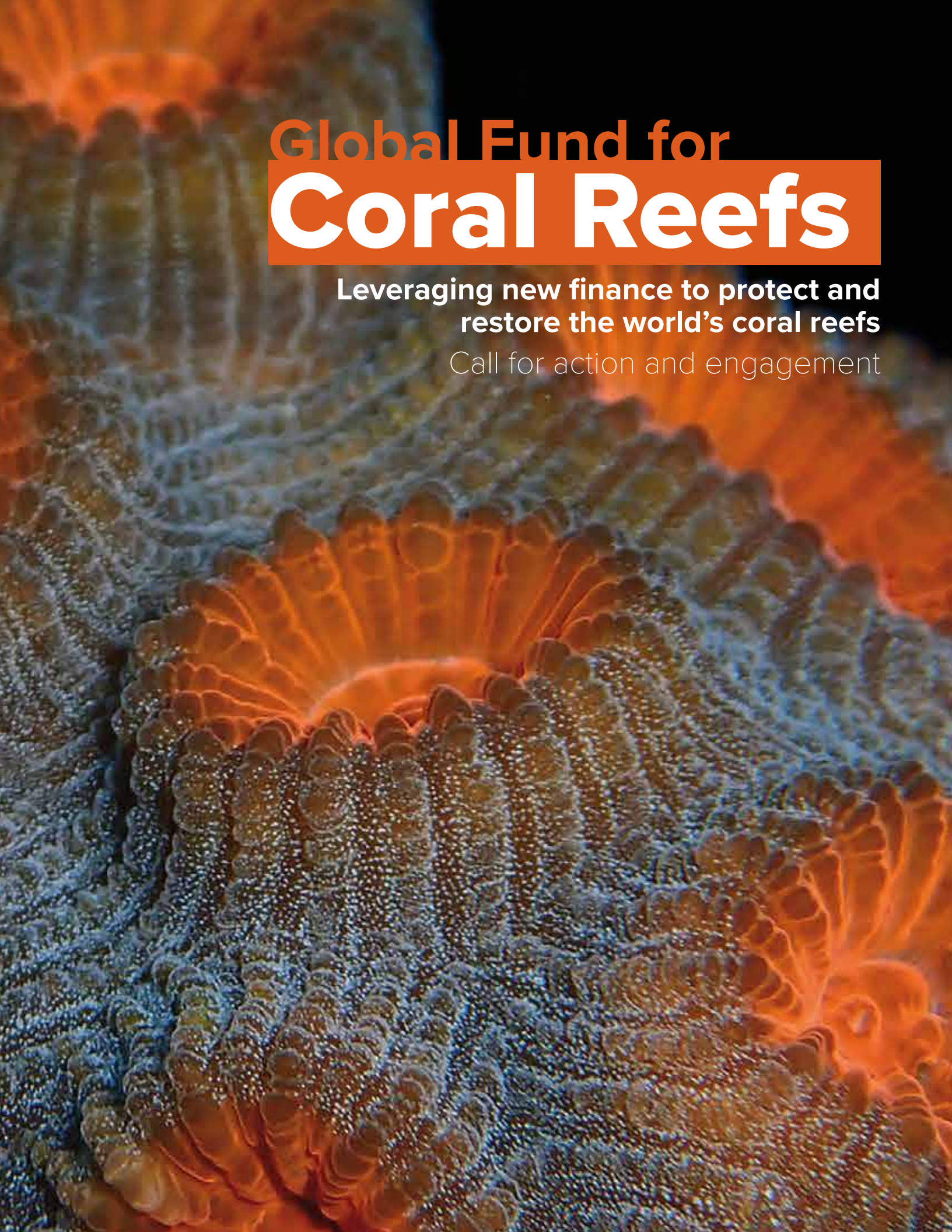


Global Fund for Coral Reefs

Leveraging new finance to protect and restore the world's coral reefs

Call for action and engagement

THE TIME TO INVEST IN CORAL REEFS IS NOW

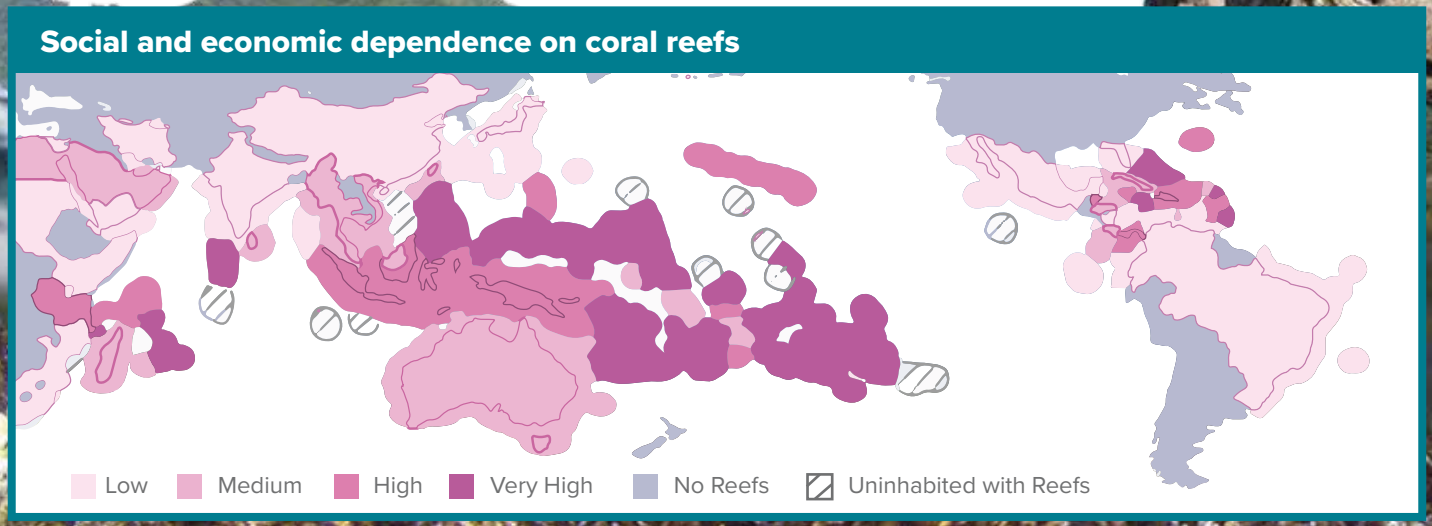
The loss and degradation of the world's coral reefs is a major catastrophe of our time. When reefs become vulnerable, marine biodiversity is endagered and livelihoods of millions are put in peril. But while the situation may be dire, it is not too late to reverse the damage. A global coalition of philanthropists, United Nations organizations, national governments, businesses and investment partners will launch the first global fund that leverages financial capital and investments for coral reefs.

While healthy coral reefs are among the most biologically diverse and economically valuable ecosystems on the planet, the Earth has lost half of its reefs over the last 30 years. Globalization and anthropogenic activity, coupled with increasing seawater temperatures and changing ocean chemistry, have adversely affected coral and fish communities, reduced coral growth rates, diminished the resiliency of coral reef ecosystems, and weakened the value of reef-related goods and services for the communities that rely on them.

Without urgent action and rapid mobilization of resources coral reefs around the world will collapse and may go extinct within the next 30 years. Battered by over-fishing, pollution, and unsustainable coastal development, coral reefs are at the frontline of climate change. A 2018 Intergovernmental Panel on Climate Change (IPCC) report warned that without bold, decisive action over the next decade, we will lose 70% to 90% of our remaining coral reefs—even if global warming is limited to 1.5 degrees above pre-industrial levels.

Across the world, hundreds of millions of the poorest and most vulnerable people depend on healthy and thriving coral reefs for food, jobs, medicine, revenue from tourism, and to provide protection from storms and floods.

Social and economic dependence on coral reefs, World Resource Institute



Why protect coral reefs?

