

REEF BLUEPRINT 2030

GREAT BARRIER REEF BLUEPRINT
FOR CLIMATE RESILIENCE
AND ADAPTATION



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Aboriginal and Torres Strait Islander readers are advised this publication may contain names and images of deceased persons.

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The Reef Authority acknowledges the expertise, wisdom, and enduring connections that have informed the guardianship of the Reef for millennia. We pay our respects to the Traditional Owners as the first managers of this Land and Sea Country, and value their traditional knowledge, which continues to inform the current management and stewardship of the Reef for future generations.



Nautilus Shell Artwork © 2023 by Laurence Gibson, Yalanji Arts, Mossman Gorge

Building partnerships with First Nations groups of the Great Barrier Reef is critical if the Reef is to heal.

Protecting the Great Barrier Reef — one of the world's best-loved natural wonders — is everyone's responsibility.

First Nations people of the Great Barrier Reef are resilient. Despite constant testing by past events and against emerging threats of today's modern society, our spiritual connection with the Reef remains strong.

I urge First Nations people, the Reef Authority, stakeholders, and other Reef enthusiasts to commit to demonstrating responsible proactive practices in our management of this precious World Heritage asset. Collaboration, a shared vision, and respect for all creatures of the Great Barrier Reef are essential on this path of protection and healing.

Our First Nations people have much to contribute to today's Reef management decisions regarding protection. Ensuring Indigenous and local knowledge combined with scientific understanding guides our decision-making processes is both a priority and a challenge. The Reef Authority and various agencies will need to be brave, courageous, and innovative in working with all our First Nations people to ensure our legacy, and wisdom garnered over millennia, endures.

Everybody has a role to play, and this begins with taking ownership of your personal actions. The actions and decisions you make today will impact the Great Barrier Reef of tomorrow, as well as all reefs around the world.

The story of the Reef is a story of human legacy. The Reef needs the world's peoples to open their hearts and minds to sharing the principles of respect and nurture that we, the First Nations people of the Great Barrier Reef, have committed to for thousands of years.

Chair

Indigenous Reef Advisory Committee
Reef Authority 2023

The Great Barrier Reef at a glance



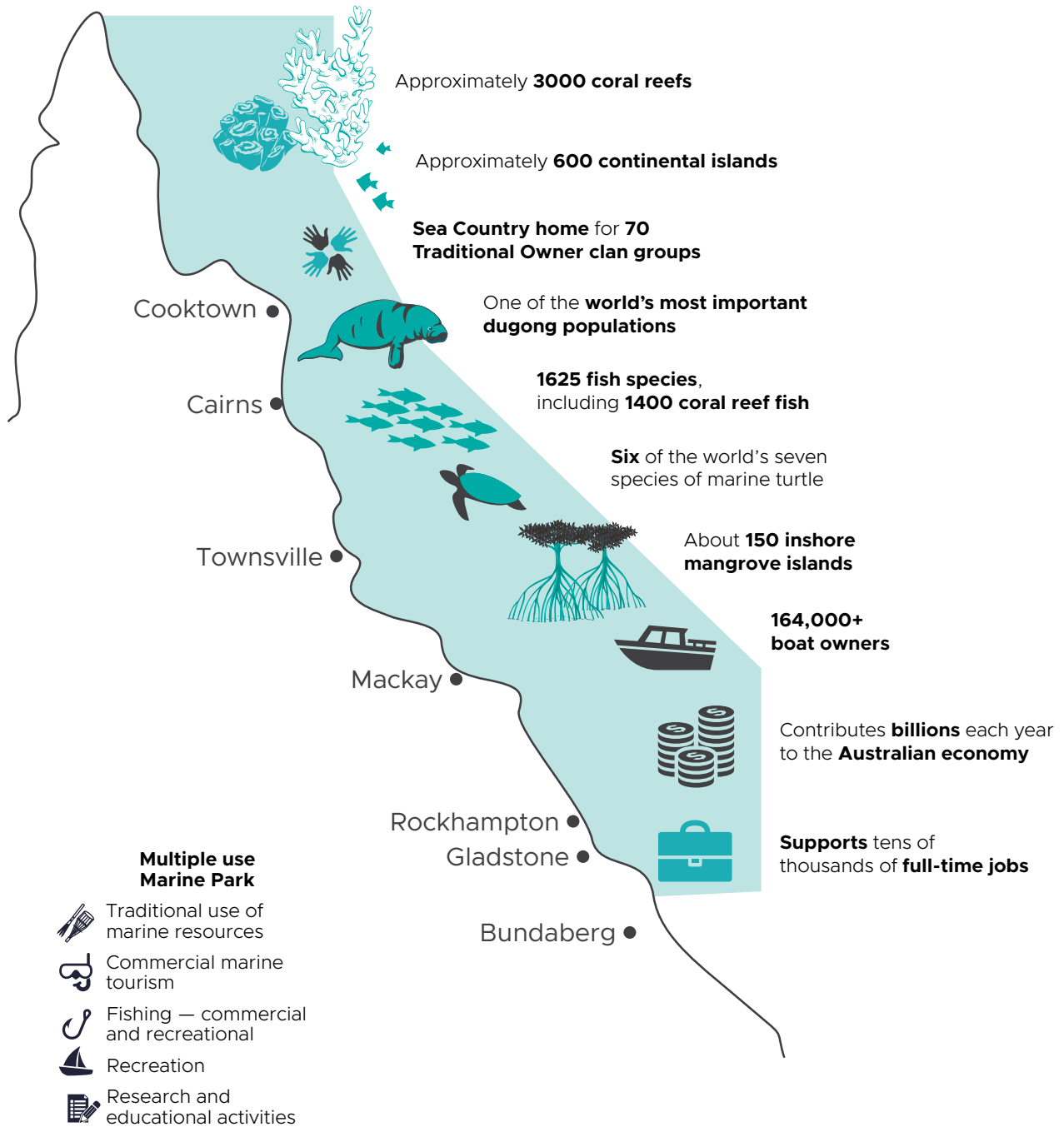
2300km long and **344,400** square kilometers in area



Approximately **2,400,000** catchment residents



The **world's largest coral reef ecosystem**, comprising **10%** of the world's coral reef ecosystems



*Global climate is rapidly changing.
The Great Barrier Reef faces a challenging future.
Blueprint 2030 sets out how the Reef Authority
will meet this challenge.*

Preface

The Great Barrier Reef Marine Park Authority continues to innovate its management in response to a changing climate, which is impacting coral reefs and all natural ecosystems around the world.

As part of our future-focused approach, I present the *Great Barrier Reef Blueprint for Climate Resilience and Adaptation — Blueprint 2030* — that builds on existing world-class management activities and past achievements and provides a pathway to continue adaptation as the climate changes.

It is the next chapter in addressing the challenge of climate change impacts on the Reef since the release of the *Blueprint for Resilience* five years ago. This pivotal strategy was published following the *Great Barrier Reef Summit – Managing for Resilience*, convened in the face of the Reef’s first back-to-back mass coral bleaching events over the summers of 2016 and 2017. It has guided priorities for the Reef Authority and our partners to address the challenge of a changing climate.

Our first *Blueprint* was influential in securing major Australian Government Reef investments, including expanding and enhancing the Crown-of-thorns Starfish Control Program and Reef Joint Field Management Program as well as the Reef Restoration and Adaptation Program. It also informed revisions to the Australian and Queensland governments’ Reef 2050 Plan.

Lessons learnt from the development and implementation of this strategy have informed the **Blueprint 2030**, as has the ever-growing body of scientific data combined with Traditional knowledge and valued information from partners, industry, and the community.

