



Tracking Blue

From Ambition to Action for a Sustainable Ocean Economy

Ocean Panel Progress Report



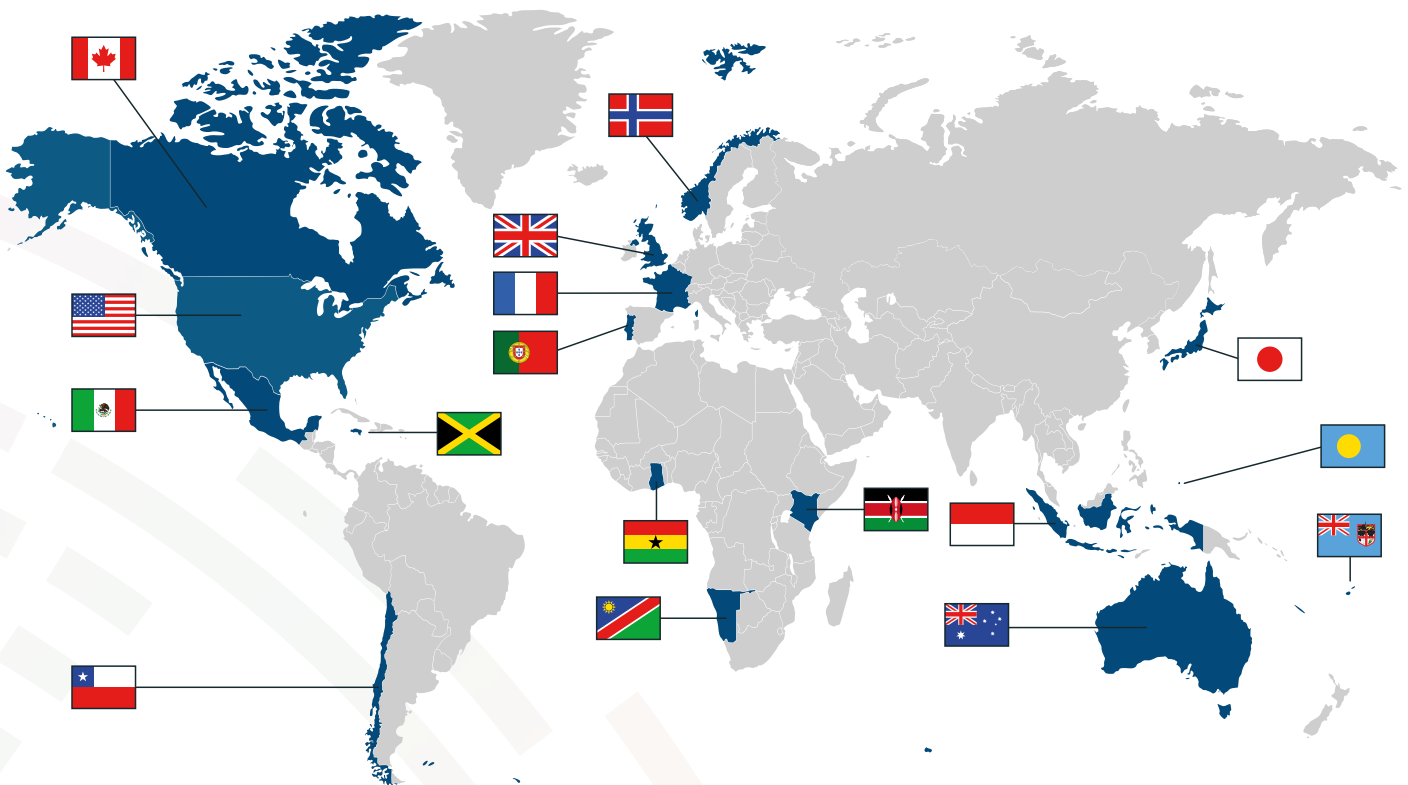
HIGH LEVEL PANEL *for*
**A SUSTAINABLE
OCEAN ECONOMY**

About the Ocean Panel

The High Level Panel for a Sustainable Ocean Economy (Ocean Panel) is a unique initiative by 17 world leaders who are building momentum for a sustainable ocean economy in which effective protection, sustainable production and equitable prosperity go hand-in-hand. By enhancing humanity's relationship with the ocean, bridging ocean health and wealth, working with diverse stakeholders and harnessing the latest knowledge, the Ocean Panel aims to facilitate a better, more resilient future for people and the planet.

Established in September 2018, the Ocean Panel has been working with government, business, financial institutions, the science community and civil society to catalyse and scale bold, pragmatic solutions across policy, governance, technology and finance to ultimately develop an action agenda for transitioning to a sustainable ocean economy. Co-chaired by Norway and Palau, the Ocean Panel is the only policy initiative made up of serving world leaders with the authority needed to trigger, amplify and accelerate action worldwide for ocean priorities. The Ocean Panel comprises members from Australia, Canada, Chile, Fiji, France, Ghana, Indonesia, Jamaica, Japan, Kenya, Mexico, Namibia, Norway, Palau, Portugal, the United Kingdom and the United States, and is supported by the United Nations Secretary-General's Special Envoy for the Ocean. The Secretariat, based at World Resources Institute, supports the Ocean Panel with analytical work, communications and stakeholder engagement.

With this report, the Ocean Panel shares its progress in meeting this transformative agenda—including the achievements, challenges, priorities and solutions—to grow a stronger, more sustainable and just ocean economy. The report takes a systematic approach to tracking the progress on voluntary ocean commitments registered by the members of the Ocean Panel on international ocean conference platforms. It further presents a series of actions that the Ocean Panel countries have taken to advance different aspects of the sustainable ocean economy, and explores the opportunities for collaboration and assistance as well as the priority issues that are gaining momentum in each Ocean Panel country.



Foreword

Our human history is closely interwoven with the ocean. For millennia, the ocean has been a producer of essential protein, a vital transportation artery, a hub of recreation and respite – a life-giving force. Today, we recognise the ocean for all these attributes, as well as its remarkable versatility. Through interactions with the land and atmosphere, the ocean continues to shape our climate, weather, coasts and all life on them.

As co-chairs of the High Level Panel for a Sustainable Ocean Economy (Ocean Panel), we have brought together 17 world leaders from all regions of the world who have committed to realise the vision of sustainably managing 100% of national ocean areas, and an ambitious ocean action agenda for this decade where effective protection, sustainable production and equitable prosperity go hand-in-hand. In 2020, we released *Transformations for a Sustainable Ocean Economy: A Vision for Protection, Production and Prosperity*, in which we identified 14 outcomes and 74 priority actions that we need to take across five critical areas—ocean health, ocean wealth, ocean equity, ocean knowledge and ocean finance. The *Transformations* document, informed by leading-edge science, the latest knowledge, and state-of-the-art thinking, is the culmination of a historic effort to chart the course from ambition to action, and from action to impact, towards our shared vision.

Today, four years after the Ocean Panel was established and two years after we articulated our vision and action agenda, we are pleased to present this progress report that details how far we have come in our transition to a sustainable ocean economy. The first in a series of biennial reports, this document assesses our collective progress, highlights implementation examples which serve as inspiration for others, communicates our priorities for collaboration, identifies areas that need further assistance and discloses key ocean priorities.

The 2022 report shows promising progress on three fronts. First, collectively we have laid the foundation to scale and accelerate action and have made significant progress against our 2030 outcomes, tackling two-thirds of our priority actions—ranging from taking measures to reduce marine pollution and develop new technologies to combat illegal, unreported and unregulated fishing, to increasing efforts to protect and restore marine and coastal ecosystems and create systems for sustainable financing. Second, we have shown that the pursuit towards a sustainable ocean economy mirrors the 2030 Agenda for Sustainable Development, with our actions helping to achieve 61 targets across all 17 goals. Third, the report establishes, for the first time, a systematic approach and a baseline to measure subsequent progress and provides a platform that can be used to share successes and lessons learnt openly, over the period to 2030, and beyond. These are important steps forward.

The report also highlights that to achieve our 2030 outcomes and the vision of sustainably managing 100% of national ocean areas, continued scaling of action and ambition are necessary. Progress and implementation of the Panel's recommendations are uneven and therefore need to be enhanced. This will need to happen in the short term, as innovations, investments and transformation policies and programmes must start now to have an impact by 2030. The Ocean Panel was established to lead the way, and we need to live up to this ambition; failure to act will jeopardise global health, well-being and economic vitality and further exacerbate inequalities. The question is not whether a healthy, resilient and prosperous ocean is possible, but what we will do together to make it happen. To make the vision of a sustainable ocean economy a reality, we call on everyone to join us in the effort.

Jonas Gahr Støre

Prime Minister
For the Government of Norway



Surangel S. Whipps Jr.

President
For the Government of Palau







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The background of the entire page is a close-up, high-resolution photograph of crumpled, translucent blue fabric. The fabric is heavily wrinkled and folded, creating a complex, organic texture. The lighting is soft and even, highlighting the fine details of the material's weave and the play of light and shadow across its undulating surface. The color is a consistent, vibrant blue throughout.

Executive Summary

The High Level Panel for a Sustainable Ocean Economy (Ocean Panel) is a unique global initiative led by serving world leaders that is working to build momentum towards a sustainable ocean economy in which effective protection, sustainable production and equitable prosperity go hand-in-hand. The launch of the Ocean Panel’s action agenda in 2020—including a commitment from all members to sustainably manage 100% of the ocean area under their national jurisdictions, guided by Sustainable Ocean Plans and the aspired outcomes of the Transformations for a Sustainable Ocean Economy: A Vision for Protection, Production and Prosperity (*Transformations*)—generated significant global interest. With this report, the Ocean Panel shares its progress in meeting this transformative agenda—including the achievements, challenges, priorities and solutions—to grow a stronger, more sustainable and just ocean economy. This report combines a systematic approach to mapping and tracking the progress on voluntary commitments registered by the members of the Ocean Panel on international ocean conference platforms, with the narrative stories of progress and impact from each individual country.

An ocean that counts

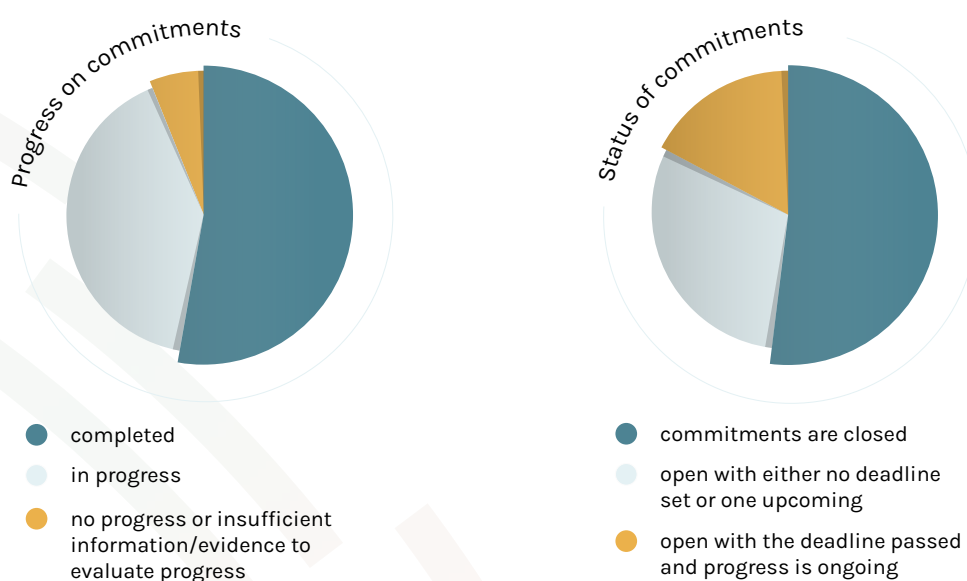
Six hundred fifty-two commitments for ocean action have been announced by the Ocean Panel countries and registered on two platforms: 121 commitments at the United Nations (UN) Ocean Conference in 2017 and a cumulative 531 commitments at the Our Ocean Conference across 2017, 2018, 2019 and 2022.

Nearly one-fifth of the commitments registered at the UN Ocean Conference from a governmental entity were made by Ocean Panel member countries.

In 2022, there was a twofold increase in the commitments made by Ocean Panel countries on the Our Ocean Conference platform with a total of 199 registered.

The vast majority of the commitments announced by Ocean Panel countries are either completed (54 percent) or are being progressed (40 percent) in a timely manner (Figure ES-1).

Figure ES-1. Progress on and Status of Commitments Announced by Ocean Panel Countries



Note: We used 345 commitments in the analysis to avoid duplicates, discontinued commitments and new commitments (registered in 2022) where progress cannot yet be measured.

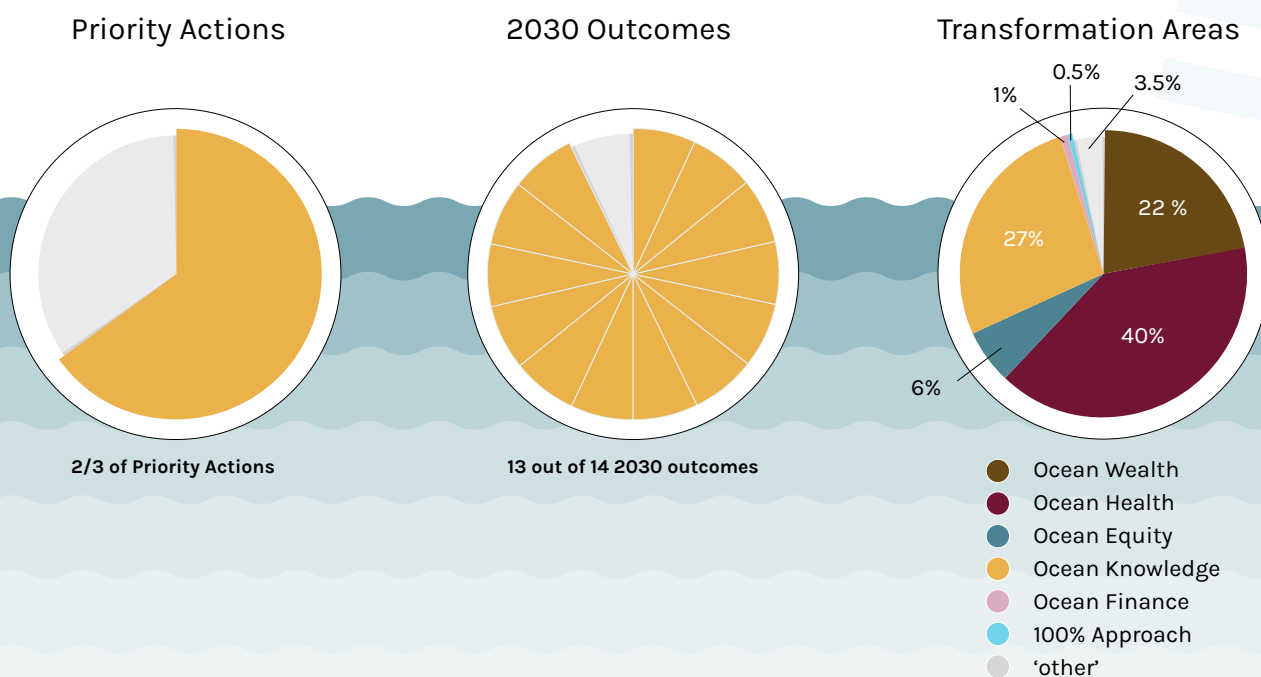
Progress towards the Transformations and the 100% approach

‘Our vision for protection, production and prosperity requires mutually reinforcing transformations in five critical areas: ocean wealth, ocean health, ocean equity, ocean knowledge and ocean finance. Action in all areas is required to achieve a sustainable ocean economy and build critical foundations for economic recovery and resilience’ (Ocean Panel 2020).

The Ocean Panel is making significant progress against the 2030 outcomes outlined in the *Transformations*, with actions initiated by countries tackling two-thirds of the stated priority actions to help realise 13 of the 14 agreed outcomes. These actions cover all five transformation areas to a varying degree. Overall, 40 percent of the commitments cover actions on

ocean health, followed by actions on ocean knowledge at 27 percent and ocean wealth at 22 percent. Actions under ocean equity cover 6 percent and ocean finance, 1 percent. The five areas as detailed in the *Transformations* provide a key framework for achieving a sustainable ocean economy; however, there are further actions countries can take in pursuit of a sustainable ocean economy which are not reflected in the *Transformations*. Such actions are captured in the remaining commitments at <4 percent (category ‘other’) (Figure ES-2). These commitments reflect the diversity of approaches underway as countries localise actions depending on their unique circumstances and national contexts.

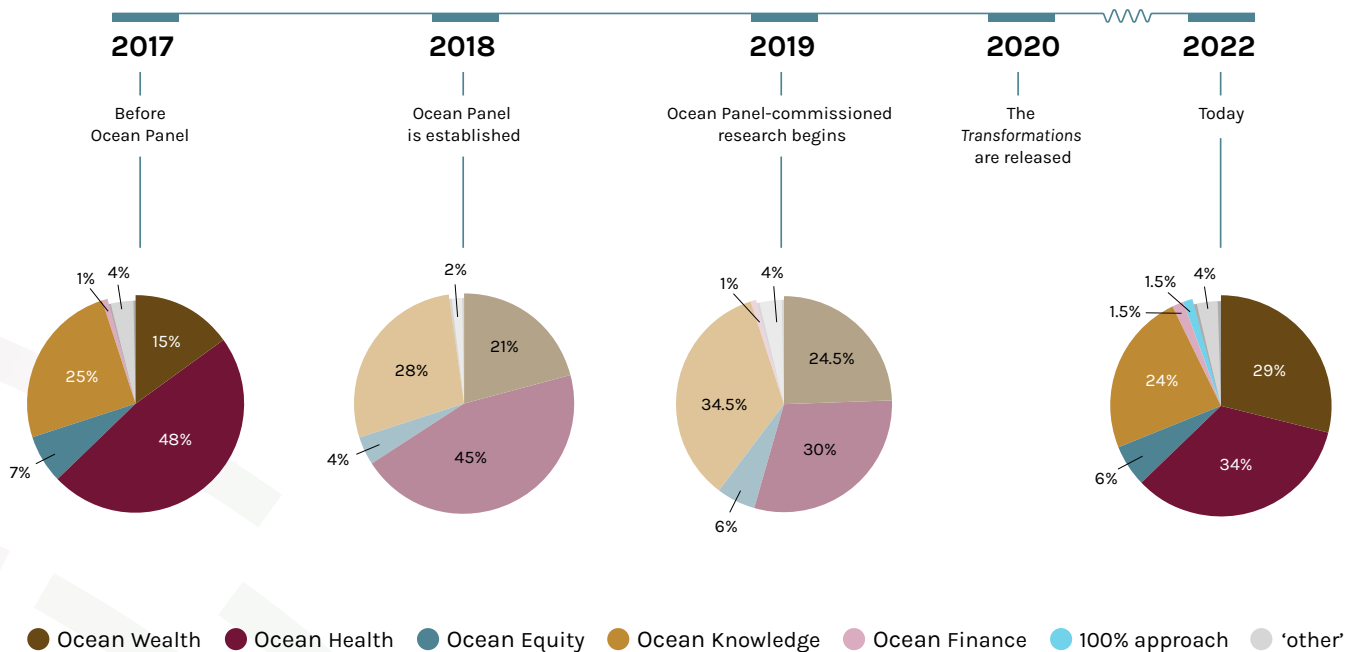
Figure ES-2. Progress towards the Transformations



A comparison of the commitments made year over year against the five areas of the Ocean Panel’s Transformations indicates that ocean health priorities are being increasingly complemented with commitments towards sustainable production, with intensifying efforts on building ocean literacy and skills and harnessing scientific research, technology and data. In 2017, nearly 50 percent of the commitments covered actions on ocean health, followed by actions on ocean knowledge and ocean wealth. Actions under ocean finance and ocean equity together represented approximately 7 percent of the total number of pledges. The commitments working towards ocean action outside of the five transformation areas represented

just over 4 percent (category ‘other’). In 2022, the percentage of actions focused on ocean health dropped to about 34 percent, with ocean knowledge staying fairly constant at 24 percent and ocean wealth jumping to about 29 percent. The percentage of commitments that cover ocean finance and ocean equity was similar to 2017, with these areas being less well-represented in the overall agenda and a key area for further focus. This year saw the first commitments made on international platforms by countries to advance the Ocean Panel’s ambitious aim to sustainably manage 100% of their ocean areas, and the development of the Sustainable Ocean Plans was announced as part of the OOC (Figure ES-3).

Figure ES-3. Progress towards the Transformations between 2017 and 2022



Significant steps towards sustainable ocean planning and the 100% approach

Striking the balance between sustainable human activities and healthy ecosystems is at the core of sustainable ocean planning—a process that delivers on the dimensions of effective protection, sustainable production and equitable prosperity. There are numerous ways a country can advance the development of a Sustainable Ocean Plan to guide the sustainable management of 100% of the ocean area under its national jurisdiction. While the destination—a sustainable ocean economy—may be shared, the course charted to achieve this ambition will differ across countries. On whatever path a country follows, developing a robust, effective Sustainable Ocean Plan will provide for the long-term health of ocean ecosystems as an underpinning for thriving economies and societies. The steps that the Ocean Panel countries have taken towards sustainable ocean planning and the achievement of the 100% commitment

show how the agendas of achieving ecosystem health, food and energy security, local community prosperity, economic growth and sustainability can not only complement but also reinforce each other, and also what forms sustainable ocean planning can take in regulatory and operational terms under different circumstances and contexts.

Developing and implementing a Sustainable Ocean Plan is an iterative process that includes the following generic steps: set scope, prepare, develop, implement, monitor and evaluate, and update the plan (Ocean Panel 2021). Specific steps may vary across countries, reflecting different starting points and needs. Of the 16 countries considered in this progress report, 10 countries are in the ‘set scope’ and ‘prepare’ stage, 3 are developing their plans, and 3 are implementing them (see Figure ES-4).

Figure ES-4. Current Status of Countries regarding the Stage of Their Sustainable Ocean Plans

set scope & prepare



develop



implement

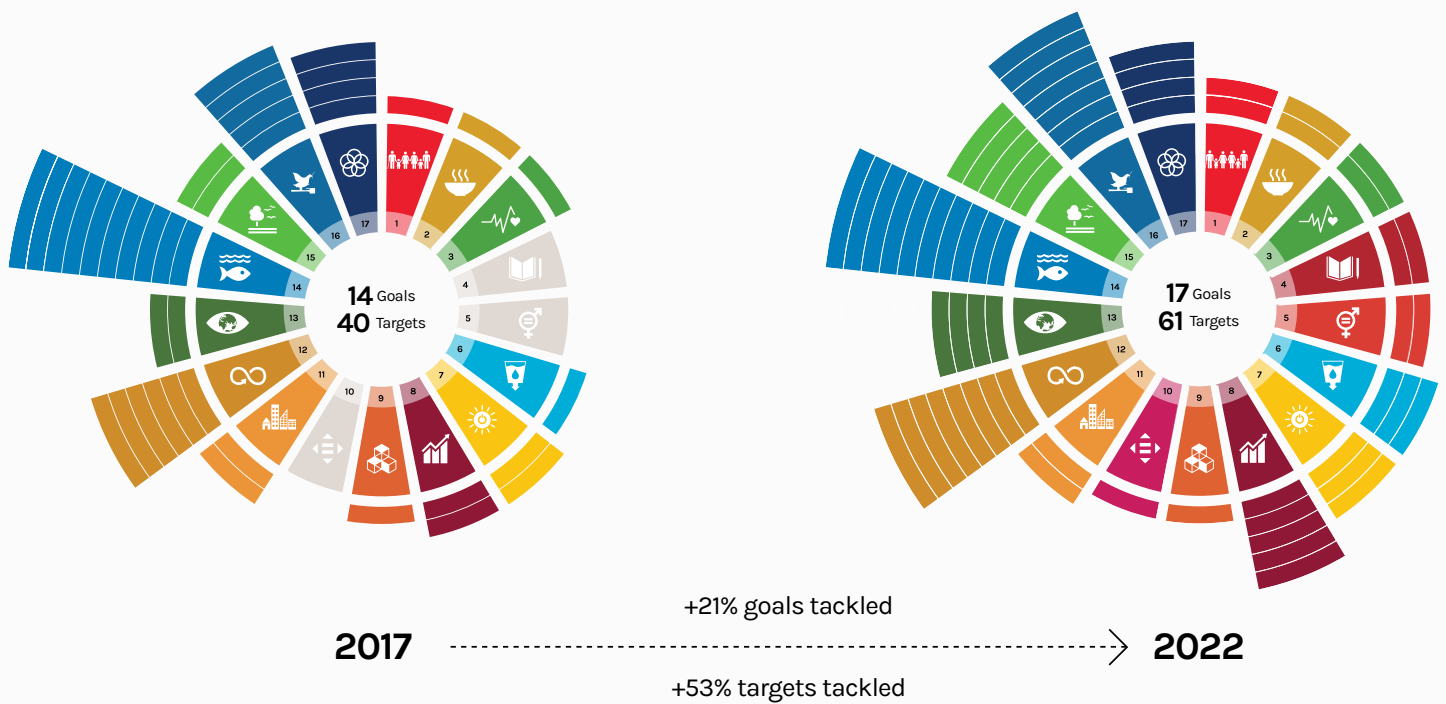


Note: The United Kingdom, joining in June 2022 to become the newest member of the Ocean Panel, is not included in this progress report.

Advancing progress across the 2030 UN Sustainable Development Agenda

Delivering action in pursuit of a sustainable ocean economy helps achieve many of the goals and targets within the 2030 UN Sustainable Development Agenda. Between 2017 and 2022, the broadening focus of commitments made by Ocean Panel countries means that actions contribute to 3 additional goals and 21 additional targets, representing increases of 21 percent and 53 percent, respectively. Across all years and platforms, the commitments announced by the Ocean Panel countries can help achieve 61 targets across all 17 goals (see Figure ES-5).

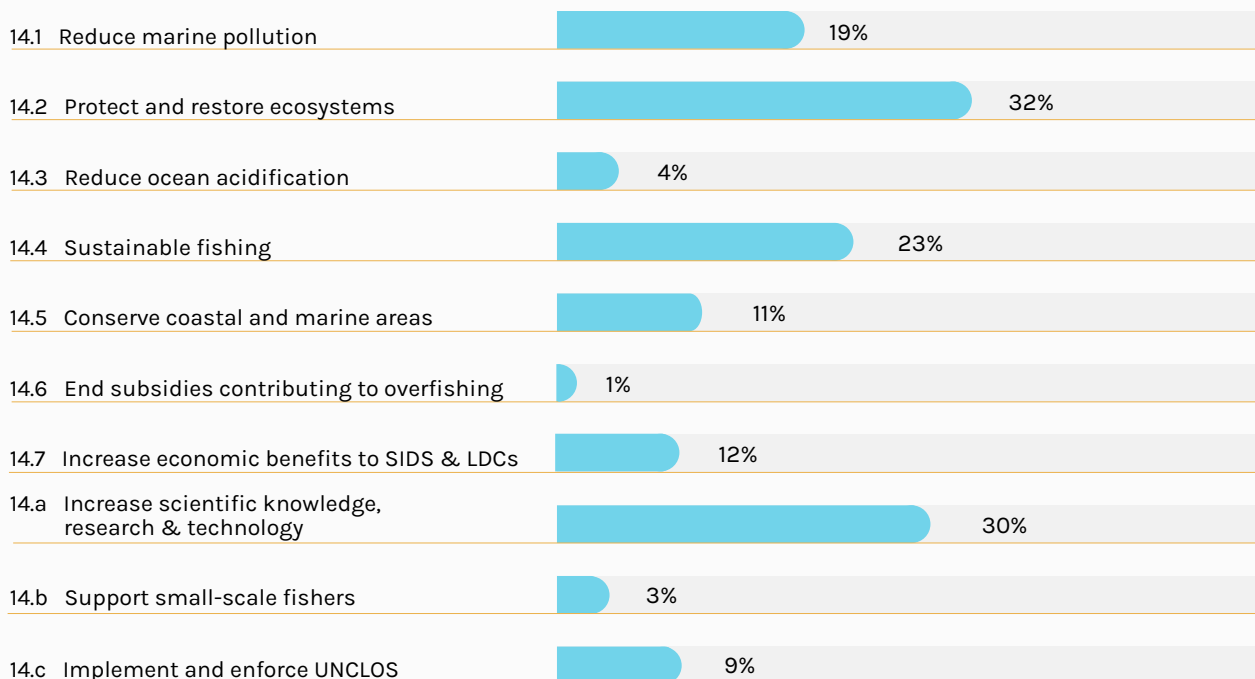
Figure ES-5. Comparison of the Sustainable Development Goals and Associated Targets Addressed through the Delivery of the Ocean Commitments between 2017 and 2022



The commitments made by the Ocean Panel address each of the 10 targets of Sustainable Development Goal (SDG) 14—‘Life below

Water: Conserve and sustainably use the oceans, seas and marine resources’—as shown in Figure ES-6.

Figure ES-6. The Degree to Which the Commitments Made by the Ocean Panel Tackle Each of the 10 Targets of Sustainable Development Goal 14



Transformations in action

Transitioning to a sustainable ocean economy requires undertaking actions ranging from local initiatives to global partnerships. Needs and priorities differ among countries and so each action must be adjusted to specific place and time contexts and circumstances. Sharing knowledge and experiences is the best way to learn from each other and overcome difficulties and impediments. This report showcases 30 implementation examples by Ocean Panel countries spanning all transformation areas to illustrate what transitions can look like and how similar issues have been addressed in practice in different corners of the world and in very different contexts. These actions can serve as examples and sources of inspiration for governments around the globe, providing key ingredients to turn commitments into practice and create opportunities for profound and positive change.

Building strong, multi-sectoral and long-lasting partnerships

From the outset, the Ocean Panel has sought to inspire a much broader range of actors to support the transition to a sustainable ocean economy. Given the multi-sectoral nature of the challenges facing the ocean, no outcome can be achieved through the actions of just one actor or even one sector. The Ocean Panel has encouraged and facilitated partnerships at all levels and scales, leveraging action from the private sector, financial institutions, philanthropies and non-governmental organisations, and will continue to help enable greater collaboration and active engagement in informing, directing and driving the ocean action agenda for maximum impact.



1. Introduction





There has never been a clearer opportunity for our world to secure a sustainable blue future. The potential of a sustainable ocean economy is great. The challenge of unlocking the promise and possibilities of the ocean's resources in ways that are economically prosperous requires environmentally sustainable, socially responsible and more inclusive solutions.

The High Level Panel for a Sustainable Ocean Economy (Ocean Panel) represents nations of highly diverse oceanic, economic and political perspectives. They are nations large and small, across all ocean basins, at every stage of economic development and at every condition of the ocean environment, from the tropics to the polar regions. Co-chaired by Norway and Palau, the Ocean Panel is the only initiative led by serving world leaders with the authority needed to trigger, amplify and accelerate action worldwide for ocean priorities.

In December 2020, the Ocean Panel announced a shared vision for the sustainable development of the ocean—one in which effective protection, sustainable production and equitable prosperity go hand-in-hand. The leader-endorsed document *Transformations for a Sustainable Ocean Economy: A Vision for Protection, Production and Prosperity (Transformations)* sets out a new ocean action agenda and charts the route ahead for the decade (see **Box 1**; Ocean Panel 2020). It identifies 74 priority actions to be taken across five critical areas: ocean health, ocean wealth, ocean equity, ocean knowledge and ocean finance. A central tenet of this agenda is the commitment by all countries to sustainably manage 100% of the ocean area under their national jurisdictions, guided by Sustainable Ocean Plans, by 2025. In addition, the Ocean Panel urges all coastal and ocean states to join them in this commitment, so that by 2030 all ocean areas under national jurisdiction will be sustainably managed.

The Ocean Panel's priority actions are underpinned by an unprecedented scientific knowledge base, including 16 commissioned Blue Papers and 4 Special Reports written and peer-reviewed by a group of over 250 ocean experts representing 48 countries. Given the multi-sectoral nature of many ocean issues, no recommendation could possibly be realised through the actions of just one entity or one sector. Coordinated approaches break down silos and cross-fertilise ideas that offer effective protection, sustainable production and equitable prosperity—the hallmarks of a sustainable ocean economy. Eight Action Groups have emerged in response to the Ocean Panel's action agenda. These groups consist of diverse entities from the public, private, financial, research and civil society sectors to accelerate, scale and finance ocean action, operating at tipping points where collaboration is key to achieving the results desired in a sustainable ocean economy.

A recurring theme is that the ocean and marine resources must be healthy to support a prosperous ocean economy, while continuing to support industries that have traditionally relied on the ocean and its resources. To achieve this objective, the natural environment must be valued by taking action to protect, conserve, restore and rebuild the marine and coastal resources. The Ocean Panel countries have taken significant steps in innovation, sustainability and ocean protection which have resulted in cleaner, more resilient coastlines and coastal communities, improved resilience to environmental challenges, stronger partnerships with Indigenous communities and more opportunities for jobs and economic growth.

The launch of the Ocean Panel's action agenda—including the 100% commitment to sustainable ocean management and the aspired outcomes of the *Transformations*—

generated significant global interest. Ocean Panel members are demonstrating momentum on tackling ocean issues and are sending a clear signal of a unified vision of coherent, coordinated and comprehensive responses to building a sustainable ocean economy. As the world moves into this critical decade and in light of the many challenges humanity faces right now, being able to track and communicate the progress that is being made towards this ambitious agenda is more important than ever. This report shares the Ocean Panel's progress in meeting the *Transformations* and the 2030 Development Agenda—including the achievements, challenges, priorities and solutions—to grow a stronger and more sustainable and just ocean economy.



2030 Outcomes of the Transformations for a Sustainable Ocean Economy

If successfully implemented, the new ocean action agenda set forth by the Transformations will result in the following outcomes by 2030:

A 100% APPROACH

Sustainable Ocean Plans are providing a credible basis for safeguarding the long-term health and

resilience of the ocean, attracting investment and creating jobs to the benefit of coastal communities and national economies.

A 100% APPROACH

Sustainable Ocean Food: Wild fish stocks are restored and harvested at sustainable levels, aquaculture is sustainably grown to meet global needs, and waste is minimised and managed throughout the value chain.

Sustainable Ocean Energy: Ocean-based renewable energy is fast-growing and on the path to becoming a leading source of energy for the world.

Sustainable Ocean-Based Tourism: Coastal and ocean-based tourism is sustainable, resilient, addresses climate change, reduces pollution, supports ecosystem regeneration and biodiversity conservation and invests in local jobs and communities.

Sustainable Ocean Transport: Shipping investments have effectively accelerated the shift towards zero-emission and low-impact marine vessels.

Sustainable New Ocean Industries: Innovation and investments in new ocean industries have boosted environmentally responsible and inclusive economic growth.

A Precautionary Approach to Seabed Mining: Sufficient knowledge and regulations are in place to ensure that any activity related to seabed mining is informed by science and ecologically sustainable.

OCEAN HEALTH

Reduce Greenhouse Gas Emissions: Ambitious climate action has set the world on track to achieve the goals of the Paris Agreement and restore ocean health.

Protect and Restore Marine and Coastal Ecosystems: Marine and coastal ecosystems are

healthy, resilient and productive, and nature-based solutions are key elements in developing coastal infrastructure.

Reduce Ocean Pollution: The ocean is no longer a sink for pollution and ocean dead zones are minimised.

OCEAN EQUITY

Promote Equal Opportunity for People to Benefit from the Ocean: People have equitable access to

ocean resources, benefits are fairly distributed and the most vulnerable are protected from the risk of harm.

OCEAN KNOWLEDGE

Build Ocean Literacy and Skills: Through the United Nations Decade of Ocean Science, ocean literacy has been enhanced worldwide. People understand the value of the ocean and have acquired the skills and knowledge to participate in the sustainable ocean economy.

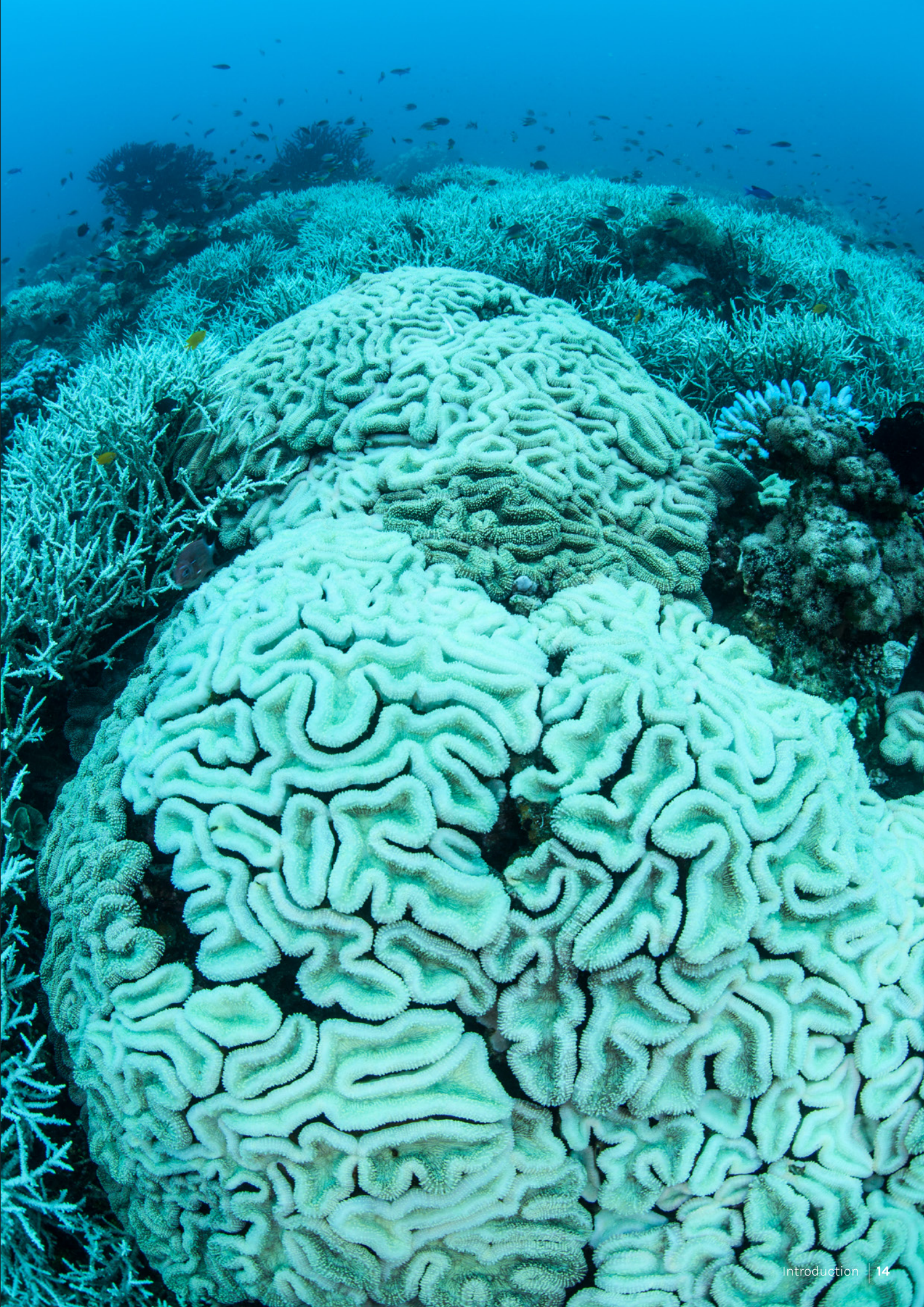
Account for the Value of the Ocean: Decision-making affecting the ocean reflects the value of and impacts on the ocean's natural capital.