"Coastal communities are in jeopardy, the oceans are swamped by a tide of pollution, and marine life is in decline because of climate change. Thankfully, we have a battle plan. [...] If we don't protect our seas and oceans, and if we don't win the battle against climate change, all the assumptions on which we base our policy-making will be worthless."

From a speech by United Nations Secretary General, **António Guterres,** at the July 2018 G7 Summit

In addition to biodiversity values, coral reefs have a vital and cost-effective role in protecting people and property. Healthy coral reefs **break up as much as 97% of wave energy** before a wave reaches shore, which dramatically reduces flooding and beach erosion in coastal communities.

Coastline damage and beach erosion correspond to areas of reef loss. **One-meter loss in reef height doubles the cost of damage when severe weather impacts a coastline,** and one study shows how, for every 100-year storm event, flood damage increases by 91%; the equivalent of $272 billion US dollars.

Countless communities rely on coral reefs for **theirs livelihoods and economic security.** Over 30% of the world's reefs are used by those working in tourism and are worth approximately **$36 billion US dollars.** The loss of coral reefs would result in the loss of livelihoods, income, food security, and cultural links for millions around the world.

The coral reef funding gap

A recent assessment conducted by the Conservation for Biodiversity High-Level Panel estimated that the global investment required for coral reefs is at least five times greater than current levels. Calls for eliminating this **"coral reef funding gap"** have been made by the Convention on Biological Diversity (CBD) Conference of the Parties, United Nations Environment Assembly, the International Coral Reef Initiative, and Coral Reef Life Declaration.

An analysis between 2010 and 2016 found only 314 active projects worldwide focused on coral reef protection. Valued at $1.9 billion US dollars, these projects were funded by 60 individuals, groups, and/or organizations. Considering that the resources and services communities gain from healthy coral reef systems is equivalent to $375 billion US dollars a year there is a massive gap to contend with. The financial resources for coral reef protection and restoration comes from few public and philanthropy sources, and nearly three-quarters of all projects consist of small-scale initiatives.