“Blueprint 2030 is our roadmap to further strengthen Reef resilience. It sets out specific actions and longer-term opportunities for the Great Barrier Reef Marine Park Authority to implement with our partners during this decade.”

I acknowledge the valuable contributions from the work of the Academy of Science, advice from the Reef 2050 Independent Expert Panel and Reef Advisory Committee. Thank you to all the staff of the Great Barrier Reef Marine Park Authority and our partners who work hard to protect the Reef’s future.

Since 1975, it has been the Reef Authority’s great privilege and responsibility to manage this global icon for its long-term protection and conservation. As Australia’s lead management agency for the Reef, we work in partnership with others to protect this World Heritage site’s Outstanding Universal Value for future generations. We recognise that the Reef is of critical cultural significance for the 70 Traditional Owner groups who call it home and that the health of their culture is inextricably linked to a healthy Reef.

Josh Thomas

Chief Executive Officer
Great Barrier Reef Marine Park Authority

Blueprint 2030

We recognise that delivering world-leading management and protecting Reef resilience as the climate changes will require more than business-as-usual. Climate change requires us to think outside the box. We must be bold and innovative — do more with the tools we have and develop new tools and approaches to deliver our work. This *Great Barrier Reef Blueprint for Climate Resilience and Adaptation (Blueprint 2030)* will help us deliver on the objectives of the *Great Barrier Reef Marine Park Act 1975* to protect and conserve the Reef.

Purpose

The purpose of our **Blueprint 2030** is to drive how the Reef Authority adapts its management under a changing climate so we can progressively and effectively respond to the risks identified in the Outlook Report. It does this by setting out our commitment to the global community, describing five strategic goals to fulfil that commitment, and identifying actions to achieve those goals.

Key Reef Authority programs will continue to be core to how we manage the Reef. The goals and actions in Blueprint 2030 will establish new programs and enhance existing programs, such as our regulatory and marine spatial planning work, the Reef Joint Field Management Program, working with Traditional Owners to develop and implement Traditional Use of Marine Resources Agreements, the Crown-of-thorns Starfish Control Program, and Reef Guardians.

Adapting our management to respond to a changing climate means three things:

1. We will need to *change* how we do some things.
2. We will need to do *new* things we haven't done before.
3. We will need to stop doing some things we have been doing for a long time.

Some of these choices will be difficult.

Blueprint 2030 will set us up to meet these challenges in a way that best supports the long-term protection and conservation of the Reef.

Our 2017 Blueprint was a rapid response to an acute crisis — the unprecedented combination of impacts between 2015 and 2017. Blueprint 2030 is a strategic response to the broader threat of climate change and its future impacts on the entire Reef ecosystem.

Our *Great Barrier Reef Blueprint for Resilience* (2017) signalled a change in the future management of the Reef and focused on corals and coral reef resilience. **Blueprint 2030** builds on this with goals and actions that are bold and comprehensive, and that protect the resilience of the entire Reef ecosystem – not just corals and coral reefs.

Our five strategic goals:

1. Protect the Reef's resilience
2. Enhance the Reef Authority's capability
3. Co-manage Sea Country with Traditional Owners
4. Empower others to protect and manage
5. Do our part to reduce emissions

A challenging future

Climate change is the greatest threat to the Great Barrier Reef.

Climate change is the greatest threat to the world's coral reefs. Most coral reefs have already declined and are facing irreversible change. Significant cuts to emissions together with innovative and adaptive management must occur to protect the world's reefs.

The future of the Reef is uncertain. Extreme weather events driven by warming temperatures — such as heatwaves, severe tropical cyclones and flood events — are impacting the Reef. These changes are happening rapidly, and the consequences are significant. Rising greenhouse gas emissions are also driving changes in ocean chemistry, affecting the ability for corals (and many other organisms) to build the foundations of the Reef. The Reef of the future will be different to the Reef of today. As climate-driven pressures continue to mount on a global scale, all species and values within the Great Barrier Reef are at risk. This threatens the Reef's Outstanding Universal Value.

The summer of 2021–22 marked the sixth mass coral bleaching event on record for the Great Barrier Reef, with four of these occurring in the last seven years. Coral reefs are the foundation of the entire Reef ecosystem and its biodiversity, and the cornerstone of its broader ecological, cultural, social, economic, and heritage values. As such, the increasing severity, frequency and cumulative consequences of these events is of critical concern.

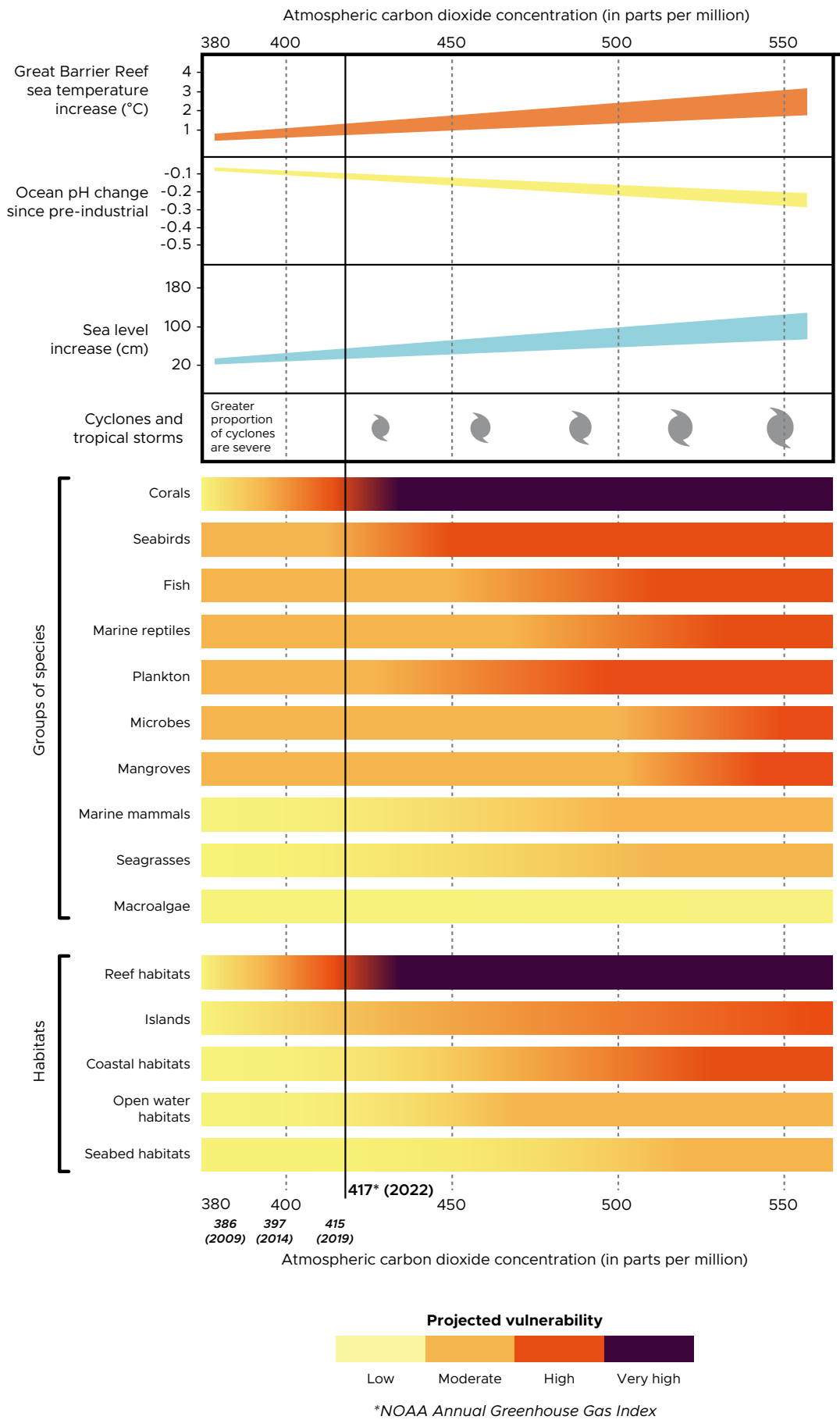
The *Outlook Report 2019* concluded that without additional local, national and global action on the greatest threats, the overall outlook for the Reef's ecosystem will remain very poor, with continuing consequences for its heritage values, and the communities and industries that depend on it. While the Reef has shown resilience and recovery in recent years, a long-term decline in its ecological health appears almost certain.

