

Transformations for a Sustainable Ocean Economy: A Vision for Protection, Production and Prosperity

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High Level Panel for a Sustainable Ocean Economy

1 Our Call to Action

We have a collective opportunity and responsibility to protect and restore the health of our ocean, and build a sustainable ocean economy that can provide food, empower coastal communities, power our cities, transport our people and goods and provide innovative solutions to global challenges.

In accepting this responsibility and seizing this opportunity, we can give a blue boost to the economy today while mitigating and building resilience for future crises.

The framework and five areas of transformation presented here secure ocean health and wealth for generations to come. We urge other governments, industries and stakeholders to join us in this endeavour.

We, the 14 members of the High Level Panel for a Sustainable Ocean Economy (the Ocean Panel), are heads of state and government representing people from across all ocean basins, nearly 40% of the world's coastlines and 30% of exclusive economic zones. We recognise that the ocean is the life source of our planet and is vital for human well-being and a thriving global economy.

The ocean is home to many complex ecosystems facing significant threats. The actions we take now can safeguard the ocean's capacity to regenerate, in order to deliver substantial economic, environmental and social value and offer powerful solutions to global challenges. Rapid action must be taken today to address climate change, acidification, ocean warming, marine pollution, overfishing, and loss of habitat and biodiversity. Failure to act will jeopardise global health, well-being, and economic vitality and exacerbate inequalities.

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The COVID-19 pandemic has highlighted the deep inter-connections between human and planetary health and the need for nations to work together to respond to global threats. The pandemic has caused a dramatic disruption of the global economy, major impacts to our societies and a huge toll on our communities. It has put increased financial pressure on developing countries and in particular Least Developed Countries and Small Island Developing States.

We have an opportunity and obligation to reset and build a more equitable, resilient, knowledge-based and prosperous future that is in harmony with nature. The ocean and its related economy offer a wealth of opportunities to support this transition.

Building a sustainable ocean economy is one of the most important tasks and greatest opportunities of our time. It is critical to achieving the goals of the 2030 Agenda for Sustainable Development, and it is vital if we are to emerge from current and future crises with stronger economies, healthier people and more resilient communities.

We commit to bold transformations towards a sustainable ocean economy where environmental protection and conservation, and economic production and prosperity, go hand in hand. These transformations must unleash the full force of innovation across sectors in technology, finance and governance, and do so at pace and scale, guided by the following principles:

- **Alignment:** Ocean protection and production must align with the UN Framework Convention on Climate Change and the Paris Agreement, the Convention on Biological Diversity, and the Polluter Pays Principle as set out in the Rio Declaration. Actions must be aligned across ocean-based and land-based activities and ecosystems.
- **Inclusiveness:** Human rights, gender equality, community and Indigenous Peoples' participation, through their free, prior and informed consent, must be respected and protected.
- **Knowledge:** Ocean management must be informed by the best available science and knowledge, including

indigenous and local knowledge, and aided by innovation and technology.

- **Legality:** The UN Convention on the Law of the Sea is the legal basis for all ocean activities, and existing international ocean commitments must be implemented as a foundation for achieving a sustainable ocean economy.
- **Precaution:** Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.
- **Protection:** A healthy ocean underpins a sustainable ocean economy. A net gain approach must be applied to ocean uses in order to help sustain or restore the health of the ocean.
- **Resilience:** The resilience of the ocean and ocean economy must be enhanced.
- **Solidarity:** The need for access to finance, technology and capacity building for developing countries, especially Small Island Developing States and Least Developed Countries, must be recognised, taking into account their particular circumstances and vulnerabilities.
- **Sustainability:** The production and harvesting of ocean resources must be sustainable and support resilient ecosystems and future productivity.

We will leverage the UN Decade of Ocean Science for Sustainable Development and the body of knowledge commissioned by the Ocean Panel to build collective understanding and knowledge of ocean sustainability, ecosystem services and functions, and ensure that science underpins decision-making for building a sustainable ocean economy.

2 A 100% Approach

The ocean is a complex natural system that is inextricably linked to land-based activities and ecosystems. We must approach ocean management holistically in order to achieve the vision of protection, production and prosperity. We need a comprehensive approach to sustainably manage 100% of the ocean, starting with coastal and ocean states and working together regionally and globally to safeguard areas beyond national jurisdiction.