Harness Ocean Science, Technology and Data: A globally shared data revolution has contributed to sustainable ocean management worldwide.

OCEAN FINANCE

Ocean Finance: Sustainable ocean finance is accessible for all and drives ecologically

sustainable and socially equitable economic growth.





2. Methodology





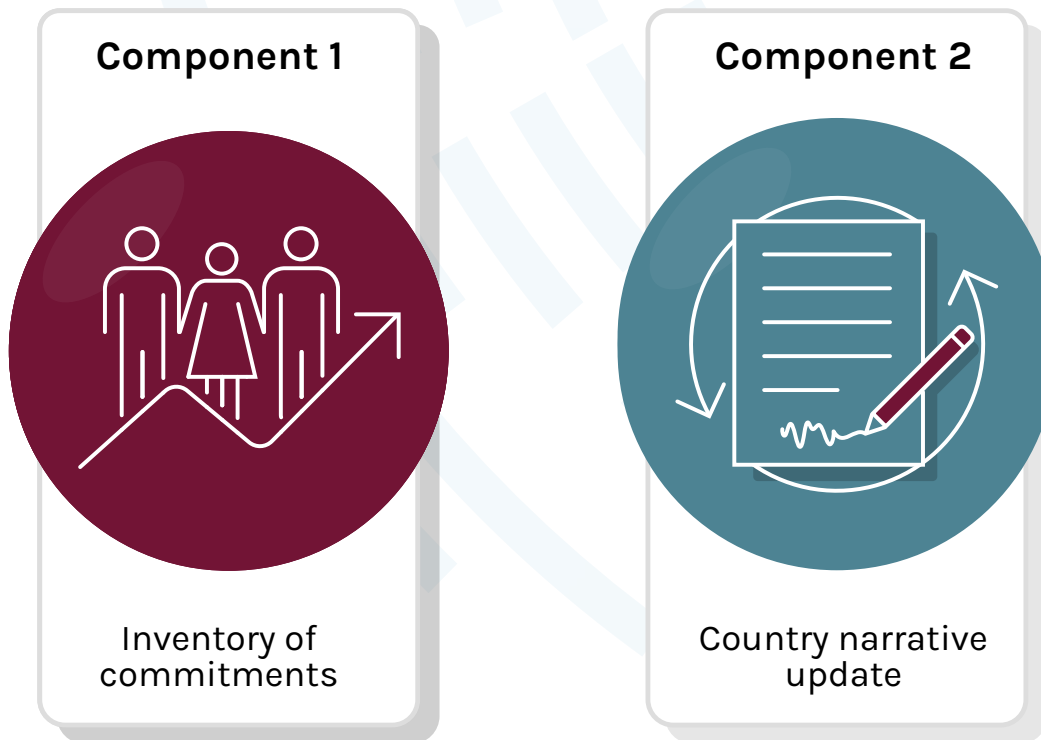
2.1 | The Framework

The following principles and considerations have guided and framed the development of the reporting mechanism used to track the Ocean Panel's progress:

- **Accountability and transparency.** In the context of such an aspirational agenda, a reporting mechanism is a central component for relaying progress over time. It needs to be robust, enable regular stocktaking of progress, share experiences and recognise successes and challenges in an open and transparent manner.
- **The importance of nuance.** It is important to recognise the diversity of the Ocean Panel countries and the breadth and depth of the ocean agenda (covering five transformation areas comprising 14 outcomes and 74 priority actions), considering the different national realities, interests and capacities as well as national policies and priorities among them.
- **Alignment with existing platforms and processes.** Coordination and coherence with existing reporting mechanisms and efforts need to be made priorities to minimise an additional reporting burden, encourage participation and contributions from each member and recognise members' efforts, achievements and challenges, while considering emerging information and incorporating new methodologies as they are developed and operationalised.

The approach for following the Ocean Panel's progress comprises two core components, outlined in **Box 2**.

The Core Components of the Approach for Following the Ocean Panel's Progress



Component 1:

Tracking the progress of ocean commitments across international fora

An inventory of voluntary commitments is systematically compiled, regularly evaluated and quantitatively analysed. The inventory also clearly specifies the significance and relevance of each commitment to the 100% approach and the *Transformations* and tracks the countries' progress in implementing the ocean action agenda.

Component 2:

Country narrative updates

A compendium of narrative updates provided by each Ocean Panel country is maintained that places a premium on implementation and concrete actions, offering an open and safe space for exchange and peer learning on best practices and knowledge, while creating a deeper understanding of the challenges and priorities for identifying future needs, ensuring better alignment and building stronger partnerships.



2.2 | The Process

2.2.1 Mapping and tracking the progress of ocean commitments across international fora

Voluntary commitments by states, governments, non-governmental organisations (NGOs) and other ocean actors that aim to deliver outcome-oriented activities have become a well-recognised mechanism in international sustainability policy. Two major international processes that harness voluntary commitments on ocean issues include the Our Ocean Conference (OOC), an annual, high-level event initiated in 2014, and the United Nations Ocean Conference (UNOC), which took place for the first time in 2017. Though not replacing government measures to implement legally binding agreements, the commitments announced at these fora provide a unique opportunity to raise awareness, promote partnerships and broader engagement, and catalyse action from different sectors and actor groups. All commitments announced by the Ocean Panel countries since 2017 as part of UNOC and OOC, and registered on their associated platforms, were collated in late 2021. The commitments were mapped against all levels of the *Transformations*—5 areas and the 100% commitment, 14 outcomes, 74 priority actions—and the full suite of the SDGs and associated targets—17 goals and 169 targets—to explore alignment and degree of coverage with the Ocean Panel agenda and the common global goals. We developed a systematic, transparent and uniform ‘commitment and review’ system whereby the status of commitments and evidence of progress were sought through extensive desktop research and subsequently verified by the member countries. We categorised the countries’ level of progress on a three-step scale. See Appendix A for more details on this process.

2.2.2 Country narrative updates

The country narrative updates highlight the set of specific actions that is being advanced within the broader context of national efforts to achieve the headline commitment of 100% sustainable ocean management and the 2030 outcomes of the *Transformations*. This component provides a contemporary, nuanced overview of a given country's achievements, reflecting the richness and diversity of approaches underway. It identifies common and shared priorities among Ocean Panel countries and areas for future collaboration. Ocean Panel countries responded to guiding questions provided by the Secretariat, with their responses forming the basis for the 'Transformations in Action' (Section 4) and priorities for collaboration and assistance, and highlighting issues that are gaining momentum, as outlined in the late sections of this report.





3. Taking Stock of Ocean Commitments



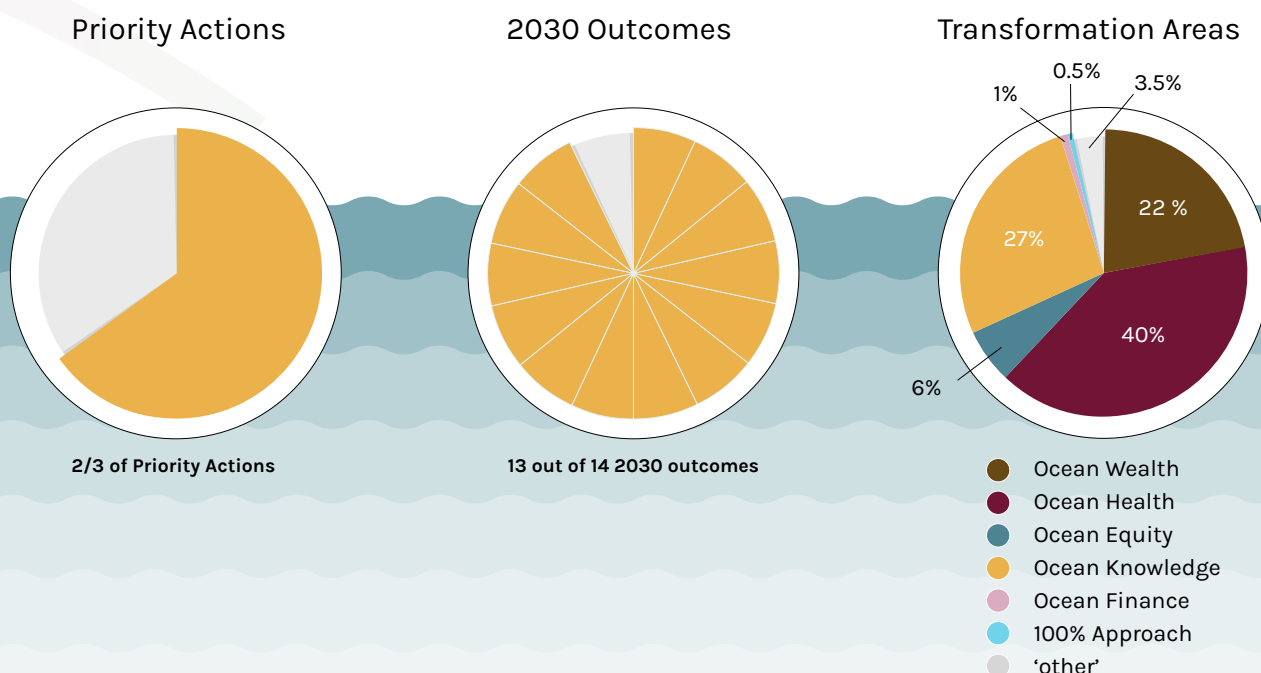
The Ocean Panel countries announced and registered a total of 652 commitments from 2017 to 2022 at UNOC (121 commitments in 2017³) and OOC (531 commitments in 2017, 2018, 2019 and 2022). The number of commitments registered on both platforms remained constant in each year from 2017 to 2019. In 2022, there was a twofold increase in the number of pledges made by Ocean Panel countries, with 199 commitments registered on the OOC platform alone.

Mapping against the Ocean Panel action agenda and the 2030 UN Agenda for Sustainable Development

Collectively, the Ocean Panel is making significant progress against the 2030 outcomes outlined in the *Transformations*, with actions initiated by countries tackling two-thirds of the stated priority actions to help realise 13 of the 14 agreed outcomes (see Appendix B for a list of the outcomes and priority actions addressed). These actions cover all five transformation areas to a varying degree. Overall, 40 percent of the commitments cover actions on ocean health, followed by actions on ocean knowledge at 27 percent and ocean wealth at 22 percent. Actions under ocean equity cover 6 percent and ocean finance,

1 percent. The five areas as detailed in the *Transformations* provide a key framework for achieving a sustainable ocean economy; however, there are further actions countries can take in pursuit of a sustainable ocean economy which are not reflected in the *Transformations*. Such actions are captured in the remaining commitments at <4 percent (category 'other') (see Figure 1). The commitments reflect the diversity of approaches underway as countries localise actions depending on their unique circumstances and national contexts.

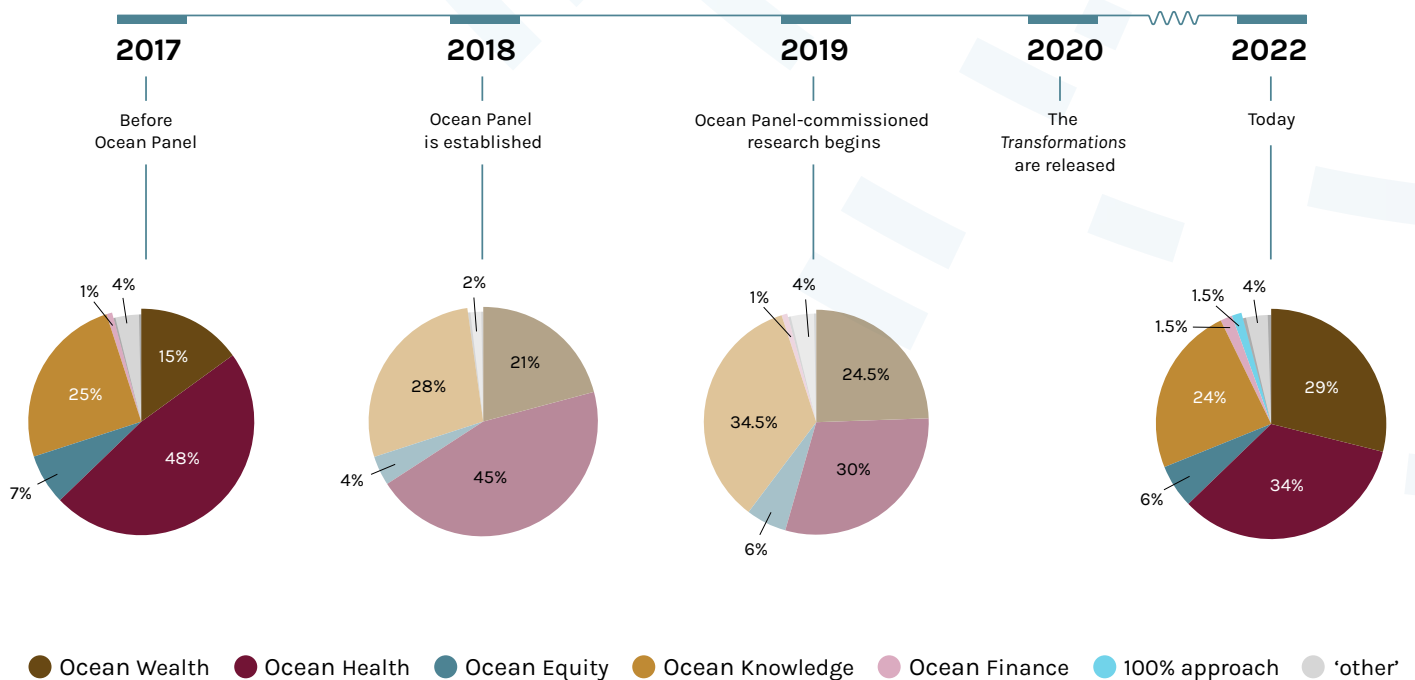
Figure 1. Progress towards the Transformations



A comparison of the commitments made year over year against the five areas of the Ocean Panel's *Transformations* indicates that ocean health priorities are being increasingly complemented with commitments for sustainable production, with intensifying efforts on building ocean literacy and skills and harnessing scientific research, technology and data. In 2017, nearly 50 percent of the commitments covered actions on ocean health, followed by actions on ocean knowledge and ocean wealth. Actions under ocean finance and ocean equity together represented approximately 7 percent of the total number of pledges. The commitments working towards ocean action outside of the five

transformation areas represented just over 4 percent (category 'other'). In 2022, the percentage of actions focused on ocean health dropped to about 34 percent, with ocean knowledge staying fairly constant at 24 percent and ocean wealth jumping to about 29 percent. The percentage of commitments that cover ocean finance and equity was similar to 2017, with these areas being less well-represented in the overall agenda and a key area for further focus (see Figure 2). This year saw the first commitments made on international platforms by countries to advance the Ocean Panel's ambitious aim to sustainably manage 100% of their ocean areas, and the development of the Sustainable Ocean Plans was announced as part of the OOC.

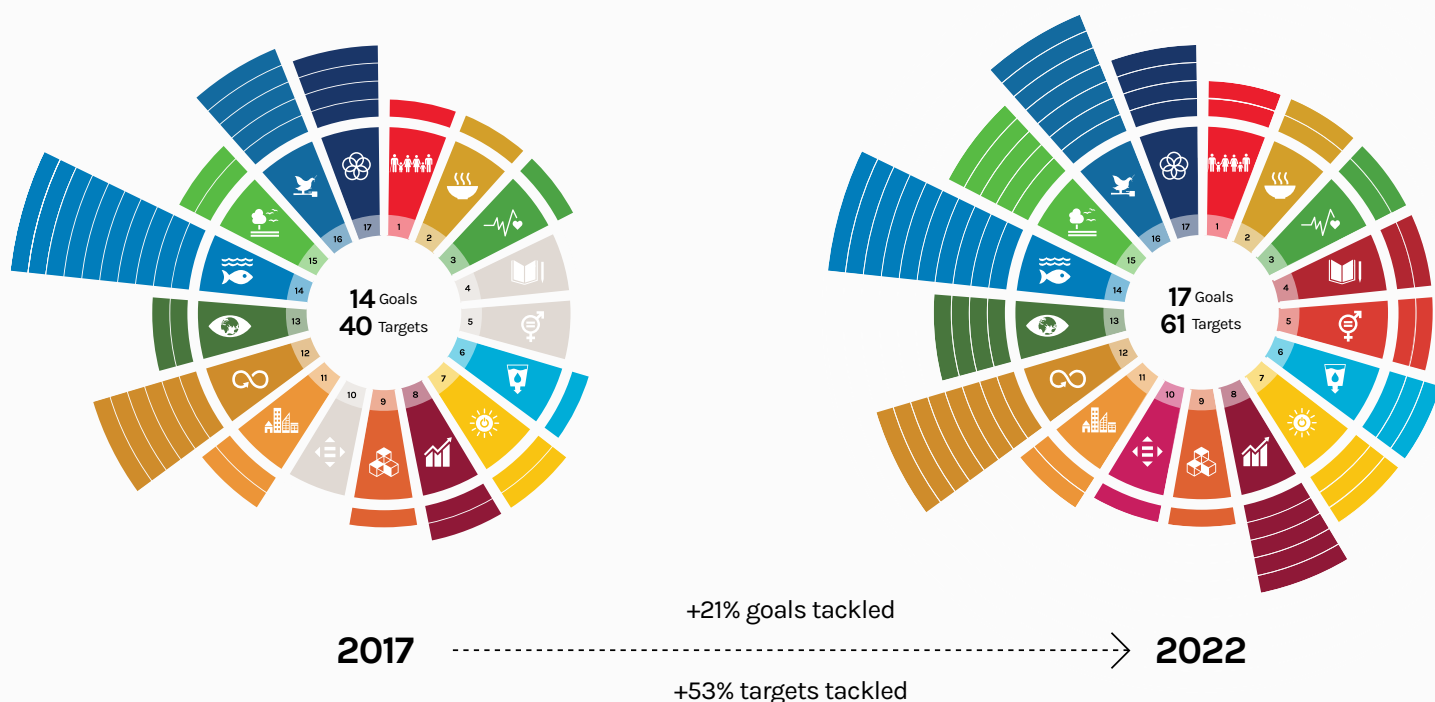
Figure 2. Mapping the Ocean Commitments against the Five Transformation Areas across All Studied Years



Between 2017 and 2022, the Ocean Panel countries pledged further actions across 3 additional goals and 21 additional targets, representing increases of over 20 percent and 50 percent, respectively (see Figure 3). Across all years and platforms, the

commitments announced by the Ocean Panel countries can help achieve progress on 61 targets across all 17 goals (see Appendix C for a detailed list of the goals and associated targets addressed).

Figure 3. Comparison of the Sustainable Development Goals and Associated Targets Addressed through the Delivery of Ocean Commitments, 2017–2022



The commitments made by the Ocean Panel address each of the 10 targets of SDG 14—‘Life below Water: Conserve and sustainably use the oceans, seas and marine resources’—with the breakdown as follows:

- **Nineteen percent address Target 14.1**—‘By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution’
- **Thirty-two percent address Target 14.2**—‘By 2020, sustainably manage and protect marine and coastal

ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans’

- **Four percent address Target 14.3**—‘Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels’
- **Twenty-three percent address Target 14.4**—‘By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive

fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics'

- **Eleven percent address Target 14.5**—'By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information'
- **One percent addresses Target 14.6**—'By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation'
- **Twelve percent address Target 14.7**—'By 2030, increase the economic benefits to Small Island Developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism'
- **Thirty percent address Target 14.a**—'Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular

Small Island Developing States and least developed countries'

- **Three percent address Target 14.b**—'Provide access for small-scale artisanal fishers to marine resources and markets'
- **Nine percent address Target 14.c**—'Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want"'

Progress towards the completion of ocean commitments

Out of 453 commitments across the years 2017, 2018 and 2019, representing both the UNOC and OOC platforms, 26 commitments, or 6 percent, could not be validated by the countries, so the analysis relied on the initial evidence of progress that had been sourced. Forty-nine commitments were repeated in the same year across the two platforms, so the duplicate was removed from the analysis. An additional 2 commitments were marked as 'discontinued' where countries had indicated that due to changes in policy, the pledges could no longer be implemented or monitored. This resulted in using 345 commitments in the analysis.

Fifty-four percent of the commitments have been completed (see Table 1), such as Japan's commitment 'The Japan Coast Guard initiated the JCG Mobile Cooperation Team'.⁴ Through this commitment, the Japan Coast Guard Mobile Cooperation Team (MCT) was established as a department focused on capacity-building efforts. As of 20 December 2018, 54 members including from the MCT had been dispatched on 15 missions to eight countries in the Indo-Pacific region to help improve maritime safety and security capabilities.

Forty percent of the commitments are still in progress, such as Kenya's 'Sustainable Fisheries and Marine Environment Governance for Socio-economic Benefits'.⁵ Kenya and the World Bank initiated the five-year Marine Fisheries and Socio-Economic Development Project in August 2020. The project development objectives are to improve management of priority fisheries and mariculture and increase access to complementary livelihood activities in coastal communities. This project is just one deliverable out of Kenya's overall commitment. Alongside this deliverable is the development of a fishers' blue book and the integration of blue economy

development which is being advanced with international partnerships.

For the remaining 6 percent of the commitments, no progress has been made or no sufficient information or evidence could be sourced to evaluate progress.

Fifty-two percent of the commitments are now closed, such as Canada's commitment 'Canada Commits to the United Nations Environment Clean Seas Campaign'.⁶ The government of Canada made the announcement on 11 September 2017 at the Vancouver Aquarium during the World Environmental Education Congress.

The difference between commitments that are 'completed' and 'closed' is that the former refers to the progress achieved and the latter to the status of the commitment. Completed commitments can be reported as completed but remain open when action is ongoing. For example, Canada's commitment 'Development of Canada's Operational Guidance for Identifying Other Effective Area-Based Conservation Measures in Canada's Marine Environment'⁷ has been categorised as completed and open due to ongoing efforts noted by the country.

Thirty-one percent are still open with a deadline for completion in the coming years or with no deadline set. An example of a commitment with a future deadline is Palau's 'Palau bans the importation of plastic bags by 2025'.⁸ Thus far, Palau has put in place enabling policies to achieve this commitment. First, starting from November 2018, businesses have been banned from importing plastic bags for distribution 'at the point of sale or prior to exit for the purpose of transporting groceries, food products, or other merchandise'. Second, starting from November 2019, businesses have been banned from distributing non-biodegradable or non-compostable bags 'at the point of sale or prior to exit for the purpose of transporting groceries,

food products, or other merchandise'. Furthermore, the government and civil society are partnering with major retailers to implement plastic-free days and run campaigns that increase public awareness of the destructive effects of plastic use and how to reduce plastic dependence.

An example of a commitment with no set deadline is Norway's commitment 'Addressing the problem of plastic litter from ships'.⁹ To achieve this commitment, Norway initiated the GloLitter Partnerships Programme with the International Maritime Organization (IMO) and Food and Agriculture Organization of the United Nations (FAO) in 2020. The programme will be allocated up to US\$5.5 million (NOK 50 million) and will support IMO's action plan to address marine plastic litter from ships with the aim of expanding to include more countries and industry partners through cooperation with the UN Global Compact.

The remaining 17 percent of the commitments are still open with a deadline for completion in the past such as Namibia's commitment 'Ensuring that at least 10 percent of our EEZ [exclusive economic zone] is gazetted as marine protected areas [MPAs] by 2020'.¹⁰ Currently, Namibia's entire coastal belt is gazetted as national parks, and includes three coastal Ramsar sites. The gazettement of the marine protected areas will commence during the 2022/2023 financial year.

Table 1. Progress on and Status of Commitments Announced by Ocean Panel countries


Progress on Commitments	Status of Commitments
54% have been completed	52% are closed
40% are in progress	31% are open with either no deadline set or one upcoming
6% have had no progress or insufficient information/evidence to evaluate progress	17% are open with a passed deadline and ongoing progress







4. *Transformations* in Action



Navigating through complex systems and identifying pathways for progress

The transition to a sustainable ocean economy requires a profound departure from business-as-usual practices to a global effort to create opportunities for maximum impact. Sharing knowledge and experiences is the best way to learn from each other and overcome difficulties and impediments. Transitioning to a sustainable ocean economy requires undertaking actions ranging from local initiatives to global partnerships. Needs and priorities differ among places and so each action must be adjusted to specific place and time contexts and circumstances.

This section presents a series of actions that the Ocean Panel countries have taken to advance different aspects of their transitions to a sustainable ocean economy and deliver the 2030 Outcomes in the five transformation areas. These examples do not provide one-size-fits-all solutions, but rather illustrate what a transition can look like and how similar issues have been addressed in practice, in different corners of the world and in very different contexts.

The countries of the Ocean Panel are not starting from scratch. They are continuing to evolve the approaches already taken and integrate the lessons learnt from these as they go. These actions can serve as examples and sources of inspiration for governments around the globe, providing key ingredients to turn commitments into practice and create opportunities for profound and positive change. The members of the Ocean Panel will continue to build on these endeavours to strengthen ongoing efforts that will enhance partner and stakeholder relationships, increase public outreach and engagement, and develop new resources and tools to promote a sustainable ocean economy for generations to come.





Ghost Nets Initiative (Australia)

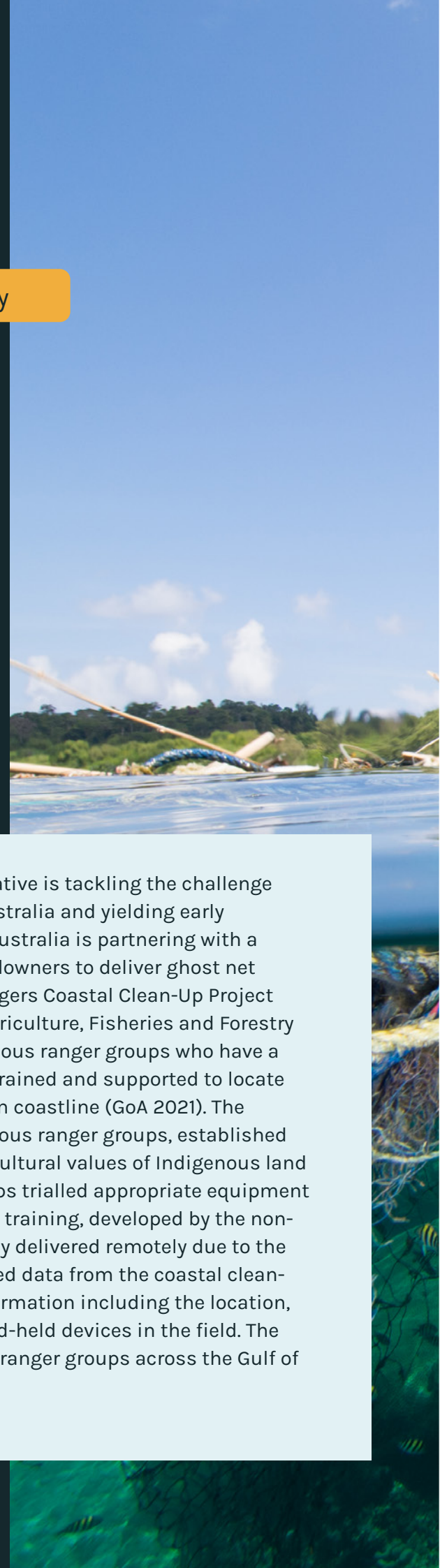
Ocean Health – OceanKnowledge – Ocean Equity

Implementation region: Oceania

Implementation scale: Sub-national; the initiative is focused initially on the Gulf of Carpentaria in northern Australia—a recognised ghost net hot spot—and will be expanded to the northern coastline of Australia

Organisations and stakeholders involved: Parks Australia, Indigenous rangers, NGOs and communities in northern Australia, Northern Australia Quarantine Strategy, Australian Fisheries Management Authority and the Maritime Border Command

Background. The Australian government’s Ghost Nets Initiative is tackling the challenge of discarded fishing nets and marine debris in northern Australia and yielding early positive results. As part of the initiative, the agency Parks Australia is partnering with a range of government, non-government and Indigenous landowners to deliver ghost net and marine debris clean-up activities.¹¹ The Indigenous Rangers Coastal Clean-Up Project is being delivered in partnership with the Department of Agriculture, Fisheries and Forestry through its Northern Australia Quarantine Strategy. Indigenous ranger groups who have a presence around the northern coast of Australia are being trained and supported to locate and remove ghost nets and marine debris from the northern coastline (GoA 2021). The initiative is building on the growing capacity of the Indigenous ranger groups, established by Indigenous organisations, to look after the natural and cultural values of Indigenous land and sea country. As part of the pilot phase, five ranger groups trialled appropriate equipment and methods for removing nets and debris and took part in training, developed by the non-governmental organisation Tangaroa Blue, which was largely delivered remotely due to the risk of COVID-19 in the remote communities. The rangers feed data from the coastal clean-up activities into a central data repository by recording information including the location, weight and origin of the debris, into an app running on hand-held devices in the field. The clean-up project is scaling up to support other Indigenous ranger groups across the Gulf of Carpentaria and the adjacent northern coast in 2022.



Positive impacts.

- Early indications are that the approach provides an **effective way to deliver ghost net and marine debris clean-up activities** in the environmentally and culturally sensitive northern coastal area, much of which is Aboriginal land.
- The coastal clean-up project has already contributed to **removing 205 ghost nets and more than 211 cubic metres of marine plastic debris**.
- There is **strong uptake and commitment by Indigenous ranger groups**, and they have significant local knowledge to guide and oversee on-the-ground activities.
- The recording of data on marine debris and nets is taking place with over **300 observations captured** in the central database.
- There has been an **increase in community interest to help with ranger-led clean-up activities**, which has resulted in volunteers offering to undertake clean-up activities in country. This has extended to the **participation of schools within communities** in the region, both in learning about the impacts of ghost nets and marine debris as well as **the crucial role that Indigenous rangers play in environmental protection and management of natural areas**.

Challenges.

A significant challenge is accessing knowledge about where ghost nets and marine debris are located and how to access them from the land or water to remove them. Working through the Indigenous ranger groups helps overcome this problem as they have extensive local knowledge.

Recipe for successful implementation.

This approach could be replicated where local and/or Indigenous organisations have the capacity to implement clean-up activities on behalf of a broader community. As the Ghost Nets Initiative builds on years of work by Indigenous rangers, NGOs and communities in northern Australia, stakeholder engagement has been a key focus in designing and delivering activities. In 2021, for example, Parks Australia held three online workshops with over 30 participants from scientific, environmental and Indigenous organisations and industry as well as a series of one-on-one meetings to help shape and align the programme. To succeed, there is a need to focus on collaboration, as the task is immense and requires as much support and teamwork as possible to tackle the issue, and on ensuring that the data are easy to collect and effectively communicated to a wider audience, by, for example, quantifying them in ways that illustrate the effort memorably. Saying something like 'Today we removed over half an Olympic swimming pool full of debris from our beaches' makes the task seem more impressive and achievable.



Ocean Accounts (Australia)

Ocean Knowledge

Implementation region: Oceania and Asia

Implementation scale: Multiple jurisdictions—national, regional (including Australian states and territories), local

Organisations and stakeholders involved: Engagement for the National Ocean Ecosystem Account has involved all levels of the Australian government, the private sector, academia and environment NGOs

Background. The Australian government has invested AUD 1.1 million over two years (commencing 2021–22) to support planning for the roll out of ocean accounting at a national scale. As part of this achievement, Australia has set out to commit to and complete several other ocean accounts both nationally and internationally through a wide range of partnerships and commitments.^{12, 13, 14, 15}

At a glance.

- Australia released phase one of its first National Ocean Ecosystem Account in August 2022 focusing on blue carbon ecosystems and their climate mitigation and resilience benefits. A second phase of accounts are on track for November 2022
- Establishment of an ocean accounting pilot in Geographe Marine Park, off Western Australia, and an ocean waste account pilot in Samoa in partnership with the United Nations Economic and Social Commission for Asia and the Pacific
- An investment of AUD 7.55 million over four years to demonstrate and establish that project-level ocean accounts, both internationally and domestically, are a credible and cost-effective approach for measuring, valuing and verifying the benefits of restoring or conserving coastal blue carbon ecosystems for climate, biodiversity and people
- A collaboration and investment process across Australian federal government agencies regarding a Blue Carbon Accounting Model and the mapping of Australia's blue carbon ecosystems, such as salt marshes and seagrass meadows
- The Department of Climate Change, Energy, the Environment and Water became a member of the Global Ocean Accounts Partnership

- Chair of the United Nations working group to develop global statistical standards for ocean accounts in collaboration with the UN Statistics Division
- As part of the Australia-India Indo-Pacific Oceans Initiative Partnership, the University of New South Wales and the Madras School of Economics are establishing an Australia-India ocean accounting community of practice

Positive impacts.

- The National Ocean Ecosystem Account is applying a **human-centred design approach** to compilation so that accounts are **useful for policy and management decision-making**.
- Australia actively supports **global capability building for ocean accounts** through a number of fora, which will benefit globally consistent approaches.
- **Investment in ocean ecosystem data that can be integrated with other data themes supports** a system of Environmental-Economic Accounts in Australia.
- Developing project-level ocean accounts for blue carbon ecosystems **will help pave the way for scaling up investment in coastal blue carbon ecosystems** by addressing barriers and information needs required for funding, investment and management decisions.

Challenges.

Australia is a large country with a large ocean estate, which presents technical challenges for accounting approaches, such as with data availability, integration and selection of appropriate accounting boundaries. As part of the human-centred design approach, a range of experts are being consulted during national account compilation to address these challenges. Investments have also been made to enhance underlying data sets.

Recipe for successful implementation.

With the assistance of expert advisers, Australia has identified the potentially large scope of a 'complete sequence of national ocean accounts', a priority action agreed to by the Ocean Panel. Australia has developed a strategic prioritisation framework to help inform implementation planning and the practical roll out of ocean accounts.





Ghost Gear Program (Canada)

Ocean Health

Implementation region: Americas, Africa and Oceania

Implementation scale: Multi-national

Background. Launched in 2019, Canada’s Ghost Gear Program supports several initiatives, both nationally and internationally, that commit to reducing plastic waste and protecting the marine environment. Examples include the Ocean Plastics Charter; the G7 (Group of Seven) Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities; and the Canadian Council of Ministers of the Environment’s Canada-wide Strategy on Zero Plastic Waste. Since the start of the programme, Canada has instituted mandatory reporting of lost gear in all commercial fisheries, launched the Fishing Gear Reporting System to collect reporting information on lost gear from harvesters and announced the Sustainable Fisheries Solutions and Retrieval Support Contribution Program. The first of its kind globally, the Ghost Gear Fund is dedicated to the reduction of ghost gear. Since 2020, CAD 16.7 million has been awarded to fund 49 projects—45 in Canada (see Figures 4 and 5) and 4 internationally—with projects in Nigeria (see Figure 6), Vanuatu and Solomon Islands, and the Caribbean.¹⁶ An additional CAD 10 million has been announced for the Ghost Gear Fund in the recent 2022 budget. Projects have been carried out at various levels—including small-scale, local initiatives and multi-regional projects—with regional and international NGOs.

Positive impacts.

- **More than 1,300 tonnes of abandoned, lost or otherwise discarded fishing gear and more than 153 kilometres (km) of rope** have been removed from Canadian waters.
- **The fund has supported more than 700 targeted retrieval trips** and created **more than 300 jobs**.

Challenges.

Following the implementation of mandatory lost gear reporting, the number of submissions of lost gear reports increased drastically. In response, the Fishing Gear Reporting System was created as a user-friendly system to collect this influx of data and store and generate maps for potential retrieval operations and the identification of hot spots. Another challenge was ensuring that information was shared with harvesters, informing them of the importance of lost gear reporting and that the purpose of collecting the information was not for enforcement purposes or to penalise harvesters for gear loss, but instead to get a sense of the scale of the issue in Canada and inform all stakeholders of the problem.

Recipe for successful implementation.

Replication of a programme of this nature could be done with the up-front support of national or regional governments or organisations. Having support from harvesters as well as those in waste-management facilities in advance is also recommended. An education and awareness campaign to support the launch of a Ghost Gear Program not only informs industry and the public of the programme, but also raises awareness of the problem and reduces concerns from the fishing industry that it might be blamed for the issue of ghost gear. Focusing on cleaning up historic gear—while working on strategies to prevent and reduce future gear loss—would support successful implementation of similar endeavours.



Figure 4

Figure 4. Collection of Traps off the Coast of Nova Scotia, Canada, Retrieved by Coastal Action and Supported by the Canadian Ghost Gear Fund.

Source: Coastal Action.



Figure 5

Figure 5. A Recycling Depot Designed for Ocean Plastics in British Columbia, Canada

Note: In 2020, the Ocean Legacy Foundation built the first recycling depot specifically designed for ocean plastics in British Columbia, supported by the Canadian Ghost Gear Fund.

Source: Ocean Legacy Foundation.

Figure 6. Ghost Gear Clean Up on Shorelines in Nigeria as Part of the Stand Out for Environment Restoration Initiative, Supported by the Canadian Ghost Gear Fund

Source: Stand Out for Environment Restoration Initiative.