Never has the Reef Authority's world-leading expertise in Reef management been more important. As the challenges to the Reef have evolved, so too have we adapted our management to address and overcome the threats within our control. For those threats outside our control, we have clear position statements on the threat and the necessary outcomes for a healthy Reef.

Managing the Reef is now more challenging and complex than ever. As the Reef Authority, we recognise that to protect resilience, more is required beyond our established management. The most critical threats come from outside the Marine Park. As a global community, we must take urgent and effective action to reduce greenhouse gas emissions. Actions taken now will make a difference to the Reef's long-term outlook.



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Projected vulnerabilities of components of the Reef ecosystem to climate change. Adapted from the Reef Authority's Great Barrier Reef Outlook Report (2019). Trajectories for the groups of species and habitats continue to evolve with the changing climate and in response to climate action.

Figure left: The top panel of the figure illustrates the relationship between rising atmospheric carbon dioxide concentration and the observed and projected increases in sea surface temperatures, sea level, frequency of severe cyclones and changes in ocean chemistry. The lower panel summarises the consequences of the current and projected environmental changes for Reef habitats and groups of species. The diagram highlights the differing levels of vulnerability among key Reef components, notably that hard corals and the coral reef habitats they create are the most vulnerable to, and are already being affected by, a rapidly changing climate.

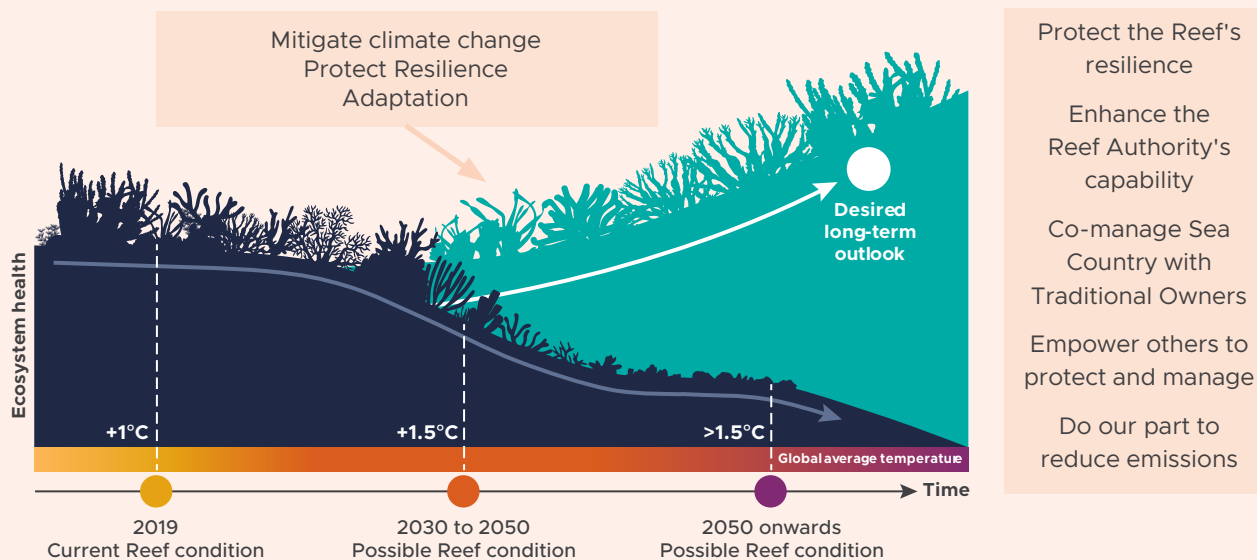
The diagram also shows that the 2022 global carbon dioxide concentration is 30 parts per million more than when the first Outlook report was published in 2009.

Improving the outlook for the Reef

There are three ways to improve the outlook for the Great Barrier Reef and the communities and industries that depend upon it.

The first and most critical is to **mitigate** climate change by urgently reducing greenhouse gas emissions. The second is protecting the Reef's inherent **resilience**. The third is **adaptation** to the actual or expected future climate and its effects.

Mitigating climate change is a global challenge involving international cooperation on a global scale. Protecting resilience and adapting to climate change are the core business of the Reef Authority, delivered through adaptive resilience-based management.



The two outlook pathways provide examples of what the future might look like. The downward arrow — deteriorating ecosystem health — represents business-as-usual without concerted effort to address climate change. The upward arrow — improving ecosystem health — represents what is possible if key risks are adequately mitigated within required timeframes.

Mitigating climate change

Despite international commitments outlined in the Paris Agreement, the rate of greenhouse gas emissions has continued to increase. This has dire consequences for the Reef and will drive continued declines in its overall health.

If we stopped emitting greenhouse gases today, the rise in global temperatures would begin to flatten within a few years. Urgent global action is critical to limit global temperatures to 1.5°C of warming¹, or as close as possible, to conserve the Reef and protect the livelihoods that depend on it. Scientists predict that even at 1.5°C of warming we will likely see major worldwide losses of coral.

***Mitigation** of climate change refers to a human intervention to reduce emissions or enhance the greenhouse gas sinks which remove carbon dioxide from the atmosphere.*

Protecting resilience

The Reef and its habitats have natural resilience — they can withstand and/or recover from disturbances like tropical cyclones, intense rainfall and heatwaves. However, climate change is exacerbating disturbances, shrinking recovery windows and overwhelming the resilience of some habitats. Protecting resilience refers to actions that protect the Reef's inherent capacity to withstand and recover from disturbances.

***Resilience** refers to the capacity of interconnected social, economic, and ecological systems to cope with a hazardous event, trend or disturbance; responding or reorganising in ways that maintain their essential function, identity and structure. Resilience is a positive attribute when it maintains capacity for adaptation, learning and/or transformation.*

The Crown-of-thorns Starfish Control Program is an example of resilience-based management in action. There are too many individual reefs across the Great Barrier Reef to conduct control operations on each one. The program uses a collaborative process between managers, operators, Traditional Owners, and scientists to identify the reefs that are most important to overall ecosystem resilience, and targets operations to those reefs. This ensures our control operations provide the greatest coral protection and resulting resilience benefits

Adapting to change

The Paris Agreement also defines a global goal on adaptation. The major themes of this goal are enhancing adaptive capacity and resilience and reducing vulnerability. Under the Australian and Queensland governments' Reef 2050 Plan, adaptation means increasing the resilience of the Reef and associated communities and industries.

