



GLOBAL FUND FOR CORAL REEFS

INVESTMENT PLAN 2021

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Global Fund for Coral Reefs

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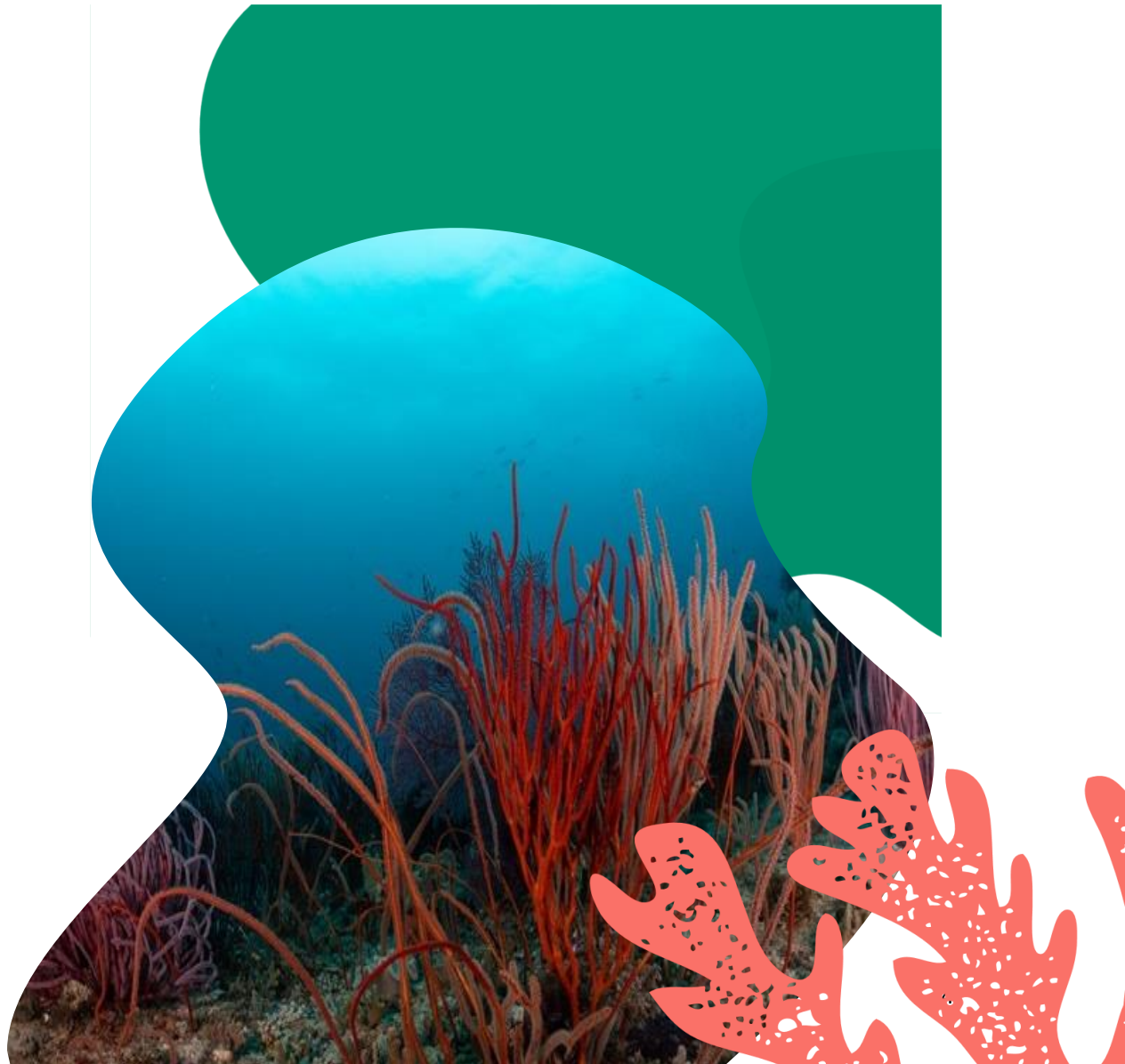


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List of Acronyms

AfDB	African Development Bank
ADB	Asian Development Bank
ASC	Aquaculture Stewardship Council
BAF	Blue Action Fund
BCU	Bioclimatic Unit
BHS	Birds Head Seascape
BMU	Beach Management Unit
BNA	Blue Nature Alliance
BNCFF	Blue Natural Capital Financing Facility
CBD	Convention on Biological Diversity
CBO	Community-Based Organization
CFA	Conservation Finance Alliance
CI	Conservation International
CORAL	The Coral Reef Alliance
CRRRI	Coral Reef Rescue Initiative
CTF	Conservation Trust Fund
CTI	Coral Triangle Initiative
DFI	Development Finance Institution
DfN	Debt-for-Nature Swap
GCF	Green Climate Fund
GEF	Global Environment Facility
GFCR	Global Fund for Coral Reefs
ICRI	International Coral Reef Initiative
IDB	Inter-American Development Bank
IPCC	Intergovernmental Panel on Climate Change
IR	Independent Research
IUCN	International Union for Conservation of Nature
IUU	Illegal, Unreported and Unregulated
KfW	Kreditanstalt für Wiederaufbau
KPI	Key Performance Indicators
LDCs	Least Developed Countries
LMMA	Locally Managed Marine Area
M&E	Monitoring and Evaluation
MA+R	Managed Access with Reserves
MAB	Man and the Biosphere
MAR	Mesoamerican Reef
MDB	Multilateral Development Bank
MDC	More Developed Country
MFI	Microfinance Institutions
MPA	Marine Protected Area
MSC	Marine Stewardship Council
MSP	Marine Spatial Planning
ODA	Official Development Assistance
OECM	Other Effective Area-based Conservation Measures
ORRAA	Ocean Risk and Resilience Action Alliance



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PA	Protected Areas
PA2F	Prince Albert II of Monaco Foundation
PES	Payment for Ecosystem Services
PFP	Project Finance for Permanence
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RFI	Request for Information
RFP	Request for Proposal
RRI	Resilient Reefs Initiative
SDG	Sustainable Development Goal
SIDS	Small Island Development State
SME	Small and Mid-size Enterprise
SOA	Sustainable Ocean Alliance
SOF	Sustainable Ocean Fund
SPE	Special Purpose Entity
TAF	Technical Assistance Facility
TNC	The Nature Conservancy
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP FI	United Nations Environment Programme Finance Initiative
UNFCCC	United Nations Framework Convention on Climate Change
UNMPTFO	United Nations Multi Partner Trust Fund Office
US	United States
USAID	United States Agency for International Development
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

1 Executive Summary

Tropical coral reefs are experiencing an existential threat due to greenhouse gas (GHG) emissions combined with local drivers of reef degradation. Up to 90% of warm water coral reefs are at risk by the middle of the century.¹ Inadequate financing for coral reefs in addition to other barriers reduces the chance that coral reef ecosystems will survive this century despite the enormous value they provide. Two complementary strategies are required: (1) target conservation efforts on coral reefs with the greatest chance of survival to ultimately repopulate damaged and lost reefs and (2) reduce the local drivers of reef degradation.²

The Global Fund for Coral Reefs (GFCR or the “Fund”) is a blended finance facility seeking to save coral reef ecosystems for future generations and to support adaptation and resilience for communities dependent on these reefs. The Fund’s four main outcomes are:

- 1) Protection: Protect priority coral reef sites and climate change ‘refugia’;
- 2) Transformation: Transforming the livelihoods of coral reef-dependent communities;
- 3) Restoration: Restoration and adaptation technologies are made scalable, cost-efficient, and applicable to a variety of regional contexts;
- 4) Resilience: Recovery of coral reef-dependent communities to major shocks.

The GFCR will use a blended finance approach to leverage donor and philanthropic resources to increase private and climate adaptation finance for reefs. The Fund structure includes a Grant Window and an Investment Window supported by a Global Team housed under the UN Multi-Partner Trust Fund Office, an Executive Board and an Investment Committee. The Grant Window will raise and allocate USD 125 million over 10 years. A portion of Grant Window funding will be allocated through the UN Capital Development Fund (UNCDF) for concessional finance. The Investment Window will be managed by Pegasus Capital Advisors and BNP Paribas and will raise and invest a total of USD 500 million. USD 125 million is being sought as junior capital for the Investment Window from the Green Climate Fund (GCF). Both windows will be guided by the Fund’s investment principles and safeguards with the goal of optimizing returns and positive impact on coral reef ecosystems and communities while minimizing potential environmental and social risks.

A Request for Information (RFI) was implemented on a global scale to identify potential sites, key actors, and business models for the Fund. Results of the RFI have informed site selection and prioritization process and helped to identify key business models and partners. The GFCR has prioritized 34 countries based on reef resilience, ODA and climate finance eligibility, and absence of trade restrictions. Not all priority countries will receive financing. The principal reef resilience studies included 50 Reefs and UNEP Coral Bleaching Futures. A subset of priority countries has been targeted for priority ecosystem programs (Track I) and for climate adaptation financing from the Green Climate Fund.

A range of investment approaches will be combined to achieve the outcomes of the GFCR. Grants and investments should address local drivers of reef degradation to support the Fund’s outcomes as well as addressing certain enabling conditions. A large diversity of potential business models has been identified through the RFI and independent research. The Fund will support a continuum of financing needs

¹ <https://www.ipcc.ch/sr15/>

² Supporting justification for targeting resilient reefs is provided in a technical document from the GFCR: Coral Reefs, Climate Change and Communities: Prioritising Action to Save the World’s Most Vulnerable Global Ecosystem (UNDP, UNEP, GFCR).

including support for small and medium enterprises in communities where there is direct impact and dependence on reefs. A portfolio approach where a mix of deal sizes, return targets, and impact levels will be sought by the Fund to achieve their dual goals of impact and return. Various portfolio approaches can be pursued including:

1. Building a blended finance portfolio around large anchor investments (ideal for a global fund) in companies or projects, such as an ecotourism company, sustainable fisheries, blue/grey infrastructure investment, etc. The Fund could then use its grant and concessional financing to assure that the local SME, communities and ecosystems are enhanced as a result of these investments;
2. Investing in intermediaries capable of aggregating and supporting a portfolio of targeted smaller investment deals, intermediaries could include venture funds, incubators, and other technical assistance facilities including those being developed in some of the Fund's target sites.
3. Collaboration with partners capable of providing complementary impact investments to develop and finance diverse businesses, projects, and technologies needed to achieve the Fund's desired outcomes.

The GFCR is developing three programming tracks to achieve its outcomes:

Track I. Priority Ecosystem Programmes – Country and ecosystem-based approaches with systematic design and holistic impact targets. This Track seeks to leverage all the blended finance tools of the Fund to address multiple drivers of degradation in priority resilient reefs and act as key demonstration sites showing what is possible with concerted efforts.

Track II. Scalable Opportunities – identification, support and investment in scalable and replicable business models and finance instruments.

Track III. Strategic Partnerships – supports the capitalization and geographic expansion of the Fund's impact and lessons learnt through collaboration with key financial and implementation partners.

These different tracks will be operating simultaneously under similar investment principles and theory of change yet will take slightly different approaches to identifying opportunities and investment choices. Each track will seek to use the range of blended finance mechanisms at the Fund's disposal.

Track I programmes are being developed and initiated in the following countries: Indonesia, The Philippines, The Bahamas, Tanzania/Kenya, Maldives and Fiji

Additional Track I programmes are being considered for:
Mesoamerican Reef – Mexico, Belize, Honduras, Guatemala
Solomon Islands
Madagascar and elsewhere.

Ongoing work continues on the design of the Fund. This work includes the establishment of sector specific investment principles, risk management systems, safeguards, and a monitoring and evaluation system. The UNCDF is proposing to develop the Blue Bridge Facility to provide enhanced liquidity (loans) and risk sharing (guarantees) as part of the Grant Window. Pegasus Capital Advisors will be designing their investment structures for the Investment Window during the second half of 2021 and plan to be operational in 2022. All ongoing work will be integrated into the next version of the Investment Plan.

2 Overview

- *Coral reefs are under severe threat from global and local stressors with up to 90% loss predicted even under improved global climate scenarios.*
- *Inadequate financing for coral reefs together with several other barriers reduces the chance that coral reef ecosystems will survive this century.*
- *The extremely high value of coral reefs for natural processes and human needs justifies the creation and financing of the Global Fund for Coral Reefs.*
- *The GFCR is a multi-partner fund that brings together a broad group of partners committed to saving coral reefs.*
- *The GFCR will use a blended finance approach to leverage donor and philanthropic resources to bring private and climate adaptation finance to complement available resources.*
- *The GFCR will reduce local drivers of reef degradation in the world's resilient reefs to avoid the extinction of coral reefs and support reef dependent communities and economies.*
- *Three implementation tracks have been developed to support the GFCR activities.*

2.1 Introduction

Coral reefs are among the most susceptible ecosystems in the world to climate change impacts and face an existential threat from anthropogenic warming and acidification combined with local drivers of reef degradation.³ Predictions of coral ecosystem loss are severe with up to 90% of warm water coral reefs at risk by the middle of the century.⁴ Efforts to decrease greenhouse gas (GHG) accumulation in the atmosphere, even if successful, will still likely result in the devastation of the majority of reefs around the world. Two complementary strategies are required to abate the risk of total coral reef ecosystem loss:

1. Conservation efforts need to be targeted on coral reefs with the greatest chance of survival to ultimately repopulate damaged and lost reefs, and;
2. Local drivers of reef degradation must be significantly reduced.^{5,6}

Local degradation of reefs arises from unsustainable fishing, poorly managed tourism, pollution, coastal development, and others and has been shown to decrease resilience of reefs to climate change driven bleaching and ecosystem degradation.⁷

The loss of coral reefs due to human impacts is not only a loss for biodiversity – coral reefs harbour 25% of marine species on less than 0.1% of the ocean floor – but also the economic and financial impacts of this loss will be severe. Coral reefs provide enormous benefits to humanity in terms of storm

³ Kleypas et al. (2021) Designing a blueprint for coral reef survival, *Biological Conservation*, Volume 257, 109107, <https://doi.org/10.1016/j.biocon.2021.109107>

⁴ See IPCC <https://www.ipcc.ch/sr15/>

⁵ Supporting justification for targeting resilient reefs is provided in a technical document from the GFCR: Coral Reefs, Climate Change and Communities: Prioritising Action to Save the World's Most Vulnerable Global Ecosystem (UNDP, UNEP, GFCR).

⁶ Kleypas et al. (2021), Designing a blueprint for coral reef survival, *Biological Conservation* 257, 109107 <https://www.sciencedirect.com/science/article/pii/S0006320721001592>

⁷ Roberts et al. (2017) Marine reserves can mitigate and promote adaptation to climate change, www.pnas.org/cgi/doi/10.1073/pnas.1701262114

protection, recreation, food, ecological function. Currently around 1 billion people in over 100 countries depend on reefs for food and other products. Those most reliant on coral reef ecosystem services includes many people in extreme poverty, and those in countries classified as least developed (LDC) or small island developing states (SIDS). The global annual value of coral reefs and associated ecosystem (i.e., mangroves and seagrass) has been estimated to range from USD 375 billion to USD 2.7 trillion per year.^{8,9}

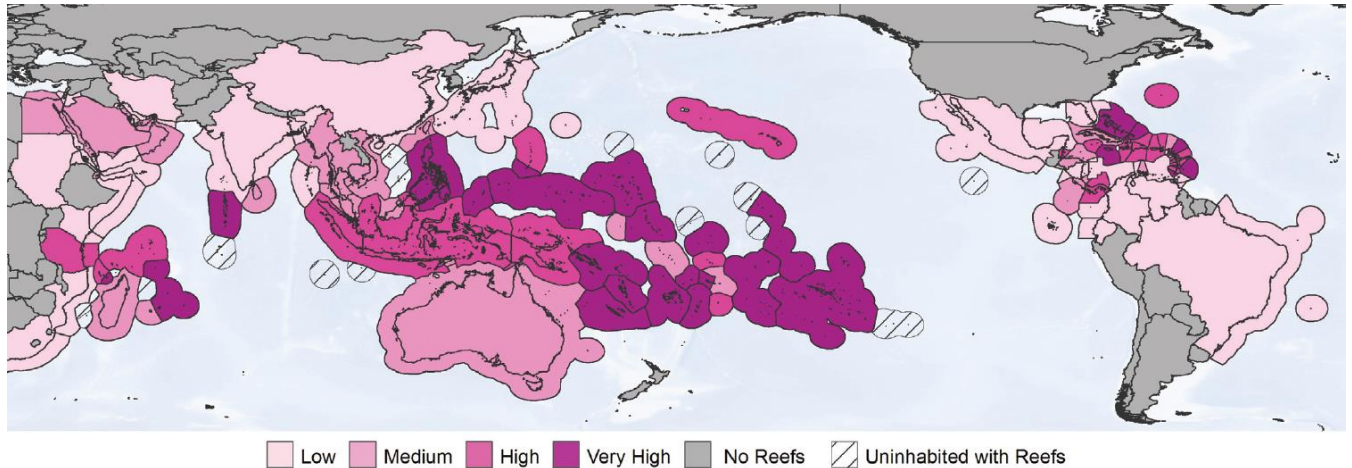


Figure 1 Reef dependence - population, fisheries employment, nutritional dependence, export value, tourism, protection from reefs. Source: [WRI](#)

Despite the incredible value of reefs, inadequate actions and resources are being deployed to address the substantial global and local threats they face.

2.2 The Global Fund for Coral Reefs

The Global Fund for Coral Reefs (GFCR or the “Fund”) seeks to mobilize action and resources for coral reef protection and restoration and support adaptation and resilience for communities dependent on these reefs. The GFCR has been spearheaded by a partnership between the Paul G. Allen Family Foundation and the Prince Albert II of Monaco Foundation and includes several United Nations agencies including the UN Multi-Partner Trust Fund Office (UNMPTF-O), UN Environment (UNEP), United Nations Development Programme (UNDP), and the UN Capital Development Fund (UNCDF) along with private sector partners BNP Paribas and Pegasus Capital. The initiative is the first UN Multi-Partner Trust Fund for SDG 14 - Life Below Water.

To protect coral reefs and their biodiversity, the GFCR 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.

⁸ Costanza, R., d'Arge, R., de Groot, R. *et al.* The value of the world's ecosystem services and natural capital. *Nature* 387, 253–260 (1997). <https://doi.org/10.1038/387253a0>

⁹ UN Environment, (2018) Analysis of International Funding for the Sustainable Management of Coral Reefs and Associated Coastal Ecosystems., International Coral Reef Initiative and UN Environment World Conservation Monitoring Centre, 2018. And IYOR, [Benefits of Coral Reefs](#)

The Fund was announced in September 2020 with the ambition of deploying USD 625 million in grant and investment capital by 2030. The Fund will be implemented over the course of 10 to 12 years and has initiated Grant Window operations in 2021. The Investment Window will be operational in 2022. The Fund is supported by a Global Team based in the UNMPTO and is overseen by an Executive Board that includes initial fund partners and principal donors. The Conservation Finance Alliance has been engaged to prepare the Fund’s Investment Plan and support initial implementation.

This Investment Plan seeks to present the overall investment philosophy, strategy and principles of the Global Fund for Coral Reefs. The Plan integrates the priorities and desired outcomes described below, identifies and addresses the challenges and barriers for financing coral reef health, and provide initial guidance for the deployment of grants, concessional finance, and private investment to accomplish the Fund’s objectives. The Plan will present targeted geographies, proposed business models and finance instruments that could support coral reefs and related ecosystems, describe the initial approach of the Fund’s elements including the Grant and Investment Windows, describe three implementation tracks that address priority locations, investments, and partnerships, and provides a wide range of supporting material in a set of annexes. The Investment Plan is a living document and many of the elements of the Fund are being developed over time. These elements will be added to the Investment Plan in future iterations with an adaptive management approach.

2.2.1 The Need for the Fund

Current financing for coral reef conservation and sustainable use is woefully inadequate. A detailed description of the “coral reef financing gap” is provided in the [Terms of Reference to the Global Fund for Coral Reefs](#). It has been estimated that coral reefs could greatly benefit from seven times more financing than is currently being deployed. But while additional financing is critical, recent major publications on biodiversity finance¹⁰ have also highlighted the hundreds of billions of dollars of annual government subsidies that support human activities known to harm nature, including shipping, fishing, coastal development, and other economic activities. These harmful subsidies are five times higher than biodiversity finance levels and do not include the massive private financial flows that harm nature. Given this massive imbalance in finance, it is essential that closing the “coral reef finance gap” is complemented by other activities and finance mechanisms that can reduce harmful actions and incentivize positive actions from government and private companies. This is a fundamental guiding principal to the GFCR’s investment strategy.

Perhaps the most important actor in assuring sustainable long term positive outcomes for coral reefs and related ecosystems are governments. The large majority of finance for nature comes from the public sector (see Figure 2).¹¹ A recent World Bank report entitled, *Mobilizing Private Finance for Nature* states, “that governments and regulators, supported by financial institutions and multilateral development banks (MDBs), hold the key to mobilizing private finance at the scale needed to transform the way we build, produce, and consume in order to protect nature while fostering sustainable poverty reduction.”¹² As these reports describe, there is no simple solution to reducing threats and enhancing

¹⁰ A Comprehensive Overview of Global Biodiversity Finance, Final report, April, 2020, Prepared by the Organisation for Economic Cooperation and Development
<https://www.oecd.org/environment/resources/biodiversity/report-a-comprehensive-overview-of-global-biodiversity-finance.pdf>

¹¹ Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar, A., Meghji, A., Sethi, S. A., and Tobin-de la Puente, J. 2020. Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability.

¹² <https://pubdocs.worldbank.org/en/916781601304630850/Finance-for-Nature-28-Sep-web-version.pdf>

conservation and resilience of nature including coral reefs – an integrated approach will be necessary that takes into account the systemic nature of both the drivers of degradation and the financing flows and finance mechanisms that could address those drivers.

In conclusion, substantial increases in both public and private finance for coral reefs will be necessary but not sufficient for achieving the goals of the Fund. This increase in financing must be complemented by government regulatory actions, conservation finance tools, innovative support from finance institutions including MDBs, and recognition of the importance of public finance for long term maintenance of gains in coral reef management.

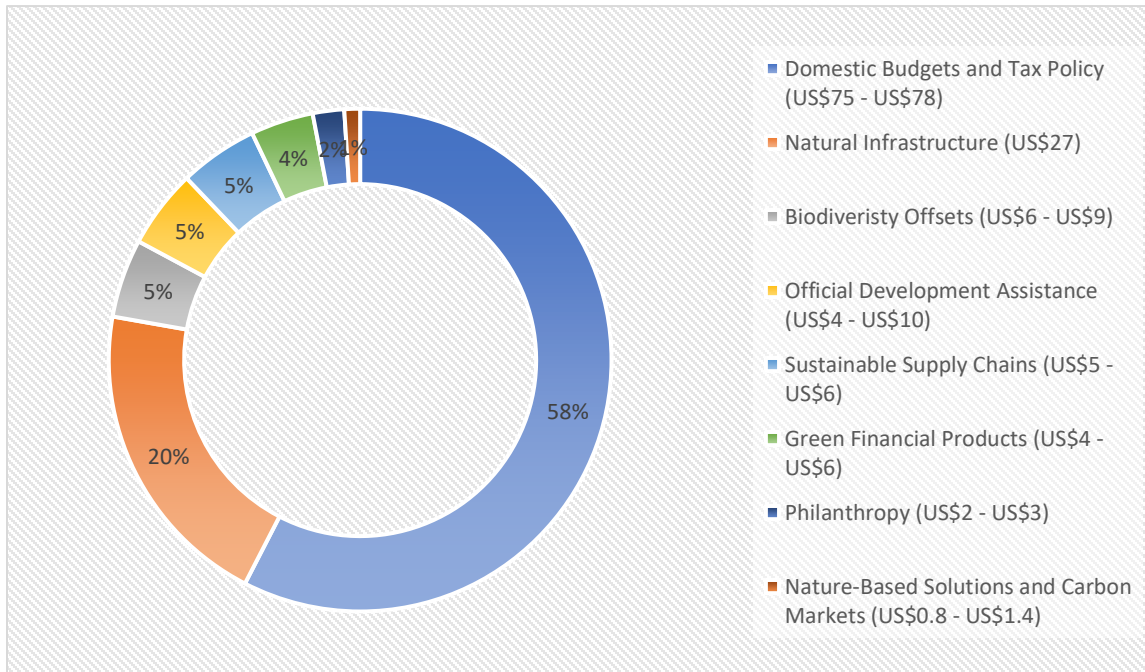


Figure 2 Sources of global biodiversity finance as cited by Deutz et al. 2020.

2.2.2 Principle Barriers to Success

The GFCR can address four main types of barriers to successful coral reef management and resilience: economic, institutional, informational, and financial.

