

OPERATIONAL BRIEF

Financing Options and Instruments

BLUE ECONOMY FOR RESILIENT AFRICA PROGRAM



© 2022 The World Bank Group
1818 H Street NW, Washington DC 20433
Telephone: 202-473-1000 | Internet: www.worldbank.org

This work is a product of the staff of The World Bank Group with external contributions. “The World Bank Group” refers to the legally separate organizations of the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), and the Multilateral Investment Guarantee Agency (MIGA).

The World Bank Group does not guarantee the accuracy, reliability or completeness of the content included in this work, or the conclusions or judgments described herein, and accepts no responsibility or liability for any omissions or errors (including, without limitation, typographical errors and technical errors) in the content whatsoever or for reliance thereon. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank Group concerning the legal status of any territory or the endorsement or acceptance of such boundaries. The findings, interpretations, and conclusions expressed in this volume do not necessarily reflect the views of the organizations of the World Bank Group, their respective Boards of Executive Directors, and the governments they represent.

The contents of this work are intended for general informational purposes only and are not intended to constitute legal, securities, or investment advice, an opinion regarding the appropriateness of any investment, or a solicitation of any type. Some of the organizations of the World Bank Group or their affiliates may have an investment in, provide other advice or services to, or otherwise have a financial interest in, certain of the companies and parties named herein. Nothing herein shall constitute or be construed or considered to be a limitation upon or waiver of the privileges and immunities of any of the organizations of The World Bank Group, all of which are specifically reserved.

Rights and Permissions

The material in this work is subject to copyright. Because The World Bank Group encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given and all further permissions that may be required for such use (as noted herein) are acquired. The World Bank Group does not warrant that the content contained in this work will not infringe on the rights of third parties, and accepts no responsibility or liability in this regard. All queries on rights and licenses should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; e-mail: pubrights@worldbank.org.

Cover photo: © Dominic Chavez / World Bank

Acknowledgments

This brief was written by Peter Kristensen (Lead Environmental Specialist), Sylvia Michele Diez (PROBLUE Program Manager), Elisson Wright (Senior Environmental Finance Specialist), and Anthony Molle (Lead Infrastructure Finance Specialist).

This publication was prepared by a team led by Lia Carol Sieghart (Practice Manager) and comprising Peter Kristensen (Lead Environmental Specialist), Marcelo Hector Acerbi (Senior Environmental Specialist), Sajid Anwar (Environmental Specialist), Darshani De Silva (Senior Environmental Specialist), Nagaraja Rao Harshadeep (Lead Environmental Specialist), Kanako Hasegawa (Environmental Specialist), Ede Ijjasz-Vasquez (Lead Consultant), Juliana Castano Isaza (Natural Resources Management Specialist), Federico Scodelaro (Consultant), Madjiguene Seck (Senior Partnership Specialist), Ruth Tiffer-Sotomayor (Senior Environmental Specialist), and Phoebe Girouard Spencer (Environmental Economist). This brief was written by Peter Kristensen (Lead Environmental Specialist), Sylvia Michele Diez (PROBLUE Program Manager), Elisson Wright (Senior Environmental Finance Specialist), and Anthony Molle (Lead Infrastructure Finance Specialist).

The publication has greatly benefited from the strategic guidance of Simeon Ehui (Regional Director, West and Central Africa 1), Boutheina Guerhazi (Director, Africa Regional Integration), Stephen Hammer (Adviser), Valerie Hickey (Global Director, Environment), Keiko Miwa (Regional Director, Human Development, Middle East and North Africa), Paul Noumba Um (Regional Director, Infrastructure and acting Regional Director for Sustainable Development, Middle East and North Africa), and Ayat Soliman (Regional Director, East and Southern Africa).

The team benefited from insightful comments and guidance from internal reviewers. Reviewers for the publication were Marcelo Acerbi (Senior Environmental Specialist), Sylvia Michele Diez (PROBLUE Program Manager), Ruxandra Floroiu (Lead Environmental Specialist), Ede Ijjasz-Vasquez (Lead Consultant), Christian Peter (Practice Manager), Lia Carol Sieghart (Practice Manager), and Sanjay Srivastava (Practice Manager).

