Guidelines for applying a business approach to the financial management of MARINE PROTECTED AREAS

Blue4all

MPA Community Network

Guidelines for applying a business approach to the financial management of **MARINE PROTECTED AREAS**

is a publication developed by Blue4All, an EU-funded project (GA 101094014) focusing on developing science-based tools for achieving Marine Protected Areas that meet conservation and restoration objectives, while addressing the needs and concerns of all stakeholders.

This guideline is also a publication supported by the "MPA Community Network" an umbrella initiative, developed to centralise and connect MPA-related projects across Europe, as well as fostering collaboration among MPA managers, stakeholders, and conservation experts.

This publication was funded by the European Union. It's contents are the sole responsibility of the authors and do not necessarily reflect the views of the European Union.

Edition

First edition, 2026

ISBN

978-989-33-9324-6

Please cite as:

Mata-Lara M., Drews-von Ruckteschell, F., Lai, T.Y., Ala-Harja, V., Van Gerven, A & Congiu, M. (2026). *Guidelines for applying a business approach to the financial management of Marine Protected Areas.* MPA Community Network through the Blue4All project funded by the European Commission. 169 pages.

Contact

Mariana Mata Lara (mml@submariner-network.eu) or Franziska Drews-von Ruckteschell (fdr@submariner-network.eu), **SUBMARINER Network**

MPA Community Network |
An initiative by Blue4All

Authors

Mariana Mata Lara, SUBMARINER Network
Franziska Drews-von Ruckteschell, SUBMARINER Network
Tin-Yu Lai, SYKE
Venla Ala-Harja, HELCOM
Annaïk Van Gerven, Royal Belgian Institute of Natural Sciences
Michela Congiu, MEDSEA

Acknowledgments

Isabell Storsjö, Syke
Francesca Frau, MEDSEA
Rita Trabulo, Royal Belgian Institute of Natural Sciences

The European Commission

Abreviations

ASC - Aquaculture Stewardship Council
BSAG - Baltic Sea Action Group
CDFW - California Department of Fish and Wildlife
CFA - Conservation Finance Area
CCRIF - Caribbean Catastrophe Risk Insurance Facility
CFP - Common Fisheries Policy (European Union's)
CO_2 - Carbon Dioxide
CSR - Corporate Social Responsibility
CTFs - Conservation Trust Funds
EFAC - Ecolabelled and Financed Area for Conservation
EIB - European Investment Bank
EMFAF - European Maritime, Fisheries and Aquaculture Fund
EU - European Union
FAPBM - Madagascar Biodiversity Fund
FMCN - Mexican Fund for the Conservation of Nature
FPA - Fully Protected Area
IUU - Illegal, Unreported, and Unregulated Fishing
MCAF - Marine Conservation Action Fund
MPAs - Marine Protected Areas
MSC - Marine Stewardship Council
OCPP - Ocean Country Partnership Programme
OECMs - Other Effective Area-Based Conservation Measures
OFR - Ocean Friendly Restaurants
OPC - Ocean Protection Council (California)
PES - Payments for Ecosystem Services
PPA - Partially Protected Area
PPPs - Public-Private Partnerships
REDD+ - Reducing Emissions from Deforestation and Forest Degradation
SMTP - Schmidt Marine Technology Partners
TMNP - Table Mountain National Park
WWF - World Wildlife Fund

Table of Contents

MPA Community Network
An initiative by Blue4All

01 INTRODUCTION

02 A BUSINESS MINDSET TO CONSERVATION PLANNING

03 BUSINESS MODEL COMPONENTS & TEMPLATE

04 BUSINESS PLAN COMPONENTS & TEMPLATE

05 FINANCIAL MECHANISMS - A COMPILATION

06 CHOOSING WHAT FITS MY MPA

07 FINANCIAL TOOLS AND FINANCIAL STRATEGY

08 CONCLUSION

About

This **Guideline for Applying a Business Approach to the Financial Management of Marine Protected Areas (MPAs)** offers a structured, **step-by-step approach** for MPA managers, planners, and stakeholders to secure sustainable financial resources and improve the operational effectiveness of MPAs. It applies a business mindset to the field of marine conservation, aimed at ensuring that MPAs can thrive financially while fulfilling their ecological and social goals.

Each chapter in this guide provides tools, frameworks, and practical advice to help MPAs navigate the complexities of financial planning and management. The following is an overview of what to expect in the key sections of the guideline:

Chapter 1: Introduction

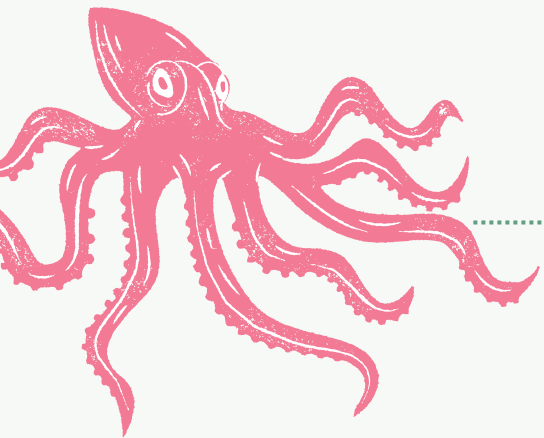
This opening chapter introduces the importance of MPAs for the conservation of marine biodiversity and highlights the financial challenges MPAs face. It explains the urgent need for sustainable financial mechanisms and sets the context for the application of a business approach to marine conservation.

Chapter 2: A Business Mindset to Conservation Planning

This chapter explores the value of applying a business mindset to conservation planning. It demonstrates how thinking strategically about the financial sustainability of MPAs, similar to a business, can help identify diverse revenue streams and reduce financial risks. The chapter emphasises that conservation is not a profit-driven endeavour, but can benefit from structured financial planning to ensure long-term success.

Chapter 3: Business Model Components & Template

This chapter dives into the structure of the business model for MPAs. It outlines the essential components that make up a sustainable business model for marine conservation, including defining the mission, value proposition, key activities, stakeholders, and revenue streams. The chapter also includes a template for MPA managers to develop their own business models, tailored to their specific needs and goals.



About

Chapter 4: Business Plan Components & Template

Building on the business model, this chapter focuses on the business plan for MPAs. It provides a detailed roadmap that outlines the specific actions, strategies, and financial projections needed to execute the business model. This includes resource management plans, enforcement strategies, stakeholder engagement frameworks, and monitoring protocols. The chapter includes a template to help MPA managers create a comprehensive and actionable business plan.

Chapter 5: Financial Mechanisms - A Compilation

In this chapter, we provide a detailed overview of various financial mechanisms available to MPAs, both traditional and innovative. These include funding sources such as government grants, philanthropic contributions, corporate sponsorships, and market-based mechanisms. The chapter categorises financial mechanisms and explores real-world examples of their application, providing MPA managers with a wide array of options for securing funding.

Chapter 6: Choosing What Fits My MPA

This chapter helps MPA managers select the most appropriate financial mechanisms based on their specific context. It offers guidance on assessing the financial situation of an MPA and choosing the best-suited funding strategies. The chapter emphasises the importance of considering local conditions, ecological needs, stakeholder involvement, and governance structures when selecting and testing financial mechanisms.

Chapter 7: Financial Tools and Financial Strategy

This chapter focuses of the Excel-based decision support tool developed by Blue4All that helps MPA managers develop their financial strategy.

Chapter 8: Conclusion

The final chapter summarises the key points covered in the guideline and reiterates the importance of applying a business approach to securing financial sustainability for MPAs. It encourages MPA managers to continuously monitor and update their business plans to adapt to changing conditions and funding landscapes. The chapter concludes with a call to action for MPA managers to proactively engage with diverse funding sources and integrate financial strategies into their conservation efforts.

Financial Mechanisms

DONATIONS AND PHILANTHROPY 58

PHILANTHROPIC GRANTS 59
PRIVATE VOLUNTARY DONATIONS 61
CROWDFUNDING 62

PUBLIC AND GOVERNMENT SUPPORT 64

ANNUAL GOVERNMENT BUDGET ALLOCATION 66
ENVIRONMENTAL LEVIES 67
SUBSIDIES AND TAX BREAKS 69
ENVIRONMENTAL PENALTIES AND FINES 70
EU-FUNDED PROJECTS 71
FOREIGN CONSERVATION FINANCE 73
CONSIGNMENT TAX 74

MARKET-BASED MECHANISMS 76

PAYMENTS FOR ECOSYSTEM SERVICES (PES) 79
BLUE CARBON CREDITS 80
BLUE BONDS 82
HABITAT BANKING 84
LOANS 86
DEBT-FOR-NATURE SWAPS 88

CORPORATE PARTNERSHIPS AND SPONSORSHIPS 90

CORPORATE SPONSORSHIPS 91
PUBLIC-PRIVATE PARTNERSHIPS (PPPS) 92
ECO-CERTIFICATION PROGRAMS 94

TOURISM AND RECREATION-LINKED REVENUE 97

USER FEES 98
CONCESSIONS AND REVENUE SHARING 100
ECO-TOURISM PACKAGES 102
VIRTUAL ACCESS FEES 103

CONSERVATION-SPECIFIC FUNDS 106
CONSERVATION TRUST FUNDS 108
ENDOWMENT FUNDS 109
SINKING FUNDS 111
REVOLVING FUNDS 113

RISK FINANCING AND INSURANCE 115
CATASTROPHE BONDS 117
RISK POOLS 118
PARAMETRIC INSURANCE 120
CLIMATE RISK INSURANCE 121

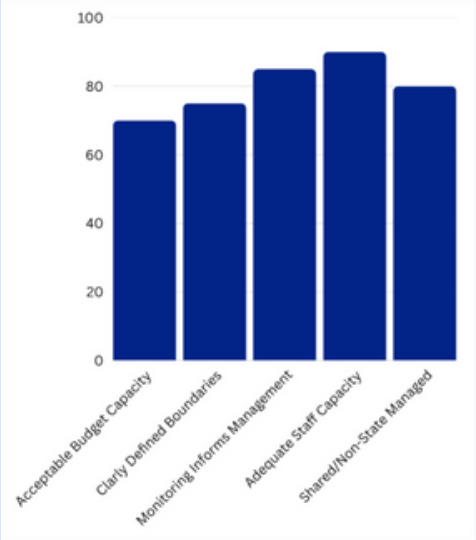
LICENSING AND SUSTAINABLE USE 123
EXTRACTIVE LICENSES AND PERMITS 124
NON-EXTRACTIVE LICENSES AND PERMITS 126
SUSTAINABLE SEAFOOD BRANDING 128

COMMUNITY AND SOCIAL MECHANISMS 130
VOLUNTEERING 131
COMMUNITY MEMBERSHIP FEES 132
DONATIONS FROM LOCAL EVENTS 134
CULTURAL AND HERITAGE-BASED CONTRIBUTIONS 136

RESEARCH, EDUCATION, AND INNOVATION 137
TRAINING AND CERTIFICATION PROGRAM 140
BLOCKCHAIN-BASED CONSERVATION TOKENS 141
EDUCATIONAL PARTNERSHIPS AND VIRTUAL PROGRAMS 144
INNOVATION AND TECHNOLOGY FUNDS 145
SEED FUNDING 148

Introduction

Ocean conservation in Europe, as in the rest of the world, faces significant challenges, particularly in terms of staffing capacity and securing adequate funding for the management and enforcement of Marine Protected Areas (MPAs) and Other Effective Area-Based Conservation Measures (OECMs).[1]



In Europe, more than 80 per cent of marine protection areas provide only marginal protection (light, minimal, or no protection) from the most harmful human activities, such as dredging, mining, or the most damaging fishing gears[2].

Figure 1. Per cent of MPAs exceeding or falling below threshold values for indicators of effective and equitable management processes, including financial capacity. Modified from Gill et.al. 2017.

> *In 2022, MPAs covered 11.4% of EU waters, and only 0.2% were fully or highly protected. In fact,* ***86% of MPAs area showed low protection levels or incompatibility with conservation, as they allow industrial activities****.*[3]

Part of the problem is a lack of comprehensive management plans and insufficient and inconsistent financing which most MPAs lack[4].

1. Gill, D., Mascia, M., Ahmadia, G. et al. (2017). Capacity shortfalls hinder the performance of marine protected areas globally. Nature 543, 665–669.
2. Aminian-Biquet, J., et.al.. (2024). Over 80% of the European Union's marine protected area only marginally regulates human activities. One Earth, 7(9), 1614–1629.
3. Idem
4. WWF. (2019). Protecting our ocean. Europe's challenges to meet the 2020 deadlines. 32 pages.

Introduction

Without effective MPA implementation, which requires a thorough management plan and substantial investment in activities such as habitat restoration, biodiversity monitoring, and enforcement against illegal activities, the conservation targets set by European nations and international agreements won't be met [5]and the Ocean's health won't be reached.[6]

A clear management plan and innovative and sustainable financial mechanisms are thus essential to support the long-term success of marine protected areas. In this guide, various instruments to finance marine protection have been listed. Many of the global cases found have taken place outside Europe. Still, there are also European examples regarding almost all types of recognised instruments, although not all are specifically linked to MPAs.

The "Guidelines for applying a business approach to the financial management of MARINE PROTECTED AREAS" explores how a business mindset applied to the world of ocean conservation can help MPAs and OECMs become more financially sustainable through the planning and use of mixed financial mechanisms. For those MPAs not having in place a management plan, the "business model template" will help understand most elements needed for the MPA to function. Once this is understood, the compendium of financial mechanisms and the financial tools provided will help fill in the "business plan template" that will act as an action plan to secure funding for the MPA.

This step-by-step guide is designed for self-guided reflection and internal use by MPA managers and planners. It does not involve external assessment or individualised feedback, but rather provides a structured approach to support strategic financial thinking within your team. Ensuring long-term financial sustainability necessitates continuous monitoring and regular updates to the business plan. MPAs must adopt a proactive approach to resource management to maintain the effectiveness of the proposed strategies.

It is good to clarify that this guide does not position conservation as a business — nor should it ever. Instead, it applies business-oriented thinking to help secure funding for ocean conservation, where the only profit pursued is the improved health of marine ecosystems and the services they provide."

While we are aware that securing sustainable funding for MPAs is a multifaceted challenge, we aim through this work to ease the planning and implementation of tools that help enhance the effectiveness of their conservation efforts, ensuring the long-term protection of marine biodiversity and the health of ocean ecosystems.

5. Di Cintio et.al. (2023). Avoiding "Paper Parks": A Global Literature Review on Socioeconomic Factors Underpinning the Effectiveness of Marine Protected Areas. Sustainability, 15(5), 4464.
6. Bohorquez et.al. (2023). A novel framework to evaluate the financial sustainability of marine protected areas. Biological Conservation, Volume 283.

Introduction

Our approach consists of 4 steps:

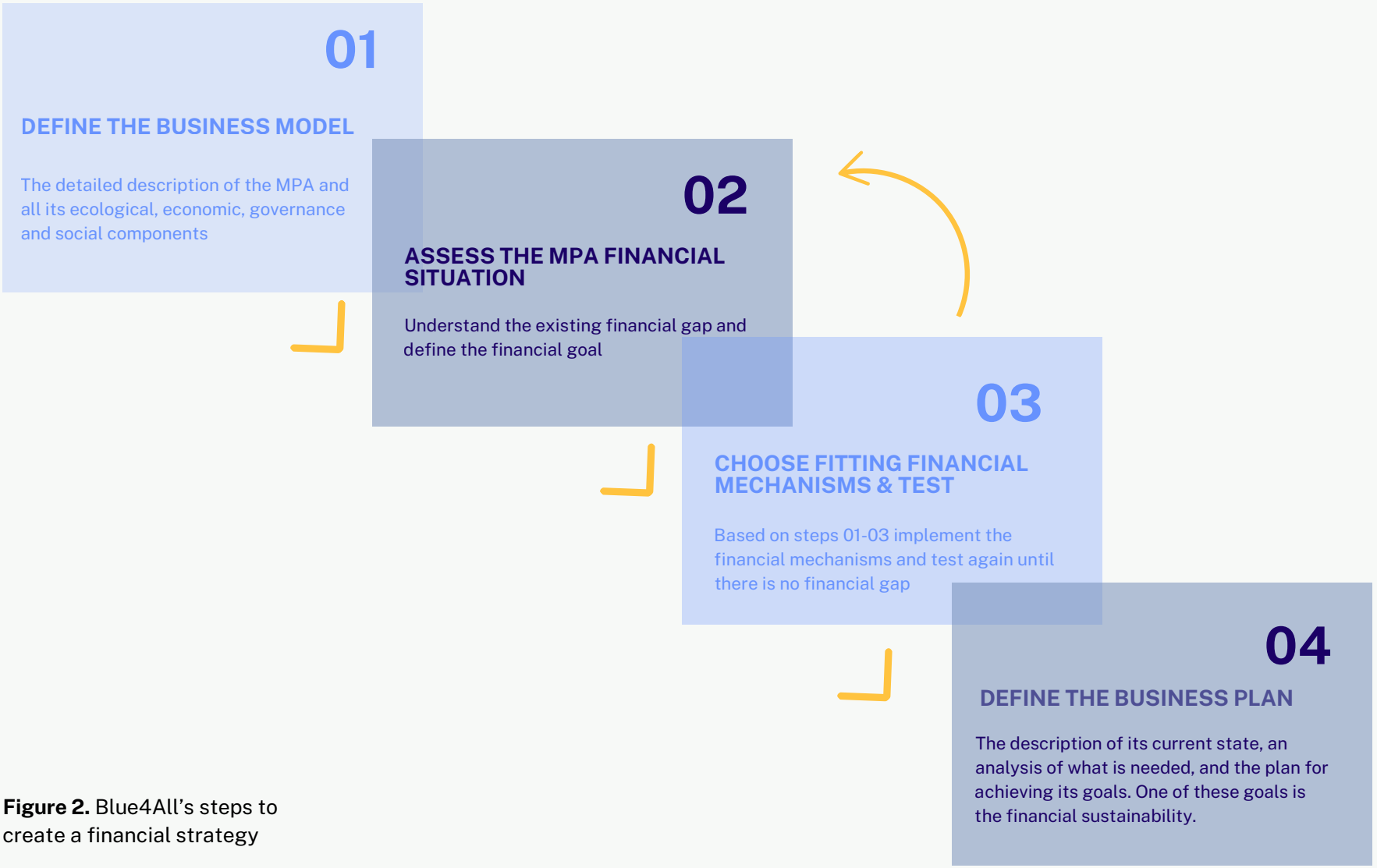


Figure 2. Blue4All's steps to create a financial strategy

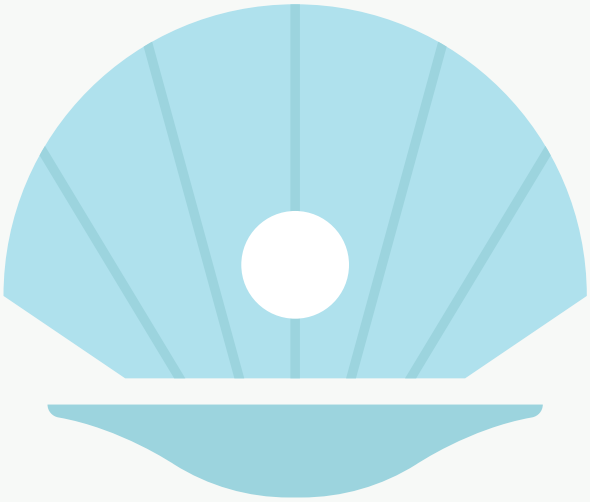
A **business mindset** in **conservation planning**

MPAs and OECMs play a pivotal role in preserving marine biodiversity, ensuring the health of ecosystems, and sustaining the livelihoods of communities that depend on them. However, these areas often face financial challenges due to limited and inconsistent funding. The need for sustainable, long-term financial planning has become more urgent as global environmental threats intensify.

In response to these challenges, applying a business-oriented mindset to ocean conservation offers new opportunities for MPAs and OECMs to achieve financial sustainability. Although **conservation should never be treated as a for-profit venture, we can adopt the strategic thinking of the business world to create financial structures that support the continuous protection and management of marine areas.**

By developing a replicable approach and compiling the existing useful tools out there, MPA and OECM managers can diversify their funding sources, reduce financial vulnerability, and plan for the future. These tools help clarify how an MPA or OECM creates, delivers, and sustains value—not in financial terms alone, but also in terms of ecological and social benefits. A well-structured business plan ensures that financial mechanisms are thoughtfully integrated into conservation strategies, enabling protected areas to secure, allocate, and manage funds effectively.

This section presents a framework for understanding and implementing business and finance models specifically designed for MPA and OECM management. The aim is to provide MPA managers with the tools they need to design financial mechanisms that ensure their operations are financially sustainable, while staying true to their conservation missions. By using this approach, MPAs and OECMs can continue to protect vital marine ecosystems and contribute to the well-being of coastal communities.



Business plan and model in the literature

In the collected literature to review the concepts of business plan and model related to MPAs, both the original meaning of business plan and model, as well as the adapted meaning of taking the business concept for MPA management were used (see pages 06-07).

Peer-reviewed papers that explore the business plan and model related to MPA were rarely found. Sala et al. (2013[7], 2016[8]) mixed-used the terms business plan and model and used their original meaning that develop a business plan and model for certain economic activities that can be operated together with the existing MPA. In these two papers, the idea of a fish bank was proposed, which suggested transferring the role of fishery to shareholders of tourism sectors. Similarly, following their original meaning but establishing concrete business model plans, several peer-reviewed papers explore the business opportunities that are suitable to operate together with the explored MPA. These papers mainly focused on the opportunities in eco-tourism and their potential cooperation with fishery as alternative revenue sources for original fishery activities[9,10,11]. One paper explores the possibility of an ecolabel approach to incentivize sustainable fishing practices and offset the costs of fishing effort displacement can also considered as an alternative business model for fisheries co-existing with MPA. A report from Friend of Ocean Action [12], however, provides an overview analysis regarding the opportunity and risk of business cases that are possible to bring 'win-wins' for marine conservation (OECMs rather than MPA) in different sectors, including offshore wind, offshore aquaculture, marine fisheries, port and harbour, coastal and marine tourism, and oil and gas decommissioning. The report also sketches out the phases, activities and tools needed to create a comprehensive business case for protection and conservation in the form of marine spatial plans.

7. Sala, E., et.al. (2013). A general business model for marine reserves. PLOS ONE, 8(4), e58799.
8. Sala, E., et.al. (2016). Fish banks: An economic model to scale marine conservation. Marine Policy, 73, 154–161.
9. Lara-Pulido, J. A., et.al. (2021). A Business Case for Marine Protected Areas: Economic Valuation of the Reef Attributes of Cozumel Island. Sustainability, 13(8).
10. Cusack, C. et.al. (2021). Marine ecotourism for small pelagics as a source of alternative income-generating activities to fisheries in a tropical community. Biological Conservation, 261, 109242.
11. Rees, S. E., et.al. (2015). The socio-economic effects of a Marine Protected Area on the ecosystem service of leisure and recreation. Marine Policy, 62, 144–152.
12. World Economic Forum. (2019). The business case for marine protection and conservation. 20 pages.

There are also some peer-reviewed papers touching upon business and MPA but not related to the traditional concept or adapted concept of a business approach to MPA management described in this guideline. Rather, they explored how private sectors are involved in the governance of MPA. Khuu et al. (2023)[13] analysis of the challenges and issues of coevolutionary governance of MPA that businesses have been involved, with the case of Vietnam. Bottema et al. (2012)[14] investigated the durability of private sector-led, entrepreneurial marine protected areas (EMPAs) with the case of Indonesia.

Jameson et al., (2002)[15] is the only found peer-reviewed peer that mentioned the business planning approach to MPA management. However, a couple of reports and guidebooks (grey literature) suggest adapting a business model/planning approach to MPA management and guiding how to implement it. Such guidebooks [16, 17, 18, 19, 20] provide a brief explanation of why such a business model and plan is needed (i.e. insufficiency of traditional financial approaches and lack of sustainable financial resources) before they provide detailed instructions on how to establish a business plan. Flores et al. (2008)[21] do not instruct on how to develop a business plan for MPA management but provide the principle of applying such a market-oriented approach and list a small comparison to the traditional approach.

Thus, this "Guidelines for applying a business approach to the financial management of MARINE PROTECTED AREAS" aims at taking the user step by step into the understanding of the business mindset applied to MPAs by explaining each of its components, its meaning in the MPA world and by providing an easy to fill in template, that will go in hand with the use of available tools and a compendium of financial mechanisms that altogether will help achieve financial sustainability.

13. Khuu, D.T., et.al. (2023). Development of Marine Protected Areas (MPAs) in Vietnam from a coevolutionary governance perspective: Challenges of unholy alliances between the state, businesses and NGOs. Environmental Science & Policy, 149, 103560.
14. Bottema, M. J. M., & Bush, S. R. (2012). The durability of private sector-led marine conservation: A case study of two entrepreneurial marine protected areas in Indonesia. Ocean & Coastal Management, 61, 38–48.
15. Jameson, S.C., et.al. (2002). The three screen doors: Can marine "protected" areas be effective?. Marine Pollution Bulletin, 44(11), 1177–1183.
16. MedPAN. (n.d.). Management tool on the sustainable financing of MPAs in the Mediterranean. Retrieved from MedPAN website.
17. Landreau, B. (2012). Guidebook for the development of simplified business plans for protected areas. With contributions from the French Development Agency (AFD) & French Global Environment Fund (GEF).
18. Conservation Finance Alliance. (2002). Business planning for protected areas. In Conservation Finance Guide. Retrieved from CFA website.
19. Emerton et.al. (2018). Developing Protected Area Conservation Investment Plans: Quick Reference Guide and Workbook. Technical Report.
20. Meyers, D. et.al. (2020). Conservation Finance: A Framework. Conservation Finance Alliance. 45 pages.
21. Flores, M., et al., (2008). Financial Planning for National Systems of Protected Areas: Guidelines and Early Lessons. The Nature Conservancy, Arlington, Virginia, US.

A **business mindset** in **conservation planning**

The general difference between a business model and a business plan, and its implications in the MPA world

In the world of business, two terms often emerge as foundational elements: the Business Plan and the Business Model. Both are crucial, yet their roles, purposes, and impacts are distinct, and understanding these differences can mean the difference between the success and failure of an enterprise, or in our case, the MPA.

While we will go in more depth in the chapters to follow, here we present the basic differences between one and the other:

In the business world[22]:

Business Model

It's the foundation upon which a company is built, a reflection of its core identity. It provides an overview of how a company creates, delivers, and captures value.

In the MPA world:

Business Model

It is the foundational framework that outlines how the MPA creates, delivers, and sustains ecological, social, and economic value. It defines the purpose of the MPA, its conservation goals, and the strategies for achieving them.

22. Schlopsna, N. (2023). Business plan vs. business model: What every entrepreneur should know. Retrieved from SpectUp website.

A **business mindset** in **conservation planning**

In the business world[23]**:**

Business Plan

It's the roadmap, detailing the steps a business needs to take to achieve its goals. It delves into the detailed strategies, operations, and financial projections for realizing the model.

In the MPA world:

Business Plan

The strategic roadmap that outlines specific actions, strategies, and financial projections* needed to realize the goals set out in the business model. It delves into the operational aspects of managing the MPA, including resource management plans, enforcement strategies, stakeholder engagement frameworks, and monitoring protocols.

**Financial projections include budgetary requirements, funding sources and financial sustainability measures.*

Summarising, while the business model outlines the strategic blueprint for how the MPA will create, deliver, and capture value, the business plan details the specific steps and resources necessary to execute and achieve the goals set forth by the business model.

23. Idem

A **business mindset** in **conservation planning**

Having clarified the difference between a business model and a business plan, we now turn to two key elements of the business model's financial component — the main focus of this guide: financial tools and financial mechanisms.

Financial Tools: Financial tools are instruments that support the design and implementation of financial strategies for MPAs. These may include guidelines, Excel models, or web-based platforms. They help assess financial needs, identify funding gaps, test financing options, and structure long-term plans.

This guide works in close synergy with the Blue4All MPA Finance Planner, an Excel-based tool developed by the Blue4All project (further explained in Annex I). Building on the MedPLAN Tool and the framework by Bohorquez *et.al.* (2022), it helps MPA managers evaluate financial health, calculate funding gaps, select financing mechanisms, and build a tailored financial strategy. When you see the Excel symbol, it indicates that this section of the guidebook and and the MPA Finance Planner intersect and complement each other.

