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HIGH LEVEL PANEL *for*
A SUSTAINABLE
OCEAN ECONOMY

Working Paper

Ocean finance for the sustainable ocean economy

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About the Ocean Panel

Established in 2018, the High Level Panel for a Sustainable Ocean Economy (Ocean Panel) is a unique initiative made up of serving 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 working collaboratively with a wide array of stakeholders, the Ocean Panel aims to identify bold solutions that bridge ocean health, wealth and equity and accelerate and scale responsive action worldwide.

This Working Paper was prepared in support of the work of the Ocean Panel to provide a robust science and knowledge base and practical opportunities for action across issues central to the attainment of a sustainable ocean economy. The Working Paper was developed by consensus of the authors who have balanced their individual academic and other perspectives. The arguments, findings and opportunities outlined in this Working Paper represent the views of the authors alone. Ocean Panel members have not been asked to formally endorse the Working Paper and should not be taken as having done so.

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Foreword

In Nice, France, on 9–13 June, the United Nations Ocean Conference will convene, bringing together relevant stakeholders from across the globe to assess the challenges and opportunities related to the implementation of Sustainable Development Goal 14, 'Life below Water'. Preceding the conference, the Blue Economy and Finance Forum will be held on 7–8 June at the Grimaldi Forum in Monaco. It will convene key actors that are working towards establishing the enabling environment for the sustainable ocean economy, curating investments in the millions and billions to finance this transition.

To facilitate these discussions, the High Level Panel for a Sustainable Ocean Economy (Ocean Panel)—a coalition of 18 countries committed to sustainably managing 100% of their ocean areas under national jurisdiction—has commissioned this Working Paper to present a high-level overview of the complex landscape of ocean finance. The paper assesses the current state of play of sustainable ocean finance, outlining the financial flows, the new and innovative instruments available, and the enabling conditions needed to facilitate transparent and equitable access to finance. This is in line with the priority outcome on ocean finance first stipulated in the Ocean Panel's *Transformations for a Sustainable Ocean Economy: A Vision for Protection, Production and Prosperity*—that, by 2030, 'Sustainable ocean finance is accessible for all and drives ecologically sustainable and socially equitable economic growth'.

Sustainable finance for the ocean is beginning to flow. However, the landscape is varied and complex, with new, innovative mechanisms entering the field while traditional finance instruments are adapting to the demands of a sustainable ocean economy. There is an urgent need for this transition away from harmful business-as-usual finance pathways, and a closer look at the uses of existing finance to ensure they are working towards a sustainable ocean economy for all. The enabling environment must be examined, and the barriers to accessibility re-evaluated, to ensure that a sustainable ocean economy is developed where effective protection, sustainable production and equitable prosperity go hand in hand.

We, and the authors of this Working Paper, call upon governments, industries, policymakers and all other ocean stakeholders to consider the information and opportunities outlined in this paper. We encourage all to engage in the conversation of finance for the sustainable ocean economy, as only with a collective understanding can we ensure that a just transition will be achieved.

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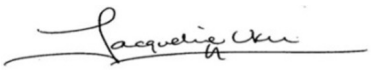

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Highlights

- The ocean is in a state of emergency (UNDESA 2023) requiring urgent and accelerated action to tackle the triple planetary crisis of climate change, pollution and biodiversity loss. Restoring the ocean's health and building its resilience requires redirecting mainstream finance away from destructive business-as-usual (BAU) development pathways and scaling up better financing solutions. This should be done using both traditional and innovative financial mechanisms, as well as risk transfer tools and blended finance, to access additional sources of commercial finance and to catalyse—and scale—transactions.
- The opportunities for increased financing of the sustainable ocean economy (SOE) are significant. It is estimated that by 2030 an additional US$1 trillion of finance could be targeted at ready-to-implement ocean-based climate solutions across the energy, transport, food and nature-based solution sectors. These could help close the 'emissions gap' by up to 35 percent on a 1.5 degrees Celsius pathway in 2050 (Hoegh-Guldberg et al. 2023).
- With ocean and human health inextricably linked through multiple avenues, such as food security, employment, coastal protection, cultural value, mental health promotion and pollution reduction, financing the SOE will support social and economic resilience for coastal nations, not least dependent coastal communities (Fleming et al. 2024).
- Ocean sustainability is under-represented in current financial frameworks, caused in part by a lack of awareness of the materiality of ocean risks and opportunities. This limits private and public capital flows and is particularly true for financing emerging areas, such as mechanisms to price and potentially attract trade investments into resilience and nature-positive restoration; addressing marine pollution and water treatment; and financing nature-based solutions. Other limits stem from the fact that some ocean sustainability activities are essentially public goods and will always require dedicated and sufficient public financing (UNCTAD 2023).
- Insurance premiums for climate resilience and natural catastrophe protection are forecast to rise by 50 percent by 2030 and additional insurance coverage is needed for over half of the $19 trillion already committed to financing the climate transition (Howden and BCG 2024). This requires a significant shift in addressing how risks can be minimised and shared effectively and fairly. This should also include ensuring that effective sustainable resource management approaches are in place to build resilience in advance of a significant climate event and reduce the impact of hazards in the long term.
- The biggest gains to be had are from redirecting trillions of dollars of finance currently targeted at unsustainable BAU pathways which are contributing to pollution and the biodiversity crisis in the ocean. Harmful government subsidies to sectors with known negative impacts on nature are further impeding the shift to sustainability by distorting markets and disincentivising the transition. This includes those that incentivise destructive overfishing globally, amounting to $22 billion annually (Sumaila et al. 2019). According to the Organisation for Economic Co-operation and Development, 65 percent of all support to fisheries between 2020 and 2022 presented a risk of encouraging unsustainable fishing in the absence of effective management (OECD 2025a). While there is finance in the system, only a fraction is being directed towards SOE pathways. For example, over 2010–22, support to sustainable fisheries constituted 59 percent of the $4.5 billion in disbursements of official development assistance (ODA) towards support for fisheries (WTO 2024). The $1.1 trillion paid in 2023 for fossil fuel subsidies (FFST n.d.) represents an even larger source of finance that is currently contributing to the climate crisis.

- Sustainable streams of finance are starting to flow—with sustainable ocean-related ODA commitments increasing to $2.4 billion in 2022 from $1.2 billion in 2010 (OECD 2025e) and blue bond issuance at at least $10.4 billion. However, these financial sources commonly target different sustainable activities, and the amounts raised fall far short of the financial needs to transition to the SOE.
- Sustainable ocean-related ODA still accounts for less than 1 percent of all ODA, and is expected to decline, reflecting the overall drop in total ODA by 7.1 percent in 2024—the first decline after five consecutive years of growth (OECD 2025c).
- Harmful fishery subsidies still outweigh sustainable investments. Globally, 8 to 14 million tonnes of unreported fish catches are likely entering the global market every year, leading to an estimated annual loss throughout the economy of $26–$50 billion, and lost tax revenues of $2–$4 billion (Sumaila et al. 2020).
- There remains a mismatch between ocean financing needs and access to financial sources from both the commercial sector and global concessional funds. A particular concern is that climate-vulnerable communities and countries with high debt burdens neither have adequate access to grants and concessional capital, nor to commercial finance, yet they are also home to the majority of global marine biodiversity.
- Capacity and resource constraints—including financial, technological, data accessibility and infrastructural needs—make it essential to address the specific challenges of emerging economies, small island developing states (SIDS) and least developed countries (LDCs) in financing their SOEs and helping to build a policy, regulatory and broader enabling environment that stimulates investment and sustainable use of the ocean. In the first instance, this requires financing for the necessary infrastructure and technology to produce and implement a better regulatory framework. This can subsequently improve access and capacity for effectively deploying philanthropic funds and ODA for the ocean economy, including in the service of unlocking other sources of finance and 'blended finance' (e.g. through domestic resource mobilisation and de-risking private finance).

Executive summary

About this paper

The ocean is the world's largest natural asset, and a vital foundation for multiple business sectors integral to the global economy. Over three billion people rely on the ocean for their livelihoods, yet growing pressures from climate change, pollution and exploitation are threatening long-term ocean sustainability. It is therefore essential to deliver a sustainable ocean economy to restore ocean health and generate a productive and prosperous ocean for all. This Working Paper presents a high-level overview of the current landscape of ocean finance for the SOE. It showcases the pathways and enablers to accelerate action towards the 2025 United Nations (UN) Ocean Conference and the Blue Economy and Finance Forum.

Key findings

Ocean finance is insufficient, misaligned and underleveraged:

- Despite the critical role sustainable ocean finance could play in addressing the triple planetary crisis of climate change, biodiversity loss and pollution, current financial flows fall short of the estimated $550 billion per year needed to support the SOE.
- Significant funding is being used to support unsustainable business pathways (e.g. harmful fishery and fossil fuel subsidies). This needs to be redirected towards sustainable practices if we are to secure a sustainable ocean economy.
- The specific needs and nature of ocean-related businesses and industries must be considered when reviewing investment requirements. Underinvested sectors crucial to the SOE include marine conservation, sustainable fisheries, marine renewable energy, nature-based solutions, sustainable marine and coastal tourism, and ocean data innovations.
- The landscape of ocean finance is fragmented given its pervasiveness across nature, biodiversity and climate goals, and business sectors. This makes coordination among and within sectors difficult.

Current financial tools and mechanisms are not reaching their full potential. They are either not tailored to ocean needs and/or remain small scale or underused. Major barriers include the following:

- A lack of a universally agreed framework or taxonomy for sustainable ocean finance
- Inadequate disclosure, transparency and traceability across ocean-based sectors and public and private finance flows
- Limited capacity, high transaction costs, and low and slow return profiles of ocean-based projects, particularly community-based and small-scale enterprises and projects focused on conservation in LDCs and SIDS
- Policy misalignment (e.g. harmful subsidies) and a lack of regulation and governance that fully integrates ocean sustainability across all levels from project, subnational, national and global levels; this fails to de-risk and attract investment

A just and sustainable ocean economy requires systemic financial transformation that creates pathways and enablers which do the following:

- Integrate ocean finance into new and existing financial commitments across nature, biodiversity and climate
- Integrate ecosystem-based ocean sustainability objectives or targets, criteria and blue natural capital in corporate value chains to align business and enterprise strategies with global biodiversity and climate targets
- Lower risk profiles by enhancing knowledge-sharing, capacity-building and seed financing and strengthening governance towards building a pipeline of investable and bankable projects

- Instil policy, regulation and governance that creates an inclusive and supportive enabling environment, including for small-scale fishers and coastal communities
- Align and redirect investment, capital and trade towards financing the SOE and away from unsustainable business-as-usual practices

Recommendations

To facilitate these pathways and enablers, we recommend that governments do the following to help scale up financing for the SOE:

To strengthen market infrastructure and financial innovation:

- Develop and align private finance frameworks and tools with net-zero and nature-positive targets, and enforce environmental, social and governance (ESG) disclosure standards that incorporate marine-related financial risks.
- Facilitate the development of context-specific SOE project pipelines through knowledge-sharing, capacity-building for proposals, provision of seed finance and assisting (where applicable and appropriate) in matchmaking with financiers.

To align public and private capital with ocean sustainability:

- Significantly scale up and allocate public funds to strategically support the development of the SOE through national budgets. As such, consider instituting ocean user fees and removing harmful subsidies as potential funding mechanisms that allow the redirection of capital away from harmful marine practices and towards regenerative ocean business sectors, including those that support coastal communities.
- Implement fiscal policies that provide financial incentives, such as through improved depreciation schedules for sustainable maritime infrastructure and the consideration of blue bonds in public investment and pension portfolios, to stimulate private investment.
- Apply sustainability-linked and ocean-positive criteria in public procurement when buying goods and services. Strengthen reporting requirements for companies in relation to ocean exposures. Assess the impacts of new finance windows on marine ecosystems, in alignment with global ESG frameworks, such as the European Union's Corporate Sustainability Reporting Directive and the UN Environment Programme Finance Initiative's Sustainable Blue Economy Finance Principles.
- Develop sustainable ocean plans for the ocean areas under national jurisdiction, which align with national climate priorities and are reflected in updated nationally determined contributions (NDCs), that explicitly incorporate financing for the SOE. This will help secure finance for sustainable ocean sectors and fit-for-purpose sustainable infrastructure and technology.
- Build capacity for and increase ocean literacy, both widely and specifically on ocean finance, and strengthen the broad understanding of its importance to relevant actors, including UN agencies, governments, financial institutions and coastal communities.

To scale and institutionalise ocean finance:

- Actively participate and invest in the reform of the global financial architecture to ensure that it prioritises the ocean and ocean health and that these systems reduce capital costs and effectively channel capital towards the sustainable ocean economy, including in developing countries where flows are most limited.
- Advocate for simplified and harmonised access to ocean finance. This can include standardised definitions, consolidated application processes and dedicated capacity support to overcome, for instance, challenges of access for SIDS and LDCs to the global market rate of capital.
- Encourage the production of comparable data and a common language, including through the creation of dedicated ocean accounts and the adoption of a universal SOE taxonomy.
- Scale up and mobilise additional development finance, from private, including philanthropic, partners and public sources (i.e. official development assistance, public and development banks), and ensure that this finance is targeted effectively and in line with international commitments to biodiversity and climate change and countries' sustainable ocean–relevant strategies or policies.

Introduction

Ocean finance (or blue finance) is a term used to describe the emerging discipline focused on financing the sustainable ocean economy (SOE) (see Box 1 for definition) (Shiiba et al. 2022). Developing the SOE is crucial to maintaining the ocean's health and its positive impacts on human health and well-being, while unlocking its vast array of economic opportunities. The ocean is the world's largest natural asset and is the foundation for multiple industries including fisheries, renewable energy and tourism. In terms of gross value added, the ocean economy would have ranked fifth in 2019, and seventh in 2020. In 2019, it supported the employment of up to 133 million full-time equivalents globally (OECD 2025b), and has been estimated to support the livelihoods of over three billion people (UNCTAD 2023b). The value of the SOE extends far beyond investing in ocean regeneration and resilience, and the opportunity to deliver the triple bottom line of returns for people, planet and prosperity. It contributes extensively to industries, employment and livelihoods, especially for coastal communities. It therefore makes overwhelming business sense—as well as common sense—to finance and invest in the SOE.

This paper, commissioned by the High Level Panel for a Sustainable Ocean Economy (Ocean Panel), will support the third United Nations Ocean Conference (UNOC3), co-hosted by France and Costa Rica on 9–13 June 2025. UNOC3 aims to mobilise actors and accelerate action towards the conservation and sustainable use of the ocean, thereby advancing the implementation of Sustainable Development Goal 14 (SDG 14, 'Life below Water') and Targets 2, 3 and 8 of the Kunming-Montreal Global Biodiversity Framework. In particular, this paper will inform the preceding UNOC Special Event: Blue Economy and Finance Forum (BEFF). Taking place in Monaco on 7–8 June, the BEFF will focus on mobilising finance to achieve SDG 14 by investing in ocean resilience, financing the Ocean economy and inspiring innovation in ocean governance and finance. The BEFF will convene investors from across the public, private and philanthropic sectors to promote a regenerative and sustainable ocean economy. It will provide a platform for the key actors working to create the enabling environment to stimulate the necessary investments required for the transition to the SOE. By providing an overview of the current ocean finance landscape and suggesting recommendations to facilitate the mobilisation of finance and development of policies towards the SOE, this paper aims to inform discussions at both UNOC3 and the BEFF.

Since the mid-1990s, ocean-based economic activity has surged. This is partially due to the formalisation of exclusive economic zones by the United Nations Convention on the Law of the Sea (UNCLOS) which entered into force in 1994. This gave the sovereign right of coastal states to explore and exploit ocean resources within 200 nautical miles from the baseline territorial sea (UNCLOS 1982). Rapid industrialisation and trade expansion in developing countries and a global transition to renewable energy has caused a rise in the use of ocean resources and exponential development of new ocean-related products and services (see Figure 1). This continuing growth of the ocean economy in volume and gross value added, coined the 'blue acceleration', is

BOX 1. **Definitions**

SUSTAINABLE OCEAN ECONOMY

The sustainable ocean economy refers to the sustainable development of economic activities associated with the ocean. Although the global vernacular for this concept varies, the underlying definitions are largely similar and aligned with the same goals. The World Bank defines the 'blue economy' as the 'sustainable use of ocean resources for economic growth, improved livelihoods, and job creation while preserving the health of ocean ecosystems'.[a] The United Nations Conference on Trade and Development (UNCTAD) considers the SOE as a vehicle towards a greener, more sustainable and inclusive economic path for the marine and coastal environment.[b] The European Commission defines the SOE as 'all economic activities related to oceans, seas, and coasts… cover[ing] a wide range of interlinked established and emerging sectors'.[c] The Organisation for Economic Co-operation and Development (OECD) defines the ocean economy as the 'sum of the economic activities of ocean-based industries, and the assets, goods and services of marine ecosystem';[d] it provides a measurement framework for ocean-related development assistance and distinguishes between ocean-based activities that promote conservation or the sustainable use and management of resources and those that do not.

This paper adopts the term 'sustainable ocean economy' as defined by the Ocean Panel: '[The] development of the ocean economy in a way that balances the needs of people, planet, and prosperity'. It is development which ensures the 'long-term, sustainable use of ocean resources in ways that preserve the health and resilience of marine ecosystems and improve livelihoods and jobs, balancing protection and prosperity'.[e]

FINANCING TERMS

The words 'financing', 'funding' and 'investing' are used throughout this paper. Although their meanings are similar, they have distinct differences. The definitions used for this paper are outlined here:

- **Funding**: money provided, especially by an organisation or government, for a particular purpose
- **Financing**: the process of providing capital or funds to support a business's or project's operations, expansion or investments
- **Investing:** put (money) into financial schemes, shares, property, or a commercial venture with the expectation of achieving a profit

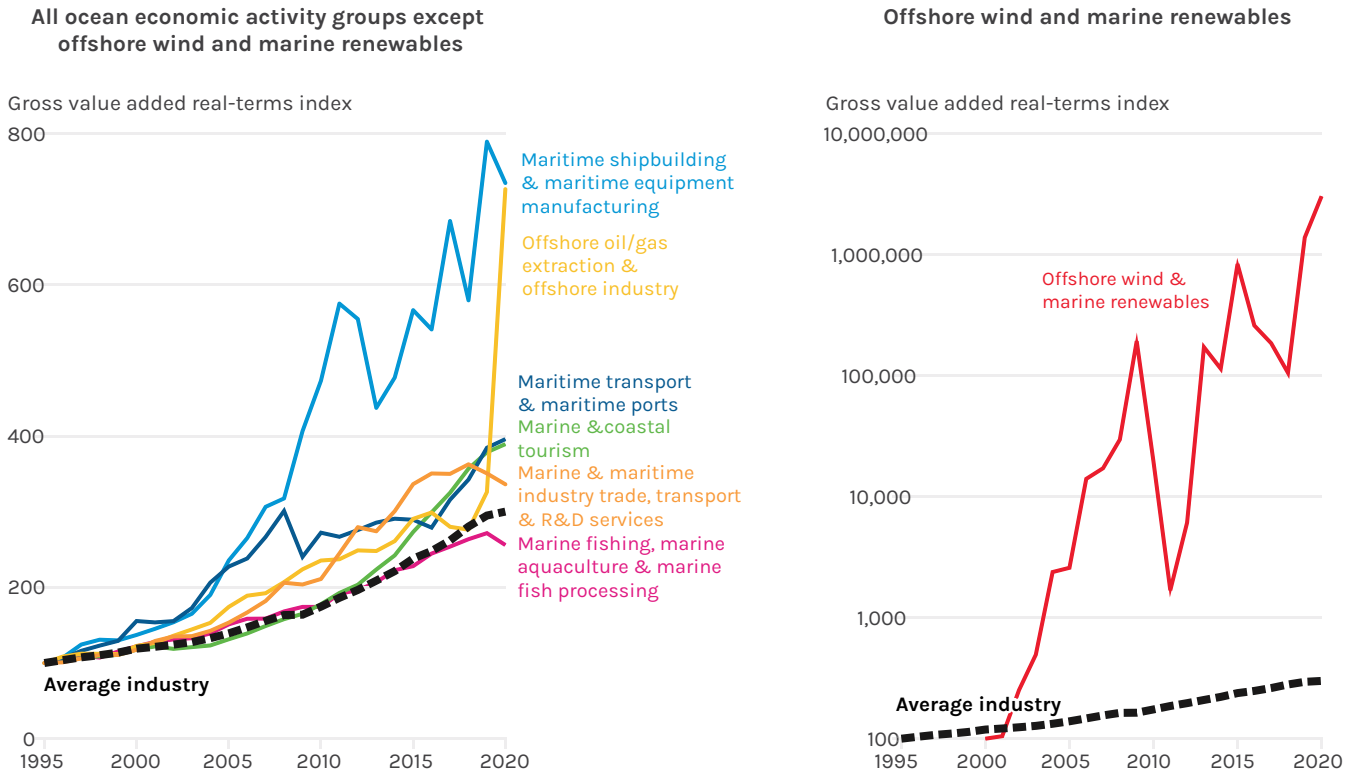
Notes: [a] World Bank 2017. [b] UNCTAD 2023c. [c] European Commission 2021. [d] OECD 2016. [e] Winther et al. 2020.

often outpacing the growth of the global economy. The demand on ocean resources is expanding exponentially, aligning with increasing populations and market demands, creating a race among often competing interests for marine space, materials and food (Jouffray et al. 2020).