***Adaptation in human systems** refers to the process of adjusting to actual or expected climate and its effects, to moderate harm or exploit beneficial opportunities. In **natural systems** it refers to the process of adjusting to actual climate and its effects, including human intervention to facilitate such adjustments.*

Resilience-based management

The Reef Authority protects resilience and drives adaptation to climate change through resilience-based management. Resilience-based management reduces threats and identifies and prioritises management actions that protect and build the Reef's capacity to withstand and recover from disturbances. It is future-focused and proactive, using the best available science and knowledge of current and future pressures to target, prioritise, and adapt management actions.

Our 2017 Blueprint represented the collaborative application of resilience-based management. Through its development, we learned important lessons about adapting our management under a changing climate. These included the need to capture the right data and enable its use through initiatives such as developing a resilience network and the Reef 2050 Integrated Monitoring and Reporting Program, and the processes and questions that should be considered when identifying priority initiatives.

¹ Consistent with targets in the [Paris Agreement](#)

Case studies

The below examples of coral protection show benefits well beyond the direct outcomes on individual reefs, replenishing coral larvae to downstream reefs and fish populations ‘spilling over’ to adjacent reefs that are open to fishing.

These two proactive actions exemplify the Reef Authority’s resilience-based management approach. Resilience-based management is well-recognised globally as a best practice. We continue to integrate this approach into all our programs and use it to identify and prioritise emerging options including Reef restoration.

Protecting reefs works

Biodiversity matters: The first and second mass coral bleaching events in 1998 and 2002 demonstrated the vulnerability of the coral foundations of the Reef; its biodiversity, industries and communities that depend on it.

This resulted in the Reef Authority, working with Government and its partners, to significantly expand the protected, no-take areas within the Marine Park from 5 per cent to 33 per cent in 2004. This was a proactive measure focused on future biodiversity benefits, underpinned by the best available science. Its implementation was complex, in part because the effect on Marine Park users was immediate, while the benefits took time to accrue and become evident.

The outcomes of expanded protection to both fish and coral habitats are now clear in monitoring data showing improvements in target fish populations on no-take versus fished reefs. Notably, research released by the Australian Institute of Marine Science in 2016 showed that fish and coral communities better tolerate and recover from coral bleaching events, cyclones, coral disease and crown-of-thorns starfish outbreaks on no-take reefs compared with reefs that are open to fishing. While the exact mechanisms underpinning these resilience benefits are still being investigated, it is likely that more intact biodiversity and food webs that include more abundant predators, create ‘healthier’ reef ecosystems that are more resistant to disturbances. The resilience benefits of enhanced protection are critically important given the increasing severity and frequency of climate driven impacts. The 2004 rezoning and ongoing compliance continues to pay dividends for the Reef, Traditional Owners and the industries and communities the Reef supports to this day.

Targeted COTS culling is a great success story

An all-out assault on COTS: The severe back-to-back coral bleaching events of 2016 and 2017 compounded nearly a decade of coral decline driven by severe cyclones and ongoing crown-of-thorns starfish (COTS) outbreaks.

The Reef Authority and its partners responded by creating a Blueprint for Resilience that identified 10 key priority actions to enhance recovery including ‘an all-out assault on COTS’. Well-targeted culling can prevent severe coral losses from crown-of-thorns starfish predation and protect the supply of juvenile corals to damaged reefs. The subsequent multi-million dollar Australian Government investment in crown-of-thorns starfish research and control enabled the Reef Authority and its partners to deploy sufficient culling capacity to minimise coral losses to predation by these starfish across hundreds of reefs in the Marine Park.

Five years on from this investment, the results have been dramatic. Reefs that had sustained culling of these predator starfish showed a 40 per cent increase in coral cover, compared to reefs with little or no control, which conversely suffered 40 per cent coral losses. These results occurred in parallel to two, albeit less severe, mass coral bleaching events, and a relatively quiet period for cyclones and floods.

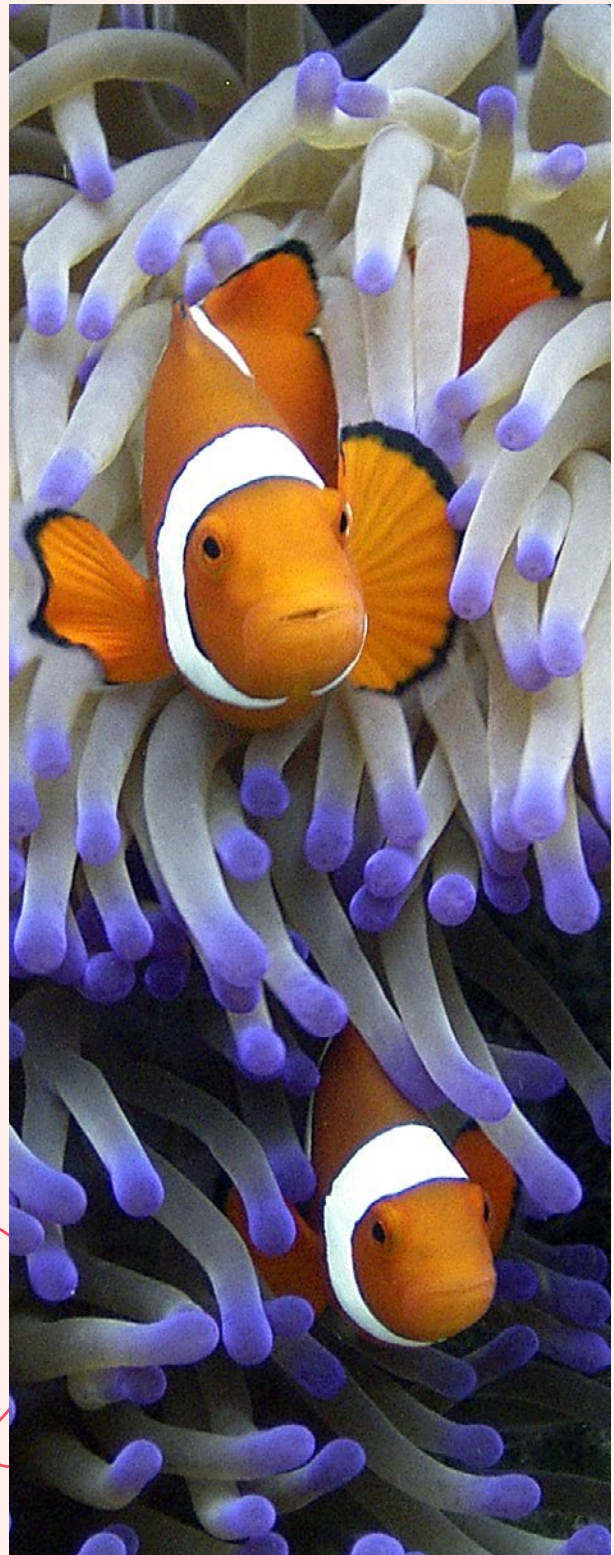
Crown-of-thorns starfish culling in concert with zoning protection and other management measures supported the recovery of predominantly fast-growing corals to record levels in 2022. While these types of coral are vulnerable to future impacts, the long-term investment in crown-of thorns starfish culling through to 2030 will help protect recent gains and buy more time for recovery and adaptation.

Our commitment to the global community

The Reef Authority has been entrusted to protect and manage the Great Barrier Reef, a unique natural wonder of outstanding value to the world. We recognise this is a big responsibility. As such, we make the following commitment to the global community:

The Reef Authority will do everything in our power to protect and build resilience of the Great Barrier Reef system and be global leaders in marine protected area management.

This commitment reflects the critical importance of protecting and building resilience for the future of the Reef, and our leadership role for marine protected area management globally.