Financial Mechanisms: Financial mechanisms go beyond identifying a funding source — they describe how funds are mobilized, transferred, and managed. As defined by Bohorquez et al. (2022), a mechanism combines the origin of financing with the instruments and processes that make it accessible and functional for an MPA.
This guide includes a detailed overview of financial mechanisms relevant to the European context, offering MPA managers a wide range of options — both traditional and innovative — to match their specific needs and conditions.

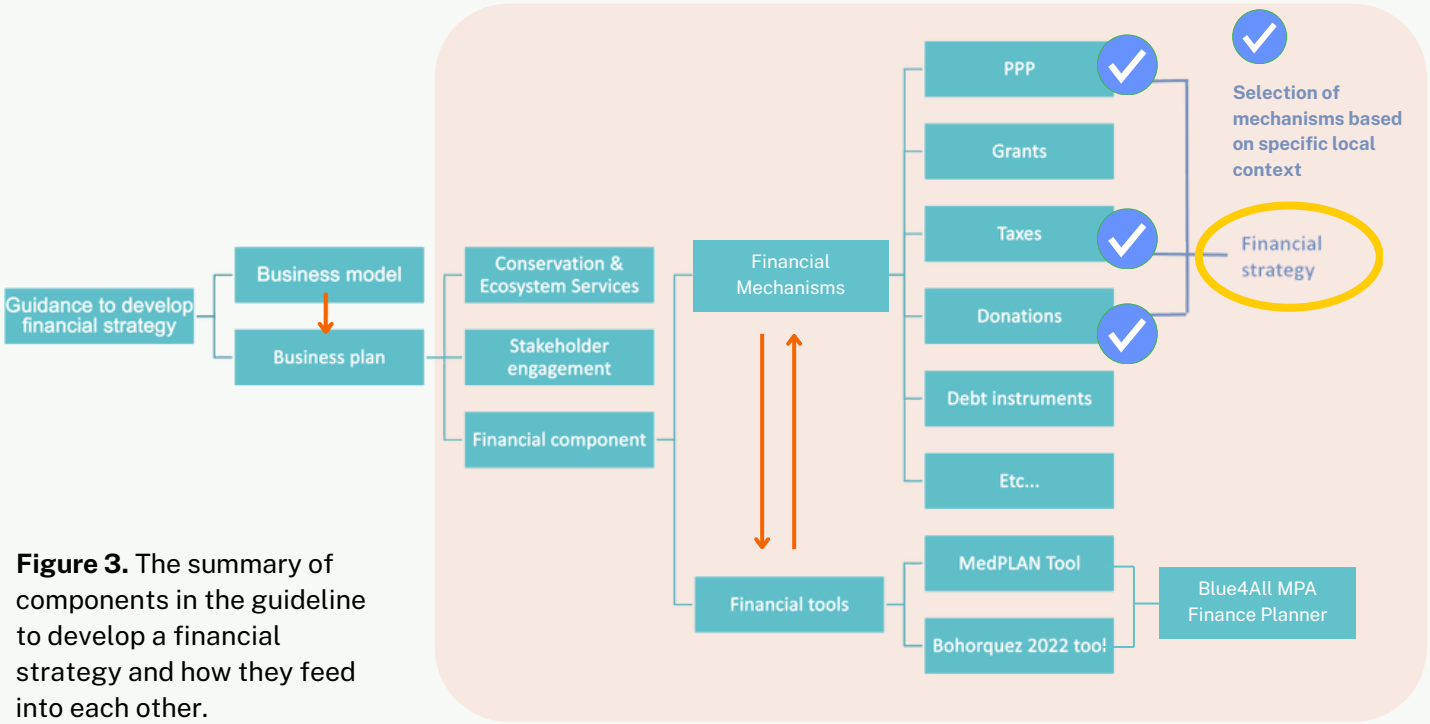
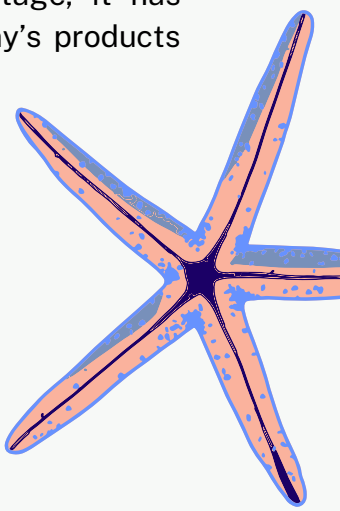


Figure 3. The summary of components in the guideline to develop a financial strategy and how they feed into each other.

Business model components & template

As seen in the previous chapter, a business model is a structure that a company uses to generate profits and build value. It outlines how business leaders operate a company and deliver products and services to customers. The firm's model is its positioning within the value chain of its industry and the organizational structure of its relationships with partners, clients and suppliers. Some of the basic elements of a business model are the following [24]:

1. **Basic business concept:** This is a brief summary of the company's basic purpose. It may regard factors like its average consumer, the product or service, the benefit the product or service can offer the consumer and the method of delivery for products and services.
2. **Benefits provided:** A business model usually contains an estimate of the tangible benefits that the product or service can offer customers.
3. **Value chain position:** The value chain position refers to the company's role in the supply chain or the process that gets products and services to the consumer.
4. **Cost drivers and revenue sources:** This aspect of a business model identifies which activities cost money and which activities are sources of revenue.
5. **Competitive advantage:** When a company has a competitive advantage, it has distinguished itself from competitors. Consumers perceive the company's products and services as superior to others.



When adapting the business model components to Marine Protected Areas, **the goal shifts from profit generation to sustaining ecological and social value, as well as ensuring the long-term viability of the protected area.**

Below we will dissect each of the components to see how they might look for MPAs, leaving a space for the user of the guide to start filling in such information for their MPA.

24. *Indeed Editorial Team. (2024). Business model vs. business plan: What's the difference?. Retrieved from Indeed website.*

1. Basic concept (purpose and mission)

For MPAs, the basic concept focuses on the core mission of the area, which is usually conservation and the sustainable use of marine resources. It would include:

- **Primary goal**: For example, protect biodiversity, preserve ecosystems, and ensure sustainable use of marine resources.
- **Beneficiaries**: For example, local communities, fishers, tourists, researchers, and global stakeholders benefiting from conservation efforts.
- **Main services:** The ecosystem, cultural and social services the MPA provides. For example, ecosystem preservation, eco-tourism, research opportunities.

BASIC CONCEPT

What is the primary goal of the MPA?

Examples: Conserve Biodiversity; Manage resources sustainably; Protect coral reefs from bleaching; Establish sustainable fishing practices.; Support community-led eco-tourism projects.

Main Beneficiaries: Who benefits from the MPA and why?

E.g. Local communities through the concessions, tourists through the eco-tourism experiences, and researchers as they can access the strictly protected areas for research purposes.

- ☐ Local communities _____
- ☐ Researchers _____
- ☐ Tourists _____
- ☐ Local schools _____

- [ ] Fishers _____
- [ ] Tourist operators _____
- [ ] Local authorities _____
- [ ] Local businesses _____
- [ ] Other _____

Core services provided: What services does the MPA offer?
E.g. Mangrove restoration, coastal protection, marine research facilities and data sharing, etc.

2 & 3. Benefits and Value Chain Position (process to deliver value):

It usually refers to the process that gets services to the user. **In the context of Marine Protected Areas, the value chain proposition refers to the systematic process of creating, delivering, and sustaining ecological, social, and economic benefits through effective conservation and resource management.** Unlike traditional business value chains, where the focus is on maximizing financial profit, the value chain for MPAs prioritizes ecological health, community well-being, and sustainable use of marine resources while ensuring financial sustainability for ongoing management.

The components of the value chain are normally divided into two categories — primary (directly involved in producing or selling a product and meeting external demands) and secondary or support activities that affect how efficiently the primary activities operate.

Business model components & template

The components of a value chain proposition applied to the MPA world would be:

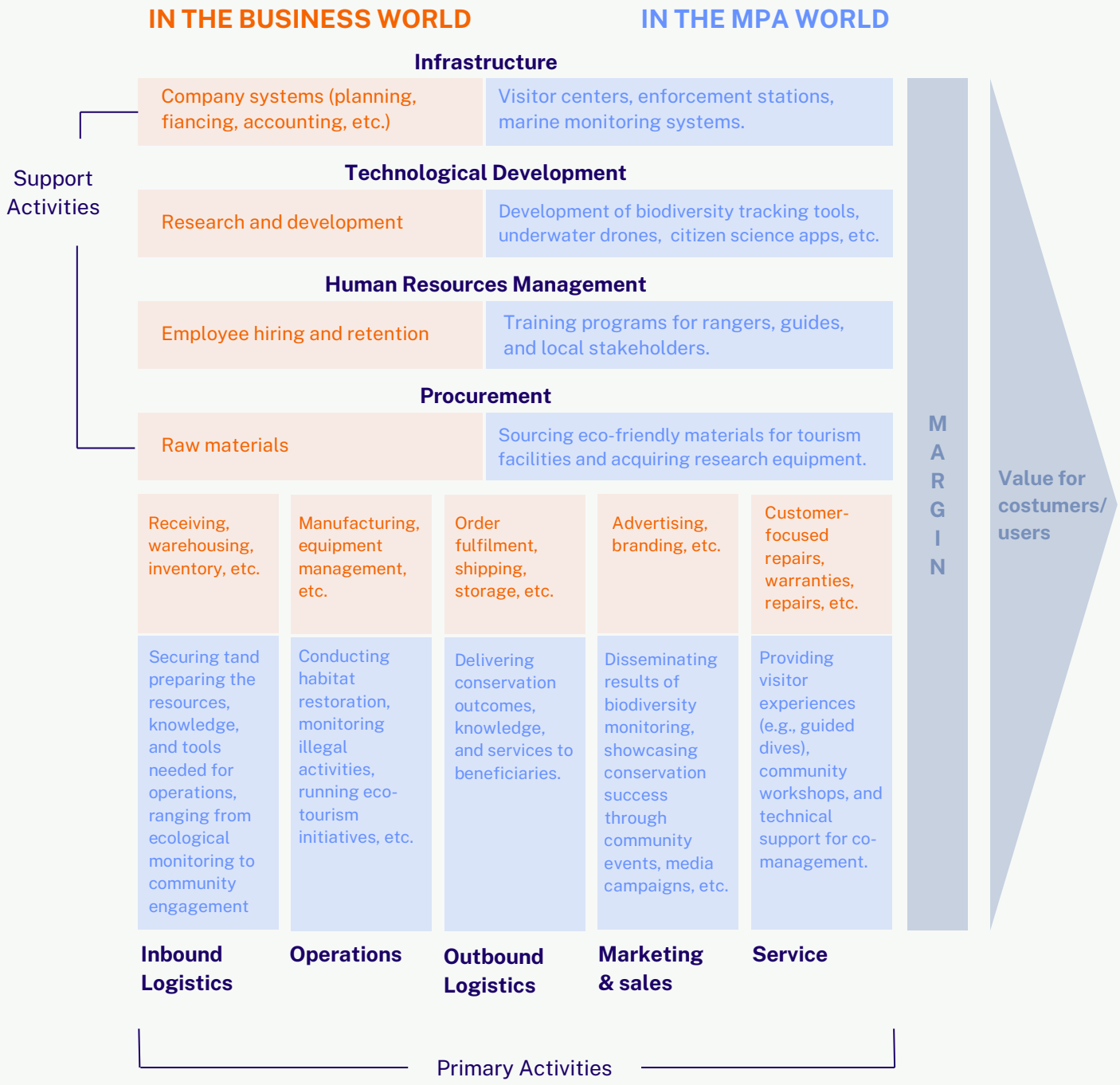


Figure 3. Blue4All's translation of the traditional value chain components from the business world to the MPA world.

BENEFITS PROVIDED - DEFINING VALUE

Before defining the value chain components, it is important we firstly understand all those tangible and intangible social and ecological benefits of our MPA.

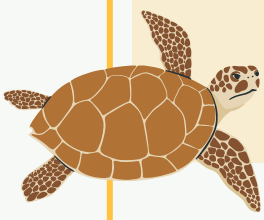
ECOLOGICAL VALUE

What ecological benefits does the MPA provide?

Examples: Protecting biodiversity, restoring habitats, enhancing climate resilience.

Key ecosystems or species being protected:

Examples: Coral reefs, mangroves, seagrasses, endangered marine species.



How does the MPA contribute to regional/global conservation goals?

Examples: Achieving UN Sustainable Development Goals (SDG 14), contributing to 30x30 targets.

SOCIAL VALUE

What social benefits does the MPA provide to communities?
Examples: Supporting sustainable livelihoods, preserving cultural heritage, promoting education.

Who are the primary beneficiaries of these social benefits?
Examples: Local fishers, eco-tourism operators, schools, community members.

What initiatives promote community engagement and inclusion?
Examples: Co-management systems, stakeholder workshops, citizen science programs.

VALUE CHAIN PROPOSITION - COMPONENTS

Before defining its components, it is important we firstly understand the value of our MPA.

SUPPORT ACTIVITIES

Infrastructure

What physical or organisational structures are needed to support the MPA?

Examples: Visitor centers, patrolling stations, monitoring systems.

Technology Development

What technologies are necessary for conservation and management?

Examples: GIS tools, biodiversity monitoring software, citizen science apps.

Human Resources Management

What workforce and skills are required? and what systems are in place to retain them?

Examples: Rangers, educators, researchers, community liaison officers; and park management training, guides, budget for conferences, etc.

VALUE CHAIN PROPOSITION - COMPONENTS

Before defining its components, it is important we firstly understand the value of our MPA.

Procurement

What resources and materials need to be sourced for operations?

Examples: Patrol boats, coral fragments, mangrove saplings, drones for aerial surveillance, acoustic monitoring equipment to track marine mammal movements, solar panels or wind turbines to power remote monitoring stations, buoys for mooring, uniforms and safety gear for rangers and volunteers, digital platforms or tools for crowdfunding and public engagement, tablets or smartphones for field data collection, etc.

PRIMARY ACTIVITIES

Inbound logistics

What inputs are needed to enable the MPA's operations?

Examples: Data from scientific studies, equipment for restoration projects, stakeholder contributions, etc.

Operations

What core conservation activities does the MPA perform?

Examples: Habitat restoration, biodiversity monitoring, surveillance for illegal activities, educational programmes, etc.

Outbound logistics

How are the MPA's benefits delivered to stakeholders?

Examples: Disseminating research findings, hosting eco-tourism activities, providing ecosystem services, concessions for eco-touristic activities, etc.

Marketing and sales

How is the MPA's value communicated to stakeholders and beneficiaries?

Examples: Running awareness campaigns, securing corporate sponsorships.

Service

What ongoing support or benefits are provided to stakeholders?

Examples: Training programs, interactive centres, community engagement workshops, maintenance of visitor facilities.

4. Cost Drivers and Revenue Sources (Financial and Resource Flows)

To ensure long-term success, it is essential to understand the financial dynamics that support MPA management. This includes identifying **Cost Drivers** — the key expenses associated with maintaining and operating the MPA — and **Revenue Sources** — the diverse streams of income that sustain these activities.

Although this will be filled in with numbers in the financial tool to be used, here we can already start thinking and identifyinf all those costs and sources of income we know the MPA has.

COST DRIVERS

*Complemented by **STEP 1** Blue4All MPA FINANCE PLANNER*

XLS

Reocurring Costs

What are the major reocurring costs for MPA management?

Tick those applicable to your MPA

1. Human Resources

☐	Salaries for permanent staff (e.g. director, financial officer)
☐	Salaries for short term and seasonal staff (e.g. tourist guides, visitor center staff)
☐	Volunteer training and support
☐	Staff development (e.g. training, conferences)
☐	Other:

2. Infrastructure Maintenance

☐	Buildings (repairs, utilities, upgrades)
☐	Vehicle and vessle maintenance and fuel
☐	Equipment Maintenance (e.g. Buoys, Monitoring Equipment)
☐	Trails and boardwalks for eco-tourism
☐	Waste management systems (e.g., trash collection, recycling facilities)
☐	Renewable energy systems (e.g., solar panels)
☐	Other:

3. Utilities costs

☐	Waste management systems (e.g., trash collection, recycling facilities)
☐	Utilities (e.g. internet, electricity)
☐	Other:

4. Basic Equipment

☐	Uniforms
☐	Office Supplies
☐	Basic Field Equipment
☐	Other:

Investment Costs

What are the major investment costs for MPA management?

Tick those applicable to your MPA

1. Material Resources - Equipment Purchase

☐	Vehicles and Vessles
☐	Computers
☐	Communication tools (e.g. radios, satellite phones, etc)
☐	Monitoring Equipment (e.g. drones, ROV)
☐	Other:

2. Material Resources - Infrastructure Purchase

☐	Office
☐	Visitor Centre
☐	Signage
☐	Other:

3. Scientific Research and Studies

☐	Fish Stock Assessment
☐	Habitat and Biodiversity Mapping
☐	Tourism Strategy Development
☐	Other:

4. Education, Outreach and Capacity Building

☐	Campaigns to raise awareness of the MPA's value
☐	Production of promotional educational materials (e.g., flyers, videos, merchandise)
☐	Stakeholder Training and Local Community Capacity Building Workshops
☐	Organisation of events (e.g., eco-festivals, clean-up days)
☐	Co-Management Initiatives
☐	Other:

5. Ecosystem restoration and compensatory actions

☐	Ecosystem restoration activities (e.g. seegrass, kelp forest, oyster reef)
☐	Compensation activities
☐	Removal of marine litter and ghost gear
☐	Other:

6. Other

☐	Contingency funds for emergencies (e.g., natural disasters, equipment failure)
☐	Membership fees for regional or international networks
☐	Financial audits and reporting
☐	Other:

REVENUE STREAMS

*Complemented by **STEP 2** Blue4All MPA FINANCE PLANNER*

Select those financing mechanisms you CURRENTLY use as a source for funding. You can find a description of the different financing mechanisms in this guide (from page 57 onwards).

1. Donations and Philanthropy

☐	**Philanthropic Grants:** Support from foundations, NGOs, and individual donors.
☐	**Private Voluntary Donations**: Contributions from individuals or organisations.
☐	**Crowdfunding:** Online campaigns to fund specific projects (e.g., coral reef restoration).
☐	Other:

2. Public and Government Support

☐	**Annual Government Budget Allocation /Tax Revenue:** Government funding for MPA management.
☐	**Environmental Levies:** Specific taxes or fees from industries (e.g., shipping, tourism) that impact marine ecosystems, with funds allocated to MPAs.
☐	**Subsidies and Tax Breaks:** Incentives for blue carbon projects or eco-friendly activities.
☐	**Environmental Penalties and Fines:** Revenue from enforcement actions against illegal activities.
☐	**EU-Funded projects:** Being part of consortia of EU-funded projects involving MPAs in Europe
☐	**Foreign Conservation Finance:** Wealthier nations funding MPAs in developing countries as part of global biodiversity targets.
☐	Other:

3. Market-based mechanisms

☐	**Payments for Ecosystem Services (PES):** It involves payments from beneficiaries to those who maintain or restore ecosystem services (e.g., water quality, biodiversity conservation, coastal resilience, etc.)
☐	**Blue Carbon Credits:** The most common type of PES. A market-based mechanism aimed at monetising carbon sequestration in marine ecosystems, directly linking conservation to climate mitigation efforts.
☐	**Blue Bonds:** Investment tools tied to ecological outcomes.
☐	**Habitat Banking:** Selling credits to offset environmental impacts elsewhere.
☐	**Loans**: Financial instruments where funds are borrowed and repaid with interest.
☐	**Debt-for-Nature Swaps:** Debt forgiveness in exchange for conservation commitments.

4. Corporate Partnerships and Sponsorships

☐	**Corporate Sponsorships:** Businesses funding conservation projects in exchange for branding opportunities.
☐	**Public-Private Partnerships (PPPs):** Collaborative ventures for tourism, infrastructure, or restoration.
☐	**Eco-Certification Programs:** Fees from certifying businesses for sustainable practices.
☐	Other:

5. Tourism and Recreation-Linked Revenue

☐	**User Fees:** Entrance fees or permits for recreational activities
☐	**Concession Agreements and Revenue Sharing:** Partnering with private operators for tourism services.
☐	**Eco-Tourism Packages:** High-end experiences tied to conservation (e.g., "adopt-a-coral" programs).
☐	**Virtual Access Fees:** Revenue from virtual tours and digital experiences.
☐	Other:

6. Conservation-specific funds

☐	**Conservation Trust Funds:** Long-term funding pools created through donations or grants, generating revenue through investments.
☐	**Endowment Funds:** Perpetual income-generating funds for MPA activities by preserving the principal fund and using only the investment returns.
☐	**Sinking Funds:** Fixed-purpose funds for time-limited projects, with the fund being fully expended by the end of the project.
☐	**Revolving Funds:** Self-sustaining financial mechanisms that are continuously replenished through income generated by conservation-related activities, or ongoing fees, providing ongoing support for conservation efforts.
☐	Other:

7. Risk Financing and Insurance

☐	**Catastrophe Bonds**: Bonds that pay out in the event of disasters (e.g., coral bleaching, hurricanes).
☐	**Risk Pools:** Shared financial resources among MPAs for emergencies.
☐	**Parametric insurance:** Insurance that covers the probability (or likelihood) of a loss-causing event happening (like an hurricane) instead of indemnifying the actual loss incurred from the event.
☐	**Climate Risk Insurance:** Insurance for climate change-related events,
☐	Other:

8. Licensing and Sustainable Use

☐	**Extractive Licenses and Permits:** Fees for sustainable fishing or other extractive activities. It could be for example, rotational or exclusive fishing rights: Licenses for seasonal or restricted access to premium fishing areas.
☐	**Non-Extractive Licenses and Permits:** Authorisations granted to individuals, organizations, or businesses for activities within the MPA that do not involve the removal of natural resources. These could be both single use permits or long term agreements
☐	**Sustainable Seafood Branding:** Premium revenue from eco-certified seafood products.
☐	Other:

9. Community and Social Mechanisms

☐	**Volunteering:** In-kind support from local communities.
☐	**Community Membership Fees or Contributions:** Membership fees from local individuals or groups who want to support the MPA and in exchange receive benefits like discounted access to MPA activities, recognition in community events, or participation in decision-making processes.
☐	**Donations from Local Events or Festivals:** Events like seafood festivals, beach clean-ups, or cultural celebrations that could include a donation element to support the MPA.
☐	**Cultural and Heritage-Based Contributions:** Local communities charge fees for cultural performances, storytelling, or guided heritage tours.
☐	Other:

10. Research, Education, and Innovation

☐	**Training and Certification Programs:** Revenue from marine conservation, MPA management, or other courses or certifications.
☐	**Blockchain-Based Conservation Tokens:** Blockchain technology is used to create and trade digital tokens that represent contributions to conservation projects. Each token corresponds to a measurable conservation activity or outcome, such as protecting a specific oyster reef area, sequestering carbon, or restoring seagrass.
☐	**Educational Partnerships and Virtual Programs:** Collaborating with schools, universities, or online platforms to offer virtual tours, lessons, or immersive experiences related to the MPA.
☐	Other:

5. Competitive advantage (Unique value proposition of the MPA)

The competitive advantage of a MPA refers to its unique attributes and its advantages that make the MPA indispensable for conservation, attract funding and support, and ensure long-term ecological, social, and economic sustainability. Competitive advantages can arise from the MPA's ecological uniqueness, innovative stakeholder engagement strategies, or exceptional tourism appeal, among other factors.

COMPETITIVE ADVANTAGE

1. ECOLOGICAL UNIQUENESS

What are the MPA's distinct ecological features?

Examples: Rare marine species, biodiversity hotspots, critical habitats, etc.

Why is this ecological uniqueness significant?

Examples: Global importance for biodiversity conservation, key role in mitigating climate change.

2. STAKEHOLDER ENGAGEMENT

What innovative strategies does the MPA use to engage stakeholders?

Examples: Co-management with local communities, citizen science programs, educational trainings, etc..

What are the tangible outcomes of this engagement?

Examples: Improved compliance, reduced conflict, enhanced local livelihoods.

3. TOURISM APPEAL

What makes the MPA attractive for tourism?

Examples: Pristine ecosystems, unique diving or snorkeling experiences, iconic or endemic marine species, etc.

4. SCIENTIFIC IMPORTANCE

What unique research opportunities does the MPA offer?

Examples: Access to understudied ecosystems, long-term ecological monitoring, etc.

What is the MPA's significance in global or regional conservation science?
Examples: Contributions to addressing climate change, biodiversity loss.

5. POLICY AND GOVERNANCE INNOVATION

What innovative policies or governance models are implemented in the MPA?
Examples: Co-management agreements, voluntary conservation programs.

6. CULTURAL AND HISTORIC SIGNIFICANCE

What cultural or historical features make the MPA unique?
Examples: Sacred sites, historical shipwrecks, traditional fishing grounds.

7. ECONOMIC CONTRIBUTIONS

How does the MPA contribute to local or regional economies?
Examples: Job creation, tourism revenue, etc.

4 Business plan components & template

Now that we have defined the business model for our MPA, it is time we focus on the actionable roadmap, our **business plan**, that **will allow us to implement the strategic framework outlined in the business model**. While a business model describes the value proposition, key activities, and financial mechanisms of an organisation or project, the business plan specifies how these elements will be operationalised, measured, and sustained over time. The business plan **will thus, serve as a practical tool to guide management, stakeholder engagement, and financial planning**[25]. It translates strategic ideas into concrete actions, timelines, and measurable outcomes, ensuring the MPA's long-term success and sustainability. Furthermore, this section can be delivered to potential donors to detail the plan of the MPA in terms of financial, environmental and social management and goals.

Adapting the components of a business plan into the MPA world would look like:

1. **Executive Summary**
2. **Mission and Vision Statement**
3. **MPA Basic Information**
4. **Management Credentials and Governance**
5. **Conservation Priorities and Ecosystem Services**
6. **Stakeholder Engagement and Communication Strategy (Marketing Plan)**
7. **Financial Plan and Sustainability**
8. Monitoring and Evaluation Framework (optional but recommended)
9. Risk Assessment and Mitigation Strategies (optional but recommended)

25. Indeed Editorial Team. (2024). Business model vs. business plan: What's the difference?. Retrieved from Indeed website.

1. Executive summary

The executive summary is only to be developed if the business model is not shared as it gives a quick overview of the MPA status in a nutshell. It should be a brief overview of the MPA's purpose, ecological importance, and the plan for achieving long-term conservation success and sustainable resource management. The key points could include the MPA's mission, current challenges, funding needs, and strategies for stakeholder engagement and community benefit.

EXECUTIVE SUMMARY

MPA NAME: _____

Purpose

Briefly describe the MPA's mission and overarching conservation goals.

Ecological Importance

Highlight key habitats, species, or ecosystem services that make the MPA significant.

Key challenges

What are the primary threats or issues the MPA faces?

Funding Need and Current Strategies

Summarise financial requirements and key revenue strategies.

Stakeholder Engagement and Community Benefits

How does the MPA involve stakeholders and support local communities?

2. Mission and Vision Statement

The Mission and Vision of a MPA articulate its core purpose and long-term aspirations. The mission reflects the MPA's immediate goals and guiding principles, such as conserving marine biodiversity, ensuring sustainable resource use, or supporting local communities. The vision complements this by outlining an inspiring future state, emphasizing what the MPA seeks to achieve over the long term. Together, the mission and vision provide a clear, unified direction for stakeholders, fostering alignment and commitment to the MPA's objectives.

MISSION AND VISION

Mission Statement

Define the core philosophy and long-term aspirations of the MPA. For example: "To conserve and protect marine biodiversity while promoting sustainable livelihoods for local communities".

Vision Statement

Define the long-term goal or the ideal state of the MPA. Example: "A thriving marine ecosystem that supports biodiversity, local livelihoods, and global conservation goals."

3. MPA Basic Information

This is to provide essential details about the MPA's background to those who read the business plan without having much context. However, it also helps the manager reflect on the legal framework and historical context, which are elements that will help us pick in the next chapter the financial mechanisms that suit the MPA best according to such context.

MPA BASIC INFORMATION

Location

Name of place/region, country and the specific geographic coordinates.

- *Region and Country:* _____
- *Geographical Coordinates:*
  - *Latitude:* _____
  - *Longitude:* _____

Date of establishment

Legal framework

What laws or agreements govern the MPA?

Historical context

Why was the MPA established, and what has happened since its creation?

4. Management Credentials and Governance

Effective management and governance are the backbone of a successful MPA. This section highlights the expertise, leadership, and collaborative structures that guide the MPA's operations. Strong credentials in marine science, conservation, and sustainable development ensure informed decision-making, while innovative governance models, such as co-management with local communities or partnerships with NGOs, foster inclusivity and accountability. By showcasing the management team's qualifications and the governance structure's effectiveness, this section underscores the MPA's capacity to achieve its conservation and sustainability goals.