The **Coral Reef Economy** report shows that interventions led by private entrepreneurs targeting sustainable fisheries, wastewater and erosion management can have a positive impact on the health of coral reefs and reef-dependent economies. They have the potential to close between 45% to 70% of the gap between the estimated value derived from degraded and healthy reefs by 2030.

By acting now and unlocking the potential of innovative investments, major improvements for our reefs, and those who rely on them, are within reach.

CORAL REEFS AND SUSTAINABLE DEVELOPMENT

“Coral reefs are marine ecosystems that are essential for the conservation of marine biodiversity. They are severely affected by climate change, and many of them are in danger of eventually disappearing. To address this situation, my Foundation and the Vulcan Group have taken the initiative to support the setting up of an international financial mechanism to marshal private and multilateral resources that will help to improve scientific knowledge and promote practical solutions to save these reefs. I urge anybody who wants to protect biodiversity to join our initiative.”

Prince Albert II of Monaco

Global efforts to protect coral reefs

To mobilize action and finances for coral reef protection and restoration a new international commitment is being formed.

Post-2020 Global Biodiversity Framework

Governments that are part of the International Coral Reef Initiative (ICRI) have committed to develop a new coral reef target as part of the Post-2020 Global Biodiversity Framework. This framework will replace the Aichi targets from the Strategic Plan for Biodiversity 2011-2020 and will be crucial in advancing biological diversity from 2020 onwards and ensuring specific focus is placed on coral reefs and ocean ecosystems.

2030 Agenda for Sustainable Development

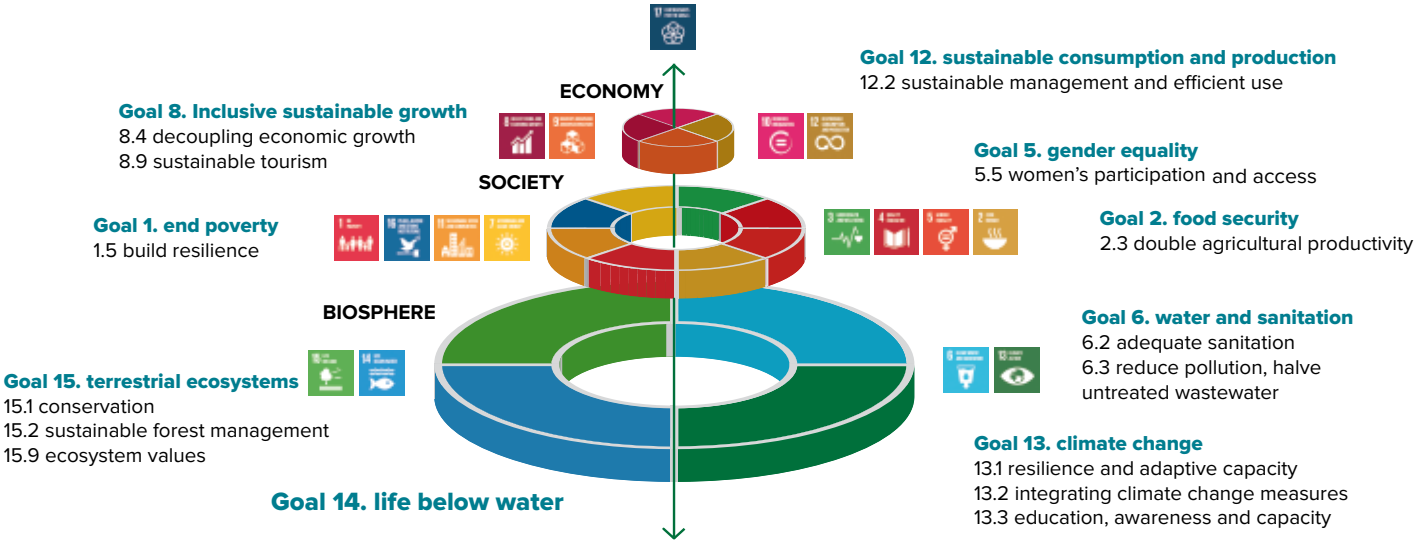
Thriving coral reefs and related ecosystems are vital for achieving the Aichi Biodiversity Targets and delivering on nature-dependent Sustainable Development Goals (SDGs), primarily Goal 14, 'life below water'. Indeed, most SDGs can be hit through entry points such as coral reef tourism, food security, shoreline protection, and human health and wellbeing. This brings into focus the economic, social and cultural ramifications of dying coral reefs, declining fish populations, and an increase in coastal erosion.

United Nations resolution on "sustainable coral reef management"

During the fourth United Nations Environment Assembly (UNEA-4) in March 2019, resolution 4/13 was passed on sustainable coral reef management. In it, Member States and United Nations Environment (UN Environment) recommended a series of actions and called for greater coordination between countries in implementing policies related to the conservation and management of coral reefs at international, regional, and local levels.