Figure 6



Combatting Illegal, Unreported, and Unregulated Fishing through Innovative Technologies and Partnerships (Canada)

Ocean Wealth

Implementation region: Americas and Oceania

Implementation scale: Multi-national

Background. The Department of Fisheries and Oceans Canada is now concluding some of its initiatives under the G7 Charlevoix Blueprint for Healthy Oceans, which included CAD 11.6 million in funding to develop new technologies to track and analyse illegal, unreported and unregulated (IUU) fishing; develop a Pacific intelligence-sharing network; and work with NGOs to combat IUU fishing around the world to improve high seas fishing vessel transparency. This included a CAD 7 million investment in the research, development and test-deployment of satellite-based technologies to remotely identify and track IUU fishing vessels, resulting in the creation of the Dark Vessel Detection (DVD) platform. The DVD platform has now been used in partnership with coastal developing states, such as Ecuador, and the Pacific Islands Forum Fisheries Agency to help address important IUU fishing concerns. The platform is currently illuminating fleet activity for developing countries in the South Pacific, as well as helping Ecuador protect the Galápagos Islands (see Figure 7).

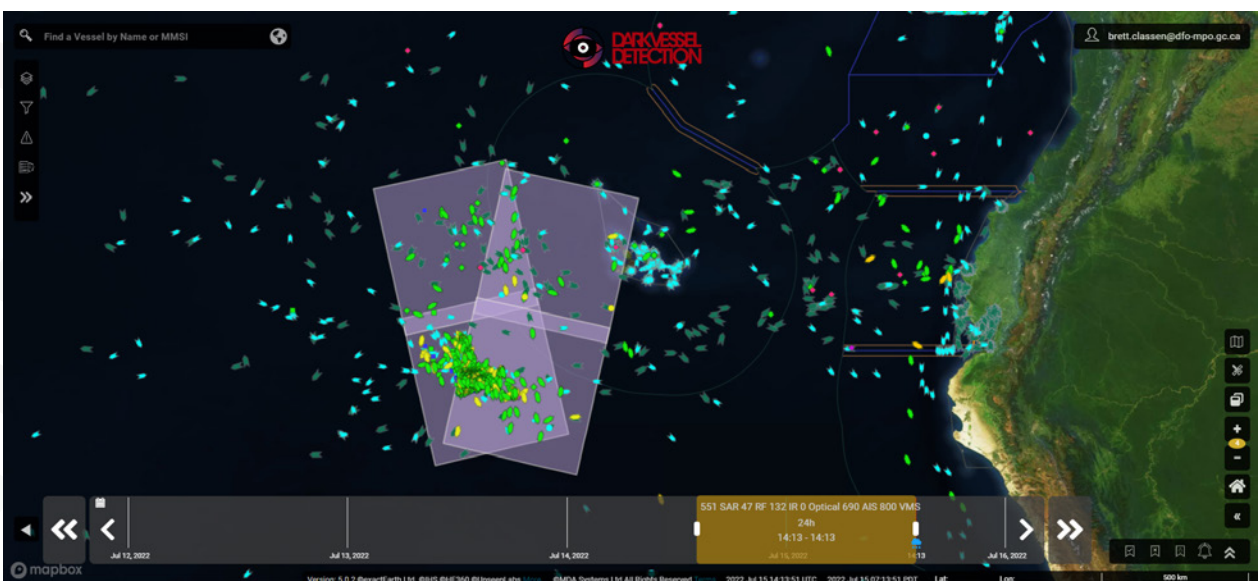


Figure 7. Dark Vessel Detection Platform Monitoring in the Ecuador Region

Source: Fisheries and Oceans Canada, Conservation and Protection International Enforcement Team.

Positive impacts.

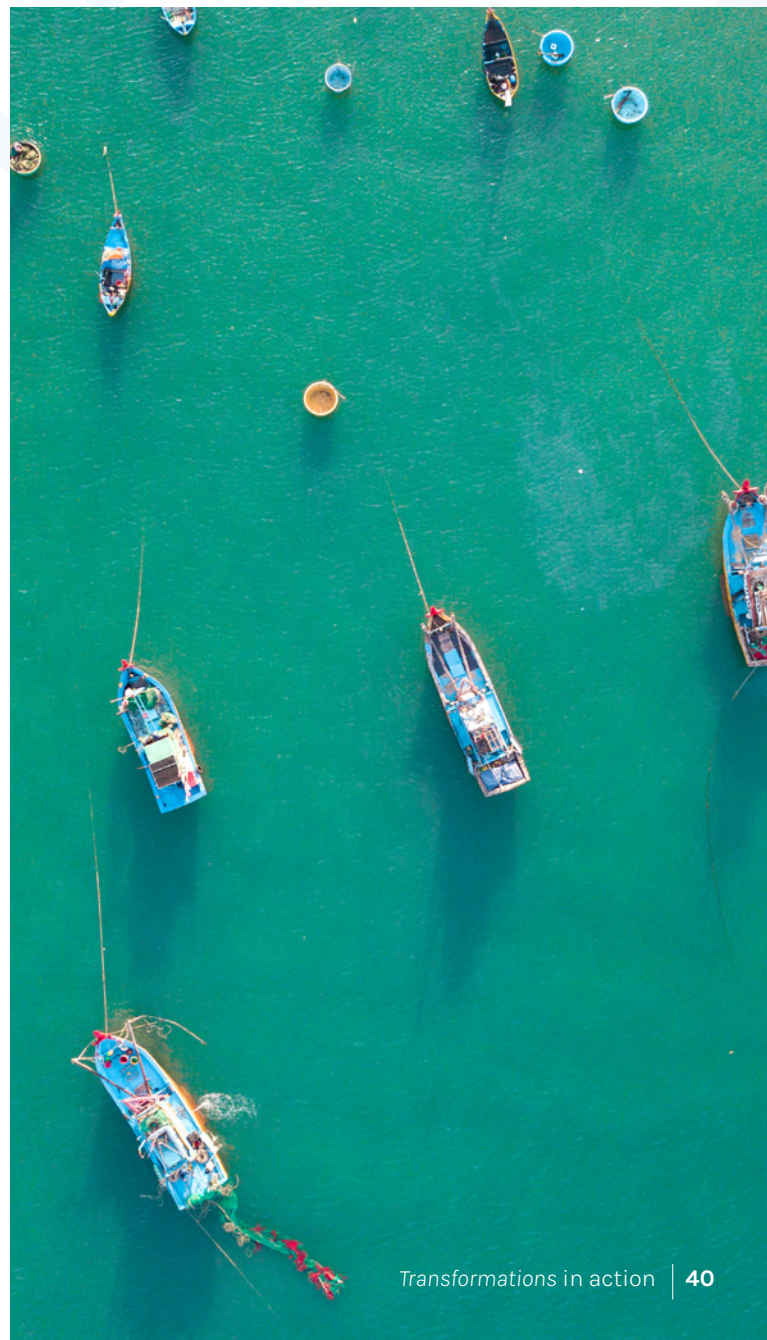
- The advancement of these technologies has added a **comprehensive toolset** to the fight against IUU fishing.
- **Significant satellite data and analysis of these data** have been provided to developing nations and their enforcement agencies to assist them with monitoring, control and surveillance of their exclusive economic zones and adjacent high seas.
- Developing nations have used this information to strategically assign their highly valued surveillance platforms to **target the highest-priority areas** and **apprehend violators fishing illegally**, including in marine protected areas.

Challenges.

It is worth noting that there is significant mission pre-planning required to carry out these patrols. In particular, there is an important need for relationship building with officials in other nations who can assist with patrol planning. This is crucial to, for example, develop the missions, gain access to programmes and obtain permits in another nation. These challenges were overcome via constant, evolving development of relations with strategic enforcement and governmental contacts to mutually facilitate Canada's goals and the goals of the country of concern, for example, arranging unmanned aerial vehicle permits to conduct drone missions in Senegal and Costa Rica. Another notable challenge is that since the onset of the pandemic, COVID-19 restrictions have caused some significant delays and at times hindered in-person relationship building.

Recipe for successful implementation.

Successful implementation would require funding, significant planning and the building of training-and-capacity-development relationships with partner countries. Relationship and trust building is a very important component of tackling IUU fishing, particularly when dealing with enforcement concerns and ensuring data are available and able to be shared. These projects can and should be replicated to help equalise the disparities in enforcement capacity between developed and developing nations.





The Blue BOAT (Chile)

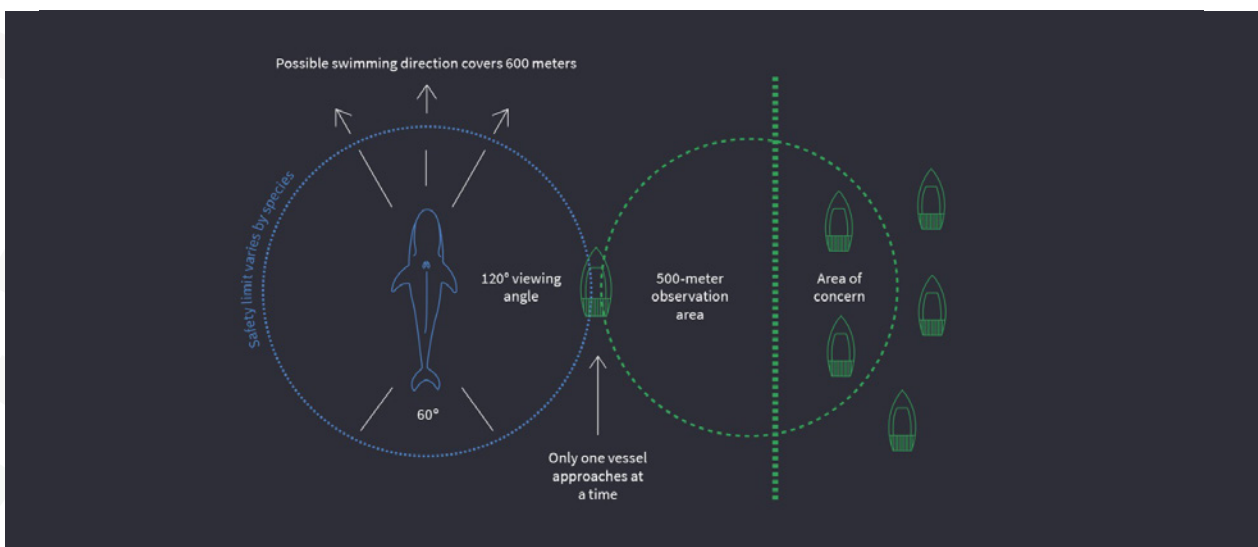
Ocean Health - Ocean Wealth - Ocean Knowledge

Implementation region: Americas

Implementation scale: National

Organisations and stakeholders involved: The project is sponsored by the Chilean Ministry of the Environment, developed in conjunction with the MERI Foundation.

Background. The Blue BOAT (Buoy Oceanographic Alert Technology) Initiative seeks to conserve and protect whales while monitoring the ocean and studying and valuing marine ecosystem services, in particular those associated with the role of whales in carbon dioxide (CO²) capture.¹⁷ The Blue BOAT Initiative contributes to several of the expected outcomes of the Ocean Panel's transformation areas, for example, by helping to make shipping in specific areas of Chile more conscious of the species that surround those areas. Through the installation of buoys to mark out a protected area, whales will be protected from possible impacts and ocean data will be collected to analyse the state of the ocean and the impacts of climate change. The initiative takes place in Chilean waters between the Gulfs of Ancud and Corcovado, with the first buoys being installed in September 2022. Although this initiative is carried out in the south of Chile, it could be replicated in other latitudes. Considering that whales travel throughout large areas of the ocean there is a need for projects like this one around the world.



Schematic representation of the measures established to avoid collision between vessels and whales in maritime traffic routes

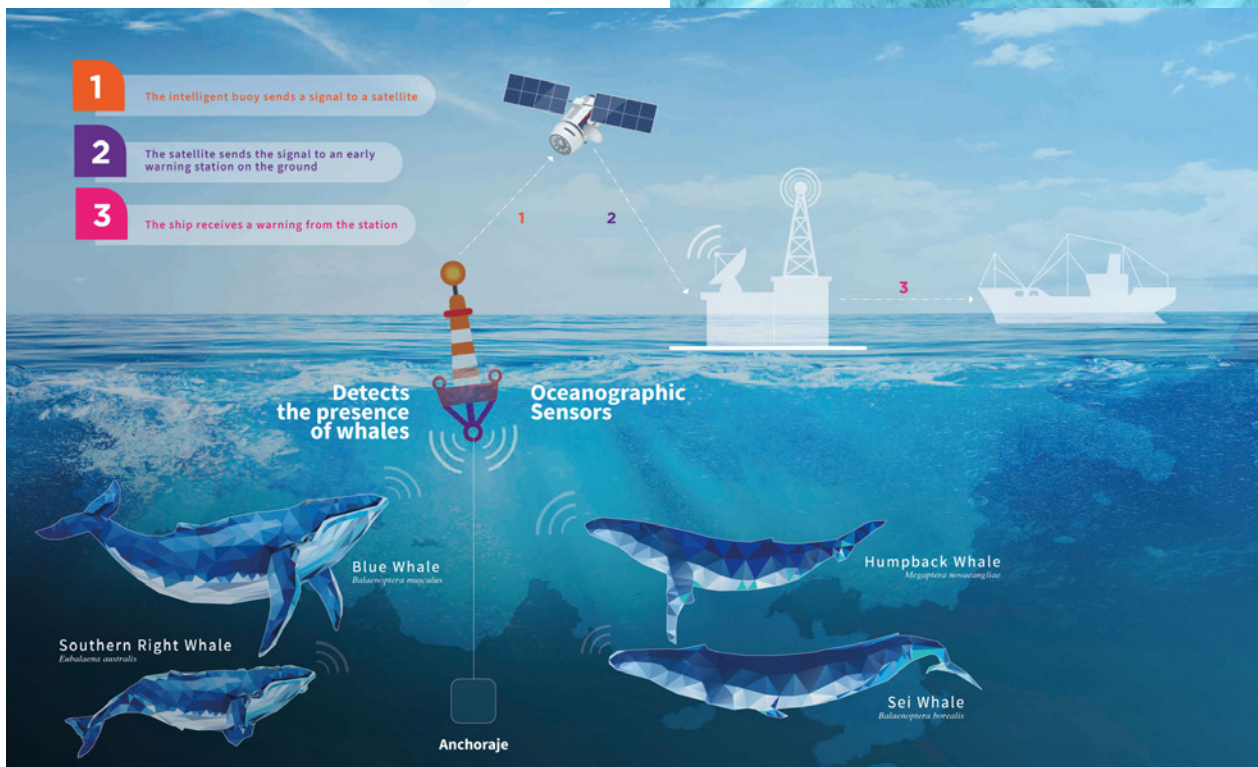
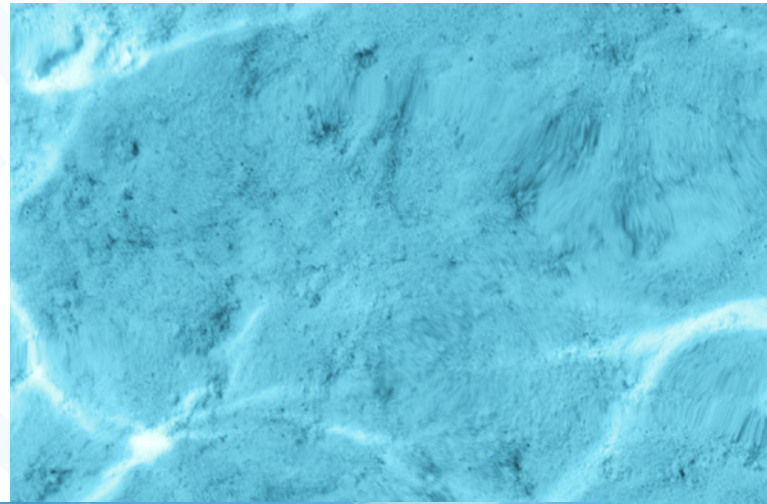
Source: The Blue BOAT Initiative, Meri Foundation on behalf of Cortés Solari Philanthropy

Positive impacts.

- The buoys **collect important data so that the whales are not impacted by vessels in the area.**
- The data obtained are used to **measure the activity of the whales in the area.**
- The buoys **help collect data related to climate change.**
- The data obtained from the buoys enable **an increase in education about and appreciation for the ocean.**
- In the long term, the buoys may **stimulate tourism in the area** where the project is being developed.

Challenges.

Challenges include deciding where to locate the buoys to have the biggest possible impact and obtain the most effective data. Likewise, the buoys' locations may impact previously existing shipping routes which could be met with objections from some of the leading shipping companies.



An early warning system for vessels that includes a network of smart buoys, and a passive acoustic and oceanographic monitoring system

Source: The Blue BOAT Initiative, Meri Foundation on behalf of Cortés Solari Philanthropy



Green Corridors Network (Chile)

Ocean Wealth

Implementation region: Americas

Implementation scale: National

Background. The Green Corridors Network is a collaboration between the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping and the Chilean government (Government of Chile 2022). Within three to eight years, the parties will make a pre-feasibility assessment of the possible routes for where ‘green corridors’ could be located in Chile and establish frameworks for the use of zero- or low-emission fuels for after the corridors have been created. The assessment will pinpoint a number of places where such zero- or low-emission shipping could be developed, as well as the likely timing, emission reduction impact and fuel types.



Positive impacts.

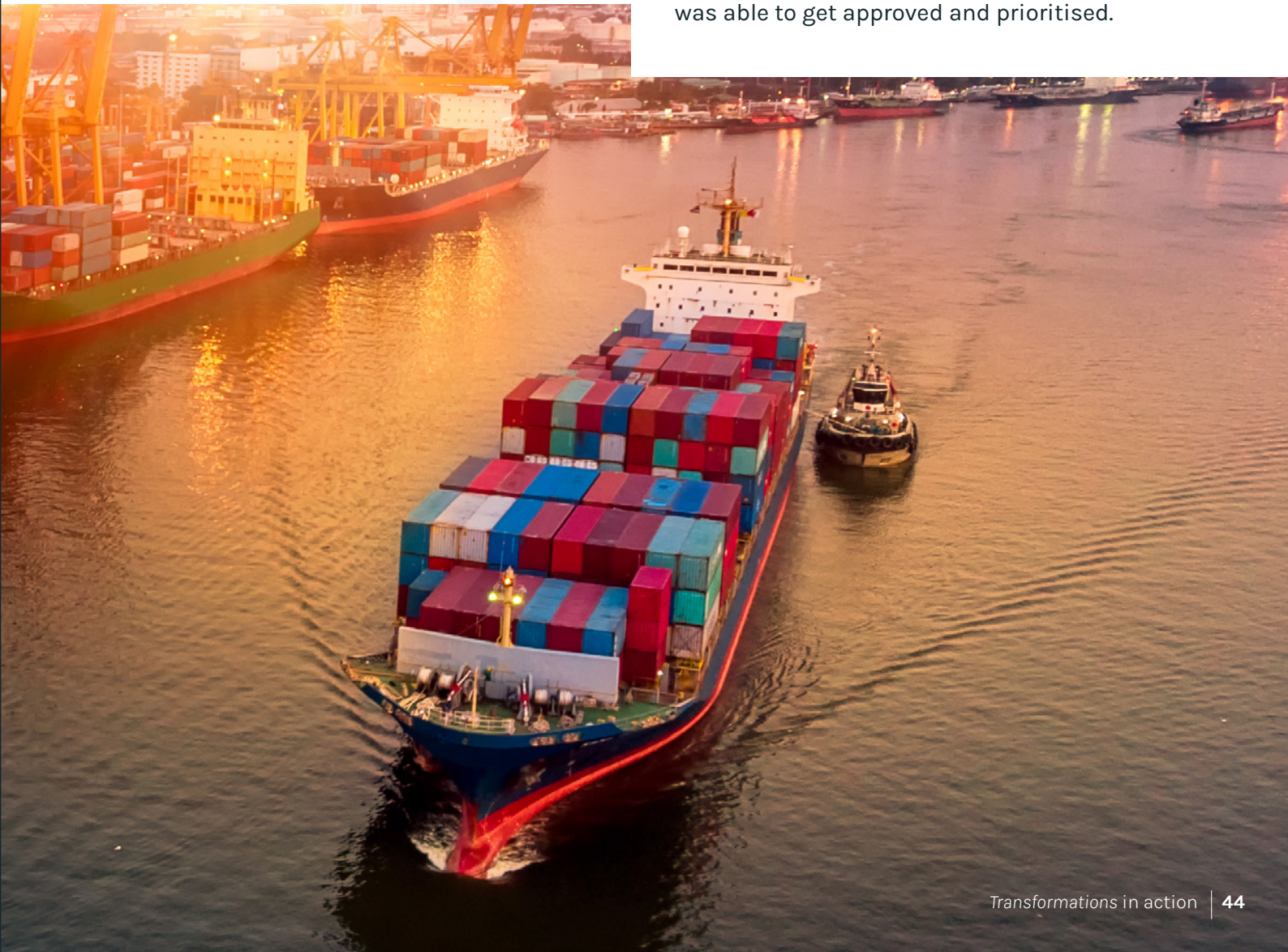
- **Transparency of information** shared among all stakeholders involved
- **Effective collaboration between the private and public sectors** which enables and encourages a green transition on a global scale
- A push for the development of **zero-carbon marine fuels and technologies**
- The foundation for a **new sustainable business model both onshore and offshore**, accelerating research and contributing to a global carbon-neutral economy

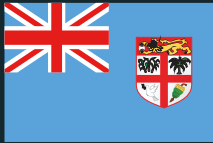
Challenges.

Challenges include maintaining an ongoing dialogue among all the stakeholders as well as encouraging the adoption of further initiatives towards a global carbon-neutral economy. Significant time lags may result from a lack of good relations and clear communication.

Recipe for successful implementation.

Consistent conversations and transparency among collaborators made it possible to establish effective conditions for project implementation. Through a collective agenda to bring about a carbon-neutral future for the global economy, this project was able to get approved and prioritised.





National Ocean Policy (Fiji)

Ocean Wealth - Ocean Health - Ocean Equity -
Ocean Knowledge - Ocean Finance

Implementation region: Oceania

Implementation scale: National

Background. The publication of Fiji's National Ocean Policy and the adoption of its Climate Change Act, making the policy a legal mandate, are landmark achievements for the Fijian government. Climate Change Act 2021 is the Fijian government's ground-breaking and proposed legislative approach to the threat of climate change caused by human activity, acting as Fiji's intended response to the challenges that face the planet (GoFG 2021). The act provides a framework for a 'whole-of-government approach' to meet fundamental objectives. These objectives have significant implications for Fiji's economy, as the policies will be set and implemented via a variety of government decisions, including regulation measures to reduce emissions in accordance with the international frameworks developed via the Paris Climate Agreement. Some of the provisions of the Climate Change Act have also been announced in Fiji's budget, including measures to reduce plastic pollution; a ban on all single-use plastic bags from 1 January 2020; a ban on Styrofoam containers, cups, trays and plates from 1 January 2021 (effective after a grace period ending on 1 August 2021); and zero duty on non-plastic food packaging such as straws, containers and cutlery. Fijians are choosing alternative plastic, such as reusable shopping baskets and bags made and woven by Fijian artisans, as they seek to improve the health of the ocean on which much of their food and livelihoods depend.



Positive impacts.

- Ministries have begun to **implement their respective climate change policies**.
- Achievements are **measurable by indicators** under these policies.
- Both documents ensure that the government is responsible for **increasing the resiliency of the Fijian people**, particularly communities most vulnerable to climate change, and **providing the public with the legal powers** to act against the Fijian government should matters relating to climate change not be addressed adequately.
- Eventually those who emit more carbon than permitted are likely to be subjected to adverse financial consequences and other measures to **disincentivise their current activities**, forcing change.
- Existing ways of operating in certain industries and in relation to certain activities are subject to **greater scrutiny and restrictions**.
- The policy will help **reduce the production of greenhouse gases** and the accurate measuring of their reduction in accordance with international law standards.
- The policy will **boost Fiji's efforts on carbon sequestration**—the removal and storage of carbon in its natural environment.
- The policy will **improve the health and resilience** of Fiji's marine ecosystems to maintain their role in mitigating the effects of climate change.
- The policy will help Fiji **secure and coordinate sustainable climate financing**.

Challenges.

Ensuring that a climate change policy is able to capture the complex implications of climate change at a national level is a difficult task. To address this, the Climate Change Act underwent multiple rounds of consultations with a diverse range of stakeholder groups, including NGOs, civil society organisations, academia groups and government entities. Being able to meet the demands of every group was difficult, with the private sector having different perspectives on climate change projects and the implications of breaching related laws. Common ground was found by providing incentives if certain conditions were met and explaining the benefits associated with climate change projects.

Recipe for successful implementation.

The development of a climate change act must be a stakeholder-driven process. This allows for robust dialogue during its development phase and for more comprehensive legislation.



Zero Plastic Reaching the Sea (France)

Ocean Wealth

Implementation region: Europe

Implementation scale: National

Background. France has set ambitious goals towards reducing marine litter, with a particular focus on plastic pollution. Most marine litter is comprised of plastics which end up in the ocean through diverse pathways and processes such as wind, rivers, waste and rainwater networks. Therefore, actions taken towards preventing marine plastic pollution should focus on tackling it at the source. Through improved recycling and reuse facilities and increased awareness among the public and industries about this issue, a trickle-down effect can take place that potentially results in less plastic in the ocean. The national roadmap and action plan against marine litter—'Zero Plastic Reaching the Sea 2020–2025'—forms France's environmental strategy against marine litter.²⁵ The plan was developed in collaboration with a wide variety of actors who play a role in the fight against plastic pollution, including agencies, researchers, NGOs and public administrations, and is organised into 35 actions across 4 sections (outlined below). It focuses on preventing plastic pollution originating on land; reducing litter in rivers, in wastewater, on beaches and in the sea; and raising awareness of this issue through educational programmes.

Positive impacts.

More than one-third of the actions have been completed in the first two years of the plan, with progress being made on many of the others.

Section 1

- **Strengthened links with local authorities** by extending producer responsibility regarding cleaning up coastal dumpsites and fighting littering

- Studies initiated to **develop alternatives to plastic products** that won't harm people's health or the environment

Section 2

- **Increased cleaning of accumulation sites** along riverbanks, creating the possibility of removing litter before it reaches the riverbed during tides or floods
- The **development of devices** that retrieve litter from waste and rainwater before it reaches aquatic environments

- **Enhanced action against the leakage of biomedica** used in water treatment plants

Section 3

- The **improvement of litter collection in ports**, in line with the Port Reception Directive
- The **setup of a scheme** to collect and recycle fishing gear

Section 4

- The **development of ‘fishing for litter’ initiatives** that encourage fishers to retrieve litter during fishing operations
- The **development of a multi-stakeholder platform** that gathers information on all citizen litter collection events happening across the country, including in overseas territories. This platform complements scientific monitoring of litter programmes and can help define policy actions as it gathers citizen science information

Challenges.

The main difficulties encountered in implementing the plan were related to the large number of actors involved in the process and the cost of the actions.

Recipe for successful implementation.

Having each section focused on a different area, each with clear goals and strategies, enables concrete actions to be taken to ensure the goal of zero plastic reaching the ocean is reached by 2025. Furthermore, successful implementation relies on raising awareness among the relevant actors in the marine space and related industries. Due to its large scope, the plan can be successful only if roles and responsibilities are effectively delegated among stakeholders.





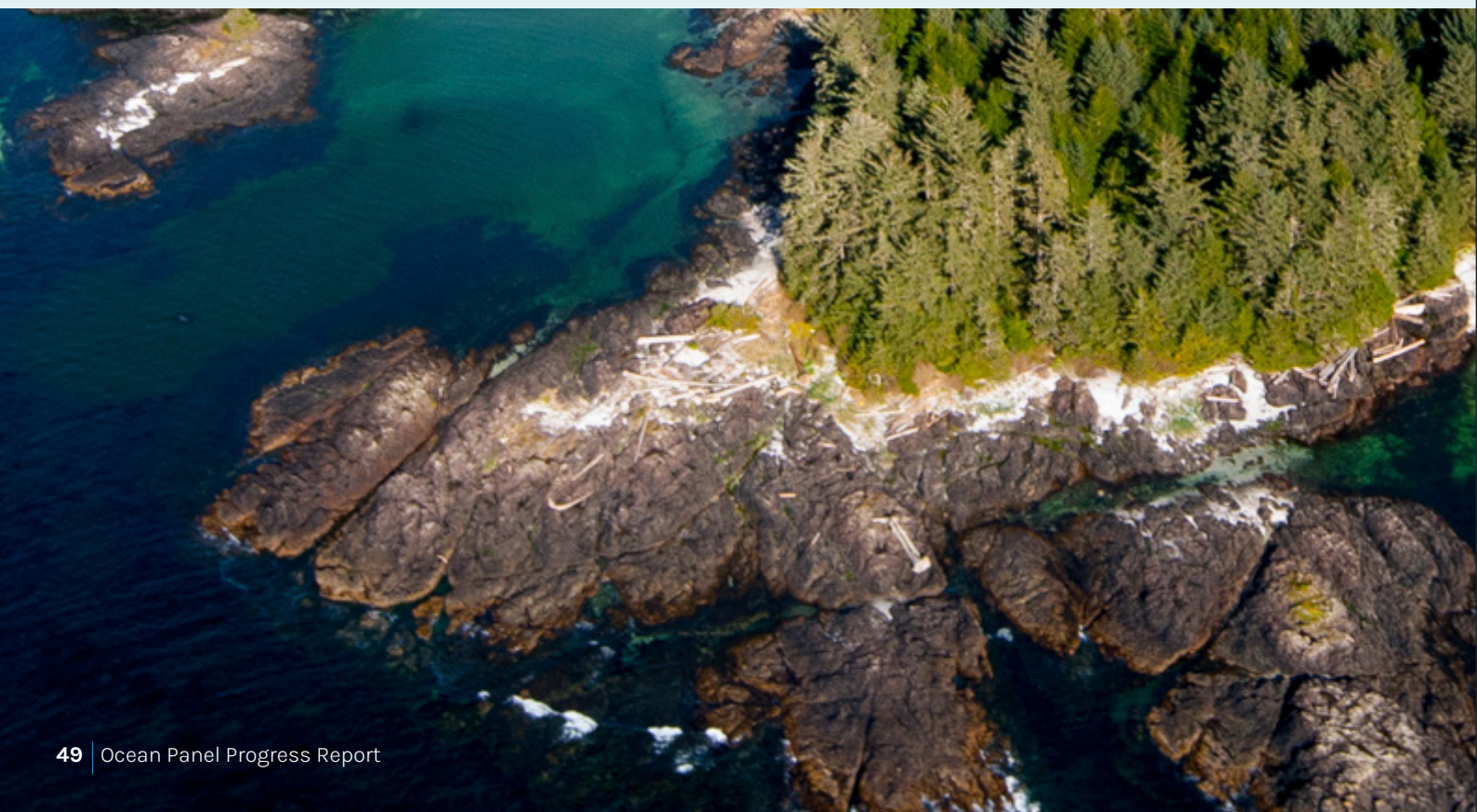
The State of the Marine Environment Report for the Western Region of Ghana (Ghana)

Ocean Knowledge

Implementation region: Africa

Implementation scale: Sub-national

Background. Ghana's Environmental Protection Agency (EPA) published the *State of the Marine Environment Report for Ahanta West, Ellembelle, Jomoro and Nzema East Districts of the Western Region of Ghana* in December 2021 (EPA 2020). The report provides an overview of the current state of the marine and coastal environment in the Western Region of Ghana, detailing how the status and health of marine and coastal resources have been and are being impacted by a range of natural and human pressures and revealing environmental pressures from sources such as fisheries, offshore hydrocarbon exploitation, plantation development, sand mining, sea defence infrastructure, shipping, submarine cables and pipeline installations, tourism and recreation, and waste generation and disposal (marine debris and plastics). The report suggests that the environmental quality of the marine and coastal environment of Western Ghana has been on the decline.



Positive impacts.

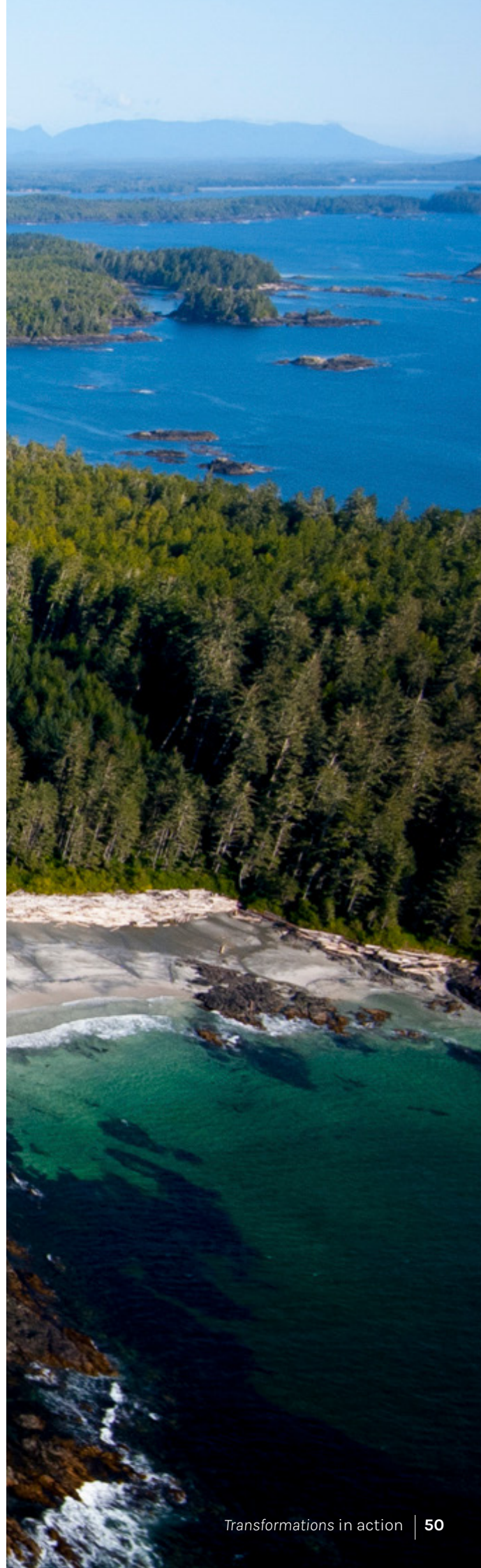
- The report **emphasises the need** for and **identifies the areas** in which there is a need for conservation.
- The report creates a **clear framework for continued action**.
- The report makes a clear call for **effective collaboration** among regulators, researchers, industry players and coastal communities, including traditional authorities, to manage resource exploitation.

Challenges.

While there were difficulties associated with developing the report, potential future challenges in implementation were also highlighted as part of the report. When gathering the data, issues included finding and reaching out to the right institutions, as well as ensuring that the data provided were accurate. Potential challenges associated with implementation may include ensuring that stakeholders are held accountable for their commitments to create change that prevents further stress from being put on the environment—in other words, ensuring an active response to the report by all relevant stakeholders.

Recipe for successful implementation.

The report, which was based on available primary and secondary information, was possible thanks to the exemplary collaboration and involvement of relevant stakeholders who help manage Ghana's marine and coastal environment. To carry out this assessment, the EPA wrote to key institutions involved in the management and regulation of marine and coastal resources encouraging them to nominate officers to participate in the working group. Nominating officers and creating direct contacts allowed for questions to be directly answered, enabling transparent and quick generation of available knowledge.





Recovering Overexploited and Depleted Fish Stocks (Ghana)

Ocean Health - Ocean Wealth

Implementation region: Africa

Implementation scale: National

Background. In 2021, the Ghana Ministry of Fisheries and Aquaculture Development, in collaboration with the Fisheries Commission, announced a closed season for artisanal fishers from 1 to 31 July and industrial fishers from 1 July to 31 August. Consideration is now being given to more frequent closures to enable fish stocks to replenish year-round.¹⁹ Furthermore, as a response to the achievement's success, the ministry seeks to engage stakeholders within the involved sector to find another suitable month during the minor upwelling period to implement additional closure measures, thereby enhancing the impact of the closures.



Positive impacts.

- A closed season, from one to two months, would support the **recovery of the country's 'overexploited and depleted' fish stocks** and make year-round fishing possible, which **would boost economic growth**.
- Based on a survey conducted following the closure, most fishers indicated that although they landed varying quantities of different types of fish species, **the fish catch increased immediately after the closure was lifted**.

Challenges.

To ensure that year-round fishing throughout Ghana is possible, more drastic measures may be needed, including a more frequent closure schedule. Another challenge has been the lack of compliance with the restrictions by all fishers. Some fishers have not stopped their fishing activities, resulting in their arrest and prosecution.

Recipe for successful implementation.

One of the reasons the implementation was successful was the intensification of operations by the Fisheries Enforcement Unit after the closed season, ensuring that the gains made were not eroded by illegal fishing practices. To do so, there was a need for accountability through, for example, the arrest and/or prosecution of those who participated in illegal fishing activities. Furthermore, by appealing to various stakeholders, and including the active participation of fishing unions, this achievement was widely viewed as a success and has been replicated for several years now.





Conservation of Marine Protected Areas (Indonesia)

Ocean Health

Implementation region: Asia

Implementation scale: National

Background. The government of Indonesia has increased efforts in the ocean health sector to achieve its 2030 goals of having healthy marine and coastal ecosystems and increasing the use of nature-based solutions. It has done so by increasing the scope of its marine protected areas. In 2018, the government met its commitment to conserve 20 million hectares of its marine areas.

Positive impacts.

- By the end of 2018, 20.88 million hectares of marine conservation areas had been established, **exceeding the intended target** by 880,000 hectares.
- The country has an extensive target to **designate 30 million hectares** as MPAs by 2030 and has protected **23.14 million hectares** as of 2021.

Recipe for successful implementation.

For a similar policy to be successful elsewhere, it is through strong community engagement and effective enforcement that these areas can be fully protected.

Challenges.

Designating an area as an MPA may spark conflicts with local industries and users. Although the tourism industry often benefits from such adjustments as cleaner, more biodiverse areas typically attract more tourists, the designation may lead to fishers losing their jobs or being compensated by the government for being forced to change their previous operation methods.