While boosting economies, this growth is often at the expense of marine ecosystems as a result of unsustainable human activities and climate change (e.g. ocean acidification, marine heatwaves, and plastic pollution) (Halpern et al. 2019). The cumulative impact of these stressors has caused significant biodiversity loss and, in many cases, complete ecosystem collapse (Scheffer et al. 2001; Rocha et al. 2015). The cost of inaction is high, so it is critical that sustainable ocean finance, and the regulatory framework to guide it, is rapidly scaled up. This presents its own structural challenges due to the complexities of ocean governance compared with that of its more familiar terrestrial counterpart. For example, issues over tenure and ownership are increasingly arising due to the expansion of coastal development, which is displacing local communities and restricting access to marine and coastal resources. This has resulted in 'ocean grabbing' wherein the use and rights of access to ocean resources is moved away from local communities to external actors (Franco et al. 2014; Tholan et al. 2024). The practice is occurring through a diverse array of mechanisms—including, among others, infrastructure development, coastal tourism and fisheries governance—and to meet protected area targets.

The ocean holds immense promise for advancing climate, biodiversity and sustainable development goals, but realising this potential necessitates ensuring the sustainable and equitable development of ocean-based activities through sustainable use of its resources. While all countries depend on a sustainable ocean, for developing countries

FIGURE 1. **Economic growth in ocean economic activity groups outpaced average industry growth from 1995 to 2020**



Notes: Gross value added chained volume indexes—with a reference year of 2015 set so that 1995 equals 100 in Panel A and 2020 equals 100 in Panel B—are calculated for each ocean economic activity group and the average industry. The weighted industry average is measured by calculating the relevant industry group-level real-terms growth rates, weighting each industry group by the share of its contribution to total overall economy gross value added, and chaining together. Panel B is based on 2020 because it is the first year in which offshore wind and marine renewables begin to produce gross value added according to the Organisation for Economic Co-operation and Development's Ocean Economy Monitor. R&D = research and development.

Source: Adaptation of Figure 1.8 from OECD (2025b) using Ocean Economy Monitor, January 2025.

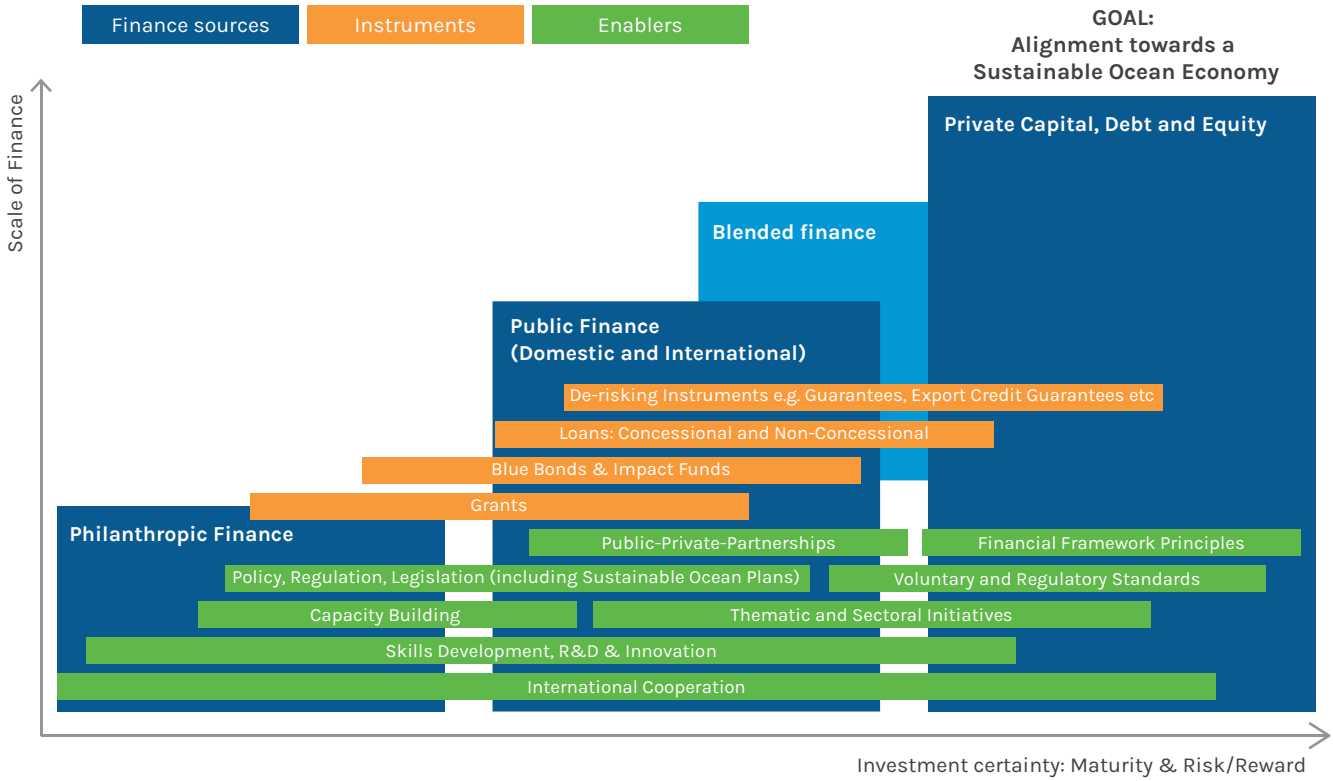
the ocean has the potential to drive economic development, economic diversification and climate action, but this is currently not fully realised (OECD 2020a). If business-as-usual (BAU) pathways are maintained, an estimated US$8.4 trillion in assets and revenues will be lost through the continued depletion of ocean ecosystem integrity by unsustainable practices in leading ocean sectors (e.g. shipping and fisheries) (Kennedy et al. 2021). This can be reduced but only if urgent action is taken now.

Financing for the SOE is therefore critical to the mobilisation and scaling up of this action. Ocean finance is a broad and wide-ranging discipline, encompassing the estimation of finance needs to the identification of barriers and challenges to mobilise finance at scale and ensuring its alignment with the SOE. It includes developing approaches, financial instruments, platforms and principles, such as the Sustainable Blue Economy Finance Principles (UNEP-FI n.d.) which are aimed at redirecting mainstream finance towards the emerging sustainable ocean capital market (Sumaila et al. 2021). The diagram in Figure 2 visualises a positive growth trajectory for the SOE. The following examples illustrate how philanthropic and public funding, grant and concessional funding, capacity-building, research and development (R&D), and international cooperation are critical to supporting the initial de-risking of projects and initiatives for the SOE:

- **Private sources of finance**, such as venture capital and impact investments, can provide early-stage funding to entrepreneurs offering innovative ocean solutions that are high risk. This can assist with the essential scaling of novel technologies and approaches that contribute to the SOE.

- **Philanthropic and public sources of finance** can provide risk-tolerant funding to support local and Indigenous communities—the existing guardians of blue natural capital. This funding can go towards capacity-building and policy reform to enable the conservation and sustainable use and management of marine ecosystems while recognising the rights of these communities and the interconnectedness of their well-being with the ocean.
- **Blended finance** approaches can be used to overcome differences in risk-and-return perceptions and help bring complex projects to life. When public instruments are strategically targeted to crowd in private investments, they can unlock financing in future-oriented projects that aligns with biodiversity, climate and ocean sustainability goals (OECD 2021; European Commission 2023).
- **Development finance institutions** (DFIs) are best placed to mobilise finance for larger, more complex projects—especially those which require structures that integrate significant debt components. Through providing long-term and catalytic finance, and technical expertise, DRIs can help facilitate large-scale, nature-positive outcomes while being cost-effective. Public finance and international cooperation can also reduce capital costs for developing countries.
- **Guarantees and insurance** can help transfer risk to mobilise SOE investment. They can also help de-risk investments in emerging markets and create insurance markets in previously uninsured areas such as coasts vulnerable to extreme weather events. This can especially benefit small island developing states (SIDS) and least developed countries (LDCs), unlocking the protection of financial markets so they can rebuild quickly after storms.

FIGURE 2. **Spectrum of financing sources, instruments and enablers towards the mobilisation of the sustainable ocean economy**



Note: R&D = research and development.
Source: Authors.

Ultimately, the emerging ocean finance architecture needs to be fully aligned with the wider sustainable finance transition. Effectively using enablers, risk management tools, blended and public-private partnerships, and international commitments and cooperation provides a finance playbook for the SOE.

This paper surveys the current landscape of ocean finance—it maps recent developments, highlighting emerging financing pathways, the appropriate sources and the required instruments and frameworks for ocean finance of the SOE. It provides both information as well as key takeaways on how financing needs to be part of the design of a successfully maturing SOE in the context of both the challenges (Schutter et al. 2024) and opportunities. It describes financial instruments currently in use and identifies areas where new financing models may be required.

The paper is structured to firstly outline the critical challenges and barriers to sustainable ocean finance and current financial flows before examining the potential opportunity pathways and enablers to mobilise finance. This includes the role of international commitments, as well as the different approaches towards private, philanthropic, public and blended finance including international cooperation. The enablers assessed include platforms to access investable and bankable projects; policy mechanisms to lay the foundation for sustainable ocean governance; and the alignment of frameworks, guidelines, safeguards and standards to the SOE. The paper concludes by providing some preliminary recommendations for governments on how to help scale financing for the SOE.

To supplement this paper, we have also developed an 'Information Bank'—a repository of the latest definitions, principles, sources of finance, funds and initiatives, based on the contributions of leading ocean finance institutions (Ocean Panel 2025). It gives an accessible overview to help governments and decision-makers navigate the evolving ocean finance landscape, focusing on international development cooperation.

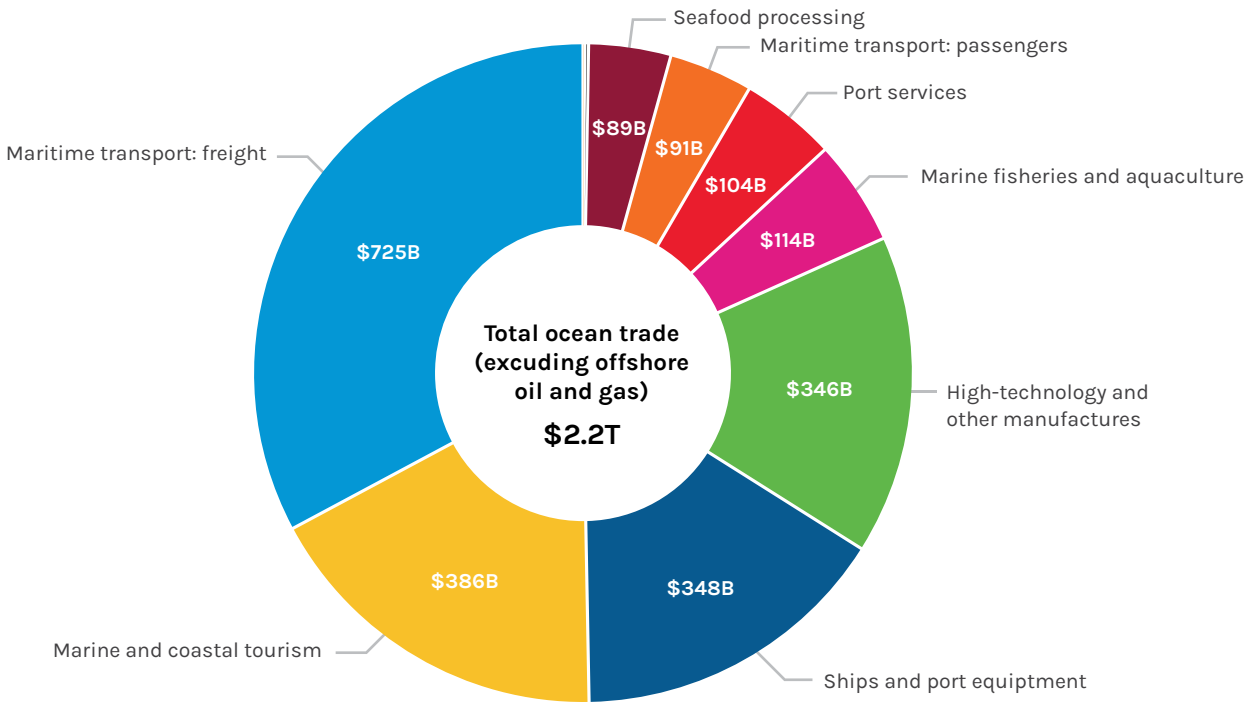
1. Pathways to success

1.1. Ocean finance needs and current flows

The ocean economy has seen significant growth in recent years. In terms of trade, preliminary calculations suggest that the value of ocean goods and services exported reached $2.2 trillion in 2023 (Figure 3) (UNCTAD n.d.). Of this, developed economies accounted for 57 percent of ocean trade. By 2023, ocean goods and services surpassed pre-pandemic levels, with ocean goods exports reaching $900 billion and ocean services exports totalling $1.3 trillion. While this recovery highlights the ocean economy's resilience and adaptability, it is also notable that the most volatile sector was tourism, which is also the largest. The long-term economic value of tourism is dependent upon maintaining a sustainable environment, the cost of which is not included in measures of its trade value. This gap underscores the urgent need for adequate sources of finance, at affordable cost, to enhance investment that respects and supports the planetary boundaries on which these economic activities depend.

The most significant ocean sector in terms of export value in 2023 was marine and coastal tourism ($725 billion), followed by maritime freight transport ($386 billion) and high-technology manufactures ($346 billion), the last of which comprises manufacturing for fishing, pharmaceuticals, marine sports, clean energy and electrical equipment (Figure 4). Marine

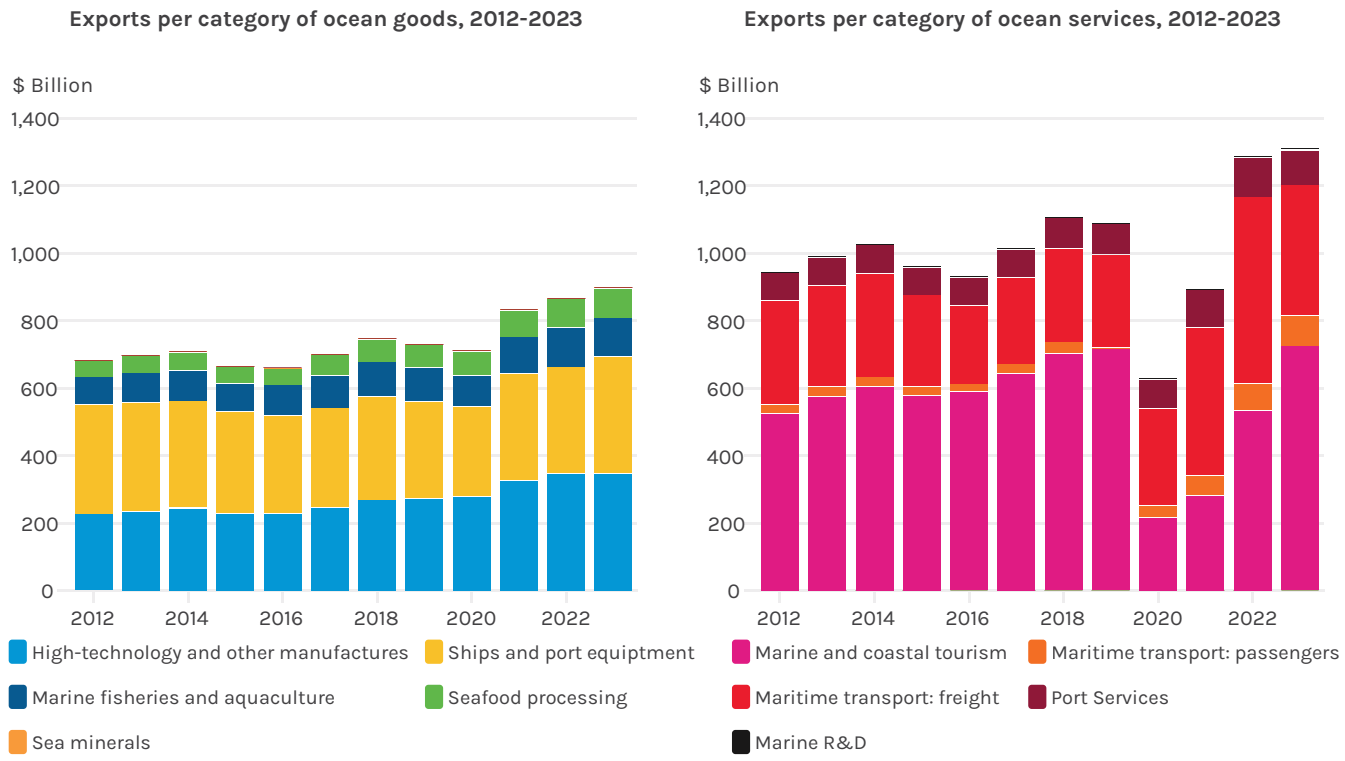
FIGURE 3. **Global exports of ocean-based goods and services in billon $, 2023**



Notes: Exports of ocean services have yet to recover back to pre-pandemic levels. Billions of US dollars in current prices. Detailed information including sources and notes can be found on the website of United Nations Trade and Development SDG Pulse at https://sdgpulse.unctad.org/sustainable-trade/. The country classification used in this data file is available from https://unctadstat.unctad.org/datacentre/, last updated 2 July 2024. R&D = research and development.

Source: UNCTAD n.d.

FIGURE 4. **Exports of ocean-based goods and services in billion $, 2012–23**



Note: R&D = research and development.
Source: UNCTAD n.d., Ocean Trade in Goods and Services Database.

fisheries and seafood processing added $203 billion in food-related and non-food-related goods exports. Ocean services accounted for more than half of the total trade in ocean goods and services in 2023 (UNCTAD 2025a). The extensive linkages that marine tourism has with other sectors, such as construction, infrastructure and facilities; food and beverage; and cultural and recreational goods and services, give it a strong potential to foster sustainable development, if backed by sustained and accessible ocean finance.