MANAGEMENT CREDENTIALS AND GOVERNANCE

Management Team

Who manages the MPA, and what are their qualifications?

Governing Body or Co-Management Structure

Describe the organization or group responsible for governance and the different roles within them.

Key Partnerships

Highlight collaborations with scientists, NGOs, businesses, or local stakeholders.

Innovative Governance Practices (optional)

What unique approaches (e.g., participatory governance) are used?

5. Conservation Priorities and Ecosystem Services

This section should outline the MPA's conservation priorities, focusing on the habitats, species, and ecological processes it aims to protect. It should also highlight the ecosystem services the MPA provides such as supporting sustainable fisheries, enhancing tourism opportunities, mitigating climate change through carbon sequestration, and/or fostering educational and research initiatives. By detailing these priorities and services, this section should demonstrate the MPA's vital role in ecological preservation and socio-economic development.

CONSERVATION PRIORITIES & ECOSYSTEM SERVICES

CONSERVATION PRIORITIES

Specific Conservation Activities

What actions will be taken to protect key habitats and species? Example: Establishing no-take zones, coral transplantation, mangrove reforestation, etc.

Implementation Timeline

What is the schedule for conservation priorities? Example: Habitat restoration completed by 2025, biodiversity surveys conducted annually.

Stakeholder Roles

How will stakeholders contribute to these priorities? Example: Local fishers participate in enforcement patrols, NGOs lead restoration projects, etc.

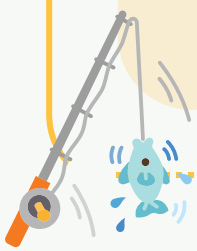
LEVERAGING ECOSYSTEM SERVICES

Operational Integration

How are ecosystem services being utilised in the MPA's operations? Example: Sustainable tourism generating revenue, carbon sequestration supporting funding through blue carbon credits.

Connection to Revenue Streams

Which ecosystem services are directly linked to funding strategies?
Example: Fishing licenses tied to sustainable fisheries, research fees for biodiversity monitoring.



MEASURING SUCCESS

Monitoring Indicators

What specific metrics will track the effectiveness of conservation activities and ecosystem service utilisation? Example: Percentage increase in fish biomass, tourism revenue trends, annual carbon offset metrics.

CHALLENGES AND MITIGATION

Potential Challenges

What obstacles could arise in implementing conservation priorities or leveraging ecosystem services? Example: Over-tourism impacting habitat, limited enforcement capacity.

Mitigation Strategies

What solutions will address these challenges? Example: Capacity-building programs for enforcement teams, seasonal tourism regulations, etc.

6. Stakeholder Engagement and Communication Strategy (Marketing Plan)

This section focuses on how the MPA will build meaningful relationships with key stakeholders, including local communities, tourists, businesses, researchers, and policymakers. It outlines strategies for fostering collaboration, promoting the MPA's value, and ensuring active participation in conservation efforts. The communication strategy (or marketing plan) emphasizes ways to raise awareness, attract eco-conscious visitors, and strengthen support through targeted campaigns and outreach programs. By prioritising engagement and communication, the MPA can align stakeholder interests with its conservation objectives and secure the long-term support necessary for sustainability.

STAKEHOLDER ENGAGEMENT & COMMUNICATION STRATEGY

STAKEHOLDER IDENTIFICATION AND ROLES

Key Stakeholders, Roles and Responsibilities

List and categorize stakeholders and define each stakeholder group's role in supporting the MPA. Example:

- *Local communities: Co-management and enforcement support.*
- *Tourism operators: Promote eco-tourism and adhere to sustainable practices.*
- *Researchers: Conduct biodiversity monitoring and share findings.*

ENGAGEMENT STRATEGIES

Community Engagement

How will the MPA engage local communities to ensure their involvement and buy-in? Example: Stakeholder workshops, participatory governance models, capacity-building programs.

Private Sector Partnerships

What strategies will engage businesses (e.g., tourism operators, fishers) in sustainable practices? Example: Eco-certification programs, revenue-sharing agreements, joint marketing campaigns.

Academic and Scientific Collaboration

How will the MPA foster partnerships with researchers and institutions? Example: Research access programs, co-publishing scientific studies, citizen science initiatives.

COMMUNICATION STRATEGY

Key Messages

What are the core messages the MPA wants to communicate to each stakeholder group? Example: For tourists "explore responsibly and help preserve biodiversity", for communities "together, we can ensure sustainable livelihoods", etc.

Communication Channels

What platforms or tools will the MPA use to reach stakeholders? Example: Social media, newsletters, local radio, workshops, and tourism brochures.

Promotional Campaigns

Any planned campaigns to raise awareness or attract support? Example: "Discover Our Oyster Reefs" campaign to promote sustainable tourism

MONITORING AND MEASURING SUCCESS

Engagement Metrics

How will the MPA track the success of its stakeholder engagement strategies? Example: Number of community members participating in workshops, increase in tourism revenue.

Communication Metrics

How will the MPA measure the effectiveness of its communication efforts? Example: Social media engagement, survey feedback from visitors, outreach campaign reach.

7. Financial Plan and Sustainability

The financial plan is the backbone of the MPA's business plan, ensuring its conservation goals and operational activities are supported by sustainable and diversified funding. Unlike traditional profit-driven financial plans, this section emphasizes financial sustainability, focusing on current funding sources, projected needs, and long-term strategies. By detailing revenue generation opportunities and strategic funding allocation, the financial plan demonstrates how the MPA will balance conservation priorities with economic viability, ensuring resilience against financial challenges.

Note: You could keep coming back to filling in this section of the template after going over Sections 5-7

FINANCIAL PLAN AND SUSTAINABILITY

*Complemented by **STEP 1-3** Blue4All MPA FINANCE PLANNER*

XLS

FUNDING GAPS

** Fill this in after using the tools provided in section 07 and STEP 1, 2 and 3 of the Blue4All MPA Finance Planner*

Current Financial State

What percentage of the MPA's financial needs is currently met?

Funding Gap

How much more funding is needed to achieve sustainability?

DETAILED ALLOCATION OF FUNDS

Categories and Allocations

Break down funds into actionable categories

Category	Annual Budget (€)	Current Funding (€)	Gap (€)
Enforcement and Monitoring			
Administration			
Infrastructure			
Education and Outreach			

Complemented by **STEP 4-7** Blue4All MPA FINANCE PLANNER

XLS

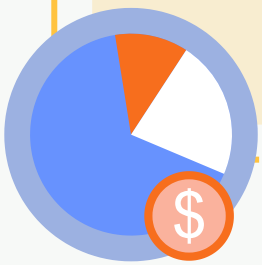
REVENUE DEVELOPMENT PLAN

New Revenue Streams

Identify specific, actionable ways to generate additional income. Example: Launch a guided diving program projected to bring in €30,000/year.

Sustainability Milestones

Set measurable financial goals. Example: Achieve 60% funding from self-generated income by 2030.



RISK MANAGEMENT AND CONTINGENCY PLANS

Key Financial Risks

Identify risks to financial stability (e.g., tourism dependency)

Mitigation Strategies

What plans are in place to handle these risks?

8. Monitoring and Evaluation Framework (optional but recommended)

A well-defined Monitoring and Evaluation framework is essential for tracking the progress as it ensures accountability, transparency, and adaptive management by providing measurable indicators and systematic methods for data collection. Through regular evaluations, the MPA can assess its impact on conservation, social, and financial objectives, identify areas for improvement, and adjust strategies to achieve long-term sustainability. This section outlines the tools, timelines, and metrics needed to monitor success effectively and communicate progress to stakeholders.

MONITORING AND EVALUATION FRAMEWORK

CONSERVATION				
		1	2	3
OBJECTIVES	*E.g. Conserve endangered species*			
INDICATORS	*E.g. # of nests or individuals observed*			
DATA COLLECTION METHODS	*E.g. Wildlife surveys, camera traps*			
EVALUATION TIMELINE	*E.g. Annually*			
ADAPTIVE ACTIONS	*E.g. Adapt protection measures as needed*			

CONSERVATION				
	4	5	6	7
OBJECTIVES				
INDICATORS				
DATA COLLECTION METHODS				
EVALUATION TIMELINE				
ADAPTIVE ACTIONS				

SOCIAL				
		1	2	3
OBJECTIVES	*E.g. Increase visitor satisfaction*			
INDICATORS	*E.g. Average visitor satisfaction score*			
DATA COLLECTION METHODS	*E.g. Visitor feedback forms*			
EVALUATION TIMELINE	*E.g. Quarterly*			
ADAPTIVE ACTIONS	*E.g. Improve eco-tourism facilities and services*			

SOCIAL				
	4	5	6	7
OBJECTIVES				
INDICATORS				
DATA COLLECTION METHODS				
EVALUATION TIMELINE				
ADAPTIVE ACTIONS				

FINANCIAL				
		1	2	3
OBJECTIVES	*E.g. Achieve financial sustainability*			
INDICATORS	*E.g. % of revenue from self-generated sources*			
DATA COLLECTION METHODS	*E.g. Financial audits, revenue tracking*			
EVALUATION TIMELINE	*E.g. Annually*			
ADAPTIVE ACTIONS	*E.g. Diversify revenue streams, target new partnerships*			

FINANCIAL				
	4	5	6	7
OBJECTIVES				
INDICATORS				
DATA COLLECTION METHODS				
EVALUATION TIMELINE				
ADAPTIVE ACTIONS				

9. Risk Assessment and Mitigation Strategies (optional but recommended)

While we already identified in subsection 7 the risks and mitigation strategies for the financial part, here we will focus on identifying those for the potential environmental and operational risks that could impact the MPA's success. Effective risk management ensures resilience against challenges, from climate change and natural disasters to financial instability and stakeholder conflicts. By incorporating contingency plans, the MPA can prepare for emergencies and sustain its conservation and operational goals.

ENVIRONMENTAL RISKS	**KEY RISKS** *List specific environmental challenges.*	**MITIGATION STRATEGIES** *What actions will address these risks?*
	E.g. Habitat degradation	*E.g. Habitat restoration*
1		
2		
3		
4		
5		
...		

OPERATIONAL RISKS	**KEY RISKS** *Identify risks related to governance, enforcement, and stakeholder engagement.*	**MITIGATION STRATEGIES** *What actions will address these risks?*
	E.g. Insufficient patrolling capacity	*E.g. Capacity-building programs*
1		
2		
3		
4		
5		
...		

INTEGRATED CONTINGENCY PLANNING	**EMERGENCY SCENARIOS** *What specific emergencies might arise?*	**RESPONSE PLANS** *Detail comprehensive plans for these scenarios.*
	E.g. storm damage to habitats	*E.g. Rapid response teams for habitat restoration.*
1		
2		
3		

Financial Mechanisms - A Compilation

Considering then that **our aim** through the development of a business model and a business plan **is to become financially sustainable***, a literature review was made with all potential financial mechanisms available that could be of help to MPAs and OECMs as new stream revenues.

In this section, we introduce the categorisation of financial mechanisms (traditional and innovative) that support conservation efforts in MPAs and OECMs. The categorisation aims to provide a structured overview of the various funding strategies available, highlighting their unique characteristics and applications, as well as examples on where they are already being used, facilitating the identification of suitable funding strategies for specific conservation needs but also underscoring the importance of diversifying funding sources to ensure the resilience and effectiveness of marine conservation efforts.

* ***Financial Sustainability*** [26, 27]

It is the ability of a protected area to:

1. *Secure sufficient, stable and long-term financial resources and*
2. *To allocate those resources in a timely and appropriate manner to cover the costs necessary for the effective management of a protected area in accordance with its objectives.*

The categorisation is composed of ten main overarching categories having different and various instruments within each. The overarching categories are:

1. Donations and Philanthropy
2. Public and Government Support
3. Market-based mechanisms
4. Corporate Partnerships and Sponsorships
5. Tourism and Recreation-Linked Revenue
6. Conservation-specific funds
7. Risk Financing and Insurance
8. Licensing and Sustainable Use
9. Community and Social Mechanisms
10. Research, Education, and Innovation

26. MedPAN (n.d.) Business planning for Mediterranean Marine Protected Areas Training course. Retrieved from MedPAN website.
27. Binet, T., Diazabakana, A., Laustriat, M., Hernandez, S. 2015. Sustainable financing of Marine Protected Areas in the Mediterranean: a guide for MPA managers. Vertigo Lab, MedPAN, RAC/SPA, WWF Mediterranean. 76 pages

1 DONATIONS, AND PHILANTHROPY

Donations and philanthropic contributions are typically non-repayable funds provided to MPAs to support conservation, research, and community engagement activities. These funds may come from individuals, private foundations, corporate entities, or philanthropic networks and often target specific projects or general operational needs.

DONATIONS AND PHILANTHROPY								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Philantropic Grants	Financial contributions from foundations or individuals to support specific conservation projects.	Provide funding for conservation projects protecting marine biodiversity and ecosystems.	Foundations, Charitable organisations, High-net-worth individuals	Private foundations, Charitable trusts, Individual philanthropists	Non-repayable funds with returns measured in environmental and social impacts.	Gordon and Betty Moore Foundation, David and Lucile Packard Foundation	Flexibility, Capacity Building, Long-Term Commitment	Dependency, Donor Priorities, Competition
Private Voluntary Donations	Financial contributions from individuals or organisations for conservation.	Generate financial support for marine conservation projects.	Individual donors, NGOs, charitable organisations	Philanthropists, Environmentally conscious individuals, Businesses	Unrestricted or project-specific donations, no financial return but emotional or reputational benefits.	WWF's "Adopt an Acre" Program, Deutsche Umwelthilfe	Flexible Funding, Long-Term Support, Community Support	Inconsistent and unpredictable; high competition for donor attention.
Crowdfunding	Raising small amounts from many people via online platforms for conservation projects.	To engage the general public in conservation and fund specific, tangible projects.	Online platforms (e.g., GoFundMe, Kickstarter) or MPA-specific campaigns.	Individuals, Social media users, Online communities	Funds are raised for clear, tangible goals with no financial return; contributors are updated on project outcomes.	BlueSeeds (France), Save the Med Foundation (Spain)	Broad Engagement, Quick Funding, Public Involvement	Promotion Effort, Uncertain Success, Platform Fees

1 DONATIONS AND PHILANTHROPY

PHILANTHROPIC GRANT

Philanthropic grants are funds provided by corporations, foundations or charitable organisations, committed to supporting environmental conservation[28]. These grants are vital for marine conservation projects, as they offer flexible funding that can be tailored to specific needs and objectives. **However, the Ocean receives less than 1% of global philanthropic funding, despite covering 70% of the planet** [29]. There has been a marked increase in funding over the past decade according to the "Tracking the State of Global Ocean Funding-Funding Trends in 2023", doubling from USD 430 million in 2010 to USD 1.0 billion in 2022 worldwide. However, a substantial financial gap remains, particularly in the context of ambitious global targets like protecting 30% of the ocean by 2030 (30x30).

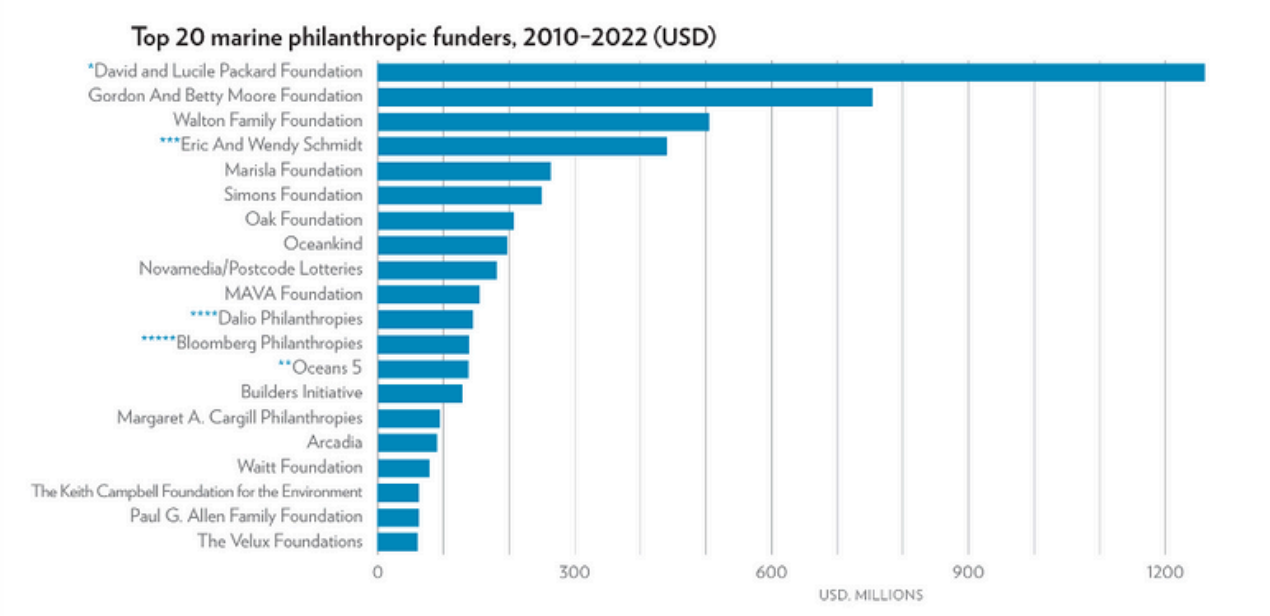


Figure 4. The top 20 marine philanthropic funders worldwide in the last decade (2010–2022), according to the Funding Trends 2023: Tracking the State of Global Ocean Funding [30].

28. Michigan University (2017). Manual of University Policy, Procedures and Guidelines. Internal Document.
29. Lewis, F., Saliman, A., Peterson, E. "Funding Trends 2023: Tracking the State of Global Ocean Funding." Our Shared Seas. 2023
30. Idem

DONATIONS AND PHILANTHROPY

The funders from Figure 4 and other philanthropic organisations have been instrumental in funding marine conservation initiatives globally. Philanthropic grants are often used to support a wide range of activities, including scientific research, community engagement, and capacity building. For example, grants from the Pew Charitable Trusts have supported the establishment and management of MPAs by funding scientific assessments, stakeholder consultations, and policy advocacy efforts[31].

In European countries, there are several foundations which offer philanthropic grants for marine protection. In Finland for example Baltic Sea Action Group (BSAG) and John Nurminen Foundation work on several marine protection and biodiversity-related issues and collaborate with various stakeholders such as researchers, farmers, industry representatives, companies and private citizens. Similar foundations are acting for conservation all around Europe.

These grants are particularly valuable for early-stage projects that require initial funding to demonstrate their potential impact and attract additional support from other sources.

An example of philantropic grants is the **Prince Albert II of Monaco Foundation,** founded in 2006 as it focuses on environmental protection, sustainable development, and the promotion of renewable energies, with significant efforts in marine conservation. For example, the foundation has funded numerous projects aimed at the protection of marine mammals in the Pelagos Sanctuary, a marine protected area in the Mediterranean.

31. The Pew Charitable Trusts. (2022). Connecting marine protected areas can improve ocean health. Retrieved from PEW website.

DONATIONS AND PHILANTHROPY

+ STRENGTHS

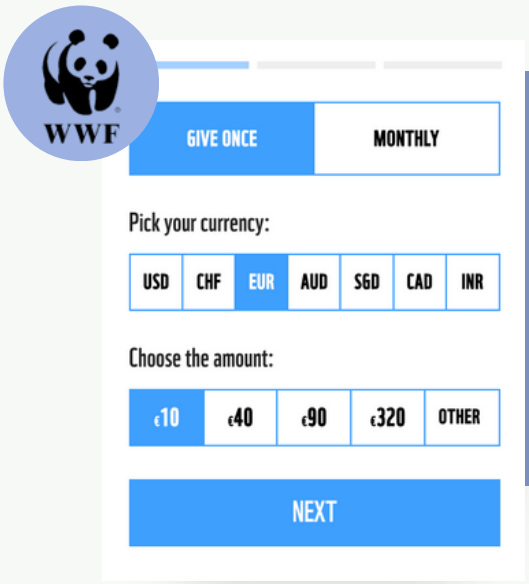
- Flexible funding tailored to specific needs and objectives
- Valuable for early-stage projects; supports a wide range of activities like research and community engagement.

- WEAKNESSES

- Can be inconsistent and unsustainable over the long term.
- These funds are not always tied to specific conservation objectives. They depend on the priorities of the donors and may be allocated to awareness projects rather than the direct management of MPAs.

PRIVATE VOLUNTARY DONATIONS

They are financial contributions made by individuals, families, or private entities without any obligation or expectation of financial return and are typically motivated by altruism, social norms, empathy or personal satisfaction [32]. These donations are often made to support specific projects or general conservation efforts.



An example is the "**support WWF**" page that provides individuals and groups an opportunity to support WWF's initiatives including ocean conservation efforts globally.

32. White, K. M. et.al. (2023). Charitable donations and the theory of planned behaviour: A systematic review and meta-analysis. *PLOS ONE, 18(5), e0286053.*

Another example would be the "Adopt an animal" approach used by different organisations, that offer the donor something in return for their donation. Eamples of this can be a certificate, a live-tracking page where they can see their animal on a map, a gift related to the adopted animal such as actsheets, gadgets, etc.

An example in Europe is **The Shark Trust** in Belgium that offers a 'jawsome' adoption pack when adopting a shark.

+ STRENGTHS

- Flexible funding that can be directed to specific projects
- Supports a wide range of activities
- Demonstrates public and corporate commitment to conservation

- WEAKNESSES

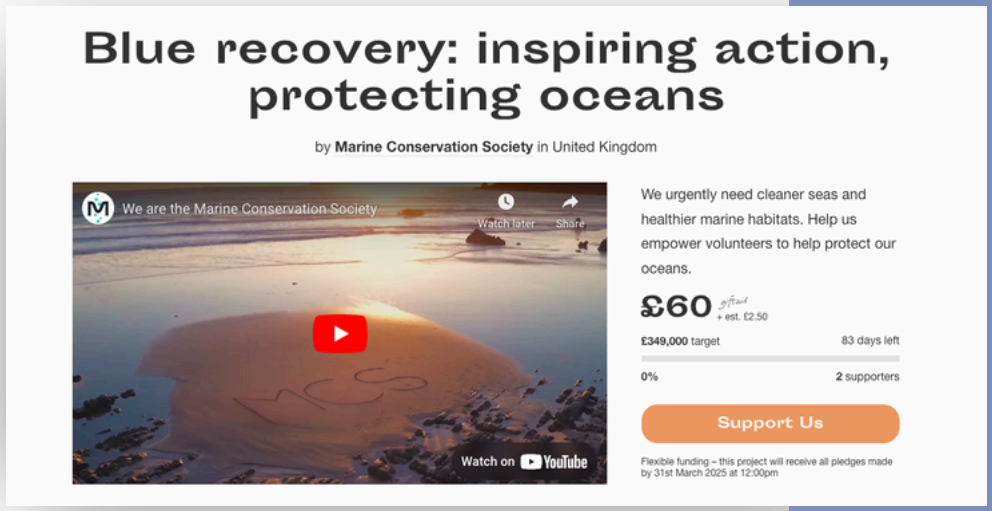
- Dependent on donor priorities and interests
- Funding can be inconsistent and unsustainable over the long term

CROWDFUNDING

Crowdfunding involves raising small amounts of money from a large number of people, typically via online platforms, to fund specific projects. This method has become increasingly popular for funding environmental and conservation projects due to its ability to reach a broad audience and generate significant funds quickly.
It is a promising strategy to capture nonuse value from altruistic and philanthropic donations of beneficiaries worldwide and a means to diversify finance streams for protected area management[33].

33. Andrew S., et.al. (2023). Crowdfunding marine and coastal protected areas: Reducing the revenue gap and financial vulnerabilities revealed by COVID-19, Ocean & Coastal Management, Volume 242.

DONATIONS AND PHILANTHROPY



An example is the '**Blue Recovery**' campaign launched by the Marine Conservation Society in the United Kingdom trying to raise money for cleaner seas and healthier marine habitats.

Seidal *et.al.* (2023)[34] report on 5 crowdfunding campaigns that generated $2 million in charitable giving (nonuse value) pandemic relief protected area support. None of these happened in Europe but are good examples of this financial mechanism. A detailed table on these cases can be checked in the BIOFIN website.

+ STRENGTHS

- Mobilises financial support from a broad audience
- Increases public awareness and involvement
- Can raise significant funds quickly for specific projects

- WEAKNESSES

- May require substantial effort to promote campaigns
- Success is not guaranteed and can be unpredictable
- Platform fees

34. Andrew S., et.al. (2023). Crowdfunding marine and coastal protected areas: Reducing the revenue gap and financial vulnerabilities revealed by COVID-19, Ocean & Coastal Management, Volume 242.

2 PUBLIC AND GOVERNMENT SUPPORT

Public and government support represents a foundational financial mechanism for Marine Protected Areas, offering consistent and often large-scale funding to sustain conservation and management efforts. This category includes financial support from local, national, and international governments, as well as public agencies. Public funding is often channelled through grants, subsidies, or dedicated budgets, and may also include innovative mechanisms like environmental taxes, fines, or payments for ecosystem services. Governments play a critical role in aligning MPA financing with broader policy objectives, ensuring long-term sustainability and accountability. While public support can provide stability, it often requires careful negotiation, adherence to regulatory frameworks, and alignment with public interests to maximize effectiveness. Balancing these funding sources with other mechanisms can help reduce dependency and create a resilient financial framework for MPAs.

PUBLIC AND GOVERNMENT SUPPORT								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Annual Government Budget Allocation /Tax Revenue	Funds collected by governments from taxes and used for marine conservation.	Provide a steady stream of funding for conservation efforts.	National governments, Local governments.	Taxpayers (individuals, businesses)	Government budgets with returns in improved environmental health and biodiversity.	Balearic Islands sustainable tourism tax, Norwegian environmental taxes	Sustainable Funding, Public Contribution, Government Oversight	Public Resistance, Bureaucracy, Linkage
Environmental Levies	Taxes or fees from industries impacting marine ecosystems, with funds allocated to MPAs.	To generate revenue for MPAs while discouraging harmful activities.	Tax authorities and environmental agencies.	Businesses, tourists, and citizens paying levies.	Levies are revenue-generating but also act as deterrents for harmful activities.	Charges applied to certain activities or industries that have a recognised environmental impact (e.g., shipping, energy, tourism).	Provides sustainable revenue while discouraging harmful actions.	May disproportionately burden certain stakeholders (e.g., tourism operators).

2 PUBLIC AND GOVERNMENT SUPPORT (CONT.)

PUBLIC AND GOVERNMENT SUPPORT								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Subsidies and Tax Breaks	Incentives provided for blue carbon projects or eco-friendly activities.	To promote sustainable practices and incentivise blue projects.	Government agencies promoting sustainability.	Taxpayers and businesses benefiting from subsidies.	Reduces costs for conservation initiatives; no direct financial returns.	Subsidies for companies working on decarbonising	Encourages voluntary participation in reducing emissions	May not address root causes of harmful activities.
Environmental Penalties	Revenue generated through enforcement actions against illegal activities in MPAs.	To enforce regulations and generate funding for restoration and enforcement.	Legal and environmental authorities.	Violators of environmental laws and regulations.	Fines are punitive but fund enforcement and restoration activities.	Fines for illegal fishing in Mediterranean MPAs.	Ensures accountability while generating conservation funding.	Dependent on the occurrence of violations; unpredictable revenue.
EU-Funded Projects	Participation in EU-funded consortia focused on MPA-related conservation and research activities.	To leverage EU collaboration for additional funding and resources for MPAs.	EU funding bodies (e.g., Horizon Europe, LIFE Programme).	EU member states and participating consortia partners.	Funds are project-specific and contribute to collaborative conservation outputs.	LIFE Programme funding for habitat restoration in Natura 2000 sites.	Leverages international collaboration for conservation efforts.	Requires alignment with EU priorities and competition for limited funds.

ANNUAL GOVERNMENT BUDGET ALLOCATION /TAX REVENUE

Annual government budget allocations and tax revenues refer to funds derived from the general pool of taxes collected by national or local governments. A portion of these revenues is dedicated to the operational, enforcement, and management needs of MPAs. Unlike environmental levies, which specifically target those benefiting from and directly impacting the ocean, these funds are part of broader government budgets and reflect a nation's or region's prioritisation of marine conservation within its fiscal policies. MPAs have traditionally relied on annual government budget allocations and general tax revenues for their funding. This conventional mechanism provides a stable financial foundation for essential operational activities but it is not enough for all activities needed to reach the global targets.[31]

For instance, in France, the French Biodiversity Agency (Office Français de la Biodiversité) oversees the management of MPAs and receives funding through national tax revenues.