CORAL REEFS CONTRIBUTION TO THE 2030 AGENDA AND SDGs.

(Source: UN Environment, ICRI)



Human health and wellbeing

70% of the protein in diets of Pacific Islanders come from reef-associated fisheries.

Women's livelihoods are disproportionately affected when reefs are damaged.

Contribution to SDGs

Shoreline protection

$6 billion A healthy reef can reduce coastal wave energy by up to 97%. Globally $6 billion of built capital is protected from flooding by coral reefs

Contribution to SDGs

Food security

1.42 million Coral fisheries provide an average annual seafood yield of 1.42 million tonnes

Contribution to SDGs

Tourism

$36 billion Coral reef tourism contributes $36 billion to the global tourism industry annually

Contribution to SDGs

Biodiversity

4000 species Coral reefs support approximately 4000 species of fish and 800 types of corals

Contribution to SDGs

Medicines

50% Coral reefs are the medicine chests of the 21st century, with more than half of all new cancer drug research focusing on marine organisms

Contribution to SDGs

WHY DO WE NEED A GLOBAL FUND FOR CORAL REEFS?

As it stands, there is no dedicated global financial instrument for coral reef protection—what exists is fragmented and operates on a country-by-country or project-by-project basis. Our immediate priority is to collectively shift efforts and resources to the coral reefs by establishing a portfolio that shows how new, large-scale solutions—supported by private investment—can make a difference.

A coalition of global partners committed to reef protection has come together to develop and test this global financing instrument, including Prince Albert II of Monaco Foundation; Paul G. Allen Family Foundation; United Nations Development Programme (UNDP); and United Nations Environment Programme (UNEP).

The Global Fund for Coral Reefs has a **dual focus**:

- Facilitate the **uptake of innovative financing mechanisms,** including private, market-based investments focused on coral reef conservation and restoration
- **Unlock financing for coral reef-related climate adaptation** through the Green Climate Fund, Adaptation Fund, and multilateral development banks (MDBs).

The Global Fund will offer risk equity capital and grant funding to deliver exciting, impactful projects. New solutions for preventing the extinction coral reefs are beginning to emerge, including ways of improving coral resilience in the warming waters.

Grants and equity investments will make it possible for the Fund to deliver smart solutions at scale. Starting capital will be leveraged by the Fund and used to help developing countries mobilize the resources they need to meet their coral reef commitments as per the post-2020 Global Biodiversity Framework.

The Fund will be designed over the next 18 months and the ambition is to raise $500 million US dollars in capital by 2030.

Strategic approach

The Global Fund for Coral Reefs will promote a **'protect-recover-transform'** approach in priority locations to save and protect coral reefs that face extinction.

Protect

Functioning reefs are still found in climate-cool spots around the world but need additional protection to prevent further loss and degradation.

Recover

Coral reefs need help in recovering when severely degraded by bleaching or other human activities.

Transform

Coastal societies will need to find new livelihoods and limit their dependence on reefs that no longer function, while reducing local threats to keep reefs above functional thresholds through strategic local management (e.g. marine protected areas and other management restrictions) so corals can recover.

STRATEGIC APPROACH: DRIVERS OF CHANGE

Due to the multiple drivers of degradation, layered interventions are required. This can range from global (e.g. climate change, ocean acidification, increasing human populations) to local (e.g. natural disasters, overfishing, destructive fishing, pollution, boat anchoring, etc.), and include drivers that directly and indirectly cause adverse harm to coral reefs and surrounding ecosystems.

DIRECT GLOBAL DRIVERS

Ocean acidification and reduced coral growth

Increasing seawater temperatures and bleaching events

DIRECT LOCAL DRIVERS

Natural disasters (typhoons, tsunamis, flooding, etc.)

Overfishing

Destructive fishing (dynamite, poison, etc.)

Pollution (nutrients, chemicals, etc.)

Tourism

Sedimentation

Land reclamation

Invasive species

Lost and abandoned fishing gear

Increased intensity of storms

Crown-of-Thorns starfish outbreaks

INDIRECT DRIVERS

Human population growth

Unsustainable consumption patterns

Political apathy

Lack of public awareness

Economic systems that do not take environmental costs into account

Damage to adjacent ecosystems (e.g., mangroves and seagrasses)

STRATEGIC APPROACH: PRIORITY OUTCOMES

The Global Fund for Coral Reefs supports interventions that are designed with the following four **priority outcomes** in mind:

Outcome 1: Protection policy and climate refugia	Potential outputs
Strategic coral reefs (i.e. climate refugia and natural 'seed banks' with assigned value to protect intellectual property and patents) are protected to increase global resilience of the ecosystem in the face of climate change.	• Scientific studies on identifying climate refugia • Refugia management plans • Enhanced marine protected areas and locally managed marine areas around refugia • Water quality/land-ocean interface projects to protect refugia • Community sustainable fishing projects adjacent to refugia • Legal advice on intellectual property, potential uses and patents related to climate-resilient corals located in refugia