In addition, the team received incisive and helpful advice, input, and comments from World Bank colleagues, including Syed Adeel Abbas (Senior Climate Change Specialist), Anjali Acharya (Senior Environmental Engineer), Jacqueline Alder (Consultant), Philippe Ambrosi (Senior Environmental Economist), Tamara Bah (Consultant), Ozgul Calicioglu (Environmental Engineer), Soniya Carvalho (Lead Evaluation Officer), Manon Pascale Cassara (Consultant), Keren Charles (Senior Disaster Risk Management Specialist), Manuela Ravina da Silva (Environmental Specialist), Charlotte De Fontaubert (Senior Fisheries Specialist), Idriss Deffry (Environmental Specialist), Raian Divanbeigi (Senior Economist), Enos Esikuri (Senior Environmental Specialist), Gunilla Greig (Senior Fisheries Specialist), Gabriella Morandi Guimaraes (Consultant), Maged Hamed (Lead Environmental Specialist), Sandrine Jauffret (Senior Natural Resources Management Specialist), Sarah Jung (Consultant), Harrison Charo Karisa (Senior Fisheries Specialist), Jane Kibbassa (Senior Environmental Specialist), Mark Leybourne (Senior Energy Specialist), Maria Lopez (Consultant), João Moura Marques (Natural Resources Management Specialist), Bernhard Metz (Senior Operations Officer), John Morton (Senior Urban Specialist), Dania Mosa (Consultant), Kamakshi Perera Mubarak (Social Development Specialist), Helena Naber (Senior Environmental Specialist), Stefan Ott (Junior Professional Officer), Berengere Prince (Lead Natural Resources Management), Dario Quaranta (Consultant), Hak Joo Song (Junior Professional Officer), and Louise Twining-Ward (Senior Private Sector Specialist).

Support for this report was also provided by PROBLUE, a multi-donor trust fund administered by the World Bank that supports the sustainable and integrated development of marine and coastal resources in healthy oceans.

About the Blue Economy for Resilient Africa Program

The Blue Economy generated nearly US\$300 billion for the African continent in 2018, creating 49 million jobs in the process. These and other crucial benefits—most notably food security, livelihoods, biodiversity, and resilience to the effects of climate change—are entirely dependent on the health and productivity of coastal and marine areas.

By safeguarding productive coastal landscapes, countries will be in a better position to take full advantage of future Blue Economy opportunities, which range from sustainable blue energy to aquaculture to blue carbon.

The World Bank's Blue Economy for Resilient Africa Program, announced at COP27, will provide multisectoral analytical, financial, and policy support to Africa's coastal countries and island states to help them leverage the opportunities—and manage the risks—inherent in scaling up their Blue Economies.

About this series of briefs

The Blue Solutions for Africa series of operational briefs captures how a thriving Blue Economy can help African countries better manage the development challenges they face while supporting economic growth, sustainable livelihoods, and the health of these precious ecosystems.

THE BRIEFS COVER THE FOLLOWING THEMATIC AREAS

- Climate change
- Coastal and marine biodiversity and habitats
- Sustainable fisheries
- Marine pollution
- Jobs and livelihoods
- Participatory marine spatial planning
- Data management and knowledge creation
- Innovative financing instruments
- Developing and incentivizing institutions
- New frontiers of innovation



© Shutterstock

Key Messages



Fully implementing a Blue Economy approach in Africa requires scaling up the financial resources available.



African nations need to spend as effectively as possible the limited resources available to them by leveraging coordination and sustainability.