We Commit

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.

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 **Sustainable Ocean Plan** describes policies and mechanisms to facilitate sustainable use of the ocean and maximise benefits and value creation for current and future generations. It provides a framework to reconcile conflicting uses of the ocean and its resources and enable long-term sustainable growth in the ocean economy. It can include a range of mechanisms such as regulatory reform, strategic investments in emerging sectors, marine spatial planning, integrated coastal and watershed management, and the establishment and implementation of marine protected areas and other effective area-based conservation measures that can help deliver nature's contributions to people, economic and positive biodiversity conservation outcomes, climate change mitigation and adaptation, and sustainable fish stocks.

The Sustainable Ocean Plans should be in line with the 2030 Agenda for Sustainable Development, build on integrated ocean management and ecosystem knowledge, address pressures from all land- and sea-based sources, and take account of the predicted impacts of climate change. As the foundation for a sustainable ocean economy, these plans should be developed and implemented through an inclusive, participatory, transparent and accountable process.

We support a global target to protect 30% of the ocean by 2030. As a global target, it would not be binding on states individually. National decisions on marine spatial plans, marine protected areas and other effective area-based conservation measures will depend on the state and function of the ecosystem and the extent and quality of ocean management as well as the importance of addressing human well-being, sustainable ocean food and climate change. To achieve the global target, we also call for international cooperation, including supporting capacity building in this area. Detailed content of Sustainable Ocean Plans will vary according to national circumstances.

We will work with others to mobilise and facilitate support for coastal and ocean states in developing Sustainable Ocean Plans by 2030.

2.1 Getting to 100%

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.

The Ocean Panel presents a framework with outcomes for these five areas and a range of actions to achieve them. We commit to deliver these fully by 2030 or sooner. The framework is consistent with the existing target deadlines set in the Sustainable Development Goals, and particular effort is needed for the unfulfilled targets with a 2020 timeline. We will act with determination in accordance with national capacities and circumstances, and invite other leaders, industry and civil society to join us.

3 Ocean Wealth

In recent years, the ocean has produced US \$2.5 trillion in goods and services each year, and the asset value of the ocean has been estimated at US \$24 trillion. Many ocean-based industries have the potential to outperform the growth of the global economy, both in terms of additional value and employment. Unsustainable human activity—in the ocean and on land—is threatening the ocean’s ability to regenerate and sustainably provide for people around the world. We must transform our relationship with the ocean to ensure that it can continue to produce sustainably for future generations.

3.1 Sustainable Ocean Food

Ocean food plays a critical role in feeding global populations. It supplies an essential and accessible source of animal protein and micronutrients, which are particularly important in low-income, food-deficit countries and Small Island Developing States and during times of economic or environmental crisis. The ocean can provide more abundant and diverse food than it currently does, thereby playing a bigger role in the global food system. To build resilience, ocean food production must meet national and local needs and be adapted to a changing climate. Doing so can enhance food security, improve nutrition, human health and well-being, create sustainable economic growth and jobs and prevent the widening of current inequities. This transition must include increased transparency in global ocean governance and supply chains and the elimination of inefficiencies and perverse incentives that undermine the sustainability of the food we derive from the ocean. We must seize opportunities to sustainably increase fisheries productivity and aquaculture production, including by strengthening opportunities for coastal communities, Indigenous Peoples, artisanal and small-scale fishers.

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.

Priority Actions

- 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.
- Explore in a precautionary manner the potential to sustainably harvest new species from the ocean, without undermining ecosystem health.
- 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.

3.2 Sustainable Ocean Energy

The ocean holds tremendous potential to provide clean energy for the world. Scaling up ocean-based renewable energy will generate jobs and boost economic development while providing a pathway to decarbonisation. An ocean-based renewable energy revolution is in the making, and recovery efforts provide an opportunity to increase investment over the coming years. The pace and scope of development must match the state of the science, enable technology transfer and adoption, and minimise the impact on marine ecosystems to enable the delivery of sustainable ocean-based energy.

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

Priority Actions

- 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.