With this continued growth, it is evident that a movement is needed to ensure ocean ecosystems are recovered, restored and maintained to underpin the delivery of the SOE. At the most basic level, ensuring the continued extraction of fishing or tourism revenues will require investments that do not undermine the ecological viability of these core resources and would ideally even improve them. The business model for shifting to renewable energy sources for coastal transport, rather than polluting fossil fuels, is one example of this, and more will be needed. Future estimates suggest that the ocean economy will increase by up to 40 percent in gross value added by 2050 from its 2020 value of $2.6 trillion (OECD 2025b). It is critical that this is achieved sustainably. The appetite for regenerative and sustainable investment is on the rise (European Commission 2024). Businesses and governments alike are recognising the need to align their operations with the transition to a low-carbon (if not net-zero), nature-positive and resilient future in line with the Paris Agreement, Sustainable Development Goals and Global Biodiversity Framework to attract investment and benefit from the high rate of returns projected. In 2021, it was estimated that $1 invested in ocean solutions would yield at least $5 in global benefits by 2050 (Sumaila et al. 2021). WWF reports that over the next 15 years, up to 66 percent of globally listed companies could face a value of risk of up to $8.4 trillion under a BAU scenario (Kennedy et al. 2021). This includes environmental risk elements such as event-based damage from extreme sea level events caused by climate change. However, the absolute risk for almost all sectors to assets and revenues is reduced under a more sustainable development scenario, with a reduction in losses of up to $5.1 trillion.

Ocean finance has significant overlaps with climate and nature finance due to the ocean's critical role in contributing to addressing biodiversity and climate risks. However, given the ocean's unique characteristic as the largest biome on the planet and its human-related interactions, ocean finance is beginning to develop its own dynamic and specialised financial instruments. To establish a clear pathway for ocean finance to achieve the SOE, it is essential to redirect mainstream finance away from destructive BAU pathways and understand the global requirements to achieve the SOE. While estimating this level of transition finance is not without challenges, indicative estimates have been suggested for the period to 2030. Johansen and Vestvik (2020) calculated that, for SDG 14 to be achieved, $174.72 billion per year was required,[13] in addition to ceasing destructive BAU expenditures (see Appendix A for further details). More recent estimates of the additional financing needed to achieve the SOE suggest a range of between $383 billion and $717 billion per year, with a midpoint of $550 billion per year across six investment areas (Blue Bond Accelerator 2025).[24] The majority of this finance will be required in the Asia Pacific region due to those countries' SOE capabilities but lack of financial backing, which is calculated to account for 56 percent of the global investment need (Blue Bond Accelerator 2025).

While some see an increased appetite for sustainable financing to deliver the SOE across regions and sectors, its total scale remains low—both relative to needs and significantly below potential finance flows. The examples listed below reflect the current situation in terms of financial flows to the SOE within different sectors (further set out in Appendix A):

- Increasing capital flows and deals towards the SOE. This includes at least $10.4 billion in blue bonds from 2018 to 15 February 2025,[3] and over $76 billion total capital raised by ocean economy funds since 2015 (Phenix Capital 2025).
- A number of significant commercial investments in offshore renewables and net-zero shipping. Global offshore wind investment reached a record $76.7 billion in 2023, jumping 79 percent from the previous year (Metcalfe 2024).
- Low but growing volumes of funding from philanthropic and public sources, estimated up to $2.8 billion (Lewis et al. 2023) and $2.4 billion (OECD 2025e), respectively, in 2022. However, these represent less than 1 percent of estimates of both total global philanthropic funding and total official development assistance (ODA), respectively.
- A number of historic environmental agreements, such as the Agreement under UNCLOS on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ Agreement) and key moments such as Our Ocean Conferences which seek to stimulate, and have stimulated, pledges. For example, from the Our Ocean Conferences there have been 2,906 commitments to date, totalling an estimated $169.2 billion (Our Ocean Conference 2025).

1.2. Key barriers and challenges to mobilising finance for a sustainable ocean economy

The ocean is a global common, providing benefits to all. It is therefore appropriate to take a coordinated, regenerative and sustainable approach ensuring that ocean finance is directed to development pathways that deliver equity, well-being and environmental health.

A number of key barriers have held back the growth of ocean finance (Sumaila et al. 2020):

1. **A lack of universal framework:** While guidance exists, there is no universally agreed classification system for SOE activities to help guide investments.
2. **Gaps in understanding and scale:** Neither market prices nor gross domestic product (GDP) reflects the significant contributions the ocean makes towards the economy, and greater knowledge is required on the ocean's economic, social and environmental value, as well as its transboundary nature.
3. **Distorted market dynamics:** Subsidies[4] are still in place for activities that generate negative externalities while effective ocean governance, including conservation and restoration to sustain the ocean's productivity, is underfunded, for example, by those countries that would be benefiting. The economic impacts are often absorbed by marginalised communities and developing countries.

4. **Weak pipeline:** There is a lack of high-quality, investable projects that have the appropriate risk-return ratio or deal size, as well as a lack of precedent transactions.
5. **Higher risks:** The ocean's physical conditions, increasing marine hazards and issues of property rights and enforcement mean that ocean investments come with specific risks.

Together, these barriers and challenges are halting the progress and scaling of financing towards the SOE. Traditional sectors with their established finance pathways and historic track records of solid cash flows have easier access to finance, even if models confirm they are at risk in the future from biodiversity loss, climate change and water stress. The traditional commercial finance mechanisms (UNEP-FI 2021) such as bank loans, receivables and asset finance require proven business models and track records and are thus at times not appropriate for the specific conditions that local communities face. As the SOE is an emerging market, with a lack of local capital, limited financial institution support and overall higher borrowing costs, finance for it is restricted. It is often 'outcompeted' by more established sectors due to impact assessment challenges and because they include activities that are intrinsically less appealing to commercial financial imperatives, such as those with features of global public goods, such as collective ownership, spillover effects and an inability to exclude non-payers (UNCTAD 2023a; Vivas Eugui et al. 2021). Even established sectors that require transition finance, such as is needed to deliver net-zero shipping and energy efficiency, which have access to finance through traditional sources, are experiencing delays due to uncertainties over appropriate technologies and a lack of clarity regarding regulatory developments (UNCTAD 2023a).

The lack of a universal framework causes challenges to arise when delineating ocean finance from broader nature and climate finance frameworks. For governments reporting against international climate finance targets, splitting these without a clear understanding of how they link may divert from the overall quantum of finance needed to tackle nature and biodiversity losses. Without this framework, the private sector and multilateral development banks (MDBs) are also at risk of inaccurate reporting of their ocean finance investments. Without standardised guidelines, accurate tracking and reporting of ocean finance, these institutions could be accused of 'blue-washing'—where investments are portrayed as environmentally beneficial to the ocean without substantial evidence.

SIDS experience further challenges due to their inherent characteristics (e.g. exposure to climate impacts, remoteness, capacity-constrained small populations); structural vulnerabilities; and high levels of indebtedness, which limits their ability to make sustainable investments even when these are part of national development plans. Many lack deep local capital markets or access to global bond markets as they are either not investment grade (i.e. low-risk, high-quality investment) or have a weak or lack a sovereign rating (a measure of a country's ability to pay back its debts) (Blue Bond Accelerator 2025). Ocean-based opportunities may provide solutions to certain structural challenges (e.g. through economic diversification in SIDS) (OECD 2022a). However, SIDS require access to concessional finance and sustained capacity-building in this area and in areas for economic diversification. Clearer regulatory frameworks which instil effective and equitable ocean governance are, therefore, required.

In addition to the regulatory framework, investment in infrastructure and technology to support the sustainable development of emerging sectors (e.g. marine biotechnology) and sustainable practices (e.g. sustainable marine aquaculture) is required. These must be pursued in parallel. Developed countries need to financially support SIDS and LDCs with sustainable ocean management, not just to tackle disparities in ocean governance, but also to contribute to the broader goal of sustainable development (Sumaila et al. 2020).

A UN Environment Programme report estimated that, as of 2023, $7 trillion per year was being spent on nature-negative finance from both public and private sources (UNEP 2023). A significant part of this was related to marine ecosystems, including harmful fishery subsidies. Just over $1 trillion was related to harmful fossil fuels subsidies. We must repurpose this to combat nature loss and scale public funding and private financing into ocean nature-based solutions, and ensure that there is a just transition to an inclusive financial system, particularly for vulnerable groups, women and Indigenous Peoples.

Several methodologies are already being employed to overcome these challenges. Microfinance, seed investment, incubation and accelerator efforts and new impact investment funds are already actively supporting and promoting new SOE opportunities. However, these can still have significant transaction costs and cover only a part of the required financial needs. On a larger scale, infrastructure projects can bring coastal resilience considerations and nature-based solutions into their designs and structures and are in part supported by development finance institutions (IUCN 2020). Unfortunately, many still require solid models of coastal climate change and integrated assessment skills. Common frameworks such as impact assessments (BNCFF 2019) and technology-based solutions are helping to address monitoring and verification issues as well as costs, but these are at the earlier stages of development.

It is evident, therefore, that these barriers and challenges must be addressed to scale and accelerate finance for the SOE. Although obstacles vary across contexts, especially when comparing advanced and developing economies, there are some common actions—outlined in subsection 'Pathways for mobilising public and private sector financing towards a sustainable ocean'—that can be taken to alleviate them:

1. Produce a universal framework by implementing a globally recognised taxonomy of SOE investments using existing high-integrity principles, such as the Sustainable Blue Economy Finance Principles (UNEP-FI n.d.), guidelines, metrics and standards for sustainable ocean investments and operations for increased accountability.
2. Increase ocean finance literacy across finance institutions and scale up comparable ocean data and measurements to reduce gaps in understanding and scale. By increasing ocean finance literacy, this can elevate the broad understanding of its relevance and importance. Scaling up ocean data must also focus on making them accessible and available to decision-makers for increased transparency and traceability.
3. Redirect public financing away from harmful subsidies to reduce market distortions and recognise the special circumstances of SIDS and facilitate their access to finance and investment for developing coastal states, including LDCs.
4. Establish credible accelerators and matchmaking platforms across the spectrum of capital to enable finance flows and provide technical assistance and grant funding to grow the marketplace and a strong pipeline of investable projects. Spur entrepreneurship and develop a supportive regulatory environment to guide commercial and investment activity.
5. Develop de-risking tools such as insurance and guarantees to lower the risk of and reduce uncertainty in investments. This will decrease costs, boosting both public and private ocean financing.

To facilitate these actions, a number of mobilising pathways across the public and private sectors can be used. These are outlined in the following section.

1.3. Pathways for mobilising public and private sector financing towards a sustainable ocean economy

Investment opportunities abound but we need to address key bottlenecks of SOE development. The volume of capital that a sector attracts varies mainly based on the sector's commercial viability, technological advancements and regulatory frameworks. For example, sustainable tourism, offshore renewables and net-zero shipping can use existing traditional sources of financing, whereas marine protection has not yet seen investment-scale activity due in part to its lack of a clear revenue model. A few sector-specific examples of these bottlenecks are shown here:

- Capital investment into offshore renewable energy needs not only regulatory certainty, energy market cost parity and sufficient grid connectivity to be rolled out at scale, but also the integration of robust environmental and social safeguards. Comprehensive assessments of environmental and social impacts, with mitigation measures in place to prevent adverse effects on marine ecosystems, are required to ensure the responsible development of offshore wind projects.
- Transitioning to a net-zero carbon global shipping fleet now has regulatory momentum behind it. This includes through the International Maritime

Organization's (IMO's) revised greenhouse gas (GHG) strategy, IMO carbon price discussions and the European Union (EU) Emissions Trading System (ETS) which have provided clear signals to the industry. However, fleet decarbonisation will require global access to new fuels at a new scale and new economic price point. Therefore, finance that integrates land-side infrastructure with the shipping value chain will be critical, alongside that which facilitates the transfer of these technologies to establish green shipping corridors.[5]

- Finance for the blue food sector needs to prioritise investments that are fully aligned with sustainable and regenerative management of marine resources and embeds restoration within their supply chains. This includes supporting ventures such as bivalve mariculture which offers profitable blue food products while enhancing marine biodiversity and water quality and improving cold water storage to bolster food security and reduce post-harvest losses. These investments will help reduce pressures from industrial fishing and aquaculture and cultivate ecological restoration and economic viability. Reducing marine biodiversity loss requires not only investments into conservation and restoration but also adequate governance, policies and enforcement, including the management of economic incentives in adjacent areas to eliminate stressors.
- Coastal resilience investment requires strong local engagement, adaptation science and the integration of nature-based solutions. Insurance to address risk transfer aspects can also be an important enabler.
- Tackling marine plastic pollution must be integrated into comprehensive circular economy principles, including adequate legislation for land-based activities. It also requires heeding the disproportionate burden that plastic pollution, both in terms of the scale of the problem and the costs of curbing it, poses on developing countries (Agnelli and Tortora 2022). It requires the reduction of fossil fuel subsidies that are resulting in the overproduction and underpricing of plastics, as per the ongoing discussions surrounding the UN Plastics Treaty (CIEL 2023).
- Transitioning towards sustainable marine and coastal tourism requires coordinated action across governments, the private sector and the local communities involved. The momentum of tourism to 'build back better' post-COVID pandemic resulted in many countries mainstreaming sustainability into their tourism strategies (OECD 2024). However, for investments to flow, broader stakeholder engagement is required, with a greater evidence base for sustainable tourism policies and their positive environmental and social impacts.

Listed below are the suggested key pathways that will address barriers and create enablers to allow for the transition to the SOE:

1. **Integrating ocean finance into new and existing international finance commitments**
   - Mobilise public and private finance, together with the multilateral system, to deliver on existing international commitments, using a range of funding mechanisms and instruments. These include, but are not limited to, the following:
     - The Global Environment Facility (GEF) and its Trust Fund administered by the World Bank
     - United Nations Framework Convention on Climate Change (UNFCCC): the Paris Agreement, the Green Climate Fund (GCF), the Adaptation Fund and the Fund for responding to Loss and Damage
     - The Convention on Biological Diversity's (CBD's) Kunming-Montreal Global Biodiversity Framework (GBF) and its Global Biodiversity Framework Fund
     - The BBNJ Agreement and its Special Fund
   - National and multilateral development banks should include 'blue' lending more squarely within their climate lending targets
2. **Aligning business and enterprise strategies with global biodiversity and climate change targets for value chain reform and investment and the uptake of social and environment safeguards**
   - For corporations, their entire value chains should reflect ecosystem-based ocean sustainability objectives, targets, and criteria, as well as blue natural capital metrics, grounded in science, with adequate disclosure, transparency and traceability systems in place. Reducing the

risks associated with unsustainable BAU practices and poor levels of transparency, as well as encouraging and resourcing innovation and increased efficiencies, will help build bankable and investible SOE pipelines,[6] potentially unlocking new finance opportunities, as well as redirecting existing mainstream finance away from less-sustainable options. A lack of a pipeline is a potential barrier to financing the SOE.

3. **Enhancing knowledge-sharing, capacity-building, seed financing and governance to build a pipeline of investable and bankable projects**
   - Knowledge-sharing, capacity-building, seed financing and governance to lower risk profiles need to be employed to scale up and generate pipelines of bankable projects. This will help increase access to finance, particularly for small-scale projects that tend to have high transaction costs, low and slow return profiles, and capacity constraints (particularly in terms of business planning), and are often remote and fragmented in nature.
   - Building these pipelines will enable a clear and transparent pathway that investment can be funnelled through, concentrating on the Global South, SIDS, and small and medium-sized enterprises (SMEs). Early ODA and philanthropic grant funding is key to developing this pipeline and must be matched with technical assistance as well as follow-on steps that enable these businesses to move from philanthropic to other types of capital. Blended finance vehicles are critical, as is ensuring that the policy enabling environment, including trade and public procurement, among others, can help guide them. The availability of guarantees to de-risk local bank investments is also important.
   - Matchmaking platforms[7] need to be used and scaled up to enable funding access to these projects. These platforms connect institutions that require investment—ranging from small-scale ocean projects to government bodies—with a diverse pool of investors, including public, private and philanthropic sources. They often provide additional technical assistance for project developers and investors to help facilitate transactions, and enable the scaling of ocean finance for the SOE. Public and development banks are typically extremely important in this role.

4. **Instilling policy, regulation and governance that creates an inclusive and supportive enabling environment**
   - Ocean sustainability needs to be fully integrated into the design of plans, policies and processes—endorsed and implemented at the project, subnational, national and global levels. This can be through governance frameworks that ensure this integration, such as national and regional land- and ocean-use regulations, sustainable ocean plans (SOPs) and national accounts.
   - SOPs should include a country-level strategic financial plan with a focus on achieving 100% sustainable ocean management, acting as a critical tool to integrate funding and finance considerations into a country's ocean governance and guide future ocean financing (Ocean Panel 2021).
   - Coherence should be ensured across policy, regulatory and financial system reform to align all activities towards the SOE.
   - Harmful subsidies should be redirected towards supporting the transition to the SOE.

5. **Aligning and redirecting investment, capital and trade towards financing for the SOE**
   - Principles, standards and sustainable finance taxonomies are required to guide sustainable ocean activities and financing (OECD 2025d). Some elements of the emerging ocean finance ecosystem already exist, including the Sustainable Blue Economy Finance Principles (UNEP-FI n.d.) and associated guidance,[8] which offers the first global framework for directing finance towards SOE pathways. The Taskforce on Nature-related Financial Disclosures (TNFD 2023) builds on the Task Force on Climate-Related Financial Disclosures (TCFD 2017) by offering an accountability framework with a focus on nature, including some SOE sectors.
   - Key aspects of the ocean finance ecosystem need to be developed, however, including national-level ocean taxonomies which can provide a finance industry categorisation of SOE sectors and subsectors. This needs to be

supplemented with the implementation and adoption of a universal framework and taxonomy of SOE investments to guide financial decisions away from unsustainable BAU pathways and towards SOE opportunities. This will help financial institutions avoid risks and commit to meaningful transition pathways.

- For effectiveness and accountability, common indicators are needed to operationalise, track and incentivise the transition to sustainable ocean practices.

Overall, a full system approach is required to efficiently unlock and align financing for the SOE.

- Coherent, complementary and coordinated actions across public and private sector actors are required to improve the matching of needs and replicate, scale and accelerate funding and financing for the SOE.
- There must be effective integration of accountability frameworks, principles and guidance—such as SOPs, the Sustainable Blue Economy Finance Principles and sectoral guidance (UNEP-FI n.d.), Minderoo's 30x30 finance principles (MF&P 2024a), the Taskforce on Nature-related Financial Disclosures (TNFD 2023), UNCTAD's Blue Deal (UNCTAD 2023c) (see Box 2), the Ocean Investment Protocol (de Vos et al. 2024) and #BackBlue (ORRAA 2025)—which call for and can help facilitate such a holistic approach. For further details on these, see the 'Information Bank' (Ocean Panel 2025).
- Ocean finance must be integrated into climate, nature and development finance. For example, by enhancing ocean finance in DFI strategies, as proposed by Cartagena Ocean Action,[9] financing is facilitated for critical investments such as those in resilient marine infrastructure, emerging ocean technologies and the use of remote sensing and artificial intelligence for ocean data management.

