marine/gbr/long-term-sustainability-plan
- 9 The State of Queensland (2015) *Great Barrier Reef Report Card 2015*, Reef Water Quality Protection Plan. https://www.reefplan.qld.gov.au/tracking-progress/reef-report-card/2015-report-card
- 10 Great Barrier Reef Marine Park Authority (2017) Final report: 2016 coral bleaching event on the Great Barrier Reef, GBRMPA, Townsville. https://elibrary.gbrmpa.gov.au/jspui/handle/11017/3206
- 11 Commonwealth of Australia (2016) 'Reef 2050 Plan—Update on Progress, Commonwealth of Australia 2016'. https://www.environment.gov.au/marine/gbr/publications/reef-2050-plan-update-on-progress
- 12 Great Barrier Reef Marine Park Authority (2017) *Great Barrier Reef blueprint for resilience*, GBRMPA, Townsville. https://www.gbrmpa.gov.au/our-work/reef-strategies/managing-for-a-resilient-reef
- Heron et al. (2017) Impacts of Climate Change on World Heritage Coral Reefs: A First Global Scientific Assessment. Paris, UNESCO World Heritage Centre. https://whc.unesco.org/en/ news/1676
- 14 Australian Government, Department of Agriculture, Water and the Environment. https://www.environment.gov.au/marine/gbr/reef2050/mid-term-review
- 15 State of Queensland (2018) Reef 2050 Water Quality Improvement Plan 2017–2022. https://www.

#### reefplan.qld.gov.au/

- 16 Intergovernmental Panel on Climate Change (2018) *Global Warming of 1.5°C*, a special report. Summary for Policy Makers. https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/
- 17 Great Barrier Reef Marine Park Authority (2019) *Great Barrier Reef Outlook Report 2019*, GBRMPA, Townsville. https://www.gbrmpa.gov.au/our-work/outlook-report-2019
- State of Queensland (2019) Reef Water Quality Report Card 2017 and 2018, Reef 2050 Water Quality Improvement Plan. https://www.reefplan.qld.gov.au/tracking-progress/reef-report-card/2019
- 19 Commonwealth of Australia (2019) State Party Report on the state of conservation of the Great Barrier Reef World Heritage Area (Australia), Commonwealth of Australia, 2019. https://www.environment.gov.au/heritage/publications/state-party-report-gbr-2019
- 20 Australian Government (2020) *Nationally Determined Contribution*. Communication 2020. https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Australia%20First/Australia%20NDC%20recommunication%20FINAL.PDF
- 21 Climate Action Tracker, https://climateactiontracker.org/countries/australia/
- Tarte, D. and Hughes, T. (2020) Review of State Party Report on the state of conservation of the Great Barrier Reef World Heritage Area (Australia). Report prepared for the Australian Marine Conservation Society. https://www.marineconservation.org.au/wp-content/uploads/2020/04/ World-Heritage-Report\_February-2020\_web.pdf
- 23 Tarte, D. and Hughes, T. (2020) Review of State Party Report on the state of conservation of the Great Barrier Reef World Heritage Area (Australia). Report prepared for the Australian Marine Conservation Society. https://www.marineconservation.org.au/wp-content/uploads/2020/04/World-Heritage-Report\_February-2020\_web.pdf
- O'Callaghan B.J. and Murdock E. (2021) Are we Building Back Better? Evidence from 2020 and Pathways to Inclusive Green Recovery Spending. United Nations Environment Program. https://www.unep.org/resources/publication/are-we-building-back-better-evidence-2020-and-pathways-inclusive-green
- Osipova, E., Emslie-Smith, M., Osti, M., Murai, M., Åberg, U., Shadie, P. (2020). *IUCN World Heritage Outlook 3: A conservation assessment of all natural World Heritage sites, November 2020.* Gland, Switzerland: IUCN. x + 90pp. https://portals.iucn.org/library/sites/library/files/documents/2020-035-En.pdf
- 26 State of Queensland (2017) *Queensland Sustainable Fisheries Strategy 2017 2027.* https://www.publications.qld.gov.au/dataset/queensland-sustainable-fisheries-strategy/resource/319c7e02-f07b-4b2e-8fd5-a435d2c2f3c9
- 27 State of Queensland (2021) *Reef Water Quality Report Card 2019*, Reef 2050 Water Quality Improvement Plan. https://www.reefplan.qld.gov.au/tracking-progress/reef-report-card/2019
- 28 Commonwealth of Australia (2020) 'Reef 2050 Long-Term Sustainability Plan—Public Consultation Draft August 2020, Commonwealth of Australia 2020.

 $\overline{32}$ 

- 29 Hof, C.A.M., Smallwood, E., Meager, J., Bell, I.P. (2017) First citizen-science population abundance and growth rate estimates for green sea turtles *Chelonia mydas* foraging in the northern Great Barrier Reef, *Australia. Marine Ecology Progress Series*, Vol.574: 181–191,2017. https://www.int-res.com/abstracts/meps/v574/p181–191/
- 30 Bell, I.P, Meager, J.J, Eguchi, T., Dobbs, K.A., Miller, J.D., Hof, C.A.M. (2020) Twenty-eight years of decline: Nesting population demographics and trajectory of the north-east Queensland endangered hawksbill turtle (*Eretmochelys imbricata*). *Biological Conservation* 241 (2020) 108376. https://www.transparency.gov.au/annual-reports/great-barrier-reef-marine-park-authority/reporting-year/2019-20-48
- 31 Australian Government, Australia's emissions projections 2020 (Dec. 2020), pp. 3, 11, 13, 70, https://www.industry.gov.au/sites/default/files/2020-12/australias-emissions-projections-2020.pdf. See also, A. Morton, The Guardian, Spinning emissions: Australia's climate projections are not what they seem (Dec. 11, 2020), https://www.theguardian.com/environment/2020/dec/11/spinning-emissions-australias-climate-projections-are-not-what-they-seem.