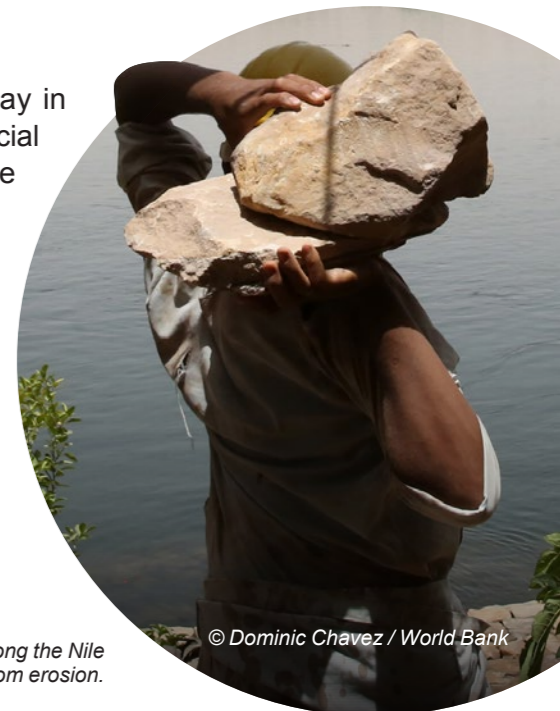
Many African countries would also benefit from accessing the World Bank's full range of finance instruments, which spans grant financing, debt, and equity financing. Technical assistance or grant financing is often required to undertake the analytics and diagnostics needed to identify policy improvements.



The private sector has an important role to play in developing Africa's Blue Economy. Several financial instruments can encourage partnership with the private sector, each of which have a different purpose with different requirements.



The World Bank is available to help countries with mobilizing capital for investments. It also provides technical support and learning from its portfolio of more than US\$7 billion of ongoing investments in oceanic and ocean-related sectors.



Building stronger river banks along the Nile river to protect it from erosion.

© Dominic Chavez / World Bank

Introduction

Africa's coastal and marine areas face growing challenges. Protecting the continent's natural assets and the services they provide is not just a moral imperative; it is also a chance to obtain higher economic yield by, for example, adding value to fish products in Mauritania, using mangroves as shield for rice paddies from storm surges in Guinea, using clean coastal environment for tourism, as in Senegal, and generating new jobs by moving from destructive to productive practices, so enabling countries to access to blue carbon finance.

To realize this potential, African countries need access to finance that spans grant financing, debt relief, and equity financing. As a range of financing instruments are made available, there is a need to shift from separate, isolated investments in individual sectors to a more integrated, holistic “ridge to reef” approach. There is a need for cohesive, systematic management of marine and coastal areas.

The World Bank is available to help countries with mobilizing capital for investments. It also provides technical support and learning from its portfolio of more than US\$7 billion of ongoing investments in oceanic and ocean-related sectors. These investments take various forms, including concessional and non-concessional loans, blue bonds, marine conservation endowment funds, carbon credit, parametric insurance, and debt for climate swaps. The real challenge lies in operationalizing solutions, from the point of articulating the need to engaging financiers to catalyzing a truly collaborative effort to reach the common objective of keeping coastal and marine areas pollution-free and productive.

The Challenge

Despite wide acknowledgement of their importance to global development and environmental health, the world's oceans are under threat from mismanagement, the effects of climate change, and poorly understood interactions within and between oceanic and terrestrial sectors. Investments in oceanic development are often isolated to individual sectors, exacerbating conflicts over resources and space.

Protecting the ocean is not only a moral imperative; it is also a financial opportunity. Ocean financing needs to move beyond an extractive, inequitable “business as usual” approach—which sees activities undertaken with little regard for negative environmental, economic, and social impacts that threaten long-term development—to align economic development opportunities with ocean health in a way that fosters low-carbon, resource-efficient growth, creates jobs, and reduces poverty. Enabling such a transition requires significant upfront investments, firstly to understand current trends and emerging threats through technical assistance, and secondly

to formulate appropriate governance, fiscal, and financial policies, as well as investment solutions.

In many cases, financing is available. However, it is not always available at the right time or place. The time and effort required to request (and then wait for approval of) finance can also be prohibitive. In some cases, projects are isolated from each other or are not “shovel-ready”, and continuity is not achieved.