Economic Barriers. Economic barriers include inherent and regulatory challenges with management of shared natural resources – often referred to as management of the “common pool resources” - for which coral reefs are a prime example. This derives from the fact that natural resources including coral reef ecosystems tend to be common pool resources (similar to public goods where it is difficult to exclude or charge beneficiaries, or charge polluters), are extremely diverse, complex ecosystems (difficult to measure and track), and involve numerous stakeholders with different interests and needs. To avoid the tragedy of the commons, Ostrom¹³ identified eight principles that revolve around clear attribution of boundaries, locally appropriate rules, participation, legitimacy, monitoring, sanctions, dispute resolution, and nested responsibility. Another economic barrier is associated with the concept

¹³ <https://www.onthecommons.org/magazine/elinor-ostroms-8-principles-managing-commons> and https://www.theguardian.com/global-development/poverty-matters/2012/jun/14/elinor-ostrom-commons-rio20?trk_model=open_graph_object&trk_len=5&trk_pos=16&trk_event=search_ac

of “externalities” where the social harm or benefits generated by a private entity (such as pollution – social harm, or ecosystem restoration – social benefit) is not included in their costs, pricing, revenues, or any aspect of their financial performance or value. Economic externalities can be corrected through regulations, taxes, subsidies, and other economic instruments. Unfortunately, when they are not corrected, environmental externalities make it difficult to use business investment and other market solutions to improve environmental outcomes. It is essential to establish clear government policies, regulations, enforcement, and increasingly environmental accounting and reporting to level the playing field such that responsible companies are rewarded, and not penalized, for their efforts.

Institutional Barriers. For these economic barriers to be adequately addressed, it is essential to remove certain institutional barriers. Sound governance of natural resources requires strong, effective and well financed institutions to assure that the policies, regulations and economic instruments are effective. Some of these institutional barriers that must be overcome include low capacity for management, poor capability for enforcement of laws and regulations, inadequate monitoring and evaluation, and lack of transparency. The Grant Window of the Fund will seek to address these underlying conditions through enhanced public, private and local management of reef systems, fisheries, and watersheds, among other actions. Addressing structural and institutional barriers is essential to create a supportive environment for private investment in coral positive businesses.

Informational Barriers. Informational barriers stem from a lack of awareness, knowledge, capacity, and effective communication. Overcoming these barriers is essential to address the complexities of coral reef ecosystem management and conservation. Informational barriers can be addressed by some of the following approaches¹⁴:

- Building awareness and understanding of benefits among all stakeholders
- Establishing a knowledge and evidence base of the value and effectiveness of sound management approaches
- Establishing and communicating clear policy and regulatory support
- Developing and sharing examples of effective business and market solutions for coral reef conservation
- Building technical capacity among all stakeholders to develop, design, fund/finance, and implement conservation, resilience, and livelihood solutions.

Financial Barriers. The financial barriers arise from the other barriers and have specific elements as well. Overcoming the financial barriers requires a combination of solutions that address underlying conditions as described above and both sides of the financial transaction value chains. For example, connecting effective projects with willing donors and an investable deal pipeline with investors. Prospective investors in marine conservation frequently state that there is a limited deal pipeline. Yet, many local entrepreneurs struggle to find the capital necessary to finance their companies. Part of this disconnect is because most investors seek larger scale or more profitable investment opportunities than are available. Many social or environmental entrepreneurs prioritize impact and generally function at a small or local scale – unattractive to international investors due to high relative transaction costs and perceived or real risk. As well, there are emerging business models for which investors have limited understanding. Often, public and philanthropic money is needed to prove these models and to build awareness in the

¹⁴ Adapted from: Swann, S., L. Blandford, S. Cheng, J. Cook, A. Miller, and R. Barr. 2021. “Public International Funding of Nature-based Solutions for Adaptation: A Landscape Assessment.” Working Paper. Washington, DC: World Resources Institute. <https://doi.org/10.46830/wriwp.20.00065>

investment community. Additionally, the most directly positive coral businesses – such as restoration, MPA finance or ecotourism – tend to have relatively low returns on investment relative to risk. Higher return to risk opportunities generally correspond to business that have a more indirect positive impact on reefs – i.e., new financial technology (fintech), integration of nature-based solutions in infrastructure, or biodegradable plastics. One key solution is the use of blended finance tools leveraging public and philanthropic capital to mitigate financial risk and provide concessional finance and technical assistance to support pipeline development and investment readiness.

One approach to solving the financing barrier could be to aggregate investments into larger units. In a way, this is done by venture capital firms and incubators who invest in a range of companies and in turn allow investors to finance the VC firm. The Fund will explore opportunities for this type of aggregation with microfinance institutions, incubators, and technical assistance facilities.

2.2.3 The Theory of Change

The Global Fund for Coral Reefs' desired change is, ***“to prevent the extinction of coral reefs in our lifetime by eliminating the coral reef financing gap and supporting interventions for their best chance of survival.”*** To achieve this goal, it will be necessary to change and align many human activities, address the four barriers described above and provide long-term sustainable finance at adequate levels to support these changes over time. Figure 3 provides more detail on the GFCR's Theory of Change that was originally developed by the UNDP and UNEP.

The Fund's desired change can be achieved by: (1) minimizing local threats, thus, improving resilience of coral reefs to climate change and (2) raising local and high-level political buy-in for transformational change through assuring development co-benefits. The mechanism chosen by the Fund to achieve these two intermediate impacts and support the desired change is a combination of a) unlocking major investment in conservation and b) focus on outcomes that produce SDG co-benefits. This overall theory leads to four target Outcomes of the Fund:

- 1) Protection: Protect priority coral reef sites and climate change-affected 'refugia'
- 2) Transformation: Transforming the livelihoods of coral reef-dependent communities
- 3) Restoration: Restoration and adaptation technologies are made scalable, cost-efficient, and applicable to a variety of regional contexts
- 4) Resilience: Recovery of coral reef-dependent communities to major shocks.

The Fund has chosen to focus on some of the world's most resilient reefs based on an analysis done by the UNDP for the GFCR called Climate Resilience Rationale that is included in the Annexes.



THEORY OF CHANGE

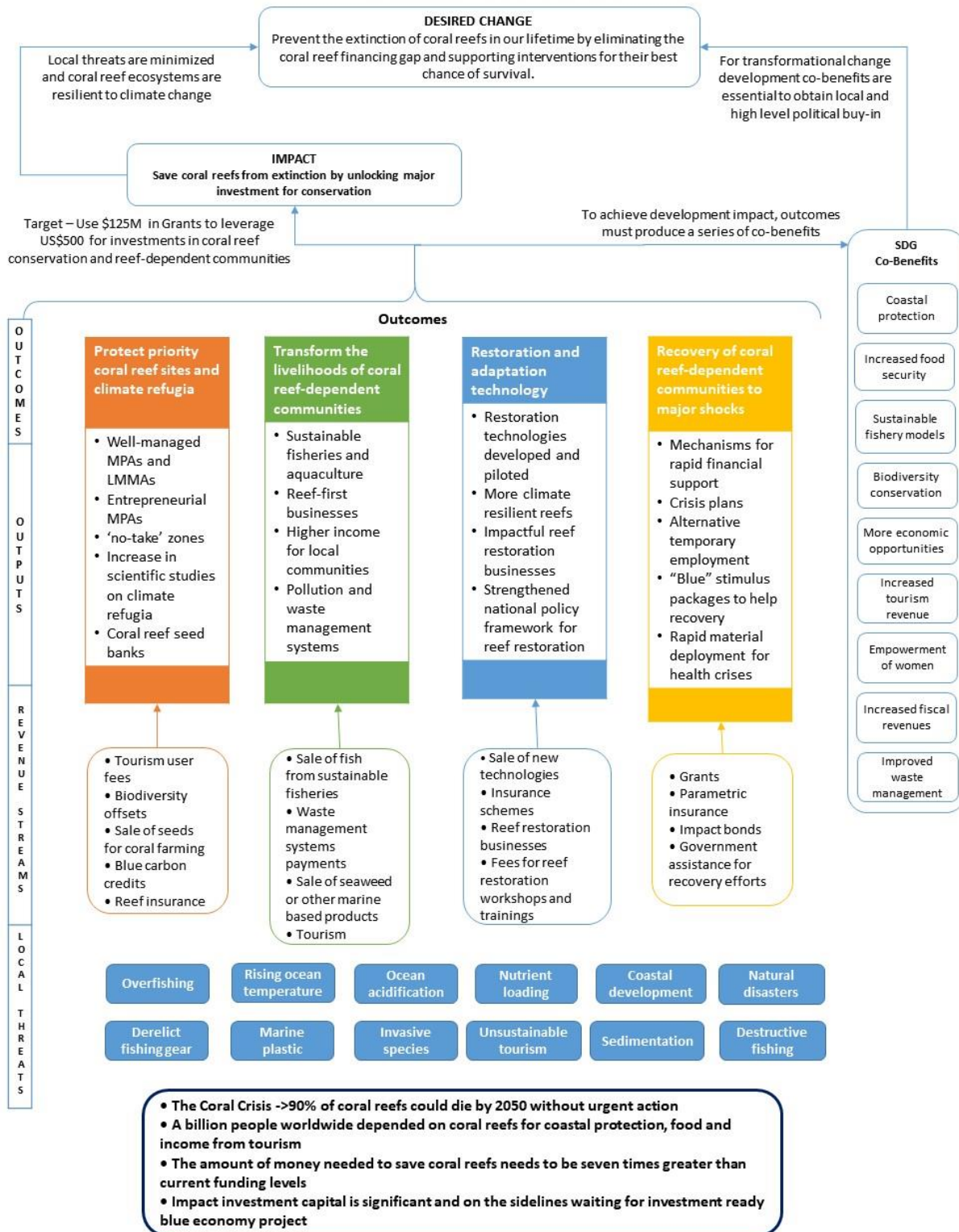


Figure 3 The GFCR Theory of Change

2.3 Methodology

The participative methodology utilized for the development of this Investment Plan was implemented from September 2020 through May 2021. The approach including running a Request for Information (RFI), independent research by the Conservation Finance Alliance, SYSTEMIQ, and Fund Partners, numerous interviews with experts, companies, NGOs, potential partners and intermediaries, regular online discussions among the partners and other outreach. An interim report was presented to the Executive Board in January 2021 and feedback from that report and other intermediate products were assimilated into this first version of the Investment Plan 2021. There are multiple ongoing initiatives that will add substantial detail to future versions of the Fund's Investment Plan including programme preparation studies by convening partners, the elaboration of a monitoring & evaluation (M&E) system by UNEP, the structuring of the Investment Window by Pegasus and BNP Paribas, the structuring of the concessional finance mechanisms by UNCDF, the development of a Request for Proposals concept as part of Track II, investment principles and safeguards, partnership strategies and a knowledge management system (by UNDP/CFA, Track III). As such, the Investment Plan can be seen as a living document with the 2021 version being the first of several iterations.

The Request for Information was carried out by CFA to solicit existing or potential ideas of coral reef sites and business models to inform the Investment Plan and prioritization process. The RFI window was open from August 10th to October 21st, 2020. The CFA and GFCR partners broadly circulated the RFI surveys widely and held various webinars and discussions with potential implementing partners and key networks to generate submissions. The questions posed in the survey were the result of close study of the GFCR's theory of change, the Fund's terms of reference as well as internal discussion and consultation with leading coral reef scientists and Fund partners. The two RFI templates are provided in the Annexes. The RFI was made available to respondents in two formats, as an online SurveyMonkey survey and as a document that could be completed and submitted by email to the CFA Secretariat.

The GFCR's Request for Information on Site Selection received a total of 335 responses. These responses were from international organizations, NGOs, governments, academic organizations, businesses and individuals. Of the submissions, 258 unique responses contained sufficient information to use in our site selection process.

- Total responses: 335
- Useable responses: 258
- Number of countries, regions and territories: 72
- 217 eligible responses (non-Annex I countries with no trade sanctions).

Site submissions were received from all important coral reef regions including the Atlantic (46%), Middle East (4%), Indian Ocean (21%), Southeast Asia (14%), and Pacific (11%). The high levels of interest from the Atlantic region represents both a bias in the CFA outreach efforts – partner networks are more robust in Latin America and the Caribbean (LAC) – and a general difference in conservation finance activities among the different regions.

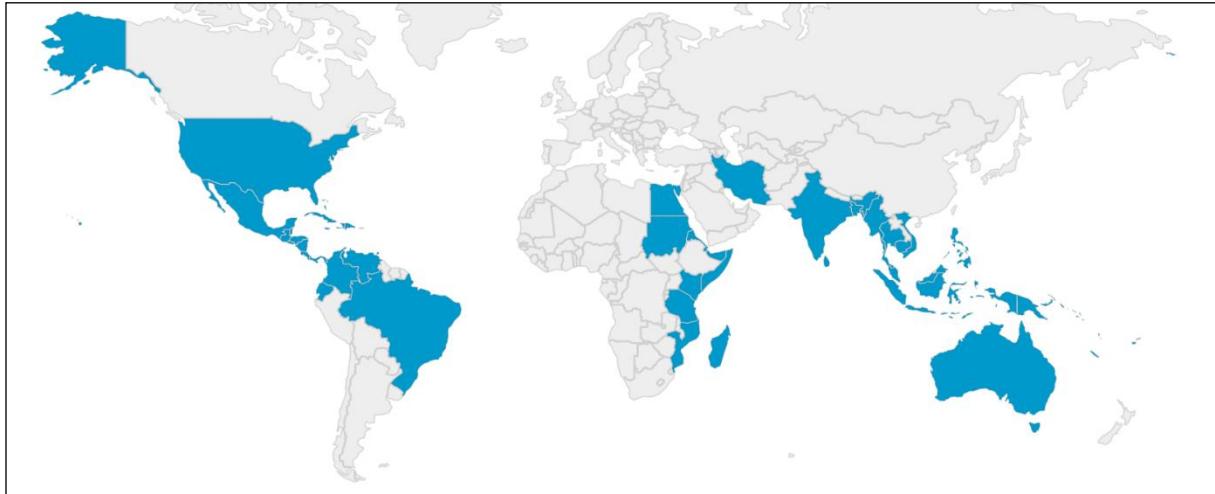


Figure 4 Geographic Distribution of RFI Site Submissions

Over 130 business models were submitted and independent research identified many additional potential investments (see Annexes). From this work, a list of over 25 categories of business models and finance instruments with over 75 individual models and mechanisms (54 business models, 25 finance instruments) were identified by the CFA and SYSTEMIQ teams. In addition to the CFA research and interviews, SYSTEMIQ screened 600+ companies as potential pipeline of deals on behalf of the GFCR Investment Window Partners.

The goal of the RFI was to generate a list of ideas, companies, and contacts for further outreach, not to provide all the information needed to evaluate sites, business opportunities or finance instruments. The total number of complete RFI responses was adequate for this goal and to inform this Investment Plan but was inadequate for generating the robust pipeline that will be required for the Fund. However, the combined additional research of CFA and SYSTEMIQ allowed for a more comprehensive assessment of the potential pipeline.

Many responses to the RFI originated from conservation NGO's and other conservation and development organizations (e.g. UNDP Country Offices) and responses from the private sector were limited. This is likely due to a combination of factors including the way the RFI was distributed – primarily through the CFA and partners' networks – heavily dominated by international organizations, NGOs and their networks. As well, the survey was conducted in English¹⁵ and some respondents may have been discouraged from responding even with internet-based translators. However, businesses generally do not look for financing opportunities through an RFI or Request for Proposals (RFP) but through banks, investment companies and other traditional financial sources. When the Investment Window is functional a well-designed communication plan should be implemented to attract numerous high-quality investment opportunities. The Request for Proposals being designed in Track II will much better target the business sector.

Another observation from the RFI results is that there is limited understanding and awareness regarding conservation finance in general and blended finance in particular. Many of the approaches of the Fund

¹⁵ Responses were accepted in Spanish and French as well.

are novel to conservation practitioners and most businesses – there will be a period of awareness raising necessary to attain the desired scale.

2.4 Strategic Approach

2.4.1 Structure of the Fund

The Global Fund for Coral Reefs will be the first global blended finance fund to specifically target coral reef conservation and adaptation. The Fund will use a range of finance instruments ranging from grants, concessional finance, and market rate impact investments. The blended finance approach, as defined by [Convergence](#), is the use of, “catalytic capital from public or philanthropic sources to increase private sector investment in emerging markets” (see [blended finance](#) primer). According to Convergence, there are three elements to successful blended finance mechanisms:

1. Return: intended to yield (1) an overall financial return and (2) risk adjusted return for private investors in line with market expectations
2. Impact: underlying activities contribute towards the SDGs in a developing country (some participants may not have an impact objective)
3. Leverage: public/philanthropic parties [leverage](#) catalytic capital to make a deal happen that would otherwise attract little or no private capital.

To achieve the desired outcomes and, ultimately, the overall goal of the Fund with this blended finance concept, it will be essential to have a clear investment philosophy, strategy, and principles. It will also be necessary for the strategy to adapt over time as the science of coral reef conservation and resilience, as well as our knowledge of how different business models can be most effective improves over time.

The overall strategy of the Fund is to leverage public and philanthropic finance, including climate adaptation funding, that can “crowd-in” private capital and increase the scale of impact of the Fund. This approach requires very effective coordination between the grant and concessional finance arm of the Fund – the Grant Window – and the private investing arm of the Fund – the Investment Window. There are four ways in which the two windows of the Fund will assure a unified approach to achieving stated objectives:

- 1) Governance and Decision-Making Structures - Governance structures for decision making are designed to assure strong coordination among the two main windows.
- 2) Investment Principles and Policies – investment principles and policies are being elaborated by the Fund partners and will include sector specific guidance to assure the strongest impacts towards the Fund’s outcomes.
- 3) Safeguards – a unified set of investment safeguards will be agreed among the partners based on the existing safeguards in place for most partners (UN, Green Climate Fund, BNP Paribas)
- 4) Adaptive Management – the Fund will adapt its strategies and practices to improve outcomes and impacts during the course of implementation.

This approach will be assured by the management and governance structure of the Fund as described in Figure 5.

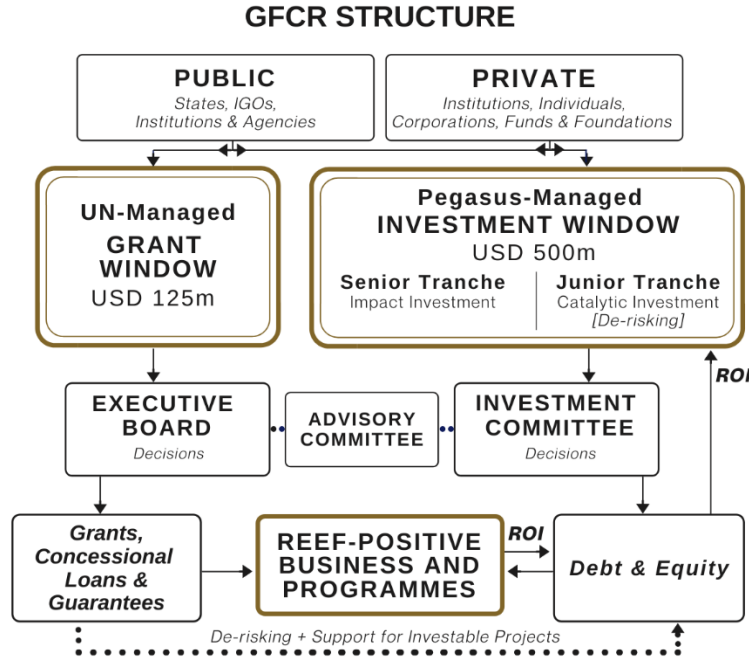


Figure 5 GFCR Overall Structure

The overarching structure is built around the Grant Window and the Investment Window with the entire GFCR managed by a Global Team housed under the UN Multi-Partner Trust Fund Office. The Grant Window will raise and allocate USD 125 million over the 10 years of operations. This financing will pass through the UN Multi-Partner Trust Fund Office and will be allocated through choices made by the Executive Board. A portion of this funding will also be allocated to the UN Capital Development Fund (UNCDF) for concessional finance in support of the Fund objectives. The Investment Window will be managed by Pegasus Capital Advisors and will raise and invest a total of USD 500 million over the course of the life of this investment fund. Of this total investment capital, USD 125 million is being sought as junior capital from the Green Climate Fund (GCF). An Investment Committee, managed by Pegasus and BNP Paribas, will make investment decisions for the Investment Window. An Advisory Committee will provide guidance to both the Executive Board and the Investment Committee. There will be cross participation (non-voting) between the Executive Board and the Investment Committee. Both windows will be guided by the Fund’s investment principles and safeguards with the goal of optimizing returns and positive impact on coral reef ecosystems and communities while minimizing potential environmental and social risks.

To achieve the greatest leverage of the public and philanthropic capital in the Fund, the Grant Window will support transformative change in the enabling conditions – effectively bending the curve of returns to impact rather than simply increasing private returns with the same level of risk (see Figure 6). Private investments will be facilitated where there is the greatest potential impact for coral reef and community outcomes.

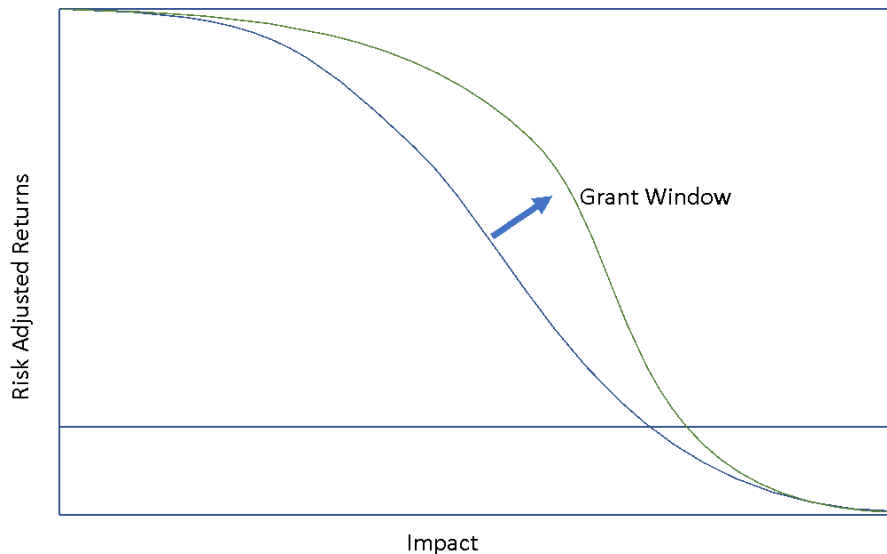


Figure 6 Efficient use of Grant Window to Create Systemic Change

Part of bending the return to impact curve will be through the strategic use of risk management tools and instruments including concessional loans, financial guarantees, and insurance products. A portfolio approach where a mix of deal sizes, return targets, and impact levels will be sought by the Fund to achieve their dual goals of impact and return. There are a few different complementary approaches that could yield the desired outcomes. One portfolio approach could be built around large-scale investments (ideal for a global fund) that form an anchor private sector engagement in a focal area – such as an ecotourism facility, blue/grey infrastructure investment, etc. The Fund could then use its grant and concessional financing to assure that the local communities and ecosystems are enhanced as a result of this investment. A second approach could be aggregating investments through intermediaries such as debt or equity funds who would take on the transaction costs to enable smaller scale investments. A third approach would rely heavily on financial partners for co-investing and supporting pipeline development.

2.4.2 Implementation Tracks of the GFCR

The Global Fund for Coral Reefs seeks to have a global impact on coral reefs and dependent communities. Part of the solution to the coral reef challenge is to target resources towards the most resilient reefs as described in the introduction. Another key strategy for the GFCR is to act as a demonstration fund: identifying and replicating solutions that can be scaled and attract private investment and sharing lessons learned to a broad audience of coral reef stakeholders. It was determined during in the Fund’s design phase, that large scale ecosystem-based programmes that focus on key reef systems are essential but require substantial financing. With a Grant Window target size of USD 125 million, over 10 years, the maximum number of large ecosystem-based programmes would be about 10. With such a relatively restricted geography, the Investment Window could not be assured to find investable deals in only 10 countries and such a limited geographic focus would limit scaling and

replication. One solution to these challenges was the elaboration of three associated but distinct programming “Tracks” to structure and focus interventions to achieve the Fund’s outcomes.

The GFCR is developing three programming tracks:

Track I - Priority Ecosystem Programmes – Country and ecosystem-based approaches with systematic design and holistic impact targets.

Track II - Scalable Opportunities – identification, support and investment in scalable and replicable business models and finance instruments.

Track III - Strategic Partnerships – expansion of geographic reach and impact through collaboration with key financial and implementation partners.