+ STRENGTHS

- Provides a steady stream of funding
- not relying on private or external stakeholders, and making it relatively straightforward to access and allocate.
- Can support long-term projects

- WEAKNESSES

- Competes with other government priorities, making funding levels susceptible to political and economic fluctuations.
- Often tied to specific budgetary cycles and constraints, reducing adaptability to emerging conservation challenges.

31. Binet, T., et.al. (2015). Sustainable financing of Marine Protected Areas in the Mediterranean: A financial analysis. Vertigo Lab, MedPAN, RAC/SPA, WWF Mediterranean.

ENVIRONMENTAL LEVIES

Environmental levies are targeted financial charges or fees imposed on activities or industries that directly or indirectly impact the environment and/or have a benefit from it. Unlike environmental penalties, which are punitive measures applied after violations of environmental regulations, levies are proactive tools designed to encourage sustainable behavior and generate dedicated revenue streams for conservation. For instance, environmental levies are commonly applied to sectors such as shipping, tourism, and resource extraction, ensuring that those benefiting from marine resources contribute back to their management, restoration and conservation, reinvesting these fees into the maintenance, monitoring, and enforcement of MPAs, supporting biodiversity conservation and sustainable resource management.

A good example is the the Martinique's Le Prêcheur Regional Marine Protected Area in France, which explored various taxation options, royalties, and entry fees as potential funding sources[32]. These include taxes on tourism, environmental taxes, and taxes targeting specific activities or groups (e.g., tourists, local inhabitants, marine ecosystem users). The resulting recommendation was the expansion of the airport tax to finance the MPA, the introduction of new royalties on tourism activities, and the allocation of part of the tourist tax to the reserve's management.

In some countries, tourism taxes are used to support conservation activities. For example, Palau has implemented the "Pristine Paradise Environmental Fee," a mandatory fee for tourists tax that funds environmental protection and management, including the upkeep of MPAs, through a nominal fee of One Hundred Dollars ($100 USD) added to the price of every plane ticket landing in the country[33]. By integrating conservation funding into the broader tax system, governments can provide reliable financial support for marine protection initiatives.

32. Failler, P., et.al. (2019). "Sustainable financing of marine protected areas: the case of the Martinique regional marine reserve of "Le Prêcheur". Green Finance.Volume 1, Issue 2: 110-129.
33. Alii Palau Airlines. (n.d.). "Palau's Pristine Paradise Environmental Fee (PPEF)". Retrieved from their website.

PUBLIC AND GOVERNMENTAL SUPPORT

In Europe, another example is the Balearic Islands in Spain which have implemented a sustainable tourism tax, that is levied on tourists and allocated to various environmental projects, including the protection and management of MPAs[34]. Such taxes ensure that visitors contribute to the preservation of the natural environments they enjoy.

+

STRENGTHS

- Provides a steady stream of funding
- Encourages industries and individuals to adopt sustainable practices by linking usage or impact to financial contributions.
- Scalability as it can be applied across various sectors, such as tourism, shipping, and resource extraction, making it a flexible tool for diverse MPA needs

-

WEAKNESSES

- It might face resistance from businesses or stakeholders concerned about increased costs, particularly in tourism-dependent economies.
- Potential inequities as it could disproportionately impact certain groups, such as small-scale operators or local communities, without careful design.
- Risk of Fund Mismanagement: Without transparent governance, there is a risk that funds generated by levies may not be adequately reinvested into conservation.

34. abcMallorca. (2020). Balearic tourist tax doubles. Retrieved from their website.

PUBLIC AND GOVERNMENTAL SUPPORT

SUBSIDIES AND TAX BREAKS

Subsidies and tax breaks are financial incentives provided by governments to reduce the financial burden on individuals, businesses, or organisations engaging in environmental-friendly activities which in this case, could be applied to help MPAs. More known subsidies are those covering transactions contributing to reduced. Similarly, tax breaks may offer reductions or exemptions in taxes to promote desired environmental outcomes. These tools could be useful for enabling blue carbon projects, ecosystem restoration, and sustainable tourism while incentivising businesses and stakeholders to adopt conservation-oriented practices.

An example in Europe are the Swedish Environmental Subsidies. In 2022, Sweden allocated approximately 24.3 billion SEK (2 billion EUR) to environmentally motivated subsidies, aiming to promote sustainable practices across sectors, with companies receiving the majority (91%) to encourage investments in eco-friendly technologies. Additionally, 6.8 billion SEK were allocated for environmental improvements in agriculture, such as biodiversity measures through the Swedish rural development program.[36] Similar subsidies could be implemented for projects and technologies supporting ocean restoration and conservation.

+ STRENGTHS

- Reduces financial barriers for adopting eco-friendly practices.
- Provides funding for conservation and restoration projects.
- Stimulates innovation and job creation in environmentally sustainable industries.

- WEAKNESSES

- It still needs to be created for the conservation world
- Poor targeting can lead to funds being used inefficiently or ineffectively.
- Administrative Burden: High costs and complexity in managing and monitoring programs.

35. Statistics Sweden (SCB). (2022). Environmental accounts - Environmentally motivated subsidies 2022.

ENVIRONMENTAL PENALTIES

Environmental penalties are fines imposed on individuals or entities that breach environmental laws and regulations. These fines serve as both a deterrent against illegal activities and a source of funding for conservation efforts. Effective enforcement of fines is crucial to maintaining the integrity of MPAs and ensuring compliance with conservation regulations.

In Europe, the European Union's Common Fisheries Policy (CFP) includes stringent penalties for illegal, unreported, and unregulated (IUU) fishing activities. Countries such as Portugal, Spaind and Italy have implemented substantial fines and sanctions for violations, which are or could be used to fund fishery management and conservation programs. The Portuguese government imposes fines for illegal fishing activities that goes from 750 EUR to 50,000 EUR[36]. These fines are part of the national strategy to combat IUU fishing and support the existing marine resources.

By imposing significant financial penalties on violators, regulatory bodies can reinforce the importance of adhering to conservation laws while generating revenue for further protection efforts.

Greece became the first country in Europe to ban bottom trawling in marine protected areas[37] under the logic of the study of EU MPAs showing that there would be net gains after only four years of a ban, and that after 13 years there would be about €3.41 returned for every €1 spent.[38]

36. Assembleia da República. (2014). Lei n.º 82-D/2014, de 31 de dezembro. Diário da República n.º 252/2014, 1º Suplemento, Série I de 2014-12-31.
37. Euronews. (2024). Greece to become first in Europe to ban bottom trawling in all marine protected areas. Online news.
38. Dunkley, F., & Solandt, J.-L. (2019). Marine unProtected Areas: A case for a just transition to ban bottom trawl and dredge fishing in offshore Marine Protected Areas. Marine Conservation Society.

PUBLIC AND GOVERNMENTAL SUPPORT

+ STRENGTHS

- Serves as a deterrent against illegal activities
- Generates revenue for enforcement and conservation
- Holds violators responsible for their actions, reinforcing the importance of adhering to environmental laws
- Can be applied to a wide range of activities, from illegal fishing to pollution, ensuring comprehensive enforcement.

- WEAKNESSES

- Fines may not affect illegal fishing decisions if they are set too low
- Violators might not be able to pay fines that are too high
- Corruption might allow violators to avoid paying
- Requires robust enforcement mechanisms
- Effectiveness depends on the size of fines and likelihood of detection

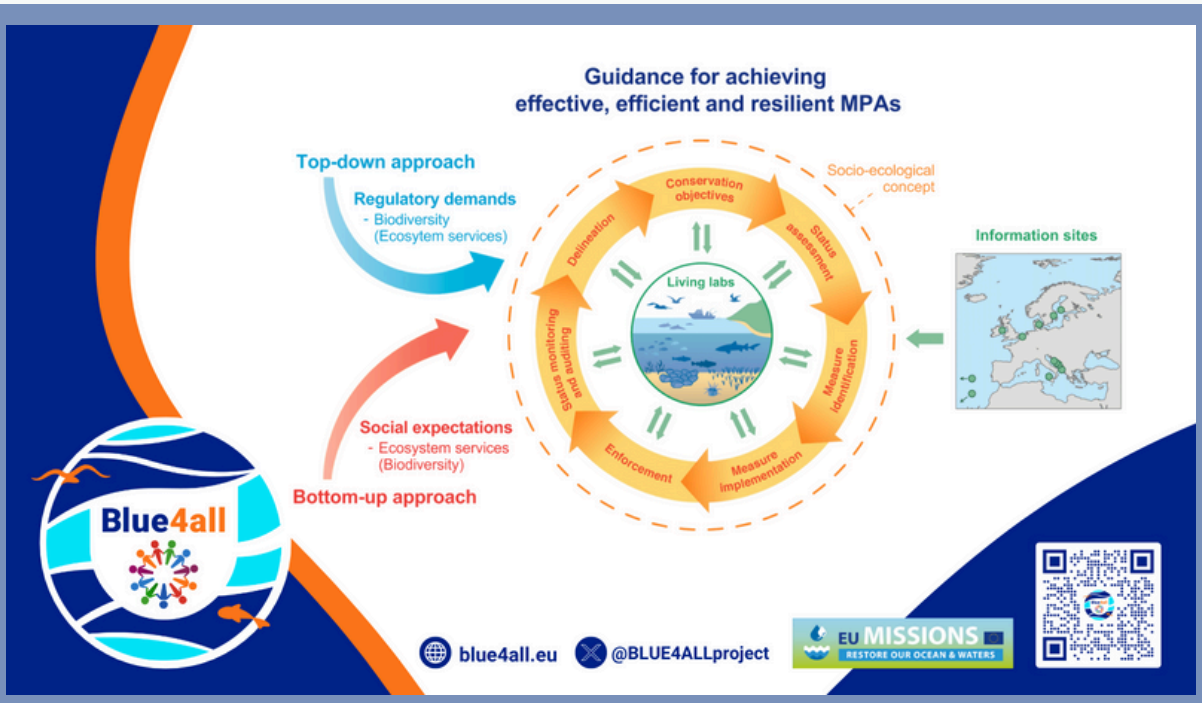
EU-FUNDED PROJECTS

In Europe, EU-funded projects are pivotal in supporting MPAs across Europe, providing substantial financial and technical resources for conservation, management, and innovation. These projects are typically funded through European Union programs such as Horizon Europe, LIFE Programme, and the European Maritime, Fisheries and Aquaculture Fund (EMFAF). Unlike general funding mechanisms, EU-funded projects are collaborative and transnational, bringing together diverse stakeholders, including governments, research institutions, NGOs, and private sector actors, to address shared challenges in marine conservation.

Blue Parks Calls, for example, fund innovative projects that enhance the ecological and socio-economic benefits of MPAs, such as habitat restoration, blue carbon projects, and sustainable fisheries. These calls complement other EU mechanisms by prioritising actions that integrate science, policy, and community engagement, and that help reach the EU targets such as those under the Mission Restore our Ocean and Waters that aim at protecting at least 30% of the EU seas by 2030, and have at least 10% of those area under strict protection.[39]

39.United Nations Department of Economic and Social Affairs. (n.d.). Establishing an EU-wide 'Blue Parks' initiative. United Nations

PUBLIC AND GOVERNMENTAL SUPPORT



An example is Blue4All project that is working with stakeholders from 25 MPA Living Labs and Information Sites in the Mediterranean Sea, Baltic Sea and North East Atlantic regions to develop tools for preserving and restoring the marine environment in a socially sustainable and acceptable way that serves as a blueprint for creating effective, efficient, and resilient MPAs and networks of MPAs.[40]

+ STRENGTHS

- Secure funding for the duration of the project
- Encourages partnership[s and cross-learning with other MPAs and partners
- Policy alignment
- Supports cutting-edge technologies and innovative approaches in MPA management and monitoring.

- WEAKNESSES

- Securing funding involves detailed proposals and compliance with strict administrative requirements, which can be resource-intensive.
- High-competition
- Funding is often project-based and time-limited, making long-term sustainability a challenge without additional resources.

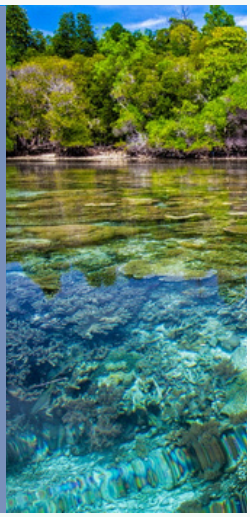
40. Blue4All (n.d.) The Blue4All project. Retrieved from the 'about' section of the project website.

PUBLIC AND GOVERNMENTAL SUPPORT

FOREIGN CONSERVATION FUNDING

Foreign conservation finance involves wealthier nations providing financial support to developing countries for the establishment and management of MPAs and other conservation initiatives. This collaborative approach aims to preserve marine biodiversity, enhance ecosystem services, and contribute to global conservation targets. By investing in MPAs abroad, donor countries help safeguard critical habitats, support sustainable fisheries, and promote climate resilience, while also fulfilling international biodiversity commitments.

One notable example of foreign conservation finance is the United Kingdom's Blue Planet Fund. Launched in 2021, this £500 million program supports developing countries in protecting the marine environment and reducing poverty. The fund focuses on four key areas: marine biodiversity, climate change, marine pollution, and sustainable seafood. Through initiatives like the Ocean Country Partnership Programme (OCPP), the Blue Planet Fund assists nations in establishing well-managed MPAs, combating illegal fishing, and adopting sustainable practices. [41]



+ STRENGTHS

- Resource Mobilization: Provides crucial funding and expertise for marine conservation in under-resourced regions.
- International Collaboration: Promotes knowledge exchange, best practices, and innovation.
- Global Impact: Helps donor countries meet biodiversity targets and support marine protection worldwide.

- WEAKNESSES

- Local Alignment: Projects may not always fit the ecological and cultural needs of recipient countries.
- Sustainability Risks: Dependence on external funding can undermine long-term conservation efforts.
- Coordination Challenges: Managing cross-border initiatives can be complex and slow implementation.

41. https://www.gov.uk/government/publications/blue-planet-fund/blue-planet-fund

CONSIGNMENT TAX

The Consignment Tax, also known as a **Tax Designation Scheme**, is a mechanism that allows taxpayers to **allocate a predefined portion (commonly 0.5%–1%) of their personal income tax to a nonprofit organisation of their choice**. This designation does not increase the taxpayer's tax burden but redirects a fraction of the income tax already owed to the state. The system is available in several European countries, notably **Portugal, Italy, Hungary, and Slovakia**, and is intended to empower civil society and strengthen public participation in financing social, cultural, and environmental causes.

This tool operates through **voluntary taxpayer action** during the annual income tax declaration process. Registered organizations must meet legal criteria (e.g., public utility status, environmental or social mission) to qualify for receiving these allocations. The amount collected through this system depends on the number of taxpayers who designate and the national income tax collected.

The purpose of the consignment tax is to provide an additional and participatory funding channel for non-governmental and public-interest organisations, including those involved in marine conservation and MPA management. **It enhances transparency, civic engagement, and public trust in nonprofit organisations**.

Example of the campaign launched by WWF Portugal to convince taxpayers to destin 1% of their tax to the organisation.

In the 2024 IRS campaign in Portugal, over 1 million families (specifically, 1,015,864 households) utilized the consignment mechanism to allocate a portion of their income tax to eligible organizations. In one decade, the campaign collected 247 million euros for non-profit organisations.[42]

42. https://www.ligacontracancro.pt/clipping/detalhe/url/consignacao-do-irs-triplicou-e-deu-247-milhoes-as-instituicoes-sociais-numa-decada/

PUBLIC AND GOVERNMENTAL SUPPORT

CONSIGNMENT TAX (cont.)

+ STRENGTHS

- Empowers citizens by giving them a say in public fund allocation.
- Direct and cost-free for taxpayers.
- Can provide sustained, non-competitive funding to NGOs.
- Promotes transparency and civic engagement.
- Flexible use: organizations can use funds for operational costs, which are often hard to cover through restricted grants.
- Demonstrated success in several European countries.
- Low administrative burden once organizations are registered.

- WEAKNESSES

- Dependent on taxpayer awareness and willingness to designate.
- Can result in uneven distribution of funds (larger or better-known organizations receive more).
- Funds are limited to countries with tax designation laws, limiting broader applicability.
- Lack of long-term predictability in annual revenues for smaller organiSations.
- In some cases, delays in payment from the tax authority have been reported.
- If not paired with transparency and monitoring, it may not guarantee impact-oriented spending.
- Administrative eligibility requirements can exclude grassroots organiSations.

3 MARKET-BASED MECHANISMS

Market-based mechanisms are innovative financial tools that leverage economic incentives to promote environmental conservation and sustainable resource use. These mechanisms are directly linked to ecosystems, as they integrate ecological objectives with market dynamics, creating opportunities or both conservation and economic benefits. However, their effectiveness depends on the ability to translate ecological value into economic value. By linking financial investments or payments directly to ecological outcomes, they can provide a sustainable and scalable approach to funding MPAs and other marine conservation initiatives. The instruments under this type of financial mechanism have long been applied to terrestrial conservation. One prominent example is Payments for Ecosystem Services (PES), widely implemented in forests and watersheds. Programs like Costa Rica's PES initiative compensate landowners for maintaining forest cover, which provides ecosystem services such as water filtration, carbon sequestration, and biodiversity preservation . Similarly, carbon credit programs under mechanisms like REDD+ (Reducing Emissions from Deforestation and Forest Degradation) enable landowners and governments to generate income by preventing deforestation and restoring degraded lands .

Following their success in terrestrial applications, their ability to generate self-sustaining revenue streams, attract private-sector investment, and align conservation goals with broader economic strategies, as with many conservation-related mechanisms, the adaptation to marine environments has been made in this century with different tools that are implemented across the world and can serve as examples to Europe.

3 MARKET-BASED MECHANISMS

MARKET-BASED MECHANISMS								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Payments for Ecosystem Services (PES)	Payments made to those who maintain or restore ecosystem services (e.g., biodiversity, water quality).	Incentivise conservation by linking it to financial rewards.	Governments, NGOs, conservation organisations	Companies, governments, individuals	Agreements between payers and providers, with payments conditional on the delivery of verified ecosystem services.	Mikoko Pamoja in Kenya, a community-led mangrove conservation and restoration project based on PES	Promotes sustainable behaviour; generates stable funding; enhances ecosystem services.	Can be difficult to measure and verify ecosystem service delivery
Blue Carbon Credits	Monetises carbon sequestration in marine ecosystems like mangroves, seagrasses, and salt marshes.	Mitigate climate change while funding ecosystem restoration.	NGOs, governments, carbon project developers	Companies seeking to offset emissions	Carbon credits are issued based on the amount of carbon sequestered; credits are sold in carbon markets or directly to companies.	SeaGrass Grow Project from the `Ocean Foundation	Links conservation to climate goals; generates revenue for restoration projects.	Requires robust verification; may face market volatility; limited to carbon sequestration benefits.
Blue Bonds	Debt instruments to raise capital to finance marine and ocean-based projects	To have positive environmental, economic and climate benefits..	Governments, development banks	Institutional investors, development banks	Bonds are sold to investors; funds are repaid with interest, often tied to ecological outcomes or specific revenue streams.	Seychelles Blue Bond	Provides large-scale funding; links financial returns to ecological benefits; fosters innovation.	Relies on debt repayment; requires effective governance and project success for financial viability.

3 MARKET-BASED MECHANISMS (CONT.)

MARKET-BASED MECHANISMS								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Habitat Banking	Credits are sold to offset environmental impacts elsewhere, linked to conservation actions or projects are compensated through conservation activities that yield a gain at least equivalent to the impact.	Ensure "no net loss" of biodiversity through offset frameworks.	Governments, environmental agencies	Developers, companies	Developers purchase credits from conservation banks to offset their environmental impacts.	Great Barrier Reef Offset Framework (Australia)	Aligns development with conservation; creates a market for biodiversity protection.	Risk of "paper parks" or ineffective offsets; challenging to verify equivalence between impact and offset actions
Loans	Financial instruments where funds are borrowed and repaid with interest to fund conservation projects.	Provide capital for large-scale conservation initiatives.	Development banks, commercial banks	Governments, NGOs, private entities	Borrowers receive capital to fund projects; repayment is made with interest, often through generated revenues or donor funding.	World Bank PROBLUE initiative, European Investment Bank loans	Enables large-scale projects; attracts private investment; adaptable to diverse conservation needs.	Risk of debt dependency; requires reliable revenue streams for repayment; interest adds financial burden.
Debt-for-nature swaps	Converting foreign debt into conservation funding for environmental projects.	Reduce national debt and fund conservation projects.	International conservation organisations, Governments, Financial institutions	Creditor countries, Conservation NGOs, Multilateral development banks	Agreements where debt is forgiven for conservation investments.	Polish EcoFund, Seychelles	Debt Relief, Dual Benefits, International Cooperation	Complex Negotiations, Limited Scope, Dependency

PAYMENTS FOR ECOSYSTEM SERVICES (PES)

Payments for Ecosystem Services (PES) is a market-based mechanism where beneficiaries of ecosystem services provide financial compensation to those who maintain, restore, or enhance these services. In the context of marine conservation, PES incentivizes actions that protect vital ocean ecosystems, ensuring the continued provision of services such as water quality regulation, biodiversity conservation, and coastal resilience. This approach aligns ecological sustainability with financial incentives, encouraging stakeholders to prioritize long-term environmental health.

In marine ecosystems, PES is increasingly applied to promote the conservation of mangroves, seagrasses, coral reefs, and other critical habitats that support fisheries, mitigate climate change through carbon sequestration, and protect coastlines from storm surges. By monetizing these benefits, PES creates a direct economic rationale for conservation, enabling local communities, governments, and the private sector to collaborate on sustainable ocean management.

Photo: Mikoko Pamoja project

Mikoko Pamoja is a community-led mangrove conservation and restoration project based in southern Kenya, which aim is to provide long-term incentives for mangrove protection and restoration through community involvement and benefit, enhancing fishery grounds for local communities and enhancing coastal protection.

A minimum of 70% of the PES income is directly received by communities and funds are democratically controlled by local people to meet local priorities. For example, they have used it to fund a water and sanitation project which now cleans water for two villages [43].

43. Plan Vivo Foundation website. (n.d.). Mikoko Pamoja – Kenya.

MARKET-BASED MECHANISMS

+ STRENGTHS

- Direct financial rewards encourage stakeholders to actively maintain and restore ecosystem services.
- Promotes Community Engagement as local communities benefit economically, fostering stewardship and reducing resource exploitation pressures.
- Can be adapted to various marine and coastal ecosystems, including mangroves, coral reefs, oyster reefs and seagrass meadows.

- WEAKNESSES

- Verifying ecosystem service delivery and ensuring compliance can be complex and resource-intensive.
- Relies on demand in voluntary or regulated markets, which can fluctuate and impact revenue generation.
- Setting up and maintaining PES programs requires significant upfront investment in technical expertise and infrastructure.

BLUE CARBON CREDITS

Blue carbon credits are a market-based mechanism that monetises the carbon sequestration potential of marine and coastal ecosystems, such as mangroves, seagrasses, and salt marshes. These ecosystems are referred to as "blue carbon sinks" due to their exceptional ability to capture and store atmospheric carbon dioxide (CO_2) over long periods. One carbon credit equates to one tonne of carbon dioxide or carbon dioxide equivalent. By quantifying the carbon stored or emissions avoided through conservation or restoration, blue carbon credits create a financial incentive for stakeholders to invest in preserving these vital ecosystems.

This mechanism aligns marine conservation with global climate change mitigation efforts. It enables governments, corporations, and individuals to purchase carbon credits to offset their emissions, directing the generated funds toward sustainable management, restoration, and local community development. Carbon markets, where credits are traded, present a potentially large marketplace, with accompanying economic incentive, through which coastal ecosystems may receive investment for their restoration, conservation and enhanced BC sequestration capacity.

MARKET-BASED MECHANISMS

Since 2008, The Ocean Foundation has widely promoted the concept of Blue Carbon. In 2016, they completely redesigned their carbon offset program, working with various corporations, foundations, events, & individuals to develop the most appropriate offset approach for them. This program is called SeaGrass Grow, and it restores seagrass meadows from the sale of blue carbon credits to businesses seeking carbon neutrality.

The SeaGrass Grow Blue Carbon Offset Calculator estimates carbon dioxide (CO_2) emissions from various activities, including household energy use, meat consumption, office operations, [44] land-based transportation, air travel, hotel stays, and vehicle usage.

+ STRENGTHS

- Climate change mitigation as it directly supports global efforts to reduce atmospheric carbon dioxide by monetizing carbon sequestration.
- Enhances biodiversity, coastal resilience, and fisheries productivity alongside carbon storage.
- Provides economic benefits to local communities through conservation-based livelihoods.
- Increasing corporate and governmental interest in achieving net-zero emissions boosts the demand for blue carbon credits.

- WEAKNESSES

- Requires robust monitoring, reporting, and verification systems, which can be costly and complex.
- Prices for carbon credits may fluctuate based on demand and regulatory changes, impacting revenue predictability.
- Limited to regions with blue carbon ecosystems, excluding many MPAs without such habitats.

44. The Ocean Foundation website. (n.d.). SeaGrass Grow project.

MARKET-BASED MECHANISMS

BLUE BONDS

Blue bonds are debt instruments issued by national governments, development banks, or corporations to finance marine and ocean-based projects with long-term sustainability objectives. Functioning similarly to conventional bonds, investors provide capital to the issuer, who commits to repaying the principal along with interest over a specified period. The funds raised are allocated to activities that qualify as "blue projects," encompassing sustainable initiatives within ocean or marine-related areas. These can be generally differentiated between private bonds (corporate and project-specific) or public bonds (sovereign and municipal): [45]

- **Private Bonds**: Issued by corporations or for specific projects, these bonds typically finance blue-oriented initiatives like new wind energy facilities. Repayment is generally sourced exclusively from the revenues generated by the funded activity. The fixed-rate nature and long maturities of these bonds attract long-term investors such as pension funds and insurers, making them suitable for large-scale infrastructure projects related to maritime transportation or marine renewable energy.
- **Public Bonds**: Issued by sovereign or municipal entities, these bonds function similarly to corporate bonds but often carry a lower risk profile, resulting in lower yield coupons. They are used to fund broader public initiatives within the blue economy.

Although specific cases in Europe are limited, the framework set by the Seychelles' Blue Bond is the best example as it raised $15 million supported by the World Bank and Global Environment Facility, to fund the sustainable management and expansion of Marine Protected Areas, improve governance of priority fisheries, and develop the Seychelles' blue economy, setting a precedent for similar initiatives globally. [46]

45. European Commission. (n.d.). Blue bond: Restore our ocean and waters.
46. United Nations Department of Economic and Social Affairs. (n.d.). Seychelles blue bond: Transitioning to sustainable artisanal fisheries and strengthening value chain benefits through innovative finance and partnerships.

MARKET-BASED MECHANISMS

While the concept of blue bonds is gaining traction globally, examples in Europe could emerge as well. Europe's extensive coastlines and dependence on marine resources make it an ideal candidate for blue bond initiatives.

Potential Applications:

1. **Mediterranean Region**: Countries around the Mediterranean could issue blue bonds to address issues such as overfishing, pollution, and habitat degradation. Collaborative efforts involving multiple countries could be particularly effective.
2. **North Sea and Baltic Sea**: Northern European countries could use blue bonds to fund the restoration of marine habitats, reduce pollution, and promote sustainable fisheries. These regions face significant environmental pressures and could benefit from coordinated conservation efforts.
3. **Small Island Nations**: European island nations, such as Malta and Cyprus, could leverage blue bonds to finance marine conservation and sustainable tourism projects.

+ STRENGTHS

- Large-scale funding as it provides substantial capital for significant projects.
- Performance-based approach as it encourages effective project management and accountability.
- Appeals impact investors seeking both financial returns and positive environmental impact.
- Encourages public-private participation it’s often supported by governments, development banks, and private investors.

- WEAKNESSES

- Complex structure as it requires detailed performance metrics and rigorous monitoring.
- High costs as it can involve high transaction and management costs.
- Risk of non-performance as returns are contingent on project success, adding an element of risk.
- Public bonds often offer lower yields than private bonds, which may limit their attractiveness to investors seeking higher returns.
- Countries or organizations with weak credit ratings or limited financial capacity may find it challenging to issue blue bonds.