Outcome 2: Technology	Potential outputs
Coral reef **restoration and adaptation technology** is scalable, cost-efficient and applicable to a variety of contexts, with proven outcomes for ecological resilience.	• Restoration technologies developed and piloted • Strategies for high-impact restoration • Restoration guidelines; trainings on coral reef restoration • 'In situ' restoration projects in the water • Identification of priority restoration sites

Outcome 3: Sustainable livelihoods	Potential outputs
Reduced reliance on degraded coral reefs and reef ecosystems in highly **reef-dependent communities;** people are made aware of the coral reef crisis and encouraged to make pledges to take action.	• Community-based projects for sustainable fisheries, seaweed farms, aquaculture, tourism, etc. • Impact of coral reefs on women measured and reported • Women empowered through capacity building and safety nets • Sustainable value chain development and educational programmes to build skills for alternative careers and livelihoods • Communication and educational campaigns to drive and sustain behavioral change

Outcome 4: Reef protection and tourism	Potential outputs
Private sector-led investment in reef protection and restoration is combined with targeted public financing to support urgent conservation and restoration efforts.	• Mandatory global tourism levies, reef insurance and taxes • Reef-first business models and plans • Economic evaluation of coral reefs and ecosystem services • Strengthened national policy framework based on robust business case for coral reef restoration and maintenance • Impact and environmental, social and corporate governance (ESG) investment with reefs focus

HOW WILL IT WORK: INNOVATIVE BUSINESS MODELS

"Business as usual" is not a viable option for sustainable coral reef management. The Global Fund for Coral Reefs will combine a mix of financing instruments to unlock new resources for the protection of coral reefs.

The Fund will identify potential revenue streams and provide financial returns to investors. Coral reefs and related ecosystems have an immense global value of $2.7 trillion US dollars per year in the form of food, tourism, and medicine. As importantly, coral reefs offer coastal protection by absorbing energy from waves, and this net benefit is estimated in billions of US dollars per year. Reefs are home to species that contain pharmaceutical compounds that could treat some of the world's most prevalent and dangerous diseases.

Because the supply of market-rate seeking, commercial capital outpaces the availability of risk-tolerant concessionary capital and grants the Fund is taking a blended finance approach, making investments and grants that cater to different investment risk profiles.

Leveraging investments

By leveraging grants (an estimated $125 million US dollars) and partner assets deployed through a holding company or other mechanism ($375 million US dollars), the fund could mobilize a significant amount of capital (~$2-3 billion US dollars). Finances will be used to sustainably manage coral reefs, thereby assisting the 500 million people who depend on healthy reef ecosystems. Structuring underused and fragmented investments through a global portfolio approach can steer global finances towards coral reef protection.

$125M
in donor funds through the grant manager

$375M
in partner asset deployed through the holding company

$2-3Bn
unlocked from global public and private financial instruments

STRUCTURE

Given the diversity of coral reef ecosystems and limited, proven, scalable revenue streams, the legal structure of the Global Fund for Coral Reefs will be flexible, long-term, and lean. A holding company could be established, allowing for capital and fee structures that accommodate growing regulatory environments and impact measurement. This setup could simplify programming by creating space for ongoing technical assistance and new deals that may have unspecified investment horizons.

THE GLOBAL FUND FOR CORAL REEFS: POTENTIAL PIPELINE

The ambition of the vehicle is to build a robust and investable pipeline, blending financing sources and revenue streams.

One investment model considered is the MPA (marine protected area) model. Globally there are thousands of designated MPAs, but generally they face limited funding, inadequate management, and lack of enforcement. They are oftentimes designed with limited community impact—banning fishing and sustainable use. This means existing MPAs will receive limited support from affected communities, governments, and private businesses. From an impact perspective, MPAs have proven to be successful in protecting biodiversity and much-needed ocean habitats. This makes ecosystems more resilient in the face of climate change and ocean acidification.

MPAs will form an important part of the investment pipeline of the Coral Reef Fund, identifying the opportunities that have functioning basic infrastructure and governance but need working capital to improve its services, marketing, and engagement with the community, ultimately strengthening the value chains that can lead to revenue generation.

We can envision revenue streams from ecotourism, dive fees and licensing, park management and leasing (see below), fisheries (improved catch and fish populations), and potentially CO^2 credits as an additional incentive (from improved sequestration).

COMBINING PUBLIC AND PHILANTHROPY DONATIONS

1. Grants:

Primarily for technical assistance and capacity building of identified projects and pipeline companies. The Fund will disburse grants on a limited basis to models that are sustainable from financial and social perspectives and have built-in measures to ensure that grant funding is not needed for the life of the investment. Grantmaking can be used to finance studies once feasibility is established or near certain (e.g. to collect additional data), and to capacitate the associated enterprises with financial skills, back office, accounting, marketing support. Social enterprises may require more advisory services than non-impact focused enterprises.