These different tracks will be operating simultaneously under the similar investment principles and theory of change yet will take slightly different approaches to identifying opportunities and investment choices. Each track will seek to use the full range of blended finance mechanisms at the Fund’s disposal.

2.4.2.1 Track I – Priority Ecosystem Programmes

Priority Ecosystem Programmes are targeted at countries and regions that are high priorities for the GFCR based on the country selection process described below combined with the RFI and independent research results. Initial countries and sites were prioritized based on their inclusion in the 50 Reefs studies and UNEP’s Coral Bleaching Futures studies (see Priority Countries). They are countries and regions that not only host key resilient reefs but also can provide important demonstrations of business models and finance mechanisms that have strong impact towards the Fund’s outcomes. As the name describes, they are full programmes that seek to achieve the Fund’s objectives in their targeted geography and take a systematic approach to programme planning and implementation. Each programme will seek to address multiple drivers of degradation in their target sites as well as generate viable investments for the Investment Window. Each Track I programme is led by a convening agency who brings together a range of partners to achieve the programmes impacts. The convening agent approach was chosen for several reasons:

- The GFCR is a global fund and is not designed to directly manage programmes at the country level.
- The urgency of coral reef conservation required the Fund to choose partners well established in the target countries, with strong existing relationships and local knowledge.
- The GFCR seeks to complement and augment existing initiatives – specifically to add the private sector engagement opportunities brought by blended finance.

The convening agencies will mostly be civil society and international organizations who will work in strong collaboration with government, other civil society organizations, and private sector partners. They are focused on priority focal areas and have been developing comprehensive programmes to leverage the investment structures of the Fund to achieve impacts and demonstrate opportunities.

The programmes follow a traditional programme development and implementation process with an initial period of programme design, adaptive management, regular monitoring and evaluation (M&E), and reporting back to the Fund’s Global Team and Executive Board. Each Priority Ecosystem Programme will seek improve the enabling conditions for private investment in coral positive business and to identify and build a pipeline of investable deals for the Investment Window and other investment partners on the order of at least 3x the level of grant and concessional financing (Grant Window) provided to the programme by the Fund. The Fund seeks to initiate these programmes in at least 10 countries by the end of 2021.

2.4.2.2 Track II – Scalable Opportunities

This track will seek to identify and directly support scalable business models and finance mechanisms targeting the countries prioritized in the Fund’s site selection process and included in the GCF proposal of the Investment Window (29 countries). The goal will be to take great business models and implement them where there is opportunity – in certain cases, implementing across multiple sectors, sites and countries to achieve the desired level of scale. Within this track, it will be possible to replicate technologies and business models developed in advanced economies for expansion and scaling in the targeted developing countries. Opportunities will be identified directly by the Investment Window team, the UNCDF, and through a Request for Proposal (RFP) process that will be designed during the second half of 2021. The specific approach for this Track II will be elaborated during 2021 through a collaboration among the Fund’s partners and technical support teams. Both Pegasus and UNCDF are in the process of determining their individual approach to this track and the Global Team and supporting technical advisors will work with these partners to support the effective integration of their individual strategies into the Fund’s overarching investment vision. The UNCDF will be exploring how it can use its facilities and experience to support business structuration in Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

2.4.2.3 Track III – Strategic Partnerships

The third implementation track will be built around the Fund’s growing strategic partnerships and will include co-financing from partner organizations and initiatives. The initiatives under this track include:

- 1) To develop and coordinate effective partnerships and initiatives with vertical funds, international finance institutions and other co-financing partners to scale up GFCR impacts, and
- 2) Facilitate knowledge management to promote the success, replication and scaling up of GFCR solutions.

Under this track, grant and concessional financing will come primarily from partner organizations who are working towards shared coral reef and coastal conservation goals. Additionally, the Fund will seek to develop additional financing opportunities with the vertical funds such as the Green Climate Fund and the Global Environment Facility as well as explore joint financing opportunities with multi-lateral, bi-lateral, and national development banks, microfinance institutions (MFIs), and other global and regional partners. Under Track III, the Fund can be responsive to partner driven and financed initiatives. One desired outcome of this track will be the scaling and replication of early lessons learned by the Fund as well as bringing in lessons from partners. These lessons and other informational tools will be united in a Knowledge Management system for the Fund and its partners. The Investment Window will benefit from the expanded sourcing of potentially investable opportunities associated with these partnership programmes. Also, this track provides opportunities to target more challenging (from an investing point of view) SIDS and LDCs where partners are already working by building the foundational conditions that enable impact investing. Some key institutional partners will include the Global Environment Facility (GEF), WWF, Asia Development Bank, Ocean Risk and Resilience Action Alliance (ORRAA), Blue Nature Alliance, Great Barrier Reef Foundation, Joint SDG Fund and more as described in the section on Partners. The CFA will be supporting the Fund partners and Global Team on this track under the proposed GFCR Strategy, Partnerships and Knowledge Facility.

3 Geographic Focus

- *The GFCR has prioritized 34 countries based on reef resilience, ODA and climate finance eligibility, and absence of trade restrictions.*
- *The principal reef resilience studies included 50 Reefs and UNEP Coral Bleaching Futures.*
- *A subset of priority countries has been targeted for priority ecosystem programs (Track I) and another subset for climate adaptation financing from the Green Climate Fund.*
- *A Request for Information (RFI) was implemented on a global scale to identify potential sites, key actors, and business models for the Fund.*
- *Results of the RFI have informed the site selection and prioritization process.*

3.1 Overview

The GFCR seeks to cover countries the Major Coral Regions of the World that are eligible to receive Official Development Assistance (ODA) and climate finance. These major coral regions have been identified by several studies and the GFCR will follow the categories provided by the WRI Reefs at Risk (see Figure 7). These regions are the following: Atlantic (including Caribbean), Australia, Indian Ocean, Middle East, Pacific, and Southeast Asia. As the Fund will not invest in UNFCCC Annex I countries, the “Australia” region can be excluded - leaving 5 major coral regions. In theory, the Fund’s investment window could invest in any of these 5 major coral regions. However, the engagement of the private sector partners with the Green Climate Fund (GCF) will result in a limited focus on countries included in the proposal to the GCF (Annex II). It will be possible to add additional countries to the initial GCF proposal over time but all must be eligible under the GCF rules. The Grant Window will also be focused on a limited set of priority countries due to the target Fund size and the strategy outlined above of taking a holistic approach in each Track I site. Under Track II, the Grant Window can also be responsive to Investment Window initiated opportunities. A flexible regional approach is based on the following considerations:

- 1) The science on reef resilience is strong but not perfect and new information could expand the specific country focus to other important reefs.
- 2) Working in a diversity of regions and countries will allow for risk mitigation and optimize innovation - new ideas from one area could be replicated in another.
- 3) The Investment Manager may have limited investment options in the initially prioritized countries (Track I) and may wish to expand their investment pipeline. As well, the Investment Window will not likely make investments in countries that are perceived as very high risk.

As such, the country prioritization as described below will be especially important for the Grant Window and the Fund’s concessional finance functions (e.g. UNCDF and GCF’s financing to the Investment Window). The Investment Window may seek investments in other countries within the targeted Coral Regions (Figure 7 below) excluding Australia.

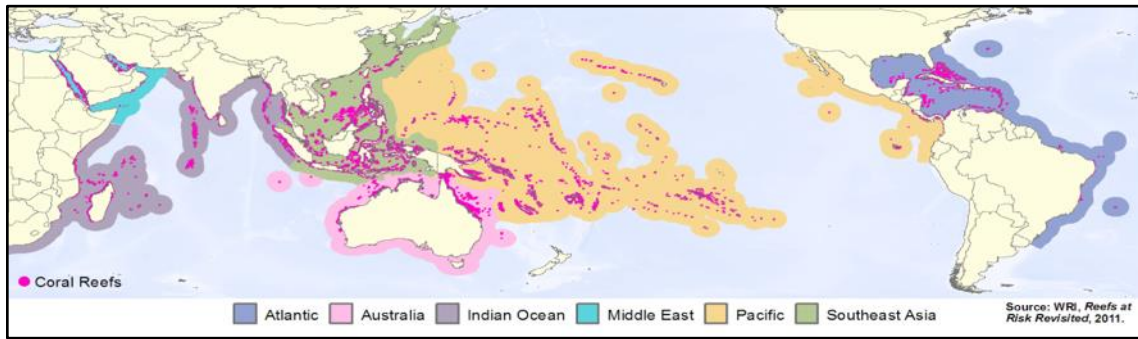


Figure 7 Major Coral Regions of the World (Source: [Corals of the World](#))

These major reef regions are based on the distribution and number of coral species. Figure 8 shows the diversity of coral species globally, highlighting high-value regions in terms of biodiversity.

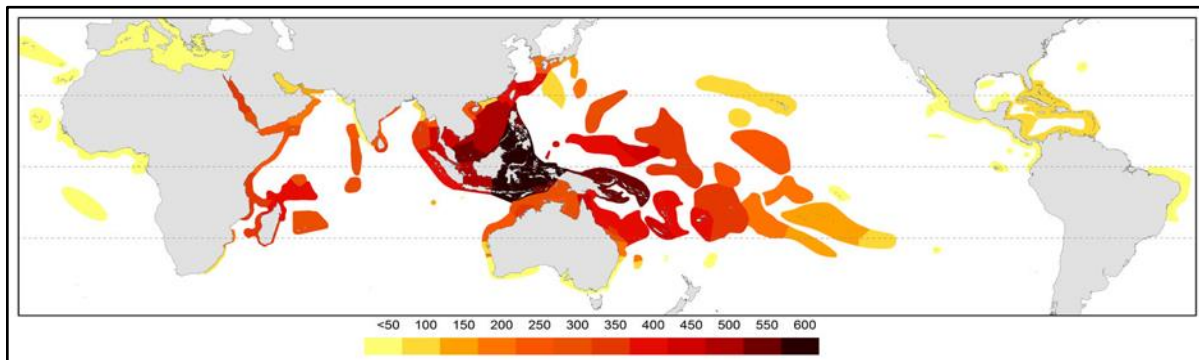


Figure 8 Global Diversity of Corals (Source: [Corals of the World](#), indicating number of coral species.)

3.2 Priority Countries

Many of the functions of the GFCR require programmes and collaboration at the country level. This is especially true for Track I programmes. To identify priority countries, the CFA working with the GFCR Partners produced a range of indicators on various aspects related to the GFCRs objectives and proposed operations. These indicators can be used to prioritize certain countries based on specific desired issues and a spreadsheet is provided as a companion to this Investment Plan. Although many variables were explored in this matrix, it was the overall list of priority countries was determined by using only three key factors: 1) reef climate resilience, 2) ODA eligibility, and 3) official trade restrictions. Additional considerations were considered for the initial GCF country list including excluding some higher risk countries.

The following objective filters were applied to all countries and territories from an initial list of approximately 70 total countries in Request for Information (RFI) submissions, resilient reef countries, and others suggested by experts:

1. **Climate Change Resilience** - based primarily on the presence of [50 Reefs](#) Bioclimatic Units (BCUs)¹⁶ and UNEPs Future Coral Bleaching study - only countries with priority BCUs for climate resilience and countries identified from UNEP's Projections of Future Coral Bleaching Conditions using IPCC CMIP6 models (2020, update from 2017, see below) are included. From the UNEP

¹⁶ Bioclimatic Units – BCUs – are areas of resilient reefs as determined by the global 50 Reefs studies.



study, only countries with 2 or more pixels expected to not experience repeated annual bleaching by 2040 were included.

2. **UNFCCC Non-annex I / ODA Eligible Status** - Only countries with UNFCCC Non-Annex I Status and Official Development Assistance (ODA) eligibility¹⁷ are included due to the grant and concessional financing approach of the GFCR.
3. **Trade Restrictions** – Pegasus and BNP Paribas cannot invest in countries with UN, [US](#), and [EU sanctions](#), or other trade restrictions. Additional investment restrictions of the Fund’s private partners will limit actual investment choices and priorities for the Investment Window.

After these three filters are applied to the total list of approximately 70 countries and territories, 34 countries remain (listed in order of number of priority BCUs) as shown in Table 1. Twenty-five of the countries have 50 Reef BCUs and the additional nine are expected to show 20 years resistance to warming (UNEP, 2020).

Table 1 Potential GFCR Countries with Priority Resilient Reefs

	Country	Coral Reef Area	50 Reefs - BCUs	UNEP - % of coral area post 2040
1	Indonesia	51020	23	65
2	Philippines	25060	6	15
3	Eritrea	3260	4	13
4	India	5790	4	79
5	Bahamas	3150	3	42
6	Tanzania	3580	3	25
7	Malaysia	3600	3	70
8	Brazil	1200	3	0
9	Egypt	3800	3	3
10	Maldives	8920	2	59
11	Kenya	630	2	46
12	Thailand	2130	2	69
13	Fiji	10020	2	0
14	Solomon Islands	5750	1	15
15	Mozambique	1860	1	46
16	Comoros	430	1	7
17	Papua New Guinea	13840	1	7
18	Madagascar	2230	1	44
19	Vietnam	1270	1	98
20	Sri Lanka	680	1	89
21	Haiti	450	1	11
22	Cambodia	<50	1	74
23	Djibouti	450	1	100
24	Dominican Republic	610	1	10

¹⁷ See <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/daclist.htm>

25	Timor Leste	~ >500	1	82
26	Costa Rica	970	0	67
27	Panama	720	0	19
28	Mexico	1780	0	43
29	Kiribati	2940	0	53
30	Tuvalu	710	0	24
31	Ecuador	<50	0	78
32	Seychelles	1690	0	63
33	Belize	1330	0	14
34	Colombia	940	0	40
	Total / Average	160810	72	43
	% of Total	57%	85%	

Notes: This list is subject to evolution as trade restrictions are subject to change. Of note is Cuba which is perhaps the most “resilient reef” country in the Caribbean but not included here due to trade restrictions. [UNEP Coral Bleaching Futures \(2020\)](#) report: The UNEP report largely overlaps with 50 Reefs in terms of countries indicated for climate-resilient reefs, but it also implicates several additional countries (those not already included in 50 Reefs or related analyses) for consideration – numbers 26 through 34 in Table 1. The UNEP report provides projections on the amount of each country’s reef area that is expected to face “annual severe bleaching” (ASB) by certain time periods. These projections are divided into 5-year periods. The GFCR has selected the period of 2040 and after for predicted ASB, and Table 1 provides the scores for countries that meet the above-described criteria and are likely to have reefs surviving after 2040 (2 pixels or more, pixels are ¼ x ¼° map areas where coral reefs occur).

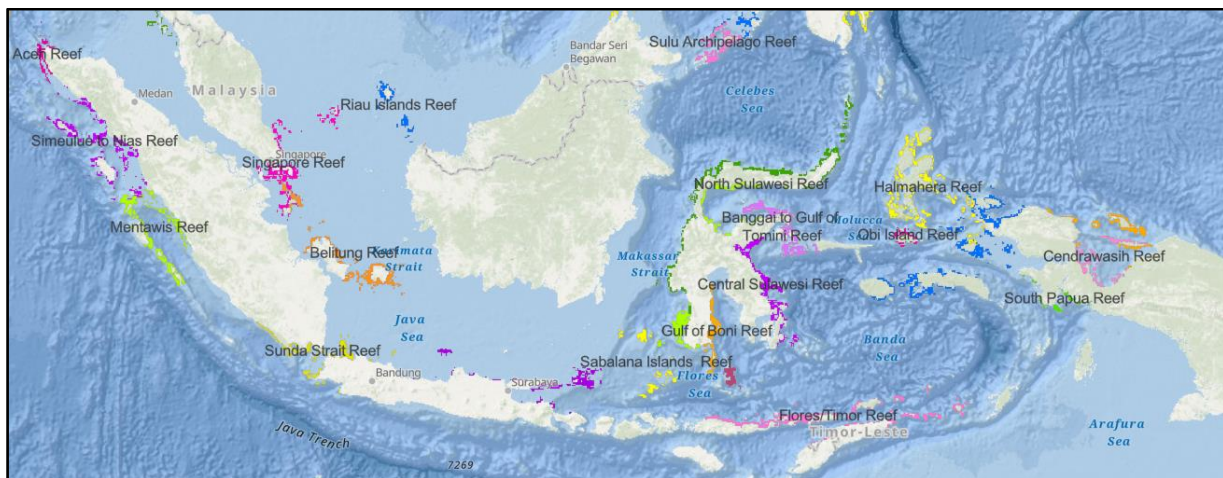


Figure 9 Indonesia’s 23 BCUs

It should be noted that relatively very few small island developing states (SIDS) were among the list of priority countries. This was mainly due to the nature of the global coral reef resilience studies and the observation that many of the Caribbean SIDS do not contain reefs expected to be resilient to climate change. The GFCR will seek opportunities to expand its impact with SIDS as part of Track III programmes.

3.3 Track I Target Countries and Sites

The country prioritization table together with the site selection RFI responses formed the base information for the development of the Investment Plan for priority countries. The RFI analysis was then followed by independent research including outreach to different proponents of sites and business models to identify priority sites based on a combination of resilient reef information (global studies), the

active presence of strong candidates to act as convening agents, and the presence of viable business models and economic activity that would facilitate investment opportunities for the Investment Window. Initial observations and discussions were shared with the GFCR partners during frequent online meetings and the following countries were targeted for Track I.

Table 2 Track I Target Countries

	Country	Coral Reef Area	50 Reefs - BCUs	UNEP - % of coral area post 2040	Programme Type
1	Indonesia	51020	23	65	Track I
2	Philippines	25060	6	15	Track I
5	Bahamas	3150	3	42	Track I
6	Tanzania	3580	3	25	Track I
7	Malaysia	3600	3	70	TBD
9	Egypt	3800	3	3	TBD
10	Maldives	8920	2	59	Track I
11	Kenya	630	2	46	Track I
13	Fiji	10020	2	0	Track I
14	Solomon Islands	5750	1	15	Track I
18	Madagascar	2230	1	44	TBD
24	Dominican Republic	610	1	10	TBD
28	Mexico	1780	0	43	Track I MAR
33	Belize	1330	0	14	Track I MAR

Given the urgency of starting action on the ground and pipeline development, a number of countries were identified by the CFA and GFCR Partners as strong candidates for initial Track I programmes. The first selection of 7 countries (6 programmes) was made due to the presence of high value resilient reefs, existing opportunities and interventions that will deliver rapid impact on reefs and reef dependent communities and that are investment ready within the next 1 to 2 years.

- Indonesia – Highest number of BCUs (23), top priority country, diverse economy, strong tourism sector, strong activity of potential partners, Coral Triangle country
- Philippines – second highest number of priority BCUs, active reef tourism market, emerging economy, dependent on reef fisheries, Coral Triangle
- Bahamas – Priority BCUs cover most of coastline, heavily dependent on coral reef tourism, climate change risk, strong activity of key partners, Caribbean representation
- Kenya & Tanzania Trans-Border – Priority BCU – unique conservation value, coral reef ecosystems of the northern Mozambique channel have high species diversity and endemism, high tourism potential, existing and strong blue carbon potential
- Maldives – entire coastline priority BCUs, heavy dependency on reef and coastal tourism, high climate change susceptibility, strong engagement from government, plans for expansion / replication of UNESCO MAB
- Fiji – Priority BCUs, advanced pipeline development from Matanataki and Blue finance, co-financing by UN Joint SDG Fund, heavy dependency on reef and coastal tourism, strong tradition of Locally Managed Marine Areas (LMMAs).

The following additional Track I opportunities will be presented to the Executive Board:

- Mesoamerican Reef (MAR) Regional Programme – Second largest barrier reef in the world, massive economic value, leader in innovation on coral reef finance and conservation, includes Mexico and Belize.
- Solomon Islands – target country for WWF’s Coral Reef Rescue Initiative (CRRI), part of Coral Triangle, high priority BCUs, potential for substantial impact.

Ongoing research is targeting additional opportunities for Track I countries and the expansion of current programmes to cover regional areas which could occur over the next few years. Of special interest for a possible regional focus is the Coral Triangle – home to most of the world’s high-biodiversity, resilient reefs – which could expand from existing Track I countries to include Malaysia, Timor Leste, and Papua New Guinea. Madagascar has very strong potential for sustainable fisheries, ecotourism and blue carbon. The Red Sea is also a priority, and a regional programme could centre around Egypt and expand to include other countries in the Red Sea region. Additionally, this regional approach also be applied to the Pacific, expanding the Fiji programme to include some Pacific SIDS. A regional programme could also be foreseen under Track III in collaboration with the Caribbean Biodiversity Fund for the Caribbean sites.

4 Investment Landscape

- *A range of investment approaches will be combined to achieve the four outcomes of the GFCR.*
- *Business models and finance instruments should address local drivers of reef degradation to support the Fund's outcomes.*
- *Addressing enabling conditions is essential for systematic change to create improved opportunities for private investment in coral positive businesses.*
- *A large diversity of potential business models has been identified through the RFI and independent research.*
- *Various portfolio approaches can be pursued including:*
 1. *Building a blended finance portfolio around large anchor investments in company or projects,*
 2. *Investing in intermediaries capable of aggregating and supporting a portfolio of targeted smaller investment deals, and*
 3. *Collaboration with partners capable of providing complementary impact investments to develop and finance diverse supporting businesses, projects, and technologies needed to achieve the Fund's desired outcomes.*

4.1 GFCR's Four Outcomes

Using blended finance to achieve the four outcomes of the Fund requires a strong analytical approach and innovative solutions to historically challenging drivers of reef degradation. The four outcomes are the following:

- 1) Protection: Protect priority coral reef sites and climate change-affected 'refugia'
- 2) Transformation: Transforming the livelihoods of coral reef-dependent communities
- 3) Restoration: Restoration and adaptation technologies are made scalable, cost-efficient, and applicable to a variety of regional contexts
- 4) Resilience: Recovery of coral reef-dependent communities to major shocks.

To achieve the first outcome – protection of priority coral reef sites and climate change refugia – a combination of spatial protection or conservation measures are required combined with decreasing the local drivers of reef degradation – both within the target conservation areas and more remote drivers. Marine Protected Areas (MPAs) including locally managed marine areas (LMMAs) and “other effective conservation measures” (OECMs) have been shown to increase fish biomass and coral reef health. However, many MPAs are severely underfunded and have inadequate capacity to effectively implement. Innovative solutions for public private partnerships such as those being developed by Blue finance show great promise for combining MPA management and sustainable finance with impact investing. Other sources of local revenue for MPAs such as user fees, concessions, biodiversity offsets, and other charges can be enhanced by strategic blended investments in ecotourism, blue coastal infrastructure, and sustainable fisheries. Outside drivers of degradation that could be addressed by blended finance are numerous and described below.

The second outcome – transforming the livelihoods of coral reef-dependent communities – seeks to improve the sustainability, profitability, stability, and resilience of local livelihoods for these communities. In order to support resilient and sustainable livelihoods for communities reliant on coral reefs, it will be essential to facilitate access to capital as well as build and retain institutional capacity

and local knowledge on business opportunities compatible with coral reef conservation. Often communities are faced with 1) pricing power differentials between local reef users and the market chains to which they sell products, 2) lack of access to capital, savings, and insurance upstream in the value chains (often leading to abusive market or lending arrangements), 3) poor chain of custody information, 4) other information differentials (price, quality needs, etc.), and more. Actions that could address some of these market conditions would decrease risk and price volatility and assure that investments down the supply chain do not have adverse impacts on coral reefs and their dependent communities.

The third outcome – developing and scaling effective coral reef restoration technology – will require a combination of support to technology companies working on increasing effectiveness and decreasing costs for coral restoration as well as business models that build demand. These business models may require increasing awareness and knowledge of the positive value of coral restoration for beach protection, coastal infrastructure protection, reducing damage from infrastructure development (i.e. ports, offshore wind, mitigation and offsets), and potential revenues associated with tourism.

The fourth outcome – recovery to major shocks – is quite specific and reflects opportunities such as parametric insurance (i.e. [Quintana Roo](#)), establishment of disaster funds, and can be strongly supported by making reefs and their dependent communities more resilient economically and ecologically.

The Fund’s strategy to achieving these outcomes through blended finance is partially built on using business models and financial instruments to achieve conservation objectives and reduce local drivers of reef degradation. To achieve these outcomes, a holistic approach will be necessary. The holistic (or systems thinking) approach means that the Fund and its partners will be addressing multiple drivers of degradation in a focal area that bolsters sustainability and resilience for nature and people.

The following two sections explore these issues in greater depth.