BOX 2. The Blue Deal approach to sustainable ocean finance

UNCTAD's concept of a Blue Deal reflects growing efforts to frame ocean finance and governance through a lens that includes climate change and environmental awareness, economic sustainability of ocean resources and development needs.[a] It is closely related to the Green New Deal approach[b] but goes further to account for the high proportion of ocean resources that are public goods and recognises the many examples of inconsistent and often perverse financing, both public and private, that contradict ocean climate goals and can be ambiguous for development outcomes as well. UNCTAD's mapping of financial flows to the ocean economy found that activities which can viably capture revenues, manage risks and earn profits can successfully attract reasonably plentiful market finance (e.g. aquaculture, seafood processing, shipping and port services, coastal and island tourism and other traded goods and services). However, the potential is much lower for the underlying and essential activities of conserving ocean, coastal and marine ecosystems; wastewater management and other pollution controls; investment in core blue R&D; and general or basic research in critical ocean industrial production and processes, where revenue generation is much less certain.[c]

For these essential activities that are difficult to fund, it will be crucial that public sources of long-term finance can be provided at scale through ODA, grants, philanthropy or highly concessional loans provided by well-financed and ocean-expert public and development banks. Much needed regulatory reforms that follow from this view include shifting public finances out of fossil-fuel and harmful-fishery subsidies that are currently worth hundreds of billions of dollars per year, while taking seriously the role of public banks, giving them the finances and the policy space they need to do the heavy lifting that is required. Public banks are institutions designed for the functions a sustainable ocean economy needs, with the mandate to provide long-term, patient capital and the expertise to direct it towards sustainable uses, and it would be helpful if their owners provided the financial firepower and a clear and strong sense of public purpose to support the SOE. At present, public banks are lending to both ocean-positive and ocean-negative activities in the fossil fuel, petrochemical and plastic sectors, for example.[d]

Notes: [a] UNCTAD 2022. [b] UNCTAD 2019. [c] Vivas Eugui et al. 2021. [d] Barrowclough and Finkill 2021.

2. Ocean finance in international commitments

The health of the ocean is in a critical state (Enevoldsen et al. 2024). Key international commitments, multilateral environmental agreements and voluntary pledges have set a range of targets and goals to protect and conserve the ocean's health, as well as facilitate the transition in industries and sectors towards the SOE. With regard to ocean conservation, a significant feature of SOE development, these pledges vary from protecting 30 percent of marine areas by 2030 to new agreements to protect biodiversity in areas beyond national jurisdiction. Other pledges have focused on the SOE as a whole, such as the agreement to 100% sustainably manage national ocean areas. Solutions for how the ocean can act to mitigate climate impacts have been proposed across ocean-based sectors, including ready-to-implement actions for the SOE (Ocean Panel 2020; Hoegh-Guldberg et al. 2023), but all require the scaling of ocean funding and finance as a key pillar of support. This section explores the commitments which are enabling ocean financing, and whether there is a need for specific ocean finance–based commitments to transition to the SOE.

Currently, there is no explicit international ocean finance commitment total. There is neither an ocean equivalent of the New Collective Quantified Goal on Climate Finance—a global target for the amount of climate finance that should be provided and mobilised annually and with a set timeline (UNFCCC 2024). Nor is there a target similar to that of the Global Biodiversity Framework which aims to mobilise $200 billion per year, including $30 billion per year by 2030, through international finance (CBD n.d.). However, this is because ocean finance is an inherent aspect of these commitments, in the same way finance for terrestrial-based activities is included. Ocean finance is intrinsically integrated across international commitments that are aimed at tackling the triple crisis of climate change, biodiversity loss and pollution as these are all challenges faced by the ocean. From global climate ambition to thematic and sectoral targets as illustrated in Boxes 3 and 4, ocean finance is an integral feature of these. Global coalitions have also incorporated voluntary commitments on ocean finance into their agendas such as the Ocean Panel's transformation agenda which sets out an ambitious goal for ocean finance towards 100% sustainable ocean management for its 18 member countries (Ocean Panel 2020). The financing gap and needs of SIDS and LDCs are particularly noted. This reflects the inherent cross-cutting nature of ocean-based sectors and activities, and the opportunities for co-benefits and synergies in tackling ocean, environment and sustainable development hand-in-hand.

Yet, despite its intrinsic nature, there remains a lack of transparency regarding how much finance committed for biodiversity, nature or climate is being allocated towards the ocean. It's estimated that less than 1 percent of global climate finance is being directed towards ocean-based solutions (Barber et al. 2021), despite its potential to close the emissions gap by up to 35 percent by 2050 on the 1.5-degree-Celsius (°C) pathway (Hoegh-Guldberg et al. 2023). However, this is only an estimate, as tracking the flow of ocean finance remains a challenge. This is exacerbated by the reluctance or inability of countries and private sectors to disclose information about their investments in sustainable ocean economy–related activities. Only with standardised reporting frameworks and a commitment to transparency can we fully understand the flow of ocean finance and ensure it is fully integrated into international commitments and agreements across the spectrum of nature, biodiversity and climate (for more details, see Tracking in subsection 'Creating a supportive and inclusive enabling environment').

Creating alignment and ocean-specific finance commitments—taking into account the gap between commitment and implementation by analysing the specific governance and accountability mechanisms that have facilitated or hindered delivery—could help financial actors invest in the SOE.

BOX 3. Ocean-related international commitments and finance for implementation

The ocean, representing the planet's largest ecosystem, faces a triple planetary crisis from the three main interlinked issues that humanity currently must tackle: climate change, pollution and biodiversity loss. This triple crisis has prompted a range of international commitments and agreements, many of which include aims to restore and sustainably manage the ocean. Key examples include the following:

- **Sustainable Development Goals,** in particular SDG 14, 'Life below Water', to conserve and sustainably use the ocean, seas and marine resources for sustainable development.
- **UNFCCC and its Paris Agreement** to limit temperature increase to 1.5°C above pre-industrial levels, including the Paris Alignment to make finance flows consistent with a pathway towards low GHG emissions and climate-resilient development. This also includes the continuation of the collective goal for developed countries to provide $300 billion per year by 2035, with the wider goal of mobilising $1.3 trillion per year from all financial actors,[a] and the Sharm el-Sheikh Implementation Plan to consider, as appropriate, ocean-based action in national climate goals, including but not limited to nationally determined contributions, long-term strategies and adaptation communications.[b]
- **The Kunming-Montreal Global Biodiversity Framework, under the Convention on Biological Diversity**, with targets to do the following: ensure that by 2030 at least 30 percent of degraded marine and coastal ecosystems are under effective restoration (Target 2); ensure and enable that by 2030 at least 30 percent of marine and coastal areas are effectively conserved and managed (Target 3); integrate biodiversity in decision-making including progressively aligning all relevant public and private activities, and fiscal and financial flows, with the goals and targets of the GBF (Target 14); take legal, administrative or policy measures to encourage and enable businesses to reduce their negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production (Target 15); reduce harmful incentives including subsidies (Target 18); and mobilise $200 billion per year for biodiversity from all sources, including $30 billion per year by 2030 through international finance (Target 19) (CBD 2022).
- **World Trade Organization Agreement (WTO) on Fisheries Subsidies** will set new rules to curb harmful subsidies and protect global fish stocks in a manner that also recognises the needs of fishers in developing countries and LDCs. The agreement will enter into force upon acceptance of its legal instrument by two-thirds of the membership.[c]
- **UNCLOS's BBNJ Agreement** will establish a new financial mechanism to provide adequate, accessible, new and additional, and predictable financial resources for the implementation of the agreement, including the establishment of a Special Fund with simplified application and approval processes. The BBNJ Agreement enters into force following the ratification of 60 signatories, and several of the details of the BBNJ Agreement's financial mechanism will be established or determined during the BBNJ Agreement's first Conference of the Parties (COP).[d]

Notes: [a] UNFCCC 2024. [b] UNFCCC 2022. [c] WTO 2022. [d] BBNJ COP1 will be held 120 days after the 60th ratification of the BBNJ Agreement.
Sources: See Information Bank section 'Financing international commitments'.

BOX 4. **Estimating needs: financing the Ocean Breakthroughs**

To provide the market and governments with illustrations of what needs financing to achieve the SOE, the UNFCCC Marrakech Partnership for Oceans and Coastal Zones and the UN Climate High-Level Champions have identified a set of 'Ocean Breakthroughs'[a] across key areas and sectors of the ocean economy, including indicative financing goals:

- **Marine conservation:** by 2030, invest at least $72 billion to secure the integrity of ocean ecosystems by protecting, restoring and conserving at least 30 percent of the ocean for the benefit of people, climate and nature. The Mangrove Breakthrough, as part of the 'Ocean Breakthroughs for 2030', will advance a financial roadmap for blue carbon ecosystem investment.
- **Ocean renewable energy:** by 2030, install at least 380 gigawatts of offshore wind capacity while establishing targets and enabling measures for net-positive biodiversity outcomes and advocate for mobilising $10 billion in concessional financing for developing economies to reach that goal.
- **Aquatic foods:** by 2030, provide at least $4 billion per year to support resilient aquatic food systems that will contribute to healthy, regenerative ecosystems, and sustain food and nutrition security for three billion people.
- **Shipping:** by 2030, ensure zero-emission fuels make up 5 percent of international shipping's energy demand; 450,000 seafarers have been retrained and upskilled; and at least 30 percent of global trade moves through climate-adapting ports.
- **Tourism:**[b] by 2030, $30 billion per year is invested to support halving emissions related to coastal tourism, and additional investments are made to build the resilience of local communities as well as recover and protect ecosystems to sustainably manage tourism in island and coastal destinations most vulnerable to climate change.

Notes: [a] UNFCCC HLC n.d. [b] The Tourism Breakthrough does not include the cruise ship industry.

3. Financing sources and instruments

This section explores existing finance tools which can be capitalised on to promote the transition to the SOE as well as innovative finance solutions that are in development. It investigates the different finance types—private, philanthropic, public and blended—to produce a picture of the current landscape of finance for the SOE. In the absence of comparative risk-return profiles, considerations of secondary market development and exit strategies for long-term ocean investments and risk mitigation strategies for cross-border investments provide only a starting point. To see a summary of the different financial instruments and mechanisms described in this section, see the Information Bank.

3.1. Private finance

Where there is clear demand from industry and governments, private capital is able to make a return on investment in the transition towards the SOE by financing sustainable trade, port and energy infrastructure, food systems and other relevant sectors, including opportunities in emerging sectors such as marine ecosystem restoration. However, aligning finance flows for the SOE also requires redirecting financing flows from ecological, economic and social inclusion perspectives. This includes scaling up and realigning long-term climate and development finance, a challenge for commercial finance. As a result, while global financial assets stand at more than $470 trillion, only a very small portion is presently being allocated toward sustainable ocean activities (UNCTAD 2023d). Recent years show a number of efforts to adapt existing private finance mechanisms to the specific ocean finance opportunity. These range from blue-focused exchange traded funds to targeted venture capital and private and public equity growth investment through ocean-focused impact funds, to sustainability-linked lending and specific capital market instruments, such as blue bonds. To deliver ocean finance at scale both the private sector and public finance need to reorient toward the SOE.

Private sector engagement in ocean finance faces structural and financial barriers that limit broader capital mobilisation. Regulatory uncertainty remains a key challenge, driven by inconsistencies in policy frameworks and the absence of a globally accepted ocean finance taxonomy, which complicates risk assessment and weakens investor confidence. Insufficient financial returns also deter investment, as high transaction costs and extended payback periods make ocean sustainability projects less competitive compared with traditional financing options. Currency risks in cross-border transactions can further exacerbate these challenges, particularly in vulnerable regions, while gaps in comprehensive ocean data amplify perceived risks, limiting long-term private sector commitments.

Governments and MDBs can reduce regulatory uncertainty by harmonising ocean finance taxonomies, simplifying licensing procedures and promoting consistent sustainability disclosure frameworks. These efforts improve clarity, reduce investor risk perceptions and help standardise project approval and risk assessment practices.

To improve financial returns and address investment barriers, governments can offer targeted incentives such as tax credits and green procurement policies. MDBs can provide concessional capital and blended finance structures that de-risk projects and enhance bankability. Meanwhile, the private sector can support aggregation platforms that bundle smaller initiatives into scalable investment vehicles.

Currency risks and data limitations remain critical barriers, particularly for investments in SIDS and low- and middle-income countries. Local currency lending programmes, partial guarantees and co-investments in data systems (such as ocean accounts or

monitoring infrastructure) can reduce exposure to volatility and improve transparency. These instruments can be supported by governments, MDBs and private foundations acting in coordination.

Key sources of and instruments for private finance are described fully below (with key definitions outlined in Table 1).

Impact funds

An impact fund is an investment vehicle that aims to generate a measurable and positive environmental or social impact as well as a financial return. Several ocean-focused funds are invested in SOE businesses. In the EU this was encouraged through BlueInvest (European Commission n.d.), an initiative aiming to boost innovation and investment in sustainable technologies for the ocean economy by supporting readiness and access to finance for early-stage businesses, SMEs and scale-ups. Enabling SOE impact investments is particularly critical in SIDS and can help tackle the 'missing middle'. It can unlock potential, grow investment through private and blended finance and deliver returns. Setting up specific funds can help create investor value, improve sustainability and increase resilience by directly investing in companies, projects and infrastructure that leverage ocean sustainability to address the climate, biodiversity and pollution triple crisis. For example, the proposed Outrigger Fund would provide dedicated finance to SIDS across six regenerative and SOE sectors through an impact-led Article 9 fund, pursuing a 100% sustainable investment approach, with dedicated impact key performance indicators. Similarly, the Mangrove Breakthrough Fund (GMA n.d.) aims to unlock $4 billion in finance to mobilise action to restore and conserve the world's mangroves.

Ocean equity funds

An equity fund is an investment fund that primarily invests in stocks or equities. Public equity funds which focus on the ocean economy are still relatively new. The recent Rockefeller Ocean Engagement strategy has the objective of outperforming global equity markets over the long term by investing in ocean health improvers and leaders and solutions-oriented equity. The fund includes an active shareholder engagement strategy that incorporates sub-targets of SDG 14 ('Life below Water'). Private equity strategies such as those taken by Ocean 14 Capital look to identify companies with proven business models at the beginning of the growth stage, which can benefit from the fund's equity investment and added value (O14C n.d.).

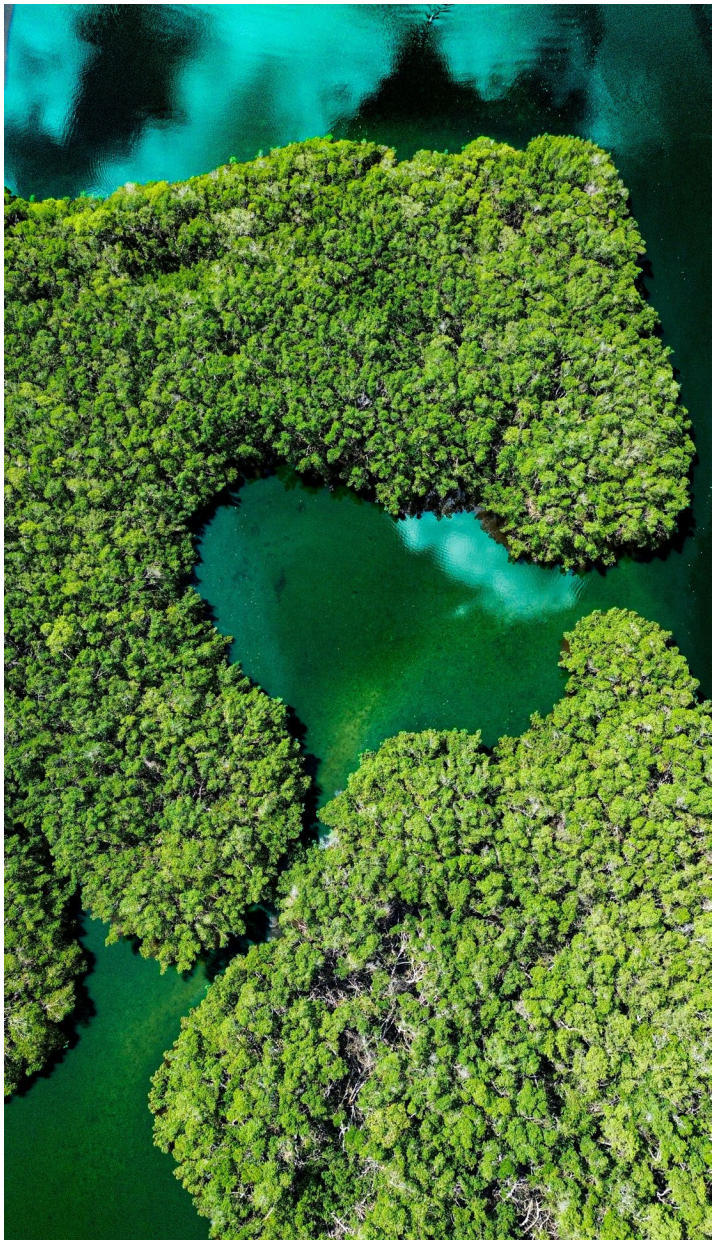
TABLE 1. **Definitions of private finance instruments and sources**

INSTRUMENT OR SOURCE	DEFINITION
Impact fund	Investment vehicle that aims to generate a measurable and positive environmental or social impact as well as a financial return.
Ocean equity fund	An investment fund that primarily invests in stocks or equities related to the SOE.
Lending (loans)	Practice of providing money (a loan) to a borrower to be paid back with interest.
Corporate capital expenditure	Funds used by a company to improve, buy or maintain its fixed assets such as property or equipment.
Carbon credit	A tradable instrument representing one fewer tonne of carbon in the atmosphere that is bought by companies to offset their own greenhouse gas emissions on the voluntary carbon market.
Biodiversity credit	A tradable instrument generated by projects that have restored or conserved an area over a specific period that can be bought by private companies to meet their own conservation needs, but not as an offset mechanism.
Payments for ecosystem services	Where natural resource users are paid to conserve the resource in question or manage it more sustainably by those who benefit from the enhanced provision of the resource.

Notes: SOE = sustainable ocean economy; DFI = development finance institution.
Source: Authors.

Lending

The *Rising Tide* and *Diving Deep* reports (UNEP-FI 2021; UNEP 2022) map the current ocean finance trends in lending, underwriting and investment activities which impact the ocean. They identify frameworks and financial instruments that are successfully addressing ocean sustainability and highlight new opportunities and gaps across seven major ocean-linked sectors chosen for their established connection with private finance: seafood, ports, maritime transport, coastal and marine tourism, marine renewable energy, natural infrastructure and solid waste disposal.



Corporate capital expenditures

Corporate capital expenditures are funds used by a company to improve, buy or maintain its fixed assets such as property or equipment. Collectively, corporate chief financial officers (CFOs) are custodians of over $14 trillion a year in corporate investment, much of which is in and around the ocean (UNGC 2020). CFOs, treasurers and the companies they represent can be a driving force for achieving the SDGs, including the SOE. With growing interest in sustainable and responsible financing worldwide, it is increasingly crucial for ocean-related company capital expenditures to support a more sustainable transition.

Carbon credits

The value of blue carbon ecosystems, and demand for blue carbon credits, has grown significantly in recent years. These are a small slice of the larger voluntary carbon market (VCM) which was valued at more than $1 billion annually in 2021 and is projected to increase in value by a factor of 15 by 2030, and by 100 by 2050 (Blaufelder et al. 2021). Carbon credits are generated by projects that have removed or avoided GHG emissions and represent one fewer tonne of carbon in the atmosphere. These are subsequently bought by companies to offset their own GHG emissions on the VCM. It is estimated that up to 20 percent of mangrove conservation projects could potentially qualify for blue carbon market participation, meaning blue carbon credits could be worth more than $10 billion (Friess et al. 2016).