Tackling Single- Use Plastic (Indonesia)

Ocean Health

Implementation region: Asia

Implementation scale: National

Background. Indonesia has put the fight against plastic pollution at the top of its national agenda to reduce the current high levels of marine pollution. By establishing a partnership among the Indonesian Ministry of Environment, local governments and civil society, Indonesia seeks to promote and implement government-led actions to stop the use of plastic bags within modern markets. By launching a National Action Plan on Marine Plastic Debris to achieve a reduction of 70 percent of its plastic debris by the end of 2025 (Presidential Decree No. 83/2018) and establishing the Indonesia National Waste Management Policy and Strategy (Presidential Decree No. 97/2017), Indonesia has set the course towards a healthier, more sustainable ocean.



Positive impacts.

- Two provinces and 39 districts/ cities have as a result **banned the use of single-use plastic**.
- During the two years following the presidential regulation made in 2018, the amount of marine debris leakage **decreased by 15.3 percent**.

Challenges.

It was challenging to create a cohesive, all-encompassing strategy that helped balance the demands of various levels of society, including both official government bodies and civil society, as attitudes towards tackling single-use plastic varied at every level. While some viewed single-use plastic as a necessary part of market interaction and too expensive to be replaced by alternatives, others had a clearer environmental focus to their decision-making.

Recipe for successful implementation.

The Indonesian government secured successful implementation by first engaging with concerned parties to ensure the regulation would get passed and then making sure that stakeholders involved would participate within the framework(s). Achieving a significant reduction in marine pollution and minimising the amount of single-use plastic being used requires participation at all levels of society.





The Development of Blue Sukuk and Blended Blue Finance (Indonesia)

Ocean Finance

Implementation region: Asia

Implementation scale: National

Background. By developing and launching different blue finance measures, Indonesia intends to help create a system for sustainable ocean finance. An example of this is the Blue Sukuk initiative which will be launched to support investment in a healthy ocean and blue economy. In 2021, a Sustainable Development Goals Government Security Framework (SDGs Framework) was developed, allowing for the issuance of ‘green and SDGs securities’. These so-called securities were made up of ‘green securities’, a combination of green, blue and sukuk bonds, and ‘SDGs securities’, a combination of sustainability and sukuk bonds. The Sustainable Blue Financing programme was implemented through the Indonesia Climate Change Trust Fund. Furthermore, to promote sustainable ocean finance, between 2020 and 2021 Indonesia produced a *Blue Finance Policy Paper*, a Blue Finance Advisory Panel, and a *Blue Finance Roadmap*.

Positive impacts.

- The initiatives enable the funding of projects that will **deliver environmental and social benefits** to help the nation achieve its 2030 development agenda.
- Indonesia has engaged with the United Nations Development Programme (UNDP) in developing the framework **to ensure alignment with the objectives of the SDGs.**
- Using a blended blue finance model enables **easier transactions and investments within and concerning the ocean economy sector.**

Challenges.

One of the main challenges with implementing sustainable blue finance is that it is traditionally viewed as having a ‘contradictory nature’—emphasising efficiency and encouraging investment in and development of fisheries, while maintaining and promoting a sustainable environment (meaning that resources are used at a rate at which they can naturally recover). This poses a challenge as investments usually emphasise growth, and traditional sustainability practices do not. A challenge related to the development of blue sukuk is the limited amount of research available regarding its viability. As it is a new concept, the extent to which accurate future outcomes can be predicted is limited.

Recipe for successful implementation.

For the blue sukuk bonds to be successful, they require trust from investors—without it no one would be likely to invest in the first place. Implementation requires large-scale participation which is possible in a country like Indonesia which is the world’s second-largest sukuk-issuing country.





Protect and Restore Marine and Coastal Ecosystems (Jamaica)

Ocean Health

Implementation region: Americas

Implementation scale: Local

Background. Winns Morass, located on the north coast of Jamaica in the town of Falmouth, Trelawny, is a wetland area that through an escrow fund was established as part of a mitigation strategy to counter the loss of mangroves, and has been in the process of being restored. Restoration actions commenced in 2020 on approximately one hectare of the Winns Morass, which has since expanded to include a wider area (see Figure 8). The work has been conducted in collaboration with the University of the West Indies and has led to the promise of a Tree Preservation Order being placed over the area in partnership with the Municipal Corporation.



Figure 8. Location Map for Winns Morass in Falmouth, Trelawny

Source: National Environment and Planning Agency, Government of Jamaica.

Positive impacts.

- **Approximately 57 hectares of wetland** were secured for ecological restoration as part of the mitigation effort, stemming from the development of the Falmouth Cruise Ship Pier.
- The wetland restoration process has allowed for **the resumption of tidal influence** (see Figure 9).
- Replanting seedlings and diversifying the soil has led to an **increase in the resilience of the soil** and a **higher level of biodiversity** within the wetland area.

Challenges.

Heavy equipment was needed to remove approximately 368 cubic metres of dumped material to restore the land to optimal forest floor level. Similarly, to successfully refurbish the area, 450 mangrove seedlings harvested from their parent trees needed to be planted—300 *Rhizophora mangle* (red mangrove), 149 *Avicennia germinans* (black mangrove) and 1 *Laguncularia racemosa* (white mangrove).

Recipe for successful implementation.

The intervention used for Winns Morass can be replicated in other areas by both improving the hydrology of the area and strategically planting seedlings.

Figure 9. Images Showing the Changes to a Section of Winns Morass Where Hydrology of the Area Was Improved

Source: **National Environment and Planning Agency, Government of Jamaica.**



January 2020



May 2020



December 2020



Reduce Ocean Pollution (Jamaica)

Ocean Health

Implementation region: Americas

Implementation scale: National

Background. On 10 July 2018, Jamaica's House of Representatives passed the Ballast Water Management Bill to protect the marine environment from ship source pollution. The Ballast Water Management Act was promulgated in 2019.

Positive impacts.

- The bill supports the country's commitment under the **Ballast Water Management Convention**, to which Jamaica is a Party.
- The act implements measures to **prevent ships entering Jamaica's waters from introducing foreign aquatic species and diseases.**

Challenges.

Approximately 2,400 ships visit Jamaica's waters every year, bringing and taking bulk cargo, such as bauxite and alumina, and discharging their ballast water before the loading operation. As a result, Jamaica is at risk of invasive aquatic species or pathogens being introduced into the maritime environment.

Recipe for successful implementation.

Implementing nationwide legislation allows for a concise, consistent approach to ballast water management, minimising the extent to which confusion may occur regarding the active management of, for example, ballast water tanks. This process is replicable as it follows a clear legislative guideline which sets out to improve ocean health.





Ocean Policy and Legislation (Jamaica)

Ocean Health

Implementation region: Americas

Implementation scale: National

Background. The Ministry of Economic Growth and Job Creation (MEGJC), in collaboration with the National Environment and Planning Agency, has been working assiduously to finalise several key national policies which relate to the conservation of Jamaica's biological resources. These policies include an Overarching Protected Areas Policy, replacing the 1997 Protected Areas Policy for Jamaica, and a Watersheds Management Policy. Once the Overarching Protected Areas Policy is finalised, the ministry will focus on promulgating Overarching Protected Areas legislation.



Positive impact.

- Provision of the **framework for regulating over 300 legally declared protected areas in the country**, including terrestrial areas, marine and national parks, forest reserves and forest management areas, fish sanctuaries, and cultural and heritage sites

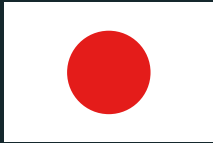
Challenges.

MEGJC is currently pursuing amendments to the Wildlife Protection Act and Forest Act. The former is being amended to, inter alia, include provisions related to flora as well as some endemic species, while the latter is being amended to align it with the 2017 Forest Policy. It is anticipated that the finalisation of the amendment to the Wildlife Protection Act will facilitate Jamaica's ratification of the Protocol for Specially Protected Areas and Wildlife.

Recipe for successful implementation.

Focusing on one proposed policy at a time—to avoid draining the available resources and create a clear, efficient framework—can aid in implementation success. Clear communication and a set agenda allow for easier implementation of the act and policy.





Enforcement of the Plastic Resource Circulation Act (Japan)

Ocean Health

Implementation region: Asia

Implementation scale: National

Organisations and stakeholders involved: National and local governments, private sectors (product suppliers and retailers), consumers.

Background. Japan has committed to enforcing a series of comprehensive policies on plastic use and production to tackle a wide range of issues including marine plastic waste and climate change, and inform on waste import regulations. One of these policies is the Plastic Resource Circulation Act, legislation unanimously passed in June 2021 and entered into force in April 2022.²⁰ This new act addresses the entire plastic life cycle—from product design to waste disposal. In doing so it aims to reduce the use of single-use plastic, increase waste management and recycling and promote ‘3R + Renewable’—reduce, reuse and recycle plus renewable. It does so by prescribing statutory guidelines for the design of products with environmental suitability and certification in mind; reducing the level of single-use plastic used by retailers and service providers; encouraging municipalities and the private sector to reduce, sort, collect and recycle entire plastic waste items; and enforcing the 3Rs of industrial plastic waste.

Positive impacts.

- The act aims to encourage a **more sustainable use of plastic throughout its life cycle**, from its production to its disposal.
- It provides **clear guidelines for both businesses, local governments and consumers** as to how they can use plastic more sustainably.
- It hopes to lead to **an increase in the sorted collection and recycling of all plastic waste** (not only packages) by municipalities and the private sector as well as increase the uptake of the 3Rs for industrial plastic waste, leading to **less marine pollution**.

Challenges.

As the legislation aims to tackle waste and plastic management at all levels of usage and production, the extent to which it will be able to fully address all aspects of the goal may be limited. Nonetheless, the high level of support shown for this bill suggests an eagerness from all parties to participate in its enforcement and encourage resource recycling of plastic.

Recipe for successful implementation.

As this act addresses the whole life cycle of plastic, it involves all stakeholders promoting '3R+Renewable' and increasing circularity at all levels. By working with businesses, local governments and consumers involved in all parts of the life cycle of plastic; continuing to have clear communication; and having a strong digital presence, this act will lead to more sustainable use of plastic within Japan.





Establishment of the Center for Ocean Literacy and Education (Japan)

Ocean Knowledge

Implementation region: Asia

Implementation scale: Local, sub-national, national

Organisations and stakeholders involved: Nippon Foundation, Sasakawa Peace Foundation

Background. The Center for Ocean Literacy and Education (COLE) at Tokyo University was established as an academic practical research institution to increase focus on ocean and marine education.²¹ The objectives of the centre were developed by a team of oceanographers and educational researchers and the centre is led by ocean and marine education research promotion bureaus throughout the country. COLE is developing a new hands-on ocean and marine education curriculum for the primary and secondary levels with education administration personnel and teachers.



Positive impacts.

- The establishment of COLE has **increased ocean education nationwide.**
- **Community-based ocean education has been implemented in many regions, and some regions** have established their own ocean-related subjects within school curriculums.

Challenges.

One of the challenges when creating COLE was reconciling the differing perspectives and stances of the pedagogues, who tend to focus on learner development, and oceanographers, who tend to focus on the ocean itself, when establishing and carrying out the programme. Another challenge was creating a nuanced narrative of the ocean, which can both provide for humanity and pose threats such as tsunamis. Trying to answer additional questions such as how to live with the ocean may therefore be difficult as they do not have a single answer nor can the ocean be easily defined.

Recipe for successful implementation.

What is most important for improving ocean literacy is first showcasing the fact that people cannot live without the ocean. To this end, what is needed through ocean literature is both a human and a scientific perspective. To enhance ocean literacy, it is necessary to acquire knowledge about the ocean and ask proactive questions, relevant to domestic contexts and circumstances, about what it means to live with the ocean.





Mikoko Pamoja: Managing Mangroves in Kenya through Carbon Finance (Kenya)

Ocean Health - Ocean Equity

Implementation region: Africa

Implementation scale: Local

Background. Mangrove forests are extraordinary ecosystems that provide a wide range of benefits to humans, including exceptional carbon sequestration and protection against climate change impacts. They are globally threatened; finding new and more effective approaches to mangrove conservation is a conservation and climate mitigation priority. The Kenya Marine and Fisheries Research Institute launched and runs Mikoko Pamoja, the world's first community-led project to restore and protect mangrove forests through the sale of carbon credits (see Figures 10 and 11). International demand for carbon credits from Mikoko Pamoja now exceeds supply, and the project is achieving its climate, community and conservation objectives. The area of mangroves in Kenya is estimated at 60,000 hectares, 70 percent of which are located in Lamu and surrounding islands. These forests provide goods and services that are of ecological, economic and environmental value.

Timeline.

2013: Inception of Mikoko Pamoja, which attracted international attention

2017: Awarded the coveted United Nations Equator Prize (see Figure 12); received US\$50,000 from the Leonardo DiCaprio Foundation to help replicate Mikoko Pamoja activities in Vanga Blue Forest (VBF), located in the transboundary mangroves of Kenya and Tanzania

2019: VBF to offset 5,500 tonnes of carbon dioxide equivalent (tCO₂eq) per year in a contracting period of 20 years (from 2019), generating an income of \$3,000/year to the local community

Positive impacts.

- Mangrove restoration and protection can mitigate carbon emissions while bringing other benefits such as **protecting biodiversity and securing economic returns to fisheries and local communities**
- The generated income **supports local development projects in water and sanitation, education and environmental conservation**
- Seventy-three percent of local people rely on water points provided by Mikoko Pamoja
- Six hundred textbooks provided for local schools
- Water freely available to over 1,000 students in two local schools
- In 2018, 1,473 people visited the project
- In 2018, 148 employment opportunities were created for monitoring activities

Challenges.

Overharvesting of mangrove wood products, conversion pressure and pollution effects are the factors responsible for the loss and degradation of mangrove forests in Kenya. At least 40 percent of the mangroves in Kenya have been lost during the last four decades. Using a conservative emissions value of 10 tCO₂eq/year, the total emissions from losses and degradation of mangroves in Kenya are estimated at 24 megatonnes of CO₂eq/year. This is three times higher than the emissions from the transport sector.



Figure 10

Recipe for successful implementation.

By building strong community relationships and maintaining local engagement this project was able to succeed. The involvement of grassroots organisations was key to the project's success as it relied on local connections and relationships to run.



Figure 11

Figure 10. A 21-Year-Old Rhizophora Mangrove Plantation at Gazi Bay, Kenya

Source: Photo courtesy Abel Kiprono.

Figure 11. An Example of a Carbon Offset Certificate Issued through Mikoko Pamoja

Source: Tropimundo.

Figure 12. Mikoko Pamoja Receives the United Nations Equator Prize in 2017

Source: Kenya Marine and Fisheries Research Institute Archives.



Figure 12



A Circular Economy Model for Waste Management (Kenya)

Ocean Health

Implementation region: Africa

Implementation scale: National

Background. Major threats to the health, productivity and biodiversity of coastal and marine environments result from land-based human activities. Most of the pollution load entering the sea from sources such as municipal, industrial and agricultural waste discharge and surface runoff, mainly consisting of plastics, affects some of the most productive areas of marine environments, including estuaries and near-shore coastal waters. In 2010, the Kenyan constitution devolved domestic waste management to individual counties. However, there has been demand for federal-level intervention as some of the counties have made minimal investment into long-lasting solutions to solid waste management. Within the coastal and inshore waters of Kenya, the contaminants which have caused the greatest concern include organic waste from domestic and industrial sewage; microbial pollutants; agrochemicals such as biocides and excessive nutrient loads; and toxic chemicals which include heavy metals, oil and petroleum and other industrial chemicals. Research data have shown that most waste in Kenya—which is overall 60 percent organic, 30 percent recyclable and 10 percent ‘other’—could be recycled or re-used. These findings led the Ministry of Environment and Forestry to enact a National Sustainable Waste Management Policy in 2020, introduce the Sustainable Waste Management Bill in 2021 and develop a National E-Waste Management Strategy for 2019–2024 (GoK 2019) to combat this issue and establish a circular economy model for waste management in Kenya. Considerable efforts have been made to manage the pollution problem in Kenya, such as through the Environmental Management and Coordination Act (EMCA) Water Quality Regulation in 2006, and the EMCA Waste Management Regulation in the same year.



Positive impacts.

- These regulations aim to **enhance responsibility for waste management** by ensuring that those who sell products that generate waste invest in waste management.
- The regulation is expected to **increase the number of participants and resources committed to waste management** and create **thousands of job opportunities**.

Challenges.

One of the main challenges is the time lag associated with the bureaucratic process that policies and bills must go through. After a bill has been passed by the Kenyan cabinet and parliament, it still needs to go through the senate. After a bill becomes law, successful implementation relies on factors such as a change in public attitude, getting individuals as well as organisations involved with waste sorting at the source of production, not dumping hazardous waste and e-waste into dumpsites, extracting the maximum value from waste, and establishing reuse and material recovery facilities as well as sanitary landfills.

Recipe for successful implementation.

Pollution prevention and control has the overall objective of mitigating harm and damage to coastal and marine resources and ensuring a sustainable environment and means of development. Implementation success relies on the active participation of all sectors in the circular economy model since waste management heavily focuses on continuity. Reducing marine pollution requires releasing and disposing of residual waste in an environmentally safe manner, incorporating aspects of the circular economy model and employing waste recovery technologies at all levels.





Plastic Interventions (Kenya)

Ocean Health

Implementation region: Africa

Implementation scale: National

Background. Since 2017, Kenya has enrolled and introduced several bans, restrictions and other forms of intervention to combat the ever-growing level of plastic waste in the ocean. This process has included a ban on polythene bags (28 February 2017); a framework of cooperation between the Ministry of Environment and Forestry and the private sector to manage plastic PET (polyethylene terephthalate) bottles (17 May 2018); a ban on the use of single-use plastic in conservation and protected areas such as national parks, forests and beaches (4 June 2019); and a process to encourage recycling by exempting plastic recycling plants and suppliers of machinery and equipment from paying a value-added tax (2019–2020).



Positive impacts.

- Research data gathered during coastal clean-up days have shown a **reduction in the number of polythene bags along the shores, an increase in investment in plastic recycling** and an **upsurge in the volume of PET bottles recycled**.
- The private sector has established PETCO Kenya to manage a **take-back scheme for PET bottles**.
- The private sector has **developed a plastics action plan to guide** companies' operations.
- The government's actions have the capacity to **encourage new investment in plastic recycling plants, create jobs and support environmental conservation efforts**.

Challenges.

As these achievements all vary in level of implementation difficulty, they all present different challenges. For example, the ban on polythene bags may face the issue of there being inadequate non-plastic alternatives for certain items as well as the challenge of polythene bags entering the Kenyan market via neighbouring countries that still use them. Similarly, due to the wide scope of the ban on single-use plastic, narrowing down the specifics of implementation within conservation areas may be difficult.

Recipe for successful implementation.

Fast-tracking the enactment of sustainable waste management policies and bills and promoting behaviour change among citizens to sort and dispose of waste appropriately may ensure wider engagement and increased support for these interventions, which can be seen as essential components to achieving sustainable waste management. Similarly, success may also depend on ensuring bans and restrictions are specific so they are easier to follow by the public. For example, the ban on single-use plastic identified 10 categories of plastic to facilitate implementation.



Abandoned, Lost and Discarded Fishing Gear (Mexico)

Ocean Health

Implementation region: Americas

Implementation scale: National

Background. To strengthen ocean health, Mexico is implementing concrete initiatives within its national waters, such as committing to the Global Ghost Gear Initiative (GGGI) in November 2020. Since then, the government, with the support of the GGGI and strategic multi-sectoral allies, has been working to create a predictive model of key sites where ghost fishing gear would most likely be located as well as developing a National Strategy for the Comprehensive Management of Ghost Gear through the Inter-ministerial Commission for the Sustainable Management of Seas and Coasts (Comisión Intersecretarial para el Manejo Sustentable de Mares y Costas; CIMARES). A pilot project to recover ghost gear was developed, led by WWF Mexico along with NGOs, academia, federal and local authorities, and local fishers in Punta Mita, Nayarit. Finally, roundtables, virtual multi-sectoral discussions and workshops have been held on best management practices for fishing gear, both at the national and regional levels (see Figure 13).



Figure 13. Photo of the Participants of the Best Practice Framework on Fishing Gear Workshop Held on 17 and 18 March 2022 in Ensenada, Baja California, Mexico

Source: Government of Mexico.

Positive impacts.

- The national strategy will be **a guiding document** that complements current efforts to combat this type of marine pollution throughout Mexico's domestic waters.
- The actions taken to implement this initiative **improve the cleaning of the seabed in the area** and **promote education and awareness among local communities** about the impact of this form of pollution.

Challenges.

Among the biggest challenges may include empowering local communities to help in these efforts. Furthermore, there is a lack of coordination among stakeholders—the three levels of government, NGOs, private initiatives and fishing communities—and the extent to which artisanal fishers will take ownership of the sustainable development of projects within their own communities is unclear.

Recipe for successful implementation.

Engaging a large variety of stakeholders and allowing for transparent conversations to take place across sectors are key. When developing the pilot project, it was critical to engage all levels of society to ensure successful implementation.





Developing an Ocean Knowledge Platform (Mexico)

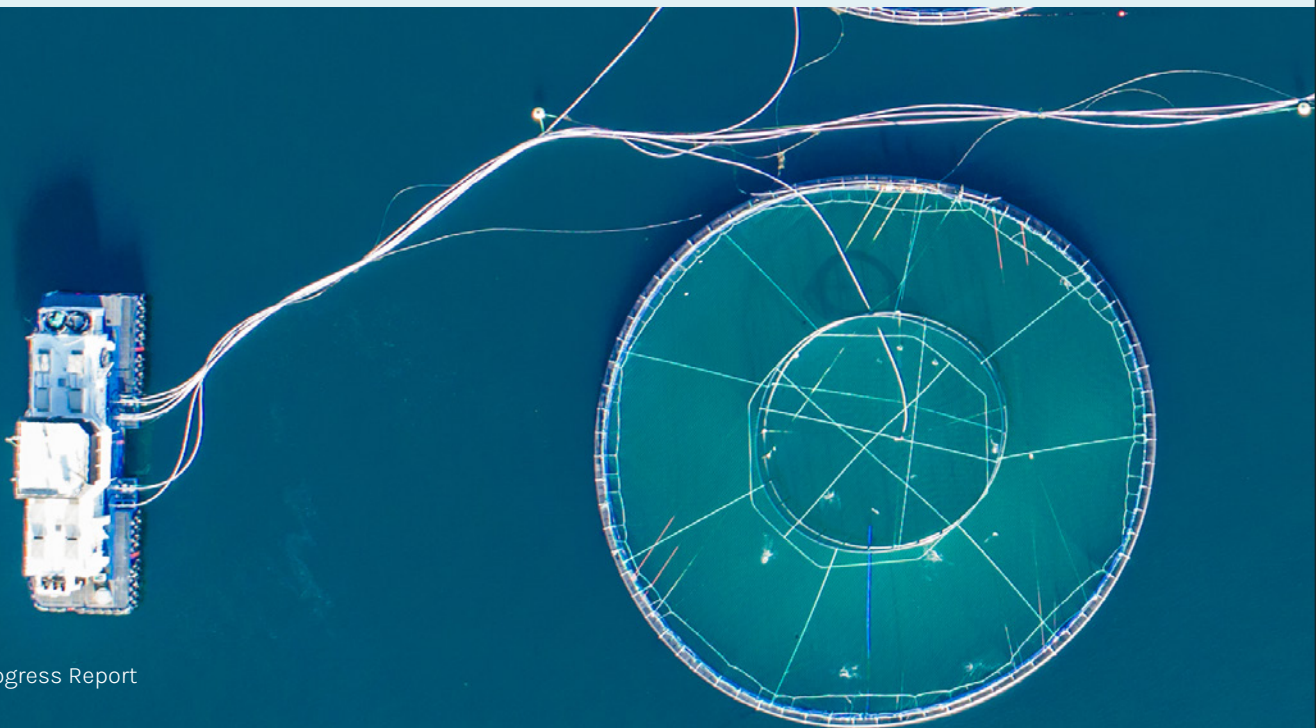
Ocean Knowledge

Implementation region: Americas

Implementation scale: National

Organisations and stakeholders involved: The main organisations involved are the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía; INEGI), Ministry of Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales; SEMARNAT), the National Institute of Ecology and Climate Change (Instituto Nacional de Ecología y Cambio Climático; INECC), the Ministry of the Navy (Secretaría de Marina; SEMAR) and the Ministry of Foreign Affairs (Secretaría de Relaciones Exteriores; SRE).

Background. Consistent with the vision of promoting the importance of ocean knowledge and Mexico's active participation in the Ocean Panel, ministries of the Mexican federal government joined forces to integrate a one-of-a-kind ocean knowledge platform for the country. This initiative is already a formal project with a critical roadmap to carry it out in a timely manner. The roadmap, *Perspectives for the Integration of Oceanic Information in Mexico: Gaps and Opportunities*, describes the main national efforts to generate data and information on ocean-based activities, and identifies the gaps in effort and primary opportunities to address them.



Positive impacts.

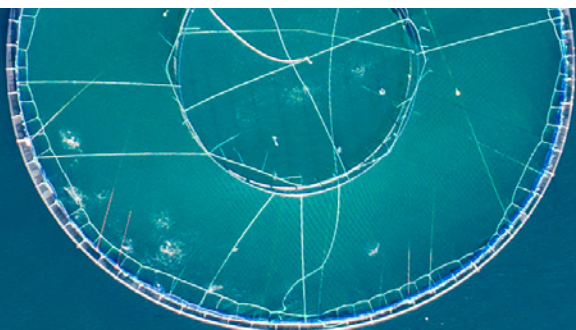
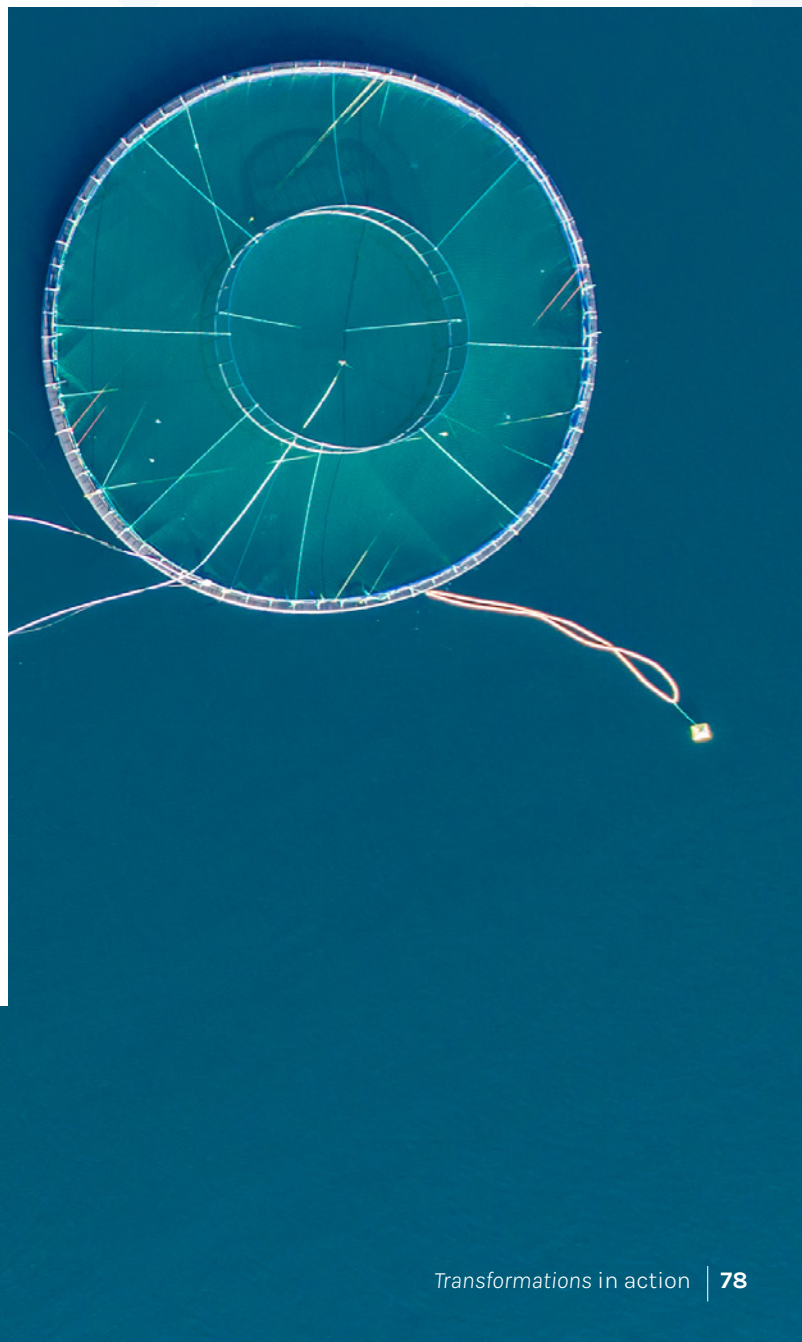
- **Increased availability of information** about the ocean and coastal ecosystems
- **Articulation of the efforts** made by all stakeholders, **improved access** to data and information about Mexico's seas and coasts and the ability to **exchange multi-sectoral experiences**
- **Strengthened decision-making in public policy** linked to the sustainable management of Mexico's seas and coasts

Recipe for successful implementation.

The collaboration among several ministries, as well as non-governmental organisations, to ensure that there was a concise, collective strategy regarding what sort of knowledge platform should be produced made success possible. The introduction of this one-of-a-kind ocean knowledge platform will lead to efficient and relevant data being gathered, satisfying the need for more accessible ocean knowledge. The growing need to share ocean knowledge globally means that it would be beneficial to replicate this initiative elsewhere.

Challenges.

Integrating the principles and legal framework into a technical system was made difficult by the novelty of the platform and the time required for the official review of documents. Work has begun to define how the platform would allow the use of open data and ease operational management. One of the challenges involved in developing this initiative was coordinating among multiple stakeholders, mainly federal government agencies with the participation of international organisations and the private sector. In addition, barriers were identified in terms of a lack of information and available resources, which the government plans to address through the initiative's activities.





Clean Beaches, Safe Water and Environment Program (Mexico)

Ocean Health - Ocean Wealth

Implementation region: Americas

Implementation scale: National

Background. The main objective of the Clean Beaches, Safe Water and Environment Program (PROPLAYAS) is to maintain and improve the quality of beaches, both in the context of their conservation and the sustainability of the socio-economic activities associated with the tourism activities within the national coasts.²² Its actions are aligned with the 2030 Sustainable Development Goals and linked to the Ocean Panel's 2030 coastal and ocean-based tourism outcomes in the *Transformations*. PROPLAYAS aims to create sustainable, non-pollutant and productive ocean-based tourism while addressing climate change, supporting ecosystem regeneration, conserving biodiversity and catalysing investment in local communities.

Positive impacts.

- PROPLAYAS helps protect the **health** of users, improves the **environmental quality** of national beaches and raises the **competitiveness level** of tourism destinations.
- Within the first years of the implementation of PROPLAYAS, **the water quality compliance rate increased from 73 percent to 98 percent** (achieved in 2021), in accordance with the standards set by the Ministry of Health and the World Health Organization.
- In 2022, **34 beaches were certified** based on Mexican Norm NMX-AA-120-SCFI-2016 which establishes the requirements and specifications for beach quality sustainability.
- **Fifty-nine beaches received the international Blue Flag award** granted by the Mexican representation of the Foundation for Environmental Education.²³



Challenges.

A challenge, as well as a benefit, of PROPLAYAS is that it involves three levels of government (federal, state and municipal) in coordination with the private, social and academic sectors in its implementation and functioning.

Recipe for successful implementation.

Ninety-one percent of the water collected in the coastal municipality is treated in 321 pre-existing treatment plants. Through targeted cross-sectoral engagement, the PROPLAYAS programme can expand the pre-existing sanitation programmes, successfully managing them at a larger scale, thereby furthering the extent to which the positive impacts can be felt on beaches across the country. While pre-existing systems were already in place prior to PROPLAYAS, it has been through multilevel engagement that PROPLAYAS has been able to result in such clear and positive change.



Reduction in Greenhouse Gas Emissions from Ships (Namibia)

Ocean Health

Implementation region: Africa

Implementation scale: National

Background. In July 2019, Namibia ratified Annex VI of the International Convention for the Prevention of Pollution from Ships 1973 (MARPOL Convention, as modified by the Protocol of 1978 and by the Protocol of 1997), thus committing to reduce greenhouse gas emissions from ships by 50 percent by 2050 (GoN 2019). To achieve this target, limits were established on substances known to be harmful to human health and the environment. All ships (local and foreign) operating in Namibian waters became required to use fuel with a sulphur content of no more than 0.5 percent mass/mass (m/m), including vessels engaged in offshore bunkering operations. To ensure the enforcement of the limit on sulphur dioxide, a carriage ban on non-compliant fuel was imposed on 1 March 2020, preventing ships from burning non-compliant fuel while at sea. Furthermore, all local fuel oil suppliers had to register with the Directorate of Maritime Affairs. The International Maritime Organization has developed several guiding documents which aim to support the implementation of MARPOL Annex VI.²⁴

Positive impacts.

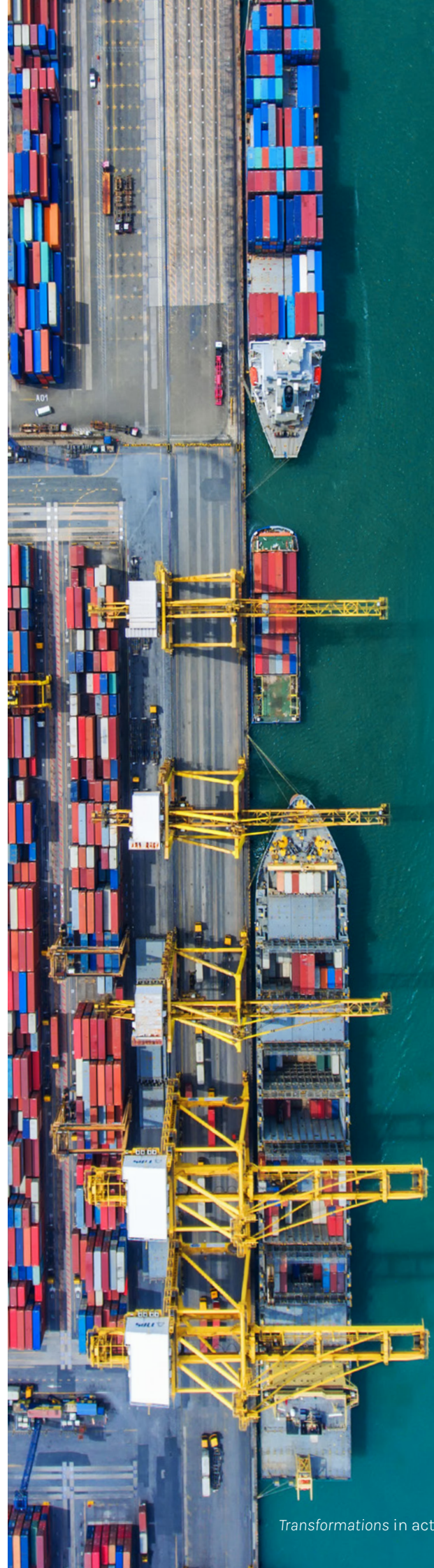
- **Over 95 percent of Namibia's fleet** of seagoing vessels use environmentally friendly marine fuels of low sulphur content.
- The global maritime community is now aware that **Namibia is at an advanced stage** (having secured cabinet approval in principle) of ratifying, and becoming a party to, MARPOL Annex VI – Air Pollution

Challenges.

The previous maximum sulphur content of fuel oil for ships operating in areas other than 'Emission Control Areas' was 3.5 percent m/m. Ensuring all ships were able to shift efficiently and promptly to 0.5 percent m/m presented a key challenge to implementation. The lack of available compliant fuel meant that some ships were forced to use fuel oil that did not comply with the convention's standards.

Recipe for successful implementation.

To re-create this implementation, systems must be in place that both help shipping companies transition to less polluting fuels and ensure continued enforcement. Recognising that an immediate transition to environmentally friendly marine fuels will not be possible for all vessels and developing systems to support and monitor uptake of the convention's standards will aid in broader implementation. It is important to encourage ship owners and operators to develop a ship implementation plan that outlines the process and timeline for complying with regulations. Furthermore, conducting thorough inspections of ships calling into all ports will ensure a systematic uptake of the convention's guidelines.





The International Declaration on Transnational Organized Crime in the Global Fishing Industry and the Blue Justice Initiative (Norway)

Ocean Wealth - Ocean Equity

Implementation region: Africa, Americas, Asia, Europe and Oceania

Implementation scale: Multi-national

Background. The fight against organised crime in the fishing sector addresses SDG 16. However, as SDG 16 is an enabling goal of, among others, SDG 14 on ‘Life below Water’, addressing organised crime in fisheries will impact states’ abilities to reach the targets set forth in SDG 14. In 2018, the only global political instrument against organised crime in the fisheries sector—the International Declaration on Transnational Organized Crime in the Global Fishing Industry (‘Copenhagen Declaration’)—was adopted by Norway and seven other countries. Norway is the depository of the declaration, and today it has the support of 50 governments, including the following member countries of the Ocean Panel: Chile, Fiji, Ghana, Indonesia, Jamaica, Mexico, Namibia, Norway and Palau (see Figure 14). Norway also announced the Blue Justice Initiative during the Our Ocean conference in Oslo in 2019. This initiative assists governments in addressing the challenges identified in the Copenhagen Declaration.²⁵ The initiative is supported by the International Blue Justice Tracking Center located in Vardø, Norway, staffed by the Norwegian Fisheries Directorate and the Coastal Administration. Norway has also partnered with UNDP, the United Nations Office on Drugs and Crime (UNODC), the International Labour Organization and the International Organization for Migration on other projects.

Positive impacts.

- The International Declaration on Transnational Organized Crime in the Global Fishing Industry inspired the **adoption of a regional minister resolution** on 21 May 2021 by the Ministerial Council of the Caribbean Regional Fisheries Mechanism.
- In 2021, Sri Lanka customs in cooperation with UNODC **uncovered illegal trade** of 300 kilograms (kg) of dried shark fins and 250 kg of dried manta ray gills.
- Norway **gave the following commitment** prior the UN Ocean Conference 2022: “Norway will continue to raise awareness by seeking support to the International Declaration on Transnational Organized Crime in the Global Fishing Industry (Copenhagen Declaration) and address these challenges through the Blue Justice Initiative.”²⁶

- Norway, Jamaica, Belize, Saint Vincent and the Grenadines, the Caribbean Community (CARICOM), the Caribbean Regional Fisheries Mechanism and UNDP arranged a high-level side event on **international and regional measures to address fisheries crime** during the UN Ocean Conference in Lisbon in June 2022.