4.2 Drivers of Reef Degradation

The GFCR seeks to take a threats-based and integrated approach to effectively address the main local drivers of reef decline. As stated previously, the direct global drivers of reef degradation are primarily ocean acidification, ocean warming, sea level rise and impacts related to growing cities and increasing human populations. Climate change drivers are nearly impossible for a single fund to address and most scenarios still indicate that perhaps 90% of coral reefs could be lost even under optimistic climate change scenarios. The GFCR is also too small to have an impact on climate change yet can have a powerful impact on climate adaptation for coral reefs and will use climate mitigation finance (e.g. blue carbon) where possible. The GFCR also will work with partners to understand and support advancement on these large-scale drivers. However, addressing local drivers of reef degradation like pollution, coastal development and overfishing is possible with a USD 625M global fund and reducing these drivers renders reefs more resilient to the effects of climate change.

Building on a range of reports and studies exploring drivers of degradation, including the drivers listed in the GFCR’s Terms of Reference, Vibrant Ocean’s Reef Report Cards¹⁸, the results of the RFI and other

¹⁸ Bloomberg Philanthropy supported work from WCS that includes threat assessments for each of the 50 Reefs bioclimatic units (BCUs). For more information on each of these threats and related sources, please see this [Reference Guide](#).

research, including the current taxonomy of the [Conservation Standards](#), the GFCR has established a comprehensive list of drivers of reef degradation. This list can be used to standardize measurement and tracking of impacts for the Fund.

- | | |
|--|---------------------------------------|
| 1. Coastal development | 11. Other ecosystem modifications |
| 2. Aquaculture | 12. Invasive species |
| 3. Agriculture, silviculture, and livestock | 13. Wastewater |
| 4. Energy production and mining | 14. Industrial and military pollution |
| 5. Shipping | 15. Garbage and solid waste |
| 6. Logging and wood harvesting | 16. Noise and light pollution |
| 7. Harmful fishing | 17. Habitat shifting and alteration |
| 8. Harmful tourism | 18. Rising oceanic temperature |
| 9. War, civil unrest, and military exercises | 19. Storms and flooding |
| 10. Dams and water management use | 20. Disease |

This list of drivers will also play a role in the development of a tool designed to associate drivers of degradation with potential business models that address those drivers. The tool is currently being developed by the CFA and will be completed and shared with the GFCR partners when available. Specific drivers of degradation should be assessed during all programme preparations (Track I) and can also be valuable for impact assessment in the other two tracks. Once the main local drivers of reef degradation are identified, these drivers will be targeted by the range of blended finance interventions available to the Fund.

4.3 Enabling Conditions

Private investment in coral positive business and finance instruments is highly dependent on the ability of government, civil society, local communities, and private sector actors to effectively manage marine and coastal resources to increase productivity, decrease costs, or expand the range of sustainable benefits from coral and related ecosystems. In other words, profitability within the framework of the GFCR is highly dependent upon the right mix of enabling conditions. System elements such as regulations, public budgets, strong institutions, complementary grants and other financial support for enabling conditions are essential to supplement the blended finance fund. The following partial list of enabling conditions and issues should be considered and supported in locations where the GFCR is active. These approaches reflect solutions to the barriers to scaling private investment described in the introduction.

Controlled Access

Controlled access can be accomplished through MPAs, LMMAs, and other spatial conservation measures that restrict harmful activities, equipment, or other drivers of degradation. The converse scenario, open access, frequently results in overharvesting and reduction in economic benefits over time. Often controlled access is complemented by a clear benefit sharing mechanism where local populations or other stakeholders who give up certain access rights, are compensated either through improved ecosystem productivity or financially.

Governance and Enforcement

Controlled access is mediated through institutions. Investments and regulations that strengthen key institutions responsible for controlling access to shared resources such as natural ecosystems (reefs, mangroves, forests, watersheds, etc.) are essential to create conditions for successful investments in sustainable businesses. For most investments to have a positive impact on coral reefs, it is essential to

have effective reef management systems in place that control access and user rights as well as deter damaging actions such as pollution, destructive fishing, and more. Although a full range of stakeholder participation is key for most governance mechanisms to work, governments at all levels play a leading role in enabling most management systems to be effective. In fact, governments tend to be the largest stable sources of conservation finance, set resource-access rights or validate customary user rights, create positive incentives such as tax breaks and subsidies, and set baseline conditions for private businesses to function (including fees, fines and penalties) that can impact profitability of businesses and create a level playing field.

Information and Knowledge

Many business initiatives inadvertently cause harm due to lack of awareness of more sustainable approaches. Sustainable solutions can also be perceived as more costly than “business as usual” approaches. Building and sharing knowledge and information on sustainable approaches is essential for implementing private-sector solutions for the cases where sustainability is more profitable. Information and knowledge sharing will also be essential in ensuring community support for initiatives and investments that require a transition period prior to receiving improved ecosystem productivity and profits.

Access to Capital

Many market-driven and return-based solutions for coral conservation, restoration, and associated sustainable livelihoods are not implemented due to key stakeholders lacking access to capital at the required scale and conditions. This is one of the main motives for the blended finance approach of the GFCRs. The GFCR could improve access to capital for coastal communities and conservation friendly businesses by supporting the developing of local financing facilities like technical assistance facilities (TAFs) and microfinance institutions (MFIs) that help grow and scale businesses for more senior investment.

Risk Reduction

The perception and the reality of risk in coral management and positive businesses is an underlying condition that should be appreciated and addressed by the GFCR. Many businesses that are the most closely related to conservation – like the MPA finance models of [Blue finance](#) – are also new to investors. Additionally, many resilient coral reef areas are in countries where investments are generally risky or have limited exit opportunities. Thus, the combination of dependency on reef conditions, investing in higher risk countries, smaller business sizes, natural resource dependent business, and new business models all contribute to real and perceived investment risks that will need to be addressed to assure adequate financing of these target enterprises. Again, the blended finance approach of the Fund can address many of these issues and can be complemented by the strategic use of insurance products.

Some other actions that the GFCR and its implementing partners can take to improve enabling conditions for private investment and overall Fund success include the following:

- Building stakeholder capacity
- Strengthening supply chain transparency
- Identifying and supporting conservation champions
- Supporting Marine Spatial Planning
- Supporting data collection and sharing
- Better identification of threats, pressures, and drivers of degradation
- Transitioning local entities from informal economy to the formal economy
- Business and investment feasibility studies

- Ecosystem service valuation.

4.4 Business Models and Finance Instruments

Achieving the outcomes of the Fund requires the identification, development, financing, and successful implementation of a wide range of business models and finance instruments (or mechanisms) that support coral reef conservation and reduce the drivers of reef degradation. This section presents the summary results of the Request for Information for business models, provides a detailed list of models and instruments that have been identified including some examples. Additional work on identifying a deal pipeline has been conducted by SYSTEMIQ on behalf of BNP Paribas and Pegasus. The CFA and SYSTEMIQ have organized calls with many of the proponents of potential businesses using or developing these models and SYSTEMIQ has been building a list of potentially viable opportunities for the Investment Window (included in the Annexes). This Investment Plan makes no attempt at providing a comprehensive potential portfolio of deals but instead, presents deal categories and their associated challenges and opportunities. The examples and country profiles in the Annexes do include some potential deals and associated projects but these have not been vetted systematically.

4.4.1 RFI and Research Results

Over 130 potential business models were submitted through the RFI process. An analysis was conducted on these submissions and was complemented by independent research by the CFA and SYSTEMIQ. From this work, a list of over 25 categories of business models and finance instruments with over 75 individual models and mechanisms (54 business models, 25 finance instruments) were identified and are presented in Table 5 and described in more detail below. In addition to the CFA research and interviews, SYSTEMIQ screened 600+ companies as potential pipeline of deals on behalf of the GFCR Investment Window Partners.

Overall, there were 131 complete responses to the Business Model RFI. Responses came from a wide geography (*Figure 10*).

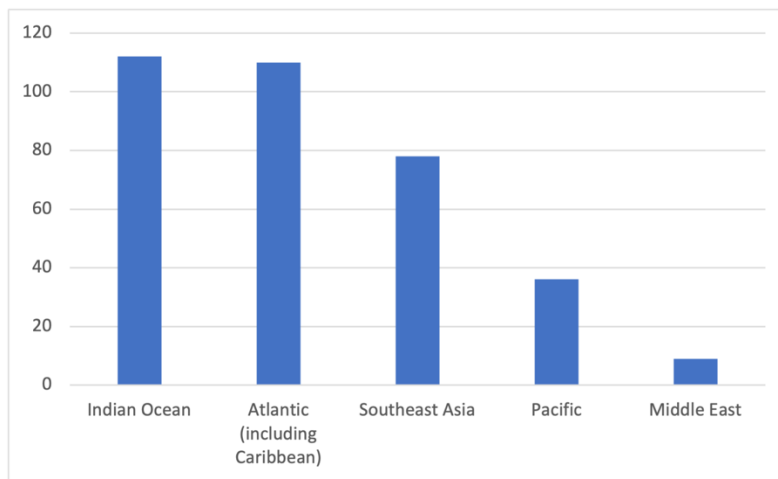


Figure 10 Number of Business Model submissions received by region.

The responses fell into the following sectoral categories.

Table 3 Distribution of self-reported categorizations (note: multiple responses allowed¹⁹)

¹⁹ Respondents were allowed to provide multiple responses to certain questions, and these are identified in the figure captions

Category of initiative	#
Coral restoration	84
Ecotourism	79
Research and monitoring	75
Marine Protected Areas	75
Sustainable wild fisheries	49
Enhanced Governance	46
Green Finance	38
Sustainable aquaculture	36
Plastics reduction, recycling & circular economy	29
Technical Assistant Facility or Incubator	28
Other	28
Blue Carbon	27
Responsible supply chains	24
Waste management and wastewater treatment	23
Micro and small infrastructure	21
Sustainable near-shore agriculture	19
Sustainable marine transport and related infrastructure	12
Clean Energy	8
Pharmaceuticals	3

The business model RFI produced interesting results and many valuable leads and ideas on business models. The most common categories of business models were 1) coral restoration, 2) ecotourism, 3) research and monitoring and 4) Marine Protected Areas (MPAs). Many initiatives include a research or monitoring component even if that was not the revenue generating part of the business model. Ecotourism and Marine Protected Areas have revenue potential as business models and finance instruments. Some of the more clearly financial or business-related common responses included Sustainable Wild Fisheries, Green finance, Aquaculture, Plastics, Blue Carbon, Responsible Supply Chains and Waste Management and Wastewater Treatment. There were also more responses than expected for Technical Assistant Facility or Incubator.

Overall, the organizations submitting responses have moderate experience working with their business models with over 60% having been operating for 2 or more years (including almost 40% operating for 5 years). A quarter of respondents have less than a year of experience. These results highlight the need for pipeline development and support to “coral positive” enterprises. The number of responses that included at least some revenue was 37 or 28% (N=131, *Figure 11*).

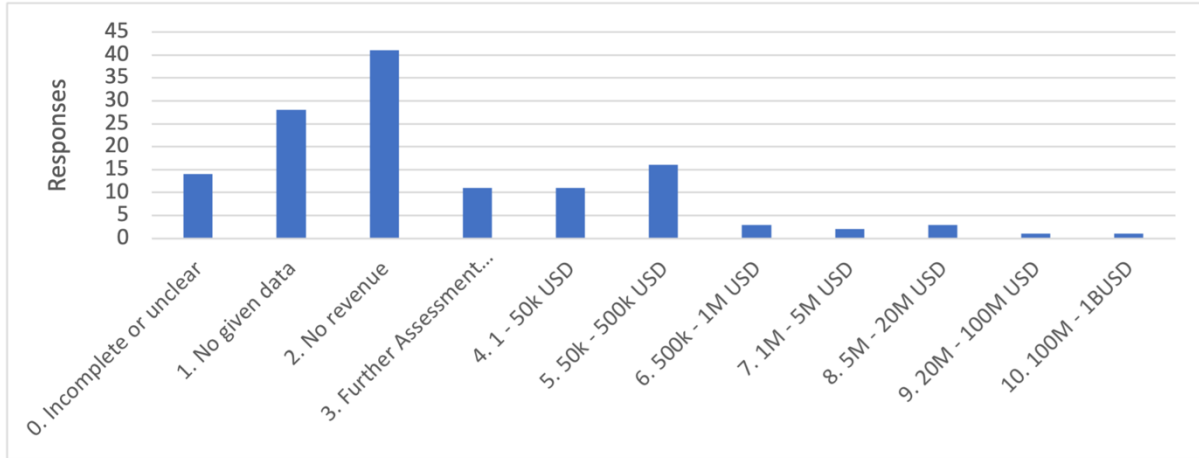


Figure 11 Most Recent Year's Revenue

Financing needs were also requested from respondents and the results are presented in Figure 12.

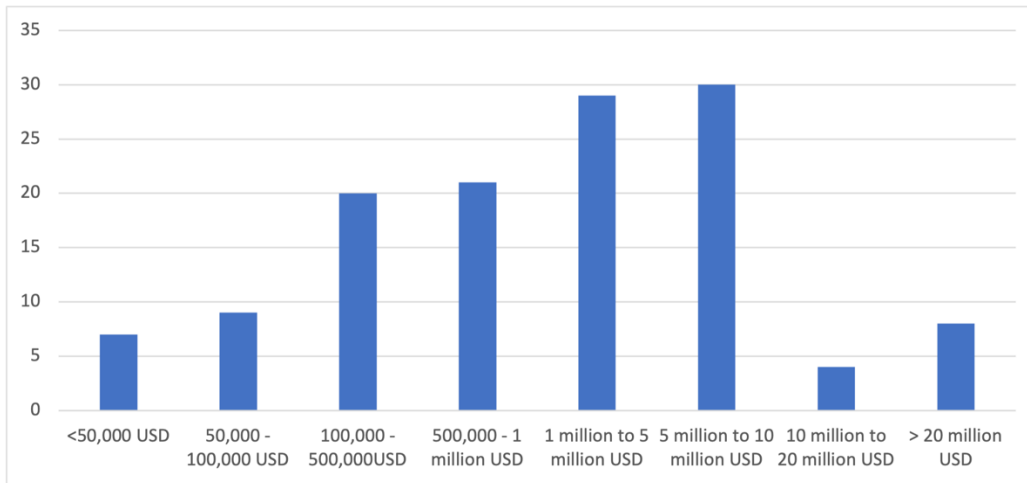


Figure 12 Anticipated Financing Needed

The drivers of degradation that the business models were addressing were diverse and presented in Table 4.

Table 4 Targeted Threats for Coral Reefs (multiple responses included)

Category	No. of responses
Harmful tourism	82
Coastal development	68
Overfishing, including illegal, unregulated and unreported (IUU)	57
Storm and wave damage	57
Marine litter	52
Warming	52
Destructive fishing (e.g., blast fishing, cyanide fishing)	47
Invasive species	42
Acidification	39

Disease	36
Land based pollution	35
Marine transport	19
Non-living resource extraction and exploration	18
Other	6

Most of these models have implementation and finance challenges including difficult trade-offs among impact, returns, and investment scales. The most common financing needs of these reef positive investment opportunities were in the USD 100k to USD 5 million range and provide low to moderate returns (see Annexes).

4.4.2 Archetypes

A holistic approach must be adopted to deliver the strongest conservation and investment results with the understanding that the most impactful interventions required in selected sites vary depending on the presence of different forms of drivers of reef degradation and different opportunities. In order to better formalize this holistic approach and to match specific direct or indirect conservation activities with drivers of reef degradation present, the following table of 1) direct conservation activities, 2) indirect conservation activities and 3) specific finance instruments was assembled by the CFA and SYSTEMIQ teams. The selected examples provided in Table 5 are mostly taken from the RFI and exemplify many of these archetypes.

Table 5 Archetypes of Business Models and Finance Instruments

Sector	Model / Instrument	Selected examples from RFI and Independent Research (IR)
1. Direct conservation activities		
1.1 Marine Protected Areas	1.1.1 Marine Protected Area (MPA) Ecotourism	Blue Finance – Public private partnerships, MPA finance with impact investing (#1078). Several global locations. Ministry of Fisheries Fiji Islands – Expansion of both offshore and inshore MPA, income generation for rural communities (#1017). Fiji. Signing Blue programmes labeling for sustainable marine tourism to benefit and contribute to healthy marine ecosystem of key MPAs in Indonesia
	1.1.2 MPA/LMMA Sustainable fisheries	
	1.1.3 MPA/LMMA Other Financing (DfN, Blue Bonds)	
1.2 Coral Ecosystem Restoration	1.2.1 Reef Restoration (incl. Artificial reefs) – tourism, Hotel (beach, coral)	Coral Gardeners – Deploying AI to monitor coral nurseries and transplanted reefs globally (#1003). French Polynesia.



	<p>1.2.2 Reef Restoration – industrial assets</p> <p>1.2.3 Reef Restoration – pay for success, donors</p> <p>1.2.4 Restoration Technology - assisted evolution, propagation, other technology – diverse financing</p> <p>1.2.5 Restoration Training</p> <p>1.2.6 Mangrove Restoration</p> <p>1.2.7 Seagrass Restoration</p> <p>1.2.8 Salt Flat Restoration</p>	<p>Coral Vita – Scaling up coral restoration projects using land-based nurseries using micro-fragmenting and assisted evolution techniques (#1042) Bahamas, several global locations.</p> <p>ADE (Aquaculture Development for the Environment) – Plant 1 million corals in one year (#1055) Fiji.</p> <p>Biorock - Accelerated coral growth with electrolysis – Independent Research (“IR”) Global locations.</p> <p>Coralive - Coral restoration project. The structures placed in the water will act as mineral secretion receivers and form the coral garden nursery (#1082). Philippines, Madagascar.</p> <p>GoodMachine – coral planting robot</p> <p>REEFolution – coral gardening</p>
<p>1.3 Invasive Species Management</p>	<p>1.3.1 Markets for Invasive Species</p>	<p>Belize - Lionfish markets</p>
<p>2. Indirect conservation activities</p>		
<p>2.1 Sustainable fisheries</p>	<p>2.1.1 By-catch reduction/ redistribution</p> <p>2.1.2 Ghost net reduction / recycling</p> <p>2.1.3 Monitoring Control and Surveillance</p> <p>2.1.4 Post-catch processing - reducing waste and valorising co-products</p> <p>2.1.5 Supply chain traceability / Certification</p> <p>2.1.6 Fisheries management – increasing profitability</p> <p>2.1.7 Increased access to local and international markets</p>	<p>Rare, Inc. – Establish MPAs to formalize the small-scale fishing sector and build capacity in microbusinesses (#1008) Indonesia, Philippines (several global locations).</p> <p>Destructive Fishing Watch Indonesia – Shift fishing methods and targets by directing fishers towards pelagic fish in Wakatobi Islands National Park (#1060) Indonesia.</p> <p>WWF Indonesia – expansion of sustainable fisheries and eco-tourism through the Seafood Savers . (#1021). Indonesia.</p>



	<p>2.1.8 Individual Transferable Quotas (ITQs)</p> <p>2.1.9 Diverse Technology Solutions</p>	<p>Wildlife Conservation Society – Shimoni-Vanga community fisheries project (#1130) Kenya.</p> <p>Sriwichai Shrimp Farm - Sustainable shrimp farm in Thailand. They use environmental practices and carry out community-led conservation projects. IR. Thailand</p>
<p>2.2 Sustainable mariculture/aquaculture</p>	<p>2.2.1 Seaweed farming</p> <p>2.2.2 Finfish, crustacean, mollusc mariculture</p>	<p>Seadling – Community farming of high growth seaweed seedlings to produce animal and aqua feed additives (#1049) Malaysia.</p> <p>Ocean Gardener – Coral Farming, Visitation, & Adoption (#1090) Indonesia.</p> <p>LINI – Fisheries management to combat destructive fishing techniques – IR. Indonesia.</p>
<p>2.3 Ecotourism</p>	<p>2.3.1 Other sustainable tourism activities outside of MPA</p> <p>2.3.2 Voluntourism</p> <p>2.3.3 Ecotourism within an MPA</p> <p>2.3.4 Technology based - user fee programmes and platforms for improving compliance (e.g. Reef Support)</p> <p>2.3.5 Education and Training Services</p> <p>2.3.6 Private Reserves (mostly PPP)</p>	<p>Women Against Poverty – Continued development of an eco-resort off the coast of Dar es Salaam (#1050). Tanzania.</p> <p>Seacology – Mangrove-based Ecotourism (#1118). Dominican Republic</p> <p>BIYA Environmental Science Programme – Non-profit environmental educational programme that includes citizen and tourist science courses. (#1094) Egypt.</p> <p>KiteSurfing Sri Lanka - Kitesurfing, camping, glamping ecotourism project that carries out mangrove restoration projects. IR. Sri Lanka</p>
<p>2.4 Plastic waste management</p>	<p>2.4.1 Alternative materials</p> <p>2.4.2 Waste collection and sorting</p> <p>2.4.3 Plastic recycling (incl. fishing gear)</p> <p>2.4.4 AI and digital sorting</p> <p>2.4.5 Other TBD</p>	<p>ProCoReef SAS – Thematic fund to support circular economy companies focused on waste management (Blue Fund, #1010) Colombia, Panama.</p>



		Wildlife Conservation Society – Mombasa Marine Park Community Plastic Recycling (#1046) Kenya.
2.5 Coastal Agriculture	<p>2.5.1 Alternative fertilizers (e.g. from food waste or seaweed)</p> <p>2.5.2 Organic Farming</p> <p>2.5.3 Precision farming</p> <p>2.5.4 Nutrient recycling / capture</p> <p>2.5.5 Water Funds and PES</p>	<p>Algas Organics - Seaweed fertilizer – IR. Canada.</p> <p>Water Funds (examples) - Dominican Rep., Brazil, Costa Rica, Panama, Colombia, Kenya, Tanzania, Indonesia, Malaysia, India - IR</p> <p>Carbon and Watershed Projects (examples) - Costa Rica, Panama, Dominican Republic, Colombia, Brazil, Mozambique, Madagascar, Tanzania, Kenya, India, Sri Lanka, Myanmar, Indonesia, Vietnam, Philippines, Malaysia, Timor Leste, Papua New Guinea, Vanuatu – IR</p>
2.6 Sewage and waste-water treatment	<p>2.6.1 Waste-water treatment</p> <p>2.6.2 Nature based solutions to waste treatment</p> <p>2.6.3 Other Best Management Practices</p>	<p>Coral Reef Alliance (CORAL) – Initiative to fund wastewater treatment models in the MAR through blended financing (#1099) Honduras.</p>
2.7 Other land-based pollutants management	<p>2.7.1 Sunscreens</p> <p>2.7.2 Industrial pollution abatement</p> <p>2.7.3 Other TBD</p>	<p>Avéne Pur Coral Indonesia - coral-friendly sunscreen – IR. Indonesia.</p>
2.8 Green shipping and cruise ships	<p>2.8.1 Water ballast treatment in ports</p> <p>2.8.2 Noise reduction</p> <p>2.8.3 Cruise industry fees</p> <p>2.8.4 Navigational Tools (including mapping of sensitive ecosystems)</p> <p>2.8.5 Sustainable Mooring and Docking</p> <p>2.8.6 Other TBD</p>	<p>PACT Belize - 15% Commission from a Cruise Ship Passenger Head Tax for Conservation – IR. Belize.</p>
2.9 Clean Energy	<p>2.9.1 Wave</p> <p>2.9.2 Offshore Wind</p> <p>2.9.3 Tidal energy</p> <p>2.9.4 Floating Solar</p>	<p>Pico PV – Solar Modules for Remote Homes, paired with micro-finance or pay-as-you-go schemes – IR. Indonesia.</p>



	2.9.5 Land-based clean energy systems for SIDS/Islands (e.g., solar + fuel cells)	EnerXi GmbH - Solar Cookers, reduce charcoal/kerosene consumption and thus sedimentation pollution on reefs – IR. Indonesia.
2.10 Coastal Infrastructure	2.10.1 Green/Blue infrastructure 2.10.2 Biodiversity offsets	Marine Biodiversity Offset Policies – Colombia, USA, France, Canada, Germany, Australia – IR ECONcrete - ECONcrete® offers a suite of high performance environmentally sensitive concrete solutions that enhance the biological and ecological value of urban, coastal, and marine infrastructure while increasing their strength and durability.
2.11 Coastal Forestry	2.11.1 Sustainable Forestry 2.11.2 Forestry Certification	FSC Certification

3. Finance Instruments / Mechanisms		
3.1 Debt Conversion	3.1.1 Technical assistance for structuring 3.1.2 Investment in restructured debt	The Nature Conservancy – Global initiative to convert sovereign debt to marine conservation financing (#1127) (multi-country)
3.2 Blue Bonds	3.2.1 Technical assistance for structuring 3.2.2 Investment in Blue Bonds	UNDP – Blended Financing for MPA management (through TNC Blue Bonds for Ocean Conservation initiative, (#1127, (#1012) Maldives
3.3 Blue Carbon	3.3.1 Carbon credits for mangrove conservation 3.3.2 Carbon credits for seagrass conservation 3.3.3 Combined Blue Carbon project	Wildlife Conservation Society – Blue Carbon initiatives in Locally Managed Marine Areas (LMMAs) by replicating proven model of Mikoko Pamoja (#1044) Tanzania. Agence National ‘Parcs Nationaux des Comores’ – Reinforce mangrove resilience through national blue carbon scheme in the Comoros Islands (#1097) Comoros.
3.4 Insurance products	3.4.1 Reef Parametric Insurance	Swiss Re – Use insurance to protect coral reefs and enable nature-based solutions by de-risking projects (#1120) Mexico.