3.3 Sustainable Ocean-Based Tourism

Before the COVID-19 pandemic, tourism was projected to become the single-largest ocean-based industry by 2030. Tourism is one of the sectors hardest hit by the COVID-19 pandemic worldwide. At the same time, coastal and marine tourism remains vital to the economic prosperity of island and coastal communities. The continued viability of this sector remains at risk from climate change, disasters, pollution, urbanisation and ecosystem degradation. Sustainable ocean-based tourism can restore and protect the ocean while delivering jobs and prosperity. Achieving sustainable ocean tourism that can withstand future crises requires strategic public and private investments.

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.

Priority Actions

- Invest in sustainable tourism that regenerates the ecosystems on which it depends, builds the resilience of coastal communities and Indigenous Peoples, reduces inequality through promoting equal opportunity and equitable distribution of benefits and addresses climate change and pollution.
- 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.

- Implement mechanisms to increase the reinvestment of tourism revenue into local and indigenous communities to build capacity and skills for increasing local employment in tourism, diversify economic opportunities and increase resources for coastal and marine restoration and protection.
- Accelerate financial incentives for including nature-based solutions in sustainable tourism infrastructure.
- Invest in sewerage and wastewater infrastructure for coastal and marine tourism to improve the health of coastal communities and reduce the impacts on coastal and marine ecosystems.

3.4 Sustainable Ocean Transport

Shipping, the most energy-efficient form of transport, is vital to international trade and connectivity as it continues to move over 90% of global goods. Maintaining global supply chains will be critical to support recovery from the COVID-19 pandemic and future crises. Technology to decarbonise and minimise the negative environmental impacts of marine transport exists but must be brought to scale. To ensure the industry is resilient, we must move decisively towards reducing greenhouse gas emissions by investing in solutions now to support rapid decarbonisation. Such investments will create jobs and build connectivity and the long-term resilience of global supply chains and island and coastal communities to future crises.

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

Priority Actions

- 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.
- Promote the transition of the global fleet to modern modes of propulsion and renewable fuels, including through strengthened regulations within the International Maritime Organization (IMO) and support technical cooperation for international capacity building.
- Minimise the transfer of aquatic invasive species by ships through an effective IMO framework, including its robust implementation.
- Apply the global regime for safe and environmentally sound recycling of ships.

- Promote quiet vessel programs by ports in sensitive areas, and incentivise the use of vessel-quietening technologies taking into account international guidelines.
- Ban the use and carriage for use of heavy fuel oil in the Arctic through the IMO, and welcome other similar initiatives.

4 Sustainable New Ocean Industries

The ocean holds untapped opportunities to deliver medicines, animal feed, fuel, new materials and carbon-storage solutions, the need for which has been further evidenced and strengthened by the COVID-19 pandemic and its repercussions. We need to innovate and invest to scale up these opportunities based on science and environmentally responsible practices.

Innovation and investments in new ocean industries have boosted environmentally responsible and inclusive economic growth.

Priority Actions

- Scale up environmentally responsible commercial farming of seaweed and algae to provide food and create alternatives for products such as fuels, aquaculture and agriculture feedstocks, biotech, and viable and sustainable plastic alternatives.
- 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.
- Promote fair and equitable sharing of benefits from research and development from marine genetic resources within national waters.
- Advance carbon capture and storage in the sub-seabed through international collaboration, appropriate incentives and mapping the storage potential of sub-seabed geological formations.

4.1 A Precautionary Approach to Seabed Mining

The deep ocean floor contains minerals that are useful for renewable energy technologies and may contribute to the transition to a low-carbon emission society. These areas are among the most isolated and poorly explored of all ocean ecosystems. The sensitivity of these ecosystems, our insufficient scientific knowledge and our limited understanding of the potential impacts of emerging ocean activities requires applying a precautionary approach, undertaking research and investigation, and developing a circular economy to reduce demand and help mitigate these risks.

Sufficient knowledge and regulations are in place to ensure that any activity related to seabed mining is informed by science and ecologically sustainable.