MARKET-BASED MECHANISMS

HABITAT BANKING

On land, habitat banks serve as innovative tools to counterbalance ecological disruptions caused by human activities. These are parcels of land where a significant uplift in biodiversity can be created, typically on at least 20 hectares in size or upward. They are usually required by planning authorities to compensate for habitat loss in degraded or neglected land, where through a habitat bank, the habitats will be enhanced and restored over at least 30 years. This is achieved when developers purchase credits to fund site management and improvement. [47,48]

Habitat banking -or biodiversity offsetting- in the Ocean, despite being still an emerging mechanism, operates similarly to in land focusing on creating and maintaining "credits" for marine ecosystem restoration or protection that can be sold to offset the environmental impacts of development. Ideally, developers whose activities harm marine ecosystems would be required to purchase these credits, ensuring no net loss of biodiversity or ecosystem services.

POTENTIAL APPLICATIONS IN THE OCEAN

- **Protection of Endangered Habitats**: Habitat banks could fund the establishment of Marine Protected Areas (MPAs) in regions critical to biodiversity, with credits linked to protecting species or habitats impacted by development.

- **Offshore Wind Farms:** Developers of offshore wind farms could offset habitat disturbance by purchasing credits for restoring marine ecosystems in nearby areas.

- **Shipping Lanes and Ports:** Ports and shipping companies could offset dredging or anchorage impacts by investing in habitat banking schemes.

- **Mangroves and Seagrasses:** Restoration of these habitats could generate credits, as they provide critical ecosystem services like carbon sequestration, coastal protection, and nursery habitats for marine species.

- **Salt Marshes and Oyster Reefs:** Protecting and rehabilitating salt marshes could create credits that offset impacts like coastal development or dredging.

47. Mackie H. (n/d). Habitat Banks – Definition, Creation and List of Types. GAIA webite.
48. Environmental Bank (n/d). What is a Habitat Bank?

MARKET-BASED MECHANISMS

A good example is The Reef Trust Offsets Plan, a framework established by the Australian Government to manage environmental offsets for activities impacting the Great Barrier Reef. It ensures that any residual adverse effects from development are counterbalanced by positive actions that maintain or enhance the reef's health.

The plan includes an Offsets Calculator designed to estimate the financial contribution necessary for delivering the required offsets through the Reef Trust. This calculator considers various factors, including the type and scale of impact, the cost of restoration or protection activities, and confidence levels in achieving the desired environmental outcomes.

Funds collected from developers are directed into projects that align with the Reef 2050 Long-Term Sustainability Plan. These projects may involve activities such as improving water quality, restoring habitats like mangroves and seagrasses, and protecting marine biodiversity. [49]

+ STRENGTHS

- Creates a dedicated revenue stream for marine ecosystem restoration and protection by monetizing conservation efforts.
- Ensures no net loss of biodiversity as developers offset their environmental impacts, ensuring ecosystem services and biodiversity are maintained or improved.
- Provides a flexible, market-based approach applicable to various marine ecosystems like oyster reefs, coral reefs, mangroves, and seagrasses.
- Encourages collaboration between governments, private sector entities, and conservation organizations.

49. Australian Government and Reef Trust. (2017.). Reef Trust offsets plan and calculator. 141 pages.

WEAKNESSES

- Establishing habitat banks requires significant initial investments in restoration, monitoring, and regulatory frameworks as it is still an emerging mechanism in the Ocean .
  - **Regulatory Frameworks**: Governments would need to implement laws requiring developers to purchase habitat credits for unavoidable impacts on marine ecosystems.
  - **Market Creation:** Establishing a marketplace where credits can be traded between habitat bank operators and developers ensures scalability.
  - **Monitoring and Verification**: Ensuring that restoration or protection efforts deliver measurable ecological benefits is crucial to the credibility of marine habitat banking.
- Verifying long-term success of restored habitats requires significant resources and scientific expertise.

BANK LOANS

Loans are financial instruments where capital is borrowed from a lender, such as a bank, development agency, or private investor, and repaid over time with interest. In the context of marine conservation, loans provide upfront capital to fund large-scale initiatives, such as MPA infrastructure development, ecosystem restoration, or sustainable fisheries management. Unlike grants or donations, loans require a repayment plan, making them particularly suited for projects with predictable revenue streams.[50]

Loans can be structured to support conservation goals through concessional terms (e.g., lower interest rates or extended repayment periods) or sustainability-linked incentives, where repayment conditions are tied to achieving measurable environmental outcomes. These mechanisms often attract private sector participation, bridging the gap between public funding limitations and the need for scalable conservation finance.

50. World Economic Forum. (2020). The ocean finance handbook: Increasing finance for a healthy ocean. 60 pages

MARKET-BASED MECHANISMS

The United Nations Environment Programme Finance Initiative (UNEP FI), which previously developed the Principles for Responsible Investment (PRI) and Principles for Sustainable Insurance (PSI) also developed the Principles for Responsible Banking, which outlines principles, key steps and activities lenders can undertake to better incorporate sustainability into their decision-making, improve their environmental impact and enable shared prosperity with their customers.[51]

In Europe, The European Investment Bank (EIB), as the EU climate bank, is investing in the sustainable blue economy, supporting low-carbon marine solutions, coastal resilience to climate change, the preservation and restoration of the ocean's nature capital, and innovation along with education and public research related to the Ocean.

In the period of 2019-2023, their lending in the above-mentioned areas amounted to €7.3 billion euros. According to EIB, their financing further leveraged €30.8 billion of new investment in the blue economy.[50]

The EIB, the European Commission, WWF for Nature and the World Resources Institute, also developed the Sustainable Blue Economy Finance Principles, which guide investors through a pioneering global investment framework towards the sustainable use of the ocean's resources. So far, over 70 public and private companies, representing $11 trillion in total assets, have joined the initiative. In 2021 and 2022, the initiative published two practical guides for financial institutions: Turning the Tide: How to Finance a Sustainable Ocean Recovery and Diving Deep: Finance, Ocean Pollution and Coastal Resilience. The documents cover seven key ocean sectors, chosen for their established connection with private finance — seafood, shipping, ports, offshore renewables, coastal tourism, solid waste management and coastal protection.[52]

51. European Investment Bank (2024). Clean oceans and the blue economy OVERVIEW 2024. EIB website.
52. Idem

MARKET-BASED MECHANISMS

+ STRENGTHS

- Loan mechanisms support projects with long-term benefits, such as decarbonization, preventing the destruction of shorelines, and protecting fragile coastal ecosystems, contributing to systemic change.
- By providing guarantees and partnering with other financial institutions, the EIB helps mitigate investment risks, encouraging private sector participation in the blue economy.

- WEAKNESSES

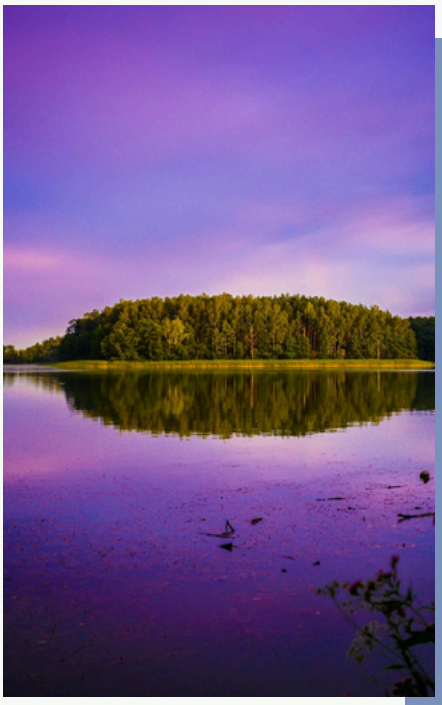
- Complex application processes and stringent due diligence requirements may pose challenges for smaller organizations or developing countries seeking EIB loans.
- Risk-sharing mechanisms may not fully eliminate financial risks, and unforeseen challenges can impact project success and loan repayment.

DEBT-FOR-NATURE SWAPS

Debt-for-nature swaps are financial arrangements in which a portion of a developing country's foreign debt is forgiven in exchange for local investments in environmental conservation projects. These swaps are typically facilitated by international conservation organisations, financial institutions, and the governments of debtor and creditor countries. In a typical debt-for-nature swap, a conservation organisation buys a portion of a country's debt at a discounted rate. The debtor country then commits to investing an agreed-upon amount of local currency in conservation projects, such as the establishment and maintenance of MPAs. This approach helps reduce the country's debt burden while simultaneously funding important environmental initiatives.

One notable example is the debt-for-nature swap between the United States and Seychelles . In 2016, Seychelles, an archipelago in the Indian Ocean, restructured $21 million of its debt in exchange for its commitment to protect 30% of its marine territory. This initiative was facilitated by The Nature Conservancy involved in creating new MPAs and enhancing marine conservation efforts. [53]

53. Zylicz, T. (1998). Debt-for-environment swap as a game: The case of the Polish EcoFund. Fondazione Eni Enrico Mattei. Retrieved from ECOSTOUR website.



An example in Europe is the Polish debt-for-swap case. In 1990 the World Wildlife Fund (WWF) converted $50,000 (purchased in a secondary market for $11,500) of the Polish debt into a Mazurian Lake conservation project, to preserve biodiversity, improve water quality, and enhance the ecological integrity of the region. Despite its limited scale and initial bureaucratic challenges, it set a precedent and provided valuable lessons for larger-scale debt-for-environment swaps, such as the Polish EcoFund established later that supported numerous environmental projects across Poland, ranging from air quality improvement and water treatment to habitat conservation and biodiversity protection. [54]

+

STRENGTHS

- Reduces national debt burden while funding conservation.
- Promotes sustainable environmental practices.
- Leverages international cooperation and funding.

-

WEAKNESSES

- Complex to negotiate and implement.
- Dependent on the cooperation of multiple stakeholders.
- May be limited in scale and scope .

54. Zylicz, T. (1998). Debt-for-environment swap as a game: The case of the Polish EcoFund. Fondazione Eni Enrico Mattei. Retrieved from ECOSTOUR website.

4 CORPORATE PARTNERSHIPS AND SPONSORSHIPS

Corporate partnerships and sponsorships provide a powerful financial mechanism for funding MPAs by leveraging resources and expertise from private businesses. These partnerships need to set strict environmental conditions in the agreement between sponsors and MPAs to avoid bluewashing. The agreements should align conservation goals with corporate interests, creating mutually beneficial collaborations that support sustainability while enhancing a company's brand or corporate social responsibility objectives. By engaging the private sector, MPAs can diversify their funding sources, reduce dependency on public budgets, and access innovative solutions.

CORPORATE PARTNERSHIPS AND SPONSORSHIPS								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Corporate Sponsorships	Businesses fund conservation projects in exchange for branding and marketing opportunities.	Leverage corporate resources for marine conservation and CSR.	Private corporations, Industry associations	Corporations, Companies with CSR initiatives	Sponsorship agreements or collaborative projects with marketing and environmental returns.	Patagonia, Tara Ocean Foundation	Resource Access, Public Awareness, Innovation	Corporate Influence, Short-Term Focus, Greenwashing
Public-Private Partnerships (PPPs)	Collaboration between government entities and private sector companies for public projects.	Leverage private sector resources to support marine conservation.	Government agencies, Private sector companies, NGOs	Private companies, Institutional investors, Government funding bodies	Contractual agreements with financial and environmental returns.	Great Barrier Reef Foundation, MedPAN	Resource Mobilization, Efficiency, Shared Risk	Resource Mobilization, Efficiency, Shared Risk
Eco-Certification Programs	Certification programs that charge fees for certifying businesses as sustainable.	Promote sustainable practices while generating revenue.	Certification organizations	*Businesses*	Fees for certification services, often tied to eco-labeling and sustainability branding.	Marine Stewardship Council (MSC) certification for sustainable fisheries.	Encourages sustainable industry practices; Provides steady income for MPAs; Increases consumer trust in certified products.	High cost of certification for small businesses; Requires robust monitoring and compliance mechanisms.

CORPORATE SPONSORSHIPS

Corporate sponsorships and partnerships involve financial contributions from businesses in exchange for marketing opportunities or the fulfillment of corporate social responsibility (CSR) objectives. These partnerships are mutually beneficial, as they provide vital funding for conservation projects while enhancing the corporate image and reputation of the sponsoring companies. Businesses increasingly recognise the importance of supporting environmental sustainability, and many actively seek opportunities to invest in marine conservation, in exchange for what is also called “Cause Marketing”. According to the Marine Conservation Institute, most (66% of) consumers are willing to spend more on products with a positive social and environmental impact.[55]

Corporate sponsorships can take various forms, including direct financial donations, in-kind contributions, and collaborative projects. For example, the collaboration between The Ocean Cleanup and several multinational corporations has resulted in significant financial support and technological advancements for removing plastic pollution from the oceans.[56]

Another example is Patagonia and its campaign 1% for the Planet, where 1% of sales from the brand go to the preservation and restoration of the natural environment, including the Ocean, through direct cash and in-kind donations to domestic and international grassroots environmental groups worldwide. [57]

55. Marine Conservation Institute (n/d). Good business is good for the planet. MCI website.
56. The Ocean Cleanup (n/d). Join the Cleanup - Partners and funders. TOC website.
57. Patagonia (n/d). Support for people and the planet — certified. Patagonia website.

CORPORATE PARTNERSHIPS AND SPONSORSHIPS

To avoid bluewashing, strict environmental conditions should be set in the agreement between donors & MPAs.

+ STRENGTHS

- Provides vital funding and enhances corporate image
- Aligns corporate social responsibility (CSR) goals with conservation efforts
- Raises public awareness
- Has great flexibility as it can fund a wide range of activities, from infrastructure development to environmental education or species protection.
- Successful collaborations can evolve into sustained support over multiple years.

- WEAKNESSES

- Can be influenced by corporate interests
- Could fall into green (blue) washing if not done correctly
- Economic downturns or shifts in CSR strategies can result in reduced sponsorship availability
- Securing and managing sponsorships may require significant administrative effort, detracting from conservation activities.

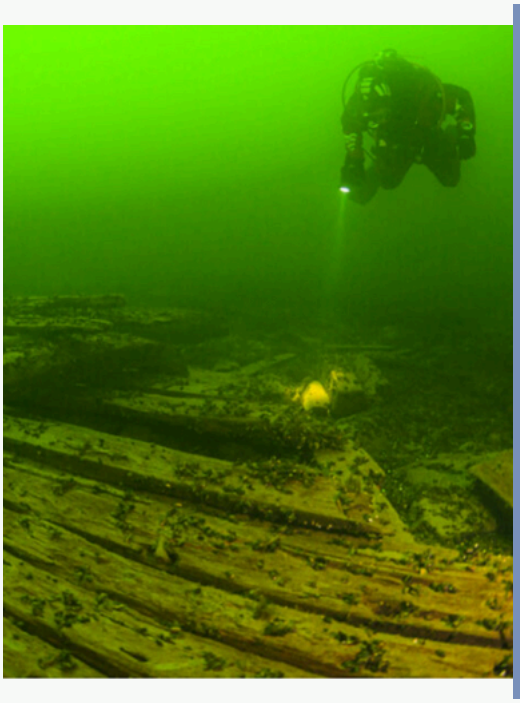
PUBLIC-PRIVATE PARTNERSHIPS (PPPS)

PPPs in nature conservation are **collaborations between the public and private sectors to address environmental challenges that combine public sector's ability to create enabling conditions with the private sector's scaling ability.** PPPs can help conserve nature by combining the strengths of governmental bodies and private entities to address pressing marine challenges.[58]

According to the World Economic Forum, PPPs has three main ways to help restore ocean health: driving a net-zero, nature-positive blue economy; investing in the conservation and restoration of marine ecosystems; and fostering ocean innovation to address local challenges with global results.[59]

58. Samandari et.al. (2023). The role of public–private–philanthropic partnerships in driving climate and nature transitions. McKinsey Sustainability website.
59. World Economic Forum (2024). 3 ways public-private partnerships can help restore ocean health. WEForum website.

CORPORATE PARTNERSHIPS AND SPONSORSHIPS



An example in Europe is the Baltic Sea Action Plan Fund, set up in 2010 to help quicken the implementation of the HELCOM Baltic Sea Action Plan which was created in 2007 to restore the ecological status of the Baltic marine environment. The Fund was initiated by Sweden and Finland being co-managed by the Nordic Investment Bank (NIB) and Nefco, the Nordic Green Bank.
Since the establishment of the BSAP Fund, 53 projects with demonstrable effects have been completed as of the end of 2023, addressing eutrophication, biodiversity and pollution. [60]

Another example is the Blue Carbon Action Partnership, a PPPs from the World Economic Forum that enables national governments to develop their own ambitions for the conservation and restoration of blue carbon ecosystems, and that provides a platform for businesses that want to invest in these ecosystems to do so in a credible, high-quality, responsible way.

This involves catalyzing important conversations on policy, finance, and standards, convening partners from across an array of sectors both in individual countries and globally, and collaboratively driving meaningful change to conserve and restore blue carbon ecosystems. [61]

60. NEFCO (n/d). Baltic Sea Action Plan Fund. NEFCO website.
61. World Economic Forum (n/d). Blue Carbon Action Partnership. BCEP website.

CORPORATE PARTNERSHIPS AND SPONSORSHIPS

+ STRENGTHS

- PPPs reduce reliance on a single funding stream by integrating public funds, private investments, and philanthropic contributions, ensuring financial sustainability.
- PPPs pool financial, technical, and human resources from both public and private sectors, enabling large-scale projects
- Private sector involvement can introduce advanced technologies and innovative approaches
- PPPs create frameworks for replicating and scaling successful projects across regions, enhancing their impact.

- WEAKNESSES

- Managing multiple stakeholders with diverse interests and priorities can lead to delays, inefficiencies, or conflicts.
- Establishing PPPs requires significant time and resources to negotiate agreements, define responsibilities, and align objectives
- Ensuring that both public and private partners adhere to agreed-upon sustainability and conservation goals can be difficult without robust governance mechanisms.

ECO-CERTIFICATION PROGRAMS

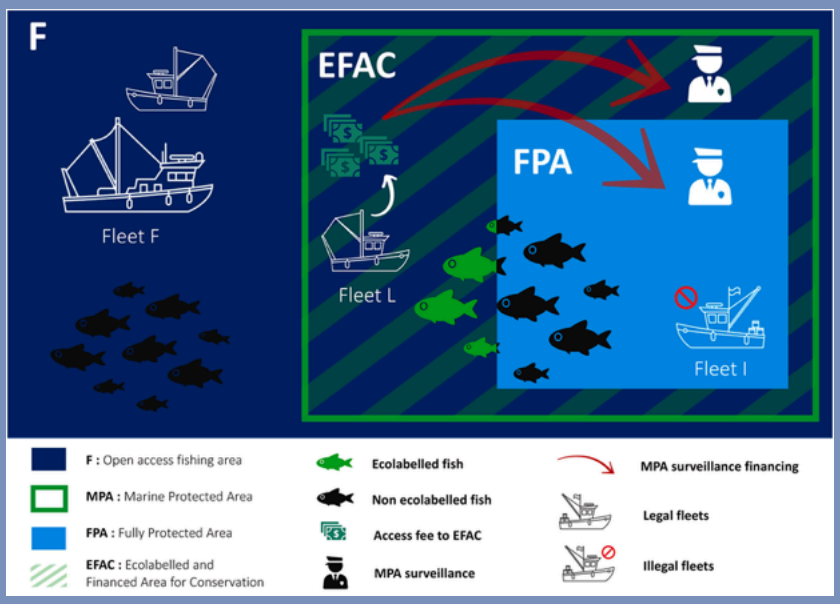
These programs provide certifications or eco-labels to businesses or products that meet predefined sustainability criteria, such as minimising environmental impacts, conserving biodiversity, or adhering to sustainable tourism practices. Fees collected from businesses seeking certification could be used to fund conservation activities.

An example of a certification programme is Green Fins, an internationally recognised initiative aimed at promoting sustainable practices in the diving and snorkelling industry to protect coral reefs and marine ecosystems. As a membership-based program, with different type of memberships and prices, it works directly with dive and snorkel operators, offering them the tools and guidance needed to minimize their environmental impact while enhancing the long-term sustainability of marine tourism. [62,63]

62. Green Fins (n/d). About Green Fins. Green Fins website
63. Green Fins (n/d). Become a Green Fins Member. Green Fins website.

CORPORATE PARTNERSHIPS AND SPONSORSHIPS

Members undergo regular environmental assessments that follow the Code of Conduct comprising 15 environmentally focused guidelines that operators commit to following. After each assessment, operators receive detailed feedback and customized action plans that outline specific steps to improve their environmental performance. While the fees are not used per-se on tangible conservation and restoration actions, the collected money supports Green Fins operations such as training and educational resources to dive staff and tourists, that indirectly fosters awareness about the importance of reef protection and sustainable tourism.



Garraud *et.al.* (2023) suggest that eco-label certification programmes in multi-zone MPAs can incentivise sustainable fishing practices and offset the costs of fishing effort displacement.[64] In what they call an "Ecolabelled and Financed Area for Conservation (EFAC)", they would divide an MPA into two zones: a Fully Protected Area (FPA) and a Partially Protected Area (PPA), in this case the EFAC, that act as a buffer zone between the FPA and the open area, Accesing the EFAC would mean entry fees for fishers to fish in it, with the funds collected used to help finance the enforcement of the MPA, Furthermore, by having an ecolabel attached to it, they suggest fishers operating in the PPA would benefit from the sale of ecolabelled fish catch, covering the costs associated with obtaining and using an ecolabel. [65]

64.Garraud L., et.al. (2023). Ecolabel certification in multi-zone marine protected areas can incentivize sustainable fishing practices and offset the costs of fishing effort displacement. Earth System Governance. Volume 17.
65. Idem

OTHER POTENTIAL APPLICATIONS

A MPA could develop a certification programme similar to what Surfrider Foundation Europe did with its programme Ocean Friendly Restaurants (OFR). OFR is a program that defines an eco-responsible set of guidelines to which any European restaurant owner can subscribe. The aim of the program is to help and guide restaurant owners towards an ecological transition and make it easy for them to reduce their impact. Restaurants part of the OFR community benefit from a unique access to a map of local alternative suppliers throughout Europe and gain visibility through the promotion made by Surfrider as restaurants that have little impact in the Ocean since they comply to 8 mandatory criteria including: no expanded polystyrene or single-use plastics use, no endangered species on the menu, dishes made with local, seasonal and or organic products, among others.[66]

Similarly, MPAs could engage local businesses in conservation efforts by implementing a certification program tailored to hotels, restaurants, and service providers operating near their boundaries. Such a program would incentivise businesses to adopt sustainable practices that align with the MPA's goals, while simultaneously enhancing their appeal to eco-conscious tourists. By creating a collaborative framework, MPAs could foster local stewardship, build a culture of environmental responsibility, and secure additional support for marine protection.
The certification program would establish clear guidelines for businesses, focusing on practical actions that directly benefit marine ecosystems. These could include reducing single-use plastics, implementing effective waste management systems, sourcing sustainable seafood, conserving water and energy, educating staff and patrons about the MPA's importance, just to name a few.

Businesses that meet these criteria would earn a certification, which could be tiered (e.g., Bronze, Silver, Gold) to encourage continuous improvement and would receive the "MPA-friendly" recognition in the form of certificates, eco-labels for display, and promotion through the MPA's website and social media channels. The collected fees could then be directly used for the MPA management and enforcement.

66. Surfrider Foundation (n/d). Ocean Friendly Restaurants: the eco-friendly charter for restaurant owners. SF website.

5 TOURISM AND RECREATION-LINKED REVENUE

Tourism and recreation-linked revenue provide MPAs with a funding source by leveraging their natural beauty and biodiversity to generate income. The different mechanisms withing this category are designed to balance conservation needs with tourism, ensuring that those who benefit from the MPA's recreational opportunities contribute directly to its protection and management. If not properly regulated, tourism can have negative impacts on habitats (e.g., anchoring on coral reefs). It is essential that the funds collected are reinvested in protective and management measures.

TOURISM AND RECREATION-LINKED REVENUE								
Financial Mechanism	Description	Purpose	Issuers	Investors/ Payers	Structure and returns	Examples	Positives	Negatives
User Fees	Fees charged for entry or specific recreational activities.	Generate direct revenue to fund MPA management.	MPA management authorities	Tourists and recreational users	Revenue collected directly at entry points or through permits; reinvested in conservation and visitor facilities.	Raja Ampat MPA entry fee of 18eur per person	Provides steady funding; easy to implement	Seasonal variability
Concession Agreements and Revenue Sharing	Partnerships with private operators for tourism services within MPAs, with revenue-sharing arrangements	Support tourism while sharing financial benefits.	MPA authorities and private operators	Tourists and recreational users	Agreements specify roles, revenue shares, and conservation requirements; returns vary based on visitor numbers.	Cabrera Archipelago Maritime-Terrestrial National Park, Spain: Concessions with eco-tour operators for boat trips.	Increases service quality; shares risks with private operators.	Complex to negotiate; risk of prioritising profit over conservation; monitoring required for compliance.
Eco-Tourism Packages	Premium, conservation-focused tourism experiences, often including education and unique activities.	Promote conservation and enhance visitor experience.	MPA operators and eco-tour companies	High-value tourists	Packages with a portion of proceeds allocated to the MPA management.	Wadden Sea National Park, Denmark: Guided bird-watching tours, oyster tours & seal safaris	Raises awareness and funding; attracts eco-conscious travelers.	Limited to affluent visitors; requires specialised staff and infrastructure.
Virtual Access Fees	Revenue generated from virtual tours, educational videos, or live-streaming experiences of the MPA.	Expand revenue without increasing visitor impact	MPA authorities	Online users and institutions	Digital content monetised through one-time fees, subscriptions, or sponsorships.	Virtual whale watching and deep-sea exploration experiences.	Broadens audience; no physical strain on ecosystems; accessible globally.	Requires technological investment; difficult to generate significant revenue initially.

USER FEES

User fees are one of the most widely implemented mechanisms for generating revenue in MPAs around the world. These are charges done to visitors for entering the MPA area, boat fees or mooring fees, as well as specific recreational activity fees such as diving fees or snorkelling fees, levied on all visitors. These fees are either collected directly by the MPA services, indirectly by third parties, such as tourist operators who collect the fees from visitors and pay them back to the MPA, or via online booking systems. Their structure can vary based on visitor categories, such as local residents, international tourists, or special-interest groups like divers. The primary purpose of user fees is to fund the management and conservation efforts, covering costs such as monitoring, enforcement, habitat restoration, and visitor infrastructure.[67]

In Europe it is not common across all MPAs since it depends on whether the legal conditions are viable for the implementation of a visitor fee mechanism at national and protected area level, among other factors. For example, in 2024, MedPAN selected 4 MPAs to pilot this programme and it found that in Albania, even though the law permitted it, the amounts defined in the national regulation would not offset the cost of implementing such a mechanism. In Croatia, the idea to impose a mooring fee, but the management body did not have the authority to implement such a fee. In Turkey, there was no legal framework for implementing visitor fees in MPAs despite having public support. And lastly, in Montenegro, it turned out to be difficult to implement given that tourists can access the MPA territory through numerous open access points.[68] However, it has great potential as willingness-to-pay studies have shown that many tourists are willing to pay to enter an MPA when the money is allocated towards funding marine conservation.[69]

67. Blue Seeds (2021). Guide on financing mechanisms for MPAs. 152 pages.
68. MedPAN (2024). Experimenting with the introduction of entry fees for MPAs: limitations, lessons learned and prospects. MedPAN website.
69. Idem

TOURISM AND RECREATION-LINKED REVENUE

An example is The Bonaire Marine Park in the Netherlands Antilles which has self-financed all operations since 1992 through visitor fees, dive entrance fees, boat entrance fees and mooring fees. A 2005 raise in Bonaire's annual fees to USD 25 and USD 10 for divers and non-divers, respectively, created a revenue stream conservatively estimated at USD 760 000, far higher than the 2002 operating budget of USD 270 000. The surplus was used for the nearby Washington-Slagbaai terrestrial park, which also provides upstream ecological benefits to the marine park. [70]

+ STRENGTHS

- Consistent and predictable source of income
- By attaching a monetary value to access, user fees can help regulate visitor numbers, thereby reducing environmental pressure on sensitive ecosystems.
- Visitors contributing financially may develop a greater sense of stewardship and support for conservation objectives.
- In some cases like Bonaire, MPAs have achieved full or substantial financial independence through well-structured user fee systems

- WEAKNESSES

- Establishing a fee collection system requires initial investment and ongoing administrative costs, including staffing and infrastructure maintenance.
- Fixed fees may disproportionately affect lower-income visitors, limiting equitable access to natural resources.
- Income from user fees can fluctuate due to seasonal changes, economic downturns, or unforeseen events affecting tourism.
- It needs to be supported by the existing legal framework at a national level.