	<p>3.4.2 Parametric Insurance for other products (i.e. Nitrogen)</p> <p>3.4.3 Other</p>	<p>The Nature Conservancy – Insurance programme for hoteliers who rely on coral reef protection (#1123) Dominican Republic, Bahamas.</p>
<p>3.5 Conservation Trust Funds</p>	<p>3.5.1 CTF associated Incubator or Technical Assistance Facility</p> <p>3.5.2 Conservation and conservation management</p> <p>3.5.3 Impact investing and PRI</p>	<p>MAR Fund – Private regional environmental fund whose mission is to drive regional funding for the conservation and restoration of the Meso-American Reef. (#1041) (Multi-country)</p> <p>UNDP – National Biodiversity Fund for PNG (#1071) Papua New Guinea.</p>
<p>3.6 Incubator or Technical Assistance Facility</p>	<p>3.6.1 Incubator</p> <p>3.6.2 Technical Assistance Facility</p>	<p>Sustainable Ocean Alliance (SOA) – Independent research. Global scale.</p> <p>UNDP/WCS/FFI and local partners – develop incubator programme for women operated small-scale fisheries in Myanmar (#1108) Myanmar.</p>
<p>3.7 Investment Funds / Incubator Funds</p>	<p>3.7.1 National or Regional Impact Investment Fund</p> <p>3.7.2 Incubator Fund</p>	<p>Okavango Capital Partners – Global Ecotourism Fund (#1112) South and East Africa.</p>
<p>3.8 Sustainable livelihoods mechanisms</p>	<p>3.8.1 Microfinance</p> <p>3.8.2 Co-financing with Development or private banks</p> <p>3.8.3 Financial guarantees with Development or private banks</p> <p>3.8.4 Community banking</p>	<p>WWF – Coral Reef Rescue Initiative (#1081) Fiji, Solomon Islands, Indonesia, Philippines.</p> <p>The &Green Fund (Indonesia) – Incorporates conservation targets into the structure of the loans provided to smallholders, 1 ha of farming balanced by 5 ha of conservation area. Could be adapted to territorial use rights fisheries.</p> <p>Vulcan Philanthropy & Shark Conservation Fund (Indonesia) – Cooperative with membership access to improved supply chain (freezers, equipment, drying, market, etc.) and microloans</p>

		contingent upon signing of agreement to not target marine megafauna. Approach adaptable to reefs.
3.9 Pay for Success	3.9.1 Impact “Bonds” 3.9.2 Other pay for success models	Seven Seas Liveaboard – Pay-for-Success Conservation Agreements with Communities along Sailing Route – IR. Indonesia.
3.10 Project Finance for Permanence	3.10.1 Project Finance for Permanence	The Nature Conservancy – Securing Marine Ecosystems through PFP Initiatives (#1114) global scope.
3.11 Biodiversity Offsets	3.11.1 Wetland banking 3.11.2 Habitat banking 3.11.3 Compliance offsets 3.11.4 Voluntary offsets	Great Barrier Reef – an established system for quantifying financial responsibility for planned impacts on the coral reef ecosystem.
3.12 Other	3.12.1 Right of Way for utilities infrastructure 3.12.2 Fees, Fines, and Penalties for reef use and damages	

The ideal scenario for a holistic programmatic approach would be to implement a range of management, institutional capacity, business models and finance instruments in the same area to create a virtuous circle towards reef health and productivity that benefits community wellbeing and resilience. A schematic portrayal of combined approaches is presented in Figure 13.



Figure 13 Schematic image of holistic approach to addressing direct drivers (SYSTEMIQ)

4.4.3 Description of Main Models and Instruments

The list of business models and finance instruments is not comprehensive but seeks to provide a useful overview of potential market-based opportunities for positive impact on coral reefs. The following section provides more detail on the main models and instruments and is separated into the three main categories.

- 1) Direct conservation activities are those projects and programmes whose primary objective is to achieve reef conservation and use a blended finance approach to achieve these outcomes.
- 2) Indirect conservation activities address the goals of the Fund through targeting drivers of degradation.
- 3) Conservation finance instruments or mechanisms provide economic, market-based, or institutional means to generate, manage, and deploy capital and incentives towards achieving conservation outcomes.²⁰

1. Direct conservation activities

1.1. Marine Protected Areas

Marine Protected Areas (MPAs) and Locally Managed Marine Areas (LMMAs) are essential tools for coral reef management and several models have been advanced for integrating blended finance tools into the creation and sustainable finance of MPAs. Ecotourism is one source of the revenue streams for certain MPAs that can be captured to provide a return to investors. Blue Finance has developed this concept and has advanced in multiple countries that are priorities for the Fund: Dominican Republic, Philippines, Indonesia, Fiji, and the Bahamas. Blended finance approaches should be well integrated into other sustainable financing mechanisms for MPAs including government budgets, grants, concessions, entrance and activity fees, etc.

1.2. Coral Restoration

Several coral restoration programmes have demonstrated the potential to develop profitable business models from restoration activities. Restoration can generate income through ecotourism approaches (both charging for access to high quality restored sites and active participation in restoration as a tourism activity) and also through coastal protection models where the asset owners of on shore infrastructure can pay for coral restoration as an alternative or complement to “grey” infrastructure protection such as seawalls. Another area of potential revenue for coral restoration is as part of large infrastructure projects such as port construction and offshore clean energy as part of the support structures – actually replacing grey infrastructure in the design and construction.

1.3. Invasive Species

Invasive species are a direct conservation threat to many coral reef ecosystems. There are emerging business models to address invasive species in countries like Belize where the conservation and diving community are working together to harvest the invasive lionfish from the reef and encourage its consumption as an alternative to other reef fish.

2. Indirect conservation activities

2.1. Sustainable fisheries

Sustainable fisheries work for coral reefs is an essential area of intervention but has multiple challenges from an investment standpoint. First, most coral fisheries are small scale and often under the control of local governments and fishers’ associations or reside outside the formal economy entirely. As such, they

²⁰ See <https://www.conservationfinancealliance.org/cfa-white-paper>

must either be grouped to achieve the scale needed for investments or addressed along the supply chain where there is natural consolidation – i.e., facilitating access to markets, better quality control, sustainability certification and more. Secondly, any investments must be integrated with management improvements to achieve the increase in productivity necessary for a return on investment. Most fisheries are exploited to capacity or are over-exploited. Adding equipment or additional fishing effort will result in an increase in overexploitation and must be carefully programmed and monitored to achieve reef positive outcomes. Options for successful implementation include addressing the underlying conditions in parallel with building a portfolio of potential investments. The use of approaches such as Marine Spatial Planning (MSP), no-take zones, support for science-based management systems (quotas, licenses, etc.) and non-destructive fishing methods such as pole-and-line techniques are essential. It may still take several years for some fish stocks to recover from such conservation interventions, and these actions must be paired with adequate impact measurement plans.

2.2. Sustainable mariculture/aquaculture

Numerous business models for sustainable aquaculture are coral positive as they have the potential to reduce pressure on reef resources through providing alternative livelihoods to local populations, improving food security for those communities, and in some cases the growing of products like shellfish could have positive impacts on water quality. There are a growing number of sustainability certifications and improvements in feed production, waste management, and integration with living ecosystems that can provide value to the producer and consumer as well. Innovations of emerging products such as seaweed can also incite new markets and increase product demand. Like wild catch fisheries, these opportunities must also be scaled through grouping actors, working through intermediaries such as microfinance institutions, or focusing on investments in the value chain.

2.3. Ecotourism

Ecotourism contributes to coral management in several ways when done well. First, ecotourism can help support enforcement operations and thus reduce illegal activities. Second, many ecotourism enterprises enact specific conservation actions such as local protected areas, coral restoration, and environmental education including diver training and more. Tourism entry and activity fees can be used to cover MPA management costs and ecotourism infrastructure such as hotels, dive shops and other operations draw in and support tourism numbers that can contribute financially to MPA management as well as provide sustainable livelihood opportunities for local populations. But tourism can also cause many challenges to coral reefs including waste management, plastic pollution, reef damage, and increasing demand for fisheries products that lead to overfishing. Initiatives to reduce these pressures can also be revenue-based opportunities such as green certification (for hotels and fisheries), investments in waste treatment, and direct investments in more sustainable ecotourism operations that encourage neighbouring hotels and operations to improve their green credentials.

2.4. Plastic waste management

Although there are innumerable opportunities for investment in plastic waste reduction, certain approaches will likely have a more direct positive impact on coral reefs than others. For example, although developing new technologies that produce biodegradable plastics could be excellent investments, these innovations are very far removed from the urgent need to rapidly reduce pressures on reefs. Efforts that remove and recycle ghost nets, collect plastic waste on beaches or from rivers feeding into the ocean, and other recycling programmes that take place adjacent to reef areas are especially valuable. Technologies and businesses that support these direct threat reductions are most desirable.

Box 1. Center for Regenerative Design and Collaboration

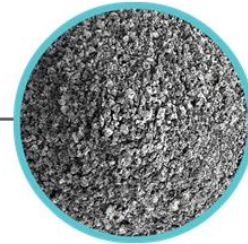
Plastic waste is a driver of reef degradation yet the solutions for plastic waste reduction on reefs go far up the supply chain and the solutions (such as biodegradable plastics) are not going to directly benefit specific reefs within a reasonable time. That said, various circular economy mechanisms could provide good returns for investors and have positive impacts on reefs. These opportunities are global in potential scale and the technology could come from anywhere. For example, there is a company based out of Costa Rica, [Centre for Regenerative Design and Collaboration](#) (CRDC), that developed a technology that converts most types of plastic waste to a raw material that can be substituted for sand in making cinder blocks and other construction material. They are working with the UNDP to develop a proposal for Samoa. The technology can be scaled up or down (a critical element for Small Island Developing States, SIDS) and is an excellent candidate for a blended finance solution.



Plastic waste is “pre-conditioned” through a shredding and dry-cleaning process.



Plastic waste is “hybridised” through a heat extrusion process.



RESIN8™ concrete modifier end-product.

2.5. Coastal Agriculture

Coastal and upland agriculture can cause sedimentation and excess nutrient runoff leading to reef degradation. Following an assessment that determines how significant this pressure is, options for investments in this area include investments in organic and regenerative agriculture, systems for “nutrient trading” (incentives to reduce fertilizer levels, enhance natural buffers along waterways, etc.), Water Funds (water tariffs and payment for ecosystem services), among others.

2.6. Sewage and waste-water treatment

Sewage and waste-water treatment investment opportunities include blended finance approaches for treatment plants at the municipal or local level (i.e., in tourist areas), financing hotel waste treatment systems, and other interventions. These investments tend to be very large at the municipal level and are almost always financed in part with public money (sometimes through municipal bonds), and include long-term contracts and a public-private partnership approach.

2.7. Other land-based pollutants management

Industrial pollution has damaging impacts on coral reefs. The Fund can support a range of solutions to address these issues such as green taxes, financing technology improvements, placing fines and penalties into environmental funds, and financing innovative technology solutions for problematic industries. Depending on the degree of threat and potential impact, these interventions may be too far removed from specific target reefs for the desired level of impact. Government-based solutions such as green taxes or improved enforcement could also be part of the grant-based support for improving underlying conditions.

2.8. Green shipping and cruise ships

Ocean transportation and the cruise ship industry have the potential for substantial impact on coral reefs through direct destruction (e.g., [Raja Ampat](#)), pollution, tourism related damage to reefs, and introduction of invasive species through ballast water. Although there are regulations in place to minimize these impacts, collection of fines is difficult, and many port facilities lack the ballast treatment systems that would make compliance more likely. There are limited controls on cruise ship visits to remote locations and the fees paid by cruise companies tend to be rather low as countries and sites “race to the bottom” to minimize fees in attempts to increase visitation. There could be opportunities for partnerships with the cruise industry that can result in increased user fees for sites, better agreements on acceptable activities at sites, and investments in improved technology – both innovation and implementation.

2.9. Clean Energy

Clean energy investments can contribute to community adaptation by creating new economic activities requiring energy in areas where energy production is polluting (either through air or increased sedimentation from areas deforested for charcoal) or insufficient, provide an additional source of financing for MPAs (e.g., concessions for environmentally responsible offshore wind), and contribute to reducing global greenhouse gas emissions. Offshore energy installations can benefit from new technology for reef restoration by integrating reef building into the design and mitigation efforts of the installations. In one Conservation Trust Fund in Africa, the establishment of hydropower enabled the CTF (by creating a subsidiary) to provide clean energy to underserved populations while generating revenue for the CTF to distribute as grants. The installation was financed using blended finance.

2.10. Coastal Infrastructure

Coastal infrastructure is one of the main drivers of reef degradation in many regions, with USD trillions predicted to be invested in coastal infrastructure and transport in the coming years. Coastal development includes new port construction, hotels, industrial developments (offshore oil and gas), and urban expansion. The Fund could explore ways to reduce the harmful impacts of new coastal infrastructure and to improve the environmental footprint of existing infrastructure through a combination of strategic investments and improved government policy. Some opportunities include investments to better integrate ecosystem-based solutions including reefs, mangroves, and riparian buffers with existing infrastructure (and other forms of blue/green infrastructure). The Fund could offer concessionary finance in exchange for improved infrastructure planning and implementation. Additional longer-term solutions include biodiversity offsets, enhanced fines and penalties for reef damage, and other infrastructure focused actions.

3. Finance Instruments / Mechanisms

The overarching goal of the Fund is to assure long term coral conservation and community resilience. This goal integrates the needs of local people, significantly reduces local drivers of degradation, and addresses climate change challenges. Directly financing businesses is one approach that supports sustainability (if the business remains both profitable and supportive of coral conservation). The Fund will explore other solutions to the sustainable coral conservation and financing challenge. Of interest are different types of conservation finance instruments including market based and commercial finance instruments such as blue bonds, debt conversions, park entrance fees, etc. Examples of applicable finance instruments are described in the section below.

3.1. Debt Conversion

Governments can reduce their foreign debt obligations through debt restructuring agreements. The savings accrued will be channelled into domestic conservation initiatives and climate adaptation programmes. This often entails the establishment of a Conservation Trust Fund to manage and distribute the funds. Debt-for-nature swaps can target both official and commercial lending, with the former being the most common scheme.

As an example, in 2016, the Nature Conservancy, through its NatureVest division and Africa programme announced the closing of the first debt-for-nature restructuring with the Government of Seychelles and its Paris Club creditors. The debt-for-nature swap helped the Government re-direct a portion of its debt payments towards marine conservation and climate adaptation, using a combination of USD 15.2 million of impact capital and USD 5 million in grants to buy back USD 22 M worth of debt that the Seychelles owed to Paris Club members Belgium, the United Kingdom, France and Italy. NatureVest has an ongoing programme to replicate and scale this example by integrating blue bonds to finance debt buy-backs in other countries.

3.2. Blue Bonds

Bonds are debt instruments financed through investors (as compared to internal bank finance) and can be traded on capital markets. Green Bonds have raised hundreds of billions USD for the environment and although generally focused on renewable energy investments, increasingly offer opportunities for investments in nature. Blue bonds are a recently emerging niche similar to Green Bonds with a specific focus on the oceans and aquaculture. In 2016, [the Republic of Seychelles](#), with help from The Nature Conservancy in parallel with the debt conversion described above, raised funds for marine conservation through a Blue Bond that will generate USD 430,000 per year to invest in sustainable fisheries. Blue bonds correspond to ocean related investments like sustainable fisheries and marine resource conservation.²¹ Fiji is currently developing a sovereign blue bond to support investments in the blue economy.

3.3. Blue Carbon

Blue carbon is a form of carbon credit or carbon offset for sequestration of carbon in marine ecosystems. Carbon financing occurs for a variety of climate mitigation actions including sustainable forestry (see REDD+), agriculture, habitat restoration (mangroves, seagrass) and rangelands. Companies and individuals purchase carbon credits for compliance, moral, public relations, and internal policy purposes. Some companies have instigated internal carbon trading (i.e., Microsoft) to increase internal carbon efficiency. The voluntary carbon market is growing currently and [Verra](#) has recently released standards for mangrove and seagrass conservation and restoration allowing third party verified blue carbon credits. The conservation of mangrove and seagrass supports coral reef health and resilience and could be an excellent element of blended finance solutions.

3.4. Insurance products

Insurance products are financial tools that are used to manage risks for governments, companies, households and individuals. The Association of British Insurers describes insurance as the following, “Insurance is a financial product sold by insurance companies to safeguard you and/or your property against the risk of loss, damage or theft (such as flooding, burglary, or an accident). The company pools clients' risks to make payments more affordable for the insured, with each member paying regular premiums to the insurer” ([ABI](#)). Insurance for coral reef conservation has many possible benefits that can be divided into two large categories: 1) insurance on environmental damages caused by natural or

²¹ https://www.4climate.com/dev/wp-content/uploads/2019/04/Blue-Bonds_final.pdf

human activity and 2) aligning incentives through reduced insurance premiums based on investing in or maintaining natural infrastructure that decreases risks of losses. The former has been implemented in [Quintana Roo, Mexico](#), for reef restoration following storm damage. Risk mitigation tools are also extremely valuable for investments and various financial insurance products can be combined with direct financing to de-risk investments.

The Nature Conservancy's Coastal Risk and Resilience Initiative (CRR) in the Mesoamerican Reef is an innovative expansion of this approach.

In Quintana Roo, Mexico, coral reefs provide protective benefits to coastal communities and tourism infrastructure and help sustain the state's USD 12 billion tourism industry. Yet 80 percent of live coral cover in the region has been lost to water pollution, diseases, bleaching, and hurricanes. Additional reef degradation will exacerbate beach erosion and the impacts of hurricanes on coastal communities. CRR is an opportunity for multi-sector collaboration to reduce risk to coastal communities, infrastructure, and livelihoods using natural infrastructure (reefs) and financial instruments. CRR combines scientific analysis, modelling, parametric insurance, capacity for reef repair and restoration, and a trust fund designed to receive funds from government allocations, donations, private investment, including annual revenue from a federal fee paid by coastal property owners. The expected outcomes of this programme include coral reefs that provide protective benefits and minimize normal and storm-driven coastal erosion, coastal communities with reduced risk and more resilient economies achieved through ongoing and emergency reef maintenance performed by trained community members, and funded by sustainable financial mechanisms including public and private finance. Investments in nature are in turn protected by insurance products that the insurance industry can scale to other regions and ecosystems. Locations currently include Mexico and are being developed in Belize, Honduras, Indonesia, Fiji, Guatemala, Philippines, and Solomon Islands.²²

3.5. Conservation Trust Funds

Conservation Trust Funds (CTFs) are defined as "private, legally independent institutions that provide sustainable financing for biodiversity conservation" ([Conservation Finance Alliance](#), 2020). CTFs provide financing for a range of environmental actions often supporting protected areas, sustainable livelihoods, and other conservation related goals.²³ Conservation Trust Funds (also called Environmental Funds) can be essential partners for the GFCR in that they can assure transparent long-term financial management for key sites and are associated with a range of other finance mechanisms including debt conversion, blue bonds, payment for ecosystem services, biodiversity offsets, and more. As well, they are excellent vehicles for managing small grants (for example in the form of pass-through funding) and some CTFs have been exploring options for impact investing, technical assistance facilities (i.e., MAR Fund) and can promote successful local initiatives to assure replication and scaling.

3.6. Incubator or Technical Assistance Facility

Business incubators (including "accelerators") are institutions that provide technical or financial services to strengthen startups and early-stage enterprises. Incubators can support companies with an explicit commitment to biodiversity by hosting them in their premises and facilitating matching capital from angel investors, state governments, economic-development coalitions and other investors. Technical Assistance Facilities are similar to incubators but often take a more expansive approach – providing

²² From the RFI submission.

²³ Two resources for case examples and additional valuable information on these CTFs include: (1) [RedLAC](#), the Latin American and Caribbean Network of Environmental Funds, and (2) CFA's [Environmental Funds toolkit](#).

support to non-profits or community-based organizations (CBOs) as well as individuals and businesses. The goal of Incubators and TA Facilities for the Fund are primarily to build up a pipeline of investable opportunities. There are no Incubators focused on coral reef related businesses but there are various incubators and TA Facilities that support ocean actions and conservation. For example, the [Sustainable Ocean Alliance](#) (SOA) and [OceanHub Africa](#) focus on entrepreneurship in the blue economy.

3.7. Investment Funds / Incubator Funds

One of the challenges of the GFCR is to get financing down to the most impactful level. The use of intermediaries such as Conservation Trust Funds (see above) and Investment Funds (including those associated with Incubators) could be a very useful vehicle. The use of an intermediary allows the GFCR to transfer down the transaction costs to the intermediary who are much better placed to absorb that cost in an efficient manner. The Fund could invest into these intermediary funds or provide financial guarantees and produce a return to investors, diversify both investments and impacts, and achieve improved impact on coral reefs. There are risks associated with this strategy, in that investors in the GFCR will only have indirect oversight in these funds and may not be supportive of this approach. Given the GFCR's need for aggregation and scale, this option is explored below in more detail.

3.8. Sustainable Livelihoods Mechanisms

One of the drivers of local reef degradation is local poverty and uncertainty (risk). The Fund will seek varied ways to invest in and promote sustainable livelihoods for reef dependent communities. Again, the issue of scale could limit the ability of the fund to address local needs and opportunities. Many sustainable livelihood activities that are revenue generating such as aquaculture (see above) but are too small scale to be investable by a global fund. Intermediaries could thus play a role in this case as noted above – for example, investing in microfinance institutions (MFIs) or providing large grants to organizations working in numerous communities. Access to finance and access to appropriate insurance products are especially important and there are various initiatives focused on coastal communities around reefs that could provide this, including Rare's work in Indonesia and Philippines.

3.9. Pay for Success

Pay for success models, also called "impact bonds" or pay for performance models, are a mechanism to transfer risk from outcome buyers (often governments or donors seeking impact outcomes) to private investors in return for a potential financial compensation. Pay for success models have mostly been used in the social impact sector but have recently been applied to the environmental sector by [Quantified Ventures](#) and through the "[Rhino Bond](#)". Their use for coral reefs is not yet known but a concept has been under development by Blue finance and [Social Finance](#) for the Bahamas.

3.10. Project Finance for Permanence

Project Finance for Permanence (PFP) is an approach to permanently and fully fund conservation. The terminology is borrowed from Wall Street, where a single "closing" is negotiated with Government, foundations and private donors to gradually eliminate the gap in a country or regions' protected area financing. PFP is a solution for graduating from piecemeal funding initiatives towards a more holistic approach often including gradually increasing government finance and site-based revenues. Successful PFPs have been completed in Brazil, Costa Rica, and Canada. This tool could be used by the Fund to leverage its grant and investment financing to support PFPs in priority countries. Often the presence of an anchor donor is key to success.

3.11. Biodiversity Offsets

Biodiversity offsets are a mechanism where project developers can achieve no net loss or net gain through offsetting their planned impacts on nature with actions that increase the value of offsite habitat in ways that compensate for their unavoidable impacts. There are a range of mechanisms currently in use including wetland and habitat banking – credits that are created then sold to developers, or bespoke offsets often required by governments (compliance offsets). Many countries have offset or compensation legislation but in most countries, voluntary offsets are used by mining and extractives companies to avoid the risk of reputational damage. The Fund could support the establishment or enhancement of biodiversity offset initiatives and could also explore opportunities for habitat banking where the compliance regulations are effective. At minimum, all large investments of the Fund should assure that they are net positive.

3.12. Other

There are a range of other finance instruments and mechanisms that can both produce sustainable revenues for coral conservation or influence incentives to decrease degradation on reefs or improve resource use sustainability. These include Individual Tradable Quotas (ITQ), fees, fines, penalties, etc.

4.5 Potential Portfolio Approaches

Many of the business models and finance approaches described in the archetypes and gathered from the RFI are relatively small scale and will have positive impacts and outcomes when implemented at local levels. However, the GFCR is a global fund with the ambition to invest USD 500 million of commercial debt and equity during the Fund's life. As such, it will be necessary to target larger investments that are inherently further removed from local scale coral reefs and dependent communities. This section explores several portfolio approaches to balance the need for large sized investments with the need for local impact and community engagement. Three strategies are proposed and can be implemented concurrently.