Recipe for successful implementation.

The Blue Paper *Organised Crime in the Fisheries Sector* identified some ‘opportunities for action’ based on a two-stage approach for governments to take against organised crime in the fisheries sector (Witbooi et al. 2020). The first stage is to build political action by developing a common understanding of transnational organised crime in the fisheries sector globally, and build political will to address the challenge cooperatively. In the Caribbean, this was done with the adoption of the International Declaration on Transnational Organized Crime in the Global Fishing Industry, collectively by 12 states in the region. The second stage is to develop practical tools to strengthen law enforcement capacity. The Blue Justice Initiative helps governments address the challenges identified in the Copenhagen Declaration. There are projects on digitalisation, vessel tracking, law enforcement capacity building and developing interagency and regional cooperation.

Challenges.

Capacity building on this issue is a complex process often complicated by an array of involved institutions in the respective countries. Seeking a joint and coordinated effort against organised crime in the fisheries sector is a challenge that the Blue Justice Initiative directly addresses.

Figure 14. Participating Countries in the International Declaration on Transnational Organised Crime in the Global Fishing Industry

Source: Blue Justice Initiative.



Supporting Countries as of August 2022



Our Food Is Our Responsibility (Keled A Ngercheled) (Palau)

Ocean Wealth

Implementation region: Oceania

Implementation scale: National

Background. Keled A Ngercheled is the island nation of Palau's initiative to increase food security by improving sustainable food systems across multiple sectors, both on land and at sea. It is a homegrown initiative to change Palau's food security by changing behaviours and priorities. The country committed publicly to sustainably tripling food production at the 2022 Our Ocean Conference. To highlight Palau's commitment, Palau's president, Surangel Whipps Jr., gave 2022 the theme 'Ensuring Our Security and Safety'. The president's cabinet acts as a steering committee for Keled A Ngercheled by aligning high-level policies to ensure food security and sustainable cross-sector food systems. Each of Palau's eight ministries sits on a Keled A Ngercheled Task Force that is integrating food security and sustainable food systems into government-wide practices and working on cross-sectoral programmes and indicators. Minister Steven Victor of the Ministry of Agriculture, Fisheries, and the Environment, who co-chaired the Our Ocean Conference, is the Keled A Ngercheled Task Force champion. The task force launched the Keled A Ngercheled Initiative with a public awareness campaign. The campaign focuses on 'Our Responsibility' by encouraging purchase, production, equitable investment and innovation in local healthy foods (see Figure 15 for the main components of the campaign). In keeping with the theme of 'Ensuring Our Security and Safety', Minister Victor issued a Ministerial Declaration declaring 2022 'The Year of Keled A Ngercheled', mandating that the ministry implement policies and practices to improve food security. For all orders of food or meals purchased with ministerial funds or grants, explicit requests are made to the vendors to maximise the amount of locally grown foods, pelagic and/or aquacultured fish or invertebrates, and plastic-free packaging (including avoiding Styrofoam).



Positive impacts.

- The campaign aims to increase public **support for local fishers and farmers**, both dwindling professions, and **increase awareness of environmentally and culturally sustainable methods to reach food security**.
- By promoting local production, Keled A Ngercheled aims to move closer towards food security by **making locally sourced and produced foods sufficiently available, accessible and safe**.
- The campaign engages with individuals (consumers, producers, processors, distributors) to encourage them to **make healthy food choices, support local producers and food system workers and reduce waste**.
- As part of the initiative, the eight ministries of the task force will mainstream prioritising food security in their actions. The campaign **encourages broader engagement** within society to follow the Keled A Ngercheled framework, aiming for **higher levels of food security**.

Challenges.

As Palau imports 85 percent of its food, many people do not have access to nutritious food due to its high costs. This has led some generations to prefer unhealthy foods. Furthermore, since some of the farming and fishing practices are unsustainable, the extent to which these practices can continue to support local food production is limited. Further, it is hard to make a living working within the food system because there has been little to no previous encouragement from the government to change the old ways of production.

Recipe for successful implementation.

Through continuous dialogue, active participation across all of society and the assignment of a specific task force, the campaign hopes to be successful.



Figure 15. The Components of Keled A Ngercheled

Source: Ministry of Agriculture, Fisheries, and the Environment, Republic of Palau.



Fisheries for a Sea without Litter (Portugal)

Ocean Health

Implementation region: Europe

Implementation scale: National

Background. The objective of the project Fisheries for a Sea without Litter is to make Portuguese fishers aware of the importance of collecting and separating marine litter during fishing activities, aided by the provision of special containers to masters of fishing vessels, and creating the necessary infrastructure for handling the litter in ports.²⁷ This initiative began in the fishing port of Peniche with a pilot project that aimed to improve waste management in fishing ports and on vessels, and raise awareness and incentivise the fishing industry to adopt good environmental practices to help reduce marine litter. Portugal has committed to expanding the project to the mainland fishing ports by 2030, which would involve 22 fishing ports and possibly hundreds of fishing vessels.



Positive impacts.

- The project has been implemented in **17 fishing communities**, involving **52 entities**, **28 fishers' organisations**, **784 ships** and **3,251 fishers**.
- The project has resulted in **6,877 cubic metres (m³) of collected waste**, including 2,185 m³ of **packaging** and 4,692 m³ of **unsorted residues**.
- A phone app is being tested in Peniche and Póvoa de Varzim that allows **automatic quantification and characterisation of the residues captured in the fishing nets**.

Challenges.

Challenges included closing the circle of collected waste, with a view to its recovery and integration as a secondary raw material given the dispersed nature of waste collection and treatment companies. This logistical problem has prevented the implementation of a solution at a national level so that only in some ports can a true circular economy be achieved.

Recipe for successful implementation.

Re-creating this implementation process would require involving the fishing community from the beginning of the project as well as constantly monitoring and evaluating progress. Furthermore, logistical partners must be established to deliver and treat the waste for processing.





Designation and Expansion of Papahānaumokuākea Marine National Monument (United States)

Ocean Health - Ocean Knowledge

Implementation region: Americas

Implementation scale: Sub-national

Organisations and stakeholders involved: The Department of Commerce (through the National Oceanic and Atmospheric Administration), the Department of the Interior (through the U.S. Fish and Wildlife Service), the State of Hawai'i (through the Department of Land and Natural Resources) and the Office of Hawaiian Affairs (representing the interests of the Native Hawaiian community pertaining to the activities in the monument).

Background. The establishment and management model of Papahānaumokuākea ushered in a new generation of management practices and partnership development that continues to support large-scale marine protected areas.²⁸ Papahānaumokuākea is a highly protected MPA to protect sensitive species and cultural significance to Native Hawaiians. Commercial fishing is prohibited, and there is only limited access for management, research and cultural purposes by permit. The 1,350-mile (2,172-km) stretch of coral islands, seamounts, banks and shoals supports an incredible diversity of coral, fish, birds, marine mammals and other flora and fauna, many of which are unique to the Hawaiian island chain. Many of the islands and shallow water environments are important habitats for rare species such as the threatened green turtle and the endangered Hawaiian monk seal. It is also the world's largest tropical seabird rookery, hosting over 5.5 million breeding birds including the endangered short-tailed albatross and four land birds found only within the monument. The International Maritime Organization has designated Papahānaumokuākea as a 'particularly sensitive sea area', one of 14 in the world. This designation requires all transiting vessels of a certain size with the intent to enter a U.S. port or place to notify the authorities when entering and exiting monument boundaries; it is recommended that other international transiting vessels avoid monument waters or participate in the reporting system.

From the monument's designation to today.

15 June 2006: The United States established the Northwestern Hawaiian Islands Marine National Monument by Presidential Proclamation 8031 under the authority of the Antiquities Act.

2007: The monument was given its Hawaiian name, Papahānaumokuākea, in 2007.

30 July 2010: Papahānaumokuākea was inscribed as a mixed (natural and cultural) World Heritage Site by the delegates to UNESCO's (United Nations Educational, Scientific and Cultural Organization's) 34th World Heritage Convention in Brasília, Brazil. It is the first mixed UNESCO World Heritage Site in the United States and the first mixed marine UNESCO World Heritage Site in the world.

2021: After 10 years of co-development, the Office of Hawaiian Affairs released *Mai Ka Pō Mai*, a historic guidance document that establishes a collaborative management framework and helps federal and state agencies integrate traditional Hawaiian knowledge systems, values and practices into all areas of management.

Positive impacts.

- **Over 400,000 pounds of marine debris have been removed from the monument** by 22,000 volunteers on multiple expeditions in the period up to 2020, following the creation of the Hawai'i Marine Debris Action Plan.
- **The monument includes the highest level of endemism known of any marine ecosystem on Earth.** Extraordinary reef fish communities approaching 100 percent endemism have been found in mesophotic

coral ecosystems—deep coral reefs between 50 and over 150 metres deep.

- **Numerous species of deep mesophotic fishes and algae, completely new to science,** have been discovered.
- The monument has incorporated **collaborative management and integration of traditional Hawaiian knowledge systems.** Representatives of coastal communities and Native Hawaiian cultural practitioners paired with world-renowned scientists have conducted rocky intertidal monitoring surveys for over 10 years
- The establishment of Papahānaumokuākea has **inspired an international movement in ocean conservation,** and led to an inaugural, U.S.-hosted meeting of site managers of the world's largest marine managed areas in 2010, co-convened by the managers of Papahānaumokuākea Marine National Monument, the Phoenix Islands Protected Area and World Heritage. This historic meeting launched Big Ocean, a global network of the world's large-scale marine protected areas (LSMPAs) and produced the first-ever managers' communiqué on the importance, contributions and needs of LSMPAs (Lewis 2010). The International Union for Conservation of Nature's World Commission on Protected Areas and Big Ocean founded a task force to improve our understanding of the challenges and benefits of LSMPAs and enhance best practice management standards. The LSMPA Take Force published *Large-Scale Marine Protected Areas: Guidelines for Design and Management* as a professional development and capacity-building resource for supporting LSMPAs (Lewis et al. 2017).



Designation and Expansion of Papahānaumokuākea Marine National Monument (United States)

Continued...

Challenges.

A key challenge was establishing a process to fully engage and coordinate among management agencies and the Native Hawaiian community. Papahānaumokuākea is administered jointly by four co-trustees—the Department of Commerce, the Department of the Interior, the State of Hawai‘i, and the Office of Hawaiian Affairs (OHA). OHA is a constitutionally established body of the state of Hawai‘i, responsible for protecting and promoting the rights and interests of Native Hawaiians. Day-to-day management of the monument is overseen by a seven-member management board comprising two sub-agencies of each co-trustee, plus the Office of Hawaiian Affairs. Climate change is a critical environmental challenge facing the monument. Recent water temperatures in the region of Papahānaumokuākea are the highest on record, and the average water temperature in the monument is expected to increase by as much as 15 degrees Celsius by 2100. Extreme temperature events have also increased in frequency and intensity in past decades and are projected to continue to do so in the coming century. This and other impacts are summarised in the *Climate Change Impacts* profile (ONMS 2020). The monument has conducted a vulnerability analysis to focus on climate change adaptation actions.

Recipe for successful implementation.

Key to the success of Papahānaumokuākea was early investment in research, permitting and information systems, which enabled capacity building and adaptive management, and continuous investment in community engagement and constituency building to foster durable support for the site.





All-Atlantic Ocean Research and Innovation Alliance (United States)

Ocean Knowledge

Implementation region: Americas, Africa and Europe

Implementation scale: Multi-national

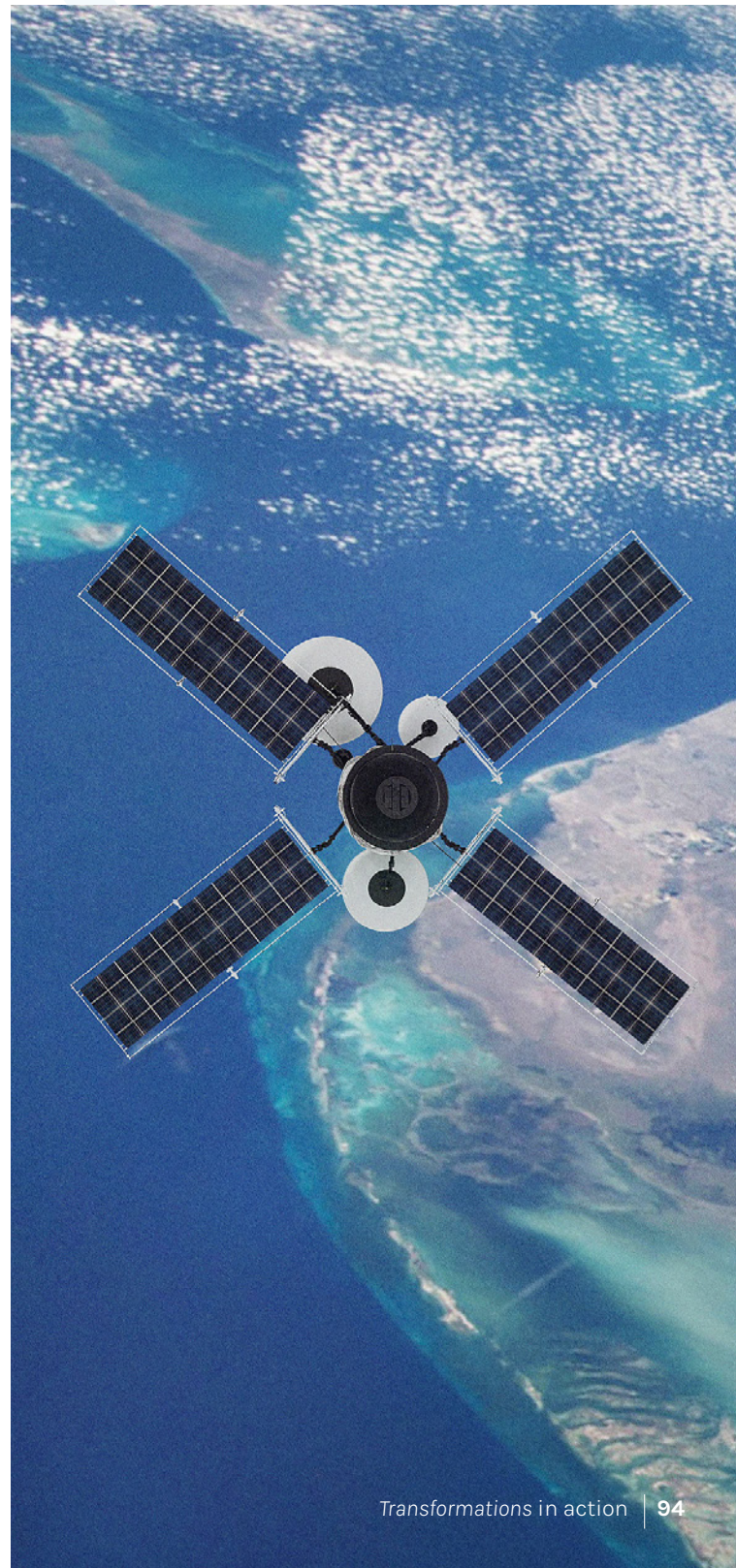
Background. The All-Atlantic Ocean Research and Innovation Alliance is a multi-national alliance framework tackling pole-to-pole research efforts in the Atlantic Ocean that has the potential to serve as a model for cooperative agreements in other ocean basins.²⁹ On 24 May 2013, the *Galway Statement on Atlantic Ocean Cooperation* was signed by representatives of the European Union (EU), the United States and Canada. The cooperative goal is to better understand the Atlantic Ocean and promote the sustainable management of its resources. Under the Galway Statement, the United States has enjoyed engaging with the EU and Canada on Atlantic Ocean research, resulting in a largely successful set of working groups and other contributions from each country since 2013, including EU- and National Science Foundation-funded projects. The success of this collaboration led to a similar initiative in the South Atlantic—the *Belém Statement on Atlantic Ocean Research and Innovation Cooperation*—which was signed in 2017 by the Canada, EU, Brazil and South Africa. Since then, Argentina, Cabo Verde and Morocco have joined via bilateral administrative agreements with the EU. In recent years, the various initiatives have coalesced in an All-Atlantic Ocean Research and Innovation Alliance, which was formalised by the All-Atlantic Ocean Research & Innovation Alliance Declaration in July 2022.

Positive impacts.


- There are regular meetings of the Galway partners. Additionally, partners across the Atlantic have convened five times in an All-Atlantic Ocean Research Forum—in Brazil in 2019, Belgium in 2020, South Africa in winter 2020, Portugal in 2021 and the United States (co-hosted with Brazil) in 2022.
- During the **All-Atlantic Forum 2022**, the **All-Atlantic Ocean Research & Innovation Alliance Declaration** was signed stating the partners' intent to expand collaboration throughout the broader Atlantic Basin.
- The working groups have conducted dozens of workshops and published over a dozen publications. **These include a roadmap for ecosystem-based management in the North Atlantic, an ocean literacy toolkit and a roadmap for seabed mapping in the Atlantic.**
- From 2015 to 2020, seabed mapping under Galway totalled over 1 million square kilometres of previously unsurveyed Atlantic Ocean seafloor.
- Associated initiatives, including ASPIRE (Atlantic Seafloor Partnership for Integrated Research and Exploration), have **logged more than 365 days at sea.**

Recipe for successful implementation.

The *Galway Statement* (2013) was a key motivating factor in the creation of the *Belém Statement* (2017) to increase work in the South Atlantic. These two initiatives led to the inclusion of additional partners and provided a model for collaborative work, including through working groups and sharing of ship time.







**5.
From Ambition
to Action:
Making
Progress at
Pace and Scale**

5.1 Steps towards sustainable ocean planning and the achievement of the 100% commitment

Striking the balance between sustainable human activities and healthy ecosystems is at the core of sustainable ocean planning—a process that delivers on the dimensions of protection, production and human prosperity. There are numerous ways a country can advance the development of a Sustainable Ocean Plan to guide the sustainable management of 100% of the ocean area under its national jurisdiction. While the destination—a sustainable ocean economy—may be shared, the starting points and courses charted will differ across countries. On any path a country follows, a sustainable ocean planning process and the development of a Sustainable Ocean Plan will explicitly signal the end of ‘business as usual’ and aim to provide for the long-term health of ocean ecosystems as an underpinning for thriving economies and societies. The steps that the Ocean Panel countries have taken towards sustainable ocean planning and the achievement of the 100% commitment show how the goals of ecosystem health, food and energy security, local prosperity, economic growth and sustainability can not only complement, but also reinforce each other, and also what forms this ocean agenda can take in regulatory and operational terms under different circumstances and contexts.

Australia is a major ocean nation with the world’s third-largest marine jurisdiction and a global leader in sustainable ocean management. The country has a vibrant ocean economy and a strong track record across many ocean-based sectors including marine protected areas, fisheries and aquaculture, maritime trade, safety and

security, biosecurity and science. Australia is already acting on most elements of the *Transformations* and is scoping the process and content for its Sustainable Ocean Plan. Practical examples of steps Australia has recently taken to support the 100% commitment include the following:

- Increasing the coverage of its exclusive economic zone within marine protected areas to 45 percent, meaning Australia has already exceeded the 30 percent target for 2030
- Fully implementing the Port State Measures Agreement and supporting regional maritime security across its very large ‘search and rescue region’ which covers 10 percent of the Earth’s surface across the Indian, Southern and Pacific Oceans
- Australia is playing its part in global efforts to reach net-zero greenhouse gas emissions. Australia has committed to reach net-zero by 2050 and in 2022 increased its 2030 emissions reduction target under the Paris Agreement to 43% reduction on 2005 levels. Australia is working to legislate both targets and accelerate its net-zero transition.

Australia’s Sustainable Ocean Plan 2025 will build on the major achievements of the past few decades and outline how these will support the growth of Australia’s sustainable ocean economy across all its diverse sectors, with a healthy and resilient ocean as its foundation.

As an ocean nation, Canada has a strong track record in ocean protection and conservation, including surpassing its commitment to protect 10 percent of its ocean space by 2020, and it is committed to continuing to explore and develop cutting-edge ocean technology. Canada has already taken important steps to ensure its ocean economy is one that is prosperous, environmentally sustainable and socially responsible. For example, the country recently modernised its Fisheries Act to restore important fish and fish habitat protection provisions and include a requirement to develop and implement rebuilding plans for major depleted stocks listed in regulations.

Canada has introduced new, dynamic management measures and enhanced protection for certain at-risk marine mammal species and has developed national protection standards for federal marine protected areas and other effective area-based conservation measures which prohibit oil and gas activities, mining, dumping and bottom trawling, and the government remains committed to doing even more. That is why the Canadian government is developing a comprehensive *Blue Economy Strategy* (BES) that will outline the vision for Canada's ocean space. It will enable Canada to take advantage of emerging economic growth opportunities to advance blue economy and Indigenous reconciliation, while ensuring a healthy and sustainable ocean for future generations. The development of Canada's BES is being informed by a public engagement process that was conducted in 2021. This process facilitated engagement with provincial, territorial and Indigenous partners as well as a wide range of Canadians involved in ocean industries; environmental and social justice initiatives; academia; and science, technology and innovation sectors. These dialogues were conducted primarily through a series of virtual roundtables and meetings with the minister of Fisheries, Oceans and the Canadian Coast Guard and

senior government of Canada officials. Canadians were also encouraged to share their feedback by answering online survey questions or by submitting written input. A *What We Heard* report on this engagement process was released on 11 March 2022. The BES will help Canada achieve the Ocean Panel's commitment for member countries to develop Sustainable Ocean Plans and outlines how Canada is meeting its commitment to sustainably manage 100% of its national waters by 2025. This will include Canada's ongoing work on marine spatial planning and marine conservation targets. In 2019, Canada surpassed its 2020 target of conserving 10 percent of coastal and marine areas through effectively managed networks of protected areas and other effective area-based conservation measures, and since then has publicly committed to ambitious new targets of conserving 25 percent of its oceans by 2025 and working towards 30 percent by 2030. In July 2021, Canada announced a historic investment in marine conservation, providing \$976.8 million in funding over five years to conserve 25 percent of Canada's ocean area by 2025. To achieve the 2025 marine conservation target, a whole-of-government approach will be taken and progress will be advanced in five key areas:

- Effectively managing existing marine protected areas and other effective area-based conservation measures
- Establishing new sites
- Continuing to build upon and foster meaningful partnerships
- Advancing marine conservation within the broader context of marine spatial planning
- Conducting international advocacy

Chile's commitment to sustainable ocean planning and the 100% approach is reflected in the following announcements made at the 2022 Our Ocean Conference, held in Palau, by the Chilean minister of foreign affairs:

- Chile is in the process of creating the Tic Toc-Golfo Corcovado Marine Park, which will cover 1,019 km² and protect a relevant feeding area for the blue whale among other marine species.
- Together with the NGO Fundación MERI, the government has launched the Blue BOAT Initiative, which seeks to conserve whales as sentinels to the health of the marine ecosystems of Chilean Patagonia and for their role in the mitigation of climate change, for example, due to their ability to capture CO₂.
- In collaboration with the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping, Chile will work to develop a Green Corridors Network for maritime transport. Due to Chile's geographical location, maritime transport is important for both exports and imports of goods. However, Chile is analysing the possibility of making this activity and its direct relationship with the ocean more sustainable.
- Forty-three percent of Chile's jurisdictional waters have been designated with a degree of protection. This is a success at the regional level; however, Chile is aware that progress must be made in the implementation of these protected areas.

Fiji is a nation of over 300 islands whose past, present and future are intrinsically linked to the ocean. The wealth and resources associated with Fiji's vast marine areas represent significant

natural capital and are valid pillars of the country's food security. The ocean is also central to traditions, culture, art, research and education. The achievement of 100% sustainable management of its national waters is one of the two key priorities of Fiji's *National Ocean Policy 2020–2030* (GoF 2020). The policy has been legislated through its Climate Change Act and is now being operationalised through joint collaborations between the Fijian government and development partners. Fiji's *National Ocean Policy* points the way to achieving 'A healthy ocean that sustains the livelihoods and aspirations of current and future generations for Fiji' (GoF 2020). At its core, this policy lays out Fiji's commitment to achieving 100% sustainable management of the ocean area under its national jurisdiction, and its designation of 30 percent marine protected areas by 2030. Defending the health of the vast and multi-faceted global ocean is a challenge that no single agency can hope to undertake on its own, so Fiji's *National Ocean Policy* seeks to capture and consolidate the exceptional work being done by various implementing agencies. The policy brings international best practices to the local level, creating an umbrella that captures the activities of multiple parties within the ocean space under one holistic framework.

France's One Ocean Summit gave it an opportunity to accelerate the pace of implementation of its national goals. First, France reached and exceeded the goal of classifying 30 percent of land and sea under French jurisdiction as protected areas with the extension of the French Southern Territories National Nature Reserve, which became the second-largest marine protected area in the world, covering over 1.5 million km². As of July 2022, 33 percent of French maritime territory is classified as a protected area. France announced commitments to further fight against ocean pollution by treating within 10 years abandoned dumps on the

coastlines that risk discharging waste into the sea, especially plastics. Three of these dumps, where the situation is particularly urgent, will be treated in 2022. Furthermore, the anti-waste law for a circular economy puts France on track to phase out single-use plastic packaging by 2040. With the goal of achieving sustainable ocean planning, France has chosen to jointly implement the Marine Strategy Framework Directive and the Maritime Spatial Planning Directive through a document that tackles environmental and socio-economic planning: *Document Stratégique de Façade (DSF; Sea Basin Strategic Document)*. France's coasts are divided into four sea basins which each have a DSF: East Channel-North Sea, North Atlantic-West Channel, South Atlantic and the Mediterranean. The DSF provides support for national policies, linking strategies for maritime planning, biodiversity and protected areas as well as various EU and international frameworks, such as the Birds and Habitats Directives, Water Framework Directive, Common Fisheries Policy and Regional Sea Conventions. The DSF is made of one socio-economic and five environmental components: marine waters environmental status assessment and impact from human activities, good environmental status, environmental targets and socio-economic targets, monitoring programmes and monitoring system, and programmes of measures and action plans. The DSF enables an integrated view, in particular, of the issues (environmental impact of activities and uses) and measures. This remains the most challenging point, particularly at the local level, and France is working to strengthen it during the third cycle of iterations to create a map that would aid decisions about the areas to be favoured or excluded for economic development.

Work is almost complete on **Ghana's** Ocean Governance Study which provides a high-level overview of the legal and institutional framework for sustainable ocean planning and identifies and prioritises capacity gaps in the development and implementation of frameworks for the ocean. An in-country

team of experts has been established to support the preparation of Ghana's Sustainable Ocean Plan, as well as mobilise technical and financial support for the exercise.

The government of **Indonesia** has identified several steps to develop Indonesia's Sustainable Ocean Plan (ISOP):

- First, setting the scope of the ISOP through inter-ministerial consultations. These consultations will set the vision, priorities and timeline for developing the ISOP.
- Second, preparing the development of the ISOP. Inter-ministerial consultations will help establish an ISOP Core Team and assess current knowledge and databases from relevant institutions. The ISOP Core Team will receive capacity development training on the sustainable ocean economy and establishing the ISOP. There will also be a stock-taking analysis of Indonesia's status in the five areas of the *Transformations*.
- Third, developing the ISOP. This stage will include inter-ministerial consultations with the ISOP Core Team, which will conduct a stock-taking analysis of the potential components of the ISOP and run a series of focus group discussions with academics, NGOs, business actors and others.
- Fourth, integrating the ISOP into National Development Plans. Integrating the contents of the ISOP into National Development Plans will require forming partnerships among the Coordinating Ministry for Maritime and Investment Affairs, the National Development Planning Agency (Badan Perencanaan Pembangunan Nasional; BAPPENAS) and members of the House of Representatives.

The government of **Jamaica** has taken important steps towards developing a Sustainable Ocean Plan and achieving the headline commitment to sustainably manage 100% of national waters, guided by the Sustainable Ocean Plan, by 2025. This has involved several processes across a range of sectors:

- The national commitment towards achieving ocean sustainability in Jamaica was bolstered by the establishment of the multi-agency National Council on Ocean and Coastal Zone Management to formulate marine sector policies and promote public awareness of the importance of marine resources to sustainable development.
- Jamaica's institutional, governance and legal framework for ocean and coastal zone management is currently being reviewed, with the support of the Small Island Developing States Unit of the United Nations Department of Economic and Social Affairs. The process is ongoing, including through the establishment of institutional arrangements and formulation of respective responsibilities of agencies involved in ocean and coastal zone management. Significantly, the intention is to mainstream sustainable ocean economy and blue economy issues.
- The World Bank's PROBLUE programme is currently financing Jamaica's Blue Economy Framework project in collaboration with the Planning Institute of Jamaica. A blue economy assessment will be conducted using the Blue Economy Valuation Toolkit (BEVTK) and the PROBLUE Blue Economy Development Framework (BEDF), which are designed to help countries assess and identify current conditions, forecast potential

trends and define a pathway for implementing economic diversification and blue growth. The outputs of this project will enable diagnostic analysis, identify preliminary options and make recommendations for blue economy growth. In turn, this work will inform the development of a blue economy roadmap for Jamaica.

- The 'Assessment and Economic Valuation of Coastal Protection Services Provided by Mangroves in Jamaica' project was funded by the World Bank Program on Forests and implemented by the World Bank in association with the National Environment and Planning Agency and the Office of Disaster Preparedness and Emergency Management. The project provided an estimate of the economic value of coastal protection services provided by mangrove ecosystems. Under the project, a habitat risk assessment was carried out to evaluate the impact of human activities on mangroves and to identify the potential reduction of ecosystem services associated with coastal protection.
- The government's ban on the importation, manufacture, distribution and use of certain types of plastic was imposed on 1 January 2019. The ban is expected to reduce the volume of plastic waste that is produced, thereby reducing the volume of marine litter. The government's commitment to reducing plastic waste entering the marine environment is demonstrated in the projects which have been implemented, including the Plastic Waste Minimization Project and the soon-to-be-launched 'Reduce Marine Plastics and Plastic Pollution in Latin American and Caribbean Cities through a Circular

Economy Approach' funded by the Global Environment Facility through the UN Environment Programme.

- Jamaica has also been a party to numerous international conventions that are directly related to safeguarding the country's coastal marine resources. These include the Convention on Biological Diversity; the Ramsar Convention, which promotes conservation and effective management of wetland areas up to six metres below sea level, and was entered into force in Jamaica in 1998 with the designation of the Black River Lower Ramsar Site (there are currently four sites designated in Jamaica with a total area of 45,860 hectares); the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (commonly referred to as 'the Cartagena Convention'); and the Land-Based Sources of Marine Pollution Protocol (LBS Protocol) under the convention, which Jamaica ratified in November 2015. The LBS Protocol provides the framework for addressing marine pollution based on the needs and priorities of national and regional governments.
- The 2018 Fisheries Act is expected to improve the management of the fisheries industry in Jamaica through the establishment of fishery management plans and expansion of marine protected areas with the inclusion of new designations (fishery manager areas, fishery management zones or buffer zones). The establishment of quota systems has also assisted in effective management. For example, Jamaica is a major conch producer which has been a regulated industry for more than 17 years; apart from the closure of the season for 1 year, the main fishing ground, the Pedro

Bank, continues to sustain a healthy population of the mollusc.

- In financial year 2021/22, the government declared the Black River landscape and seascape as a protected area under the Natural Resources Conservation Authority (NRCA). Additionally, in financial year 2022/23, the Ministry of Economic Growth and Job Creation, in collaboration with the National Environment and Planning Agency, will seek the cabinet's approval for the declaration of Pedro Cays and surrounding waters as a protected area under the NRCA Act.
- The government is preparing an Overarching Protected Areas Policy. Once finalised, this piece of legislation will provide the framework for regulating the over 300 legally declared protected areas in the country, including terrestrial areas, marine and national parks, forest reserves, fish sanctuaries, and cultural and heritage sites.

Japan has traditionally developed the foundations of its society and economy through fisheries, shipping, shipbuilding and other related industries. At the same time, the country has strived to prepare for threats from the sea such as tsunamis and storm surges. Japan has been taking initiatives to create and use new value provided by the sea, such as marine energy and mineral resources, marine renewable energy, deep-sea living resources and marine leisure activities. Japan has also been addressing issues such as conservation of marine biodiversity, global warming and ocean acidification in consideration of the sea as an indispensable factor for maintaining the lives of living creatures, including humankind, and from the viewpoint of protecting the global environment. This is very well reflected in the *Basic Ocean*

Policy and the *Basic Ocean Plan*, in which various ocean-related measures are being promoted in a comprehensive and systematic manner (GoJ 2018). The first plan was established in 2008 and has since been revised every five years. Under the leadership of the Headquarters for Ocean Policy, headed by the prime minister, the relevant ministries and agencies work together to implement and further improve the plan, as they continuously discuss and examine relevant international issues and solutions including the SDGs.

Kenya has taken significant steps towards creating a Sustainable Ocean Plan and achieving the headline commitment for sustainable management of 100% of national waters, including by doing the following:

- Mainstreaming the work of the Ocean Panel into strategic national documents
- Ensuring multiple stakeholder engagements, including with government ministries, departments and agencies; the private sector; and development partners such as the World Bank and UNDP
- Exploring funding sources, including the World Bank, UNDP and Minderoo Foundation, to support Kenya's projects
- Beginning to develop the country's Sustainable Ocean Plan

Mexico has been conducting the work of the Ocean Panel through four areas simultaneously: coordination, planning, finance and a legal framework.

Coordination. Due to the complex legal, regulatory and administrative frameworks related to coastal zone and seas management in Mexico, in 2008, by presidential instruction, the high-

level Inter-ministerial Commission for the Sustainable Management of Seas and Coasts (CIMARES) was created. The main objectives of CIMARES are to provide the country with a National Policy for Seas and Coasts, strengthen the governability of the marine and coastal regions, increase the productive capacity of the economic forces ensuring environmental sustainability, promote transparency and public participation in the decision-making process and improve and harmonise the inter-governmental and inter-sectoral framework for action. By law, CIMARES needs to have at least two high-level meetings (with the heads of each ministry) per year, and workshops with medium-level government officers (general directors) and technical personnel at least every three months. One of the first steps of the process for designing Mexico's Sustainable Ocean Plan (SOP) was creating a National Inter-ministerial Working Group for the Ocean Panel, coordinated by the Undersecretariat for Multilateral Affairs and Human Rights of the Ministry of Foreign Affairs, as sherpa to the Ocean Panel for discussing Ocean Panel activities and commitments, which communicates to CIMARES through its Group of International Affairs. This inter-ministerial group is made up of representatives from all government dependencies competent on ocean related affairs: Ministry of Foreign Affairs (Secretaría de Relaciones Exteriores; SRE), Ministry of the Navy (Secretaría de Marina; SEMAR), Ministry of Finance and Public Credit (Secretaría de Hacienda y Crédito Público; SHCP), Ministry of Well-Being (Secretaría de Bienestar; BIENESTAR), Ministry of the Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales; SEMARNAT), Ministry of Energy (Secretaría de Energía; SENER), Ministry of Economy (Secretaría de Economía; SE), Ministry of Agriculture and Rural Development (Secretaría de Agricultura y Desarrollo Rural; SADER), Ministry of Public Education (Secretaría de Educación Pública; SEP), Ministry of

Tourism (Secretaría de Turismo; SECTUR), National Water Commission (Comisión Nacional del Agua; CONAGUA), National Commission for the Knowledge and Use of Biodiversity (Comisión Nacional para el Conocimiento y Uso de la Biodiversidad; CONABIO), National Commission of Natural Protected Areas (Comisión Nacional de Áreas Naturales Protegidas; CONANP), National Commission of Aquaculture and Fisheries (Comisión Nacional de Acuacultura y Pesca; CONAPESCA), National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía; INEGI) and National Institute of Indigenous Peoples (Instituto Nacional de los Pueblos Indígenas; INPI), many of them members of CIMARES. This has allowed Mexico to work in a coordinated and harmonious way.

Planning. An initial planning step for Mexico's SOP was the process of identifying how several policy instruments in the country align with the Ocean Panel *Transformations*. Different national policy instruments were reviewed to identify the *Transformations* that should be prioritised in each one. A national consultation process was also conducted to identify Mexico's priorities vis-à-vis the *Transformations*. Federal government dependencies, members of the Expert Group and experts from civil society organisations and research institutes were consulted for this endeavour. With this, the *Implementation Strategy for a Sustainable Ocean Economy in Mexico 2021 to 2024* was published in the *Official Federal Gazette* on 12 August 2022. This document has three main objectives: to establish what a sustainable ocean economy means for the country; to identify the main priorities of the country for achieving the headline commitment, highlighting the need for a national Sustainable Ocean Plan; and to showcase a preliminary mapping exercise of existing or new ocean initiatives in the country that could help accelerate the transition

towards a sustainable ocean economy. The document contains 13 priority ocean actions relevant to the domestic context. It also represents an unprecedented effort towards transitioning to a sustainable ocean economy for Mexico. This document will help inform the development and design of Mexico's SOP, as well as implement a new ocean action agenda in the country.

Finance. Current work has been conducted through existing governmental financial resources and strategic partners. There are other ad hoc projects being developed to attend to Mexico's commitment as a member of the Ocean Panel:

- The process of defining and formulating Mexico's SOP will be financed by the World Bank (PROBLUE) and will be anchored to CIMARES. The project includes three domains—governance, knowledge and finance—covering 21 actions, including a financial gap analysis for an SOP in the country, the development of an ocean knowledge platform, improvement of the National Oceanographic Information Archive, the design of a National System of Fishing Refuge Zones, and the development of a sustainable tourism initiative for the country, among others.
- The French Development Agency (Agence Française de Développement; AfD) has also provided financial resources to support Mexico's transition towards a sustainable ocean economy. Through a cooperation project with the Ministry of Agriculture and Rural Development, National Commission for Aquaculture and Fishing (Comisión Nacional de Acuacultura y Pesca; CONAPESCA) and the National Institute of Fisheries and Aquaculture (Instituto Nacional

de Pesca; INAPESCA), AfD will help the country promote sustainable fisheries, food security and improved resilience and well-being of Mexico's fishing communities. For this project, the AfD signed a memorandum of understanding with the Ministry of Agriculture and Rural Development in 2021.