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Photographer: Chris Jones

Building strong partnerships

Reef management is fundamentally a collective effort, and we continue to work to ensure Reef values are understood and protected. Our strong partnerships will be fostered and maintained through genuine relationships with First Nations people, local, state, and Australian government agencies, research institutions, Reef-dependent industries and communities, and the broader community — nationally and internationally. *Collaboration and partnerships* is one of the four enablers in the Australian and Queensland governments' [Reef 2050 Plan](#), and strong partnerships are essential.

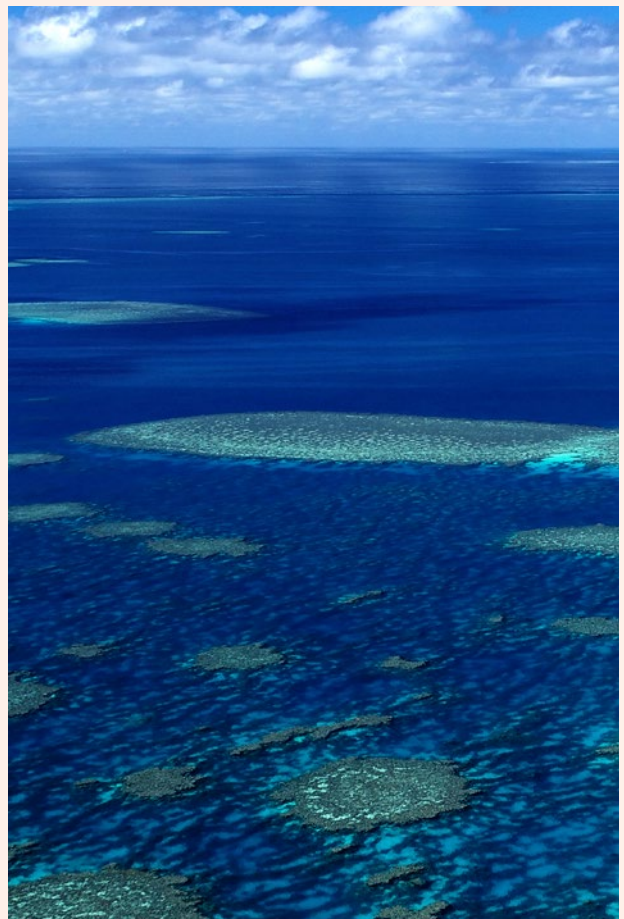
At the highest level, the [Great Barrier Reef Intergovernmental Agreement](#) provides a framework for the Australian and Queensland governments to work together to protect the Great Barrier Reef. Strong partnerships with Queensland Government agencies are the foundation for much of our work.

Partnerships with Reef Traditional Owners are also critical as Reef management becomes more complex. Our [Aboriginal and Torres Strait Islander Heritage Strategy for the Great Barrier Reef Marine Park](#), developed in collaboration with Traditional Owners, outlines how we work with First Nations peoples to keep Indigenous heritage strong, safe and healthy. Our [Co-management Principles Policy](#) and actions in this **Blueprint 2030** will build on this, and facilitate delivery of initiatives under the [Traditional Owner Implementation Plan](#) and enable co-management to be embedded in our work.

We rely on the best available science and knowledge to manage the Reef. Scientific information is a critical part of evidence-based decision making and reporting, and we have a long history of working closely with science and knowledge providers. Our knowledge base about the Reef is supported by research institutions, government agencies, universities, Traditional Owners, industry, and the Reef community.

We work with key Reef-dependent industries, including the marine tourism, and commercial and recreational fishing industries, that take actions to sustainably use the Reef. These industries play an essential role in protecting the Reef and its biodiversity. Through our catchment community-based Reef Guardian programs and Local Marine Advisory Committees, we work closely with schools, local governments and community representatives who use and rely on the Reef or its catchment, for recreation or business, to help build a healthier and more resilient Reef.

Our existing strong partnerships — and others that are yet to be established — will be central to how we implement **Blueprint 2030**.



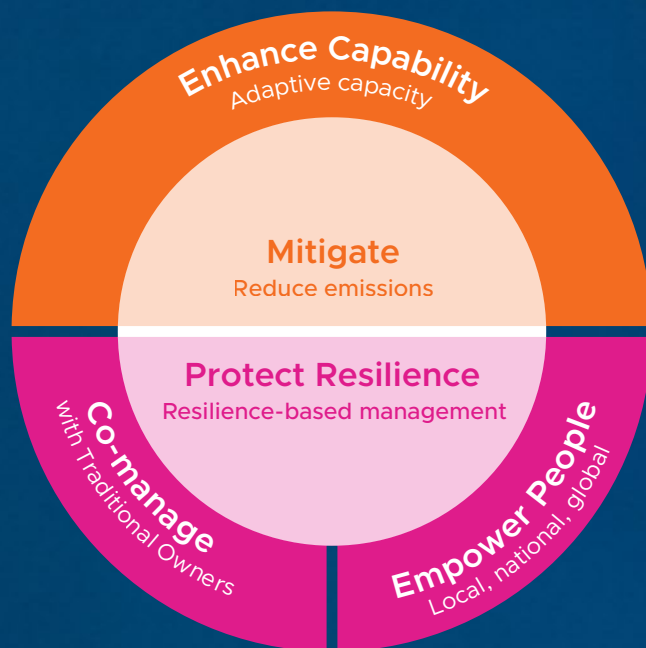
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Photographer: Johnny Gaskell



Strategic goals and actions

At the heart of **Blueprint 2030** are five strategic goals. The five goals — and the actions under them — represent the different ways we will adapt our management as the climate changes.

The strategic goals represent the Reef Authority's knowledge and understanding of what we can do to improve the Reef's outlook, by enhancing our foundational management that has served the Reef so well to date and by considering new and innovative ideas to respond to the unprecedented challenges of climate change. The actions are varied. Some are relatively simple and can be delivered relatively quickly, while others are more complex and require more preparation.



Blueprint 2030 strategic goals.



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Photographer: Johnny Gaskell

GOAL 1: Protect the Reef's Resilience

*Vision for 2030:
The Reef Authority is delivering world-leading resilience-based management that effectively addresses the key threats to the Marine Park, minimises pressures on vulnerable species and habitats, and supports a functioning ecosystem.*

Protecting the Reef's resilience is at the heart of our role and the key purpose of **Blueprint 2030**.

The Reef Authority has managed the Marine Park since 1975. Our existing management is the foundation for protecting resilience under a changing climate. This goal is not about replacing existing approaches — it is about enhancing, innovating, and complementing them to address key threats to the Reef that are within our control and influence those that are outside our jurisdiction but influence the health of the Great Barrier Reef. These actions build on our 2017 Blueprint and address a wider range of threats to the Reef, including impacts from poor water quality, Reef health incidents, unsustainable fishing practices and marine debris.

The Reef Authority understands what the Reef needs and what actions will enhance its resilience.

Actions coded in purple represent enhancement of Reef Authority programs and those in blue are new.