70. OECD (2017). Marine Protected Areas: Economics, Management and Effective Policy Mixes, p. 120

CONCESSION AGREEMENTS AND REVENUE SHARING

A concession agreement refers to a lease, license, permit, or similar arrangement that allows an external party to operate within a protected area. These agreements are part of a broader system of tourism-related user fees, designed to generate revenue for the MPA while ensuring visitors have access to high-quality services. At the same time, these agreements aim to achieve social and environmental objectives, such as conservation and community engagement.[71]

The success of concession-based revenue generation depends on the private sector or other stakeholders' ability to attract tourists to the MPA. This, in turn, is influenced by factors like the location of the protected area, the availability of facilities, ease of access, and the feasibility of providing services that are both appealing to visitors and financially sustainable, covering more than the operational costs. Concessions are typically managed by a specialized team within the MPA, which is experienced in working with commercial tourism operations. This team collaborates with operational staff and decision-makers to identify, administer, and allocate concession opportunities. The types of tourism concessions allowed within MPAs can vary significantly around the world, depending on the region's historical use of the area, national cultural norms, and the evolution of policies governing protected areas.[72]

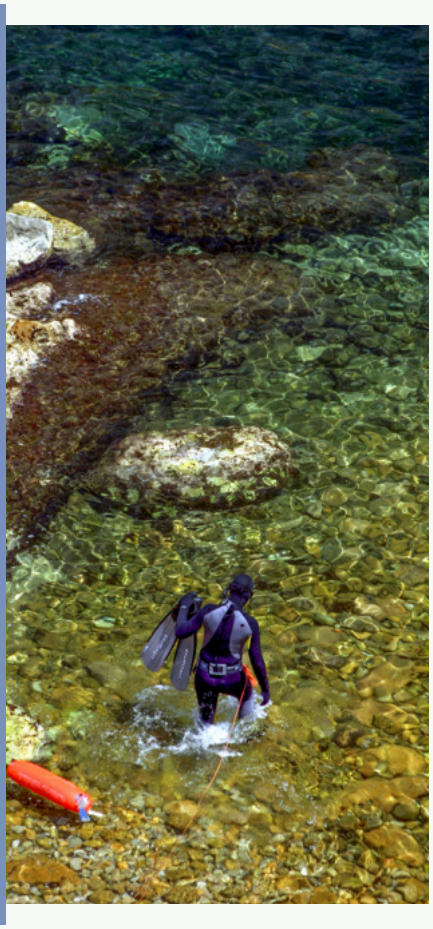
Cabrera Archipelago Maritime-Terrestrial National Park in Spain is a good example of this as it provides concessions with eco-tour operators for boat trips to arrive to the archipelago, it grants certain number of authorisations for navigation and anchoring of recreational vessels and tourist boats, as well as for scuba diving, and established a system of granting fishing permits in the National Park area, which can only be applied for by fishermen included in the census.[73, 74]

71. Spenceley, A., et.al. (2017). Guidelines for tourism partnerships and concessions for protected areas: Generating sustainable revenues for conservation and development. Report to the Secretariat of the Convention on Biological Diversity and IUCN.
72. Idem
73. Ministerio para la Transición Ecológica y el Reto Demográfico. (1992). Plan de Ordenación de los Recursos Naturales del Parque Nacional Marítimo-Terrestre del Archipiélago de Cabrera. 11 pages.
74. Gobierno de España. (1995). Ley 4/1989, de 27 de marzo, por el que se aprueba el Plan rector de uso y gestión del Parque Nacional Marítimo-Terrestre del Archipiélago de Cabrera. Boletín Oficial del Estado (BOE). 21 pages.

TOURISM AND RECREATION-LINKED REVENUE

Another example is the Côte Bleue Marine Park, in France where there are concessions for diving and eco-tourism activities, with revenue sharing.[75] This means that a portion of the revenue generated by tourism activities is shared with the park authority generating funds for marine conservation and management of the park. Furthermore, these allows setting other rules as operators must adhere to strict environmental guidelines to minimize their impact on the marine ecosystem.

Le Parc Marin de La Côte Bleue (The Côte Bleue Marine Park) has been inscribed since November 24, 2018 on the International Union for Conservation of Nature's Green List of Protected Areas. This distinction is attributed to protected areas that meet several standards for effective management and local governance.[76]



+ STRENGTHS

- Generates revenue for conservation and management.
- Promotes sustainable use of marine resources.
- Engages private sector in conservation efforts.
- Provides economic benefits to local communities.

- WEAKNESSES

- Requires robust monitoring and enforcement.
- Risk of environmental degradation if not properly managed.
- Can create conflicts with traditional users or local communities

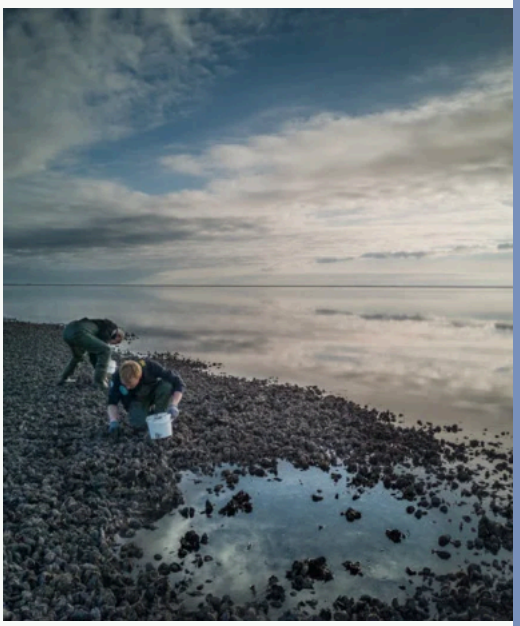
75. Parc Marin de la Côte Bleue. (2020). Plan de Gestion 2020-2030: Synthèse.
76. Martigues en Provence (n/d). Parc marin de la Côte Bleue. MeP website.

ECO-TOURISM PACKAGES

Eco-tourism packages are specialised offerings that combine tourism with conservation education and sustainable practices, providing visitors with unique, immersive experiences in MPAs. These packages often include guided wildlife tours, opportunities to participate in conservation activities, and exclusive access to pristine marine environments. By aligning recreational experiences with conservation goals, eco-tourism packages foster a deeper connection between visitors and the ecosystems they explore.

The primary objective of eco-tourism packages is to generate revenue for MPAs while promoting environmental awareness and sustainable tourism practices. These packages cater to eco-conscious travellers who value experiences that contribute to the protection of natural habitats. Activities like helping restore a coral or citizen science monitoring expeditions, not only provide memorable experiences but also directly support conservation projects through direct actions and through the revenue they generate.

When designed effectively, eco-tourism packages enhance financial sustainability, promote responsible tourism, and support local economies while protecting the unique marine biodiversity that attracts visitors. However, these packages require careful planning to ensure that visitor activities do not inadvertently harm the ecosystems they aim to protect.



The Wadden Sea National Park in Denmark, part of the UNESCO-listed Wadden Sea, offers a variety of eco-tourism packages that highlight the area's unique tidal landscapes and rich biodiversity. Visitors can participate in guided tours and activities such as seal safaris, oyster collection, and bird-watching expeditions, all designed to provide an immersive and educational experience. These packages emphasize sustainable practices, with certified guides ensuring that tourism activities have minimal impact on the delicate ecosystems of the park.[77]

77. *Vadehavscentret (n/d).* *Experience the Wadden Sea Guided Tours and activities in Wadden Sea National Park.*

TOURISM AND RECREATION-LINKED REVENUE

+ STRENGTHS

- Engages visitors in educational experiences, fostering a deeper understanding and appreciation of marine ecosystems.
- Provides economic benefits to nearby communities through job creation and partnerships with local businesses.
- Raises the profile of MPAs as unique destinations, increasing public support and interest in marine conservation.

- WEAKNESSES

- Premium pricing may exclude lower-income visitors, limiting equitable access to natural resources.
- Deloping and maintaining high-quality eco-tourism packages require significant investment in infrastructure, staff training, and marketing.
- Income is often dependent on peak tourist seasons, leading to fluctuations in financial stability.

VIRTUAL ACCESS FEES

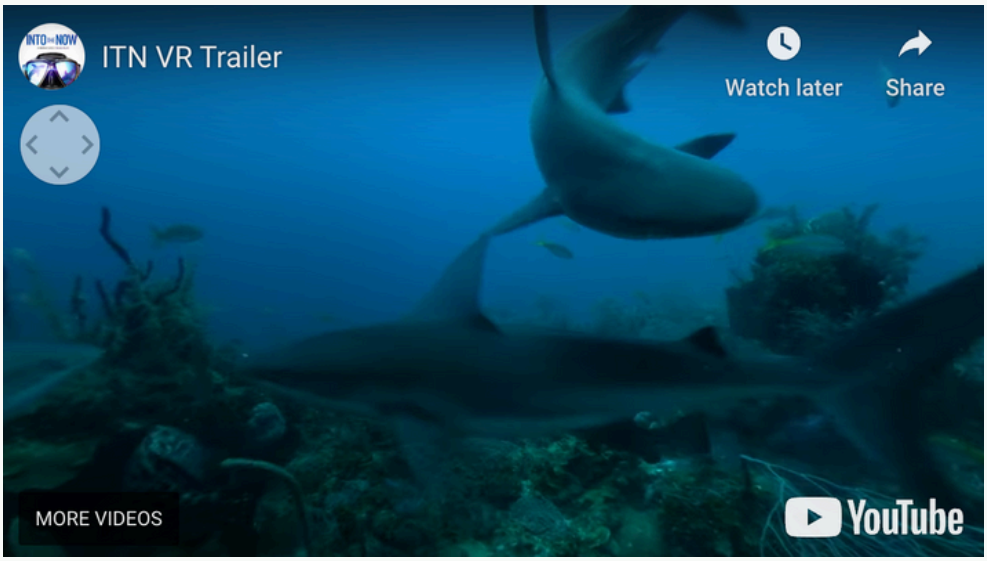
Virtual access fees could offer MPAs an innovative way to generate revenue by providing digital experiences that allow global audiences to explore and learn about these unique ecosystems. These fees could be charged for access to virtual tours, live-streamed events with key speakers, or interactive platforms that showcase the biodiversity and significance of the MPA.

By reaching audiences who may not be able to visit in person, virtual access reduces physical pressures on sensitive habitats while fostering global engagement. MPAs could monetize these experiences through subscription models, one-time fees, or partnerships with sponsors and educational institutions.

The adoption of virtual access fees aligns with the growing demand for digital content and sustainable tourism alternatives. While examples of widespread implementation are still emerging, such mechanisms hold significant potential for diversifying MPA funding and connecting broader audiences to the importance of protecting marine biodiversity.

POTENTIAL APPLICATIONS

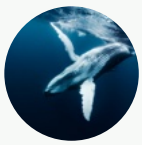
- **Virtual Reality Experiences**: Experiencing the deep sea like you're really there, with controls on the video to turn in whichever 360 direction you want. Into the Now is a good example of this.



- **The Ocean through animal's eyes**: Being able to access the view from one animal in the MPA. The BBC did several recordings as such.

- **CatchCam camera**: Accessing an underwater monitoring camera located at an important ecosystem hotspot to monitor marine life.

- **Live-Streamed Exploration:** Real-time broadcasts of marine life or special events, such as coral spawning or migratory species, allowing viewers to experience unique phenomena.



- **Marine Soundscapes:** Immersive audio experiences capturing the underwater sounds of MPAs, including whale calls, snapping shrimp, and other marine life.

- A membership could include many more perks like digital habitat restoration simulations, photos and access to the latest statistics of the status of the MPA, etc

TOURISM AND RECREATION-LINKED REVENUE

+ STRENGTHS

- Virtual access fees allow MPAs to engage a global audience, including those who cannot visit in person or cannot dive, increasing awareness and support for conservation.
- Digital experiences reduce physical pressure on sensitive marine ecosystems, making this a sustainable alternative to on-site tourism.
- Virtual access provides an additional income stream, reducing reliance on traditional funding mechanisms.

- WEAKNESSES

- Significant upfront investment, or collaboration with external partners is needed to create high-quality virtual experiences, and technical issues may deter users.
- Digital platforms need regular updates, monitoring, and content creation to remain relevant and engaging.
- A marketing approach is needed to establish the membership offerings and keep it always as a good investment to make from the user's perspective.

6 CONSERVATION SPECIFIC FUNDS

Conservation-specific funds are dedicated financial mechanisms designed explicitly to support biodiversity protection, ecosystem management, and sustainable natural resource use. These funds can be established at international, national, or local levels and are often sourced from a mix of public, private, and philanthropic contributions. Successful implementation often relies on robust governance structures, transparent fund management, and clear links between funding disbursement and conservation performance indicators.

CONSERVATION SPECIFIC FUNDS								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Conservation Trust Funds	Private, legally independent institutions—usually non-profits or foundations—designed to mobilize and sustain long-term financing for conservation efforts.	To provide sustainable, long-term financial support for conservation projects, ensuring stable funding beyond short-term donor cycles.	Non-profits, foundations, or multi-stakeholder boards.	Governments, donors, NGOs, private sector, and philanthropic organizations.	Funds receive capital from donors and, depending on the structure, either allocate it directly through grants, invest in economic activities, or reinvest the capital, releasing only the investment revenue to MPAs.	MEDFUND, consisting of an endowment, a sinking and a revolving funds; Mexican Fund for the Conservation of Nature (FMCN)	Provides sustainable, long-term funding; pools resources from various donors for financial stability; professionally managed for efficiency and transparency.	High initial setup costs; financial returns depend on market performance; requires strong governance to prevent misuse of funds.
Endowment Fund	Funds designed to preserve the principal capital and generate income from investments to fund conservation activities. Can operate independently or within a CTF.	To provide perpetual, stable funding for long-term conservation projects through investment returns.	Non-profits, foundations, CTFs, or multi-stakeholder boards.	Governments, donors, foundations, corporations, and individual philanthropists.	Initial capital is raised through donations or grants, invested in diversified portfolios. Only the investment returns are used to fund conservation activities, while the principal remains intact.	Pure Ocean (international endowment fund for marine biodiversity).	Provides perpetual funding; financial stability not reliant on annual fundraising; attracts diverse donors; professionally managed for steady returns; supports long-term conservation goals.	High initial capital requirement; dependent on market performance; complex to manage; administrative costs; potential donor restrictions on fund use.

6 CONSERVATION SPECIFIC FUNDS (CONT.)

CONSERVATION SPECIFIC FUNDS								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Sinking Fund	Time-bound funds designed to be fully spent over a set period, supporting specific conservation projects.	To provide consistent funding for projects with clear objectives and defined timelines.	Non-profits, foundations, government agencies, or conservation trust funds.	Governments, donors, foundations, and international organizations.	A fixed sum is raised through donations or grants, then spent down annually until depleted. Funds are carefully budgeted to last the project duration.	Madagascar Biodiversity Fund (FAPBM), which manages both sinking and endowment funds.	Focused funding for specific goals; predictable budgeting; ideal for short-term projects like habitat restoration or infrastructure development.	Finite resources with no replenishment; risk of premature depletion; unsuitable for long-term, ongoing conservation needs.
Revolving Fund	Self-sustaining funds that continuously replenish capital through income from conservation-related activities.	To provide long-term, consistent financing for ongoing conservation efforts through reinvestment of generated income.	Conservation organizations, government agencies, local community groups, or dedicated entities.	Blue activity operators, donors, and philantrophists.	Income is generated from activities (e.g., user fees, sustainable resource use) and reinvested to maintain the fund. Some funds include reserves for financial stability.	BlueMove Revolving Fund (Europe), supporting sustainable small-scale fisheries through microcredits and reinvestment.	Provides sustainable, continuous funding; engages stakeholders directly; adaptable to various conservation needs.	Dependent on consistent revenue streams; complex to establish and manage effectively; income can fluctuate due to external factors.

CONSERVATION SPECIFIC FUNDS

CONSERVATION TRUST FUND

Conservation Trust Funds (CTFs) are private, legally independent institutions—typically established as non-profit organizations or foundations—designed to mobilize and sustain financing for critical terrestrial and marine conservation initiatives. Today, there are more than 100 CTFs operating worldwide, providing essential financial support for conservation initiatives. These funds pool resources from a diverse range of donors and ensure professional management to support long-term conservation goals. CTFs can generally be divided into three types: endowment funds, sinking funds, or revolving funds.[78] Each of these fund types is discussed independently below.

At the core of a CTF's structure is a board of trustees or directors, which often includes representatives from key stakeholder groups such as government agencies, donor organizations, NGOs, and, in some cases, community representatives. This multi-stakeholder composition fosters alignment with the priorities of different interest groups, ensures transparency, and upholds accountability. The board is responsible for setting strategic priorities, approving grants, and overseeing the overall management and operation of the fund.

The MedFund is a Conservation Trust Fund established in 2015 by France, Tunisia, and Monaco, with support from the Prince Albert II of Monaco Foundation. Based in Monaco, The MedFund aims to provide sustainable financing for MPAs in the Mediterranean. Its mission is to mobilize resources from public and private stakeholders to enhance the effectiveness of MPAs and ensure the long-term conservation of marine biodiversity. By 2025, The MedFund aims to support over 7,000 km^2 across more than 20 MPA sites.

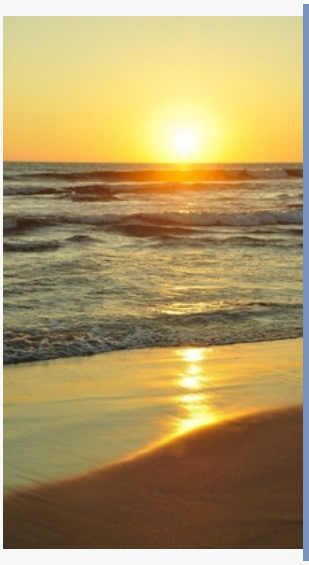
The MedFund uses a hybrid financial model with three key components:

1. Endowment Fund: Capital is invested long-term, and only investment revenues finance field activities, preserving the principal.
2. Sinking Fund: Both capital and investment revenues are used to directly finance activities over 5–10 years, after which the fund is depleted.
3. Revolving Fund: Annual revenues from partners are used to finance ongoing field activities, ensuring a steady resource flow. [79]

78. Bladon et al. (2014). A Review of Conservation Trust Funds for Sustainable Marine Resources Management.

79. MedFund (n/d). MedFund - About us. MedFund Website.

CONSERVATION SPECIFIC FUNDS



The Mexican Fund for the Conservation of Nature (FMCN) is one of the largest and most successful CTFs globally. Established in 1994, it supports a wide range of conservation projects across Mexico, including marine conservation. The FMCN's endowment model has allowed it to generate consistent returns, providing long-term funding for projects such as the protection of coral reefs, mangroves, and other critical marine habitats. The fund's success is attributed to its strong governance framework, diversified funding sources, and strategic partnerships with government agencies, NGOs, and local communities.[80]

+ STRENGTHS

- Sustainable Funding as it provides a reliable source of funding over the long term.
- Can pool resources from various donors, increasing financial stability.
- Professional Management. Ensures efficient and transparent use of funds.

- WEAKNESSES

- High Initial Setup Costs. Establishing a CTF can be complex and costly.
- Financial returns depend on market performance.
- Requires strong governance and management to avoid misuse of funds.

ENDOWMENT FUNDS

Endowment funds can be a type of CTFs - but more rigid in structure, and strictly designed to generate income from investments while preserving the principal (the initial capital) and use only the generated income for funding projects. However, endowment funds can also be set up within a CTF as a means of raising funds. Therefore, they can be part of a larger CTF or operate independently. The governance structure includes a board of trustees or directors responsible for overseeing the fund's management and ensuring that the income is used in alignment with the conservation goals. Professional investment managers or firms are often hired to manage the fund's assets, aiming to maximize returns while maintaining a prudent level of risk.

80. FMCN (n/d). FMCN Website.

CONSERVATION SPECIFIC FUNDS

The governance framework ensures transparency, accountability, and alignment with the conservation objectives. This multi-stakeholder approach often includes representatives from government agencies, conservation organizations, private sector donors, and sometimes local communities. The primary funding mechanism for endowment funds involves the initial capital raised through donations, grants, or other contributions. The principal is then invested in a diversified portfolio of assets, including stocks, bonds, and other financial instruments. The returns on these investments generate the income used to fund conservation activities.

Pure Ocean is an international endowment fund dedicated to protecting marine biodiversity through funding innovative scientific projects. Based in Marseille and Lorient, it supports global initiatives tackling ocean pollution, ecosystem restoration, and climate resilience while actively engaging the public in conservation efforts. Initial funding to be invested further is raised through corporate partnership or individual donations.

+ STRENGTHS

- Perpetual funding source over the long term by preserving the principal and using only the investment returns.
- Financial stability and predictability as they generate a steady stream of income, which is not dependent on annual fundraising efforts or fluctuating donor contributions.
- The long-term nature of endowment funds can attract contributions from a wide range of donors, including individuals, foundations, and corporations.

- WEAKNESSES

- High Initial Capital Requirement. Raising this initial capital can be challenging, especially for smaller organizations or those in regions with limited access to donor networks.
- Market Dependency. The returns generated by endowment funds are subject to market fluctuations and economic conditions

CONSERVATION SPECIFIC FUNDS

- The long-term nature of endowment funds can attract contributions from a wide range of donors, including individuals, foundations, and corporations.
- Professional management ensures that the fund's assets are handled prudently, generating reliable returns for conservation funding.
- Long-term impact and support, critical for activities that require sustained effort, such as habitat restoration, species monitoring, and community engagement.
- The predictability of funding from endowment funds encourages organizations to develop long-term conservation strategies and plans.

- Complex management. Organizations need to ensure they have the necessary skills and governance structures to effectively manage and oversee the fund.
- Administrative costs.
- Potential for restricted use: Donors may place restrictions on how the income from endowment funds can be used.

SINKING FUNDS

Sinking funds are financial instruments designed to provide funding for conservation projects over a specified period. Unlike endowment funds, which aim to preserve the principal indefinitely and use only the investment income, sinking funds are intended to be fully expended over a set timeframe. These funds are particularly useful for projects with clear, time-bound objectives, such as habitat restoration, infrastructure development, or specific conservation campaigns. The primary purpose of a sinking fund is to ensure that adequate financial resources are available throughout the duration of a project. Basically, a sum of money is provided, a proportion of which is spent annually until it ‘sinks’ to zero. This approach allows conservation organisations to plan and implement activities with the confidence that funding will be consistently available until the project’s completion. By providing a predictable flow of funds, sinking funds help to mitigate the financial uncertainties that can disrupt conservation efforts. Sinking funds are established with a fixed amount of capital that is intended to be spent down over the life of the project. This capital is usually raised through donations, grants, or government allocations.

CONSERVATION SPECIFIC FUNDS

The governance structure of a sinking fund typically involves a board of trustees or directors who oversee the fund's management and ensure that expenditures align with the project's objectives. The management of a sinking fund involves detailed financial planning and budgeting to ensure that the funds last for the entire project period. This includes setting milestones and benchmarks to track progress and adjust funding allocations as needed. Professional financial managers may be employed to optimize the use and expenditure of the funds.

The Madagascar Biodiversity Fund (FAPBM) manages both sinking and endowment funds to finance protected areas across Madagascar, including marine and terrestrial ecosystems. As an independent trust fund, it collaborates with Madagascar National Parks to allocate resources strategically. Since its creation, FAPBM has supported nearly 30 protected areas, responding to the country's conservation priorities. [81]

+ STRENGTHS

- Focused Funding: Supports specific projects with clear objectives and timelines.
- Predictable Budgeting: Fixed funds enable precise financial planning.
- Ideal for Short-Term Projects: Suited for intensive efforts like habitat restoration or infrastructure development.

- WEAKNESSES

- Finite Resources: Once depleted, no further funds are available, limiting flexibility for unexpected challenges or delays.
- Risk of Mismanagement: Requires careful planning to prevent premature depletion due to unforeseen expenses.
- Not Suitable for Long-Term Needs: Best for short-term projects, as it doesn't support ongoing conservation efforts.

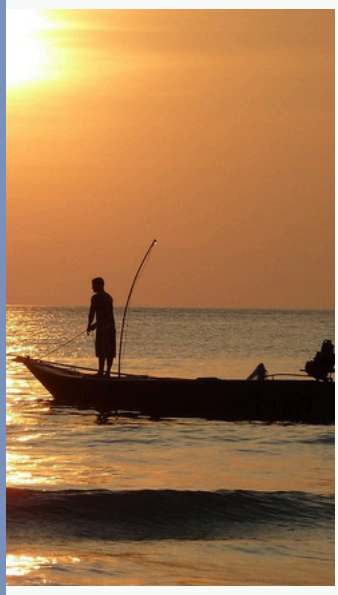
81. FAPBM (n/d). FAPBM Home. FAPBM Website.

REVOLVING FUNDS

Revolving Funds are financial mechanisms specifically designed to be self-sustaining by continuously replenishing their capital through income generated from conservation-related activities. These activities can include user fees, fines, sustainable resource use payments, and other revenue streams. This self-replenishing structure makes revolving funds particularly effective for providing long-term, consistent financing for ongoing conservation efforts.

Revolving funds are typically managed by dedicated entities such as conservation organizations, government agencies, or local community groups. Their governance structures often include a board of trustees or directors responsible for overseeing fund management, ensuring transparency, and directing the allocation of resources. Effective management involves setting up robust mechanisms for collecting and reinvesting income, ensuring that the fund remains operational over time. A critical factor in the success of a revolving fund is the sustainability of its income-generating activities. These activities must reliably produce sufficient revenue to replenish the fund continuously. In some cases, a portion of annual revenues is allocated to a reserve fund, which serves as a buffer to address potential shortfalls caused by unforeseen economic or political events, ensuring the fund's stability and resilience.

A revolving fund utilized in the marine environment in Europe is the BlueMove revolving fund, set up by BlueSeeds to help small-scale fishers access financing for sustainable projects. By providing ethical banks with financial guarantees, BlueMove enables fishers to secure low-interest microcredits, allowing them to start their projects while awaiting European funding approval. Once the EU grant is disbursed, the fishers repay their loans, restoring BlueMove's guarantor capacity to finance new initiatives. This cycle of reinvestment ensures continuous support for sustainable fishing practices. Additionally, BlueMove funds expert advisors to assist fishers in applying for grants and implementing their projects in line with EMFAF criteria. [82]



82. BlueSeeds (n/d). Pre-financing sustainable fishing projects. BlueSeeds Website.

CONSERVATION SPECIFIC FUNDS

+ STRENGTHS

- Sustainable Funding: Provides a continuous and reliable source of income for conservation activities.
- Engages Users: Involves stakeholders directly in funding conservation through user fees and other payments, fostering a sense of ownership and responsibility.
- Adaptable: Can be used for a wide range of conservation needs and easily adapted to changing circumstances.

- WEAKNESSES

- Income Variability: The fund's sustainability depends on steady revenue streams, which can fluctuate based on external factors such as tourism demand or market conditions.
- Initial Setup Challenges: Requires effective mechanisms to ensure that funds are regularly replenished, which can be complex to establish.
- Management Complexity: Needs robust systems to manage and allocate funds effectively, ensuring that income is used efficiently for conservation purposes.

7 RISK FINANCING AND INSURANCE

Risk financing and insurance mechanisms are tools that help enhance the resilience of MPAs against unexpected financial shocks and environmental disasters. These mechanisms provide a safety net to ensure the continuity of conservation activities and operational management, even in the face of catastrophic events such as natural disasters, oil spills, or major coral bleaching incidents. By spreading and managing risk, these tools can help MPAs secure funding for recovery and mitigate potential financial losses.

Risk financing involves strategies that allocate financial resources in advance to manage risks proactively, while insurance mechanisms transfer risks to a third party, ensuring financial coverage for specified contingencies. These solutions not only safeguard ecological and operational stability but also attract stakeholders by demonstrating the MPA's preparedness for uncertain events.

As MPAs face increasing vulnerabilities due to climate change and other human-induced pressures, implementing risk financing and insurance mechanisms is a cornerstone of financial sustainability and adaptive management. This category includes innovative instruments that address these challenges and help MPAs remain effective in their conservation missions.