Legal Framework. Mexico's government, together with multiple partners and the International Conservation Caucus Foundation, has established a process for evaluating the legal framework and identifying opportunities for its improvement for transitioning towards a sustainable ocean economy. In December 2021, the roundtable 'Towards a Legislative Agenda to Promote a Sustainable Oceanic Economy' was held in the Chamber of Deputies as part of the activities of the Global Environment Facility project 'Facilitating Dialogue and Strengthening Cross-Border Cooperation with Legislators to Improve Marine Governance'. Then, in February 2022, a workshop was held with civil society organisations with the aims to do the following: consolidate a technical group with civil society to provide advice to legislators interested in pursuing an agenda for sustainable seas, coasts and oceans; define thematic priorities to be promoted jointly, seeking links among the executive and legislative branches and civil society in matters of the ocean, seas and coasts; and establish an Ocean Caucus for Mexico. This last one was formally established in June of 2022.

Mexico's Preliminary Framework for Its Sustainable Ocean Plan

Mexico is ensuring that its Sustainable Ocean Plan follows the main principles stated in the SOP guide (Ocean Panel 2021), through wide participation and consultations with a variety of stakeholders, including Indigenous people and local communities. To ensure a robust process, the country has agreed to move in three distinct phases: definition, formulation and implementation of the SOP, with the country currently starting the first phase. An SOP should be anchored in existing structures and regulatory legal frameworks. Specifically, in Mexico, the SOP will be based on the following four articulated and interrelated existing instruments in the country (Figure B3-1):

- National Policy for Seas and Coasts.** The National Policy for Seas and Coasts (Política Nacional de Mares y Costas de México; PNMC), established in 2018, is the legal instrument for the integrated management of Mexico's seas and coasts. The elaboration of this national policy responds to the urgent need to establish a comprehensive management instrument that strengthens, guides and supports the planning and ordering of these regions to make more efficient and effective decision-making processes, as well as stop and reverse the deterioration that the seas and coasts have suffered over decades and thus enhance their current and future development. CIMARES is responsible for providing comprehensive and timely monitoring of the PNMC, and for establishing permanent communication and coordination mechanisms among the government dependencies for its compliance. The PNMC will be updated with the main inputs previously described, including the recommendations included in the *Transformations, the Implementation Strategy for a Sustainable Ocean Economy in Mexico 2021 to 2024*, and the legal framework analysis. This updated document will include an exercise of alignment and harmonisation with the other three instruments: Marine Ecological Ordering, Budgetary Programs and Policies, and the Ocean Socio-Ecological Information System. This updated version will form, in a preliminary way and after consultations, Mexico's Sustainable Ocean Plan.
- Marine Ecological Ordering.** Mexico's Marine Ecological Ordering (Ordenamiento Ecológico Territorial Marino; OEM) is defined in the General Law of Ecological Balance and Environmental Protection (Ley General del Equilibrio Ecológico y la Protección al Ambiente; LGEEPA) as "an instrument of environmental policy, with the purpose of promoting the use of marine natural resources and productive activities, under a sustainability framework that integrates the protection of the marine and coastal environment" (GoM 2022). This is a territorial planning process that aims to achieve a balance between development activities and natural resource protection through the involvement of the government, active participation of society and transparency in environmental management. OEM represents a basic and strategic instrument for the governance of the marine and coastal zones since it establishes a planning platform that will be used to resolve environmental conflicts and secure capital and infrastructure investments, both

for the protection of natural resources and for the promotion of development projects that increase communities' well-being. According to LGEEPA, the National Ministry of the Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales; SEMARNAT) can formulate, issue and execute, in coordination with other competent federal agencies, OEM Programs. OEM Programs work to establish the guidelines for the preservation, restoration, protection and sustainable use of natural resources; the maintenance of environmental goods and services; and the conservation of existing ecosystems and biodiversity in specific areas located in Mexico's marine zones, including adjacent federal zones. For this, Mexico is divided into four marine regions, three of which already have an OEM (Gulf of California, 2006; Gulf of Mexico and Caribbean Sea, 2012; North Pacific, 2018), and one in the process of being formulated (Centre-South Pacific, currently in diagnosis). The phases for the elaboration of an OEM Program are characterisation, diagnosis, prognosis and proposal. OEM includes ecologic, socio-economic and productive sector characterisation; a diagnosis of the region, including suitability, potential conflicts, areas to protect, conserve and restore, indicators and state; a prognosis on vital, necessary and needed mechanisms, coastal vulnerability to climate change and adaptation measures; and the ecological ordering programme (the proposal), including environmental indicators for management, delimitation, description and information on environmental management units. A high number of OEM Programs are not updated and do not comply with all SOP objectives, e.g. they do not include financing and are not in line with other planning instruments. The

efforts would be oriented to continue working with and promoting OEM Programs and updating them.

Budgetary programmes and policies. Mexico's SOP will be aligned with existing budgetary programmes and policies. The Federal Budget and Fiscal Responsibility Law defines the actions that the expense executors can take to achieve their objectives and goals in accordance with the policies defined in the National Development Plan and in other programmes and budgets; it establishes the order of actions that need to be taken to delimit expenses; and it provides an estimate of the expected performance of the use of public resources. The definition, formulation and implementation of an SOP in the country will be aligned with the programme structure approved by the Ministry of Finance and Public Credit.

System for socio-environmental assessment of the ocean (ocean knowledge platform). There are large and numerous efforts by different sectors to produce data and information on marine and coastal ecosystems. Additionally, various international initiatives generate and demand information about the Mexican seas and coasts. However, there is a lack of knowledge about the current health of the ocean and coastal ecosystems, as well as a lack of coordination among the sectors covering those areas. It is necessary to strengthen the institutional and legislative frameworks that protect, preserve and increase the wealth of Mexico's ocean and coasts. In this sense, the integration and articulation of data and information to generate knowledge is a fundamental step. Mexico has a National Statistical and Geographical Information System (Sistema Nacional de Información

Estadística y Geográfica; SNIEG) which is coordinated by the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía; INEGI), an organisation created 37 years ago; since 2008, it has been constitutionally autonomous from the federal government.

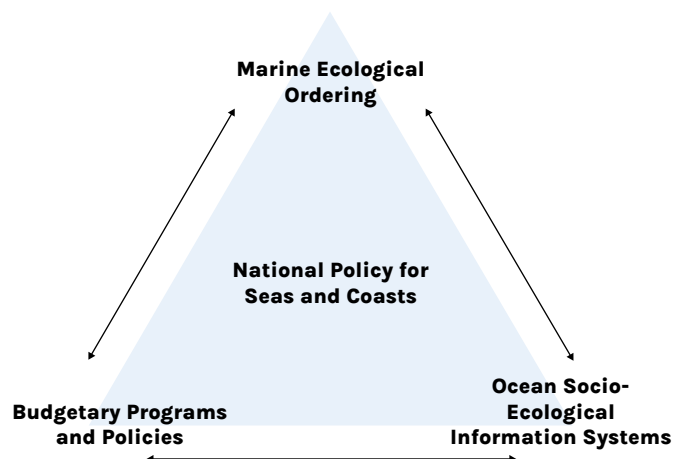
- The Law of the SNIEG establishes that the Annual Program of Statistics and Geography (Programa Anual de Estadística y Geografía; PAEG) must be elaborated in accordance with the activities developed by state units participating in the relevant information subsystem—in this case, the National Subsystem of Information on Geography, Environment, Territorial and Urban Ordinance (Subsistema Nacional de Información Geográfica, Medio Ambiente, Ordenamiento Territorial y Urbano; SNIGMAOTU) of INEGI—that contributes to the development of the National System. It is important to highlight that INEGI is constitutionally autonomous from the federal government and is responsible for collecting and disseminating information about Mexico’s territory, resources, population and economy. This offers a great opportunity for INEGI to conduct

the monitoring and evaluation of the SOP in an independent and more robust manner. In addition, there are other existing platforms that could provide information to facilitate the monitoring of the SOP: the National Oceanographic Information Archive (Archivo de Información Oceanográfica Nacional; AION), the National System of Environment and Natural Resources Information (Sistema Nacional de Información Ambiental y de Recursos Naturales) and a coastal – marine information system from the National Commission for the Knowledge and Use of Biodiversity - (Sistema de Información Marino - Costero, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad; CONABIO), among others. An ocean accounting system could provide information in at least three critical areas for decision-making related to the ocean economy: production; real income and its distribution; and well-being. It would be based on Mexico’s National Policy on Seas and Coasts and provide information for the monitoring and evaluation of Marine Ecological Ordinances and the SOP. Recently, the government of Mexico, through INEGI, has confirmed its official participation in the Global Ocean Accounts Partnership.

Figure B3-1. Mexico’s Sustainable Ocean Plan

Source: **Government of Mexico.**

MEXICO’S SUSTAINABLE OCEAN PLAN



Namibia has prioritised nine themes from *Transformations* to achieve 100% ocean management: sustainable ocean food, sustainable ocean energy, sustainable ocean-based tourism, sustainable ocean transport, a precautionary approach to seabed mining, reducing greenhouse gas emissions, protecting and restoring marine and coastal ecosystems, reducing ocean pollution, and promoting equal opportunity for people to benefit from the ocean. These themes are already well-aligned with national development programmes and projects, as coordinated by the National Planning Commission. Namibia has indicated its willingness to access funds from the World Bank to develop its Sustainable Ocean Plan and the request in writing via the minister of finance is being prepared. Namibia has committed to developing a 'blue economy' policy and governance system that sustainably maximises economic benefits from aquatic resources and ensures equitable marine wealth distribution to all Namibians. This policy therefore acknowledges that the traditional single-sector approach lacks synergy in maximising economic opportunities, preservation and sustainable management of the entire aquatic ecosystem. In its quest to coordinate, manage and regulate various economic activities that occur within an interconnected liquid system, Namibia developed an inclusive and comprehensive *Blue Economy Policy*. The blue economy concept promotes environmental protection, sustainable production, social inclusivity and equitable distribution of benefits from activities in aquatic ecosystems. The concept also recognises that ocean, coastal and inland surface water and groundwater as well as atmospheric water are all interconnected into one global water ecosystem, with interdependent sustainability. Namibia's *Blue Economy Policy* provides a basis for leveraging the full potential of Namibia's aquatic ecosystems to address its socio-economic needs in an environmentally

sustainable manner (Africa Press 2021). Furthermore, it strengthens inter-sectorial linkages and coordination in the governance of blue economy sectors. The policy is anchored in the various local and international developmental frameworks such as the UN 2030 Agenda for Sustainable Development, African Union Agenda 2063, Vision 2030, Namibia's fifth National Development Plan and Harambee Prosperity Plan II.

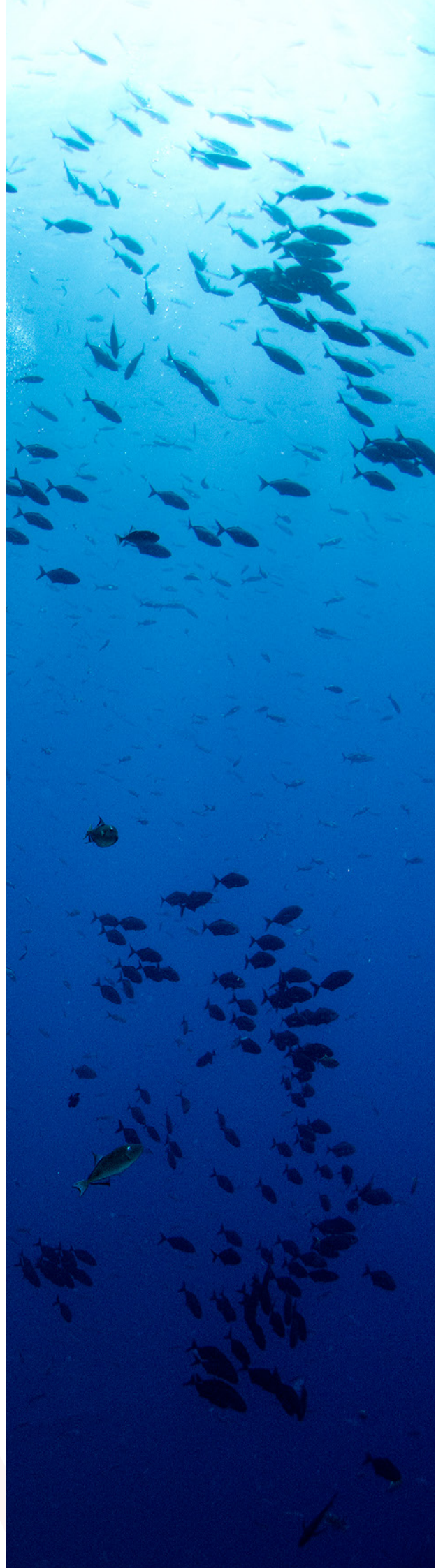
Norway's integrated marine management plans provide a framework for value creation through the sustainable use of marine natural resources and ecosystem services while maintaining the structure, functioning, productivity and diversity of the ecosystems. The plans are thus a tool for both facilitating value creation and food security and maintaining the high environmental value of Norway's marine areas. The plans cover 100 percent of the marine areas outside of the baseline, clarify an overall framework and encourage closer coordination and clear priorities for management of Norway's marine areas. They increase predictability and facilitate co-existence among industries that use these areas and their natural resources. To be updated in 2024, the ocean management plans will form the main supporting element of Norway's Sustainable Ocean Plan and work together with Norway's ocean industry plans and sector regulations to achieve a sustainable use of the ocean. The Sustainable Ocean Plan will be published in 2024. The effective regulation of sectors is the basis for effective management of the country's ocean industries. In Norway, 100 percent of the activities in each management plan area are regulated based on existing legislation governing different sectors. Norway's practice and sector regulations have developed over time to achieve an effective joint use of the sea areas for the various industries. Norway's ocean management and regulations are based on best available science and knowledge, and are continuously under development.

Aquatic food systems. A science-based, holistic aquatic food chain approach has been developed, from healthy waters to healthy people, for increased production and consumption of aquatic foods to help improve food security, nutrition and livelihoods. Norwegian management of the aquatic food system is based on knowledge and involves several institutes. Taking actions to achieve a healthy ocean is a necessity to enable sustainable fisheries and aquaculture to deliver sufficient, safe and nutritious foods with low environmental footprints. We place great importance on research and surveillance systems as a basis for knowledge-based management, providing opportunities for increased sea-based production and the harvest and production of safe and healthy aquatic foods within planetary boundaries. Extensive research, monitoring, control and surveillance is the foundation for achieving maximum sustainable yield in Norwegian fisheries.

Simultaneously, under Norwegian fisheries' regulations, 44 percent of all areas under Norwegian fisheries' jurisdiction is subject to effective area-based fisheries management measures, which aim to protect vulnerable marine ecosystems against adverse effects from destructive fishing practices (e.g. bottom trawling). Moreover, sustainability is an integrated part of the regulations affecting the Norwegian aquaculture industry. The environmental footprint is a key issue when new licences are allocated, while the carrying capacity of the recipient determines the maximum allowed biomass of a farming site. Sustainability is also a key principle in the operational framework, and there are regulations in place to ensure environmental monitoring. The country has, through research and monitoring programmes, gained extensive knowledge about seafood and health. Developing, maintaining and improving transparent databases on nutrients and contaminants is important in addition to assessing and managing the risks and benefits of fish consumption.

Ocean knowledge. Norwegian ocean management is based on knowledge from various directorates, supervisory bodies and research institutions that have ocean management as part of their tasks given by the state. This applies in fisheries, aquaculture, veterinary conditions, energy, shipping and ocean fairways, minerals and the environment. The directorates play an important role in ordering and requesting relevant information for achieving good management of the sea. In addition, universities and independent research institutes contribute to the development of ocean knowledge. The state provides funding through open arenas such as the Research Council of Norway and the European Commission's Horizon Europe, including for thematic programmes and instruments for promoting cooperation among institutions, and between institutions and businesses. Norway also has a tax incentive scheme, Skattefunn, through which the business sector can reduce its taxes by 19 percent of the costs associated with research and development projects. NOK 14.4 billion per year is invested in ocean-related research, accounting for 44 percent of Norway's total research budget. It has been a goal that overall research should account for 3 percent of gross domestic product, of which 2 percent is funded by the business sector and 1 percent by the public sector. This goal is monitored through a long-term plan for higher education and research. Some research is financed through earmarked fees that industry players are charged. This applies, among other things, to research on fish stocks and industry-oriented research in fisheries and aquaculture. What characterises the Norwegian ocean knowledge system is transparency and coordination among the authorities, research and development sectors and industries. The business sector is an important contributor of both funding and input on how public research and education should be oriented to contribute as best as possible to ocean management and value creation.

Ocean finance. Norway has few national initiatives for sustainable ocean finance but is aligning itself with European and international reporting standards. The government wants to make it easier for players in the financial markets to identify sustainable investments. Sustainable use and protection of water and marine resources is one of the environmental objectives of the EU taxonomy (classification system) for sustainable economic activity. The system can therefore be an important tool for channelling capital to projects that support sustainable marine activities. The first set of criteria for which activities can be considered to contribute significantly to the goal of sustainable use and protection of water and marine resources will be set by the European Commission in 2022. For taxonomy to be an effective and credible tool, the criteria must be ambitious and science based. The government will help safeguard Norwegian interests in the EU's work to further develop the taxonomy, with the aim that the system will be a tool for Norwegian companies that want to finance activities that are already sustainable or want to reorient their activities in a sustainable direction. Access to relevant information is important for the players in the financial markets to be able to assess and price risk correctly, and for the capital markets to function effectively. To assess and compare companies, financial market participants and other stakeholders need information on how companies are affected by and manage climate and environmental risk, and how the companies' activities affect society and the environment around them, including how their activities affect the sea. The government expects large Norwegian companies to include information on this in their company reporting in line with the requirements of the Accounting Act. The government welcomes the development of European and international reporting standards that will make it easier for investors and other stakeholders to assess and compare companies.



Example Regulations for the Management of Norway's Ocean Areas

Pollution Control Act. The purpose of the act is to protect the environment against pollution, reduce existing pollution, decrease the quantity of waste and promote better waste management. The act is based on the polluter-pays principle and ensures that the quality of the environment is satisfactory so that pollution and waste do not pose any risks to human health, adversely affect human welfare or damage the productivity of the natural environment and its capacity for self-renewal. Subject to any restrictions deriving from international law, this act applies to sources of pollution or any threat of pollution within Norway's exclusive economic zone if the source of pollution is a Norwegian vessel or installation, or otherwise to the extent decided by the king, and to exploration for and production and utilisation of natural subsea resources on the Norwegian part of the continental shelf, including decommissioning of facilities.

Offshore energy. Offshore wind and other ocean-based renewable energy in Norway is regulated by the Offshore Energy Act. The bill regulates the planning, construction, operation and removal of facilities for producing renewable energy and for transforming and transmitting electricity at sea. The bill establishes that the right to exploit offshore renewable energy resources rests with the Norwegian state. Prior to opening areas for offshore renewable energy, a strategic impact assessment is completed to ensure that all

relevant interests and requirements are assessed in the planning and construction of renewable energy production and transmission facilities. Today, two areas are open for offshore wind: Sørilige Nordsjø II (3,000 megawatts) and Utsira Nord (1,500 megawatts). The government has announced a target to open areas for offshore wind power production that will generate 30 gigawatts of power in Norway by 2040.

Ocean transport. Norwegian regulations relating to ports and navigable waters apply to territorial waters and internal waters, and partially to Norway's exclusive economic zone. A number of preventive measures, such as maritime surveillance, vessel traffic services, traffic separation systems, recommended routes, pilotage and visual aids to navigation reduce the risk associated with maritime traffic in Norwegian waters. Preparedness and response systems are also in place to handle acute pollution incidents. Both preventive measures and pollution preparedness are based on comprehensive risk analyses, including environmental sensitivity mapping, that guide prioritisation and allocation of resources.

In 2022, **Palau** launched a comprehensive Blue Prosperity Plan. The plan includes the development of sustainable fisheries, restorative aquaculture, high-value ecotourism and innovative business models, all designed to deliver optimal economic benefits while protecting Palau's ecological resources. Palau's Blue Prosperity Plan strives for a 100% sustainably managed ocean. Its foundation is a participatory, inclusive and science-based marine spatial planning process that aims to balance the protection of the ocean with sustainable fisheries production. To implement this plan over the next several years, the country will work with partners to better understand the vital habitats in its waters worthy of high-level protection while working to identify the key spawning grounds and migratory routes for the country's valuable fish stocks. All of this will help Palau design a conservation framework that optimises benefits to conservation, food security and local livelihoods. Building on Palau's National Marine Sanctuary, created in 2015, the country commits to growing regional cooperation for 100% management of the Pacific Ocean as they move collectively towards the global ambition of 30x30.³⁰

Portugal's National Ocean Strategy 2021–2030 (NOS 2030), approved in May 2021, is based on promoting a healthy ocean to maximise sustainable blue development and the well-being of Portuguese people, establishing Portugal as a leader in science-based ocean governance. Sustainable management of 100% of areas under national jurisdiction is at the core of NOS 2030. To achieve this headline commitment, Portugal has been developing its maritime spatial plans and integrated coastal management plans and establishing marine protected areas and other effective area-based conservation measures. The sustainability of the blue economy depends on the conservation of the marine environment

and on the services of its ecosystems, as well as on safeguarding Portuguese maritime heritage, in line with the National Strategy for the Conservation of Nature and Biodiversity 2030. The Baseline for the Planning of the National Maritime Space and the Strategic Guidelines and Recommendations for the Implementation of a National Network of Marine Protected Areas, both approved in 2019, as well as the assessment of Good Environmental Status of Marine Waters recently reported pursuant to the EU's Marine Strategy Framework Directive, are important benchmarks in ensuring the country's commitment to protecting marine ecosystems.

In 2018, the **United States** published a decadal vision for ocean science and technology focused on understanding the ocean in the Earth system, promoting economic prosperity, ensuring maritime security, safeguarding human health and developing resilient coastal communities (SOST 2018). In joining the Ocean Panel, the United States acknowledges the urgent need to strengthen and accelerate these actions while implementing new ocean-based initiatives that address pressing environmental and societal challenges brought on by climate change. The country's EEZ is larger than the combined land area of all 50 states and is one of the largest in the world (NOME Council 2020). Sustainable ocean planning and management require a comprehensive understanding of the EEZ through extensive mapping, exploration and characterisation (MEC) campaigns. As such, in 2020, the United States committed to the MEC of EEZ waters 40 metres and deeper by 2030 and all shallower waters by 2040. These efforts are well underway and are led by the National Ocean Mapping, Exploration, and Characterization Council (NOME Council 2021). In 2021, the Ocean Policy Committee (OPC) was codified into U.S. law to coordinate federal actions on ocean-related matters (U.S. Congress 2020). The OPC will combine ongoing ocean MEC,

research, resource management and policy efforts with new tools and infrastructure to progress three major goals: maximise the benefits of co-use of the ocean, develop ocean-based climate solutions and provide strategic direction to the United States' ocean science and technology enterprise (OPC 2022). For 2022, the Ocean Resource Management (ORM) Subcommittee of the OPC will create a National Strategy for a Sustainable Ocean Economy which will guide the development of a Sustainable Ocean Plan. In addition, the ORM will develop an Ocean-Climate Action Plan to bolster U.S. efforts in blue carbon, green shipping and marine renewables and foster the continued enhancement of spatial and data tools to support national and regional coordination across ocean uses. These new national strategy commitments and forthcoming initiatives, alongside existing ocean MEC efforts, will lay the foundation that will successfully guide U.S. efforts towards sustainably managing 100% of national waters.



5.2 | Priority Opportunities for Collaboration or Assistance

Turning this agenda into reality is primarily the responsibility of national governments, but the challenges also require new partnerships and a greater expression of international collegiality. All have a role to play so that no one is left behind.

Australia highly values international partnerships to drive ocean action. The Ocean Panel Action Groups are important collaborative coalitions that will help deliver the *Transformations*. Ocean Action 2030 will play an important role in supporting countries in building a sustainable ocean economy by developing and implementing national Sustainable Ocean Plans. The International Partnership for Blue Carbon is coordinated by Australia and is a key opportunity for collaboration.³¹ It has now grown into a global network of over 50 non-governmental organisations, intergovernmental organisations and research institutions from around the world that understand the importance of coastal ecosystems and are committed to their conservation. The International Partnership for Blue Carbon builds awareness, shares knowledge and accelerates practical action on blue carbon protection by connecting governments with blue carbon practitioners and scientists. In particular, the International Partnership for Blue Carbon is working to

- increase international commitments to protect coastal blue carbon ecosystems;
- improve national policies to protect coastal blue carbon ecosystems; and

- accelerate on-the-ground implementation of blue carbon protection and restoration activities.

The International Partnership for Blue Carbon welcomes expressions of interest from governments to join the partnership at any time. This is an opportunity for more Ocean Panel members with blue carbon ecosystems to join this partnership.

Canada sees great opportunity in working regionally with other Ocean Panel members, as well as with other countries and partners outside of the Panel, where appropriate, to advance the 100% approach and support the *Transformations* priority actions. Collaborating regionally will help leverage the Panel's collective experiences, knowledge and resources to overcome challenges and accelerate global progress towards meeting the 2030 commitments. In many cases there are already existing initiatives that can advance progress on priority areas. For Canada, priority thematic areas for collaborative action that support the 100% approach and implementation of the *Transformations* include, but are not necessarily limited to, the following:

- **High Ambition Coalition for marine biodiversity in areas beyond national jurisdiction and achievement of the '30x30' target.** In February 2022, Canada joined the High Ambition Coalition (HAC) on Biodiversity beyond National Jurisdiction (BBNJ) which was launched at the One Ocean Summit in Brest, France, to achieve an ambitious outcome of the ongoing

negotiations on a Treaty of the High Seas under the auspices of the United Nations. The HAC BBNJ recognises the contribution of such a treaty to the protection by 2030 of at least 30 percent of the ocean and seas. It also provides opportunities to work with other parties and share Canada's experience with area-based management tools (e.g. marine protected areas and other effective area-based conservation measures). In early 2023, Canada will host the fifth International Marine Protected Areas Congress to collaborate with Indigenous leaders and world-leading ocean conservation professionals towards protecting 30 percent of the global ocean by 2030.

- **Ongoing work on marine spatial planning.** Canada's advancement of domestic marine spatial planning is under development. The country is open to collaborative actions that relate to sharing knowledge, experiences and lessons learnt regarding marine spatial planning implementation from international partners. Opportunities to learn from countries that may be further advanced in such implementation, as well as sharing Canada's own unique experiences, would support collective efforts towards achieving the *Transformations* and the 100% approach.

- **The United Nations Decade of Ocean Science for Sustainable Development.** Canada is also an active member of the Ocean Decade Alliance under the (2021-2030) United Nations Decade of Ocean Science for Sustainable Development, which is a global network of leaders that inspires and stimulates action. Engagement in the Ocean Decade can be leveraged to support the efforts of the Ocean

Panel through the development of transformative ocean science to inform sustainable and inclusive ocean economies. Canada's engagement in the Ocean Decade is comprehensive, supporting all Decade outcomes, and important themes including ocean literacy, the ocean-climate nexus, Arctic science, advancing gender equity and the inclusion of Indigenous knowledge.

Chile considers that there are many opportunities to accelerate the implementation of the *Transformations* and the 100% approach, both regionally and globally. Chile believes that it is important to collaborate with different stakeholders at different levels—states, civil society, scientists, policymakers, philanthropies and local communities—which is why the country works in an inclusive manner to advance policies that allow for the development of a sustainable ocean economy. At the regional level, Chile wishes to work with the countries in the region to increase the possibility of developing a sustainable ocean economy. The Ocean Panel has five country members in the Americas, and it is a great opportunity to create synergies on topics such as ocean conservation, sustainable fisheries and new technologies, among others. For that, Chile promoted the creation of a new regional coalition, Americas for the Protection of the Ocean, which was launched at the Summit of the Americas and has the objective of creating a space where the countries, with the support of all stakeholders, can cooperate, coordinate and collaborate on ocean conservation at the regional level. It is impossible to achieve the goal to have 100% sustainable ocean management if different stakeholders don't work together or harness the opportunity to create the capacities to move forward and to be ambitious in the development of a new articulation of humanity's relationship with the ocean.

To help countries achieve a sustainable use of their marine and coastal areas, France believes that the science-to-policy role of the Ocean Panel could be further strengthened, for instance, through deepened relationships with key first-class scientific bodies, such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, the Intergovernmental Panel on Climate Change or the World Ocean Assessment programme.

The work of the Ocean Panel is gaining traction around the globe and reinforcing the crucial role of a sustainable ocean economy in addressing the critical challenges facing humanity and the planet. To sustain the momentum and accelerate the implementation of the *Transformations* and the 100% approach in **Ghana**, the following priorities for collaboration and assistance have been identified:

- **Support to prepare and implement a marine spatial plan.** Ghana recognises the central role of a comprehensive marine spatial plan (MSP) in coordinating the multiple and sometimes conflicting uses of the marine space and resources, and in ensuring the sustainable use of marine resources. With no history of preparing an MSP, technical, financial and capacity-building support will be required to make the process both nationally owned and inclusive, transparent and evidence based using reliable and credible data and local knowledge. For the effective translation of the MSP into actions, further support will be required in the form of long-term financing options for the management, design and implementation of a monitoring plan to conserve and protect fragile marine ecosystems, among others.

- **A vibrant community of learning about ocean knowledge.** A platform will be created to support peer-to-peer learning among a community of practitioners from the public sector, the business community and academia, among others, to facilitate discussions on new knowledge, good practises, success stories and emerging issues.
- **Mobilisation of private sector investment.** Private sector investment will be critical for the implementation of the *Transformations* and the 100% approach. This is especially the case in, for example, improving resilience of coastal assets and communities, restoring coastal and marine ecosystems and building critical coastal and marine infrastructure. In this regard, support will be required in developing and packing a portfolio of bankable projects that are amenable to private sector investors, identifying potential investors and pitching investment opportunities.

In accordance with the commitments made to develop and promulgate a Sustainable Ocean Plan, **Indonesia**, along with the other members of the Ocean Panel, should seek to enhance partnerships among Panel members in developing SOPs. There is a great opportunity to increase dialogue among Ocean Panel members in sharing knowledge and best practices facilitated by the Secretariat. Moreover, the Ocean Panel should seize the opportunity to collaborate with the Archipelagic and Island States (AIS) Forum. This forum gathers 47 archipelagic and island states to address sustainable development issues by increasing partnerships on blue economy, climate change mitigation and adaptation, among other topics. The AIS Forum, which Indonesia helped establish and develop, is a strategic avenue for the Ocean Panel to explore collaborations on the forum's and Panel's intersecting work.

For **Jamaica**, prime opportunities for collaboration and assistance exist for marine spatial planning and the fisheries sector. In 2015, Jamaica, with the support of UNDP, the Global Environment Fund and The Nature Conservancy, prepared a marine spatial plan for the Pedro Bank. Located in oceanic waters approximately 80 km southwest of Jamaica, the Pedro Bank is a submarine plateau more than three-quarters the size of mainland Jamaica. The objective of this MSP process is to include the drafting of a marine multi-use zoning design for the Pedro Bank to guide the sustainable use of marine resources. A collaborative approach was taken that enabled Jamaica to identify those areas that needed to be protected. A National Spatial Plan has also been drafted by the government for mainland Jamaica. Despite this groundwork, a suite of longer-term activities is required to operationalise the MSP. Namely, the clear identification of the relevant actors and roles that are required for the various marine policy and management frameworks, the drafting of regulations and corresponding legislative reforms to support the MSP recommendations, the design and implementation of a monitoring plan to evaluate the MSP and zoning plan efficacy and the development of long-term financing options for management. With regards to the fisheries sector, Jamaica has identified the following needed actions:

- Support for mariculture development by establishing a mariculture demonstration facility that will accommodate research and development and the training of persons in mariculture. The intention is to develop integrated approaches to mariculture development; these can be used to increase the availability of selected marine fish species for which the culture protocol is known, contributing to **ocean wealth** and **ocean finance**.
- Fish sanctuary development to facilitate the protection of nursery areas and juvenile fish species, thus ensuring that Jamaica is able to support the projected 30 percent of fully protected MPAs contributing to **ocean health**
- Development of under-utilised fish species—e.g. offshore pelagics, sea cucumbers, sea urchins—both in terms of the capture and culture fisheries to contribute to **ocean wealth**
- Dedicated financing to support investment and development of the sustainable fisheries and aquaculture sector. It is hoped that such opportunities will exist for **ocean finance**. Potential areas that require financing include the development of fish hatcheries for both the public and private sectors, the development of onshore landing infrastructure, the development of infrastructure for water distribution systems to support aquaculture, and support for stakeholders to improve and implement production standards to increase the quality of fishery products and reduce waste in the fisheries sector.
- Support for **ocean knowledge** regarding sustainable fisheries and aquaculture requires investment in research and development capability—e.g. for research vessels, laboratories, equipment. The output of this research will also need to be translated into a language that stakeholders can understand so they can help increase public awareness.

Negotiations for an international, legally binding instrument on plastic pollution, including in the marine environment, whose launch was decided at the fifth session of the United Nations Environment Assembly (UNEA 5.2) are a significant endeavour that will aid in the achievement of the *Transformations*, including actions related to **ocean health**. Since this issue requires concerted efforts by the whole of the international community, it is crucial that as many countries as possible, including major plastic consuming and discharging countries, participate to formulate an effective international treaty. To this end, **Japan** highlights the importance for countries under varying economic and social conditions, including the members of the Ocean Panel, to become actively involved in the negotiations, thereby acting as a driving force in the process.

Kenya identifies three priority avenues for increased collaboration opportunities, as follows:

- Financial institutions, e.g. the African Development Bank
- Development partners, e.g. the World Bank, Green Climate Fund
- Regional initiatives, e.g. through the Great Blue Wall³², and intra-regional partnerships, e.g. through the African Continental Free Trade Area

For **Mexico**, the development of international cooperation projects that facilitate the exchange of knowledge, best practices, technology and capacity building are essential to accelerate the implementation of the *Transformations* and the 100% headline commitment. Financing for development and effective implementation of international cooperation through its various schemes such as Official Development Assistance, North-South, Triangular and South-South

Cooperation must be a priority among the Ocean Panel members. Greater communication about achievements and progress among member countries is required. Regional alliances can also be established to promote the fulfilment of common objectives and interests in ocean matters that are shared by all the countries that integrate the Ocean Panel's agenda. This type of alliance could have better, more effective results, achieved in a timely manner. Coordination among the Ocean Panel's member countries to carry out joint applications to the eighth replenishment of the GEF or to other types of financing mechanisms, either through intergovernmental or multilateral banks, is another path that should be considered. Initiatives such as the World Bank's PROBLUE are necessary to implement the *Transformations*, providing resources to boost the actions carried out at the national level and promoted at the international level.

Namibia understands that a healthy and sustainable ocean will not only fight climate change but also contribute to environmental sustainability, food security, poverty eradication and social equity. Namibia has therefore committed to implementing three critical areas of the *Transformations*—**ocean wealth**, **ocean health** and **ocean equity**—with corresponding themes of sustainable ocean food, sustainable ocean energy, sustainable ocean transport, a precautionary approach to seabed mining, reducing greenhouse gas emissions, protecting and restoring marine and coastal ecosystems, reducing ocean pollution and promoting equal opportunity for people to benefit from the ocean. At the regional level, Namibia collaborates with Angola and South Africa, alongside development partners, to advance maritime research activities under the Benguela Current Convention to improve ocean governance.

Norway thinks that the Action Groups created under the Ocean Panel umbrella constitute good platforms for implementing the *Transformations* and the 100% approach. In particular, Ocean Action 2030 plays a crucial role in assisting countries in developing Sustainable Ocean Plans. The *Sustainable Ocean Plan Guide* (Ocean Panel 2021) and the convening of regular learning events are helpful for sharing experiences and good practice among countries developing their SOPs. Furthermore, collaborative efforts are needed to address ocean and climate challenges. The shipping industry is a major sector in Norway and reducing emissions from ocean transport is a priority. Responding to the progress made at the 26th United Nations Climate Change Conference of the Parties (COP26) with regard to a stronger focus on tackling emissions from this sector, Norway and the United States launched a Green Shipping Challenge for COP27. The Green Shipping Challenge is intended to encourage Parties, port authorities, companies and other actors in the shipping value chain to come forward with concrete announcements at COP27 that will help put the international shipping sector on a credible pathway this decade towards full decarbonisation no later than 2050. The Green Shipping Challenge and similar initiatives are needed to accelerate progress towards the Panel's outcomes as set out in the *Transformations* and bolster the world's resilience.

Palau identifies three priority opportunities, or 'calls to action', for collaboration and assistance:

- Raising awareness of the need to increase investments, partnerships and support in ocean science, catalysing opportunities to build on existing and new partnerships across all sectors
- Generating the global ocean science needed to support the sustainable development of our shared ocean.

Palau continues to emphasise the importance of Indigenous and local knowledge complementary to science-based studies

- Increasing accessibility for Small Island Developing States to financing mechanisms that address and follow existing capacity and structural needs

Portugal is an oceanic country with a coastline of approximately 2,500 km. The country's exclusive economic zone is one of the world's largest, spanning 1.7 million km² and including a myriad of ecosystems and resources. The Portuguese maritime triangle (Continental Portugal plus the Azores and Madeira archipelagos) represents 48 percent of all maritime waters under the jurisdiction of the member states of the European Union in areas adjacent to the European continent. Additionally, the Portuguese continental shelf is extremely important, with its delimitation beyond the 200 nautical miles currently being revised within the United Nations. The purpose is to increase the area encompassed by the maritime space under Portuguese sovereignty or national jurisdiction to 4.1 million km², expanding the sovereignty rights beyond the EEZ for purposes of conservation, management and use of the natural seabed soil and subsoil resources. This will make Portugal an even more Atlantic nation. The international ocean agenda gained new momentum and a new dimension over the past five years. Over the 2021–2030 decade, the ocean should be the focus of environmental, social, economic and geopolitical dimensions, as the world is acknowledging the vital relevance of the ocean for humans and the planet alike. Portugal must assume the competitive advantages of its geostrategic location, technological skills and maritime tradition, cutting down on administrative or tax constraints that can be detrimental to the former, and must invest in qualifying human resources and

use the state's authority over the ocean. The pattern of sustainable management will be a decisive contribution to the sustainability of our planet in the bluer future we aspire to for the next generations. Portugal is engaged in the following:

- Promoting the re-industrialisation of traditional sectors through blue biotechnology, supporting the initiative to set up an international hub for the 'blue bioeconomy', with a special focus on entrepreneurial biotechnology projects and blue biorefineries
- Developing a circular blue economy and promoting business models that focus on collecting marine litter and industrial recovery
- Continuing the commitment to ocean renewable energies and supporting innovation projects
- Guaranteeing the management and sustainability of marine resources, implementing the National Marine Space Planning Situation Plan to develop the blue economy in a sustainable way
- Implementing a national network of marine protected areas in the Portuguese sea and defining the country's management plans, with the objective of reaching 30 percent of the national maritime space within a marine protected area by 2030

- Investing in marine reforestation to support biodiversity and create nursery grounds and artificial reefs in conjunction with marine protected areas

The world's oceans are interconnected as one global ocean (NOAA 2021). While the Ocean Panel's headline commitment is to sustainably manage 100% of the ocean areas under national jurisdiction, the implementation of the *Transformations* and the 100% approach will be mutually beneficial to all Ocean Panel member nations and the world. For the **United States**, collaboration on the following priority opportunities can accelerate the *Transformations* and the 100% approach:

- Conducting cutting-edge scientific research
- Developing and adopting new tools and technologies
- Exchanging knowledge to share effective marine resource management strategies

Prioritising these actions will enhance scientific research, stimulate development and adoption of new tools and technologies, and foster new management strategies to accelerate the transition to a sustainable ocean economy.