Potential application: Grants can support foundational work, including building a business case or project pipeline for investments where the balance will shift from grants to investments over time. Grants can be used to support sustainable/alternative livelihoods and education projects in coral reef-dependent communities, as well as on communication, advocacy, and policymaking.

2. Recoverable grants:

In recoverable grants, non-profits agree to repay investors/donors the principal plus interest based on the achievement of certain financial or programmatic milestones. These bridge philanthropy and finance in a flexible and patient way. Because repayment is only required under certain circumstances, it is designed for early-stage investments where entrepreneurs rely on risk-tolerant and inexpensive capital—as is the case in coral reef investment opportunities. Recoverable grants are modelled on convertible notes—without an expiration date and where the conversion occurs at valuations greater than a given threshold. Recoverable grants recycle investment capital from successful ventures so funds can be used to support other enterprises.

Potential application: Imagine a recoverable grant in the development of a new recreation service linked to a coral reef in the Pacific Ocean or for snorkeling or scuba diving excursions in a high conservation value/low tourism value area. This grant finances new ventures like these (include training, infrastructure, marketing and promotion) and, if successful, can be repaid by fees charged for the services provided.

3. Pay-for-performance instruments, outcome-based financing, results-based financing (RBF), and impact bonds:

These terms refer to an instrument that links financing to pre-determined results, with payment made upon verification that agreed-upon results have actually been delivered. RBF can improve both supply and demand performance across sectors. In such a program, payments are based on the quantity and quality of goods or services delivered after verification. appropriate financing tools—loans, guarantees, grants or a combination—used in project development.

Potential application: With respect to the “blue economy,” this financing model can have several applications, which include ocean and coastal biodiversity conservation and restoration (e.g. coral or mangrove restoration and regrowth projects) or youth unemployment programmes that focus on blue economy jobs and training.

4. Guarantees:

An obligation undertaken by a guarantor to satisfy the payment of a debt, a guarantee is also the fulfilment of a contractual obligation on behalf of a debtor toward a beneficiary when the debtor fails to comply with the terms of a contract. Think of a guarantee as “insurance” that protects an investor or lender in the event a debtor fails to settle a debt. The guarantee covers the financial obligation (partially or fully), which lowers the financial risk of the initial investment.

Potential application: In structuring and issuing guarantees, the vehicle complements the use of grants and expands the scope of financial instruments notably by unlocking more rational choices about appropriate financing tools—loans, guarantees, grants or a combination—used in project development.

WITH WORKING CAPITAL

5. Debt:

For the SMEs identified that have business models that are revenue generating (or potentially revenue generating) but need upfront financing for capex, or opex, debt financing is an ideal solution. In this vehicle, tenors will be long and rates at market rate or below, depending on the country, and noting that the countries of operation tend to have very high interest. Openness to steady or current income as a replacement for or complement to short-term capital appreciation has enabled debt financing solutions and diminished the liquidity barrier. Debt funds now outnumber equity funds in impact investing (on an asset weighted basis including microfinance vehicles as these are still the largest vehicles), but also likely due to the current income attributes attractive to long-term investors, and likely also from aversion to PE models where capital appreciation in early stage, unproven, or untested markets is at risk.

Potential application: Debt can be imagined for the dive centres promoting ecotourism in Fiji, growing but established MPAs, and ecotourism sites (especially those catering to higher end tourism)—those projects that can service debt. In commercial concessions, a concessionaire pays a fee for the right to undertake a specific commercial operation in a protected area, in accordance with a 'user pays' principle: diving sites, guided tours, snorkelling, restaurants, and hotels in conservation areas. In management concessions, which are usually structured as PPPs (public private partnerships), a concessioning authority (usually a government), outsources responsibility for a management of a protected area or other site to an agent with greater capacity to undertake management. Terms are usually fixed upfront in terms of expected use, fees, and hence repayment.

6. Blue bonds (debt swaps, debt restructuring):

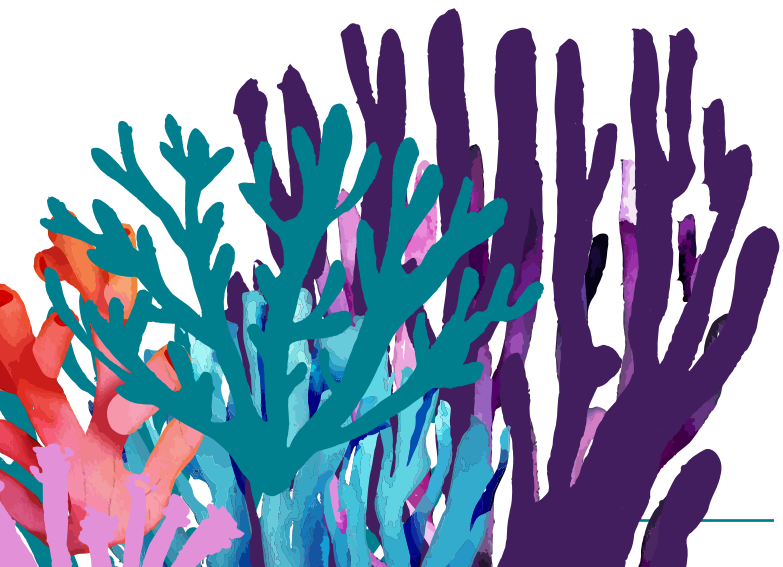
Blue Bonds leverage upfront philanthropy to catalyze as much as 40 times more in additional investments (under The Nature Conservancy Seychelles model), which can be used to protect predefined areas around the world's oceans in a set amount of time. This is essentially a debt restructuring instrument, likely relevant to the SIDS and LDCs involved, where the use of proceeds is linked to coral reefs and where debt relief is needed. The savings from the debt refinancing is then used to invest in marine protection efforts that will revitalize fisheries and protect coral reefs.