Priority Actions

- Build partnerships to increase research, innovation and deployment of urban mining (reclaiming and recycling metals from spent products, buildings and waste), and of innovative technologies that will reduce the need for new sources of metals and rare earth minerals.
- Initiate an international research agenda to improve understanding of the environmental impacts and risks of seabed mineral activities (especially regarding deep ocean ecosystems).
- Ensure that regulations for seabed mineral mining—under development by the International Seabed Authority—provide effective protection of marine environments by applying a precautionary and ecosystem-based approach, using science-based and transparent management, and ensuring effective compliance with a robust inspection mechanism.
- Ensure that all seabed mineral activities within and beyond national jurisdiction comply with robust environmental standards.
- Promote the participation of scientists from developing countries in research, and make the results from research and the analysis of research findings publicly available, including through the International Seabed Authority.

5 Ocean Health

The ocean is critical for the global climate system and planetary health. It has absorbed 25% of all carbon dioxide (CO₂) emissions and captured 90% of the additional heat generated from greenhouse gas emissions, but it is now warming and acidifying. The global community must act urgently to reduce greenhouse gas emissions, prevent biodiversity loss, restore and protect coastal and marine ecosystems, reduce pollution and take a precautionary approach to economic activity on the ocean floor.

5.1 Reduce Greenhouse Gas Emissions

The health of the ocean, and the livelihoods and economies that depend on it, requires the world to urgently reduce greenhouse gas emissions in line with the goals of the Paris Agreement. A sustainable ocean-based economy can play an essential role in this much needed emissions reduction, while providing jobs, supporting food security, sustaining biological diversity and enhancing resilience. Ocean-based climate actions can deliver up to one-fifth of the annual greenhouse

gas emission reductions needed by 2050 to limit warming to 1.5 °C.

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

Priority Actions

- Establish and implement ambitious emissions reductions, covering all sectors, consistent with the Paris Agreement goal of pursuing efforts to limit global temperature increases to 1.5 °C.
- Implement the Ocean Panel's Call to Ocean-Based Climate Action by scaling up investments in ocean-based renewable energy, green shipping, sustainable seafood production, nature-based solutions and carbon capture and storage in sub-seabed geological formations.
- Include ocean-based climate action in reporting under the Paris Agreement.

5.2 Protect and Restore Marine and Coastal Ecosystems

Marine and coastal ecosystems not only sequester and store vast amounts of CO₂ but also protect coasts and communities from climate impacts. They provide food, economic, medicinal and recreation opportunities, habitat and a range of ecosystem functions to support human well-being. An integrated approach that is climate-smart and focuses on nature-based solutions, integrating well-managed marine protected areas and other effective area-based conservation measures, alongside sustainable infrastructure development will be vital to protect coastal communities and marine habitats. This can support increased seafood production, enable pharmaceutical innovation, enhance climate change mitigation and adaptation, and protect and restore biodiversity and cultural values.

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

Priority Actions

- 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.

5.3 Reduce Ocean Pollution

The ocean has become a sink for pollutants including plastics, chemicals, nutrients and wastewater. While global awareness and action has been increasing, it has not been sufficient to prevent an increase in ocean pollution. The response to the COVID-19 pandemic has caused a surge in production and consumption of protective equipment, much of which contains single-use plastic. This response, although necessary, has further accentuated the need to stop waste from entering the ocean. Efforts to combat harmful land-to-sea pollution should not be scaled back under the guise of economic recovery after the pandemic. Urgent action is needed to target the sources and management of pollution. Through the UN Environment Assembly, governments have endorsed a long-term vision of eliminating the discharge of marine litter and microplastics into the ocean. The G20 Osaka Blue Ocean Vision and the Ocean Plastics Charter further recognise the importance of embracing a lifecycle and circular economy approach.

Nutrient runoff contributes to deoxygenation of the ocean but suffers from less attention and action; it should be treated with the same level of urgency. The connection between the land and the ocean must be understood to address systemic sources of ocean pollution.

The ocean is no longer a sink for pollution and ocean dead zones are minimised.

Priority Actions

- 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.

- Enforce rules on waste shipments and illegal exports of plastic waste.
- 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.
- Implement integrated watershed management practices.
- 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.