- 1) Anchor Investments - building a blended finance portfolio around a large anchor investment in a company or project,
- 2) Intermediaries - investing in or creating an intermediary capable of aggregating a range of targeted smaller investment deals, and
- 3) Financial Partners - working with partners capable of providing complementary impact investments to develop and finance a portfolio of supporting businesses, projects, and technologies needed to achieve the desired outcomes.

Through combining these approaches, it will be possible to support a continuum of investment sizes and enterprise development stages – building a long-term pipeline of investable opportunities in coral positive business.

4.5.1 Anchor Investments

The Investment Window will be seeking larger investments that could have both a strong impact and good financial returns. The anchor investment approach will be based on identifying a viable investment in one of the key sectors described in the business models and working with the Fund's Grant Window to support the enabling conditions for comprehensive positive impact towards the Funds outcomes. For example, a medium to large sustainable fishery company – processing and exporting fisheries products from near shore fisheries in the target reef areas – could be a viable investment as it moves towards a fully certified (MSC) supply chain. The premiums provided by certification and other investments could enhance profitability and help provide the desired financial returns. The Grant Window – through grants and concessional finance – could support the certification process and improved fisheries and management practices for the fisher communities working with the larger

company and through providing access to capital, support to management institutions, and other interventions, could assure that the outcome for the ocean, the adjacent reef ecosystem, communities and fishers is in line with the Fund’s objectives. Similar structures could be established for a range of other business models including aquaculture, ecotourism, coastal infrastructure, and others.

4.5.2 Intermediaries

The “intermediaries” strategy is based on the Investment Window making strategic investments in, or actually creating their own, financial intermediaries (or platforms) capable of aggregating a range of targeted smaller investment deals. These intermediaries could be a venture fund, technical assistance facility, or even microfinance institutions depending on the country, needs, and opportunity. Many of the Track I programmes have identified the need for financial and technical support facilities to invest in and support small and medium enterprises (SMEs) that can have a positive impact on reefs and their dependent communities. For example, Matanataki is aggregating a range of investment opportunities in Fiji (and considering a broader reach) and could be a viable investment vehicle for the Fund. Similarly, the Mesoamerican Reef Programme is planning to work with [New Ventures Group](#) based in Mexico and working in Latin America on innovative financing and technical support to social enterprise. The Fund could establish joint ventures with such groups that target coral reef areas and businesses – thus effectively enabling investment in a diversity of smaller enterprises than would be possible with direct investments.

In addition to country or regionally focused investments in intermediaries, there could be larger scale organizations that work globally. Blue finance – one of the Fund’s key implementing partners – has been developing a financing facility concept that would work on a global scale, providing finance and technical support to MPAs in targeted locations globally.

SMEs present an important opportunity to develop and scale up innovative models that are coral reef positive and they serve as a platform for innovation and livelihoods improvement, outcomes that are aligned with the Fund’s vision. Access to finance is one of the greatest barriers to SME success (Wang, 2016). In developing markets, specifically among SME entrepreneurs, businesses are also held back by a lack of business training, expertise, and market networks, which translates into missed opportunities and inadequate financing (Divakaran et al., 2014). Due to these challenges and in consideration of the services and jobs SMEs provide, many governments offer them incentives such as favourable tax treatment, technical assistance programmes, and better access to loans (Liberto, 2020). The Investment Window could benefit from the opportunities SMEs represent through this intermediary strategy.

4.5.3 Financial Partners

In addition to the two main financial partners, Pegasus and BNP Paribas, the Fund will need additional financial partners to co-invest and help build a pipeline of viable investments. Some financial partners could help fill financing gaps that the Fund is unable to fill (see Figure 14). Ocean focused investors such as the Sustainable Ocean Fund (SOF, Mirova) is currently co-investing with the Fund in Fiji and will likely provide debt financing for other projects co-financed by the Fund. Other potential co-investors could include a diversity of financial actors from microfinance institutions (MFIs), impact investors, incubator funds, technical assistance facilities that provide financing, development banks, and other private investors. The GFCR can cultivate a network of financial partners that complement, co-invest with, reduce risk, and increase impact of the Fund’s activities. Some of these collaborations will be included in the Track III programmes but are described here as they relate to a portfolio investment strategy.

Strong collaboration with investor networks for the blue economy including those being built under the concept of [1000 Ocean Startups](#) and the World Ocean Council’s [Global Blue Economy Innovation](#)

[Initiatives Network](#), could be important co-financing partners. A global competition for coral reef positive companies should be developed with 1000 Ocean Startups that includes both incubators and direct investors – thus allowing a diversity of company stages to benefit from the competition – startup through venture funding. These companies could then become strong candidates for the Investment Window and commercial finance.

Partnering with organizations such as [Kiva](#) for microfinance can provide opportunities for identifying and investing in (or providing financial guarantees through UNCDF’s Blue Bridge Facility) local MFIs that fill the financing gap at the lowest levels. At the higher levels, there are a range of international and national financial institutions that could complement the Investment Window by co-investing on large infrastructure deals and providing viable future exit opportunities for the Fund.

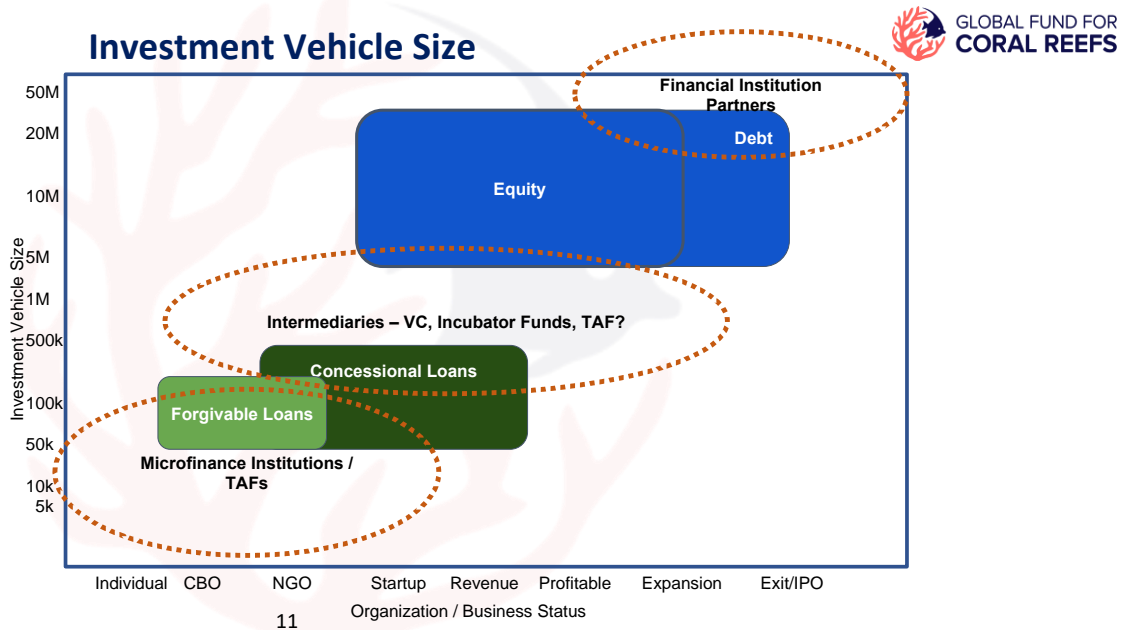


Figure 14 Expected investment vehicle size and gaps

5 Financing Windows

- *The Fund will have two main financing windows: Grant Window and Investment Window.*
- *The Grant Window will provide grants and concessional finance and is overseen by the Executive Board.*
- *The Investment Window will provide equity and long-term debt and will be overseen by an Investment Committee led by the Fund's private sector partners Pegasus Capital Advisors and BNP Paribas.*
- *The UNCDF is proposing the Blue Bridge Facility to provide enhanced liquidity (loans) and risk sharing (guarantees) to facilitate private coral positive company development and financing.*
- *Pegasus Capital Advisors will be designing the Investment Window structures during the second half of 2021 with plans to be operational in 2022.*

5.1 Overview

The Global Fund for Coral Reefs is organized under two associated financing windows for the flow of capital with distinct yet integrated decision-making structures. The Grant Window is managing the philanthropic and public financing which is seeking impact toward the Fund's outcomes including creating an enabling environment to engage the private sector and reduce the financing gap. The Investment Window is directly managed by the Fund's private sector partners – BNP Paribas and Pegasus Capital Advisors and seeks to invest in economically sustainable solutions answering the needs of the GFCR's theory of change. The Investment Window leverages the private sector's funding capabilities to scale up the Funds impacts. Both the Grant Window and the Investment Window will use return-based instruments as part of their financing approach. Across these two windows, a range of finance tools can be strategically combined to achieve the greatest impact for coral reefs while satisfying the objectives of all financial partners in the fund.

The Grant Window is directly overseen by the Fund's Executive Board who are responsible for allocating a targeted USD 125 million of public and philanthropic funding. The Grant Window is providing grants and concessional finance (through the UN Capital Development Fund). The Investment Window will be structured through the establishment of an impact investing fund of USD 500 million overseen by the Investment Manager, Pegasus Capital Advisors. The Investment Window will provide long-term debt and equity products with the dual goals of achieving measurable positive impact towards the Fund's four outcomes and providing a satisfactory return to the Fund's investors. Strong coordination between the Grant Window and Investment Window is an essential and innovative part of the Fund.

This section seeks to outline the main ways in which the GFCR's Grant and Investment Windows disburse funds to optimize the Fund's outcomes. The Fund's Theory of Change highlights the fact that private investments and climate finance for coral reef conservation and climate adaptation have not been flowing at adequate levels. It also recognizes that current levels of public and philanthropic funding will largely remain insufficient to finance the necessary actions for coral reef protection, community transformation, restoration, and resilience. The Grant Window will seek to focus on many of the 34 prioritized countries with an initial focus on a subset of countries to be determined by the Executive Board described as Track I programmes above. The Investment Window will consider investments in emerging markets throughout the world's coral regions and, although it will focus primarily on the prioritized countries that will be included in the GCF investment it may not limit investments to the 34

prioritized countries or the initially listed GCF countries as it could potentially add countries to the GCF list over time. The Grant Window could consider providing grants and concessional finance outside of the 34 target countries on an as-needed basis to support the Funds’ Investment Window as described above in Track II.²⁴ The Grant Window is expected to ensure that the enabling conditions for successful overall programme implementation are in place and that an adequate pipeline of investable projects are identified or developed. The following sections describe some implementation elements with the caveat that neither the UNCDF nor the Investment Window have structured their investment vehicles nor clarified their limitations as of the submission of this Investment Plan.

The overarching structure of the Fund as presented in the GCF proposal can be seen in Figure 15.

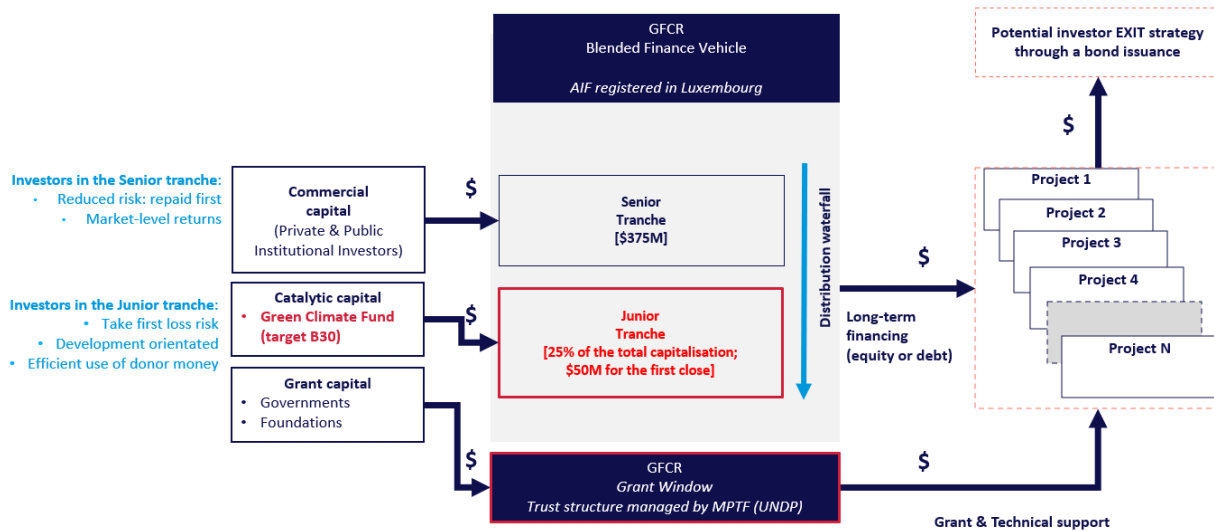


Figure 15 Overarching structure of the Fund as presented in the GCF concept.

The Fund will have a good range of financing tools available to achieve its stated outcomes. The finance tools are presented for each window. An overview of the types of finance tools and their anticipated relation to financial returns is provided in Figure 16.

²⁴ Only in ODA eligible countries (or UNFCC non-annex I countries)

GFCR Investment Tools

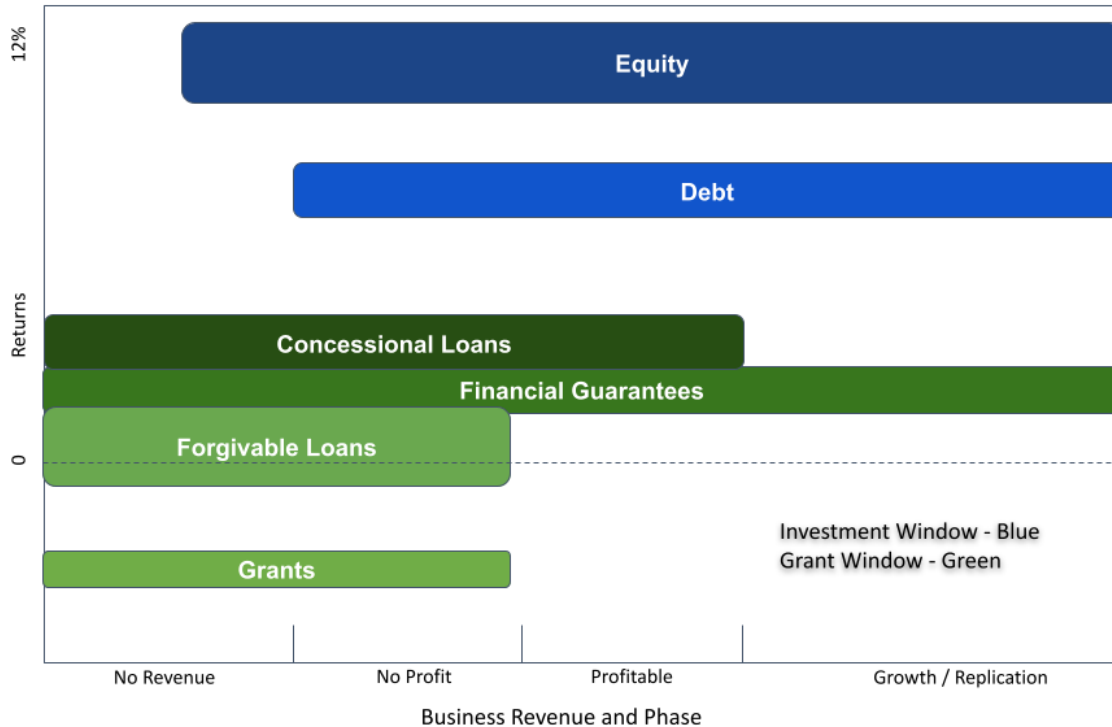


Figure 16 GFCR Schematic presentation of investment tools - note: numbers are rough initial examples

In addition to developing and strengthening enabling conditions to reduce risk, improve returns, and enhance the impact of investments, the Grant Window will support the development of the investable deal pipeline for the Investment Window. Pipeline development can take multiple forms including: 1) financial support to small and medium enterprises (SMEs), start-up companies and NGOs to develop their commercial activities, 2) technical assistance facilities (TAFs) that aid in this development including providing funding for business incubators and accelerators, and 3) site-based studies to identify drivers of degradation, potential business models that could address these drivers, and organizations and individuals capable of implementing the needed efforts to build these solutions. This support for pipeline development can be implemented in all three Tracks of the Fund.

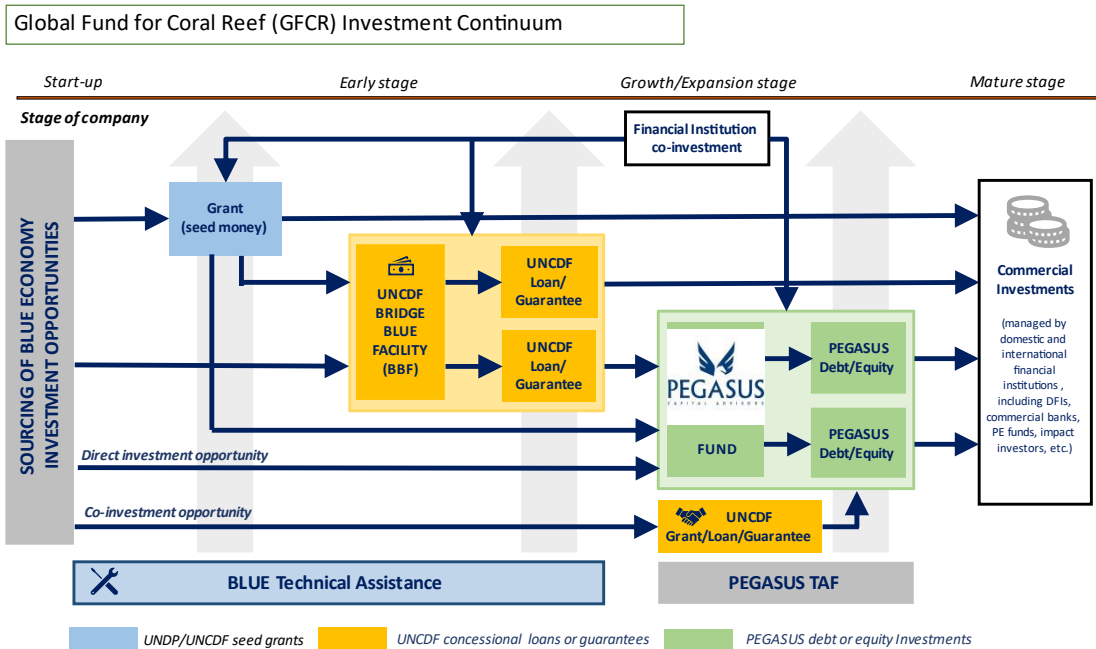


Figure 17 GFCR Company Investment Continuum (UNCDF)

5.2 Grant Window

5.2.1 Grants

In Track I, grants will be provided directly to GFCR partners developing and implementing country-based programmes and programme components. Funding flows directly from the Fund to NGO partners and other organizations and can be used as pass-through financing for smaller local partners through the convening organizations in each country or regional programme. All grants are currently designed to be non-reimbursable but reimbursable grants may be developed in the future through the work of UNCDF. The use of grants in Track II and Track III will also be critical and can be used to support feasibility studies, financial structuring, and addressing enabling conditions (Track II). The use of grants in Track III will support the knowledge management functions, expanding partnerships, and other actions as described below. The combination of grants and concessional loans may be used for very early-stage businesses that are still developing their revenue streams (see Figure 17).

UNCDF Proposed Blue Bridge Facility (BBF) Instruments²⁵

Based on UNCDF's original mandate, the toolbox of financial instruments available for the BBF includes both liquidity facilities, and risk-sharing facilities.

5.2.2 Liquidity Facilities (Loans)

The BBF's lending instruments would primarily focus on injecting responsive liquidity into the businesses and projects, primarily to provide working capital needed to cover essential operating costs, as well as

²⁵ From draft UNCDF Proposal to GFCR Executive Board

to help enterprises meet capital expenditure needs. These lending instruments can occur in various modalities:

- i. **Working Capital Loans:** such loans would finance short-term working capital needs and can have flexible amortization (e.g. bullet) or pricing (e.g. zero interest) features that are responsibly to the needs of the business or project.
- ii. **Extended Grace Period / Long Tenor Loans:** such loans would provide extended grace periods on interest and or principal (e.g. up to 3 years), or would offer long maturity profiles (e.g. up to 8 years), and can be useful if liquidity is needed for medium / long term capital expenditure investments. Extended grace periods/long tenor loans are another form of concessionality, beyond concessional interest rates.
- iii. **Subordinated Loans:** such loans would provide a financing solution that would be junior to the repayment rights of other lenders that may occupy a senior ranking. If the borrower cannot repay, the UNCDF's subordinated loan would be exposed to loss first. This provides liquidity with a healthier appetite for risk, which would be welcome in the current environment to encourage other lenders to come in with new capital.

5.2.3 Risk Sharing Facilities (Guarantees)

The Blue Bridge Facility's guarantee instruments would primarily focus on absorbing some of the risks other investors, banks, developers, suppliers and customers may face, especially in the forms of lost investments, unpaid invoices and lost customers as a consequence of implementing natural resource-based business in a rapidly changing climate in developing economies. The UNCDF guarantee instrument can be utilized in various modalities:

- i. **Pari Passu Credit Risk Guarantee:** UNCDF's partial credit risk guarantees typically provide credit risk coverage to banks and other investors who extend financing to individual companies or a broader portfolio of companies. Under the Blue Bridge Facility, UNCDF's coverage can be extended to guarantee up to 50% of the credit risk borne by a bank or investor where a default occurs. In other words, where a company fails to pay a bank or investor any amount due, UNCDF can cover up to 50% of the loss that the bank or investor incurs. Such protection would promote the continued flow of lending activity in these difficult circumstances.
- ii. **Subordinated Credit Risk Guarantee:** such instruments provide credit risk coverage to banks and other investors with higher risk absorption levels than the party they are sharing credit risks with. These guarantees can cover 70% of all losses suffered up to a certain risk percentage alongside another guarantor. Under the Facility, UNCDF's coverage can be extended to guarantee 70% of the credit risk up to 20% of the total value of the underlying credit facility.

5.2.4 Innovative Financial Products

There are a range of emerging innovative financial products that will be explored during the implementation of the Fund's Grant Window (and potentially with the Investment Window as well). These include revenue-based equity and bonds, sustainability linked loans, and more. With revenue-based equity or debt, there is no ownership transferred to the investor – only a percentage of future revenues until the invested capital is returned with profit. They are also differentiated from typical debt in that there is no fixed payment, but payment is dependent on revenues, and thus the availability of funds. These approaches are interesting for young companies with limited ability to service traditional debt instruments and good for equity investors where there are limited options for an exit (e.g., sale) from the investment.

5.3 Investment Window

The Investment Window will provide long-term debt and equity investments into revenue-generating activities across priority countries and reefs. The Investment Window activities will be de-risked on two fronts: (i) through grants and concessional finance (see above) and (ii) through a blended structure that will include junior capital from development capital providers (currently the main target is the GCF), and senior capital from private impact investors (see Figure 15). There is also a possibility of financial guarantees from donors for the fund itself.

5.3.1 Equity

The Investment Window will likely use equity investments as its primary financing instrument for the Fund. Equity investments will likely include direct equity investments as an early-stage venture capital investor and as late-stage growth capital provider / private equity investor. Details of desired returns, average life and exit strategies of equity investments are still to be refined and will be clarified during the development of the Investment Window.

5.3.2 Debt

The Investment Fund may provide long-term commercial debt instruments to potential economically sustainable companies and organizations that support the Fund's outcomes. These commercial debt instruments will be potentially combined with concessional debt instruments (of the Grant Window) to decrease risk to levels appropriate for commercial debt.

6 Implementation Tracks

- *Three implementation tracks were established to enhance the potential outcome and geographical impact of the Fund.*
- *Track I – Priority Ecosystem Programmes – seeks to leverage the blended finance tools of the Fund to address multiple drivers of degradation in priority resilient reefs and support key demonstration sites showing what is possible with concerted efforts.*
- *Track II – Scalable Opportunities – is designed to identify, support and facilitate investment in scalable and replicable business models and finance instruments.*
- *Track III – Strategic Partnerships – supports the capitalization and geographic expansion of the Fund’s impact and lessons learnt through collaboration with key financial and implementation partners.*

6.1 Overview

The implementation of the Global Fund for Coral Reefs is overseen by the Global Team on behalf of the Executive Board in collaboration with the Investment Window managers. As an innovative global blended finance fund, it was necessary to structure its activities into three implementation tracks. The three tracks are interconnected and are all overseen by the Global Team.

The three implementation tracks are the following:

Track I. Priority Ecosystem Programmes

Track II. Scalable Opportunities

Track III. Strategic Partnerships

These different tracks will be operating under the similar investment principles and theory of change yet will take slightly different approaches to identifying opportunities and investment choices. The tracks will operate simultaneously. Each track will seek to use the full range of blended finance mechanisms at the Fund’s disposal.