One such example of a successful project that used blue carbon crediting was Kenya's Mikoko Pamoja project (UNEP 2017). This was the first mangrove conservation project that raised money by selling carbon credits to fund its community-led restoration. Through this funding, the community could continue planting and conserving the mangroves, while providing a valuable income to those that maintained it. It also funded the expansion of freshwater access and was used to renovate classrooms and purchase textbooks for improved education opportunities. The crucial feature of this project is that it incorporated the local population and its traditions into its development. Without this and establishing clear and accurate carbon baselines and other ecological and social factors, such projects could cause unnecessary or harmful

climate or ecosystem impacts. It's vital that these factors are considered, that best practices are established and that safeguards are in place for those directly impacted.

Biodiversity credits

Unlike blue carbon credits, biodiversity credits are very much in their infancy. These work under a similar mechanism, with biodiversity credits generated by projects that have conserved or restored a designated area over a specific period. The credits can subsequently be bought by private companies to meet their own biodiversity needs, but are intended to have a net-positive impact on nature and biodiversity, and not be used to offset a company's negative and avoidable effects on nature. They therefore provide funding towards projects that generate credits, encouraging conservation and restoration, while establishing a mechanism by which companies can meet biodiversity targets.

While there has been growing interest in terrestrial biodiversity crediting (Lane 2023), it presents its own series of challenges, which are made only more complex when applied to the ocean. Most significantly, there is no easy equivalent for the 'tonne is a tonne' premise nor can credits be embedded in an already existing mandatory trading mechanism established through global conventions (Rao et al. 2024). Biodiversity is intrinsically diverse and difficult to measure, lacking a common currency. This becomes even harder to measure in the ocean given the unrestrictive movement of biodiversity and the need for global governance strategies for ocean areas beyond national jurisdiction. It is therefore crucial that the biodiversity credit market be developed with a view towards equitable transparency and accountability, with a good governance structure and social safeguards.

Payments for ecosystem services

Payments for ecosystem services (PES) are another relatively new mechanism being tested for the conservation of marine and coastal ecosystems (OECD 2020b). PES programmes work using a 'beneficiary-pays' approach. The entity that would benefit from the resource or ecosystem service being enhanced (i.e. produced at a level above the status quo) would pay the resource owners or managers to incentivise higher or additional ecosystem services or goods provision. Buyers could include industries reliant on marine ecosystem services such as fishing, tourism or marine renewable energies. This could play a significant role in encouraging fishing and local coastal communities to restore, conserve and sustainably manage the marine environment, as well as facilitate the sustainable use of resources by ocean-based industries. PES can also be used to compensate for lost earnings by fishers due to the formation of marine protected areas.

Most current examples of PES are land based, as the difficulty in monitoring mobile marine resources and the lack of clarity and security regarding property rights make them hard to implement for the ocean (Mohammed 2012). However, Tanzania has employed a PES programme to finance its Marine Legacy Fund (OECD 2020b). In this case, commercial fishing licenses, marine ecotourism revenue-sharing and oil and gas taxations are being collected and distributed to coastal communities for conservation and to cover operational expenses.

3.2. Philanthropic and public finance

Grant funding and loans from public and philanthropic sources make up an important part of the ocean finance landscape, in particular for investments that do not (yet) deliver commercial returns. These are either concessional or non-concessional—meaning either with more favourable terms such as below-market rates or provided at market terms, respectively. This grant finance can be used to overcome the barriers to business development and investment through policy reform, analysis of the regulatory and legislative environment, and capacity-building. As a result, this type of finance can organically create the conditions for growth in sectors that initially lack commercial viability. Philanthropies can play a crucial role by providing direct funding to new projects and initiatives that are focused on sustainable ocean practices. For national governments, there exists a key leadership and ownership role to establish ocean governance that provides effective regulation to promote the growth of sectoral ambitions for the SOE. This can facilitate the scale-up of promising ocean solutions and support a just transition. Governments in particular can leverage their role in establishing an enabling environment for sustainable finance to flow (see section 'Enablers').

Key sources of and instruments for public and philanthropic finance are outlined below (with key definitions outlined in Table 2 and in the Information Bank).

Philanthropic funding

Philanthropic funding can directly support initiatives that promote sustainable ocean use, as well as the conditions for such initiatives to exist and grow (e.g. data for governance). In doing so, this funding can help bridge the gap by directing funds towards sustainable practices and initiatives. A mapping of marine conservation funding from the philanthropic sector estimates that global philanthropic funding for ocean conversation activities was between $1.4 billion and $2.2 billion in 2022 (Lewis et al. 2023), and while this has more than doubled over the past decade, this represents less than 1 percent of global philanthropic funding. Key activities supported over 2010–22 include science (26 percent), fisheries and aquaculture (21 percent), and protected areas and habitat protection (20 percent) (Lewis et al. 2023). Many grants provide not only funding but also technical knowledge and engage deeply with the local government.

Domestic budgets

The integration of ocean-related activities that are working towards the SOE, such as sustainable ocean plans, in domestic budgetary processes can help unlock resources to kick-start their implementation (Ocean Panel 2021). This can be achieved through directly linking national budget lines to the activity's outputs, or by ensuring that the activity itself is closely aligned with more traditional sectoral or cross-sectoral instruments that guide the allocation of domestic resources (such as national development plans). These resources can support activities from research to regulation—contributing to a positive enabling environment (see subsection 'Creating a supportive and inclusive enabling environment') as well as directly financing marine management. It

TABLE 2. **Definitions of public and philanthropic financing instruments and sources**

INSTRUMENT OR SOURCE	DEFINITION
Philanthropic funding	Voluntary provision of capital towards projects or activities that benefit others.
Domestic budgets (government)	Financial plan that outlines the expected expenditures and revenue of a country for the typical period of a year (known as the fiscal year).
Public procurement	The purchase of goods and services by governments and state-owned enterprises.
Subsidies	Capital provided by the state or a public body to assist a specific industry or business in reducing the cost of its product.
Tax hypothecation	A specific amount of revenue collected from a specific tax is earmarked for a particular purpose; the amount is agreed upon among relevant stakeholders for a set period.
Ocean-use fees	Fees collected by public bodies from ocean-based activities such as tourism, energy leases, fisheries, transportation and other sources to finance the SOE.
Sovereign wealth fund	An investment fund owned by the state (including both central and subnational governments) which invests to meet financial objectives and includes investments in foreign financial assets.
Pension fund	A fund that accumulates money through investment into capital markets to be paid out as a pension when an individual retires.
Special drawing rights	International reserve assets created and held by the International Monetary Fund.
Official development assistance	Government aid that targets and specifically promotes the welfare and economic development of developing countries.
Multilateral fund	Source of funding generated by multiple governments or international organisations to support specific environmental or development goals.

Source: Authors

should be noted, however, that public expenditure reviews and budget tagging exercises should be in place to ensure the effective channelling of domestic budgets to ocean-related activities. Their inherent cross-cutting nature among ministries or entities means it is easy to lose track of the precise amount of public funding allocated.

Governments should also integrate sustainable public procurement practices into their budgets. Public procurement is the purchase of goods and services by governments and state-owned enterprises. By applying sustainability-linked and ocean-positive criteria when purchasing goods and services, governments can help strategically strengthen policy goals towards sustainability, as the demand for suppliers to abide by these criteria will increase.

Fiscal and regulatory measures and revenues

The domestic and international taxation and subsidy regime can both support the alignment of economic activity and finance and generate revenue streams. The OECD has underscored how strengthening ocean management can mobilise domestic resources in developing countries (e.g. by reducing illegal, unreported and unregulated fishing, a significant source of foregone government revenues), including for the ocean economy (OECD 2022b).

Subsidy regulations have caused significant damage, not just to developing countries, but globally. Subsidies distort price and resource allocation decisions, altering the natural dynamics of supply and demand. This can create inaccurate production and consumption levels and divert resources from more productive uses which can cause inefficiencies and negatively impact the ocean—whether unforeseen or ignored during the initial policy decision. For example, in 2019, it was estimated that of the $35.4 billion in fishing subsidies given by governments, $22 billion was given to industrial fleets that did not require the funds and were using them to accelerate overfishing (Sumaila et al. 2019). Reform is already underway to alleviate this. In June 2022, the World Trade Organization produced an agreement to end many of these harmful subsidies (WTO 2022). The agreement will become operational once two-thirds of the WTO's members have deposited their 'instruments of acceptance'.

New applications of instruments and sources

Applying instruments such as tax hypothecation can significantly scale finance for sustainable ocean activities. Tax hypothecation is where the revenue collected from a specific tax is earmarked for a particular purpose such as contributing to the SOE. This is usually an amount agreed upon among relevant stakeholders for a set period. One such example is the new IMO global economic pricing mechanisms (IMO 2024), or the shipping levy under the IMO's maritime Net-Zero Framework, launched in 2025, which aims to cut GHG emissions from international shipping (see Case Study 1).

There has also been recent momentum behind operationalising monetary benefit-sharing from marine genetic resources and digital sequence information (DSI), including from areas beyond national jurisdiction. At CBD COP15, Parties agreed to establish 'a multilateral mechanism for benefit sharing, from the use of digital sequence information on genetic resources, including a global fund' (CBD 2022). DSI is also to be one of the funding streams for the Special Fund, the finance mechanism established under the BBNJ Agreement.

Ocean-use fees

Government agencies can collect fees from ocean-based activities such as tourism, energy leases, fisheries, transportation and other sources, using them to finance sustainable ocean planning and implementation (Ocean Panel 2021). New concepts and initiatives such as marine compensation schemes and net gain are emerging to both generate revenues and align investments. Marine net gain is not an exact financing mechanism but is defined as the concept of leaving the marine environment in a better, healthier state prior to development, and where marine compensation schemes provide repayment for those impacted by efforts to conserve, restore and protect the marine environment. One example is the United Kingdom's Pollack Compensation Scheme for fishers which provided renumeration for those impacted by 'by-catch only' pollack fishery restrictions (DEFRA 2024). Around 50 vessel owners were directly compensated for half their income lost. The scheme was part of an initiative to build back sustainable fish stocks and a healthy marine environment.

CASE STUDY 1. **IMO Net-Zero Framework**

On 11 April 2025, the IMO took another step forward towards reaching its goal of net-zero emissions by or around 2050 as outlined in the *2023 IMO Strategy on Reduction of GHG Emissions from Ships*.[a] After two weeks of negotiations, the IMO reached an agreement on regulations to impose a pricing mechanism for global shipping emissions and a new fuel standard for ships. This will be part of the IMO Net-Zero Framework and will be included in the International Convention for the Prevention of Pollution from Ships.

In this agreement, all vessels will be subjected to a charge on their GHG emissions from 2028 that will increase in price following a certain threshold. They will be required to reduce over time their annual greenhouse gas fuel intensity (GFI), how much GHG is emitted for each energy unit used. Those that emit above GFI thresholds will be required to purchase remedial units to balance their emission deficits, while those that are using zero-GHG or near-zero-GHG technologies will be eligible for financial rewards.

For ships emitting above the thresholds, they have three ways to balance their emissions:

- Transferring surplus units from other ships, similar to a carbon credit scheme
- Using surplus units they have already banked
- Using remedial units acquired through contributions to the IMO Net-Zero Fund

The IMO Net-Zero Fund will be used to collect these pricing contributions as well as for the following:

1. As a reward for low-emission ships
2. To support just transition initiatives in developing countries through innovation, research and infrastructure
3. As funding for capacity-building, technology transfer and training to support the IMO GHG Strategy
4. To mitigate negative impacts on vulnerable states, such as SIDS and LDCs

Forecasts estimate that these measures could raise around $10 billion a year.[b] This is significantly lower than what is believed could be achieved by a more straightforward carbon levy of $60 billion. It is expected that the emissions reductions will be modest, and potentially far below the 20 percent reduction required by the IMO's GHG strategy. However, it is a step in the right direction and will hopefully unlock financing for those developing countries to support a just transition towards the SOE.

Notes: [a] IMO 2025. [b] ICS 2023.

Sovereign wealth and pension fund resources

Sovereign wealth and pension funds are significant financial assets that could be directed to sustainable ocean activities. Investments in the SOE from these funds could be explicitly encouraged through financial regulatory action, through central bank policies, by making progress on ocean accounting and by developing blue natural capital as a long-term asset class. These large-scale, long-term investors could then play a critical role not only as providers of long-term capital, but also as a reliable exit option for early-stage investors into the SOE. In these cases, SOPs can be used as a financial roadmap for these investments.

Special drawing rights

Special drawing rights (SDRs) are international reserve assets created and held by the International Monetary Fund (IMF). IMF members and the IMF itself hold SDRs, whereas central banks and multilateral development banks must get approval from the IMF to do so. Private entities and individuals cannot hold SDRs. SDRs—either those already allocated to countries or those originating from a potential redistribution of SDRs—could be allocated to MDBs and national banks in countries where the funds are needed most for sustainable ocean investments. The ongoing work of MDBs on a Blue Finance Roadmap (FiCS 2023) to scale finance for a sustainable and regenerative ocean economy offers a format and could be supported by the issuance of additional, targeted equity capital for these institutions.

International development cooperation including multi-lateral funds

International development cooperation includes both bilateral and multilateral finance. This can be in the form of non-concessional funds from DFIs (e.g. the World Bank and PROBLUE) (see Case Study 2). Alternatively, grants and concessional loans can be given under official development assistance from development cooperation providers, including bilateral donors and multilateral development banks. ODA is an essential source of international finance for countries that lack domestic resources even for fundamental activities, such as waste disposal and water treatment services. The more narrowly defined category of ODA for the sustainable ocean economy received only about 0.8 percent of the total (see Box 5) (OECD 2025e).

CASE STUDY 2. **PROBLUE: grant resources unlocking blue economy financing**

PROBLUE is an umbrella multi-donor trust fund administered by the World Bank that helps developing countries deliver integrated and sustainable development of marine and coastal resources in a healthy ocean. It is a vehicle for innovation and intellectual leadership on ocean economy issues responsible for the expansion of the World Bank's ocean-economy portfolio, now valued at $9 billion. As an accelerator fund, it supports countries in developing their blue economies. It is supported by 12 donor countries and has a powerful catalysing effect, unlocking additional financing—every $1 of PROBLUE financing informs $49 worth of World Bank investments. Overall, PROBLUE has provided approximately $200 million worth of technical assistance, practical tools and diagnostical studies to over 100 countries to promote sustainable development while safeguarding our ocean.

Source: World Bank n.d.b.

BOX 5. **Pattern of ODA flows to a sustainable ocean economy**

The latest estimates suggest that official development assistance for the ocean economy totalled $3.5 billion in 2022, an increase of 45 percent compared with 2021. However, this represented only 1 percent of total global ODA.

Ocean-related ODA contributions towards ocean protection or enhancing the sustainability of ocean-based sectors (i.e. ODA for the sustainable ocean economy) increased to $2.4 billion in 2022. However, this accounted for only 69 percent of total ocean economy ODA in 2022, a notable decline from 81 percent in 2021.

FIGURE B5-1. **ODA in support of the ocean economy, 2010–22**

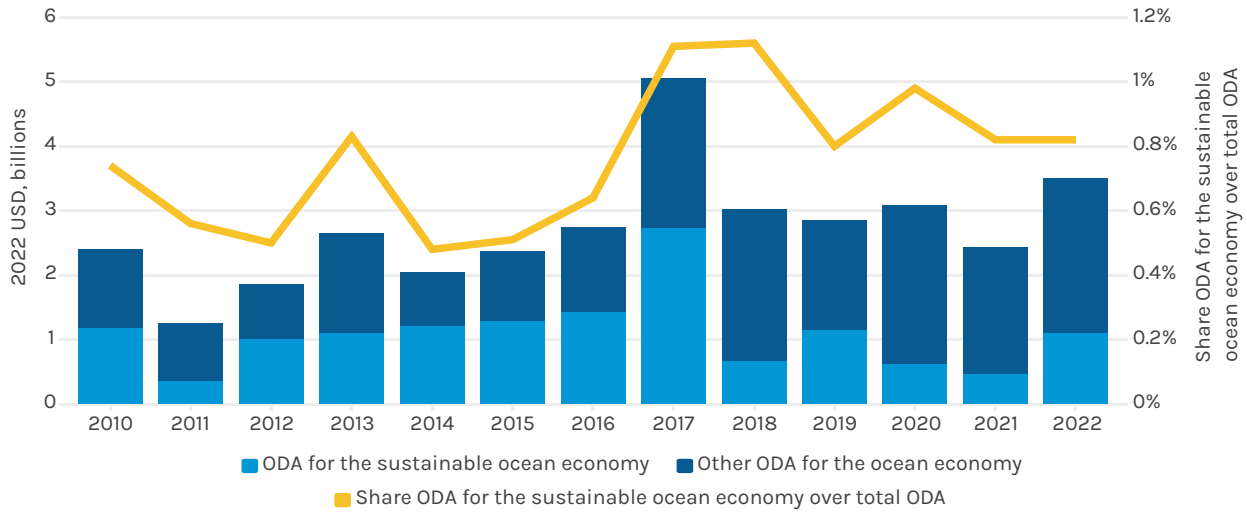


Figure notes: ODA = official development assistance. Figures are in 2022 constant prices.
Figure source: OECD 2025e.

BOX 5. **Pattern of ODA flows to a sustainable ocean economy (cont.)**

On average, in 2021–22, three sectors (maritime transport, marine protection and fisheries) accounted for roughly three-quarters of both ODA for the ocean economy and ODA for the sustainable ocean economy. This suggests that there remains scope for a more strategic use of ODA to unlock opportunities for developing countries from an array of untapped ocean economy sectors.

Meanwhile, ODA for curbing plastic pollution increased (+39 percent) from $1.1 billion in 2021 to $1.5 billion in 2022. This was driven by a jump (+84 percent) in ODA for solid waste management generally and potentially reflects an increase in the integration of recycling practices into development initiatives focused on the waste sector as well as, to some degree, improvements in reporting practices.[a]

FIGURE B5-2. **ODA to manage solid waste and curb plastic pollution, 2010–22**

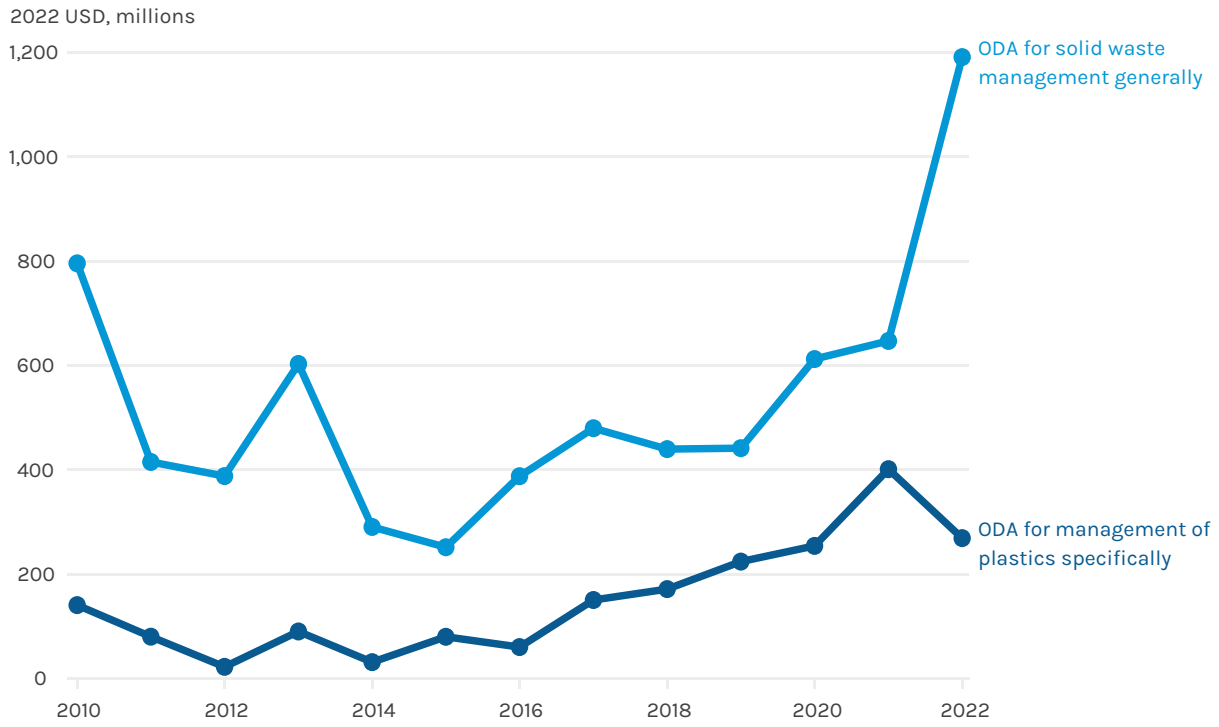


Figure notes: ODA = official development assistance. Figures are in 2022 constant prices.
Figure source: OECD 2025e.