Potential application: How the mechanism works (which is often grant funded at the outset to establish feasibility): A local government, conservation advisors, commercial investors negotiate debt-for-ocean--i.e. protecting 30% of ocean area of designating MPA in exchange for restructuring of debt--converting debt held by other countries into more manageable debt held by a local entity. Then a conservation plan is put into effect for protection, restoration and safe-use of the reef and reef-related assets. The country (government) repays the local entity who executes conservation measures.

7. Reef insurance:

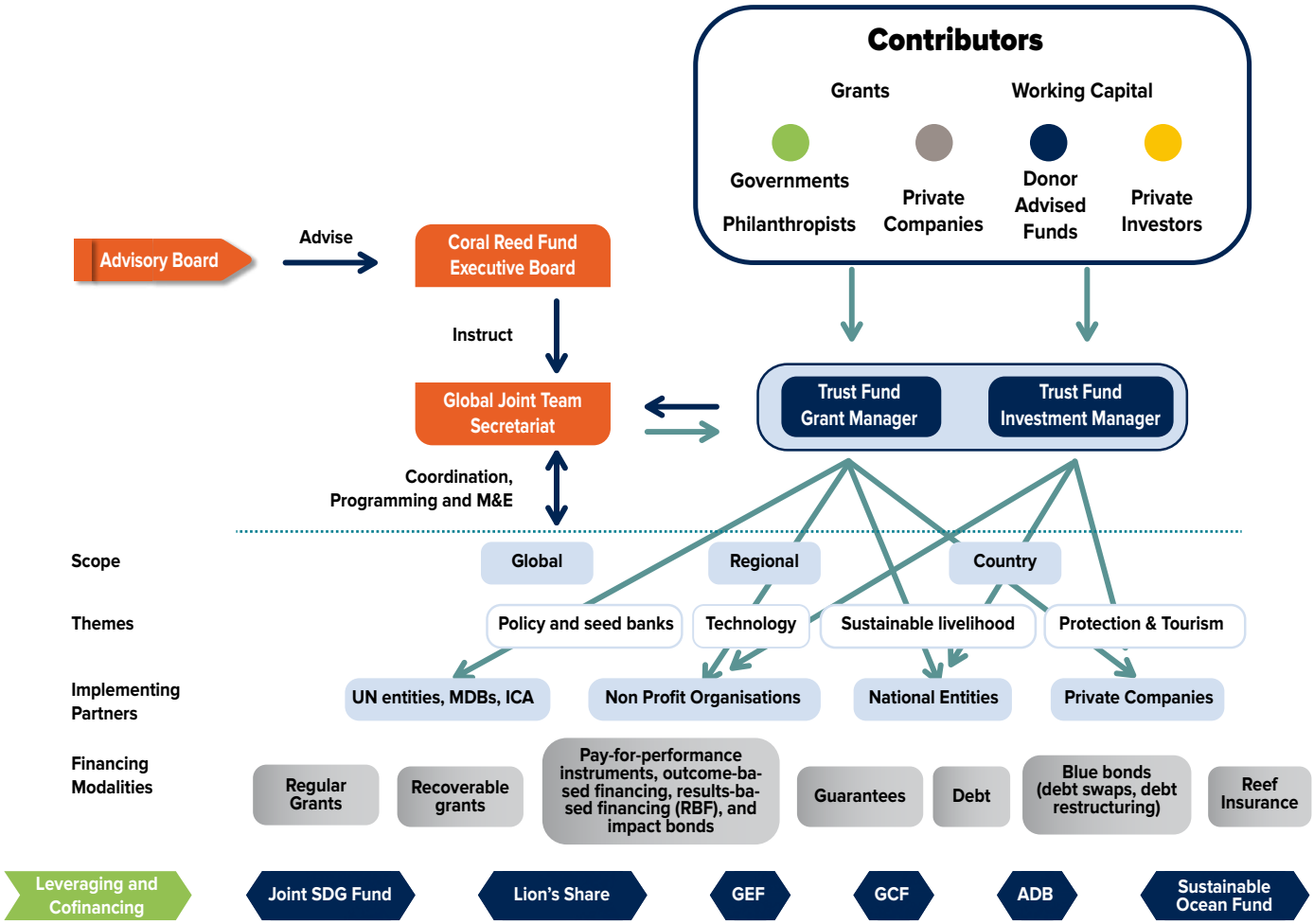
Coral reefs provide valuable services but can be damaged by hurricanes and other disasters that reduce their ability to provide these services. Identifying an insurable risk (like hurricanes, linked to a parametric trigger like wind speed) associated with a reef that is protecting onshore assets, like tourism assets, property, and communities, are the essential components of structuring reef insurance.