What is Needed

Each African country is different, with different financing needs based on that country's unique economic and political backdrop. Middle income countries have different needs to low-income countries or fragile and conflict-affected states. However, all countries have two things in common when it comes to developing their Blue Economy. First is a need to develop blue investments based on data, analytics, and scenarios for sustainability and climate change. Second is a need to shift from separate, isolated investments in individual sectors to integrated, holistic, and regional management of marine and coastal areas.

Long-term, scalable solutions require sound technical assistance; robust, multisectoral networks with clear institutional mandates; and access to sufficient and appropriate finance. Such financing can be secured in two ways: by spending the resources available better, so that better sustainability results can be achieved, and/or by identifying new sources of financing to scale the Blue Economy and climate action.

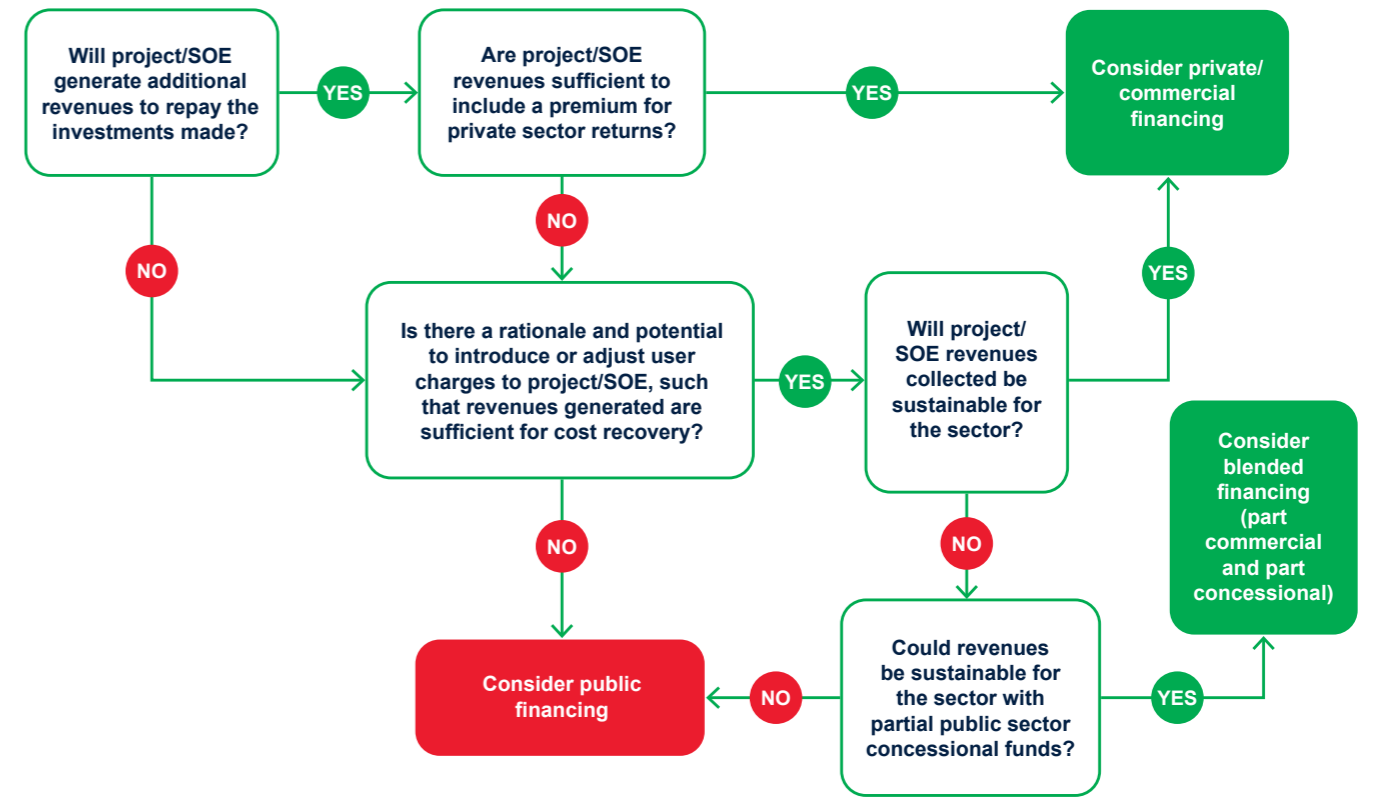
Many countries in Africa could benefit from accessing the World Bank's full range of finance instruments, which spans grant financing, debt, and equity financing. Innovative finance products that can be explored include blue bonds, crowding in private sector finance where practical, and a strategic deployment of concessional resources. This paper provides a few examples of existing instruments available from the World Bank and its partners.