5.3 | Priority Issues Gaining Momentum in the Transition to a Sustainable Ocean Economy

Achieving the vision of 100% sustainable ocean management and the 74 priority actions of the *Transformations* will require a concerted effort with Ocean Panel members leading by example to demonstrate the value of putting sustainability at the heart of ocean management. Success of the Ocean Panel's action agenda is highly reliant on member countries using the Ocean Panel machinery to drive collective action around shared priority issues. This section aims to enable greater country collaboration and active engagement in informing, directing and driving the Panel's collective agenda for maximum impact.

Australia recognises that a healthy ocean is the foundation of a sustainable ocean economy. There are several areas of the *Transformations* that are gaining momentum in the country, including the following:

- Managing an expanded marine protected area estate to include the Indian Ocean Territories, taking the percentage of Australian waters that are protected up to 45 percent
- Developing a regulatory framework to support offshore renewable energy projects
- Managing plastic pollution including through the National Waste Policy Action Plan, National Plastics Plan and ghost nets programme
- Supporting blue carbon restoration and conservation through on-the-ground projects and partnerships in recognition that these habitats

support marine life and local economies and protect the coasts from rising tides and storms

- Embracing new technology for research and decision-making, for example, using GPS (Global Positioning System) tracking to locate and retrieve ghost nets in Northern Australia and using artificial intelligence for rapid coral monitoring
- Leading science and research on reef restoration and adaptation to climate change

Expanding Indigenous Protected Areas to include sea country. This government programme supports Indigenous organisations (First Nations people) to undertake consultation and planning activities to increase the area of 'sea country' in Indigenous Protected Areas and carry out important on-the-ground or on-sea work like sea patrols, managing pests and weeds and conducting surveys and beach clean-ups. Sea country Indigenous Protected Areas boost the conservation, protection and management of Australia's unique marine environment, and provide Indigenous communities with economic and employment opportunities, together with cultural, social, health and well-being outcomes. The Australian government is also doubling the number of Indigenous rangers by the end of the decade so that 3,800 First Nations people will be supported in caring for their traditional land and sea country.

Developing a risk management and disclosure framework to support nature-positive outcomes in the ocean. The Taskforce on Nature-related Financial Disclosures is developing a global risk management and disclosure framework for organisations to report and act on evolving nature-related risks and opportunities. Organisations will be able to apply this framework to

the ocean ‘realm’ and the Taskforce is developing specific guidance to assist with this. The Taskforce is also assisting organisations to understand the ocean environment by compiling ocean-specific resources such as the Ocean Data Platform. The Taskforce’s overarching objective is to enable and promote global consistency in nature-related reporting and thereby support a shift in global financial flows towards nature-positive outcomes. The Australian Government is the second largest sovereign funder of the Taskforce and is working with the private sector to ensure the Australian experience of trialling the beta framework is appropriately represented and incorporated into the design of the final framework.

As climate change continues to permeate and impact society in myriad ways, addressing it remains at the forefront of **Canada’s** priorities both domestically and internationally. The interplay between the ocean and climate is an inherent part of the climate change challenge and must be a foundational consideration in the building of a sustainable ocean economy. This overarching priority issue continues to be reflected in the mandates of the country’s federal government departments with responsibility in the ocean-climate space, including through the country’s domestic emissions reduction plan, the commitment to achieving net-zero shipping and the inclusion of climate change considerations throughout its blue economy development.

- The government of Canada recently published *Canada’s 2030 Emissions Reduction Plan (ERP)* to achieve a 40 to 45 percent reduction in emissions from 2005 levels by 2030. The plan is another major step for Canada in taking action to address climate change. The ERP is a roadmap that goes sector by sector with the measures needed for Canada to reach this

ambitious and achievable 2030 emissions reduction target, as well as reaching net-zero emissions by 2050, in a fair and transparent way. The comprehensive plan will drive reductions across all sectors of Canada’s economy, including oil and gas, heavy industry, agriculture, building and waste. CAD 9.1 billion in new investments are being made to mobilise Canada towards a truly sustainable economy and to help lead the way for the global transition to cleaner industries and technologies. The ERP builds on the strong foundation set by the *Pan-Canadian Framework on Clean Growth and Climate Change* and Canada’s strengthened climate plan. These efforts are moving the country in the right direction. According to the 2022 *National Inventory Report*, Canada’s greenhouse gas emissions decreased to 672 megatonnes of carbon dioxide equivalent in 2020, representing a net decrease of 69 megatonnes (or 9.3 percent) from 2005 (Government of Canada 2022). This plan will build on this progress and chart the course to achieving Canada’s climate goals—a path that the ERP recognises will include cultivating the mitigation potential of blue carbon as a nature-based solution.

- Canada’s Department of Transport supports the country’s transition to net zero including by working with international partners to advance ambitious goals and measures for international transportation. In fact, Canada signed on to the *Declaration on Zero Emission Shipping by 2050* in April 2022 to signal its support for decarbonisation of the maritime sector. Canada will engage with key marine stakeholders to explore how to support the development of green shipping corridors. This ongoing

work will involve identifying actions to address the barriers to forming zero-emission shipping corridors.

Canada recognises that a sustainable ocean economy is possible only when collective efforts cut across jurisdictions, agencies, geographies, cultures and generations. For example, the government of Canada is conducting a policy analysis to respond to a federal commitment to modernise Canada's Oceans Act to require the consideration of climate change impacts on marine ecosystems and species in regional ocean management. Climate vulnerability work is also being pursued to better inform marine conservation planning and management. These changes will help support the country's blue economy development. A continued effort to ensure diversity and inclusiveness in all aspects of a sustainable ocean economy, including ocean and climate change science, is also essential to unlock opportunities and foster the much-needed transformation that is required to achieve the Ocean Panel's ambitions in light of climate change. Canada will continue to seek opportunities to advance equity throughout all aspects of its contributions to the *Transformations*, and in its fight against climate change.

One of **Chile's** main priorities is to build ocean literacy and skills, consistent with the United Nations Decade of Ocean Science and with the understanding that science should be a priority in decision-making. Chile promoted the creation of the coalition Americas for the Protection of the Ocean with the aim of establishing a space for collaboration, cooperation

and coordination at the political level on marine protected areas and ocean conservation to generate ecologically connected marine corridors in the region, protecting essential habitats and migratory routes on a regional scale.

The **Fijian government** understands the importance of diversifying its economic portfolio, particularly after the impacts of the COVID-19 pandemic, and as such is committed to a 'blue economic recovery'. This is being done currently through the issuance of Fiji's first blue bonds as the country seeks to build capital finance for investments in innovative 'blue' ideas. Plastics pose a significant threat to marine life. To counter this, the Fijian government introduced the ban on single-use plastic less than 50 microns in thickness in 2020 followed by the ban on polystyrene cups, plates, containers and trays in 2021. Biodegradable products are being introduced into the domestic market at affordable prices and people are being encouraged to re-use materials to reduce individual carbon footprints.

In 2023, the revision of the EU directive establishing a framework for community action in the field of marine environmental policy will give EU member states, like **France**, an opportunity to harmonise their assessment criteria towards healthy seas and explore ways for cooperation. The goal of this directive was to reach a good environmental status in EU seas by 2020 and this goal has not yet been reached. The revised goal of the directive should be more ambitious than the previous one. In addition, the revision of the Common Fisheries Policy in 2023 should align with the goals of the good environmental status of European waters.

For **Ghana**, illegal, unregulated and unreported fishing, marine pollution and marine spatial planning are the top three issues of high concern in the country. IUU fishing poses a serious threat to the sustainable exploitation of Ghana's aquatic resources. These activities have created a large decline in important fish populations with the potential to cause an irreversible change in the marine ecosystems. They have also unduly affected the livelihoods of fishing communities, lowered protein intake and contributed significantly to the increasing depth of poverty in fishing communities. The continuous pollution of the ocean from both terrestrial and sea-based activities poses a severe threat to the health of the ocean and its ability to provide the many essential services that sustain businesses, communities, livelihoods and weather systems, among others. Plastic debris in particular is hampering fishing activities and damaging sensitive marine and coastal ecosystems. The presence of marine debris in the ocean not only pollutes the water but also entangles marine species such as fish, shrimp and crabs and can sometimes result in fatalities. Tourism and recreational activities at beaches are negatively affected by marine debris which could lead to potential revenue losses. Curbing marine pollution will go a long way towards improving **ocean health, ocean equity and ocean financing**. To sustainably manage its marine space and resources, Ghana must develop a nationally owned framework that organises the use of the ocean space, and the interactions among the various economic activities such as shipping, fisheries, mining and tourism, the marine environment and coastal communities, taking into consideration the local context, capacity and aspirations.

Indonesia continues to work on priority issues and actions within the transformation areas of **ocean health and ocean finance**. In **ocean health**, Indonesia is increasing efforts to utilise nature-

based solutions to reduce greenhouse gas emissions. The Ministry of Marine Affairs and Fisheries has conducted blue carbon research activities including quantifying the carbon uptake capacity of mangrove forests in the country to support conservation efforts and actions to mitigate global emissions reductions. The goal is to increase coastal ecosystem restoration, such as through the National Mangrove Restoration and Rehabilitation Program, which is targeting 6,000 km² of mangroves to restore across Indonesia and intensify marine protection by working to achieve the target of 300,000 km² of MPAs by 2030. In **ocean finance**, Indonesia will start to implement blue bonds during 2025–2030.

The key priority issues for **Jamaica** are the following:

- Given the wide range of applicable legal instruments, an integrated and coordinated approach will be required among the relevant regulatory agencies, namely the National Environment and Planning Agency, Forestry Department, Jamaica National Heritage Trust and the National Fisheries Authority, to ensure that the proposed legal protection measures are efficiently and effectively applied and enforced
- The effective management of protected areas with the full support of high-level decision-makers
- Port management and logistics with significant expansion underway in port development and special economic zones

As a responsible fishing nation, **Japan** emphasises sustainable fisheries and their sound development. The country has played an active role in promoting the sustainable use of marine resources, including

addressing IUU fishing, in cooperation with international organisations such as the FAO, regional fisheries management organisations and relevant countries. In Japan, the Fisheries Act was substantially amended in 2020 for the first time in 70 years and a new resource management system that is built on total allowable catch management on the basis of maximum sustainable yield is in place to realise the sustainable use of resources based on scientific evidence. In the same year, another act was established to prevent IUU fishing-origin products from entering the Japanese market and ensure proper distribution, which is scheduled to enter into force in December 2022. In 2020, Japan also declared its intention to realise net-zero emissions by 2050. In 2021, Japan declared that it would aim to reduce its greenhouse gas emissions by 46 percent in financial year 2030 from its financial year 2013 levels and would continue strenuous efforts in its challenge to meet the ambitious goal of cutting its emissions by 50 percent. In the ‘new form of capitalism’ policy of the Kishida administration, climate change has been regarded as a critical issue to overcome. To achieve net-zero emissions by 2050, it is necessary to introduce renewable energy to the maximum extent possible. Japan will therefore accelerate the introduction of offshore wind power generation that is long term, stable and inexpensive, and that also contributes to regional development. Japan will also work to develop world-class, cutting-edge floating offshore wind power generation technology. Lastly, at the 2019 Group of 20 (G20) Osaka Summit, Japan announced its ‘Osaka Blue Ocean Vision’—which aims to reduce additional pollution by marine plastic litter to zero by 2050—and has shared it with 87 countries and regions so far. Under this vision, Japan launched the MARINE Initiative to support developing countries’ efforts in waste management through capacity building and infrastructure development and has been working to train 10,000 people for this

by 2025. Currently, more than 6,000 people have been trained. Japan will also continue to play a leadership role in developing an international, legally binding instrument on plastic pollution.

The celebration of UNEP’s 50th anniversary on 3–4 March 2022 was a landmark event and UNEA 5.2 from 28 February to 2 March 2022 was one of the most successful events in history. **Kenya** is proud to have championed the creation of this inclusive assembly. During the events, Kenya highlighted its commitments that support the ambitions of the Ocean Panel. Highlighted priority actions included the following:

- Establishing a legally binding plastic pollution instrument—which is Kenya’s most urgent issue—and engaging the executive director of UNEP to inform on the next steps towards meeting this goal
- Establishing an inclusive science policy panel to develop an international, legally binding instrument for the sound management of chemicals and plastics
- Amplifying the nexus between plastic pollution, the ocean and the circular economy. Kenya will focus on mobilising and promoting dialogue, campaigns and commitments towards building a circular economy
- Engaging in enhanced discussions with the Africa Group, G7 and China to develop a framework to ensure green recovery post COVID-19 by mobilising global resources and a better governance framework
- Strengthening UNEP as was agreed in previous UNEP meetings

Other priority issues for Kenya include creating regulations surrounding food from the sea, including those focused on fisheries, fish landings and accelerating ocean equity. Equity would be improved by, for example, facilitating women's involvement in income-generating activities, such as seaweed farming.

Mexico is currently prioritising the following actions, among others:

- Establishing a thorough process of building a Sustainable Ocean Plan with a solid structure based on current national instruments, laws and policies on seas and coasts, seeking to avoid duplicating existing efforts
- Moving towards a roadmap for the effective implementation of the priority actions contained in the recently published *Implementation Strategy for a Sustainable Ocean Economy in Mexico (EIEOS 2021–2024)*,³³ which will place the country on track to achieve the *Transformations* necessary to make the transition to a sustainable ocean economy
- Effectively implementing a great range of initiatives and projects currently in the process of execution that will catalyse Mexico's transition in line with the headline commitment, as well as other ocean commitments previously announced by the government of Mexico in different international fora

Namibia's Sustainable Blue Economy Policy is in its final stage of completion and is expected to be implemented in the second half of 2022. Through this policy, in addition to the country's annual budgetary allocations for maritime research, Namibia is committed to facilitating ocean research and protection, especially on fishery stocks

and marine ecosystems; intensifying the fight against illegal, unregulated and unreported fishing; and improving ocean governance. Namibia is also focusing efforts on achieving large-scale, low-cost, ocean-based renewable energy development. A wind power generation project is already up and running in the town of Lüderitz, and two plants for green hydrogen projects are being constructed during 2022 and 2023 in the Erongo and Karas regions, respectively.

The Ocean Panel's ambition of a globally shared data revolution that contributes to sustainable ocean management includes recommendations for filling data gaps and digitising information on the ocean floor. Since 2005, **Norway** has mapped the ocean floor in its exclusive economic zone through a national, interdisciplinary programme (MAREANO). To date, an area of 288,750 km² worth of bathymetry and other data have been acquired. Biological, geological and chemical data are directly utilised in (sectoral) management of the ocean, contributing to achieving SDG Target 14.a. The Ocean Panel has recommended developing a complete sequence of national ocean accounts. Statistics Norway has developed a pilot for a satellite account for the ocean that shows the ocean's contribution to Norwegian value creation from 2016 to 2019. This is a first step to comprehensive ocean accounting and will be compatible with ecosystem accounts. This can be a tool for achieving a more comprehensive and sustainable management of marine ecosystems. BarentsWatch—a collaboration among 8 ministries and 29 administrative agencies and research institutes³⁴—collects, develops and shares information about the sea, the environment and activities in the sea across sectors. Norway has also committed approximately NOK 17 billion to a full-scale carbon capture and storage (CCS) project called Longship. It will be the first CCS project to integrate a complete

chain of individual CO₂ providers, a flexible cross-border transport solution and an open-access storage infrastructure. It offers companies across Europe the opportunity to store their CO₂ safely and permanently underground. European companies have shown significant interest in Longship and the Norwegian storage solution. Phase one of Longship, planned to be completed by mid-2024, will have a storage capacity of up to 1.5 million tonnes of CO₂ per year. The transport and storage operator Northern Lights has already signalled its ambitions for a second phase, with a minimum storage capacity of 5 million tonnes of CO₂ per year. Northern Lights also expects to sign its first commercial agreement for CO₂ storage in 2022. Norway wants to provide attractive storage areas to companies that provide solutions on a commercial basis to industrial customers. There is also an increased commercial interest for CO₂ storage. In April 2022, two licences to store CO₂ were awarded, one in the North Sea and one in the Barents Sea. An additional area was also announced for CO₂ storage due to interest from the industry for further licensing. Norway welcomes the development of the Norwegian Continental Shelf as a leading province for CO₂ storage. Green shipping is a central part of the country's maritime policy. Norway's ambition is to reduce emissions from domestic shipping and fishing

vessels by half by 2030 and promote the deployment of zero- and low-emission solutions for all vessel categories. Several policy instruments are in place to make the shipping sector greener, including taxing emissions of CO₂ and nitrogen oxides and supporting research and development through loans and grants. Norway is also planning to set requirements for low and zero emissions in segments such as car ferries, high-speed passenger vessels, vessels in aquaculture and offshore. Today, more than 80 Norwegian ferries have batteries installed, about one-third of all Norwegian ferries.

The top three priority issues that are gaining momentum in **Palau** are sustainable fisheries, aquaculture and tourism. In 2022, Palau committed to generating 100 percent of its energy from renewable sources by 2032. This is a monumental undertaking for a small island country and will require support from other governments and the NGO community through the deployment of both innovative technologies and technical capacity. Palau's Blue Prosperity Plan includes the development of sustainable fisheries, restorative aquaculture, high-value ecotourism and innovative business models, all designed to deliver optimal economic benefits while protecting Palau's ecological resources.



The blue economy is a focal element in **Portugal's** development strategy. Portugal wishes to promote entrepreneurship, jobs and innovation, particularly in the ocean bioeconomy. With this aim, Portugal will operationalise the sea campus, including by creating a blue hub to double the number of blue economy start-ups, as well as the number of projects financed using public funding. As announced by the Portuguese prime minister at the United Nations Ocean Conference in 2022, the priority issues for the country are as follows:

- Scientific knowledge needs to be at the core. In this sense, making the most of the Azores' central location, Portugal will continue to invest in the Air Center initiative as a scientific collaboration network among countries and research institutes in the fields of space, atmosphere observation, the ocean, climate and energy.
- By the end of 2022, the aim is to create a United Nations Decade of Ocean Science for Sustainable Development office.
- Portugal has the greatest marine biodiversity in Europe, and the target is to ensure that 100 percent of the marine area under Portuguese sovereignty or jurisdiction is assessed as being in a 'good environmental state' and classify 30 percent of the national marine areas as protected by 2030.
- Invest in producing ocean renewable energies with a view to reaching 10 gigawatts of capacity by 2030 and, together with the European Maritime Safety Agency, create a pilot area for controlled emissions on Portuguese seas.

The overarching priority issues gaining momentum in the **United States** as directed by the congressionally mandated, secretary-level, interagency Ocean Policy Committee (OPC) are the following (OPC 2021):

- Maximise the environmental, economic and social benefits the ocean provides to all Americans
- Develop ocean-based solutions to mitigate climate change and adapt to its effects
- Identify the strategic direction for ocean science and technology that will inform policymaking and sustainable management practices

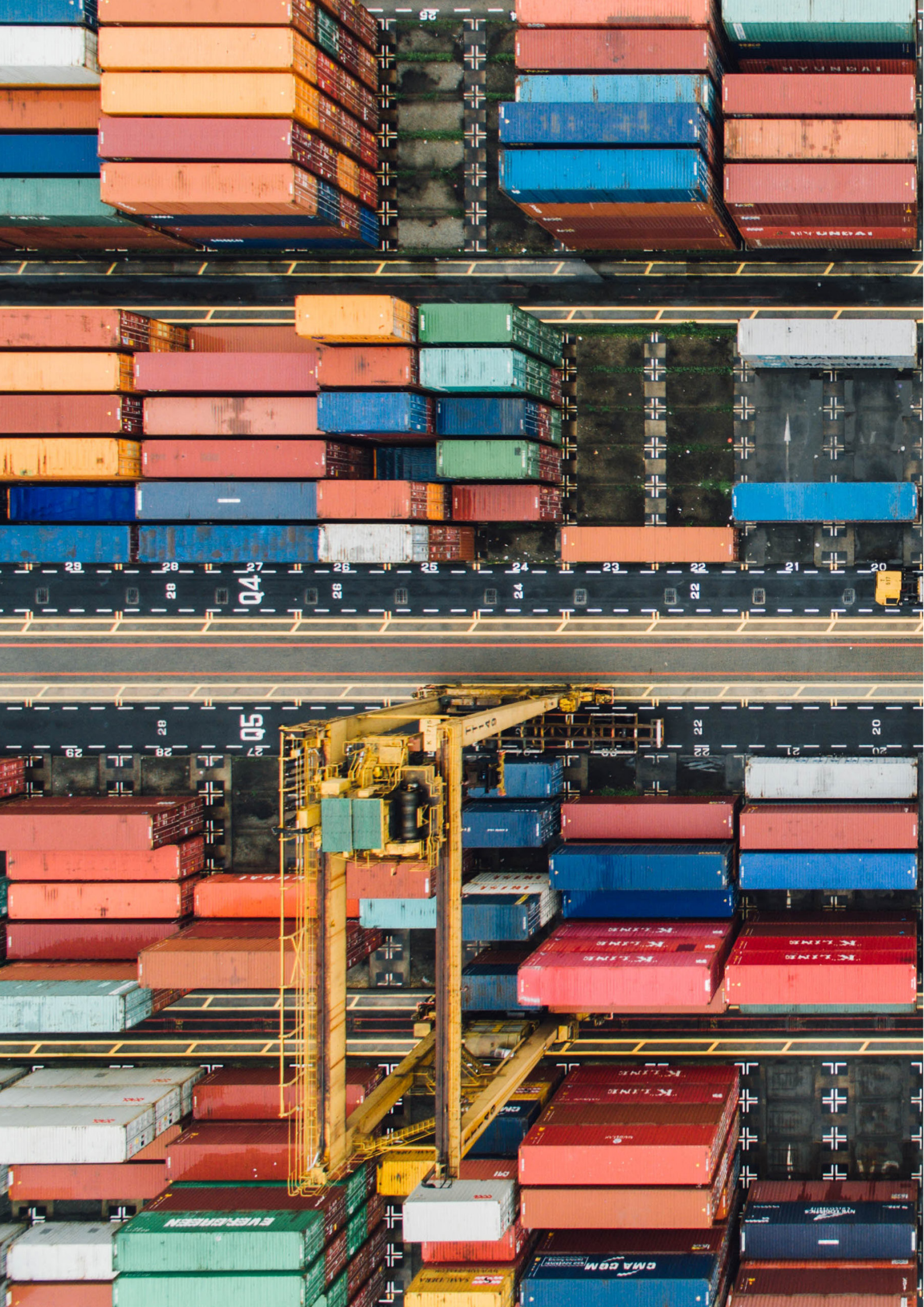
These priority issues serve as guiding principles informing U.S. policymaking to establish a sustainable ocean economy and reflect key focus areas embedded across the U.S. ocean science and technology enterprise as well as resource management strategic directives. A few U.S. initiatives are highlighted below:

- The U.S. America the Beautiful initiative promotes the conservation and restoration of at least 30 percent of lands and waters by 2030 to create jobs and boost the economy, tackle the climate crisis and support equitable access to the outdoors (BHA 2021).
- The OPC has committed to the continued development and application of spatial data and tools to support national and regional coordination across ocean uses (OPC 2022).
- The OPC's Ocean Science and Technology (OST) Subcommittee's recently released *Opportunities and Actions* document highlights offshore wind energy development, implementation of blue carbon

solutions and the development of resilient coastal communities as immediate opportunities for ocean solutions. The OST further commits to developing a diverse and inclusive blue workforce, all while enhancing racial justice and equity (SOST 2022).

- The OST's National Ocean Mapping, Exploration, and Characterization Council and the associated Interagency Working Group on Ocean Exploration and Characterization recently released a report outlining the importance of ocean exploration and characterisation efforts to identify and assess marine critical minerals and provide baseline information on associated ecosystems. The report also discussed the challenges associated with large-scale data acquisition, processing, storage and use in ocean exploration and management decision-making (IWG-OEC 2022).





An aerial photograph of a shipping yard. The image shows numerous stacks of intermodal containers in various colors, including blue, red, yellow, and white. A yellow gantry crane is visible on the left side, positioned over a stack of containers. The ground is marked with white dashed lines and numbers, indicating different sections or lanes. The overall scene depicts a busy and organized logistics hub.

6. Harnessing the Momentum behind the Ocean Panel

6.1 | The Value of the Ocean Panel to Its Member Countries

Home to over 80 percent of all life on Earth, the ocean is the world's largest carbon sink and a key source of food and economic security for billions of people. The relevance of the ocean for humanity's future is undisputed—though not usually fully appreciated. The ocean has much greater potential to drive economic growth and equitable job creation, sustain healthy ecosystems and mitigate climate change than is widely realised today. Lack of awareness of the potential as well as management and governance challenges pose impediments. Until these impediments are removed, ocean ecosystems will continue to be degraded and opportunities for people lost. The Ocean Panel has already identified a clear path to a thriving and vibrant relationship between humans and the ocean—one that is informed by science, energised by engaged people and emboldened by visionary leaders.

Through the Ocean Panel, **Australia** welcomes the opportunity to shape strategic ocean policy and affirms its commitment to work with ocean leaders and regional partners. The Ocean Panel supports and advances Australia's national ocean policy agenda by forging partnerships, providing the evidence base and building a collective understanding that a healthy ocean underpins a sustainable ocean economy. The *Transformations* framework released by the Ocean Panel provides value to the world by outlining practical solutions to transition to a sustainable ocean economy.



'Australia is proud to have been a member of the Ocean Panel since it began in 2018. Outstanding

contributions by the Panel include the 2019 UN Climate Summit statement *Call to Ocean-Based Climate Action* and the 2020 *Transformations for a Sustainable Ocean Economy*. These documents made a clear case for rapid change in the ocean economy towards effective protection, sustainable production and equitable prosperity for all. Since 2018, Australia has increased its marine protected areas to 45 percent of its exclusive economic zone and increased its investment in ocean actions, both restoration and management of the Great Barrier Reef and its extensive coastal zone. Australia has also increased its support for regional neighbours—especially for the large ocean states of the Indo-Pacific region—to advance sustainable ocean management. Moving from ideas to actions, Australia strongly supports the Ocean Panel's focus on global-scale Action Coalitions through new partnerships for offshore renewable energy, decarbonising shipping transport, restoration of coastal systems for sustainable food and livelihoods, biodiversity protection and 'blue carbon'. There are now actions underway for sustainable ocean tourism and for sourcing expertise and finance to achieve the goal of sustainably managing 100% of all exclusive economic zones. Australia is committed to the Ocean Panel's ocean action agenda, strengthening global and regional momentum towards delivering on the Sustainable Development Goals, achieving goals of the Paris Agreement and the post-2020 Global Biodiversity Framework.'

Dr Russell Reichelt AO

With the longest coastline in the world, direct access to three oceans and a rich maritime history, **Canada** is truly an 'ocean nation'. The challenges presented to the

world's ocean today are global in scope and therefore require global responses, and Canada has long recognised the need to participate in multilateral efforts to address such universal challenges. For Canada, the Ocean Panel represents an invaluable opportunity to build positive momentum towards a sustainable ocean in a cooperative and action-focused way. The Ocean Panel facilitates cooperation and builds robust international partnerships, both of which are essential to effect meaningful change, quickly and on a global scale, to ensure the sustainability of our ocean. The Panel is a unique forum through which decisions made at the highest levels in multiple countries are ultimately reflected into action, and where countries can share experiences and learn from one another as they work together towards common objectives, including the Panel's collective commitment to sustainably managing 100% of the ocean area under national jurisdiction, guided by Sustainable Ocean Plans, by 2025. Canada has endorsed and embraced the Panel's flagship document, *Transformations for a Sustainable Ocean Economy: A Vision for Protection, Production and Prosperity*, as the framework for the transformative action that is needed to secure ocean health and wealth for the future. As an active member of the Panel, Canada is committed to continued collaboration with its international partners to share knowledge and expertise; take coordinated and complementary action, including on *Transformations* actions; and seek ways to leverage the efforts of other international initiatives, such as the United Nations Ocean Decade, to support the work of the Panel.



'The challenges presented to the world's oceans are global in scope and require global responses.

The Ocean Panel is well positioned to lead the effort to tackle those challenges and as the prime minister of Canada I am proud to be a member, among other world leaders, committed to building a sustainable ocean economy now, and into the future.'

Prime Minister Justin Trudeau

For **Chile** it is an honour to be part of this select group of 17 countries, recognised as leaders in oceanic matters at a global level, which makes up the High Level Panel for a Sustainable Ocean Economy. Chile has an oceanic vocation, which has been reflected throughout its history, not only from a geographic perspective but also from a cultural, social, economic and, of course, political perspective, especially in terms of the country's foreign policy. Today more than ever, Chile reaffirms its commitment to the conservation and sustainable use of the ocean, based on the principles of a healthy, safe, sustainable and governable ocean and a 'turquoise foreign policy' and these objectives can be addressed from a multilateral perspective.

Through the Ocean Panel, **Fiji** is able to advocate for and inform like-minded countries on its activities and progress within the ocean-climate change nexus. It provides a platform through which it can better synergise efforts at international events and functions as a link to forming partnerships with other development institutions such as the Organisation for Economic Co-operation and Development. A synergised effort is required to address the systemic barriers that exist in accessing climate finance which would assist Small Island Developing States in best adapting to the complex challenges faced by the ocean, and the people who depend on it. The Ocean Panel provides such an opportunity.

When **France** joined the Ocean Panel in February 2022 during the One Ocean Summit in Brest, President Macron described the Panel as:



‘instrumental in our joint search for global, operational and efficient tools towards a renewed governance of the oceans’.

President Emmanuel Macron

The ocean covers more than 70 percent of the surface of the planet. It provides many of the services necessary for life on Earth. As such, nearly three billion people depend directly on marine and coastal biodiversity to meet their needs. Today, however, the ocean is endangered by climate change and the many associated threats to marine biodiversity. Against this background, based on a common understanding of the need to improve the state of the ocean, the countries of the Ocean Panel have committed to sustainably manage the entire ocean area under national jurisdiction by 2025 and to support the global goal to protect 30 percent of the ocean by 2030. The Panel countries aim to advance a sustainable blue economy that benefits coastal communities and national economies, while achieving positive outcomes for biodiversity, ocean health and climate change mitigation and adaptation. The Panel offers a privileged platform for ambitious countries to cooperate and share best practices, while providing science-to-policy tools and driving the broader global ocean community towards a more sustainable relationship with the ocean.

Being a member of the Ocean Panel reflects **Ghana’s** renewed commitment to take the necessary steps to reverse the deteriorating health of the ocean and transition to a sustainable use of marine and ocean resources to better deliver substantial economic, environmental and social values for its development in line with SDG 14. Ghana is proud to be part of this

noble coalition of countries championing the development of a sustainable ocean economy that carefully balances economic, social and environmental imperatives, including addressing climate change. The Ocean Panel provides a platform for joint actions, experience sharing and access to ocean knowledge informed by the latest science. Vigorously pursuing the *Transformations* agenda will foster a win-win interaction across multiple human activities and the ocean to ensure that the ocean can help provide meaningful solutions to critical issues such as climate change, food and nutrition security, poverty, decent work and clean energy. The ocean is the life source of many of our communities and over centuries it has been key to economic and socio-cultural activities. There is absolutely no doubt that a healthy and sustainable ocean economy holds the key to the sustainability of our country and the prosperity of current and future generations.

Being part of the Ocean Panel is a manifestation of the **Indonesian government’s** commitment to achieving a sustainable ocean economy and the 2030 Sustainable Development Goals agenda. The sustainable ocean economy paradigm is a solution to achieving ecosystem protection and ocean economic development and raising welfare, especially for coastal-dependent communities and small-scale fishers. The consistent implementation of a sustainable ocean economy in Indonesia will yield positive results. Indonesia continues to support the management of a healthy ocean that contributes to the national economy and people’s livelihoods.

For **Jamaica**, as a Small Island Developing State (SIDS), becoming a member of the Ocean Panel was a responsible decision. The decision reflects the country’s commitment to international leadership and advocacy on the importance of a healthy ocean to the well-being and prosperity of coastal communities and the country’s coastal tourism sector, while increasing visibility of the special

vulnerability of SIDS to the climate change and ocean crises and their challenges in accessing concessionary finance to undertake effective ocean-based climate actions. As reflected by the attention given to ocean issues at the COP26 climate negotiations in Glasgow in November 2021, the close link between ocean and climate health, and the urgent need for action to protect SIDS, is a pressing global policy issue. However, it is of extreme importance to Caribbean countries, which are already disproportionately experiencing higher temperatures, stronger typhoons, coral reef loss, rising sea levels, coastal flooding, biodiversity loss and the depletion of fish stocks including due to invasive species. Jamaica, therefore, views its involvement in the Ocean Panel as critical to ensuring that efforts to advance the United Nations Sustainable Development Goals, and SDG 14 in particular, leave no one behind. The Ocean Panel is an important forum within which to forge strong partnerships and concretise effective actions to catalyse global efforts to reduce marine pollution, protect marine and coastal ecosystems, minimise acidification, end illegal and over-fishing, increase investment in scientific knowledge and marine technology and promote respect for international law that calls for the safe and sustainable use of the ocean and its resources.



‘The richness of Jamaica’s oceans must be managed sustainably to ensure that productivity and diversification is achieved for the benefit of people and communities whose livelihoods depend on it and for the benefit of a healthy planet.’ **Most Honourable Andrew Holness, ON, PC, MP, Prime Minister of Jamaica and Ocean Panel Leader**



‘Surrounded by the sea on all sides, Japan benefits enormously from the wealth and prosperity of our vast and free oceans. It is essential to sustain these oceans as public goods that will bring peace and prosperity equally to all the people in the future. As a maritime nation, Japan is determined to spare no effort to protect our beautiful ocean. In cooperation with the High Level Panel for a Sustainable Ocean Economy, I will build partnerships among leaders and steadily work together to advance efforts towards realizing a sustainable ocean economy, and achieving SDGs. It is my belief that the initiatives taken by the Ocean Panel give a strong impetus to the global community in pursuing the common goals.’

Prime Minister Fumio Kishida

The African Union’s Agenda 2063 recognises the blue economy as a major contributor to the continent’s transformation and growth. The vision is outlined in *2050 Africa’s Integrated Maritime Strategy*, a comprehensive plan that aims to foster more wealth creation for Africa’s ocean, seas and inland waterways by developing a thriving maritime economy and realising the full potential of sea-based activities in an environmentally sustainable manner (AU 2012). The Sustainable Blue Economy Conference, which was co-hosted by Kenya, Japan and Canada in Nairobi in November 2018, brought to the fore the urgency of addressing the significant, cumulative and growing threats facing the ocean. To fully harness, manage and develop Africa’s marine resources in a sustainable manner will require national, regional and international efforts. The African region, with its distinct set of circumstances and challenges, therefore needs to take a position on the issues that are unique to the region and that will provide the required vision for an integrated, holistic and enduring approach to the sustainable exploitation of the ocean economy.

For **Kenya**, the Ocean Panel has provided a unique opportunity to develop a coherent 'Africa-centric' voice on this agenda and to develop an action plan for the decade. In particular, the Ocean Panel has supported the following:

- Kenya's transformation agenda which identifies the blue economy as a flagship programme that would accelerate economic growth and development. The Ocean Panel gave Kenya's transformation agenda impetus that has resulted in more tangible results for the nation.
- The unique opportunity for Kenya to be part of the critical conversations about the future of the ocean which has opened opportunities to deliberate on food and nutrition from the ocean as well as equity and commercialised activities that include aquaculture, seaweed farming and other uses of the ocean in a beneficial manner.
- The African Union's Agenda 2063 that identifies the blue economy as a key pillar which has resulted in regional conversations to support sustainable management of the ocean.

For **Mexico**, it is of the utmost importance to recognise the role that the ocean plays in the local and national economy, from artisanal fisheries and the services obtained directly from marine ecosystems, such as tourism, to the national and regional potential in international trade and energy generation. The country's participation in the Ocean Panel strengthens a reference framework to formulate and implement national policies for the planning, management and sustainable development of the seas and coasts within its national territory. Being part of the Ocean Panel also represents an opportunity to exchange information and knowledge regarding the best practices for ocean management, as well as to highlight the efforts that Mexico is making to transition to a sustainable ocean economy.



'For Mexico, the Ocean Panel has proven its relevance as an effective multilateral mechanism

to advance and accelerate global commitments. We together must make visible, what until now, has been invisible, the ocean as a solution, the ocean as beacon of hope for a sustainable future.'

Martha Delgado Peralta - Mexico's Undersecretary for Multilateral Affairs and Human Rights

The ocean is central to **Namibia's** economy and prosperity, as the country relies heavily on it to keep the local economy afloat. Through initiatives like the Ocean Panel, Namibians will be made aware of the value that ocean economic activities such as fishing, marine transport, marine mining and marine tourism add to the strength of the local economy. Namibia believes that in being a member, the country will have the opportunity to share experiences and knowledge with other member countries regarding better sustainable management of the ocean for the benefit of countries and their people.