Potential application: The cost of restoring the reefs after a storm is less than the losses in environmental services and less than other human-made structures providing the same services due to the protective properties of a healthy reef and the livelihoods benefits they provide. There must be interested parties to buy the insurance on the reef and ensure the reef is restored—this comes down to discussions with local governments, the tourism sector or local industry dependent on healthy reefs, and community stakeholders.



GOVERNANCE AND OPERATIONS

Governance arrangements rely on an efficient and effective decision-making and oversight framework to ensure streamlined allocation of resources and clear lines of accountability. With a Grant Manager and an Investment Manager, the Fund features an innovative business model that allows for the blending of fund and spending modalities. Governance arrangements are built on, and informed by, five principles: innovation, transparency, accountability, public-private partnership, and integrated programming.



Executive Board. The Executive Board will be composed of 10-15 committed members, with group members selected to reflect the diversity of the Fund. A leaner Executive Board is preferred to increase member ownership and decision-making efficiency. The Executive Board provides general oversight for all Fund activities, sets Fund strategy, promotes partnerships and advocacy, takes part in fundraising, allocates finances, and is responsible for the overall performance.

Advisory Board. The role of the Advisory Board will be to foster consultation, dialogue and knowledge exchange among Fund stakeholders. Responsibilities include discussing progress, challenges, lessons learned, sharing reef protection practices, and recommending actions to improve Fund performance.

The Fund Secretariat. A dedicated Secretariat will support the Executive Board and manage the day-to-day aspects of the Fund. This includes identifying management, technical and operational expertise, developing investment plans, and managing the approval of project or programme proposals in accordance with financial decisions made by the Executive Board.

The Fund Administrator. The Fund Grant Manager acts as the Administrative Agent and provides grant fiduciary administration and other support services in accordance with the legal framework set-up by founding partners and donors. The Administrative Agent uses a pass-through modality where each recipient organization applies its own procedures, provided they meet the minimum requirements outlined in the Memorandum of Understanding and Terms of Reference. Additionally, the trustee provides real-time financial data from its accounting system, giving partners and the general public the opportunity to track contributions, transfers, and expenditures.

Sourcing an Investment Manager. The strategy for managing the day-to-day work of the vehicle, including front and back office operations, administration and execution, will require the sourcing of an investment manager regardless of the structure. The Fund, through its trustee, plans to circulate an RFP within the networks of conservation finance managers, those engaged in coastal communities, SIDS, and with a proven track record in delivering environmental impacts in a financially sound manner. As the Fund and partners bring a specific set of skills but not investment management, the aim is to collect a swathe of proposed models for managing the vehicle and outsourcing this function.

Partner with Us

The decisions we make over the next decade will determine the fate of the world's coral reefs, along with the lives of the hundreds of millions of people who rely on the reefs for food, jobs, and coastal protection.

Designing and funding coordinated solutions is how we will save the world's coral reefs and help the hundreds of millions of people who rely on them.

Invest in the Global Fund for Coral Reefs

The Global Fund for Coral Reefs brings together people whose expertise and contributions will help mobilize efforts and resources on a large scale. The Fund's initial target of $125 million US dollars in grants from governments and philanthropic donors will directly leverage $375 million US dollars more in capital by protecting coral reefs and the goods and services linked to them.

Donors engaging now will have the opportunity to:

- Join a unique partnership between leading philanthropists, UN organizations and private Investors
- Participate in the design of this innovative instrument (its TOC, Business Model and Scope)
- Demonstrate their support to increase the efficiency of pooled funding arrangements at leveraging private investments toward the SDG Goals
- Mobilize resources for the Convention on Biological Diversity Post-2020 Biodiversity Framework
- And meet their commitment under the 2019 UN Funding Compact to double the share of pooled funds contributions.

Leading donors will be given the opportunity to sit on the Executive Board, steering Fund strategy and operations, review priorities and investment plans.

Want to act now?

Contact one of the members of the Global Fund for Coral Reefs Coalition:
The Prince Albert II of Monaco Foundation: fstaub@icriforum.org
The Paul G. Allen Family Foundation: chuckc@vulcan.com
UNEP : gabriel.grimsditch@un.org
UNDP : midori.paxton@undp.org
UN Multi-Partner Trust Fund Office: pierre.bardoux@undp.org

PRINCE ALBERT II OF MONACO FOUNDATION

PAUL G. ALLEN FAMILY FOUNDATION

United Nations MPTF Office

UN environment
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UNDP
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