6.2 Track I Priority Ecosystem Programmes

6.2.1 Introduction to Track I

The priority ecosystem programming track – Track I – are country and ecosystem-based approaches with systematic design and holistic impact targets. The programmes seek to concentrate efforts of the Fund in specific countries and priority reef ecosystems that have been identified during the country and site prioritization exercises. The initial ecosystems and country choices were based on a combination of three elements: 1) priority sites as determined by the reef resilience studies, 2) active potential convening partner to rapidly deploy, and 3) presence of strong potential pipeline of rapidly investable opportunities. The choices of site and convening partner were based largely on the RFI responses, independent research by the CFA, discussions with the Global Team, Executive Board, and Fund partners, and discussions with potential convening partners.

Each Track I programme is being designed and led by an experienced organisation who will be acting as a “convener.” The convening agents are organizing additional partner organizations to collaborate on the design and implementation of a comprehensive programme to achieve the goals of the GFCR in the designated focal ecosystem. The Track I programme starts with the implementing coalition conducting

background and baseline analyses, initiating interventions that address the enabling environment, reduce local drivers of reef degradation, identify and build a pipeline of potential investments for the Investment Window and other co-investors, and adapting the program over time based on a rigorous monitoring and evaluation program. The convening agencies are mostly civil society and international organizations who will work in strong collaboration with government, other civil society organizations, and private sector partners. They are developing comprehensive programmes to leverage the investment structures of the Fund to achieve impacts and demonstrate opportunities.

The convening agents will follow comprehensive programme development and implementation processes with an initial period of programme design, adaptive management, regular monitoring and evaluation (M&E), and reporting back to the Fund’s Global Team and Executive Board. Each priority ecosystem programme will seek improve the enabling conditions for private investment in coral positive business and to identify and build a pipeline of investable deals for the Investment Window and other investment partners on the order of at least 3 times the level of grant and concessional financing (Grant Window) provided to the programme by the Fund. The Fund seeks to initiate these programmes in at least 10 countries by the end of 2021.

This section provides information on the initial concepts for the following countries previously presented to the Executive Board:

- Indonesia
- Philippines
- Bahamas
- Kenya & Tanzania Trans-Border
- Maldives
- Fiji

It includes general descriptions of the additional Track I opportunities that will be presented to the Executive Board:

- Mesoamerican Reef (MAR) Regional Programme
- Solomon Islands
- Madagascar

6.2.2 Indonesia

Indonesia has the most priority BCUs (23), is an extremely diverse country with 17,500 islands (6000 inhabited) and is a central country in the highly diverse Coral Triangle. Initial analysis suggested that priority programming could be focused in and around two probable focal areas (1) Raja Ampat/Bird’s Head Seascape and (2) Lesser Sundas/Flores regions. Conservation International (CI) will take the lead for a consortium on Raja Ampat/Bird’s Head Seascape and the Indonesia Track I programme in general. The following summarizes CI’s initial concept for the area.

The Bird’s Head Seascape (BHS) spans over 22.5M ha of Indonesia’s West Papua Province, and is the global epicentre of marine biodiversity and has Earth’s greatest hard coral diversity, with over 600 species—75% of all known. Raja Ampat’s reefs have also demonstrated higher resilience due to adaptation to existing daily temperature fluctuations. These reefs and surrounding mangrove forests are the life support system of indigenous Papuans, providing food, jobs, and protection from storms and rising seas for +760,000 people comprising kinship groups with longstanding resource tenure. This ecosystem is under threat from new, unsustainable development and extraction investments. Since

2001, Conservation International, local governments, Papuan communities, and a coalition of now 40+ partners, have worked to conserve the BHS. This coalition secured the legal basis for 26 MPAs covering 5,229,782 ha (>50% of West Papua’s coral reef ecosystems) and a fee system to support long term finance. These MPAs were co-developed with local communities in a way that promotes conservation and local economic development.

The MPAs have resulted in statistically significant increases in food security, education enrolment, and economic opportunity. CI has prioritized unlocking sustainable financing for long-term management of the MPAs and community conservation activities, including helping the Raja Ampat MPA network be approved as a public service board (“BLUD status”). The status allows the MPA authority to receive and manage funds from non-government sources as well as to hire non-civil servant staff (increasing efficiency by magnitudes), in this case community rangers. One significant source of revenue for the Raja Ampat BLUD is a user-fee system, requiring all domestic and international visitors to pay the local MPA Management Authority a yearly entrance fee, generating USD 2M in 2019. According to a recent study, assuming a moderate pace of recovery of tourism after COVID-19 subsides, tourism could generate up to USD 4.4M for MPA management and community development per year by 2035.

Another CI-led initiative to provide access to sustainable funding is the Blue Abadi Fund, a dedicated conservation trust fund that makes grants to West Papuan organizations working on marine conservation in the BHS. Launched in 2017 with USD 23M in philanthropic commitments—USD 18M in an endowment and USD 5M in a sinking fund, the Fund has distributed over USUSD 3M in two grant cycles to support MPA management, monitoring and evaluation, and other sustainable development activities. As of last month, the Fund has awarded 39 grants to 27 organizations, including to the Raja Ampat BLUD to fill gaps not yet covered by user fees or due to tourism downturns like the pandemic. Blue Abadi’s governance, including a Community Advisory Committee, was designed to ensure representation by Indigenous Papuans and gender equity.

Potential Funding Opportunities

1. **Blue Abadi: Ensuring Long-term Conservation Finance in Perpetuity:** A high-leverage opportunity to invest in the first coral reef-focused debt for nature swap under the U.S. Tropical Forest and Coral Reef Conservation Act (TFCCA), which will secure conservation financing for the BHS MPA network in-perpetuity. The U.S. government (USG) and government of Indonesia (GOI) are entering negotiations for a potential USD 18M debt for nature swap, to be supported and contributed to by CI and TNC. USG has a USD 15M appropriation for the TFCCA programme this fiscal year. The NGOs collectively need to raise USD 3M (20%) in required match funding to the USG, plus added funding to cover their technical teams’ work designing the deal and ensuring its effective implementation. Under the swap, the GOI would then pay USD 18M with accrued interest into the Blue Abadi Sinking Fund, covering substantial grant-making and operational costs for Blue Abadi for 15+ years enabling the Blue Abadi endowment fund to grow to its sustainable size.
2. **Blue Abadi Impact Investment Window for Sustainable Business:** Blue Abadi could be used to design and capitalize a dedicated impact investment window within Blue Abadi to provide technical assistance and loan-financing for local sustainable business development. Examples of potentially eligible businesses could include the Raja Ampat homestay association, eco resorts, emerging surf businesses, sustainable pearl or seaweed farms, small-scale farming and fishing operations, and enterprises that address plastic and other waste streams generated by the tourism sector. Micro-hydro and solar electrification offer other significant opportunities.



Working with Conservation International Ventures Fund, a technical assistance facility could be established to build the capacity of local businesses (especially women-owned) for later private-sector financing.

3. **Expansion of Finance Innovations for the Bird's Head Seascape:**

- **Develop a Sustainable Financing Plan for Cenderawasih Bay National Park:** The park authority recently requested CI's support to develop a sustainable financing plan. This would be an opportunity to apply lessons learned from Raja Ampat, including revitalizing their user fee system and supporting sustainable marine tourism (which generated over USD 5M in 2019).
- **Secure BLUD Status for Bomberai MPA Management Authority:** The Kaimana and Fakfak MPAs are a network of six MPAs in BHS. Obtaining BLUD status for the Bomberai MPA Management Authority would allow it to replicate Raja Ampat's tourism user fee and access external funding sources including the Blue Abadi Fund and potentially carbon financing.
- **Sustainable Tourism:** There is opportunity to support sustainable tourism development in select areas that would incentivize communities and government to conserve critical reef habitats. Areas could include dive and snorkel sites as well as surf zones, where tourism would grow provided the natural attraction is well managed. This may include working with communities, private sector, and government to identify and support private investment in new areas, including Kaimana-Fakfak, Cenderawasih Bay and the Biak-Mapia corridor. A recent study estimated West Papuan marine tourism could generate USD 193M for Indonesia's economy by 2035 in a medium-growth scenario.
- **Protect Mangroves and Build Foundations for Blue Carbon Finance:** West Papua is the most important mangrove area in the world. Conservative estimates of their carbon stock are 327.5 million Mg C, equivalent to 1.2 billion Mg of CO₂. The mangroves are critical nurseries for the area's highly productive fisheries and bait fish that attract whale sharks. Both offer globally unique tourism attractions. With extensive paper and pulp concessions granted (but not yet executed) over a large swath of West Papua's mangroves, the threat is now imminent with a short time window to fully secure their protection. CI's planned efforts include protecting West Papua's critical mangrove ecosystems, while supporting the development of foundational policies and a future-threat focused baseline assessment to capture anticipated deforestation increases, unlocking blue carbon finance opportunities combined with sustainable livelihoods in mangrove tourism, crab fisheries, nipa palm sugar production, and others.

4. **Replication of BHS Financing Innovations:** The GOI has noted the impressive conservation outcomes in the BHS, especially Raja Ampat, and requested CI's support to replicate these mechanisms elsewhere in Indonesia, including:

- **Lesser Sunda Seascape:** CI recently initiated conservation efforts in the Lesser Sunda Seascape (another GFCR focal area), including CI's Surf Conservation Partnership (SCP) and a new project to develop a transboundary Indonesia-Timor-Leste Nature Peace Park. SCP is already working in Sumba and Bali to create a network of Surf Protected Areas and there is additional potential for Lombok, Sumbawa, and Flores. Surf sites put millions of dollars into local economies annually, and surfers are willing to pay for marine conservation. CI research from 2014 demonstrated that Bali's Uluwatu surf break annually added USD 35M to the local economy, and its 240,000 annual visitors were willing to pay ~USD 10 per visit for conservation, or USD 2.4M per year.
- **Morotai and Halmahera, North Maluku:** The SCP is developing a Provincial-level Surf Protected Area to protect over 30 miles of coastline, 30 surf breaks, and highly diverse reefs and forests in Morotai, North Maluku. The SCP has already supported 10 villages to create Locally Managed Marine Areas protecting their reefs and natural resources. Next steps are to develop

conservation finance including the BLUD mechanism, user fees, sustainable surf and nature tourism regulations, and diversified livelihoods opportunities. Surf Protected Area establishment has generated enormous excitement, with GOI saying it “breathes new life into the MPA approach.” With adequate resources, SCP can immediately expand across Indonesia in response to this demand. Our 5-year goal is to build an Indonesian Surf Protected Area network bringing at least 1M ha of coral reef into sustainably financed conservation.

6.2.3 The Philippines

The Philippines is a large country of 100 million people with a diversity of industries including tourism and agriculture that could be target sectors for investment. The country is part of the Coral Triangle and has remarkable reef associated biodiversity. A consortium of Blue finance, Ubá Sustainability Institute, Rare, Conservation International – Philippines and others will lead the work that includes impact investments in MPA management, sustainable reef fisheries, and the development of a Technical Assistance Facility. The concept for this Track I priority ecosystem programme called “Financing for the Verde Island Passage MPA Network (VIP)” is summarized below.

North Oriental Mindoro is located around 140 km south-west of Manila. The 9 MPAs of the North Oriental Mindoro MPA network cover 5200 ha of vibrant coral reef, mangroves and seagrass ecosystems and one of the country’s primary dive-tourism destination. The MPA network is shared between 4 Local Government Units (LGUs): Puerto Galera, San Teodoro, Baco and Calapan. A Special Purpose Entity (SPE) “The Blue Alliance” has been structured to co-manage the VIP network of MPAs. The SPE has a lease agreement for most of the MPAs belonging to the North Oriental Mindoro network and is seeking to upscale this approach to the rest of the MPAs. The project in North Oriental Mindoro provides an attractive opportunity to invest in a network of Marine Protected Areas (MPAs) with the aim to improve sustainable use of 5200 ha of marine biodiversity and enhance livelihood of 50,000 households. The project contributes directly to the SDGs nº1, 13, 14 and 17 (No poverty, Climate action, Life below water and Partnerships).

The Blue Alliance, the SPE, seeks to invest USD 2.2M from the GFCR to complement a loan agreement for USD 1.6M (committed with the anchor investor Sustainable Ocean Fund) and USD 0.8M as catalytic funding from different donors (partially secured). The investment will be used mainly to finance eco-tourism improvements and equipment of the MPAs (USD 0.8M), a multimedia visitor centre (USD 1.2M) and mangrove restoration blue carbon project (USD 0.2M). Main revenues will be generated from MPA user fees, entrance fees to the visitor centre and sales of blue carbon credits. Other revenue models are being explored with coastal fisheries and aquaculture sectors.

Initial investment will finance the CAPEX and initial working capital of the sustainable financing mechanisms (such as tourism facilities, MPA equipment, fishery improvement assets, mangrove restoration, etc.). MPA activities will be implemented by the Blue Alliance (with a permanent staff of around 20) in collaboration with local partners (e.g. Conservation International, University of Philippines, etc.) and the community “sea rangers” (Bantay Dagat). Activities will be related to biodiversity conservation, law compliance, community development & engagement, sustainable revenues, management & infrastructure. The project is divided into 2 phases. The first phase concentrates the initial investment (USD 2.2M) in the North Oriental Mindoro MPA network. The Project there is in a mature stage with the management lease arranged with local governments and is expected to be investment ready by mid-2021. The second phase (2021-2023) will bring the rest of the VIP network

MPAs to investment-ready stage through improving the quality of the project design and execution and strengthening environmental and social impacts to meet the investors' criteria.

The project includes the creation and management of a development facility (technical assistance Facility) that will structure high-quality Blue Economy projects that meet the investor's criteria. Main activities will include:

- (i) **Environmental:** The development facility will provide scientific assistance and trainings to SPEs in coral reef conservation and MPA management. Activities include support to marine spatial planning processes, coral reef high-resolution mapping, community-based coral reef monitoring, compliance strategies, METT implementation, mangrove restoration and conservation, mangrove habitat remote sensing, sustainable fishery, aquaculture, water quality, etc.
- (ii) **Social:** The development facility will provide technical assistance for gender action plans and for local communities and NGO partners in developing outreach and communications materials that raise profiles of women, support training on technical and enterprise management skills appropriate to selected livelihood initiatives, including Training of Trainers (ToT) for community members and government partners; Blue carbon project M&E shall have a governance and benefit sharing mechanism that will consider local specificities and empowerment of local women and youth.
- (iii) **Business:** The development facility will carry out screening of ecotourism, mangrove, fisheries and aquaculture systems and products with a high upside potential, low risk and low impact. The facility will build community engagement to identify the leaders to implement the potential projects, market assessments and feasibility studies; provide technical assistance for gender action plans, detailed business planning, engineering and marketing strategies; Build local capacities in social entrepreneurship skills (e.g., marketing, strategic planning, business management and conservation).
- (iv) **Investment:** The development facility will provide financial expertise during the pre-investment life cycle of the projects (due diligence, financial modelling and analysis, investor's profiling and fundraising, approval process, legal arrangements, investment structuring and risk mitigation, KPIs, etc.), and post-investment life cycle of the projects (management and follow up on repayments and collections, monitor on-going financial and operational performance of investments, analyse and monitor risks and trends in the portfolio, manage restructurings and workouts).
- (v) **Institutional:** UNDP will support the development and promotion of a government incentive scheme to attract additional investment in the blue economy. Regulations, subsidies, and other incentives can attract private sector investment. These can include reductions in duty and VAT, or offering accelerated depreciation, tax credits, biodiversity offsets and other incentives that could be used to encourage investments in protection of coastal eco-systems and the associated blue economy.
- (vi) **Implementation:** The development facility will provide project management office support for the SPEs to ensure management focus on strategy execution. Activities include project planning and reporting, resource forecasting, human resource strategies, communication to key stakeholders, alignment of interrelations between activities and management of project risks. In addition, in the case of the VIP, the route to market partner Meliomar will enable the management of supply and value chains. For Blue carbon projects, the development facility will

facilitate formal relationships amongst partners, land tenure and usage clarity, as well as project ownership and responsibilities.

6.2.4 The Bahamas

The Bahamas has a relatively low population and small EEZ, and nearly all of the country's coral reefs are within the two priority BCUs. This enables the GFCR to take a country-wide approach for a focal area. Tourism and sustainable fisheries are particularly prominent in the country and can provide areas for investment. There are also extensive mangrove networks and seagrass beds around some islands in the country that could be opportunities for Blue Carbon. The proposal for priority programming is based on an RFI received from The Nature Conservancy (TNC) who will convene the implementing partners for the programme. The initial TNC concept, "Coral Conservation in The Bahamas: Saving the Caribbean's Most Expansive Coral Reef System Through Innovative Financing" is presented below.

The proposed Bahamas priority ecosystem programme aims to:

- a) Protect coral reefs and other habitats in The Bahamas by applying innovative financing ideas to fund long-term protection.
- b) Provide long-term funding to establish and manage MPAs, improve fisheries management, and scale up reef restoration work.
- c) Close critical funding gaps for these initiatives through Blue Bonds and Blue Carbon Resilience Credits.

The planned interventions include development of a theory of change for how to apply Blue Bonds and Blue Carbon Resilience Credits in The Bahamas to help the country protect its coral reefs and related habitats into the future. The support would provide a template for The Bahamas and other Caribbean nations to follow as they work to meet their national conservation goals and address critical threats to their coral reef ecosystems. TNC is working with the Bahamian government to pursue an innovative debt conversion mechanism: Blue Bonds for Ocean Conservation. TNC led the world's first ocean-focused debt conversion in Seychelles in 2016, and now Seychelles has set aside more than 440,000 square kilometres of ocean area for protection—an area the size of Germany. Building on this groundbreaking model, TNC is pursuing a debt conversion for The Bahamas that would reduce and restructure a portion of its sovereign debt and place the proceeds in a conservation trust fund to generate long-term, reliable funding for marine conservation, with a major focus on coral reef conservation and restoration.

The Bahamas Blue Bond would help the government reach its previously defined national biodiversity targets (including 20% ocean protection under CCI) and commit to an aspirational target of 30% of its EEZ and territorial waters under protection in the near-term—with half of this in high-protection status, determined through marine spatial planning. It would also help The Bahamas meet its national, regional, and global biodiversity goals (e.g., CCI, UN Convention on Biological Diversity, UN Framework Convention on Climate Change, Sustainable Development Goals). While the proposed debt swap and conservation trust fund will cover a portion of annual MPA costs, TNC also expects that additional funding will be required from other sources. TNC sees great potential to couple the Blue Bond with Blue Resilience Credits to create a double flow of funding for conservation in The Bahamas. Through this innovative use of debt financing, The Bahamas could secure the single most significant flow of conservation funds in the nation's history.

TNC is working with industry leaders in the insurance sector to develop the Blue Carbon Resilience Credit (BCRC)—the first-ever credit to value coastal wetlands' combined ability to sequester carbon and

increase resilience. With TNC's support, two blue carbon verification systems for calculating carbon stocks and emissions reductions have been approved, most notably the Verified Carbon Standard Methodology for Tidal Wetland and Seagrass Restoration. TNC is also developing "The Resilience Credit," a new methodology to advance the United Nations Sustainable Development Goal 13: Climate Action. By combining carbon offset and coastal resilience methodologies, conservation projects can generate third party-verified carbon credits—and sell these credits to support ongoing conservation work. TNC engaged EY (formerly Ernst & Young) to do a market analysis of BCRCs and identified an appetite among a variety of corporate partners to purchase these credits.

While corals are not a carbon sink, there are benefits to taking a whole ecosystem approach to blue carbon systems to benefit adjacent habitats. For example, reducing pollution in seagrass systems would also help adjacent coral reefs, and blue carbon financing for MPAs could benefit an entire range of habitats within a given protected area. There is also a possibility that TNC could eventually tailor the resilience methodology for coral conservation in the future. With 97,000 hectares of mangrove sites across multiple islands, a high risk of tropical storms, and an urgent need to maintain healthy mangroves and seagrasses, The Bahamas is an ideal region to develop BCRC projects. TNC is working to create a pipeline of BCRC projects supported through a blended finance approach that "de-risks" individual pilot sites. Philanthropic and public funding will pool together resources to develop site-based projects, while investment capital will provide long-term financing for restoration and conservation activities. TNC is currently scoping potential sites in The Bahamas and conducting a pre-feasibility study for a pilot project to demonstrate proof-of-concept for BCRC projects in the country.

6.2.5 Kenya & Tanzania

The initial focus for Kenya and Tanzania will revolve around the Tanzania/Kenya BCU which has been prioritized by 50 Reefs and recent research has identified a valuable coral reef climate refugia. This programme is being developed by a consortium of partners on the ground convened by the Wildlife Conservation Society (WCS) to aggregate and replicate successful approaches. The portfolio will most likely include blue carbon initiatives, ecotourism enterprises, plastic collection and recycling, aquaculture and reef fisheries sustainability solutions. The priority ecosystem programme, "Sustainable financing for coral reefs on the Kenya - Tanzania border" is summarized here.

The Tanzania/Kenya coral reef bioclimatic unit (BCU, Beyer et al. 2018) has received increased attention with the release of a thirty-year study that established the presence of a climate refuge for coral reefs (McClanahan 2020). The area is of key importance providing a source of nutrition and income to many areas including Zanzibar, Mombasa and Dar Es Salaam. The area is subject to various threats with fishing pressure and coastal development being deemed the most pressing issues. More specifically, in Kenya, top local threats include fisheries overexploitation, destructive fishing practices (e.g. drag nets), habitat degradation, uncontrolled development, plastic and wastewater pollution. In Tanzania, destructive fishing, sedimentation from coastal run-off, habitat loss, climate change and coastal development are key local threats. The recent creation of a Trans-Boundary Conservation Area between Kenya and Tanzania highlights the ambition of national strategies to jointly ensure the biodiversity and resilience of the coastal and marine socio-ecological system.

WCS will provide the overall technical leadership and capacity to design and deliver the programme of work, including catalysing a regional blended finance 'investment promotion facility' for the region tasked with identifying, piloting and scaling additional projects in Kenya and Tanzania focused on coral reef conservation. To deliver the programme effectively and appropriately, WCS will seek to create or build on existing partnerships within the region. In addition to this, WCS is talking to local financial

institutions such as Okavango Partners and Conservation Capital that function both as potential advisors and investors.

The Theory of Change for the proposed programme of work is that financial incentives and blended finance, including concessionary loans will unlock new capital to protect key coral reef and linked habitats (mangrove and seagrass beds). This will be achieved by working towards a reduction of threats and via improved management of the coastal zone. Specifically, opportunities will aim to (1) build the capacity for mitigating top threats to coral reefs, (2) strengthen monitoring and evaluation of social, financial and ecological outcomes, (3) link local communities to new and diverse models of income generation, and (4) increase the value of safeguarding intact coral reef ecosystem services by developing scalable business models. In particular, the theory of change's focus on projects with local communities is highly scalable. As local fishing communities would directly benefit, the model could easily be replicated to other zones in Kenya and Tanzania as well as the broader Western Indian Ocean. This could be achieved through peer-to-peer learning groups, sharing measurable success stories, and access to financial capital to seed scaled projects.

The programme, subject to an evaluation phase, comprises four example opportunities: the establishment of a sustainable funding innovation hub for future revenue generating conservation projects in this reef system; blue carbon; plastic recycling revenue; and improved small-scale fisheries value chains. This set of interventions is timely because it dovetails with work being sponsored by Bloomberg (Vibrant Oceans), Blue Action Fund (BAF) and others. These funders have facilitated the ecological and community elements that are so important to the GFCR proposal, but the GFCR brings support for sustainable financing and investment.

6.2.6 Maldives

Maldives has a relatively small domestic economy, is highly dependent on coral reef and marine tourism, and its extensive archipelagic waters include two priority BCUs. Although the focus will be on interventions to benefit the two BCUs, GFCR programming will potentially include the entire country. The current initial concept note proposed by the UNDP Maldives Country Office is entitled "Financing Facility for the Protection of Marine Ecosystems" and aims to:

Create

- (a) create a blended financing vehicle (or possibly build on an existing vehicle) that will evolve into a national finance provider through which to provide sustainable financing and investment for priority coral conservation and climate change adaptation activities;
- (b) Support initial development and implementation of a comprehensive multi-use marine spatial planning framework, with a focus on conservation and management of coral reef ecosystems; and
- (c) Build capacity to mobilize private and public investment capital for a pipeline of initiatives that positively impact on Maldives coral reefs and associated livelihoods.

A diversified blended finance portfolio will likely include ecotourism models, public sector financing for coastal development projects, coral reef restoration operations, sustainable fisheries and fishery value chains, and circular economy enterprises with a focus on reducing plastic waste, among others.