Note: [a] Agnelli and Tortora 2022.
Source: OECD 2025e

To redress the limitations in the current landscape of ocean-related development assistance, the OECD's forthcoming guidance on development cooperation for a sustainable ocean economy will provide cross-cutting recommendations to providers, organised around five core messages (OECD 2025d):

- Set clear goals for development cooperation, guided by the pillars of a sustainable ocean economy
- Equip partner countries to establish integrated ocean policies and institutions while strengthening coordination at the provider level
- Enhance the use of ODA for the sustainable ocean economy and use it carefully to unlock broader sources of finance
- Develop capacities for an evolving ocean economy
- Recognise the transnational nature of the ocean and improve global coherence

Other efforts include the BNC+ Framework and linking the SOE to the UN Ocean Decade (Haugan et al. 2024) as well as the Marine 30×30 Principles outlined in Box 6.

Bespoke multilateral environmental funds are also an important source of concessional funding, particularly if there is an increased focus on eligibility and investment criteria that supports ocean-related actions. Dedicated windows or categories within these funds are needed to specifically target activities towards the SOE.

Current multilateral funds, such as the Global Environment Facility, the Green Climate Fund and the Fund for responding to Loss and Damage, do have some representation of ocean activities in their portfolios. The GCF is mobilising an estimated $1.66 billion in finance for projects with an ocean component; however, this is not a precise estimate of projects dedicated to the protection of marine

BOX 6. **Financing Marine 30×30 Principles**

Marine protected and conserved areas (MPCAs) represent an important tool for ocean management and the restoration of ocean biodiversity. This was recognised in 2022 when the 15th COP made the commitment under Target 3 of the Convention on Biological Diversity Kunming-Montreal Global Biodiversity Framework to protect 30 percent of the planet's land and ocean by 2030 (30×30). Sufficient and durable finance is key to achieving and ensuring long-term effective management of marine 30×30 targets, but finance is one of the key limitations to effective MPCAs. Considering the global momentum towards 30×30, and the lack of suitable financial strategies, countries need clear guidance on how to finance marine 30×30 targets. Subsequently, a global coalition of 25 partners came together to create a new systems approach to financing marine 30×30.[a] This is underpinned by the following eight key principles:

1. **Government led:** Marine 30×30 finance should be led by governments through their roles as leaders, conveners, planners, funders, policymakers and regulators
2. **Equitable:** Marine 30×30 finance should be inclusive, participatory and accountable in its design and implementation, and facilitate an equitable, gender-intentional, human-rights-based distribution of ocean finance.
3. **Network finance:** Marine 30×30 finance should fund MPCAs collectively through a network approach.
4. **Context driven:** Marine 30×30 finance should be fit for purpose, realistic and acceptable within the local context and defined by country need, capacity, socio-economic conditions and cultural norms.
5. **Cost-effective:** Marine 30×30 finance should be cost-effective in its design and implementation, employing cost-effective finance mechanisms to fund cost-effective ocean governance actions.
6. **Risk appropriate:** Marine 30×30 finance should implement a diverse and complementary finance portfolio that de-risks investment and delivers sufficient long-term capital.
7. **Adaptive:** Marine 30×30 financing should include locally appropriate adaptive planning systems that respond to emerging knowledge, evolving insights and shifts in socio-economic and environmental dynamics.
8. **Collaborative:** Marine 30×30 is a global commitment and should therefore be a collaborative effort supported at regional and global scales.

Note: [a] MF&P 2024a.

and coastal biodiversity (GCF 2024). This figure does include the Global Fund for Coral Reefs, with an investment window of $500 million, as well as Climate Investor Two, which supports the private sector in the development of resilient infrastructures, to the amount of $880 million. Since its inception, the GEF has allocated over $1.15 billion (UNEP 2018), with a particular focus on international waters. Of this sum, $735 million has been dedicated to transboundary cooperation in the field of freshwater. A further $565 million has been earmarked to support the fund's actions in international waters. While the Climate Investment Funds do not have a dedicated ocean strategy, 5 percent of the Pilot Program for Climate Resilience ($997 million) is dedicated to coastal zone management (CIF n.d.). Finally, the International Fund for Agricultural Development devotes around $60 million to 'ocean financing' to support sustainable fisheries and aquaculture.

From the above examples, it's evident that there is some representation of ocean activities in these portfolios, but it is limited. A push is needed for the ocean to be more strongly integrated and represented in core strategies and priorities in future funding rounds.

3.3. Blended finance

Blended finance is the combination of multiple sources of finance with different return requirements. Its role is not just to address different private sector return expectations by adding a grant or a lower-return tranche to the overall finance package. It can also be a way to facilitate project development, for instance, by providing initial grant support—through public, whether domestic or ODA, or private financing sources—to help make SOE concepts 'bankable'. This grant- or loan-based blended finance can help integrate partners' goals and progress complex transactions towards financial close.

Finance also needs to go beyond corporate debt provision from commercial banks or equity investments from venture funds to impact-driven and results-oriented finance, considering a broader range of stakeholders and outcomes. This can require de-risking and insurance tools from third parties or be facilitated by funding lines and guarantee facilities offered for specific ocean-related purposes. Integrating nature-based solutions and innovative, local entrepreneurial approaches into traditional asset classes such as real estate and infrastructure to achieve ocean and coastal outcomes would also fit into this space. The same applies to ways to use wider capital markets to bring new resources into the SOE. This could be through additionality such as MDB issuance—where DFIs structure transactions for a sustainable ocean project and offer private sector partners the ability to acquire the B loan—or through specific, thematic blue loans and bonds issued by either countries, corporations or financial institutions. The following examples (defined in Table 3) map this emerging ocean finance space which is helping to mobilise, aggregate and scale for the SOE. For more examples, see the 'Information Bank' and for a comprehensive review, see the World Economic Forum's *Ocean Finance Handbook* (WEF 2020).

TABLE 3. **Definitions of blended finance instruments and financing sources**

INSTRUMENT OR SOURCE	DEFINITION
Development finance institutions	A finance institution that provides long-term development funding for projects, typically sponsored or owned by governments or international organisations.
Blue bonds	Debt instruments for financing the sustainable use of ocean resources. The bonds can be issued by nations, DFIs, financial institutions and cooperations. For companies, the bonds can be issued where the companies have business activities tied to the ocean and they seek to limit impact on the ocean. The bonds can also involve the aggregation of smaller or riskier investments into de-risked formats to attract traditional investors.
Debt-for-nature swaps	Financial transactions that restructure a country's debt at reduced relative interest rates, often through the issuance of blue bonds, with the condition that part of the savings be dedicated to financing nature conservation efforts.
Parametric insurance	The insurance payout to a policy holder is pre-determined in advance of an event, and is based on an agreed threat and index threshold (e.g. earthquake magnitude or wind speed), which, when reached, triggers the policy.
Guarantees	A contractual promise, typically from a third party (like a bank or insurance company), to cover the financial obligations of another party if they default on a debt or contract.

Source: Authors.

Development finance institutions

To transform finance for the SOE, DFIs can serve as a catalyst for greater investment. They can help establish an enabling environment that will allow financing to be scaled up, particularly in the Global South, and promote the use of blended financing to accelerate investment in conservation and development. Investments can be unlocked indirectly through grants which provide support for policies, capacity development, science and data, and taxonomies, or directly through grants, concessional loans or guarantees that de-risk commercially viable projects or lower capital costs. DFIs already offer a wide range of funding windows for adaptation and resilience (Timilsina 2021). Global momentum exists for DFIs to work collectively on nature, people and planet, and, in this context, the SOE presents clear opportunities for DFIs to support nature-positive and net-zero outcomes.

One such mechanism is providing long-term local currency to those countries where capital markets are not fully developed, and therefore the market solutions are not sufficiently available. This can help alleviate the impacts of exchange rate movements for SMEs that sell products domestically in local currency but borrow in foreign currency. The World Bank's Local Currency Facility (World Bank n.d.a) is one example, which enables the International Finance Corporation (IFC) to provide local currency loans while working alongside existing local solutions such as domestic and central banks, and The Currency Exchange Fund is another. DFIs therefore provide financing for high-impact projects where local currency solutions are otherwise underdeveloped or, in some cases, completely unavailable.

Blue bonds

Blue bonds are debt instruments to finance the sustainable use of maritime resources, allowing traditional bond market investors to engage in ocean sectors through a liquid instrument (Stefanova et al. 2024). They can be issued by governments, DFIs, financial institutions or corporations. Companies have only recently started becoming issuers, in conjunction with business activities tied to the ocean and where they seek to limit impact on the ocean (see Case Study 3). Blue bonds can also aggregate smaller ocean investments—which are too small or risky to finance alone—into de-risked formats which are attractive to traditional investors. In 2025, the Climate Bonds Initiative recorded nearly $10.4 billion in blue- and water-labelled bonds (water labelled meaning freshwater projects).[10] This is up

from $5 billion for 2018–22 (Bosmans and De Mariz 2023), demonstrating a growing trend. Nevertheless, blue- and water-labelled bonds represented less than 1 percent of the green, social and sustainability (GSS+) debt market in 2023, suggesting there are lots of opportunities to expand the blue bond market (Chouhan et al. 2023).

It is estimated that a further $70 billion in ocean finance could be stimulated by blue bond issuance by 2030 through blue bond incubation (Blue Bond Accelerator 2025). Blue bonds can finance projects and strategies across all SOE sectors, and can be issued by governments, private corporations and multilateral institutions. In the Asia Pacific and Caribbean regions, many countries have sufficiently strong investment grade credit to make bond finance a reality. The first sovereign issuance was the Seychelles blue bond in October 2018 with the World Bank's assistance (World Bank 2018a). More recently, financial institutions such as the Export-Import Bank of Korea issued a $1 billion 10-year global blue bond tranche. Ørsted's blue bond to fund marine conservation and decarbonise service ships, as well as DP World's blue bond (Case Study 3), shows such instruments can be used by corporations to contribute to the transition to the SOE.

The blue bond guidance (ADB 2023)—from the International Capital Market Association, Asian Development Bank, IFC, the UN Environment Programme–Finance Initiative (UNEP-FI) and UN Global Compact—and World Bank FAQs (World Bank 2018b) help practitioners identify acceptable uses for blue bonds and assist with the issuance process (ADB 2023). Investment managers such as T. Rowe Price, working with the IFC, have launched a corporate blue bond market building fund to increase access to finance for corporate blue projects in emerging markets and help improve market standards. Blue bonds differ widely in scale and pricing to provide adequate risk-reward.

Debt-for-nature swaps

A debt-for-nature swap is defined as 'the exchange of a debtor country's external obligation for that country's agreement to use local currency instruments (usually either cash or "environmental bonds") to support a specific environmental project' (Occhiolini 1990). In other words, these are financial transactions that restructure a country's debt at reduced relative interest rates, often through the issuance of blue bonds, with the condition that part of the savings be dedicated to financing nature conservation efforts. They offer an alternative to conventional financing sources when access is

CASE STUDY 3. **DP World's blue bond**

In 2024, DP World (a multinational logistics company based in the United Arab Emirates) became the first company in the Middle East to issue a blue bond.[a] The $100 million five-year blue bond, priced at a 5.25 percent fixed annual interest rate, is backed by the US-based investment firm T. Rowe Price. The bond is aligned with the company's Ocean Strategy and its Decarbonisation and Water Strategies. It follows the recent publication of DP World's Sustainable Finance Framework which aims to increase transparency in its Sustainable Development Impact Disclosures.

Eligible projects included within the portfolio of the blue bond include the following:

1. **Sustainable marine transportation:** specifically projects that support R&D as well as the procurement of alternative fuel sources and technologies that help reduce GHG emissions and other sources of marine pollution in this sector
2. **Sustainable port development:** provides funding towards upgrading port infrastructure to reduce environmental impacts as well as air and noise pollution
3. **Marine ecosystem conservation and restoration:** funds nature-based solution projects for conservation and restoration as well as innovations to enhance and maintain biodiversity
4. **Marine pollution:** supports projects that aim to tackle waste and pollution in coastal and marine environments and initiatives that improve water quality as well as projects that ensure equitable access to clean water

Note: [a] DP World 2024.

restricted to commercial loans or international capital markets. So far a number of debt-for-nature swaps have been issued globally, including in Belize (TNC 2021), Ecuador (TNC 2024a) and the Bahamas (see Case Study 4), raising $364 million, $460 million, and $300 million, respectively.

Guarantees and insurance (including first-loss guarantees, risk-sharing tools and sovereign credit enhancements)

Insurers and reinsurers have a significant role to play in scaling up finance for the SOE, both in their role as underwriters as well as through their expertise in assessing and managing risk. They can help de-risk investments in emerging markets, opening the door to greater engagement by capital markets. Guarantees provide the promise of a payout to investors 'dipping their toes' into SOE 'waters' for the first time. They can encourage risk-shy actors to engage and learn and show them that opportunities exist and are worthwhile.

A University of Cambridge report released at the 28th UN Climate Change Conference in Dubai in December 2023 noted that the 20 most climate-vulnerable countries faced a 98 percent insurance protection gap against climate and disaster risk (CISL 2023). Financial costs resulting from a lack of action on disaster risk management have been projected by the International Federation of Red Cross and Red Crescent to reach $20 billion per year by 2050 (IFRC 2019). Over the past four years, overall annual insurance claims have exceeded $100 billion. Insurance products, particularly parametric tools, can utilise the economic efficiency of private risk markets to ensure swift payouts after an extreme storm event.

Parametric tools work by pre-determining the amount payable to the insured before any damage occurs, and pre-assigning an event or index threshold (e.g. earthquake magnitude or wind speed) after which the policy is triggered, and the pre-agreed amount is paid. In these instances, insurers benefit from creating business in areas previously uninsured or underinsured (i.e. coasts and coastal actors that are vulnerable to extreme weather events), and the insured benefit from faster payouts due to fewer claim assessments and coverage of previously difficult-to-insure risks. This can be particularly important for the most vulnerable countries. Examples of the application of parametric insurance for fisheries include Saint Lucia and Grenada, and for coral reefs ranging from the Caribbean (see Case Study 5) to the Pacific (see Case Study 6). Work is now underway to develop parametric mechanisms as part of the losses and damages financing system, with a primary focus on 11 vulnerable SIDS with populations of under 10 million. Donors potentially pay relatively small annual premium payments, in so doing unlocking the protection of financial markets so vulnerable countries can rebuild quickly after storms.

CASE STUDY 4. **The Bahamas' debt-for-nature swap**

Through the latest debt conversion for the ocean, the Bahamas bought back $300 million worth of external commercial debt with the proceeds from a lower-cost $300 million loan funded by Standard Chartered.[a] As part of the deal, the country committed to effectively manage its 6.8 million hectares of marine protected areas (MPAs) and develop and implement a marine spatial plan. The Bahamas has unlocked approximately $124 million for marine conservation over the next 15 years with the promise of an additional estimated $20 million by 2039 from the endowment fund to further support its efforts beyond the life of the project. So far, most debt-for-nature swaps have required credit enhancement or risk reduction mechanisms. The Bahamas' debt conversion included a mix of guarantees and insurance enabling Standard Chartered to price its 15-year loan at 4.7 percent, a coupon at a similar cost of new Inter-American Development Bank debt.

The success of this debt-for-nature swap lies in its combination of clear environmental commitments, collaborative mechanisms and mixture of guarantees and insurance which attracts private sector investment. Although an excellent example of a successful model for other nations to replicate, the scalability will depend very much on each country's context, such as its debt profile, institutional capacity, environmental priorities and opportunities for collaboration.

Note: [a] TNC 2024c.

CASE STUDY 5. **Parametric insurance for Mexico's coral reef in Quintana Roo**

In 2016, The Nature Conservancy (TNC) conducted an economic risk analysis along 100 miles of coastline in the Quintana Roo region of Mexico.[a] Part of the Mesoamerican Barrier Reef, this stretch of coastline forms a small section of the second-largest barrier reef in the world. It is an integral part of the area's tourism industry, bringing in up to $10 billion per year. The analysis found that storm damage to buildings along the coastline could triple with the loss of the coral reef. This affirmed its integral role as a mitigator and protector of the coastline from storm-related damages.

Subsequently, TNC partnered with the Swiss Re Foundation to develop a method of insuring this reef based on its economic value to the region.[b] It worked closely with coastal property owners to develop an annual fee-based system for those using the area. This was created via an existing beach lease structure. These fees are collected by local governments with a portion going towards the Coastal Zone Management Trust (CZMT) which is responsible for distributing the funds for reef and beach protection. The CZMT has contractual obligations with both the insurance company, which provides the parametric insurance policy, and the reef restoration team, known as the 'Brigade', which was initially supported by a grant through the Swiss Re Foundation. The insurance policy is triggered by wind speed over a certain threshold within a predefined area.

This was notably triggered by Hurricane Delta in 2020. As a result, $800,000 was quickly paid out to the CZMT. This allowed for roughly 80 Brigade members to stabilise 1,200 large coral colonies and transplant 9,000 broken coral fragments in the Puerto Morelos National Reef Park. Other smaller-scale cleanups were undertaken in Cancún, Nizuc, and Isla Mujeres National Reef Park.

Notes: [a] TNC 2024b. [b] Swiss Re 2022.

CASE STUDY 6. **Global Fund for Coral Reefs: scaling coral finance and resilience**

The Global Fund for Coral Reefs (GFCR)[a] is a unique blended finance vehicle designed to scale solutions that address local drivers of coral reef degradation, unlock conservation funding flows and increase communities' adaptive capacities. Hosting both a grant fund and an investment fund, GFCR focuses implementation and investments to benefit 'coral refugia' sites across 23 developing coral nations.

BLENDED FINANCE AND REEF-POSITIVE SOLUTIONS AS A RESILIENCE RESPONSE

Aligned with the Global Biodiversity Framework, the GFCR is the first United Nations blended finance instrument dedicated to SDG 14, 'Life below Water'. The GFCR's portfolio encompasses four impact sectors: sustainable ocean production; sustainable coastal development; circular economy and pollution management; and financial mechanisms.

The GFCR's 'reef-positive solutions' include businesses that have a positive impact on coral reef health while providing sustainable benefits for local communities. To design, incubate and grow solutions, the GFCR provides finance for technical assistance and risk-tolerant investment capital. Solutions also include financial mechanisms, such as insurance products, support for conservation trust funds, blue carbon and biodiversity credits, and MPA financial mechanisms.