Technical assistance or grant financing is often required to undertake the analytics and diagnostics needed to identify policy improvements. Countries also need debt financing to get to scale: to finance the gray, green, and digital infrastructure necessary to improve waste management; to improve safety at sea; for monitoring, control, and surveillance of fisheries; and to unlock the employment potential within marine and coastal tourism.

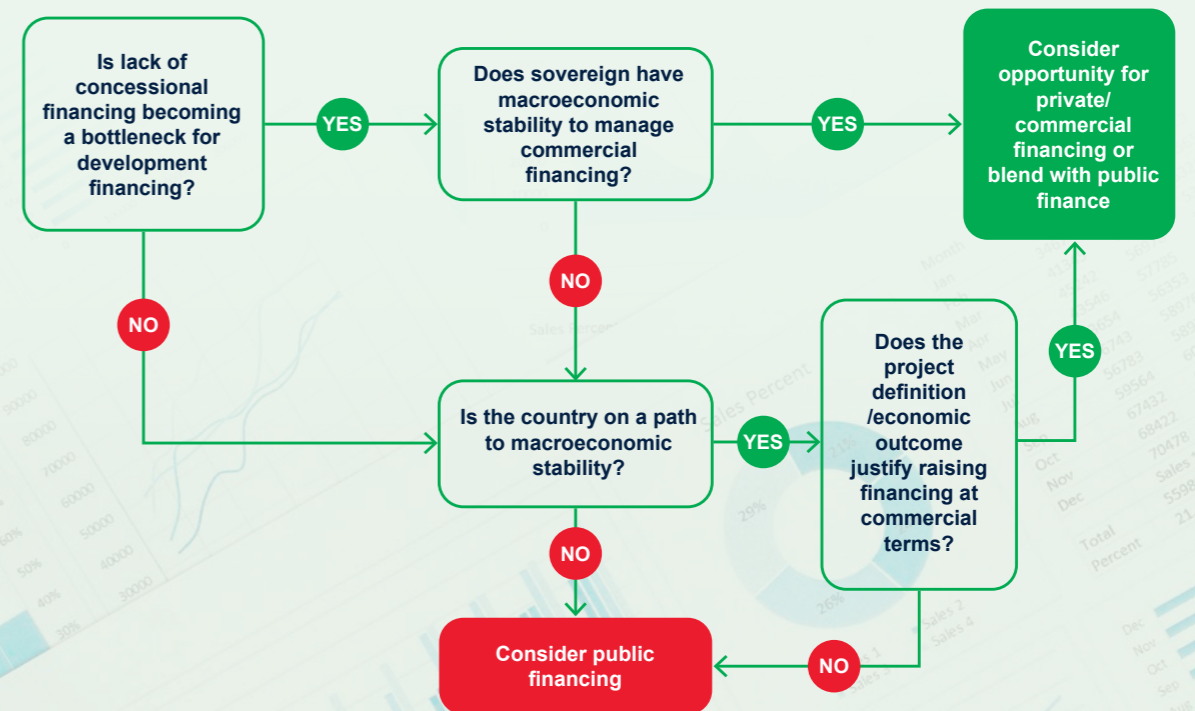
The process for accessing development finance can be complex. To help countries successfully navigate this territory, it is important to convene governments, technical partners, and donors so that they can establish trust and collaboratively develop a clear path towards achieving the Sustainable Development Goals by strengthening their blue economies.