7 RISK FINANCING AND INSURANCE

RISK FINANCING AND INSURANCE								
Financial Mechanism	Description	Purpose	Issuers	Investors/ Payers	Structure and returns	Examples	Positives	Negatives
Catastrophe Bonds	Bonds that provide payouts for recovery efforts after specific catastrophic events, such as hurricanes or coral bleaching.	To ensure funding for post-disaster recovery and reduce financial strain on MPAs.	Financial institutions, governments	Institutional investors	Payout triggered by predefined disaster events; investors receive interest payments unless the event occurs.	Example: "Reef Resilience Bond" for coral reef recovery (Caribbean).	Provides immediate financial relief; incentivizes proactive disaster planning.	Requires precise risk assessment; limited to catastrophic events.
Risk Pools	Shared financial resources among a group of MPAs to cover unexpected expenses and disasters collectively.	To provide a buffer against financial shocks through pooled resources.	MPA networks, regional authorities	MPA managers, governments	Participating MPAs contribute to a shared fund that can be accessed when disaster strikes.	Caribbean Biodiversity Fund's "MPA Risk Insurance Pool."	Promotes collaboration; reduces individual risk.	Requires coordination and trust among participants; funds may not cover all needs in large-scale events.
Parametric Insurance	Insurance policies that pay out based on predefined triggers, such as storm severity or sea temperature rise, instead of assessed damages.	To safeguard MPAs against financial losses caused by extreme weather events.	Insurance companies	MPAs, governments, NGOs	Payouts triggered automatically once specified thresholds (e.g., wind speed) are reached.	AXA Climate	Fast payout; avoids lengthy damage assessments; useful for extreme weather events.	Requires careful calibration of triggers; premiums may strain smaller MPA budgets.
Climate Risk Insurance	Insurance policies designed to protect MPAs from the financial impacts of climate change-related events, such as rising sea levels or extreme weather.	To mitigate financial risks posed by climate change and ensure operational continuity.	International climate funds	Governments, donors, NGOs	Premiums paid by MPAs or governments; payouts triggered by specific climate-related thresholds.	Global Climate Risk Insurance Fund (InsuResilience)	Addresses climate-specific risks; often supported by international organizations or donors.	Limited availability in certain regions; premiums may strain budgets for smaller MPAs.

CATASTROPHE BONDS

Catastrophe bonds (or cat bonds) are financial instruments designed to provide funding for recovery efforts in the aftermath of catastrophic events, such as hurricanes, coral bleaching, or oil spills. These bonds allow MPAs to transfer specific risks to investors in exchange for interest payments. If a predefined catastrophic event occurs, the principal of the bond is used to finance recovery efforts, effectively protecting the MPA from financial strain.

Catastrophe bonds are particularly valuable for areas vulnerable to extreme weather events, which are increasing in frequency and intensity due to climate change. They represent an innovative way for MPAs to secure funding while engaging with institutional investors who are willing to take on calculated environmental risks in exchange for returns.

Although not yet replicated in Europe, cat bonds are being used in other parts of the world. For example in 2024, the Mexican government raised its level of bond protection against natural disasters to $595 million, reflecting an overall increase of 23%. This was due to the use of its cat bond recently on several occasions, including Hurricane Otis in 2023, and Hurricane Patricia in 2015. The cat bond helps the country mitigate economic losses for areas that are more vulnerable to natural disasters. [83]

OTHER APPLICATIONS

Cat funds in Europe applied to other contexts do exist. For example, covering European windstorm risks, issued through Blue Sky Re DAC with a volume of EUR 250 million.[84]

83. Araullo K. (2024). Mexico's new cat bond integral for disaster risk management – AM Best. ReInsurance Business website.
84. Allianz SE (2023). Allianz sponsors new catastrophe bond covering European windstorm risks. Allianz website.

+ STRENGTHS

- Provides immediate financial relief for recovery efforts.
- Reduces financial uncertainty and spreads risk.
- Incentivizes proactive disaster planning and preparedness.
- Attracts institutional investors to conservation funding compared to traditional fixed-income securities, especially in a low-interest-rate environment. Since the risk is tied to specific, rare catastrophic events, investors can calculate the likelihood of a payout (triggered by the catastrophe) and balance it against the expected return.

- WEAKNESSES

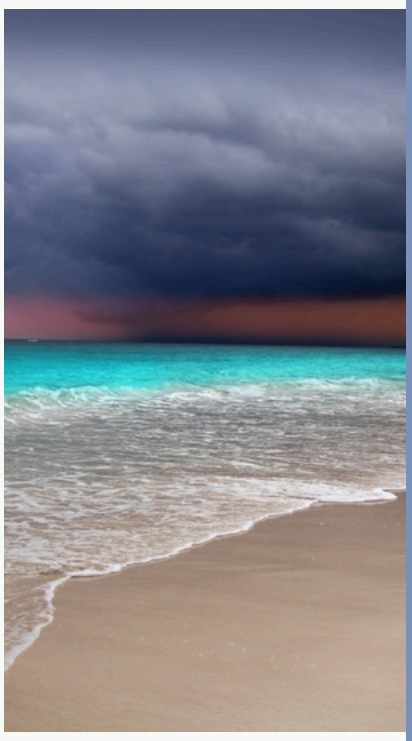
- Requires precise risk assessment to define trigger events.
- Limited application to catastrophic events, excluding smaller-scale disruptions.
- High setup costs and administrative complexity.
- Availability depends on investor interest in niche markets like MPAs.

RISK POOLS

Risk pools are financial arrangements where multiple MPAs or conservation entities collectively contribute to a shared fund to cover unexpected expenses or disasters. These mechanisms distribute risk among participants, ensuring that individual MPAs are not solely burdened by the financial impact of an emergency, such as extreme weather events, ecological damage, or infrastructure failure.

By pooling resources, MPAs can access funds when needed, creating a financial safety net while fostering collaboration among protected areas. Risk pools are particularly effective for regions where MPAs face similar vulnerabilities, making them a viable solution for building resilience against financial and operational shocks.

RISK FINANCING AND INSURANCE



This is not applied in Europe either, but a good example is the world's first multi-country, multi-peril risk pool managed by the Caribbean Catastrophe Risk Insurance Facility (CCRIF) that addresses the financing of loss and damage and that financially protects the economies of countries, as well as livelihoods, communities and people that are particularly vulnerable to natural hazards, particularly hydro-meteorological hazards that are being exacerbated by climate change.

Since CCRIF's inception in 2007, the Facility has made 63 payouts totalling over US$267 million to 17 of our 26 members all within 14 days of the event. About 65% of CCRIF payouts have been used by governments to address immediate needs caused by the disaster.[85]

+ STRENGTHS

- Promotes collaboration and resource-sharing among MPAs.
- Scales well across regions with shared vulnerabilities.
- Encourages regional cooperation and capacity building.

− WEAKNESSES

- Requires strong coordination and trust among participating entities.
- Funds may be insufficient for large-scale events or prolonged crises.
- Initial setup and management can be administratively complex.

85. Caribbean Climate Smart Accelerator (2023). The Role of Risk Pools in Financing Loss and Damage to Financially Protect Economies, Communities, Livelihoods and People. Caribbean Accelerator website.

PARAMETRIC INSURANCE

Parametric insurance is an innovative financial mechanism that provides payouts based on predefined triggers, such as specific weather conditions or environmental thresholds, rather than assessing actual damages. For MPAs, parametric insurance can offer rapid financial relief following events like hurricanes, coral bleaching, or extreme temperature increases.

This type of insurance is particularly valuable for MPAs because it ensures funds are disbursed quickly, enabling immediate recovery actions. By eliminating the need for lengthy damage assessments, parametric insurance reduces administrative delays and enhances resilience against climate-related risks. It also incentivizes MPAs to engage in risk-reduction activities, such as habitat restoration, to minimize potential payouts.[86]

AXA Climate has proposed a parametric insurance model that operates based on meteorological information provided by government agencies. The model triggers compensation within a few days of a cyclone passing within a 50-km radius, enabling Blue finance to immediately regenerate weakened marine environments (cleaning up debris, taking care of damaged corals, etc.), repair MPAs equipment (ships, guard posts, etc.), and reimburse operating losses (ecotourism, artisanal aquaculture, etc.).

To design this innovative coverage, AXA Climate conducted a risk analysis based on the loss history of two MPAs and satellite data from suppliers. For instance, the model would have provided compensation of $62,500 USD in 2015 for damages incurred during Cyclone Melor in the Philippines. [87]

86. SwissRE Corporate Solutions (2023). What is parametric insurance?. SwissRE website
87. Pachon A. (2023). Revolutionizing marine conservation: Blue finance, AXA Climate and Howden partner to protect marine ecosystems. AXA website.

+ STRENGTHS

- Provides rapid payouts, reducing delays in recovery efforts.
- Eliminates the need for lengthy and costly damage assessments.
- Incentivizes proactive risk management and resilience-building activities.
- Transparent and predictable, with clearly defined triggers.

- WEAKNESSES

- Requires careful calibration of triggers to avoid under- or over-compensation.
- Premiums may be unaffordable for smaller MPAs with limited budgets.
- May not cover non-catastrophic or smaller-scale financial shocks.
- Limited availability in some regions; requires tailored solutions for MPA needs.

CLIMATE-RISK INSURANCE

Climate risk insurance is a financial mechanism designed to protect specifically from the financial impacts of climate change-related events. Unlike general parametric insurance, which covers a range of predefined triggers (such as storms or natural disasters) regardless of their origin, climate risk insurance focuses specifically on risks directly linked to climate change, such as prolonged heat waves, rising sea levels, or ocean temperature anomalies.

Climate risk insurance also differs from catastrophe bonds, which are investor-driven instruments designed for rare, high-impact events like hurricanes or earthquakes. While catastrophe bonds transfer risk to investors, climate risk insurance is often funded through international donors, governments, or climate adaptation funds and targets both acute events (e.g., cyclones) and chronic climate pressures (e.g., coral bleaching). This dual focus on immediate and long-term climate impacts makes it particularly well-suited to the evolving challenges faced by MPAs as global temperatures rise and extreme weather events become more frequent.

By offering timely payouts, climate risk insurance ensures that MPAs can respond quickly to climate-induced damages, preserving biodiversity and maintaining ecosystem services.

RISK FINANCING AND INSURANCE

The InsuResilience Solutions Fund is a good example as it supports vulnerable regions by providing climate and disaster risk insurance.[88] While the partnership is primarily active in developing countries, its principles could be adapted to European MPAs. For instance, Mediterranean MPAs could leverage similar policies to address recurring heatwaves and their ecological impacts, such as coral mortality or seagrass decline.

+ STRENGTHS

- Targets specific climate-related risks, providing tailored financial support.
- Ensures timely payouts, reducing recovery delays after climate-induced events.
- Often supported by international donors and climate funds, reducing the financial burden on MPAs.
- Promotes resilience by incentivizing adaptive management and risk reduction efforts.

- WEAKNESSES

- Limited availability in certain regions, especially for smaller MPAs.
- Premiums may pose financial challenges for MPAs with constrained budgets.
- Requires accurate climate models and data to establish meaningful triggers.
- May exclude slow-onset climate impacts (e.g., ocean acidification) from coverage.

88. InsuResillience Solutions Fund (n/d). Transforming strategies into insurance productsImproving resilience to climate change. InsuResillience Soulutions Fund website.

8 LICENSING AND SUSTAINABLE USE

Licensing and sustainable use mechanisms are powerful financial tools for MPA, providing a revenue stream while promoting environmentally responsible behavior. By granting licenses and permits for both extractive and non-extractive activities, MPAs can generate income through fees while setting conditions that encourage sustainable practices. Sustainable use mechanisms create economic incentives for resource users to comply with conservation regulations, linking financial benefits directly to environmental stewardship. Additionally, they help regulate access to marine resources, ensuring that human activities are conducted in a way that supports long-term ecosystem health and resilience.

LICENSING AND SUSTAINABLE USE								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Extractive Licenses and Permits	Legal permits that grant access to extract natural resources (e.g., fishing, bioprospecting) within MPAs, generating revenue through fees.	To regulate resource use while generating funding for MPA management and conservation efforts.	Government agencies, MPA authorities, or regulatory bodies.	Commercial fishers, resource extraction companies, bioprospecting firms, and other resource users.	Fees are collected through licenses or access rights, with revenue used for MPA enforcement, monitoring, and management. Income may include access fees, lease payments, and fines for violations.	Conservation Finance Area (CFA) model, where regulated fishing zones generate revenue for MPA management.	Generates revenue for conservation; promotes sustainable resource use through regulated conditions; fosters stakeholder engagement and compliance.	High costs for monitoring and enforcement; risk of ecological harm from extraction; potential conflicts with conservation objectives.
Non-Extractive Licenses and Permits	Permits for non-extractive activities in MPAs, like research, tourism, filming, and shipping.	To generate revenue while supporting activities aligned with conservation goals.	Government agencies, MPA authorities, or regulatory bodies.	Researchers, filmmakers, event organizers, shipping companies, aquaculture operators.	Revenue from long-term agreements (e.g., shipping fees) and single-use permits (e.g., filming, research), offering recurring and one-time income.	Table Mountain National Park (South Africa) uses permits for filming and events to fund conservation.	Lower environmental impact; diverse, flexible revenue streams; potential for recurring income.	Inconsistent income from single-use permits; high admin costs for long-term agreements; marketing needed to attract users.
Sustainable Seafood Branding	Uses eco-certification to promote sustainable seafood, generating revenue for MPA conservation.	To support sustainable fishing and create funding through premium market access.	MPAs, Certification bodies, NGOs, seafood brands.	Consumers, retailers, restaurants, seafood companies.	Revenue from premium product sales, licensing/certification fees, and partnerships.	Lyme Bay Reserve Seafood Initiative (UK).	Promotes sustainability; engages businesses; builds consumer trust.	Unstable funding; risk of greenwashing if standards are weak.

LICENSING AND SUSTAINABLE USE

EXTRACTIVE LICENSES AND PERMITS

Extractive licenses and permits offer a potential financing mechanism for MPAs by generating revenue from controlled resource use. These permits grant legal access to natural resources within an MPA, such as commercial fishing, oil and gas extraction, and bioprospecting, while (depending on national and local regulations) possibly allowing authorities to regulate and collect fees directly. Fishing licenses, for instance, set conditions on gear use, catch limits, and seasonal restrictions, ensuring that resource use remains sustainable while supporting conservation and management efforts. [89] However, implementing extractive licenses requires careful oversight to prevent conflicts with conservation goals. Some MPAs permit selective resource extraction, but it must be closely monitored to avoid ecological harm. For example, discussions around a fishery access fee system in the Ascension Islands highlighted concerns that high enforcement costs could outweigh financial benefits, making a no-take reserve a more cost-effective option. Sustainable extraction depends on scientific monitoring and enforcement, ensuring that financial mechanisms do not compromise marine protection. While similar fee systems have been used in terrestrial protected areas for activities like mining, forestry, and grazing, examples in MPAs remain limited. Extractive use fees present both opportunities and challenges—they can generate funding for conservation, but only if designed and enforced in a way that maintains the ecological integrity of marine ecosystems.

Most MPAs Still Allow Fishing

Over 95% of MPAs permit some form of fishing, including highly destructive practices like bottom trawling, which continues in 90% of offshore EU MPAs. In Europe, less than 1% of MPAs ban recreational angling, and commercial trawling intensity is, on average, 40% higher inside MPAs than outside. As of 2015, only 0.5% of EU MPAs were no-take zones, where all extractive activities are prohibited.

No-Take Zones Provide Significant Conservation Benefits

Expanding no-take zones is widely recognized as an effective conservation strategy. A study of 25 Mediterranean MPAs found biomass was 420% higher inside no-take zones than outside, with species density increasing by 111%. Larger fish populations in these areas significantly boost reproductive output; for example, a 40 cm European seabass left to grow to 80 cm can produce 14 times more offspring.

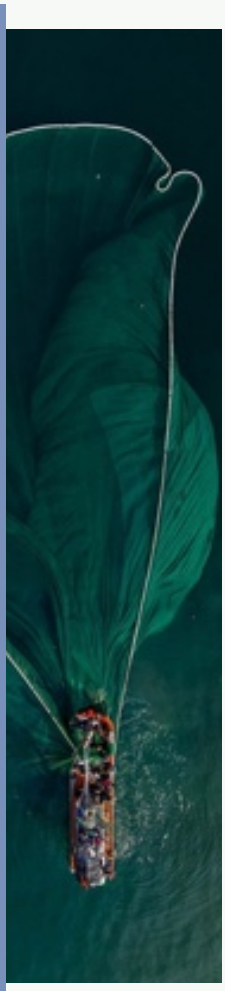
89. Bohorquez et al. (2022). A New Tool to Evaluate, Improve, and Sustain Marine Protected Area Financing Built on a Comprehensive Review of Finance Sources and Instruments. *Frontiers in Marine Science.*

LICENSING AND SUSTAINABLE USE

The Conservation Finance Area (CFA) model, proposed by Millage K. et al. (2021), presents a way for extractive use permits to sustainably finance MPAs while supporting fisheries and maintaining conservation goals. This approach zones an MPA into a no-take reserve and a CFA, where regulated fishing is allowed through paid access. The revenue generated from leasing these fishing rights is used to fund MPA enforcement and monitoring, ensuring compliance and ecological integrity.

The model leverages the spillover benefits of no-take zones, where fish biomass is higher due to protection, creating demand for access to adjacent regulated fishing areas. A bioeconomic analysis suggests that CFAs can fully finance enforcement, deter illegal fishing, and maintain higher fish stocks compared to MPAs without such a mechanism. Financial sustainability is achieved through lease pricing, access fees, and fines for violations. [90]

By aligning economic incentives with conservation, CFAs offer a market-based strategy similar to user-fee models in national parks. If effectively implemented, this system could provide a self-sustaining solution for MPAs, ensuring long-term ecological and economic benefits.



+ STRENGTHS

- Revenue Generation: Fees from extractive activities, such as fishing licenses, provide essential funding for MPA management and conservation initiatives.
- Regulated Resource Use: Licenses establish clear guidelines on permissible extraction methods and quantities, promoting sustainable practices and preventing overexploitation.

- WEAKNESSES

- Monitoring and Enforcement Costs: Ensuring adherence to licensing conditions requires substantial investment in surveillance and enforcement infrastructure.
- Potential Ecological Impact: Even regulated extraction can disrupt ecosystems, particularly if cumulative effects are not adequately assessed and managed.

90. Millage et al. (2021). Self-financed marine protected areas. Environmental Research Letters.

- Stakeholder Engagement: Involving resource users through licensing fosters collaboration and compliance, enhancing the effectiveness of conservation efforts.

- Conflicts with Conservation Objectives: Balancing extractive activities with conservation goals can be challenging, potentially leading to compromises that undermine ecological integrity.

NON-EXTRACTIVE LICENSES AND PERMITS

Non-extractive use permits generate revenue from activities within an MPA's boundaries that do not involve natural resource extraction and do not conflict with no-take status. These permits are categorized into long-term agreements (recurring revenue) and single-use permits (one-time payments), offering flexible financing options for MPA management and conservation efforts.

Examples of Long-Term Agreements [91]
- Fees for shipping and transit through MPAs.
- Sustainable aquaculture leases or revenue-sharing agreements.
- Long-term bioprospecting agreements.

Examples of Single-Use Permits [92]
- Research permits for scientific exploration.
- Filming permits for documentaries or media projects.
- Bioprospecting agreements for low-impact, one-time studies.
- Event permits for activities like boat races or regattas.

Long-term agreements offer stable funding but require significant oversight and planning, while single-use permits are easier to manage but provide inconsistent income. Although these activities potentially pose fewer environmental risks than extractive use, some—such as shipping or aquaculture—may still require impact assessments and monitoring. Administrative capacity also varies, with larger, long-term agreements demanding more regulatory oversight than one-time permits. If well-regulated, non-extractive use permits can diversify MPA funding while ensuring conservation goals are upheld.

91. Bohorquez et al. (2022). A New Tool to Evaluate, Improve, and Sustain Marine Protected Area Financing Built on a Comprehensive Review of Finance Sources and Instruments. Frontiers in Marine Science.

92. Ibid.

LICENSING AND SUSTAINABLE USE

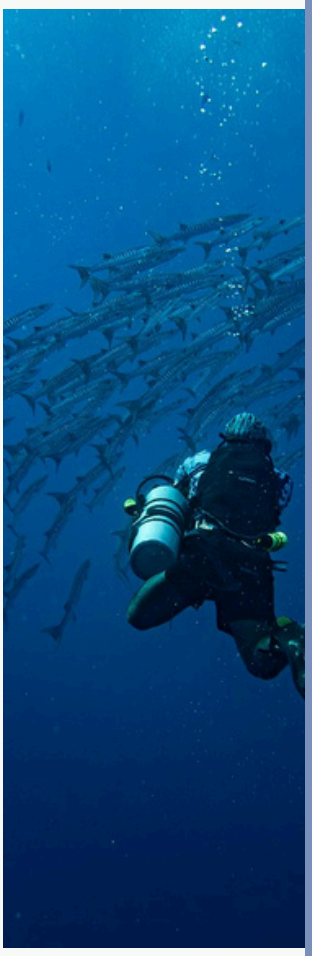


Table Mountain National Park (TMNP) in South Africa, which includes a significant MPA, uses a permitting system to regulate and generate revenue from non-extractive activities such as filming and events. This system helps ensure that commercial activities align with conservation objectives while providing essential funding for park management and marine ecosystem protection. TMNP, for example, charges a Commercial Marine Filming Fee of R6,970 per day, which is approximately €360 per day. Applications for filming and event permits can be submitted online, streamlining the process for production companies and event organizers. However, applications undergo a strict review process, and any requests that could harm the MPA or conflict with conservation goals may be rejected. By implementing these fees, TMNP successfully balances economic activity with conservation efforts. Revenue from these permits supports enforcement, infrastructure maintenance, and environmental monitoring, ensuring that the MPA remains protected while allowing for sustainable, regulated use. [93]

WEAKNESSES

- Inconsistent Revenue from Single-Use Permits: While single-use permits provide supplemental income, they are unpredictable and not a reliable long-term funding source.
- High Management and Compliance Costs for Long-Term Agreements: Agreements for infrastructure projects require extensive planning, stakeholder coordination, and legal oversight, increasing administrative burden.
- Marketing and Outreach Needs: Some activities, particularly filming permits or research collaborations, may require active promotion and engagement to attract users and generate revenue.

93. South African National Parks (2024). Film Function and Events Tariffs.

+ STRENGTHS

- (Possibly) Lower Environmental Impact: Since these activities do not involve resource extraction, some non-extractive uses pose lower risks to marine biodiversity and conservation goals compared to extractive use rights.
- Diverse Revenue Streams: Non-extractive use permits can generate income through long-term agreements (e.g. shipping fees) and single-use permits (e.g., research, filming, events), providing financial flexibility.
- Recurring Revenue Potential: Long-term agreements can generate millions annually, ensuring sustainable funding for MPA management and enforcement.
- Lower Monitoring and Scientific Requirements: Compared to extractive activities, non-extractive uses require less intensive monitoring and fewer scientific assessments, reducing overall operational costs.
- Flexibility in Implementation: Some non-extractive permits, particularly single-use permits, require minimal infrastructure and planning, allowing for quick, low-cost revenue generation when needed.

SUSTAINABLE SEAFOOD BRANDING

Sustainable seafood branding, particularly through eco-certification programs, offers a viable financing mechanism for MPAs by leveraging market-based incentives. By certifying seafood as sustainably sourced from well-managed fisheries or MPA-adjacent waters, producers can access premium markets where consumers pay higher prices for environmentally responsible products. Certification labels such as the Marine Stewardship Council (MSC) or Aquaculture Stewardship Council (ASC) serve as trusted sustainability indicators, building consumer confidence and brand loyalty. Partnerships with retailers, restaurants, and supply chain stakeholders enhance market access, creating a sustainable funding stream that aligns conservation with economic incentives. Beyond revenue, sustainable seafood branding fosters long-term ecological and economic benefits by promoting responsible fishing, maintaining fish populations, reducing bycatch, and minimizing habitat destruction. It also incentivizes local fishers to adopt sustainable practices, ensuring long-term resource availability while improving livelihoods. Additionally, a well-managed branding strategy increases MPA visibility, attracting investment from conservation funds and corporate sustainability programs.

LICENSING AND SUSTAINABLE USE

+ STRENGTHS

- Promotes Sustainability – Encourages responsible fishing, reducing overfishing, bycatch, and habitat damage.
- Engages Businesses – Aligns conservation with economic incentives, attracting industry support (involves retailers, restaurants, and producers)
- Boosts Consumer Trust – Certification labels (e.g., MSC, ASC) build brand loyalty and increase demand.

- WEAKNESSES

- Unstable & Limited Funding – Certification-based revenue can be unpredictable, fluctuating with market demand, environmental factors, and economic shifts. It may not be sufficient to fully fund MPAs, often requiring additional support.
- Potential Greenwashing Risks – Some certification schemes face criticism for weak standards or inconsistent enforcement, reducing credibility.

The Lyme Bay Reserve Seafood initiative, launched by the Blue Marine Foundation in 2014, is an example of branding sustainable seafood to generate economic benefits for fishers while protecting a Marine Protected Area. The initiative provided chiller units, insulated fish boxes, and ice machines to improve seafood quality and marketability. Under the Reserve Seafood brand, fishers were required to follow low-impact fishing methods, using only static gear, rod and line, or hand-diving, and adhering to voluntary codes of conduct that limit fishing pressure within the MPA.

Although the branding efforts faced challenges in ensuring a consistent seafood supply, the investment in cold storage and transport infrastructure allowed fishers to secure higher prices for their catch. Additionally, a fee-based transport system was introduced to cover logistical costs, helping the initiative transition towards financial sustainability. This case highlights how infrastructure support and branding can elevate the value of sustainable seafood, making responsible fishing more profitable and reinforcing MPA conservation efforts.[94]

94. Blue Marine Foundation (2023). BLUEprint for MPAs Case Study Marketing Sustainable Seafood.

9 COMMUNITY AND SOCIAL MECHANISMS

Community and social mechanisms rely on the active participation of local communities, volunteers, and social initiatives to generate funds, provide in-kind support, and enhance local engagement in conservation efforts. By fostering a sense of ownership and direct involvement, MPAs can create long-lasting financial and social benefits. These mechanisms strengthen local support, help ensure compliance and reduce conflicts between conservation goals and community livelihoods.

COMMUNITY AND SOCIAL MECHANISMS								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Volunteering	In-kind support from community members contributing time and skills.	Reduce operational costs and increase local involvement.	MPA management, NGOs	Local individuals, conservation groups	Non-monetary support with social and environmental benefits.	Marine conservation volunteer programs in the UK and Spain	Reduces labor costs, Strengthens community engagement, Enhances public awareness	Requires ongoing management and training, Can be inconsistent or seasonal
Community Membership Fees	Small contributions paid by local individuals or groups in exchange for benefits.	Provide stable local funding and increase stakeholder commitment.	MPA management, community groups	Residents, local businesses, fishers, and tourists	Revenue-based, often linked to membership benefits like priority access to events.	The Wadden Sea Partnership Program, Germany	Provides stable local funding, Encourages long-term involvement	Requires promotion, Limited revenue compared to large funding sources
Local Events and Festivals	Fundraising through community-led activities such as seafood festivals or clean-up events.	Generate revenue while raising awareness about conservation.	Local municipalities , tourism offices	Visitors, businesses, community members	Entry fees, sponsorships, and donations from events.	Festival del Mar in Spain	Engages public, Generates direct revenue, Supports sustainable tourism	Requires planning, Dependent on attendance, Affected by external factors
Cultural and Heritage-Based Contributions	Fees for cultural performances, storytelling, or guided heritage tours within the MPA.	Connect conservation with local cultural identity while generating revenue.	Local cultural organizations, indigenous groups	Tourists, researchers, cultural enthusiasts	Revenue-based, often reinvested in cultural and environmental programs.	Sami Cultural Experiences in Norway	Supports cultural preservation, Creates alternative income, Attracts responsible tourism	Difficult to scale, Requires careful management, Risk of cultural misrepresentation

9 COMMUNITY AND SOCIAL MECHANISMS

VOLUNTEERING

Volunteering is one of the most effective community-driven mechanisms for supporting MPAs, providing essential human resources for conservation activities. It encompasses a wide range of tasks, including habitat restoration, biodiversity monitoring, community outreach, and educational initiatives. Volunteer programs could help reduce labor costs, increase public engagement, and foster a sense of ownership among local communities and conservation enthusiasts.

MPAs benefit from different types of volunteer engagement, including:

- **Citizen Science Initiatives:** Volunteers contribute to research by collecting and analyzing ecological data.
- **Beach and Marine Clean-Ups:** Organized efforts to remove marine debris and plastic pollution.
- **Eco-Tourism Volunteer Programs:** Volunteers assist in guided tours, educational activities, and visitor centre management.
- **Skilled Volunteer Contributions:** Experts in fields like marine biology, IT, or communication provide professional support to MPA management.