In response to local threats facing the Mesoamerican Reef (MAR), the MAR+Invest programme was launched to invest in market solutions in Belize, Guatemala, Honduras and Mexico. Led by the MAR Fund, the initial solutions span sectors including sustainable tourism, water monitoring technology, *Sargassum* management, MPA finance and aquaculture.

The GFCR Coalition is a public-private partnership driven by UN member states, UN agencies, financial institutions, philanthropies, impact investors and conservation organisations. The coalition has set forth ambitious 2030 targets, including obtaining support from over 400 reef-positive businesses and financial mechanisms, the creation of more than 30,000 direct jobs in reef-positive sectors, the enhancement of resilience for over 20 million community members, the improved management of three million hectares of coral reefs and the facilitation of sustainable financing for 7.5 million hectares of MPAs. GFCR's investments aim to leverage $2–$3 billion in public and private finance to benefit marine ecosystems and coastal communities.

Note: [a] GFCR n.d.

4. Enablers

For ocean finance to be fully operative it needs to be completely integrated into the broader financial system. Financial regulators and central banks represent one area of interest. Both need to be fully aware of the ocean as a systemic factor for the financial system and therefore set financial reporting, risk matrix, accounting and adequacy rules appropriately. It would also be helpful to consider insights from behavioural economics regarding investor decision-making under uncertainty, institutional economics explaining governance failures in ocean resource management, and financial risk theory in relation to systematic versus idiosyncratic risk in ocean investments.

The aim is to help large, long-term asset owners hold and account for SOE assets, either through existing portfolio allocation in terms of infrastructure (among others) or possibly even in the form of ocean natural capital assets as part of an emerging nature asset class. Similarly, financial institutions would be encouraged to deploy their entire product ranges and experiences to help companies along the financial development chain. This can be anywhere from early-stage equity to growth capital and debt for projects, to exits and initial public offerings, with a view towards long-term, large-scale institutional ownership.

This section looks first at what is required to build the foundation of an investment product pipeline, and the importance of starting from the ground up. It then outlines the enablers required to create a supportive and inclusive environment to allow for ocean finance investments to flow. This includes solidifying the foundation of the SOE by implementing the necessary policies, regulations and governance framework. Matchmaking platforms, such as the Ocean Risk and Resilience Action Alliance's (ORRAA's) Octopus Desk (ORRAA 2024a), can create a space for access to investable and bankable projects in the ocean economy. Additionally, it is essential to formulate the required frameworks, safeguards, standards and guidelines to align and redirect investment towards financing the SOE. Lastly, this section discusses the ongoing dialogues on reforming the global financial system to prioritise the ocean, and how this can ensure the future of the SOE.

4.1. Building from the ground up

Moving towards a sustainable ocean economy requires making profound changes across a range of sectors, based on sound scientific understanding of what can deliver nature- and climate-positive ocean recovery and maintenance. A foundational approach which prioritises local- and community-level engagement is critical. Coastal communities, Indigenous Peoples and local stakeholders and rights holders are not only the primary stewards of marine ecosystems, but also the most directly affected by ocean degradation and its unsustainable use. Power asymmetries often marginalise the voices of these groups, limiting their influence in decision-making processes when determining how to effectively manage and finance these areas. Inclusive governance, capacity-building and access to tailored financial mechanisms are therefore crucial to empowering these groups and ensuring that conservation and economic development efforts are both effective and equitable. These must consider the sector in question and the geography of the economy. For example, SIDS and LDCs face constraints in technical, institutional and financial capacities, limiting their participation in ocean science and sustainable resource use. Initiatives such as the Ocean Decade Capacity Development Facility aim to identify and address these (IOC-UNESCO 2024). Alternatively, developed economies may require capacity-building focused on integrating ocean finance into existing frameworks, enhancing inter-agency coordination and aligning national policies with global ocean sustainability goals. Tailoring capacity-building efforts to these diverse needs is essential for fostering the SOE.

To rebuild ecosystems and biodiversity

The well-being and livelihoods of billions of people who live along the coast (whether in large cities or small communities) rely on the health of ocean ecosystems (Northrop et al. 2022). It is therefore critical that the ocean's ecosystems and biodiversity are conserved and restored. Central to these efforts are local- and community-level initiatives. Financial mechanisms such as insurance for coral reefs, mangroves and small-scale fishers, as well as savings accounts, impact bonds and cooperative platforms, can help bolster coastal resilience. In some cases, such as the parametric insurance introduced in Mexico's Quintana Roo region (see Case Study 5), these mechanisms have already been shown to help rebuild ecosystems, particularly after extreme weather events. Others such as small-scale fisheries impact bonds, like that being piloted in Indonesia, are in their early stages, but are aiming to enhance sustainable, community-led management of coastal and marine resources (Rare 2023). Municipal and subregional efforts, alongside existing public and private finance institutions, can further empower coastal communities in their role as ecosystem stewards, enabling them to actively engage in ocean governance and pursue sustainable revenue streams. Local entrepreneurs, incubators and accelerators and supporting structures and formats can also be important components of broader capacity development.

Project Finance for Permanence (PFP) initiatives are another approach aimed at creating inclusive governance for ocean conservation. These public-private partnerships support Indigenous actors in achieving the ecological, social, political, organisational and financial sustainability of a programme for conservation outcomes over a defined long-term time frame. For example, the Great Bear Sea PFP initiative is led by 17 First Nations, in partnership with the government of Canada and the province of British Colombia (OGBS n.d.). Part of the Enduring Earth's global network of PFPs, it has brought $335 million to manage 10 million hectares of ocean through a network of MPAs for long-term conservation and community-led economic development and diversification.

To advance ocean sustainability in industries

Multilateral development banks play a key role on the ground in financing projects in-country to help advance ocean sustainability in industries. For example, the World Bank's overall ocean portfolio is worth over $9 billion in active projects. This portfolio includes projects such as sustainable fisheries and aquaculture, integrated coastal and marine ecosystem management, circular economy and improved solid waste management of marine plastics, sustainable coastal tourism, maritime transport, and offshore renewable energy. By setting a new course towards a sustainable ocean economy approach, the World Bank aims to limit the impacts on ocean health of these economic sectors and ensure that they are developed in an integrated fashion.

4.2. Creating a supportive and inclusive enabling environment

Policy, regulation and governance

Achieving the SOE requires fit-for-purpose regulation, effective policy and legislation, clear sector plans and its incorporation in development plans. Many countries grapple with outdated or absent regulatory frameworks, a lack of sector-specific policies and insufficient integration of ocean sectors into national development plans. This creates uncertainty in the market, reducing investor confidence and impeding the development of ocean-based industries as there are no clear, enforceable regulations or sectoral strategies in place. A conducive policy environment should provide clear guidelines; ensure legal certainty in, for example, licensing, trade and market access; and align with broader economic and environmental objectives.

It is also important that policies align across multiple sectors. If policymaking across the ocean economy deals with sectors in isolation and without a coherent conceptual framework, multiple and sometimes conflicting policy goals can emerge. Such fragmented policymaking will not be sufficient to bring about the urgent and systemic changes required for the SOE. Rather, more holistic and integrated policy approaches are needed to ensure policy coherence,

identify and manage trade-offs among sector-specific objectives and take advantage of synergies where policies can deliver benefits to multiple sectors (OECD 2020a). To effectively encourage ocean finance, policy frameworks must be strategically designed to align incentives, redirect capital and enhance accountability across the public and private sectors. Building on the need to redirect $7 trillion from harmful flows, as highlighted in subsection 'Key barriers and challenges to mobilising finance for a sustainable ocean economy', governments and international bodies can implement a suite of policy mechanisms to catalyse investment in the SOE. Furthermore, sequencing, potential interactions and possible contradictions need to be considered. The relationship among public finance reforms, regulatory changes and private capital mobilisation requires more systematic analysis, particularly regarding whether certain enabling conditions must precede others for successful implementation. Experimental regulatory frameworks to test innovative ocean finance instruments could also be considered given their potential to accelerate financial innovation.

Fiscal and financial incentives

Tax incentives, such as reduced corporate tax rates for entities investing in ocean restoration or sustainable maritime infrastructure, can lower fiscal barriers and make blue projects more attractive to businesses. Tailored financial instruments, including concessional loan guarantees, interest rate support from MDBs and first-loss capital structures, can de-risk these instruments and encourage institutional investors to engage with ocean-focused debt markets. Blended finance mechanisms can further mobilise investment in high-impact but underfunded sectors such as blue carbon markets and sustainable fisheries.

Regulatory mandates and financial market reforms

Mandatory ocean impact reporting, integrated into existing sustainability disclosure frameworks (the EU's Corporate Sustainability Reporting Directive or the Taskforce on Nature-related Financial Disclosures) can require corporations to assess and disclose their marine footprints. This ensures that ocean-related financial risks are accounted for in decision-making, while penalties for non-compliance reinforce adherence. Stock exchanges and financial regulators can strengthen ocean finance taxonomies that classify eligible investments, providing consistency and improving transparency for investors.

Phasing out harmful subsidies and reforming public finance

Redirecting financial flows towards sustainable investments requires eliminating subsidies that drive overfishing, marine pollution and habitat destruction, while reallocating resources to support regenerative ocean industries. Governments can tie public financing to sustainability criteria, ensuring that fiscal support for maritime sectors prioritises ecosystem resilience and long-term economic viability.

Sustainable ocean plans and global financial coordination

Governments can contribute to international cooperation by embedding ocean sustainability criteria into national fiscal policies, such as adjusting public procurement rules to prioritise suppliers with ocean-positive practices, thereby aligning domestic spending with global sustainability goals. Multilateral coordination—through agreements or coalitions—could also facilitate the establishment of a global ocean finance facility to support and scale ocean-related investment efforts.

This could potentially be funded by special drawing rights or through contributions from industry—to coordinate concessional funding and technical assistance. These efforts must include inclusive stakeholder consultations with SIDS, local communities and Indigenous groups to ensure equitable access.

Financial regulators and central banks can further integrate ocean risk into macroprudential frameworks,[111] potentially aligning with internationally negotiated standards, requiring financial institutions to account for marine ecosystem degradation as a systemic risk, akin to climate-related disclosures. Additionally, innovation in blue technology and marine-based carbon markets can be supported through targeted grants and financial incentives, ensuring the continued development of sustainable ocean industries.

Sustainable ocean plans are key frameworks that can unify existing and new ocean-based plans, processes and policies into a coherent whole (see Box 7). The case studies of Fiji (National Ocean Policy) (OECD 2022a) and the Seychelles (*Seychelles' Blue Economy Strategic Policy Framework and Roadmap: Charting the Future (2018–2030)*) (GoS 2018) underscore the importance of an integrated policy framework for governing the ocean economy, one that is well-integrated with other national planning instruments and aids coordination activities. The BBNJ Agreement offers a policy framework for half of the world's ocean and requires its own financial mechanisms (Thiele 2022).

Matchmaking platforms

Recognising challenges in accessing traditional public finance, several new matching platforms are emerging seeking to match needs (demand) with funding (supply). The High Ambition Coalition's 30×30 Matchmaking Platform (HAC n.d.) is one such platform which supports member countries by mobilising financial and technical opportunities to deliver 30×30, whether they come from public, private or philanthropic organisations. The member countries submit technical or financial assistance requests to the platform, while assistance providers upload the technical expertise and support they can provide. Each request is reviewed by the HAC team who subsequently work to 'match up' the requests to the supporters available. A most recent addition to this platform was the Finance Resources for Biodiversity which is a tool that helps bridge the financing gap by curating specific global funding opportunities. Thus far, this matchmaking platform has helped support the development of a 30×30 national roadmap and multi-level capacity-building in Costa Rica, Madagascar, Liberia and Sierra Leone.

Similarly, ORRAA's Octopus Desk, which aims to launch at the UN Ocean Conference, hopes to provide matchmaking for blended finance deals in six SOE sectors with a focus on the Global South (see Case Study 7). These platforms can also be used to spur entrepreneurship and create access to seed financing for up-and-coming ocean-based projects. For example, the 1000 Ocean Startups coalition brings together such platforms with the aim of supporting start-ups for ocean impact (1000 Ocean Startups n.d.).

These platforms represent significant strides towards connecting funding resources with sustainable development needs. However, further transparency and detailed protocols on how they have overcome access barriers, specifically those faced by SIDS and LDCs, is needed to fully understand their worth.

Frameworks, financial standards and safeguards

Significant efforts have been underway to define and accelerate financing to deliver a healthy ocean, with an acceleration in focus since the creation of the Sustainable Development Goals, Paris Agreement and more recent Global Biodiversity Framework. Key initiatives include the UNEP-FI Sustainable Blue Economy Finance Principles for financial institutions (UNEP-FI n.d.), and sector-specific initiatives like the Poseidon Principles for shipping (Poseidon Principles n.d.) and UN Global Compact's Sustainable Ocean Principles (UNGC n.d.) (see summary in Information Bank, Table 3).

BOX 7. Sustainable ocean plans as investment plans

The Ocean Panel, an initiative of 18 countries, has committed to sustainably manage 100% of their ocean areas under national jurisdiction, guided by sustainable ocean plans. These plans are a unifying framework, bringing together existing and new ocean-related plans, processes and policies into a coherent, integrated whole.

The report *100% Sustainable Ocean Management: An Introduction to Sustainable Ocean Plans*[a] highlights the value of developing and implementing sustainable ocean plans, which guide public- and private-sector decision-makers on how to sustainably manage 100% of a nation's ocean area under national jurisdiction to advance long-term economic and social development—by protecting the natural marine ecosystems that underpin that development. Once implemented, SOPs can provide an investment plan to support the allocation of budgets, identification of future financing needs and financing strategies towards the SOE. So far, eight members have published their SOPs, all of which are accessible on the Ocean Panel's website: https://oceanpanel.org/published-sustainable-ocean-plans/.

The Rapid Assistance Fund, established under Ocean Action 2030, is designed to enable developing countries to get started on their SOP journeys in a timely manner.[b]

Notes: [a] Ocean Panel 2021. [b] WRI n.d.

In addition, broader initiatives are directly applicable and relevant to the ocean—including the work of the Taskforce on Nature-related Financial Disclosures and the Science Based Targets Initiative on disclosure and target-setting, as well as regulatory changes that drive disclosure and clarity on investments in sustainability, including the EU's Sustainable Finance Disclosure Regulation (SFDR), Corporate Sustainability Reporting Directive (CSRD) and taxonomy (see Information Bank). However, a globally adopted taxonomy and framework for the SOE still needs to be defined. This will guide more investments and development of policies by providing a universally accepted classification system of those activities which abide by the principles of the SOE.

Tracking

Ocean accounts are a key tracking tool to monitor, measure and manage financial flows related to the SOE both in quantitative and qualitative terms. These offer countries a standardised structure and transparent framework that integrates environmental, economic and social data on marine ecosystems, facilitating consistent data collection, comparison and evaluation across sectors. They retain a similar structure to existing national accounts but also integrate comparable and regularly compiled data on not just the economic activity of the ocean (e.g. fish sales), but also its environmental access (e.g. extent or condition of seagrasses) and social conditions (e.g. coastal employment) (GOAP 2022). These therefore go beyond just GDP indicators as a measure for sustainable ocean development. They provide a method of measuring success that incorporates capital mobilisation, ecological outcomes and social impacts. These data can be used to set robust ocean-related standards, inform risk assessments and support capital location for ocean-economy investments and the creation of ocean focused financial products (GOAP 2024). Ocean accounts can track and report on impacts by corporations to promote transparency in sustainable ocean use.

However, data and estimates of global finance flows for the SOE from its various sources remain scarce and scattered. It is currently not possible to have a comprehensive view of how much finance reaches ocean-based sectors and what precise percentage of this can be considered sustainable. For public finance, there is a significant blind spot in the volume of finance for the SOE. This is partially due to the lack of systematic tagging of ocean-related expenditures. Developing a comprehensive ocean-related expenditure review, similar to those occurring for biodiversity, would enable better tracking and subsequent allocation of public funds towards the SOE (OECD 2025d). For private finance, there is limited information on flows of private capital investments into sectors such as offshore wind, ports and shipping, and tourism (see subsection 'Key barriers and challenges to mobilising finance for a

CASE STUDY 7. **ORRAA's Octopus Desk**

The Octopus Desk will be a 'high-tech, high-touch platform' blending technology with experienced staff to match-make, connect and drive blended finance deals into six regenerative and sustainable ocean economy sectors with a focus on projects developed in the Global South.[a] It aims to bring transparency and coherence to the SOE marketplace and drive investment into coastal and ocean resilience in the Global South by doing the following:

- Connecting investors with investable opportunities based on their profiles
- Offering market insights on financial performance, impact and resilience
- Becoming a leading platform for cooperation, working to harmonise impact measurement, key performance indicators, monitoring and reporting

For six sustainable and regenerative blue economy sectors, it aims to increase the flow of public and private investment into SMEs (starting with $50,000 tickets), monitoring the total investment value, number of deals and average ticket size. Initial platform focus areas will include blue carbon investments for climate mitigation and biodiversity, and sustainable seaweed aquaculture, boosting coastal resilience and food security. This targeted approach accelerates progress and showcases platform effectiveness for future expansion. Landscape and scoping interviews have been conducted with key stakeholders and partners to develop an understanding of the current marketplace, and development of the platform is underway with Investable Oceans as the lead partner working with ORRAA. The Octopus Desk aims to defragment the current sustainable blue economy investment space, unifying key stakeholders and existing initiatives; standardising impact measurement, key performance indicators, monitoring and reporting frameworks; and facilitating efficient deal flow. In so doing, it hopes to attract investors and ultimately accelerate the flow of critical funding towards ocean resilience projects in the Global South.

Note: [a] ORRAA 2024b.

sustainable ocean economy'). Table A-1 in Appendix A presents a compilation of the latest evidence available to provide a high-level illustration of the order of magnitude, while highlighting the gaps in knowledge where further information is needed to gain a more comprehensive understanding of ocean finance for the SOE.

Going forward, to improve the effectiveness and accountability of ocean finance, improved tracking is required. Countries must be encouraged to produce ocean accounts, as this will help streamline coordination among governments, investors and non-governmental organisations to help foster collaboration and market development for ocean finance. They can use novel digital technologies to help with tracking and tracing, incorporating these into ocean accounts. Examples include blockchain technologies for transparency and traceability in fisheries and supply chains to reduce fraud and ensure funding is used as intended (Hazzarul Hisham et al. 2025). Similarly, satellite monitoring can be used to verify compliance of conservation mechanisms in MPAs, and artificial intelligence can be used in risk assessments to predict environmental changes and optimise investment decisions.

Enabling the finance ecosystem

While often focusing on the central role for financial institutions, financing the SOE is dependent on coordinated action across a vast array of stakeholders. From governments to private sector entities to local communities, each has a significant role to play in seeking or arranging financing and establishing the enabling conditions needed for capital to flow towards sustainable outcomes. These stakeholders can help effectively scale and accelerate investments by transitioning from project-to-project financing to large-scale programmatic and regionally led financial architectures. This can be done through aggregation mechanisms such as blue infrastructure banks or regional pipeline preparation facilities. By working collaboratively, stakeholders can ensure the effective and efficient impact of their financing efforts.

A comprehensive foundation is needed for our financial system to evolve and capture the opportunities presented by the SOE. This can be done by integrating sustainable considerations into financial decision-making processes and therefore better aligning investments with the SOE from the start (see Box 8, for example).