The private sector has correctly been touted as a necessary ingredient in sustainable economic development. This is also true for Africa's coastal and marine areas. Several financial instruments can be pursued to encourage partnership with the private sector, each of which have a different purpose with different requirements. The decision trees on the next page can help identify which instruments are suitable for a particular situation.

CONSIDERATIONS ON RAISING PRIVATE/COMMERCIAL FINANCING FOR REVENUE GENERATING ACTIVITIES



CONSIDERATIONS ON RAISING PRIVATE/COMMERCIAL FINANCE FOR NON-REVENUE GENERATING ACTIVITIES



How the World Bank Group Contributes to Solutions

The World Bank seeks to operationalize Africa's Blue Economy by integrating disparate oceanic sectors under a common vision of sustainability and resilience in the face of intensifying climate change risks. It provides cost-effective financing combined with technical expertise to ensure that investments are directed where they will be the most effective, so supporting the successful implementation of sustainability-focused marine and coastal activities.

With more than US\$7 billion invested in marine and ocean-related sectors in June 2022, the World Bank is in a unique position to help countries transform their ocean economies and move towards a more resilient and sustainable pathway. The World Bank's Blue Economy portfolio currently includes projects focusing on sustainable fisheries and aquaculture; integrated coastal and marine ecosystem management; the circular economy and improved solid-waste management to address marine plastics; sustainable coastal tourism; maritime transport; and offshore renewable energy.

Through its commitment to convening partnerships, the World Bank has demonstrated its ability to catalyze coherent and purposeful collective action. The [West Africa Coastal Areas Management Program](#) provides a clear example of how the World Bank draws on its global knowledge and deploys its

own financing instruments to bring along other development partners in providing collective support for countries as they pursue their existing national, regional, and global commitments.

Many instruments and financing options are available to meet countries' economic conditions and climate challenges. This includes concessional and non-concessional loans, blue bonds, marine conservation endowment funds, carbon credit, parametric insurance, debt for climate swap, and many more.



© Dominic Chavez / World Bank

Adaptable financing options

The International Development Association/International Bank for Reconstruction and Development (IDA/IBRA) offers various financing instruments to meet countries' unique needs.

Case study

THE WEST AFRICA COASTAL AREAS MANAGEMENT PROGRAM

The [West Africa Coastal Areas Management Program](#) (WACA) is an example of investment project financing (IPF). Developed in partnership with West African people who live on the coast and depend on it for their livelihoods, nutrition, food security, and prosperity, the program draws on US\$477 million in IPF funding to support countries' effort to improve the management of their shared coastal resources and reduce the natural and manmade risks affecting coastal communities. The program consists of country-level IPF projects and a regional platform that promotes integration, the sharing of knowledge, and political dialogue between member countries. The platform also mobilizes public and private finance to tackle coastal erosion, flooding, pollution and climate change adaptation.



© Freepik



Investment Project Financing

[Investment Project Financing](#) (IPF) is for government investments that create and scale up the physical or social infrastructure needed to reduce poverty and create sustainable development.



Development Policy Financing

The [Development Policy Financing](#) (DPF) instrument helps governments (or government divisions) develop and implement policies and institutional actions that support sustainable shared growth and poverty reduction. Policy reforms with a Blue Economy lens seek to ensure that marine and coastal development, wastewater management, and solid waste management contribute to economic growth and create jobs, so ultimately preventing an increase in poverty in country.

The US\$50 million Grenada Fiscal Resilience and Blue Growth Development Policy Financing is one example of DPF. The project sought to help Grenada embark on various policy reforms to ensure the sustainable use of natural ocean resources while increasing adaptation and resilience to the impacts of climate change. Grenada's marine and coastal ecosystems provide a wide array of goods and services. However, these assets were being undermined by poorly planned coastal development, pollution, unsustainable fishing, unplanned tourism, and climate change impacts.