Actions (new programs)

- 1.1** Deliver an expert forum with our national and international partners to drive leadership and innovation in marine park management
- 1.2** Support and promote domestic and international efforts to address marine debris — particularly plastic pollution — including by highlighting its importance in Reef Authority education and stewardship programs, and initiatives led by partners
- 1.3** Support rigorous implementation of Reef water quality improvement initiatives to maximise benefits for Reef values
- 1.4** Incorporate emerging technologies and methods into management as they become viable, including those under development through the [Reef Restoration and Adaptation Program](#) and the [Crown-of-thorns Starfish Control Innovation Program](#)
- 1.5** Consider options to address waste discharge from large (e.g. commercial, tourism and shipping) vessels
- 1.6** Provide timely advice to Government about the current and future effects of climate change on the Reef's critical habitats, species, and the connections between them and the need to urgently reduce CO₂ emissions

Actions (enhance existing programs)

- 1.7** Maximise the impact of our foundational management programs — including the Crown-of-thorns Starfish Control Program and the Reef Joint Field Management Program — through refined spatial targeting (Action 1.9), outputs from Goal 2, and continual innovation
- 1.8** In managing Reef health incidents and emergencies, ensure decision makers, partners and the public have access to the most up-to-date information as events occur using climate models and satellite, aerial and in-water monitoring tools
- 1.9** Enhance spatial management by developing new, dynamic planning tools to support agile, targeted, and integrated resilience-based planning and management
- 1.10** Work with Australian, Queensland, and local government partners, and recreational and commercial fishers, to maximise the impact of the [Queensland Sustainable Fisheries Strategy](#)
- 1.11** Use management tools and statutory powers to ensure that fishing activities are sustainable and in keeping with the objects of the *Great Barrier Reef Marine Park Act 1975*
- 1.12** Expand the use of innovative Reef interventions² to minimise pressures, promote recovery and resilience, and respond to Reef health incidents and emergencies

² As defined in the Reef Authority's [Policy on Great Barrier Reef Interventions](#)

GOAL 2: Enhance the Reef Authority's capability

Vision for 2030: The Reef Authority's management capability is underpinned by globally-recognised policy and legislation, strategy development, decision making, and data and knowledge.

Our ability to protect and build resilience of the Great Barrier Reef system is underpinned by our management capability. 'Management capability' refers to how we use our legislative powers and management tools; how we set strategy, prioritise, and make decisions; and the science, knowledge and data systems underpinning those decisions.

This goal drives how we adapt the Reef Authority's management capability to provide for the long-term protection and conservation of the environment, biodiversity, and heritage values of the Reef as the climate changes. Actions under this goal drive improvements in how we deliver all other actions in this Blueprint and our business more broadly.

Actions (new programs)

2.1 Maximise use of the Reef 2050 Net Benefits and Cumulative Impact Management policies to ensure these policies can best inform decision making as the climate changes, highlighting its importance in Reef Authority education and stewardship programs, and initiatives led by partners

2.2 Review and, if necessary, update the *Great Barrier Reef Marine Park Act 1975*, the Zoning Plan 2003, and key policies (e.g. Reef interventions policy), to ensure they will continue to provide for the long-term protection and conservation of the environment, biodiversity, and heritage values of the Great Barrier Reef Region as the climate changes

Actions (enhance existing programs)

2.3 Develop position statements that clearly define the desired outcomes with respect to, and comprehensively address, key threats identified in Outlook reports

2.4 Fill critical knowledge and data gaps that limit management decision-making and our ability to evaluate outcomes of management actions, including through the Reef 2050 Integrated Monitoring and Reporting Program and other science partnerships

2.5 Understand the current and future effects of climate change on critical habitats, species, and the connections between them

2.6 Develop and use decision support mechanisms and vulnerability assessments to prioritise investment in functions, programs and initiatives that deliver the greatest resilience benefits

GOAL 3: Co-manage Sea Country with Traditional Owners

Vision for 2030: Great Barrier Reef management is conducted in a manner that acknowledges, respects, and supports the inherent rights, interests, and aspirations of Great Barrier Reef Traditional Owners.

Traditional Owners have managed the natural and cultural resources and values of the Great Barrier Reef for millennia. Their strong connections to Sea Country, and knowledge of their traditional Sea Country estates, continues to this day.

Under Australian law, native title recognises Traditional Owners' inherent and continuing rights and interests over their traditional Sea Country estates, including the right to practice law/lore and customs. The Reef Authority acknowledges, respects, and promotes these unique rights and interests, which extend beyond those of stakeholders.

The role of First Nations Peoples in natural resource management, both in Australia and globally, is critical. Traditional knowledge can complement western scientific knowledge and provide managers with a richer understanding of the Reef. We have much to learn.

Co-managing Sea Country with Traditional Owners is a key component in how we adapt our management under a changing climate and show global leadership in marine protected area management.

We are improving how we work with Traditional Owners and are creating a step change to evolve our approach from engagement and relationships to shared decision making in formal partnerships. To support this journey and shape how we make decisions, we have adopted a Vision and principles for co-management policy informed by the [Commonwealth Closing the Gap Implementation Plan](#).

This goal complements other Reef Authority initiatives to move us towards culturally appropriate and inclusive Reef management in partnership or collaboration with Traditional Owners.

Actions (new programs)

- 3.1** Develop and implement a co-management roadmap to evolve the Reef Authority's approach from engagement and relationships to formal partnerships in delivering co-management
- 3.2** Facilitate implementation of the [Reef 2050 Traditional Owner Implementation Plan](#)
- 3.3** Evolve our statutory instruments to encourage Reef users to acknowledge and engage with Traditional Owners of the Sea Country they are accessing
- 3.4** Facilitate co-management by ensuring all new and revised legislation, policy and strategy reflects the inherent rights, interests and aspirations of Traditional Owners and supports the goal of achieving co-management
- 3.5** Evolve and adapt Traditional Use of Marine Resources Agreements (TUMRA) to support co-management, including expanding the proportion of the Reef that is covered by agreements.

Actions (enhance existing programs)

- 3.6** Improve our understanding and management of cultural values by completing Sea Country values mapping for Reef areas subject to plans of management
- 3.7** Support Traditional Owners to share their knowledge and experience as a Reef Authority partner by sponsoring participation in relevant domestic and international conferences and events

Co-management vision and principles

Vision: The Great Barrier Reef is naturally and culturally significant, and we are committed to co-managing in partnership with Reef Traditional Owners to protect all values, delivering benefits, and the enduring and sustainable connections of Traditional Owners to the Reef are widely recognised by managing agencies, other users, and the public.

Eight co-management principles

1. Traditional Owners have inherent rights and interests under lore and custom, common law and the *Native Title Act 1993*. The *Great Barrier Reef Marine Park Act 1975* and our plans and policies expressly acknowledge these rights and interests that extend beyond those of stakeholders, and we respect these rights in the actions we take and the decisions we make.
2. We will implement co-management that recognises the Traditional Owner aspiration of co-governance that is delivered through meaningful relationships, partnerships, and empowerment in decision making.
3. In implementing co-management, the Reef Authority will include members of the public, including commercial and non-commercial Marine Park users in our collective co-management journey.
4. Integrating Traditional Owner expertise into management of the Reef increases protection and conservation of all values of the Reef and is necessary to enhance Reef resilience under a changing climate.
5. We recognise that co-management requires a place-based approach to Traditional Owner estate boundaries and will work collaboratively with other managing agencies to provide an holistic, joined-up approach to co-management of Country.
6. We recognise and respect the cultural authority, aspirations and diversity of Reef Traditional Owners and commit to working together in a culturally safe and appropriate way, ensuring we adhere to cultural protocols, best practice, and fit for purpose engagement.
7. Partnerships with Traditional Owners are co-designed, equitable, and transparent. Formal partnership success is predicated by shared risk, decision making and the management and maintenance of effective, robust, and mutually beneficial relationships.
8. We recognise people and Country are connected, and strong peoples are necessary for strong Country, and we aim for effective, long-term partnerships that deliver benefits for the Reef and communities.

GOAL 4: Empower others to protect and manage

Vision for 2030: The Great Barrier Reef is a rallying point for domestic and international partnerships for action on climate change, Reef protection, and knowledge sharing on marine protected area management.