At approximately 2.4 million km², the marine areas of **Norway** are rich in natural resources and contribute considerably to the economy. Continued value creation from Norway's ocean-based activities depends on maintaining good environmental status and high biodiversity to safeguard the ocean as a source of food, resources and ecosystem services. At the Ocean Panel event at COP26 in Glasgow, Norwegian Prime Minister Jonas Gahr Støre stated:



'We are members of the Ocean Panel because we agree that the oceans are essential to human survival and to solving some of the greatest challenges humanity has ever faced. Not least, climate change.'

Prime Minister Jonas Gahr Støre

For Norway as a coastal state, this is a question of both identity and destiny. The work of the Ocean Panel has shown that we can build an ocean economy where effective protection, sustainable production and equitable prosperity go hand-in-hand. This is important for Norway and for the world. Norway has used a whole-of-government approach towards achieving ocean sustainability through the Ocean Panel from the beginning. This strategy is in line with the main recommendations of the Ocean Panel, emphasising the importance of a holistic and integrated approach to sustainable ocean management.

For **Palau**, the ocean is at the centre of life, culture and identity. Its capacity to provide for the country's needs is immense, but not without limits. As the only ocean policy initiative consisting of serving world leaders, the Ocean Panel holds the authority, political will and determination needed to trigger and accelerate action for ocean protection and production. The Panel provides an opportunity for leaders, experts and think tanks from different sectors around the world to find common solutions—to develop and implement comprehensive, effective regulations and an integrated ocean management regime. This is truly a test of Palau's ability to deliver a healthier planet and ocean to the next generation. Palau's co-chairmanship of the Panel raises the global profile of island innovations on sustainable ocean management, and also the unique challenges facing Small Island Developing States as a result of the ever-growing ocean crises and the need for partnerships to address such challenges. The lessons small islands provide can help shape policies and technology to support sustainable management of this shared resource, providing a unique opportunity to work together and to share and learn from each other.

Portugal is a coastal country, one with a deep relationship with the ocean, and 'whether we live by the coast or not, we all depend on a healthy ocean'. The Ocean Panel

is committed to an action-oriented agenda, highlighting the importance of a healthy ocean and a sustainable ocean economy. Seventeen heads of state and government are politically endorsing a set of priorities built upon knowledge and science, bringing together the private sector, civil society and other stakeholders. The world needs a new relationship with the ocean—one that looks at the ocean as a critical part of the solution for environmental recovery and a sustainable economy. These 17 countries are committed to advancing that solution. Among Portugal's priorities regarding a sustainable ocean economy are protecting marine and coastal ecosystems—because protection and prosperity need to go hand-in-hand—providing support for sustainable ocean food and sustainable ocean-based tourism, reducing ocean pollution and promoting equal opportunities for people to benefit from the ocean. The past few years have challenged humanity. At a time of crisis, everyone understands that the ocean is a major contributor to solving issues like pollution, poverty and unhealthy diets. It gives us life and feeds us. The ocean brings us together and creates opportunities. That is what Portugal has learnt from its strong bond with the ocean and that is the message that the country brought to the United Nations Ocean Conference, held in Lisbon in 2022, co-organised with Kenya. That is also what being part of the Ocean Panel means.



'As a member of the Ocean Panel, the United States joins like-minded nations in a commitment

to safeguard its ocean resources for generations to come. The development of a resilient, equitable and sustainable ocean economy informed by the latest science will advance U.S. priorities in restoring and sustaining ocean health, creating good-paying jobs and combating climate change to secure a safe and prosperous future for all Americans and the planet.'

President Joseph R. Biden

6.2 | The Value of the Ocean Panel to the World

The Ocean Panel countries' shared vision to sustainably manage 100% of the ocean area under their national jurisdictions, guided by Sustainable Ocean Plans, and implement the ocean action agenda for the decade as outlined in the *Transformations* are the results of broad and diverse engagement, collaboration and consultation. An unprecedented scientific evidence and knowledge base came together to help move from ambition and purpose to action and impact.

Early on in their deliberations, and before considering actions, the Ocean Panel countries set out to identify a series of topics for which they would commission syntheses of knowledge that would inform their policy and action agenda. To ensure the high quality and intellectual integrity of the Ocean Panel's commissioned research, they established an Expert Group consisting of a global group of over 70 experts renowned for their exemplary contributions to the full range of ocean-related disciplines considered in the Ocean Panel's work. Together, more than 250 experts and authors, 44 percent of them women, representing 48 countries have contributed to Ocean Panel-commissioned research to date.

The resulting 16 Blue Papers and 4 Special Reports responded to the request from the Ocean Panel and provided timely analyses of pressing challenges at the nexus of the ocean and the economy. They showcase the latest cutting-edge science, knowledge and state-of-the-art thinking, and offer innovative ocean solutions in technology, policy, governance and finance realms that could help accelerate a transition to a more sustainable and prosperous relationship with the ocean. The comprehensive assessments have already informed policymaking at the highest levels of

government and motivated an impressive array of responsive and ambitious action across a growing network of leaders in business, finance and civil society.

No transformative change could possibly be realised by just one actor, entity or sector. The governments of the Ocean Panel are leading by example on this transformative agenda by working collaboratively with the public, private, financial, research and civil society sectors to raise the profile of the ocean in international arenas, develop a sustainable ocean economy and successfully implement sustainable and equitable ocean management. The work of the Ocean Panel has triggered the formation of several coalitions and partnerships intended to promote and facilitate the Ocean Panel's action agenda. Currently, there are eight established multi-stakeholder initiatives, also called Action Groups, that collaborate to implement one or more of the priority actions in the *Transformations*, and whose strategies to tackle ocean issues have been informed by many of the Blue Papers and Special Reports (Table 2).

Table 2. Mapping Action Groups to the Transformation Areas and 2030 Outcomes and Associated Ocean Panel-Commissioned Research Strategies

ACTION GROUP	OCEAN PANEL TRANSFORMATION AREAS AND ASSOCIATED 2030 OUTCOMES	OCEAN PANEL-COMMISSIONED RESEARCH INFORMING ITS STRATEGIES
Ocean Action 2030	Headline commitment: 'to sustainably manage 100% of the ocean area under national jurisdiction, guided by Sustainable Ocean Plans, by 2025. We urge all coastal and ocean states to join us in this commitment so that by 2030 all ocean areas under national jurisdiction are sustainably managed.'	<i>Integrated Ocean Management</i> (Winther et al. 2020) <i>The Ocean Transition: What to Learn from System Transitions</i> (Swilling et al. 2020)
Ocean Renewable Energy Action Coalition	Ocean wealth: 'Ocean-based renewable energy is fast-growing, and on the path to becoming a leading source of energy for the world.' Ocean health: 'Ambitious climate action has set the world on track to achieve the goals of the Paris Agreement and restore ocean health.'	<i>Ocean Energy and Mineral Resources</i> (Haugan et al. 2020) <i>The Ocean as a Solution for Climate Change: 5 Opportunities for Action</i> (Hoegh-Guldberg et al. 2019)
Global Ocean Accounts Partnership	Ocean knowledge: 'Decision-making affecting the ocean reflects the value of and impact on the ocean's natural capital.'	<i>National Accounting for the Ocean & Ocean Economy</i> (Fenichel et al. 2020)
Ocean Data Action Coalition	Ocean knowledge: 'A globally shared data revolution has contributed to sustainable ocean management worldwide.'	<i>Technology, Data and New Models for Sustainably Managing Ocean Resources</i> (Leape et al. 2020) <i>IUU Fishing and Associated Drivers</i> (Widjaja et al. 2020) <i>Critical Habitats and Biodiversity: Inventory, Thresholds and Governance</i> (Rogers et al. 2020)
1000 Ocean Startups	Ocean finance: 'Sustainable ocean finance is accessible for all and drives ecologically sustainable and socially equitable economic growth.' Ocean wealth: 'Innovation and investments in new ocean industries have boosted environmentally responsible and inclusive economic growth.'	<i>Ocean Finance</i> (Sumaila et al. 2020) <i>The Ocean as a Solution for Climate Change: 5 Opportunities for Action</i> (Hoegh-Guldberg et al. 2019) <i>Ocean Panel's Call to Ocean-Based Climate Action</i> (Ocean Panel 2020)
Tourism Action Coalition for a Sustainable Ocean	Ocean wealth: 'Coastal and ocean-based tourism is sustainable, resilient, addresses climate change, reduces pollution, supports ecosystem regeneration and biodiversity conservation and invests in local jobs and communities.'	<i>Climate Impacts on the Ocean and Ocean Economy</i> (Gaines et al. 2019)
Shipping Decarbonisation	Ocean wealth: 'Shipping investments have effectively accelerated the shift towards zero-emission and low-impact marine vessels.' Ocean health: 'Ambitious climate action has set the world on track to achieve the goals of the Paris Agreement and restore ocean health.'	<i>The Ocean as a Solution for Climate Change: 5 Opportunities for Action</i> (Hoegh-Guldberg et al. 2019) <i>Ocean Panel's Call to Ocean-Based Climate Action</i> (Ocean Panel 2020)
Blue Food Partnership	Ocean wealth: 'Wild fish stocks are restored and harvested at sustainable levels, aquaculture is responsibly grown to meet global needs, and waste is minimised and managed throughout the value chain.' Ocean health: 'Ambitious climate action has set the world on track to achieve the goals of the Paris Agreement and restore ocean health.'	<i>The Future of Food from the Sea</i> (Costello et al. 2019) <i>Climate Impacts on the Ocean and Ocean Economy</i> (Gaines et al. 2019) <i>IUU Fishing and Associated Drivers</i> (Widjaja et al. 2020) <i>Critical Habitats and Biodiversity: Inventory, Thresholds and Governance</i> (Rogers et al. 2020) <i>The Ocean as a Solution for Climate Change: 5 Opportunities for Action</i> (Hoegh-Guldberg et al. 2019)



The background of the slide is a high-angle, aerial photograph of turbulent blue water. The water is a deep, vibrant blue, and the surface is covered in intricate, swirling patterns of white foam and whitecaps, suggesting a strong current or a storm. The lighting is bright, creating highlights on the white foam and deep shadows in the blue water.

7. Conclusions

The world faces several inter-related crises, among them the rapid decline of biodiversity, growing inequality, the threat of climate change, and most recently the vulnerability of human health against sudden and rapid global disease transfer. Four years after the establishment of the Ocean Panel and two years since the release of the *Transformations*, the member countries have laid the foundation to scale and accelerate action and are sharing openly their progress against the 2030 Outcomes, priority actions and the 100% commitment. The journey towards a sustainable ocean economy has well begun, with pioneers leading the way. This first progress report assesses the Panel's collective progress, highlights implementation examples which can serve as inspiration for others, communicates the countries' priorities for collaboration and identifies areas that need further assistance.

The report takes a systematic approach to tracking the Panel's collective progress, following a framework that is built around and guided by the principles of accountability, transparency and the importance of nuance, and one that is aligned with existing platforms and processes. Efforts will continue to focus on consolidating and applying existing reporting frameworks, while identifying remaining gaps, through a harmonised and streamlined approach to data collection and reporting. As the countries start to develop and implement their Sustainable Ocean Plans, they will build an integrated mechanism for monitoring their national plans in line with the goals agreed to in each country context. Such robust measures of reporting will help identify where actions are leading to impact, and where implementation needs more attention, iteration and improvement over time.

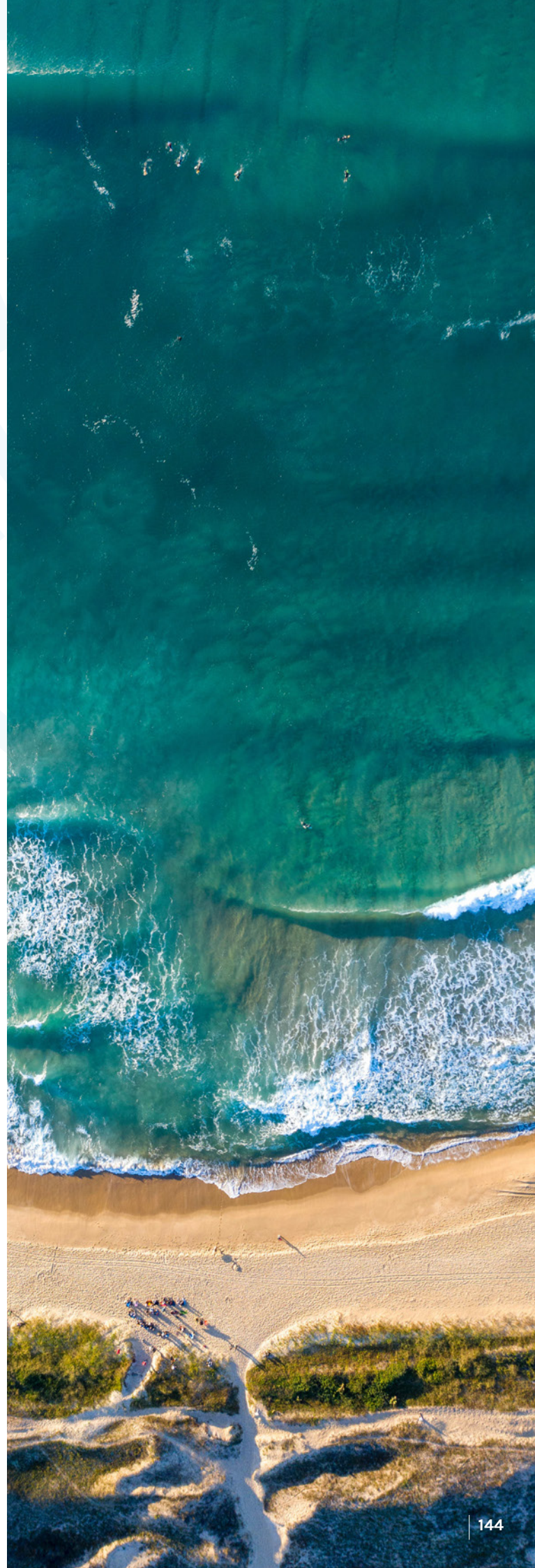
Through the '*Transformations in Action*', the Ocean Panel demonstrates that while the overarching transition needs a strategic

overview guided by a clear vision, the practical actions that drive the transition can be carried out at all different levels and scales, and they may vary depending on national needs and circumstances. These examples do not provide one-size-fits-all solutions, nor do they cover all aspects of the transition towards a sustainable ocean economy. These implementation examples demonstrate how the *Transformations* have been carried out in practice, in different corners of the world and in very different contexts, by providing insights and lessons learnt, as well as inspiration for other countries' transition processes.

The Ocean Panel, through the release of its action agenda and subsequent reports and statements, has made an important contribution to shaping and informing international policy on and the narrative around the ocean. Through meetings among engaged heads of state, the Ocean Panel countries have come together to use their collective voice to highlight ocean-based climate solutions and flag the importance of ocean action for delivering on the wider sustainable development agenda. The approach to demand-driven knowledge production can ensure that timely information makes it into the hands of decision-makers. The connections among science, knowledge, evidence and policy actions are clear. The comprehensive assessments commissioned by the Ocean Panel have already informed policymaking at the highest levels of government and motivated an impressive array of responsive and ambitious action across a growing network of leaders in business, finance and civil society. The latest Ocean Panel-commissioned report "*Opportunities for Transforming Coastal and Marine Tourism: Towards Sustainability, Regeneration and Resilience*" offers timely opportunities for action to help countries consider how to build a more resilient, sustainable and inclusive tourism sector—a key priority for many in the recovery from the COVID-19 crisis.

The significant commitment from 17 countries, which represent nearly 50 percent of the world's coastlines and at least 44 percent of the world's exclusive economic zones, to ensure that areas within national jurisdiction are sustainably managed is drawing worldwide attention to the need to take a holistic and strategic approach to considering the development and use of the ocean—critical for a just, equitable transition to a sustainable ocean economy—, and to respond to global crises.

The members of the Ocean Panel will continue to build on these endeavours to strengthen ongoing efforts to enhance partner and stakeholder relationships, increase public outreach and engagement and develop new resources and tools to promote a sustainable ocean economy for generations to come.



Appendix A. The Process Followed for Tracking the Progress of Ocean Commitments across International Fora

Voluntary commitments by states, governmental or non-governmental organisations and other actors that aim to deliver outcome-oriented activities have become a well-recognised mechanism in international sustainability policy. Two major international processes that harness voluntary commitments on ocean issues include the Our Ocean Conference (OOC), an annual high-level event initiated in 2014, and the United Nations Ocean Conference (UNOC), which took place for the first time in 2017. The UNOC encourages state and non-state actors to submit commitments to advance implementation of SDG 14, making a call to the global community to ‘conserve and sustainably use the oceans, seas and marine resources for sustainable development’ (United Nations 2015), and to achieve progress on its 10 targets addressing marine pollution, conservation, ocean acidification, marine protected areas, fisheries, benefits for Small Island Developing States, small-scale fisheries, scientific knowledge, marine research and international law.

The UNOC maintains a registry of voluntary commitments, a web-based platform that remains open for new registrations and countries’ self-reports on progress updates. The announcement of voluntary commitments across government, civil society and the private sector also stands at the heart of the OOC. Although not directly linked to the 2030 Agenda for Sustainable Development, the OOC strongly complements efforts of the UN process. The pledges for action cover six themes, namely marine protected areas, climate change, sustainable fisheries, marine pollution, sustainable blue economy and maritime security. Though not replacing government measures to implement legally binding

agreements, the commitments announced at these fora provide a unique opportunity to raise awareness, promote partnerships and broader engagement and catalyse action from different sectors and actor groups.

In late 2021, the Secretariat collated all commitments registered on the UNOC and OOC platforms by Ocean Panel countries since 2017. The commitments were mapped against all levels of the *Transformations—5* areas and the 100% commitment, 14 outcomes, 74 priority actions—and the full suite of the SDGs and associated targets—17 goals and 169 targets—to explore alignment and degree of coverage with the Ocean Panel agenda and the common global goals. An online search was subsequently conducted to find evidence of progress towards their completion using key terms relevant to each action or deliverable (e.g. country, location of action, type of action, name of the announcer). This methodology has been previously used to provide a systematic review of the commitments made during the Our Ocean Conference related to marine protected areas (Gorud-Colvert et al. 2019) and sustainable fisheries (Huse et al. 2019).

Weblinks provided on the registries as part of the countries’ self-reporting, governmental webpages, local news sites, press releases and any other sources that discussed the actions were examined. To ensure accuracy and completeness of the findings, and that the latest evidence of progress had been registered, each member country subsequently validated the information on the status of the commitments and the evidence of progress. Focal points also provided additional information for the commitments where no update could be sourced. To create a transparent, rigorous and uniform ‘commitment-and-review’ system, explicit steps were followed to harmonise the two disparate reporting systems used in UNOC and OOC registries. A three-step scale and three categories were chosen as appropriate to inform on ‘level of progress’ and ‘status of commitment’, respectively, as shown in Box A1.

Metrics for Assigning Levels of Progress and Categories of Commitment Status

Level of progress, based on a three-step scale:

- 0 = No progress/update has been sourced or provided by the country
- 0.5 = Evidence of some progress has been sourced, or provided/validated by the country
- 1 = Evidence of completion has been sourced and validated by the country

Status of commitment, based on three categories:

- Open-ongoing = Deadline is in the future, no deadline has been set, or deadline is set as ongoing and progress is ongoing
- Open-past = Deadline has passed but progress is ongoing
- Closed = Deadline has passed and the commitment has been completed

To ensure objectivity in assigning levels of progress and status of commitments, at least two independent assessments were considered for each commitment. The assessments were conducted by expert members of the Progress Working Group and chaired by members of the Secretariat of the Ocean Panel. Each pair of assessments was compared, and any variation or discrepancy was subsequently discussed and resolved to ensure consistency across the inventory of commitments.

Process considerations and analysis limitations include the following:

- The results on mapping and tracking the progress on ocean commitments do not report on individual country progress but rather on the progress of the Ocean Panel as an aggregated whole. Each member country will develop their own measures of progress as they start developing their Sustainable Ocean Plans and

implement priority actions according to their own national capacities and circumstances.

- The year 2017 (year prior to the establishment of the Ocean Panel) was chosen as the starting point for mapping and tracking the progress on ocean commitments so that the transition to a sustainable ocean economy and the advancement of the action agenda could be fully captured and documented.
- The commitments do not reflect all ocean actions that countries are currently undertaking. Announcements made at international fora, such as OOC and UNOC, tend to focus on financial commitments and may not fully capture other actions, e.g. important partnerships formed or new policy developments, or actions that cannot be categorised under the current themes found in the aforementioned registries.

- The commitments registered at UNOC and OOC can overlap, which means that the total number of commitments across years might be limited in offering insights on the full suite of actions that countries take at the national level.
- Some commitments will never be considered ‘completed’, especially those with an ‘ongoing’ deadline (e.g. ongoing management of marine protected areas)
- The commitments announced in the year a progress report is published, are not captured in that report’s progress analysis.
- The last evidence of progress was sourced at the end of March 2022; the last assessment of the levels of progress and status of commitments was conducted at the end of May 2022; and the last commitments were catalogued and mapped at the end of June 2022. Due to ongoing iterations and technical problems with the online registry platform of UNOC, the commitments announced at UNOC in 2022 are not included in this first progress report.
- In 2022, only the commitments announced at OOC have been included in the mapping analysis against the five transformation areas and the 2030 Development Agenda.
- Any countries that join the Ocean Panel during the production phase of the progress report will not be included in the progress report. In 2022, that includes the United Kingdom.

Appendix B. The 2030 Outcomes and Priority Actions Tackled through the Delivery of Ocean Commitments

A 100% APPROACH

OCEAN WEALTH

Sustainable Ocean Food

- Eliminate illegal, unreported and unregulated fishing by incentivising the use of the latest innovations and technologies—such as digital traceability—to increase transparency; strengthening monitoring, control and surveillance; improving flag state control; effectively implementing the Port State Measures Agreement; and enabling enhanced collaboration amongst all stakeholders in the supply chain.
- Prohibit harmful fisheries subsidies that contribute to overcapacity, overfishing, and illegal, unreported and unregulated fishing.
- Minimise bycatch, discards and waste in seafood supply chains.
- Develop, adopt and effectively implement science-based plans to rebuild depleted stocks, and ensure adaptive fisheries management to respond to climate change and the uncertainties of shifting ocean ecosystems, based on the UN Fish Stocks Agreement, in cooperation with multilateral bodies such as the Food and Agriculture Organisation and regional fisheries management organisations, and implement FAO's Voluntary Guidelines to Ensure Sustainable Small-Scale Fisheries.
- Strengthen regional fisheries management organisations, including

by promoting the use of a precautionary approach, management that controls harvest levels based on scientific assessment, such as total allowable catch, meaningful consequences for exceeding quotas, and through regular and transparent performance reviews.

- Put in place policies and management frameworks to minimise the environmental impacts of aquaculture, including inefficiencies in the feed supply chain, and enable the acceleration of fed and non-fed aquaculture production that fits local environmental, governance and economic priorities.

Sustainable Ocean Energy

- Invest in research, technology development and demonstration projects to help make all forms of ocean-based renewable energy—including wind, wave, tidal, current, thermal and solar—cost-competitive, accessible to all and environmentally sustainable.
- Work collaboratively with industry and other stakeholders to develop clear frameworks addressing environmental impacts of ocean-based renewable energy, enabling capacity, co-existence and integration with other uses of the ocean.
- Set clear goals, commit to deliver appropriate policy and regulatory measures, and remove market impediments in order to accelerate sustainable ocean-based renewable energy deployment.

Sustainable Ocean-Based Tourism

- Implement sustainable tourism management strategies that advance environmental, social and economic priorities and enable monitoring and transparent reporting with the full participation of coastal communities and Indigenous Peoples.

Sustainable Ocean Transport

- Establish early national targets and strategies to support decarbonisation of vessels.
- Stimulate the development and adoption of technologies for producing and storing new zero-emission fuels.
- Incentivise sustainable, low-carbon ports that support the transition to decarbonised marine transport and shipping fleets through renewable energy and zero-carbon fuel supply chains.
- Minimise the transfer of aquatic invasive species by ships through an effective IMO framework, including its robust implementation.

Sustainable New Ocean Industries

- Explore and incentivise smart and sustainable cross-sectoral and co-located activities, such as ocean-based renewable energy sites to fuel zero-emission shipping and aquaculture farms.
- Advance carbon capture and storage in the sub-seabed through international collaboration, appropriate incentives and mapping the storage potential of sub-seabed geological formations.

OCEAN HEALTH

Reduce Greenhouse Gas Emissions

- Include ocean-based climate action in reporting under the Paris Agreement.

Protect and Restore Marine and Coastal Ecosystems

- Halt the net loss and increase the extent and improve the condition of coastal and marine ecosystems, in particular critical ecosystems such as mangroves, seagrasses, salt marshes, kelp beds, sand dunes, reefs and deep ocean ecosystems.
- Use nature-based solutions in planning

and developing coastal infrastructure to reduce grey infrastructure where possible, and incentivise their use to sequester and store carbon and improve coastal resilience.

- Establish and effectively manage marine protected areas and other effective area-based conservation measures that conserve biodiversity while also delivering climate, food, socioeconomic and cultural benefits.
- Collaborate with all relevant partners, including local community, Indigenous Peoples, and stakeholders through relevant global and regional organisations to promote sustainable management of all marine and coastal ecosystems.
- Capitalise on knowledge and spatial analysis tools to identify carbon sequestration potential and optimal locations for marine protected areas, and other effective area-based conservation measures in the development of Sustainable Ocean Plans.

Reduce Ocean Pollution

- Incentivise the development, production and use of viable and sustainable alternatives to plastics to enable the phase out of problematic and unnecessary plastics, where warranted and where such alternatives exist.
- Use financial incentives, trade opportunities and extended producer responsibility to encourage sustainable product design and promote standards to maximise reduction, reuse and recycling in pursuit of a circular economy, as well as research on new biodegradable materials that substitute plastics.
- Promote a comprehensive life-cycle approach that includes improved waste management and innovative solutions towards reducing the discharge of marine plastic litter to zero.
- Eliminate discharges of plastic litter and

microplastics from sea-based sources including ships, offshore installations and from land-based sources including ports and bridges, through stronger regulations, technology development, training programmes and capacity building.

- Eliminate ghost fishing gear through such means as reuse and retrieval, promoting gear marking and loss reporting, and supporting development of new environmentally friendly cost-effective gear.
- Promote public and private awareness of and investment in sewage and waste management infrastructure in developing countries, including as a means to stop diseases.
- Promote agriculture farming practices and technology that minimises the discharge of
- excess pesticides, fertilisers, manure and soil particles to eliminate eutrophication and ocean dead zones in coastal waters
- Encourage the aquaculture industry to apply best practices in order to reduce the amount of nutrient leakage in connection with feed formulation and application, and minimise the discharge of excess antibiotics.
- Strengthen measures to prevent pollution from mining and offshore oil and gas activities, including hazardous and noxious substance spills.

OCEAN EQUITY

Promote Equal Opportunity for People to Benefit from the Ocean

- Require transparent, responsible business practices that engage and benefit coastal communities, including small-scale fishers, and protect the rights of all workers in ocean industries.
- Create the conditions to facilitate the full engagement of women in ocean

activities to help unlock their economic and social potential, and empower them to safeguard natural resources while enhancing opportunities to access decent work.

- Recognise and respect the interests of coastal communities and rights of Indigenous Peoples, and implement policies that require consideration of the particular importance of marine resources for these groups.
- Create inclusive governance by incorporating indigenous and local community knowledge and interests, particularly those of women and youth, in planning and decision-making processes.
- Promote integrity across ocean governance and ocean industries, enforce transparency and accountability in public service and public finance and take robust action against corruption.
- Promote international cooperation to combat child labour and forced labour and eliminate trafficking in persons and contraband along supply chains in the ocean economy.

OCEAN KNOWLEDGE

Build Ocean Literacy and Skills

- Make ocean knowledge available to everyone and invest in building ocean literacy and awareness among citizens, including through formal education.
- Invest in knowledge, technology and skills training for ocean conservation and management and the sustainable ocean industries of the future to ensure a just transition for workers in the ocean economy.
- Increase cooperation, capacity building and transfer of knowledge and marine technology on mutually agreed terms to ensure that benefits from the sustainable development of the ocean are shared.

Account for the Value of the Ocean

- Develop a complete sequence of national ocean accounts that are actively used to inform decision-making

Harness Ocean Science, Technology and Data

- Incentivise the use of the latest innovations and technologies, such as satellites, autonomous vehicles, artificial intelligence for near real-time data collection, research, monitoring, and enforcement and decision-making.
- Promote transparent and open sharing and accessibility of ocean data.
- Scale up integrated local-to-global observation, including indigenous and local community knowledge, and research to better inform decision-making
- Support marine science capacity building, information exchange, collaboration and appropriate technology transfer on mutually agreed terms, and mobilise capital for technologies where there are market gaps.
- Fill major data gaps and digitise information on coastal and marine ecosystems, such as mangroves, seagrasses, salt marshes, kelp beds, sand dunes, reefs, deep ocean ecosystems and the ocean floor.

and multilateral financial institutions in recovery and stimulus efforts, to guide, de-risk, incentivise and monitor investment in sustainable ocean activities to increase transparency and ensure reporting consistency.

- De-risk investments by creating focused blended finance capacity that combines concessional finance from the public and private sectors with innovative private insurance products.
- Support the development and application of a global 'ocean risk map' and 'risk index' to catalyse a responsible and sustainable ocean insurance market and investments in the resilience of islands and coastal communities.

OCEAN FINANCE

Ocean Finance

- Direct public sector financing and development assistance to investments in the sustainable ocean economy, including for the development and implementation of Sustainable Ocean Plans, to unlock private sector financing.
- Support the use of sustainable ocean finance principles and other voluntary mechanisms led by the private sector

Appendix C. The Sustainable Development Goals and Associated Targets Addressed by the Ocean Panel's Country Commitments

In 2017, the commitments covered 14 SDGs and 40 targets.

- SDG targets covered: 1.5, 2.1, 3.d, 6.b, 7.2, 7.a, 8.7, 8.9, 9.4, 11.6, 11.b, 12.1, 12.2, 12.3, 12.4, 12.5, 12.8, 13.1, 13.3, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 15.1, 15.9, 16.1, 16.3, 16.4, 16.6, 16.a, 17.9, 17.14, 17.16, 17.17

In 2018, the commitments covered 8 SDGs and 26 targets (new targets from 2017 to 2018: 12.a / Total: 1).

- SDG targets covered: 1.5, 2.1, 11.b, 12.1, 12.2, 12.4, 12.5, 12.8, 12.a, 13.1, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 16.3, 16.4, 16.6, 16.a, 17.9, 17.16

In 2019, the commitments covered 12 SDGs and 30 targets (new goals from 2017 to 2019: 5 / Total: 1; new targets from 2017 to 2019: 2.3, 5.5, 5.a, 16.5 / Total: 4).

- SDG targets covered: 1.5, 2.1, 2.3, 3.d, 5.5, 5.a, 7.2, 7.a, 9.4, 11.b, 12.5, 12.8, 13.1, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.a, 14.b, 14.c, 16.3, 16.4, 16.5, 16.6, 16.a, 17.9, 17.16

In 2022, the commitments registered at OOC covered 12 SDGs and 35 targets (new goals from 2017 to 2022: 4, 10 / Total: 2; new targets from 2017 to 2022: 1.1, 3.3, 4.7, 4.b, 6.1, 6.a, 7.1, 8.8, 10.4, 12.b, 13.2, 13.b, 15.2, 15.8, 15.c, 16.7 / Total: 16).

- SDG targets covered: 1.1, 1.5, 3.3, 4.7, 4.b, 6.1, 6.a, 7.1, 7.2, 7.a, 8.7, 8.8, 8.9, 10.4, 12.4, 12.b, 13.1, 13.2, 13.3, 13.b, 14.1, 14.2, 14.3, 14.4, 14.5, 14.7, 14.a, 14.c, 15.2, 15.8, 15.9, 15.c, 16.4, 16.6, 16.7

Endnotes

¹ Countries joining the Ocean Panel effort after 2020 may commit to developing and being guided by a Sustainable Ocean Plan within five years of joining, with the aim of sustainably managing 100% of the ocean area under their national jurisdictions.

² UNOC registry: <https://sdgs.un.org/partnerships/action-networks/ocean-commitments>; OOC registry: <https://viewer.ouroceanconference.org/#>

³ UNOC has been held twice, in 2017 and 2022. However, the commitments announced at UNOC in 2022 are not included in this first progress report due to ongoing iterations of and technical problems with UNOC's online registry platform.

⁴ To learn more about the commitment 'The Japan Coast Guard initiated the JCG Mobile Cooperation Team', see: <https://viewer.ouroceanconference.org/?p=725>

⁵ To learn more about the commitment 'Sustainable Fisheries and Marine Environment Governance for Socio-economic Benefits', see: <https://sdgs.un.org/partnerships/sustainable-fisheries-and-marine-environment-governance-socio-economic-benefits>

⁶ To learn more about the commitment 'Canada Commits to the United Nations Environment Clean Seas Campaign', see: <https://sdgs.un.org/partnerships/canada-commits-united-nations-environment-clean-seas-campaign>

⁷ To learn more about the commitment 'Development of Canada's Operational Guidance for Identifying Other Effective Area-Based Conservation Measures in Canada's Marine Environment', see: <https://sdgs.un.org/partnerships/development-canadas-operational-guidance-identifying-other-effective-area-based>

⁸ To learn more about the commitment 'Palau bans the importation of plastic bags by 2025', see: <https://viewer.ouroceanconference.org/?p=325>

⁹ To learn more about the commitment 'Addressing the problem of plastic litter from ships', see: <https://viewer.ouroceanconference.org/?p=1428>

¹⁰ To learn more about the commitment 'Ensuring that at least 10% of our EEZ is gazetted as marine protected areas (MPAs) by 2020', see: <https://viewer.ouroceanconference.org/?p=1541>

¹¹ To learn more about the Ghost Nets Initiative, see: <https://parksaustralia.gov.au/ghost-nets-initiative/>

¹² To learn more about the Blue Carbon Conservation, Restoration and Accounting Program, see: <https://www.dcceew.gov.au/climate-change/policy/ocean-sustainability/coastal-blue-carbon-ecosystems/conservation>

¹³ To learn more about the Australia-India Indo-Pacific Oceans Initiative Partnership, see: <https://www.foreignminister.gov.au/minister/marise-payne/media-release/australia-india-indo-pacific-oceans-initiative-partnership>

¹⁴ To learn more about tidal restoration of blue carbon ecosystems, see: <https://www.cleanenergyregulator.gov.au/ERF/Choosing-a-project-type/Opportunities-for-the-land-sector/Vegetation-methods/tidal-restoration-of-blue-carbon-ecosystems-method>

¹⁵ To learn more about the ocean accounts, see: <https://eea.environment.gov.au/accounts/ocean-accounts>

¹⁶ To learn more about the Ghost Gear Fund, see: <https://www.dfo-mpo.gc.ca/fisheries-peches/management-gestion/ghostgear-equipementfantome/program-programme/projects-projets-eng.html>

¹⁷ To learn more about the BLUE Boat Initiative, see: <https://fundacionmeri.cl/the-blue-boat-initiative/>

¹⁸ To learn more about the National Action Plan, see: <https://g20mpl.org/partners/%20France>

¹⁹ To learn more about the annual suspension of fishing activities, see: <https://www.ghanabusinessnews.com/2022/03/22/fisheries-ministry-considering-one-month-extension-of-closed-season/>

²⁰ To learn more about the Plastic Circulation Act, see: <https://plastic-circulation.env.go.jp>

²¹ To learn more about COLE, see: <https://www.cole.p.u-tokyo.ac.jp>

²² To learn more about PROPLAYAS, see: <https://www.gob.mx/conagua/acciones-y-programas/programa-playas-limpas-agua-y-ambiente-seguros-proplayas>

²³ To learn more about the Blue Flag Initiative, see: <http://blueflagmexico.org>

²⁴ To learn more about the MARPOL Annex VI, see: <https://www.imo.org/en/OurWork/Environment/Pages/Index-of-MEPC-Resolutions-and-Guidelines-related-to-MARPOL-Annex-VI.aspx>

²⁵ To learn more about the Blue Justice Initiative, see: <https://bluejustice.org/blue-justice-initiative/>

²⁶ To learn more about Norway's commitment at UNOC 2022 to raise awareness by seeking support to the Copenhagen Declaration, and to address these challenges through the Blue Justice Initiative, see <https://sdgs.un.org/partnerships/norway-will-continue-raise-awareness-seeking-support-international-declaration>

²⁷ To learn more about the Fisheries for a Sea without Litter initiative, see: <http://www.marsemlixo.com> and <https://postal.pt/sociedade/portos-de-albufeira-e-vila-real-de-sto-antonio-juntam-se-a-pesca-por-um-mar-sem-lixo/>

²⁸ To learn more about Papahānaumokuākea, see: <https://www.papahanaumokuakea.gov>

²⁹ To learn more about the All-Atlantic Ocean Research Alliance, see: <https://allatlanticocean.org/howweare>

³⁰ 30x30 refers to the global target to protect at least 30 percent of the global ocean by 2030. This target is to be achieved through a network of marine protected areas and other effective area-based conservation measures. For more, see the High Ambition Coalition's website: <https://www.hacfornatureandpeople.org/home>

³¹ To learn more about the International Partnership for Blue Carbon, see: <https://bluecarbonpartnership.org/>

³² The Great Blue Wall is a Western Indian Ocean-led, African-driven roadmap to achieve a nature-positive world by 2030. It aims to unlock unprecedented nature-based recovery efforts by establishing a transformational movement. Its goal is to accelerate and upscale ocean conservation actions while enhancing socio-ecological resilience and the development of a regenerative blue economy by catalysing political leadership and financial support.

³³ The agreement issuing the Instrumentation Strategy for a Sustainable Ocean Economy in Mexico 2021–2024 (EIEOS) was published in the Official Federal Gazette on 12 August 2022 (In Spanish): https://www.dof.gob.mx/nota_detalle.php?codigo=5661108&fecha=12%2F08%2F2022&s=08&fbclid=IwAR0TgpvVQY4eanjF2eKII3EYwCNMaGYsnRqFr_Ddj8pqX-Syc9HUeiFvXdE#gsc.tab=0

³⁴ To learn more about BarentsWatch, see: <https://www.barentswatch.no/>

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