Case study

MOROCCO BLUE ECONOMY PROGRAM FOR RESULTS

The US\$350 million Morocco Blue Economy Program for Results uses the Program for Results Financing instrument to create jobs, stimulate economic growth, and strengthen the sustainability and resilience of natural resources while improving food security. Specifically, it supports the development of institutional frameworks, improves the integrated management of natural resources, and strengthens selected sectors for a climate-resilient Blue Economy in targeted areas.

Program for Results Financing

The [Program for Results Financing](#) (PForR) instrument seeks to strengthen country systems by disbursing financing only upon the delivery of defined results. This helps countries improve how they design and implement their development programs and strengthen institutions to achieve lasting results.

Innovative instruments

The World Bank is constantly developing innovative financing products to meet the needs of a diverse range of countries with unique funding needs.

Case study

SEYCHELLES BLUE BOND

The [Seychelles Blue Bond](#), issued in October 2018, was the world’s first sovereign blue bond. The World Bank supported the bond by providing a US\$5 million guarantee which, together with a concessional loan of US\$5 million from the Global Environment Facility, will partially subsidize the payment of the bond coupons. These credit-enhancement instruments allowed for a lower price of the bond by partially de-risking the investment for impact investors, but also by reducing the effective interest rate for the Seychelles.

Blue bonds

Blue bonds are a subcategory of the green bond market, designed to finance sustainable marine activities and assets. Part of the rapidly growing “label” bond market, blue bonds can be issued by sovereigns, municipalities (or regional/protected areas) or corporates and are earmarked exclusively for projects deemed ocean-friendly. Standards applied in the green/blue bond market include the Climate Bonds Initiative (CBI) and the [Green Bond Standards](#) (European Union). CBI has developed criteria for [marine renewable energy](#), and are in the process of developing criteria for shipping and fisheries.



Parametric insurance

Parametric insurance is project finance through insurance payments for risk mitigation (for example, for the conservation and restoration of fisheries, coral reefs or mangroves). These insurance products have been developed for various oceanic sectors in Central America and holds promise for similar applications in Africa.

The first parametric insurance product developed by the World Bank was a US\$2.3 million insurance package for the Caribbean Oceans and Aquaculture Sustainability Facility to protect fisheries and aquaculture. The insurance promotes formalization of the sector by giving fishers incentives to register to benefit from the insurance scheme. Ultimately, it aims to reduce the natural disaster risk that climate change poses to food security and foster policy reforms that promote climate-smart fisheries practices and coastal resilience.

Case study

CASE STUDY THE GUINEA-BISSAU BIOGUINEA FOUNDATION

The Guinea-Bissau [BioGuinea Foundation](#) (FBG) is a marine conservation endowment fund registered under British law and recognized as a charitable organization in both the United Kingdom and Guinea Bissau. Its mission is to provide financial resources and mobilize partnerships to benefit biodiversity conservation, sustainable community development, and environmental education in Guinea-Bissau. FBG was established in 2011 with support from multiple donors, including the World Bank. It is primarily funded through an endowment of €4.35 million (US\$4.2 million), with additional pending commitments totaling €3.6 million (US\$3.5 million). The foundation recently helped raise US\$4.1 million for conservation through an innovative blue carbon REDD project. Its endowment targets are set at €13 million (US\$12.6 million) by 2026 and €28 million (US\$27.1 million) by 2031—which is estimated to be sufficient to sustainably guarantee basic operating costs for the country’s National Protected Areas System as well as the foundation itself.



Marine conservation endowment funds

Marine conservation endowment funds are grant-making entities that provide finance for conservation activities. They receive capital from governments, foundations, and the private sector. Often there is no expectation of a return, so the funds can support higher-risk projects that have less certain outcomes.