The Reef Authority is in a unique position to empower others to protect and help manage the Great Barrier Reef. This includes fostering collective efforts to protect the Reef, as well as sharing experience from managing the Reef for the benefit of marine protected area managers globally. All actions, big or small, can make a difference to the Reef's long-term outlook. Empowering others to protect and manage the Reef is imperative if we are to overcome the risks identified in the Outlook Report and protect Reef resilience.

This goal drives how we interact with people everywhere — including Traditional Owners, communities, industries, partners, and the

Queensland and local governments, managers internationally, and the global community — to encourage Reef stewardship action and create lifelong ambassadors for the Reef. It also drives how we contribute to global marine protected area management efforts, which in turn will provide lessons that help us better manage the Reef. Actions under this goal enhance how we provide information on the Reef, encourage people to care for the Reef and support participation in management, and strengthen domestic and international partnerships for marine protected area management.

Actions (enhance existing programs)

- 4.1** Use the Reef Authority's position as the trusted source of information on the Reef to drive better alignment of communications between partners involved in Reef management and research
- 4.2** Play a leading role in domestic and international marine protected area management through leadership exchange in forums and networks (e.g. the International Coral Reef Initiative)
- 4.3** Strengthen partnerships to address shared issues and challenges, for example, Reef tourism initiatives
- 4.4** Adapt Reef Authority legislation, policy and strategy to better support Traditional Owners, local governments, communities, and industries to deliver stewardship initiatives
- 4.5** Enhance the partnerships and collaboration with the Reef Guardian Councils and Local Marine Advisory Committees to enable delivery of regional priorities

GOAL 5: Do our part to reduce emissions

Vision for 2030: The Reef Authority is doing everything in our power to contribute to reducing greenhouse gas emissions and limiting global temperature increase to 1.5°C of warming, or as close as possible.

Climate change is the greatest threat to the Great Barrier Reef and coral reefs worldwide. To meet **Blueprint 2030's** commitment to the global community, we also need to be doing everything we can to reduce greenhouse gas emissions and limit global temperature increase to 1.5°C of warming, or as close as possible. The Reef Authority's role in providing for the long-term protection and conservation of the environment, biodiversity and heritage values of the Reef means we must do everything we

can to reduce our own emissions, and influence others to do the same.

This goal describes the Reef Authority's contribution to accelerating efforts to decrease global greenhouse gas emissions and limit the impacts of climate change on the Reef and the communities and industries that depend on it. Actions under this goal reduce the Reef Authority's carbon footprint and support the emissions-reduction activities of others.

Actions (new programs)

- 5.1** Partner with experts to harness the best available information and advice on reducing carbon emissions and encourage transformative actions through Reef Authority communication channels
- 5.2** Work with partners to incorporate the Great Barrier Reef system into the [National Ocean Ecosystem Account](#), which captures information on key habitats, the carbon stocks they sequester, store and release, and the coastal protection services they offer
- 5.3** Engage with the Australian Government's energy transition agenda (e.g. emission reduction strategies and market-based or carbon sequestration initiatives)
- 5.4** Use statutory powers or other management tools to reduce carbon emissions from Reef users (e.g. large commercial, tourism or shipping vessels, including cruise ships)

Actions (enhance existing programs)

- 5.5** Speak for the Reef and advocate for stronger global action on climate change at major international forums, including Conferences of the Parties to the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity, and meetings under the World Heritage Convention
- 5.6** Achieve net zero carbon emissions for the Reef Authority's business by 2030 by implementing an ambitious Sustainability Strategy

From strategy to action

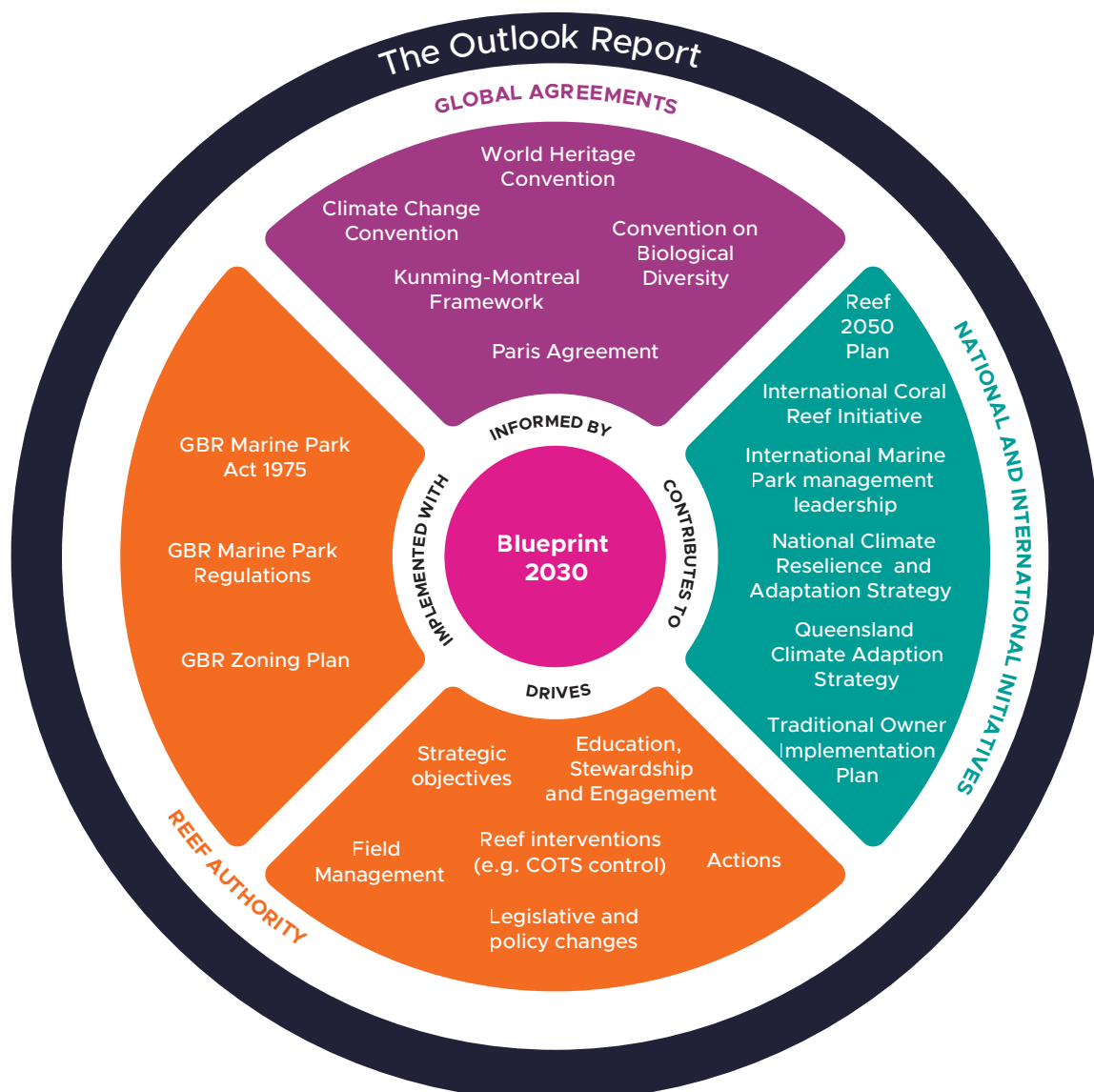
Framing our strategy

The Reef Authority’s primary purpose is articulated in the *Great Barrier Reef Marine Park Act 1975* (the Act), which is the central environmental legislation for the Reef. The main purpose (or ‘object’) of the Act is to provide for the long-term protection and conservation of the environment, biodiversity, and heritage values of the Reef.