As funding models for marine conservation in SIDS are typically grant-based, governments are seeking to establish a financing vehicle to allow more private financing to enter into the marine conservation sphere. Through the financing vehicle, GFCR partners will channel conservation finance towards:

- i) Expansion and improved management of existing marine protected areas;
- ii) Coral reef conservation and restoration activities;



- iii) Identifying businesses and SMEs supporting the MSP, which are revenue generating and available for investment;
- iv) Development of a comprehensive marine spatial planning (MSP) framework; and
- v) Support for marine-based reef-positive sustainable livelihoods.

UNPD and other partners will provide technical support for capacity-building to agencies that will be involved in the development and implementation of the MSP framework being developed through the *Noo Raajje Programme*. The programme will also support institutional capacity building for MSP planning and implementation with a special focus on sustainable financing for coral reef conservation and addressing drivers of degradation. The government plans to use this project to structure a financing vehicle - ideally as a tax-efficient vehicle for accepting donor contributions for conservation as well as pooled funds from UNDP's adaptation and conservation projects. The local private sector and institutional investors will also be invited to contribute to the grant portion of the IFF. The financing vehicle will be overseen by a board of trustees reflecting government, donors, conservation organizations and development partners. A secretariat will also be established to administer the grant and investment activities of the financing vehicle, subject to global best practices for standard risk control, auditing and quality assurance and financial reporting rules. In addition to conservation grantmaking, resources will be allocated towards development of bankable flagship investment projects.

The expected outcomes of the programme include the following:

Outcome 1: Protection and effective management of priority coral reef sites and climate change-affected refugia are sustainably financed.

- Output 1.1: Increase in well managed and enforced MPAs and LMMAs that protect and promote healthy reefs

Outcome 2: Transforming the livelihoods of coral reef-dependent communities

- Output 2.1: Scoping for the financing vehicle
- Output 2.2: Investment pipeline development

Finally, through the establishment of the Secretariat and operation of the financing vehicle the Government will also benefit from capacity building and experience for similar endeavours in the future.

6.2.7 Fiji

Fiji is highly dependent on coral reefs for coastal tourism and fisheries and has a large coastline with strong coverage of two BCU's. The priority ecosystem programme proposal is entitled "Investing in Coral Reefs and the Blue Economy" and was submitted as a collaborative project with a UN Joint SDG Fund proposal. The programme seeks to create a blended finance facility and to build capacity to mobilize private and public investment capital for initiatives that have a positive impact on Fijian coral reefs and the communities that rely on them. The initiative will construct a pipeline of bankable projects providing a blend of technical assistance, performance grants and concessional capital for de-risking investments. Projects will leverage finance from private investors and other financing facilities. Expected results include:

- 1) Private sector investment in a USD 10M blended finance facility for effective management of 30 Locally Managed Marine Areas (LMMAs) in Fiji. The initiative will accelerate the short-term investment readiness of a pipeline of 10 LMMA projects (USD 3.1M target) and bring the wider



pipeline to market (USD 10M target). Business models include reef-first businesses such as eco-tourism, visitor centres, sustainable fisheries and blue carbon credits.

- 2) Private sector investment in a USD 14M blended finance facility for a sanitary landfill project before replicating the approach to other landfill projects in the country.
- 3) Private sector investment in an eco-fertilizer factory before replicating the approach to five (5) other reef-first small and medium size enterprise (SME) projects in the pipeline.
- 4) Established and operational gender responsive Technical Assistance Facility (TAF) for blue economy SMEs and financial instruments. The TAF will:
 - a) Bring expertise during the pre-investment and post-investment life cycle of the Blue Economy SMEs
 - b) Aggregate and pool the investments and other financial instruments reducing transaction costs for outside investors and reducing risk profile
 - c) Work with Government to improve the regulatory framework
 - d) Fundraise for development and private finance.
- 5) The overall programme seeks to leverage a total USD 50M in public and private investments leveraged in reef-first SMEs and financial instruments.
- 6) Measurement and verification of positive economic and environmental impacts to vulnerable coastal communities (>70,000 beneficiaries) and coral reefs, of which 50% will be women or youth.

6.2.8 Mesoamerican Reef

The Mesoamerican Reef (MAR) is the second largest barrier reef in the world after the Great Barrier Reef, extending over 600 miles across four countries in the western Caribbean Sea: Mexico, Belize, Guatemala, and Honduras. The broader MAR ecoregion covers 457,490 km², and there are multiple local regions of the reef that have high potential for climate change resilience. The reef historically provides over USD 6.2 billion per year in financial benefits to local economies, 70% of which is derived from tourism ([UNEP & ICRI, 2018](#)).

The Mesoamerican reef is under threat from a series of pressures, including: land based and wastewater pollution; unsustainable fishing; harmful tourism; and hurricanes. Some sections of the reef have declined. But recent economic research suggests that shifting the trend of decline towards a “healthy state” could unlock an additional USD 35 billion in value between now and 2030 ([UNEP & ICRI, 2018](#)).

The MAR region has also been a testing ground for many innovative financial mechanisms for coral reef conservation, including the Quintana Roo insurance fund spearheaded by the Nature Conservancy ([TNC, 2020](#)). Other actors in the region include the Mesoamerican Reef Fund, or MAR Fund, that manages MPAs in every MAR country and seeks to develop a technical assistance facility for driving innovative investments for coral reef conservation. It is proposed that the MAR Fund convene a consortium of actors to develop a detailed programme for the GFCR.

The initial concept for the MAR ecosystem-based programme to be led by the MAR Fund is called “MAR+Invest” and is summarised below.

MAR+Invest builds upon the work of existing organizations that commit resources, networks and expertise to generate an ecosystem where innovation, entrepreneurship, investment and conservation collaborate towards the identification, development and financing of market-oriented solutions to fight the causes of degradation of the MAR while attracting diverse sources of capital. MAR+Invest will build the resilience of the MAR by investing in solutions that reduce local drivers of coral degradation like human pollution, agricultural runoff and mangrove deforestation, and by scaling and replicating

solutions like seaweed farming that reduce the effects of acidification and global warming on the reef. MAR+Invest is a business development and financing mechanism that supports conservation, protection and restoration of coral reefs and associated ecosystems (mangroves and seagrasses) –the natural capital of the MAR region– through the development and financing of commercially viable projects that deliver on coral reef positive outcomes. MAR+Invest is at the pre-design stage. Partners of the facility have been engaged, prospect portfolio for design phase has been identified, partial co-financing for portfolio development has been identified, but amounts of co-financing are to be determined. Conversations about co-financing the development phase of projects have been started with The Nature Conservancy, World Wildlife Fund and the GEF Small Grants Programme of UNDP.

The expected results at the portfolio level (aligned to GFCR outcomes):

Outcome 1. Protected Areas:

- Protected Areas (co-management)

Protected areas in the MAR reduce financial gaps

Protected areas in the MAR have new and expanded sources of revenue

Protected areas in the MAR establish business partnerships oriented towards financial sustainability

Protected areas with strengthened management, enforcement and monitoring systems

- Sustainable Protected Area Communities:

Communities living in/around protected areas improve levels of climate resilience (Better agricultural practices, develop contingency plans for major shocks)

Creation, development and financing of new community-based enterprises

Job creation for communities living in protected areas

Promotion of women-led enterprises

Outcome 2. MAR Relief

- Ocean Farming: Seaweed farming

Regeneration of ecosystem functions

Local reduction of acidification

Increase in biodiversity

Reduction of thermal stress (to seafloor habitats)

Improved climate resilience

Sustainable livelihoods

- Aquaculture: Shrimp Farming in Belize

Reduced effluent discharge from aquaculture

Job creation

- Climate Smart Agriculture.

Reduced discharge from agriculture: Reduced toxicity loads from pesticide and nutrient application)

Sustainable livelihoods

Increased climate resilience

- Blue Carbon

Conservation and restoration of mangroves

Maintains the value of ecosystem services (hectares of restored mangroves, avoided deforestation of mangroves)

Income generation in communities living in coastal areas

- Sewage

Reduction of pathogens

Water quality

Outcome 3. Reef Rescue

- Emergency Fund is expanded in scope to provide emergency response to de-risk the MAR+Invest portfolio
- Emergency Fund is partly financed by profit-sharing from specific MAR+Invest portfolio solutions

6.2.9 Solomon Islands

The Solomon Islands are a priority country for the Global Fund for Coral Reefs due to its resilient reefs (Bioclimatic Unit, BCU), and location in the Coral Triangle. It possesses 2.02% of the world’s coral reef area and approximately 550 species of coral.

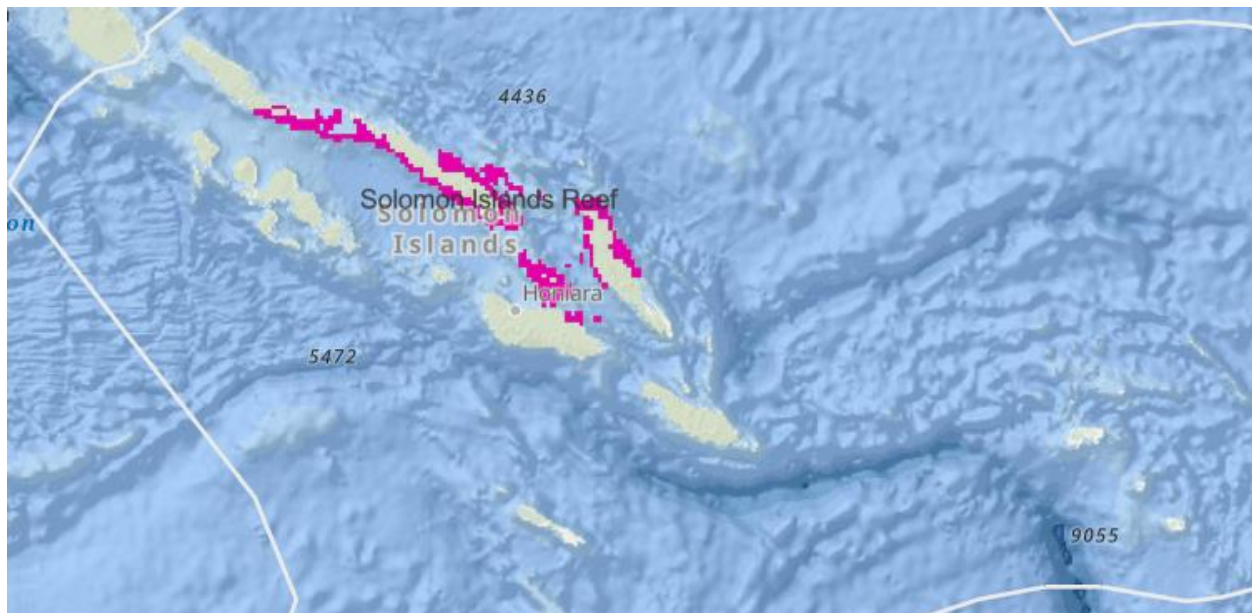


Figure 18 Solomon Islands showing the extent of the resilient BCU

The main threats to Solomon Islands’ BCU are (1) pollution from sedimentation (mainly from farming and logging-related deforestation) and (2) tourism. The Solomon Islands are one of the priority sites for the Coral Reef Rescue Initiative (CRR) spearheaded by WWF with a strong group of partners. The CRR’s objective is very similar to the GFCR and highly compatible in terms of approach and objectives (see Figure 19).

Coral Reef Rescue Initiative (CRR)

Objective: To protect the world's most resilient reefs to maintain the critical socio-economic benefits they provide coastal economies and communities and help restore degraded reefs.

Partners:



WWF GCF Coral Reef Resilience Program Structure

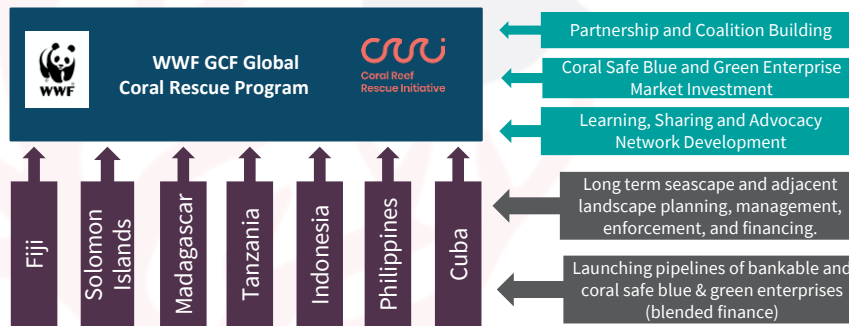


Figure 19 The Coral Reef Resilience Initiative

The CRR is launching a market study to identify opportunities for coral positive investments in the Solomons and a concept note will be developed by WWF who will seek to convene a consortium of partners to present a proposal to the GFCR for a Track I programme.

Some initial potential opportunities for business models are presented in the Country Profile in the Annexes and could include:

- Microfinance
- Ecotourism
- Fisheries
- Sustainable logging and watershed management
- Debt conversion for nature and climate action.

Some potential partners and initiatives include the following:

- [WWF](#): Strong focus on Community Based Resource Management, a central strategy of the Solomon Islands government for ensuring benefits of marine and terrestrial resources under the National Plan of Action (NPOA).
- [Coral Sea Foundation](#): The Sea Women of Melanesia programme empowers indigenous women with diving and marine science so they can take an active role in creating and monitoring marine protected areas on their own coral reefs.
- Technical Assistance Facility: [Financing the Blue Economy in Small States](#): USD 33 million regional programme to support select Pacific countries and institutions, including Solomon Islands.
- [Tetepare Endowment Fund 2010](#): Tetepare is home to the country's largest LMMA.

6.2.10 Madagascar

The island of Madagascar has a significant reef area totalling 2,230 km² with the Northwest Madagascar Reef BCU covering the northern tip of the island (stretching from Andrafialava in the west to Vohemar in the east). The reefs are mainly found west of the island between Androaka and Antsiranana and on the east from the Cap of Ambre (Antsiranana) in the north to Toamasina (Jadot et al., 2015) with 90% of these found on the western coast (Allnutt et al., 2012). Indeed, it should be noted that Madagascar is one of the top 15 countries in terms of coral reef area (Burke et al., 2011). The reefs of North West Madagascar are part of the North Mozambique Channel ecosystem which is a priority zone for coral reef conservation, thought to be the 2nd richest globally in coral reef and tropical marine biodiversity (*Northern Mozambique Channel* | CORDIO, 2015). Lastly, it should be highlighted that Madagascar's reefs are of key importance for larval supply to downstream reefs in the WIO (*Marine World Heritage - North Madagascar*, n.d.).

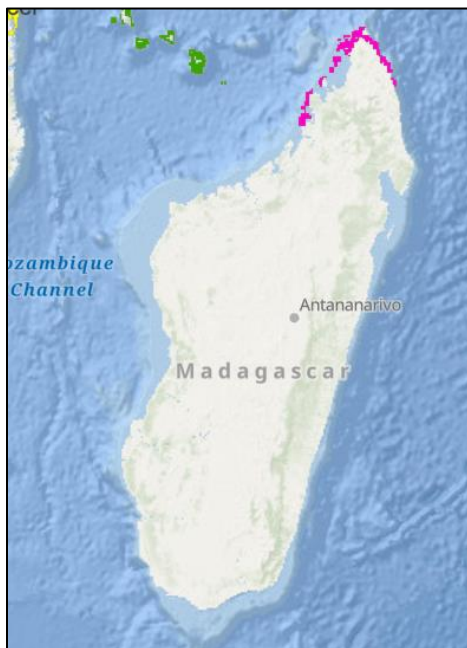


Figure 20 Madagascar's BCU (pink, Source: [Vibrant oceans](#))

Madagascar is part of the “Madagascar and Indian Ocean Islands Hotspot” which is one of 36 identified biodiversity hotspots. The hotspot is home to rich marine biodiversity boasting high endemism (including corals, coastal species, and species found in ocean trenches) as well as importance for far ranging taxa such as cetaceans and marine turtles (*The Madagascar and Indian Ocean Islands Hotspot Ecosystem Profile Summary*, n.d.). Madagascar has been described as “a mosaic of rich ecosystems: coral reefs, coral banks, mangroves, and seagrasses, and volcanic, karst or coral islands and islets, bays” (*Marine World Heritage - North Madagascar*, n.d.). It is interesting to note that the marine ecosystems of Madagascar are home to an estimated 159 species of fish with 66% of them being endemic (*An Overview of WCS Madagascar Marine Programme*, n.d.).

- Reef-associated Visitor Expenditure, USD: 50,496.00
- Value of Reef Fish Harvest, USD: 3,991,932.00
- Population Protected by Reef: 833,698

The top two pressures for the BCU are pollution from sedimentation and nitrogen pollution. These are followed by fishing (shown in the figure below). Similarly, market pressure is ever present and a recent article entitled "*An Export Boom Threatens to Put Madagascar's Mud Crabs in Hot Water*" highlights the level of market pressure faced by Madagascar's coastal ecosystems.

There are a range of opportunities for Madagascar in terms of the GFCR's investment strategy. These include the following opportunities:

- [Blue Ventures](#) – including diverse projects such as: community-based aquaculture initiatives; Tahiry Honko - the first carbon sequestration project in Madagascar focused on a mangrove ecosystem and promotes locally led conservation, reforestation and sustainable use; Madagascar Fisheries Improvement Project - the Marine Stewardship Council (MSC) eco-certification of the octopus fishery of southwest Madagascar; and Menabe Crab Fishery Management Group.
- [R.E.E.F Madagascar](#) - coral farming
- [SEED Madagascar](#) - Project Oratsimba supports three communities to sustainably manage their fisheries, and thus protect the scalloped spiny lobster.
- [Coralive.org](#) - coral reef restoration through mineral accretion technology, mangrove forest replanting and, seagrass bed transplanting.
- [Ocean Farmers](#) - 2000 household-farmers, 40 villages, 300km of coastline, algaculture for red algae producing carrageenan, a texturizer used by the food and cosmetic industry. Working alongside CARGILL in "The Red Seaweed Promise™".
- Madagascar National Parks (MNP) - [Madagascar National Park Investment Fund](#) – Sustainable Coastal Fisheries.

6.3 Track II – Scalable Opportunities

Track II – Scalable Opportunities – is designed to identify, support and facilitate investment in scalable and replicable business models and finance instruments. This track will seek to identify and directly support scalable business models and finance mechanisms targeting the countries prioritized in the Fund's site selection process and included in the GCF proposal (29 countries). Great business models and businesses can be scaled or replicated where there is the greatest opportunity – in certain cases, implementing across multiple sites and countries to achieve the desired level of scale.

Opportunities will be identified directly by the Investment Window team, through the UNCDF's concessional finance efforts (both in Track I programmes and in other countries), and through a Request for Proposal (RFP) process that will be designed during the second half of 2021. Many of the details of the approach for Track II will be elaborated during 2021 through a collaboration among the Fund's partners and technical advisory teams. Pegasus and UNCDF are in the process of determining their individual approaches and as such, little more is available at present to describe.

6.4 Track III – Strategic Partnerships

The goal of Track III – Strategic Partnerships – is primarily the capitalization and geographic expansion of the Fund's impact and lessons learnt through collaboration with key financial and implementation partners. The Global Team will oversee the implementation of Track III (as with other tracks) and there will be additional technical and implementation support from a UNDP/CFA collaboration on certain elements. Some of the outputs of this track include:



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- Develop and coordinate effective partnerships and initiatives with vertical funds, international finance institutions and other co-financing partners to scale up GFCR impacts.
- Facilitate knowledge management to promote the success, replication and scaling up of GFCR solutions.

Specifically Track III will seek to build and strengthen the global community of actors working towards blended finance and other finance solutions for coral conservation and dependent community wealth and resilience. Collaborative opportunities will be sought with a wide range of strategic partners capable of contributing knowledge, finance, investable opportunities, and capacity to the coral reef finance ecosystem. Track III will help the Fund to identify, cultivate and expand co-financing partnerships with a range of actors targeting coral conservation and resilience, market-based solutions, and innovative finance for coral reefs to expand opportunities for scaling and replicating promising solutions. Track III builds on the demonstration aspects of the Fund to enhance its impact concurrently with implementation. Some specific actions and outputs are the following:

- Successfully developed and coordinated GFCR partnerships with the Vertical Funds (including the Global Environment Facility, Green Climate Fund, etc.), international finance institutions (including World Bank, regional development banks, etc.) and other co-financing and implementing partners.
 - Green Climate Fund (GCF): Further technical support provided to deliver the subsequent Full Funding Proposal for submission before COP26 Glasgow
 - Global Environment Facility (GEF): In collaboration with UNCDF, UNDP will design and prepare a global GEF multi-country project to enhance the capacities of priority coral countries (especially LDCs and SIDS) to ensure fair representation and equitable access to blended finance for coral conservation and build investable coral-positive business pipelines.
 - International finance institutions (IFIs): UNDP and CFA, with GFCR partners, will explore opportunities for partnership with the World Bank, regional and national development banks, in line with the original objectives of the GFCR to leverage additional private finance and unlock financing for coral reef-related climate adaptation and market-based solutions.
- A dedicated knowledge management platform facilitating replication and scaling-up of successful GFCR initiatives.
 - Through a partnership with [Ubuntu](#), Track III will establish a knowledge management platform that supports peer-to-peer exchange and lessons sharing on blended finance, market-based solutions and sustainable finance for coral conservation. The platform will be accessible to global, national and local partners including businesses and communities. It will be hosted within the GFCR web site. Through the platform and website, the Fund (supported by UNDP and CFA) will offer user-friendly webinars, workshops and other events/mechanisms for building awareness and knowledge with wide stakeholder participation.
 - Distillation and publication of user-friendly case studies and stories of GFCR projects, which can be leveraged for effective communications and outreach.
 - Development and publication of a suite of technical and scientific papers that demonstrate GFCR innovation and impact (2021-2030). Subjects will build on evidence-



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- based learning from GFCR initiatives and focus on such themes as impact investing for coral reef conservation, etc.
- Best practices relating to stakeholder engagement, participatory methodologies, capacity development, public-private partnerships, blended finance approaches for marine and coastal conservation, etc. will be shared with GFCR partners and projects to inform and enhance project design implementation and inform Fund strategy. These best practices will address structural, institutional and contextual barriers to effective coral reef conservation and finance.
 - Identification and management of important strategic and technical partnerships with microfinance institutions, incubators, technical assistance facilities and related programs at national/local level; and with BINGOs and coral reef coalitions as well as the Critical Ecosystem Partnership Fund (CEPF), Blue Nature Alliance, Ocean Risk and Resilience Action Alliance (ORRAA), ICRI, Joint SDG Fund, etc. at the global and regional levels.
 - A training and capacity development program: This will support effective implementation of and compliance with the Fund's policies, standards and norms for adherence by the Grant and Investment Windows.

7 Next Steps

This version of the Investment Plan captures the advancement of the GFCR at the present moment. There are several key next steps that are being planned and implemented that will be integrated into the next version of the plan. Some of the key next steps include the following:

Investment Principles – Investment principles will be established for the Fund as a whole and for a range of investment sectors. This sector-based investment and impact standards will guide activities towards achievement of the GFCR outcomes and SDGs, specifically enabling investors and enterprises to align their activities in specific sectors (such as fisheries, tourism, circular economy—waste management, plastics, Marine Protected Areas, etc.) with the Fund’s target outcomes. They will provide positive recommended actions to support the Fund’s outcomes and reduce drivers of degradation. A clear framework will be established for integrating SDG impacts into project and investment decision-making and M&E. In addition, a paper will be produced to define what can and cannot be funded by GFCR.

Safeguards policy (with a focus on issues including human rights, gender, etc. - Building on UNDP’s gold standard policy, the safeguards policy will underpin the Fund’s commitment to mainstream social and environmental sustainability directly in projects and deals. An accountability mechanism to deal with any complaints or concerns about the Fund’s operations will also be established.

Risk management system – This will provide the Fund with a way to identify and mitigate programmatic, institutional and contextual risks that might impact the Fund’s performance and reputation – and ensure that we maximize gains and minimize harm or losses at all levels of operations from global to local.

Design and Development of the UNCDF’s Blue Bridge Facility – the Facility will be designed and integrated into the Fund’s structure over the remainder of 2021 and its concessional elements are a key feature of the Fund’s blended finance structure. As such, the Investment Plan will be adapted to better integrate this Facility once it is designed.

Investment Window structuring – Pegasus Capital Advisors and Fund partners are working on the full GCF proposal and will initiate the structuring of the Investment Window over the second half of 2021. The design and detailed structure of the Investment Window will also be integrated into the Investment Plan for the next iteration.

Portfolio Concepts – The portfolio concepts of Anchor investments, Intermediaries, and Financial Partners will be further developed for the next iteration of the Investment Plan through continued collaboration with Fund partners.

Track I programme design – the convening agents and partners for Track I programmes are currently developing their full concepts (with the exception of Fiji) and additional information and local intervention strategies will be included in the next Investment Plan iteration.

Track II and Track III development – both tracks will be further developed and structured including the Request for Proposal concept.



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