Blue carbon credits

Blue carbon refers to carbon that is sequestered through marine and coastal ecosystems such as mangroves, tidal wetlands, and by using seagrasses. While there presently are limited examples, the upstream identification stage of such credits is growing fast and can build on the experience gained in terrestrial carbon sequestration.

The World Bank provides support to help countries prepare for blue carbon credits. For example, it supported Pakistan with analytics focusing on the potential for blue carbon using the [PROBLUE](#) multi-donor trust fund. The resulting [report](#), published in May 2021, recommended that the country should start developing a Blue Carbon Action and Financing Roadmap and include blue carbon in its nationally determined contributions. Since then, the provincial Government of Sindh has jointly launched the [Delta Blue Carbon](#) partnership, one of the world's largest mangrove restoration projects, which aims to conserve and restore nearly 350,000 hectares of mangroves. In March 2022, the project sold its first tranche of 3 million blue carbon credits.



Debt for Nature/Climate Swaps

This is a mechanism by which international creditors offer debt relief in exchange for the investment of the avoided debt service in climate change-related projects. The transaction structure can vary, with the reduction of debt coming from its conversion to local currency, the use of a lower interest rate, a partial write-off, or a combination of these options. As an example, in 2021 Belize signed a debt-for-nature swap that reduced the country's external debt by 10 percent of its GDP in exchange for a government commitment to spend US\$4 million a year until 2041 on marine conservation.

Given the complexity of the instrument, its higher transaction costs, and its dependency on the creditor, its use has been limited in scope and scale to date and usually involves countries in debt distress.

Case study

PROBLUE

[PROBLUE](#) is a World Bank programmatic multi-donor trust fund that uses its well-established platform to channel funds to initiatives that align with its four strategic pillars. These pillars are:

- Improved fisheries governance
- Marine litter and pollution reduction and prevention
- The “blueing” of oceanic sectors to ensure their sustainable development
- Integrated seascape management.

PROBLUE has a broad structure to accommodate the evolving priorities of client countries and development partners alike. Its resources allow the World Bank to identify trends and emerging threats to oceans and the coastal and maritime economy, formulate appropriate solutions for action, and support the implementation of blue interventions that focus on these pillars, along with important cross-cutting issues such as gender, climate change, and maximizing finance for development.

PROBLUE is able to support Africa's Blue Economy in two ways:

- **By supporting an integrated, “spend better” approach to investment:** PROBLUE's capacity-building support and upstream knowledge work can help regional and country-level institutions develop strategic, integrated investment opportunities that are sustainable.
- **By exploring ways to increase financing to Africa for Blue Economy activities:** PROBLUE's resources can be used to leverage other resources within the World Bank and beyond. New financing mechanisms—such as payments for ecosystem services and blue carbon opportunities—can also be explored in partnership with countries and regional entities.

What Success will Look Like

Africa's Blue Economy will thrive if technical assistance and finance are channeled into larger programs so that the results become greater than the sum of the individual contributions. Multiple development funding donors will need to work together to support national development processes, mobilize additional resources, and ensure that their actions are coordinated to ensure maximum impact in client countries.

The Blue Economy will also thrive if decisions and investments reflect the externalities of the ocean economy. To achieve this, Africa's decision-makers need access to high-quality data, tools, and methodologies, as well as standards to ensure that strategic and most-resilient projects are prioritized for financing and implementation. As an example, PROBLUE has created a platform for data and tools that serves as a basis to undertake marine spatial planning and better optimize the use of the marine and coastal resources.

Ideally, Africa's Blue Economy agenda should integrate other World Bank priorities such as poverty reduction, biodiversity, climate change, and gender and social inclusivity. In particular, climate change should be incorporated both upstream and downstream, including for coastal infrastructure investments. Several examples show that the Blue Economy can be captured in nationally determined contributions for climate change and systematic country diagnostics.

Finally, Africa's Blue Economy will succeed if it is built on regional integration that draws on existing institutions and platforms in an integrated and collaborative manner.