6 Ocean Equity

A sustainable ocean economy puts people at its centre, works for everyone, enables human rights, facilitates the equitable distribution of ocean wealth and ensures equality of opportunity for all. It promotes accountable and transparent business practices, addresses labour rights abuses, child labour, forced labour, trafficking in persons and contraband, as well as tax evasion, and it supports the fight against corruption. It also recognises the specific climate vulnerabilities and financing and capacity constraints of developing countries, in particular Small Island Developing States and Least Developed

Countries. With the global population expected to grow by a further two billion people by 2050, effective planning undertaken today can assure the needs and rights of all.

6.1 Promote Equal Opportunity for People to Benefit from the Ocean

A sustainable ocean economy cannot be achieved while many millions of people remain in poverty and inequality is systemic. The COVID-19 pandemic has widened existing inequalities and placed millions of people in extreme poverty. There must be a fair and just transition out of the pandemic and to a sustainable ocean economy that leaves no one behind, enables equitable access to resources, supports fair distribution of benefits and protects the most vulnerable from further risks of harm.

People have equitable access to ocean resources, benefits are fairly distributed and the most vulnerable are protected from the risk of harm.

Priority Actions

- 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.
- Enhance domestic revenue administration through modernised, progressive tax systems, improved tax policy and more efficient tax collection.
- Promote international cooperation to combat child labour and forced labour and eliminate trafficking in persons and contraband along supply chains in the ocean economy.

7 Ocean Knowledge

The ocean is a vital and complex natural system. We need to build literacy and skills, and share and apply knowledge of how ocean ecosystems work, and how they respond to stressors to better inform decision-making. Accounting that captures the full value of ocean assets and the ocean economy is critical to guide the sustainable development of ocean industries. The UN Decade of Ocean Science for Sustainable Development (2021–2030) represents a unique opportunity to enhance the scientific understanding of the ocean.

7.1 Build Ocean Literacy and Skills

It is important for people to understand the significance and influence of the ocean on their well-being and the influence of their activities upon the ocean. People must be enabled to acquire the knowledge, skills and capacity necessary to participate in and benefit from ocean opportunities.

Through the UN 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.

Priority Actions

- 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.

7.2 Account for the Value of the Ocean

Measurement of progress for the ocean economy is overly focused on production indicators such as contribution to gross domestic product. With current data and technology, it is now possible for all countries to account for the status of the natural wealth of the ocean—the most important measure of progress towards sustainability of the ocean economy. The development and integration of ocean accounts into national accounts can provide a dynamic evidence base that goes

beyond a single indicator of production to reflect the full value of the ocean economy.

Decision-making affecting the ocean reflects the value of and impacts on the ocean's natural capital.

Priority Actions

- Develop a complete sequence of national ocean accounts that are actively used to inform decision-making.
- Align international standards for ocean accounting and best practices for implementation as soon as possible to develop and ensure interoperability, harmonisation and coherence of ocean accounts.
- Commit to global partnerships to share best practices and build capacity in national ocean accounting.
- Explore a process to develop a global approach for tracking national performance based on ocean accounts.

7.3 Harness Ocean Science, Technology and Data

Scientific research and monitoring are critical to decision-making and ocean management, and to understanding the impacts of stressors on the ocean. Advances in remote sensing technologies, big data management and modelling techniques provide new opportunities to improve the efficiency and cost-effectiveness of monitoring and managing activities in the ocean, including commercial and artisanal fisheries and protected area management. These technologies can revolutionise how ocean data are collected, stored and used for better ocean management, business development and job creation.

A globally shared data revolution has contributed to sustainable ocean management worldwide.

Priority Actions

- 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.

8 Ocean Finance

Capital to finance the transformation to a sustainable ocean economy is readily available. US \$90 trillion is projected to be invested over the next decade on infrastructure alone, much of which will be on the coast. If grounded in global principles and standards, finance can catalyse responsible policy and business practices across the land-sea interface. Strong examples of such principles include the UN Environment Programme Finance Initiative’s Sustainable Blue Economy Finance Principles and the UN Global Compact’s Sustainable Ocean Principles. We need to ensure that access to finance is equitable and supports sustainability, recognising the needs of developing countries, particularly Small Island Developing States and Least Developed Countries. Public sector finance can help unlock private sector financing.

Sustainable ocean finance is accessible for all and drives ecologically sustainable and socially equitable economic growth.

Priority Actions

- 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 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.

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