The other objects of the Act, subject to the main purpose, are:

1. Allow ecologically sustainable use of the Reef
2. Encourage engagement in protecting and managing the Reef, and
3. Assist in meeting Australia’s international responsibilities (especially those under the World Heritage Convention).

Blueprint 2030 sits within a framework of other international, national, and state agreements, legislation and strategies that guide our actions, plans and policies to protect the Reef (see figure). The Reef 2050 Plan is Australia’s overarching long-term strategy for protecting and managing the Reef. It is the principal means of conserving the Reef’s Outstanding Universal Value. **Blueprint 2030** contributes to protecting species, habitats and values that contribute to the Reef’s Outstanding Universal Value. **Blueprint 2030** will also contribute to achieving outcomes in a range of broader strategic goals, such as those in the Traditional Owner Implementation Plan and the Australian Government’s [National Climate Resilience and Adaptation Strategy 2021–2025](#).



Continuing the Reef Authority's climate adaptation journey

The Reef Authority has been evaluating and adapting to climate change risks since the early 2000s. We conducted a comprehensive climate change vulnerability assessment in 2007 and expanded this approach to evaluate all risks to the Reef's values through our Outlook reports. Our first *Climate Change Action Plan 2007–2012* recognised climate change as the greatest long-term threat to the Great Barrier Reef and identified strategies for direct actions and partnerships to increase its resilience

to climate change. This was followed by our *Climate Change Adaptation Strategy and Action Plan 2012–2017*. We also developed a series of *Climate Change Adaptation Principles* in partnership with the National Climate Change Adaptation Research Facility that were published in 2011. These principles guide partners and stakeholders in considering climate change adaptation in decision making and their everyday operations.



Reef Authority's climate change risk assessment, resilience-based management and climate change adaptation work is demonstrated in a series of publications from 2007 to present.

Our 2017 *Blueprint for Resilience* responded to the unprecedented combination of ecosystem impacts from 2015–2017 and signalled a change in the future management of the Reef. It set out key initiatives we would pursue with our partners to improve the outlook for the Reef and sustain the many benefits it provides. It was successful in both shaping and

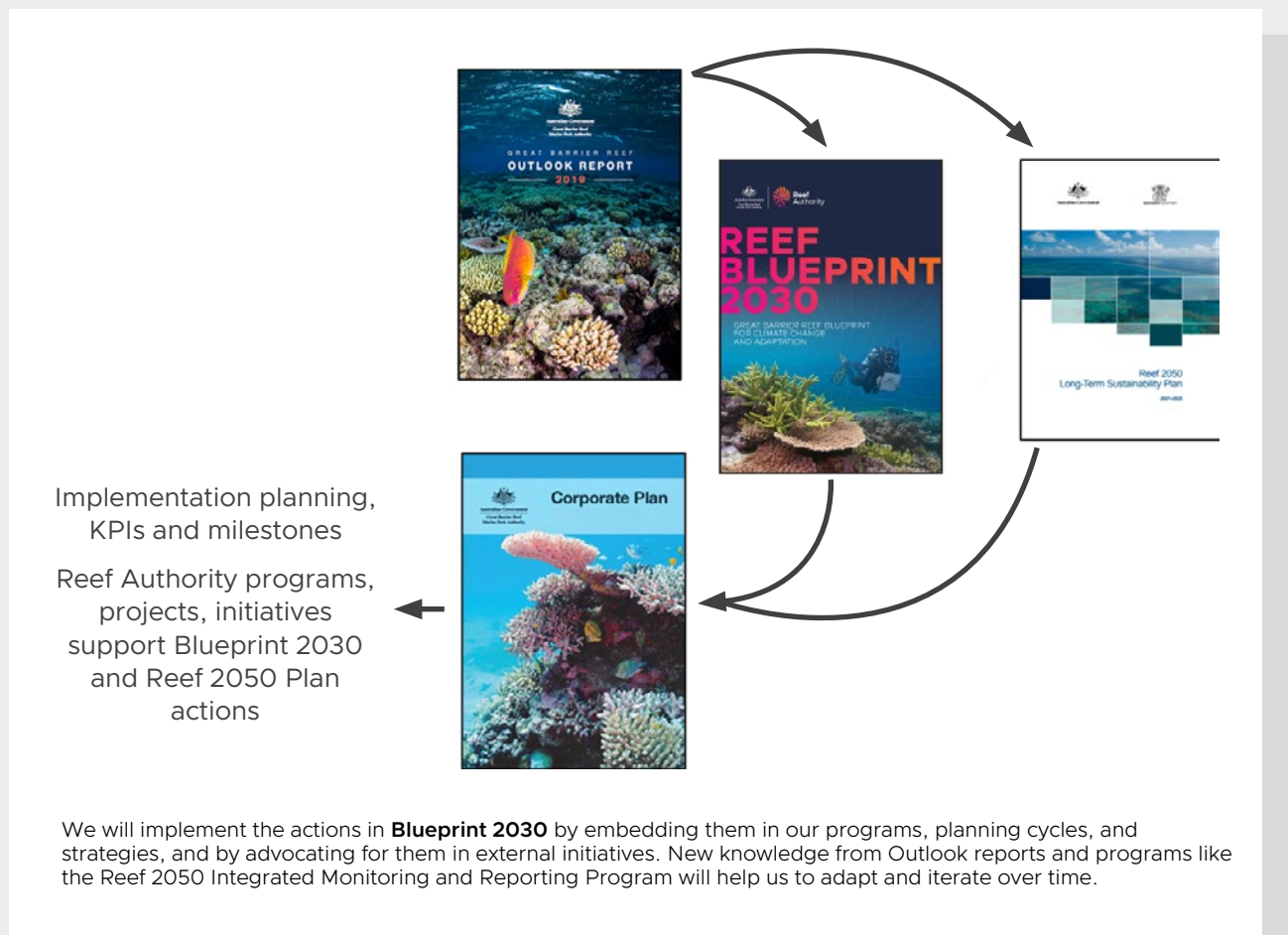
attracting funding to enhance existing and new approaches to resilience-based management.

Blueprint 2030 continues this adaptation and resilience-based management journey by addressing the broad threat of climate change and its future impacts on the entire Reef ecosystem.

Implementation

The future of the Great Barrier Reef ultimately depends on the success of international efforts to mitigate climate change and drastically reduce global temperatures. **Blueprint 2030** lays out the Reef Authority's commitments to do everything in our power to protect and build resilience of the Great Barrier Reef system; reduce emissions; and be global leaders in marine protected area management as the climate changes.

The Reef Authority will lead delivery of **Blueprint 2030**. As a principal strategy, it will guide how we implement our programs, and shape how we influence initiatives led by partners. The main means of implementation and review will be through the Reef Authority's corporate planning cycle. This will formalise how actions are incorporated into all aspects of our planning and delivery and provide a transparent means of tracking and reporting on progress.



Blueprint 2030 is a starting point. This will be an iterative process, with implementation reviewed and strengthened annually as part of our corporate planning process. We will use the best available science to improve our understanding of climate risks and impacts, and continually target and adapt our actions.

There is no single way to protect the Great Barrier Reef as the climate continues to change. The actions outlined in this **Blueprint 2030** will be incorporated into a strong and effective operational framework.

*The global climate is rapidly changing.
The Great Barrier Reef faces a challenging future.
Blueprint 2030 sets out how the Reef Authority
will meet this challenge.*



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