BOX 8. **Ocean Investment Protocol**

The UN Global Compact and UN Environmental Program Finance Initiative Ocean Investment Protocol (OIP) is a systemic framework for financial institutions, insurers and (re)insurers, ocean industries, governments and development finance institutions to unlock private capital to collectively lead the growth of the SOE to achieve SDG 14 and related SDGs as well as the Ocean Breakthroughs.[a] The OIP aims to build on the foundation and consensus established by leaders in ocean conservation and sustainable development while seeking to harmonise the important roles of each of these stakeholder groups, as well as the patchwork of existing standards and frameworks. Its goal is to develop the supportive ecosystem needed to enable finance to flow across the roles of each of the key stakeholders by providing a set of clear recommendations for action that are cross-cutting and take a system-wide view of the transition to sustainability (see Figure B7-1).

Cross-cutting recommendations to create conditions that enable private capital include the following:

- Ocean industry and financial institutions can evaluate and manage impact in the ocean, build internal capacity and use and develop sustainable finance instruments.
- Insurance can leverage its risk expertise to promote sustainable practices.
- Governments can incentivise ocean investment as a climate solution and create clear sustainable ocean plans aligned with a country's nature and climate goals to develop an ocean economy through clear and consistent practices.
- DFIs can lead the way in using financing to de-risk investments, particularly in the Global South.

BOX 8. **Ocean Investment Protocol (cont.)**

FIGURE B8-1. **System map: funding the sustainable ocean economy**

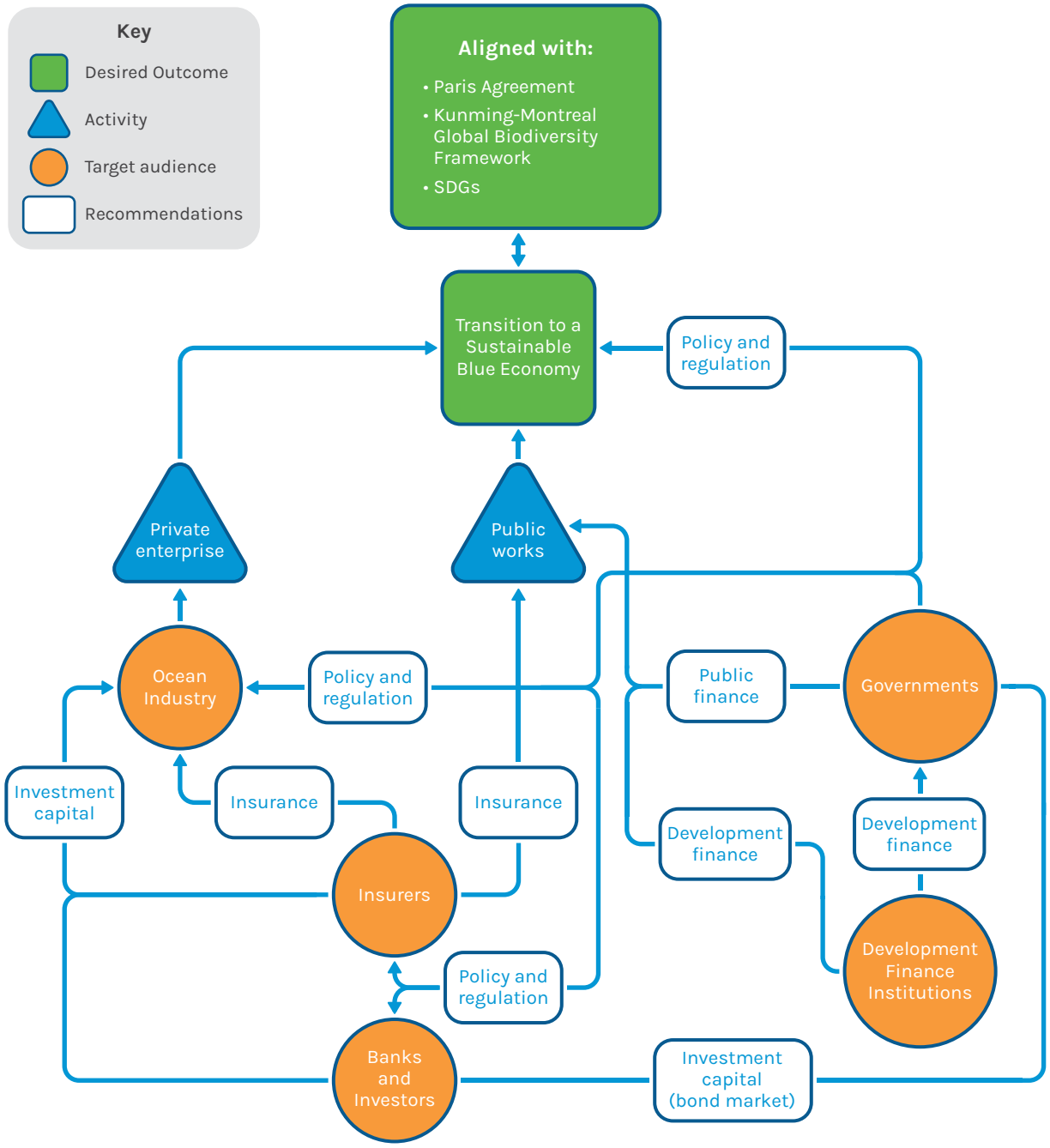


Figure notes: Arrows in the diagram represent actions taken by target audiences including policy implementation, capital disbursement and regulation. The protocol's recommendations target these actions as part of the transition to a sustainable ocean economy of which the Ocean Breakthroughs encompass specific targets. SDGs = Sustainable Development Goals.

Figure source: United Nations Global Compact and United Nations Environment Programme – Finance Initiative. 2025. The Ocean Investment Protocol: A multi-stakeholder plan to enable funding to the Sustainable Ocean Economy.

Note: [a] de Vos et al. 2024.

4.3. Ocean representation for climate, biodiversity and financial architecture reform

Historic challenges such as over-indebtedness and institutional shortcomings have led to discussions of a redesign of the global financial system. We recommend ocean consideration in such financial decision-making spaces. The integration of climate and biodiversity issues—not only through new public funding mechanisms such as the GCF and the Global Biodiversity Framework Fund, but also through private sector engagement commensurate to the opportunity needed—likewise requires an ocean lens. There are several ongoing efforts to reform the international financial architecture including the adoption and implementation of the Pact for the Future (UN 2024) and the Bridgetown Initiative 3.0 (Bridgetown Initiative 2024). These two initiatives provide avenues for reforming the international financial architecture both systemically and in favour of ocean health. The former calls on strengthening the multilateral response to the high level of unsustainable debts so that countries can focus their domestic expenditures on achieving the SDGs, including SDG 14. The latter calls on the multilateral development banks and other providers of finance to include climate vulnerability, natural capital and biodiversity conservation needs in their criteria for allocating concessional finance.

This redesign offers a unique opportunity to put ocean finance as a key delivery mechanism into the mix. We need to work collectively as policymakers, academics and industry to identify ocean tipping points and recognise their scale and relevance as systemic risks to the global financial system. In 2025, the third UN Ocean Conference, the Blue Economy and Finance Forum and the Financing for Development Conference offer opportunities to address these issues. They can encourage on-the-ground delivery of finance across SIDS and coastal communities and funding for ocean solutions entrepreneurs. They can also look to significantly increase development finance institution activity, focusing on the infrastructure needs of the SOE and allowing for appropriate accounting and asset allocation to help rebuild blue natural capital and support a just transition.

Addressing resilience and debt for a new global financial architecture is key to breaking the cycle of risk (Benomar et al. 2024). The ocean community is not equipped to do this on its own. It needs everyone to adopt its blue planet lens.

5. Conclusion and recommendations

There is growing momentum in delivering finance towards the SOE, particularly in the context of supporting cost-effective ocean-climate and nature-positive solutions. This will require an implementation roadmap to provide temporal sequencing alongside improved accountability that prioritises and specifies lead institutions (e.g. governments, development banks or industry). Despite some inherent challenges relating to the enabling environment, the SOE is an attractive finance and investment opportunity. Enablers such as effective policy and legislation, with clear sector plans and considerations of the SOE in development plans, will play an important role in facilitating this transition. Sustainable finance for the SOE has a vital role to play in addressing the scale of the ocean health challenge, facilitating the sustainable use of marine resources by industry (both directly and indirectly) and delivering targeted solutions. In areas where the resilience of coastal communities and marine biodiversity is most at threat, emerging sustainable management practices and innovative conservation projects and technologies need further support to scale. Accelerating sustainable ocean finance requires a structured and coordinated approach that integrates regulatory clarity, financial innovation and long-term institutional support. Effective action must align public and private capital, scale market-based solutions and institutionalise ocean finance within the global financial system.

Listed below are a set of recommendations for governments to consider to further enable ocean finance for the SOE:

To strengthen market infrastructure and financial innovation:

- Develop and align private finance frameworks and tools with net-zero and nature-positive targets, and enforce environmental, social and governance (ESG) disclosure standards that incorporate marine-related financial risks to facilitate the development of appropriate private sector transition investment strategies and help build resilience and competitiveness.
- Facilitate the development of context-specific SOE project pipelines through knowledge-sharing, capacity-building for proposals, provision of seed finance and assisting (where applicable) in matchmaking with financiers. By creating this supportive enabling environment and consolidating smaller projects into investable portfolios, ocean finance 'matchmaking' platforms can improve access to finance.

To align public and private capital with ocean sustainability:

- Significantly scale up and allocate public funds to strategically support the development of the SOE through national budgets as a form of public investment. As such, consider ocean user fees and the removal of harmful subsidies as potential funding mechanisms that allow the redirection of capital away from harmful marine practices and towards regenerative ocean business sectors, including those that support coastal communities.
- Implement fiscal policies that provide investment incentives such as through improved depreciation schedules for sustainable maritime infrastructure and the consideration of blue bonds in public investment and pension portfolios to stimulate private investment.
- Apply sustainability-linked and ocean-positive criteria in public procurement when buying goods and services. Strengthen reporting requirements for companies in relation to exposures. Assess the impacts of new financing windows on marine ecosystems in alignment with global ESG frameworks such as the EU's Corporate Sustainability Reporting Directive and the UNEP-FI Sustainable Blue Economy Finance Principles.

This will help financial institutions reassess their portfolios and increase the understanding of risks associated with unsustainable BAU pathways.

- Develop sustainable ocean plans for the ocean areas under national jurisdiction, which align with national climate priorities and are reflected in updated nationally determined contributions (NDCs), that explicitly incorporate financing for the SOE. Creating these investment plans will help secure fit-for-purpose sustainable infrastructure and technology such as electrified ports and sustainable aquaculture solutions, thus aligning with emerging ocean finance taxonomies and integrating them into climate strategies such as nationally determined contributions.
- Build capacity for and increase ocean literacy, both widely and specifically on ocean finance and the broad understanding of its importance, to strengthen relevant actors, including UN agencies, governments and financial institutions. Use, for example, the UNESCO ocean literacy principles (IOC-UNESCO n.d) as a first step to ensure a shared understanding of the ocean benefits. Engage with knowledge management platforms, such as UNEP-FI's Sustainable Blue Economy Finance Initiative.

To scale and institutionalise ocean finance:

- Actively participate and invest in the reform of the global financial architecture to ensure that it prioritises the ocean and ocean health and that these systems reduce capital costs and effectively channel capital towards the sustainable ocean economy. This needs to include in SIDs and LDCs where financial flows are most limited. As ocean finance goes beyond sector-specific finance practice to a critical component of the broader financial architecture for Earth system resilience, regulators and central banks will increasingly become cognisant of their systemic relevance. Reflecting this shift through appropriate risk and capital adequacy ratios, disclosure requirements and other tools will help ensure that all financial institutions align with an ocean- and nature-positive SOE.

- Advocate for simplified and harmonised access to ocean finance. This can include calling for standardised definitions, consolidated application processes and dedicated capacity support to overcome, for instance, the challenges of access for SIDS and LDCs to the global market rate of capital. A new dedicated global ocean finance facility could help coordinate concessional funding and technical assistance through multilateral agreements that ensure equitable access.
- Encourage the production of comparable data and a common language, including through the creation of dedicated ocean accounts and the adoption of a universal SOE taxonomy. This will thus allow for data capture, analysis and sharing to further support robust sustainable ocean finance decisions. Work with international accounting bodies to explore the formal classification of blue natural capital as an asset class, ensuring that ocean-related investments are integrated into global financial markets.

- Scale up and mobilise additional development finance, from the private sector, philanthropic partners and public sources (i.e. official development assistance, public and development banks), and ensure that this finance is targeted effectively and in line with international commitments to biodiversity and climate change and countries' sustainable ocean–relevant strategies and policies. This may require increased capitalisation of public banks and political support for bank mandates to invest in sustainable ocean activities. Support for activities that generate no to minimal financial returns on investment, including those that strengthen the enabling environment (e.g. policy support) for broader investments, is particularly meaningful. Development finance can also be used to directly mobilise private capital through instruments like co-financing and guarantees.

For the continued development of the sustainable ocean economy, ocean finance needs to further evolve:

- All stages of finance need to be considered, from early-stage grant and equity support to growth capital, commercial loans, and asset and receivables finance to public capital markets, to ensure that each private sector participant in the SOE has access at competitive terms to finance. Develop sufficient depth and liquidity in financial markets to facilitate exits and refinancings.
- The ongoing debate around carbon and biodiversity credits is potentially opening the door to a deeper engagement with nature finance, based on a more appropriate way to assess and integrate externalities into valuation approaches. In time this can help build compliance markets and create pathways for investment into natural assets by allocating long-term investment into blue natural capital.
- A significant amount of ocean finance—such as investments into port infrastructure or decarbonisation of shipping fleets—is presently not expressly recognised as such, but rather considered either as general finance or as climate finance. Adopting a blended finance approach will enable private finance actors to better align their portfolios with SOE opportunities and embed sustainability principles into financial decision-making.

Appendix A. Estimated ocean financing needs and current flows

TABLE A1. **Mapping estimated financial needs and current sources, investments and flows**

FINANCE TYPE	INSTRUMENT		ESTIMATED VALUE (US$)	MEASUREMENT NOTES AND METHODOLOGY	SOURCE
Investment needs	Transition finance for SOE		$383–$717 billion/ year to 2030	Required additional finance to shift towards the SOE across six investment themes: ocean conservation; sustainable seafood; circular economy and blue technology; sustainable blue infrastructure; ocean-based renewable energy; ridge to reef.	Blue Bond Accelerator 2025
	SDG 14 finance requirement		$174.52 billion/year	To achieve SDG 14 by 2030 (legacy estimate). Comprises estimation of the financial gap for achieving all targets of SDG 14 ($149.02 billion) and the rough amount committed to SDG 14 at the 2017 United Nations Ocean Conference ($25.5 billion).	Johansen and Vestvik 2020
International public finance	ODA	Bilateral	$1.43 billion	Commitments from bilateral donors to ocean-relevant activities in 2022	OECD 2025e
		Multilateral	$970 million	Commitments from multilateral sources in 2022	OECD 2025e
Philanthropic	Philanthropic and NGO non-foundation funding		$1.4–$2.8 billion	Estimate of global philanthropic marine conservation funding in 2022	Lewis et al. 2023
Public-private blended finance (i.e. leveraged private sector flows)	De-risking Instruments: guarantees and co-financing		$4.1 billion*	Private finance mobilised by ODA for the ocean economy between 2012 and 2022	OECD 2025e
			$7.7 billion*	Private finance mobilised by ODA for land-based activities affecting the ocean between 2012 and 2022	OECD 2025e
	Blue bonds		$10.4 billion	Total issuance of blue bonds up until February 2025	Data provided to the authors from the Climate Bonds Initiative
Private finance *Illustrative flows*	Offshore wind investment		$76.7 billion	Commercial investment in offshore wind globally as of 2023	Metcalfe 2024 (BloombergNEF)
	1000 Ocean Startups		$2 billion	Total early-stage investment opportunities for start-ups in SOE sectors	1000 Ocean Startups n.d.
	Funds (impact and ocean equity)		>$76 billion	Capital raised by 186 blue economy funds in the Phenix Capital Impact Funds Database among 2,800 funds since 2015 (representing 6.6%)	Phenix Capital 2025

TABLE A1. **Mapping estimated financial needs and current sources, investments and flows (cont.)**

FINANCE TYPE	INSTRUMENT	ESTIMATED VALUE (US$)	MEASUREMENT NOTES AND METHODOLOGY	SOURCE
Trade	Ocean-based goods and services	$2.3 trillion*	Contribution to total global trade in 2023	UNCTAD n.d.
Subsidies	Harmful fisheries subsidies	-$22 billion	Estimated figure sum of subsidies incentivising destructive overfishing in 2018	Sumaila et al. 2019
		-$26 billion to -$50 billion	Estimated annual loss to the global economy caused by unreported fish catches in 2020	Sumaila et al. 2020
		-$2 billion to -$4 billion	Estimated loss of tax revenues from unreported fish catches in 2020	Sumaila et al. 2020
	Other fisheries subsidies	$13 billion	Estimated figure of remaining subsidies not classified as harmful in 2018	Sumaila et al. 2019
		$2.6 billion	Estimate of support to sustainable ocean fisheries in disbursement of ODA between 2010 and 2022	WTO 2024
	Fossil fuel subsidies	$1.1 billion	Implicit ocean-impacting fossil fuel subsidies	FFST n.d.

Notes: *Indicates value is for the ocean economy, rather than the sustainable ocean economy. SOE = sustainable ocean economy; SDG 14 = Sustainable Development Goal 14, 'Life below Water'; ODA = official development assistance; NGO = non-governmental organisation; OECD = Organisation for Economic Co-operation and Development.

Endnotes

1. Johansen and Vestvik's (2020) $174.52 billion estimate comprises their estimation of the financial gap to achieve all targets of SDG 14 ($149.02 billion) and the rough amount committed to SDG 14 at the 2017 United Nations Ocean Conference ($25.5 billion).

2. The six investment themes include ocean conservation; sustainable seafood; circular economy and blue technology; sustainable blue infrastructure; ocean-based renewable energy; and ridge to reef. See Blue Bond Accelerator 2025 for further details.

3. Data provided to the authors from the Climate Bonds Initiative.

4. A 'harmful subsidy' is one which has negative effects on the environment—whether unforeseen or ignored during the production of the policy. For the sustainable ocean economy, this primarily takes the form of subsidies for commercial fishing which cause overexploitation of fish stocks.

5. Green shipping corridors are specific shipping routes with only zero-emission or emission-reduced ships and where these reductions are measured and enabled through actions and policies from both the private and public sectors.

6. A 'bankable pipeline' is a collection of projects that has been structured and vetted to ensure that the projects are viable financially and can generate returns. The risk-return profile of the projects in question meets investors' criteria and therefore the investors are confident in the effective use of their capital and expect the projects to yield the anticipated returns.

7. Example platforms include ORRAA's Octopus Desk and the High Ambition Coalition 30×30 Matchmaking Platform. For more details, see subsection 'Creating a supportive and inclusive enabling environment' and the Information Bank.

8. Associated guidance includes the reporting requirements for the Sustainable Blue Economy Finance Principles and the latest publications from UNEP-FI, all available at "Resources," UN Environment Programme, n.d., https://www.unepfi.org/blue-finance/resources/, accessed April 2025. The Sustainable Blue Economy Finance Principles now have 44 signatories, with 88 members on the platform representing over $11 trillion in assets under management.

9. See "Public Development Banks Call to Deliver Positive Action for the Ocean," Finance in Common, 2023, https://financeincommon.org/sites/default/files/2023-09/Cartagena FiCS Call for Action_Ocean_FINAL_1.pdf.

10. Data provided to the authors from the Climate Bonds Initiative.

11. Macroprudential frameworks aim to reduce overall risk accumulation by addressing identified systemic risks, increasing the financial system's resilience to shocks.

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