The UK-based Marine Conservation Society runs a network of volunteer-led programs focusing on citizen science, coastal clean-ups, and biodiversity monitoring. These programs not only reduce MPA management costs but also increase public awareness and engagement in marine conservation. [95, 96]

95. Gamble C., et.al. (eds) (2021). Seagrass Restoration Handbook. Zoological Society of London, UK., London, UK.
96. Marine Conservation Society (n/d). Ways to volunteer. MCS website.

+ STRENGTHS

- Enhancing Community Engagement and Stewardship
- Reducing Operational Costs
- Increasing Capacity for Monitoring and Research
- Promoting Public Awareness and Education

- WEAKNESSES

- Dependence on Volunteer Availability
- Training and Supervision Requirements
- Challenging to ensure Long-Term Commitment

COMMUNITY MEMBERSHIP FEES OR CONTRIBUTIONS

Community membership fees or contribution programs allow local residents, businesses, and stakeholders to contribute financially to conservation efforts, often in exchange for specific benefits such as discounted eco-tourism activities, access to special events, or involvement in MPA decision-making processes. Unlike one-time donations, membership fees provide a steady and predictable stream of funding, allowing MPAs to plan and allocate resources more efficiently.

Membership models can vary depending on the context and goals of the MPA. Some operate on a tiered system, where different levels of membership offer varying benefits. Others may focus on cooperative-style memberships that integrate local stakeholders into conservation planning and governance structures, reinforcing the sense of shared responsibility for marine protection. These programs not only help raise funds but also cultivate long-term engagement, ensuring that communities remain invested in conservation success. [97, 98]

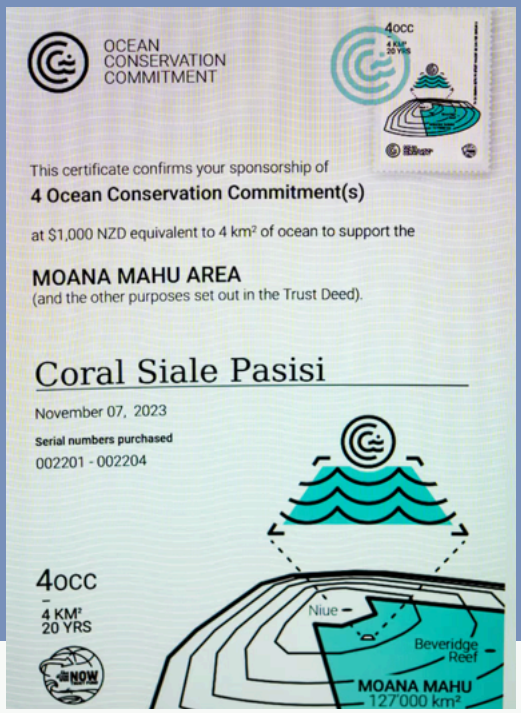
97. Gamble C., et.al. (eds) (2021). Seagrass Restoration Handbook. Zoological Society of London, UK., London, UK.
98. Marine Conservation Society (n/d). Ways to volunteer. MCS website.

COMMUNITY AND SOCIAL MECHANISMS

Niue raised the NZ$7 million through a sponsorship program that allows individuals, businesses, and philanthropists to sponsor sections of its ocean. The initiative, launched in September 2023, offers sponsorship of one square kilometer of ocean for NZ$250.

The funds generated are used to fund management of the ocean, including dealing with maritime security, bolstering climate resilience and conserving marine life in the island's Moana Mahu MPA.

In exchange, they provide with a sponsorship certificate that can be given to a family member, friend, or anyone the sponsor chooses, and features the sponsor's name and serial numbers to ensure that no one sponsors the same area twice. [99]



+ STRENGTHS

- Provides a stable source of local funding.
- Encourages long-term community involvement.
- Strengthens stakeholder commitment to conservation goals.
- Enhances local participation in governance and decision-making.

- WEAKNESSES

- Requires effective promotion to attract members.
- Limited revenue compared to large-scale funding sources.
- May not be sufficient for high-cost conservation projects.
- Potential reluctance from communities unfamiliar with membership models.

99. Carreon B. (2025). Want to sponsor a piece of ocean paradise? How one Pacific island's novel response to rising seas is paying off. *The Guardian journal.*

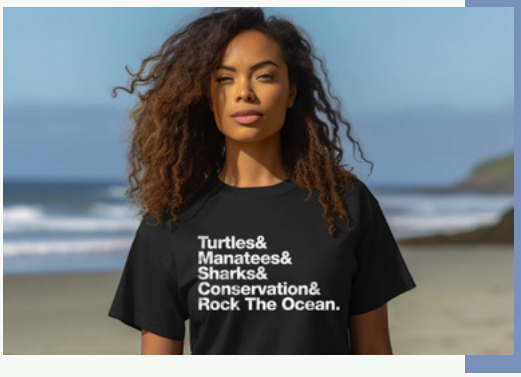
DONATIONS FROM LOCAL EVENTS OR FESTIVALS

Local events could allow MPAs to raise funds while fostering community engagement, education, and awareness. These events serve as platforms for MPAs to directly connect with local communities, businesses, tourists, and conservation supporters, providing an opportunity to highlight the ecological, economic, and social importance of marine conservation.
MPAs can leverage these events in several ways, including:

- **Entry Fees & Ticket Sales:** Some events charge entrance fees, a portion of which is allocated to conservation efforts.
- **Direct Donations:** Dedicated donation points or QR-code-based mobile payment options encourage visitors to contribute to the MPA.
- **Sponsorships & Partnerships:** Collaborating with local businesses, NGOs, and government institutions to sponsor events in exchange for visibility.
- **Merchandise Sales:** Selling eco-friendly merchandise (e.g., reusable water bottles, T-shirts, posters, books) to raise funds while promoting conservation messages.
- **Auctions & Raffles:** Offering experiences such as guided MPA tours, wildlife encounters, or exclusive conservation-related items for bidding.
- **Corporate Contributions:** Businesses hosting corporate social responsibility initiatives where a percentage of sales during the event period go towards MPA funding.
- **Sustainable Tourism Initiatives:** Incorporating ecotourism activities such as guided snorkelling or kayaking tours to educate participants while generating income.

These fundraising events can also serve as an advocacy tool, influencing policymakers and private-sector actors to invest in marine conservation. One major advantage is also the engagement of diverse audiences. Unlike other financing models that primarily rely on grants, taxes, or institutional funding, local events allow MPAs to connect with individuals—citizens, tourists, and local businesses—who may not otherwise contribute to conservation. Additionally, community-driven events build a sense of local ownership and responsibility toward the MPA, fostering long-term participation in conservation initiatives.

COMMUNITY AND SOCIAL MECHANISMS



A good example, though not in Europe, is the "Rock The Ocean's Tortuga Music Festival" held annually in Fort Lauderdale, Florida. This festival combines music performances with marine conservation awareness. At the Tortuga festival they have the Conservation Village, where they bring together organisations and experts around the top issues threatening our seas, giving concert attendees a hands-on experience. According to their statistics, Tortuga reaches 100,000+ concert fans annually and those fans have helped raise over $4 million to support the oceans. [100]

They further have brand partnerships, and a lifestyle apparel collection dedicated to saving the seas. 100% of proceeds from the purchases from the Rock The Ocean Collection goes to saving the world's oceans and marine life.

+ STRENGTHS

- Enhances community engagement as events foster a sense of ownership and responsibility among local residents.
- Raises awareness through educational components that inform the public about marine conservation issues.
- Provides immediate funding with funds raised during the event.

− WEAKNESSES

- Planning and executing events require time, effort, and financial investment, like looking for donors.
- The success depends on participation levels and external factors like weather.
- One-time events may not provide long-term funding solutions.

100. Rock the Ocean (n/d). About us. Rock the Ocean website

CULTURAL AND HERITAGE-BASED CONTRIBUTIONS

Marine environments are not only ecological treasures but also repositories of significant cultural and historical heritage. This includes underwater archaeological sites, traditional fishing practices, maritime folklore, and historic coastal settlements. Recognising and integrating these cultural assets into MPA management can enhance conservation efforts and open avenues for funding and community engagement.

Cultural and heritage-based contributions encompass financial and in-kind support derived from the recognition, preservation, and promotion of cultural assets within and around MPAs. This approach acknowledges the intrinsic link between cultural heritage and natural conservation, promoting a holistic strategy that benefits both.

Integrating cultural heritage into MPA management involves identifying and preserving sites of historical and cultural significance, such as shipwrecks, ancient coastal settlements, and traditional fishing areas. These sites can be promoted through educational programs, heritage tourism, and community events, generating revenue and fostering a sense of stewardship among local populations.

The Kerry Seas national park (Páirc Náisiúnta na Mara, Ciarraí) in Ireland, encompasses 70,000 acres of precious marine and coastal habitats, including shipwrecks, sea birds, whale spotting, and its ancient monastic settlement -and filming location for the "Star Wars" series-, which has become a significant tourist attraction. The site's management balances heritage conservation with tourism, generating funds that support both cultural preservation and environmental protection.[101]

101. Unwin M. (2024). Shipwrecks, sea birds and whale spotting: exploring Ireland's first marine park. the Guardian website.

+ STRENGTHS

- Enhances cultural preservation as it protects and promotes cultural heritage, ensuring its transmission to future generations.
- Attracts diverse funding sources since it opens avenues for grants and donations from cultural and heritage organisations.
- Strengthens community ties by valuing their cultural heritage, fostering pride and stewardship.

- WEAKNESSES

- Requires careful management to balance conservation and tourism demands to prevent environmental degradation and cultural loss.

10 RESEARCH, EDUCATION, AND INNOVATION

MPAs can generate financial support and operational sustainability through strategic engagement with research funding, educational collaborations, and innovation-driven partnerships. While conservation efforts are often seen as beneficiaries of scientific research and education, these domains also provide significant opportunities for MPAs to attract funding, reduce operational costs, and leverage external expertise.

Applying for research and innovation funding is a major financial mechanism that MPAs can use to sustain their operations, besides also supporting MPAs in testing and implementing new technologies. Furthermore, MPAs can form partnerships with universities, technical institutes, and environmental training programs to benefit from in-kind contributions rather than direct monetary funding. Lastly,MPAs can directly monetize education through training programs, certification courses, and virtual learning platforms. By offering courses on marine conservation, ecotourism management, or other, MPAs can create a self-sustaining income source.

10 RESEARCH, EDUCATION, AND INNOVATION

RESEARCH, EDUCATION, AND INNOVATION								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Training and Certification Programs	Revenue from marine conservation, MPA management, and ecotourism-related certification courses.	To build capacity for marine conservation and generate income.	MPAs, training institutions.	Students, conservation professionals, ecotourism operators.	Revenue from tuition fees, certification fees; benefits include improved workforce training.	MedPAN (Mediterranean MPA Network) training programs.	Builds long-term conservation capacity, enhances workforce skills.	Requires expert trainers, needs ongoing funding for updates.
Blockchain-Based Conservation Tokens	Digital tokens representing funding contributions to specific conservation projects.	To generate transparent, decentralised funding for MPAs.	Tech startups, NGOs, environmental foundations.	Crypto investors, conservation donors, corporate sponsors.	Revenue from token purchases; returns include funding for conservation, measurable impact tracking.	OceanDrop, Conservation NFT, Beautiful ocean Coin, Digital Ocean NFT	Transparent, scalable, connects global investors to conservation.	Regulatory uncertainty, dependence on digital literacy.
Educational Partnerships and Virtual Programs	MPAs partner with universities, research institutes, and environmental training programs to receive in-kind support (e.g., unpaid interns, student research, workforce assistance).	To reduce operational costs, strengthen capacity, and secure additional expertise at no direct expense.	MPAs, universities, training institutions, research organisations.	Students, conservation interns, educational institutions.	MPAs benefit from free labor, scientific data collection, and expertise while offering field-based learning experiences.	**Channel Islands National Marine Sanctuary partnerships**	Reduces staffing costs, builds conservation workforce, strengthens institutional reputation.	Requires coordination and supervision, potential misalignment of goals, administrative effort.

10 RESEARCH, EDUCATION, AND INNOVATION (CONT.)

RESEARCH, EDUCATION, AND INNOVATION								
Financial Mechanism	**Description**	**Purpose**	**Issuers**	**Investors/ Payers**	**Structure and returns**	**Examples**	**Positives**	**Negatives**
Innovation and Technology Funds	Grants and investment funding for developing new technologies and methods for MPA management.	To improve monitoring, enforcement, biodiversity tracking, and resource management in MPAs through innovative tools.	Private investors, NGOs.	Public-private partnerships, venture capital, conservation technology grants.	Funds awarded for technology R&D and implementation; returns include cost-effective conservation tools, improved enforcement, and data-driven decision-making.	**Schmidt Marine Technology Partners, Ocean Resilience Innovation Challenge**	Encourages cutting-edge solutions, reduces conservation costs, enhances MPA management efficiency.	Risk of funding unproven technologies, requires technical expertise for implementation, potential dependency on tech infrastructure.
Seed Funding	Early-stage funding for innovative projects or businesses linked to marine conservation.	Support pilot initiatives, startups, or new conservation technologies.	Venture capital funds, conservation organizations	Private investors, philanthropists, NGOs	Initial capital provided for innovative projects; returns depend on project success and revenue generation.	**Reef restoration startups, marine monitoring technologies**	Encourages innovation; attracts private sector involvement; supports scalable solutions.	High-risk due to uncertainty in project success; limited to projects with clear revenue potential.

TRAINING AND CERTIFICATION PROGRAMS

Training and certification programs offer structured educational experiences that could generate revenue while enhancing conservation efforts. By developing and delivering specialized courses, MPAs can attract participants from various sectors, including conservation professionals, ecotourism operators, enforcement officers, and the general public. These programs not only provide essential knowledge and skills but also foster a sense of stewardship and support for marine conservation initiatives.

MPAs can design professional development courses covering topics such as MPA management, biodiversity monitoring, and climate resilience. Certification programs, in particular, can provide recognized credentials, making them attractive for marine professionals, tourism operators, and other groups.

MPAs could expand their training offerings through online and hybrid models, allowing a global audience to participate. Fees generated from these programs can be reinvested into conservation activities, infrastructure improvements, and further educational initiatives, strengthening the financial resilience of MPAs.

The Reef Check EcoDiver Program is an international initiative that trains scuba divers to monitor and assess the health of coral reefs using a globally standardized scientific protocol. Participants engage in a comprehensive 3-day certification course, which includes both classroom instruction and practical fieldwork, covering topics such as reef ecology, identification of key indicator species, and data collection methodologies. Upon successful completion, divers are certified to conduct Reef Check surveys worldwide, contributing valuable data to reef conservation efforts. The cost of the course varies by location and provider; for instance, The Coral Tribe offers a 4-day EcoDiver course priced at $480 USD, which includes all training materials and diving equipment. Funds generated from these courses support the Reef Check Foundation's mission to protect and rehabilitate reefs through education, research, and conservation initiatives. [102,103]

102. Reef Check. (n.d.). Reef Check EcoDiver Coordinator and Teams. Reef Check Foundation.
103. The Coral Tribe (n/d). Reef Check EcoDiver course. The Coral Tribe website.

+ STRENGTHS

- Fees from training and certification programs can provide MPAs with a continuous source of income.
- Trained personnel contribute to better enforcement, monitoring, and governance of MPAs.
- Online and hybrid learning models allow MPAs to reach a global audience without significant infrastructure investment.
- Collaboration with universities, NGOs, and government institutions can enhance credibility and funding.

- WEAKNESSES

- Requires dedicated personnel for instruction, certification processing, and program administration.
- Attracting participants requires promotional efforts, which may be time-consuming and resource-intensive.
- Free MOOCs (Massive Open Online Courses) and university-sponsored courses may reduce enrollment in paid programs.

BLOCKCHAIN-BASED CONSERVATION TOKENS

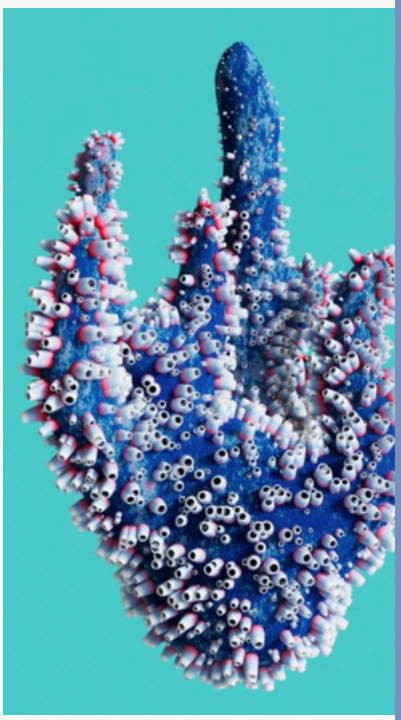
Blockchain-based conservation tokens represent an innovative approach to funding and promoting environmental conservation efforts. By leveraging blockchain technology, these digital tokens can represent ownership or support of specific conservation assets or initiatives, enabling transparent, secure, and efficient transactions. This mechanism allows individuals and organizations to invest in conservation projects, track the impact of their contributions, and potentially receive returns, thereby aligning financial incentives with ecological preservation.

In the context of MPAs, blockchain-based tokens can be utilised to support various conservation activities. For instance, tokens can be issued to represent a stake in the health of a particular marine ecosystem, where the value of the token is linked to measurable conservation outcomes such as biodiversity levels or water quality. This creates a direct financial incentive for token holders to support and engage in conservation efforts, as the value of their investment is tied to the success of the environmental initiatives. [104,105]

104. *CryptoAlturism (2024).* Natural Capital Backed Assets: Incentivizing conservation and regeneration with asset tokenization.
105. McBreen *et.al. (2024).* Unlocking Blockchain with the IUCN Green List Dynamic Token. *IUCN-US website.*

Beautiful Ocean Coin (BOC) is a groundbreaking blockchain platform aimed at revolutionizing the way marine conservation projects are funded and managed. By leveraging decentralized ledger technology, BOC ensures transparency and accountability in every transaction, allowing donors and investors to track their contributions in real-time.

The platform utilizes smart contracts to automatically distribute funds to designated marine conservation initiatives upon the achievement of specific project milestones, thereby enhancing trust between contributors and project implementers. Additionally, BOC incorporates a gamified element by rewarding users with additional tokens for supporting and promoting conservation efforts, fostering a global community of ocean advocates. This innovative approach has attracted attention from leading environmental organizations, non-profits, and sustainability-focused investors, positioning BOC as a significant player in promoting sustainable development and protecting marine ecosystems worldwide.[106]



OceanDrop is a charitable NFT art auction hosted by the Open Earth Foundation, aimed at raising funds for marine conservation. Held from December 3 to 7, 2021, on platforms such as SuperRare and DoinGud, the initiative collaborated with various artists to create 23 unique NFTs. Through these digital art pieces, OceanDrop successfully raised $130,000, which was allocated to launch a new marine conservation initiative in 2022. The funds support research and deployment of blockchain-based and digital solutions for improved management and protection of the world's oceans. Notably, the first pilot project supported the expansion of the Cocos Island Marine Sanctuary in Costa Rica. OceanDrop exemplifies how digital art and blockchain technology can be harnessed to foster environmental stewardship and fund critical conservation efforts.[107,108]

106. Beautiful Ocean Coin. (2024). Beautiful Ocean Coin: Revolutionizing marine conservation through blockchain technology. GlobeNewswire.
107. Open Earth Foundation. (2021). OceanDrop: NFT art for ocean conservation. Ocean Drop website.
108.CryptoAlturism (n/d). Ten projects and collectives using web3 and blockchain to support ocean and marine conservation and regeneration. CryptoAlturism website.

+ STRENGTHS

- Transparency & trust as blockchain ensures that all transactions are recorded on an immutable ledger, making it easy to track how funds are allocated and used for conservation efforts.
- Efficiency and automation since smart contracts allow for automated fund distribution, reducing administrative overhead and ensuring timely support for conservation projects.
- Decentralized and global reach since blockchain operates without geographical restrictions, individuals and organizations from anywhere in the world can contribute to marine conservation projects.
- New revenue stream as tokens are an innovative new funding mechanism beyond traditional grants and subsidies.

- WEAKNESSES

- Regulatory uncertainty since cryptocurrencies and blockchain assets face evolving legal and regulatory frameworks that could impact their adoption and operation.
- Market volatility because the value of conservation tokens may fluctuate, making them unreliable as a stable funding source for long-term conservation projects.
- Implementing and managing blockchain solutions requires technical expertise, which may not be accessible to all conservation organisations.
- Without strict verification mechanisms, some projects may issue tokens without delivering tangible conservation benefits, undermining credibility and promoting bluewashing.
- Some blockchain networks, especially those using proof-of-work consensus mechanisms, consume high amounts of energy, which may counteract conservation goals.
- Limited adoption and understanding as many stakeholders, including local communities and policymakers, may have limited knowledge of blockchain, creating challenges in acceptance and implementation.

RESEARCH, EDUCATION, AND INNOVATION

EDUCATIONAL PARTNERSHIPS AND VIRTUAL PROGRAMS

Educational partnerships and virtual programs offer MPAs a strategic avenue to enhance conservation efforts through collaboration with universities, research institutes, and environmental training programs. These alliances provide MPAs with valuable in-kind support, including unpaid interns, student-led research, and workforce assistance, thereby bolstering their capacity to manage and protect marine ecosystems. By engaging with academic institutions, MPAs can access cutting-edge scientific research, benefit from innovative educational initiatives, and foster a culture of stewardship among emerging environmental professionals.

The Channel Islands National Marine Sanctuary exemplifies the benefits of educational partnerships through its collaborations with various academic and research institutions. The sanctuary has established partnerships with entities such as the National Marine Fisheries Service, the National Park Service, and Fisheries and Oceans Canada, as well as regional and international academic institutions like the University of California, Santa Barbara, the Scripps Institution of Oceanography, Woods Hole Oceanographic Institution, Simon Fraser University in Canada, and the University of Auckland in New Zealand. These collaborations facilitate a range of research and monitoring activities, including marine protected area monitoring, climate variability studies, and deep-water community assessments. Through these partnerships, the sanctuary leverages academic expertise and resources to enhance its conservation and management efforts. [109]

109. NOAA (n/d). Channel Islands National Marine Sanctuary.

+ STRENGTHS

- Enhanced research capabilities as partnerships with academic institutions provide MPAs with access to advanced research methodologies and technologies, leading to improved understanding and management of marine ecosystems.
- Engaging unpaid interns and student researchers offers additional human resources without significant financial investment, allowing MPAs to undertake projects that may otherwise be unfeasible.
- Involving students and researchers from various disciplines can introduce fresh ideas and innovative approaches to conservation challenges.

- WEAKNESSES

- The temporary nature of internships and student involvement can lead to discontinuity in projects, requiring additional effort to maintain momentum and institutional knowledge.
- Ensuring that academic research agendas align with the practical conservation needs of MPAs can be challenging, necessitating clear communication and collaborative planning.
- Coordinating with multiple institutions and managing the associated administrative tasks can be complex and time-consuming for MPA staff.

INNOVATION AND TECHNOLOGY FUNDS

Innovation and Technology Funds provide financial support for research institutions, technology developers, and conservation organizations to develop cutting-edge tools and methodologies for marine conservation and MPA management. These funds do not typically provide direct funding to MPAs, but they support the development of new monitoring techniques, enforcement technologies, and ecosystem restoration innovations that MPAs can later adopt and integrate into their management strategies.

By investing in scientific advancements and technological solutions, these funds drive innovation in marine conservation, ensuring that MPAs have access to more

effective, cost-efficient, and scalable tools. Whether it's artificial intelligence for biodiversity monitoring, automated enforcement drones, or new data collection methods, these investments play a key role in improving the efficiency and success of MPAs worldwide.

As MPAs continue to face challenges such as illegal fishing, habitat degradation, and climate change, the availability of state-of-the-art conservation technology is essential. Through partnerships with research institutions and organizations receiving Innovation and Technology Funds, MPA managers can leverage the latest developments in marine science, strengthening their ability to protect biodiversity, enforce regulations, and adapt to emerging environmental threats.

In 2025, California Sea Grant, in collaboration with the California Ocean Protection Council (OPC) and the California Department of Fish and Wildlife (CDFW), announced a solicitation for proposals aimed at advancing monitoring priorities for California's mid-depth rocky reef habitats. The initiative focuses on habitats ranging from 30 to 100 meters in depth within the state's extensive MPA Network which comprises 124 MPAs, and covers approximately 16% of state waters along 1,700 km of coastline.

The solicitation offers a total of $1.5 million USD in funding, with individual projects eligible for up to $1.2 million for monitoring activities and up to $300,000 for investigating and refining sampling designs and approaches. The primary objectives are to implement monitoring programs during the 2025 and 2026 sampling seasons and to evaluate sampling designs and methodologies for long-term monitoring of mid-depth rocky reef habitats.

Even though the California Sea Grant Mid-Depth Rocky Reef MPA Monitoring program does not offer direct funding for MPA managers to apply for, it provides significant indirect benefits that enhance MPA management and conservation efforts. By supporting research and technological advancements in monitoring techniques, this funding contributes to the overall effectiveness and sustainability of California's extensive 124 MPAs.[110]

110. SeaGrant California (2025). 2025 California Mid-depth Rocky Reef MPA Monitoring Request for Proposals. SeaGrant website.

RESEARCH, EDUCATION, AND INNOVATION

Schmidt Marine Technology Partners (SMTP), a program of The Schmidt Family Foundation, provides grant funding to scientists, engineers, and entrepreneurs developing cutting-edge ocean conservation technologies. While MPAs do not directly apply for these funds, they benefit from the innovations developed through this program, which enhance monitoring, enforcement, and ecosystem restoration efforts. Since its inception in 2015, SMTP has funded over 60 marine technologies, many of which contribute to the sustainable management of MPAs and marine ecosystems worldwide. [111]

One notable example is SeafoodCheck, an automated software solution developed by Virgil Group LLC that assesses seafood legality and supports MPA enforcement efforts by improving traceability and reducing illegal, unreported, and unregulated (IUU) fishing. SMTP also funds innovative habitat restoration technologies, such as the Automatic Urchin Removal System by Marauder Robotics and the Santa Monica Bay Foundation. This technology helps control destructive urchin populations, which can decimate kelp forests, a critical habitat for marine biodiversity within MPAs.

+ STRENGTHS

- Since funding is directed toward research institutions and technology developers, MPAs can benefit from these innovations without having to finance research themselves.
- Sustainable funding for R&D in ocean conservation ensures that MPAs stay ahead of emerging threats like climate change, illegal fishing, and biodiversity loss.

- WEAKNESSES

- Unlike grants for direct MPA operations, these funds are usually allocated to universities, research institutions, and tech developers, meaning MPAs must wait for results to become available rather than leading innovation efforts themselves.
- New technologies may not be equally available to all MPAs, particularly in developing regions or smaller-scale protected areas that lack the resources to adopt or maintain these innovations.

111. Schmidt Marine Technology Partners. (n.d.). Grantmaking program. SMTP website.

SEED FUNDING

Seed funding provides early-stage financial support for innovative projects, startups, and initiatives that aim to develop new solutions for marine conservation challenges. These funds are typically granted to researchers, entrepreneurs, and conservation organizations in the ideation and development phase, helping them validate concepts, develop prototypes, and test new approaches.

Unlike larger conservation grants or investment funds, which often require proof of concept and established impact metrics, seed funding is risk-tolerant and focused on potential rather than immediate results. It serves as a critical catalyst for marine conservation, allowing novel ideas to be tested, refined, and scaled before seeking larger funding sources.

This funding mechanism is particularly valuable for technological innovations, business solutions, and research initiatives that might otherwise struggle to secure financial backing. Whether it's developing AI-driven marine monitoring systems, launching eco-friendly aquaculture ventures, or designing novel conservation finance models, seed funding bridges the gap between concept and implementation, ensuring that promising ideas can progress to full-scale development and real-world application.

Given the growing need for adaptive and scalable conservation strategies, seed funding is an essential financial tool for driving innovation in ocean conservation, empowering early-stage ventures, and accelerating the transition from scientific research to tangible, on-the-ground impact. [112,113]

112. Standford University (2025). Big Ideas for Oceans. Stanford University Seed Funding site.
113. McCloy, D.C. (2024) Aquarium's Marine Conservation Action Fund (MCAF) celebrates 25 years of supporting local ocean conservation projects around the world that have a global impact on marine animals & ocean health. New England Aquarium website.

The Marine Conservation Action Fund (MCAF) is a program by the New England Aquarium that provides seed funding to support community-based marine conservation projects worldwide. Over its 25-year history, MCAF has invested over $1.8 million in more than 230 projects across 60 countries. These small grants, typically up to $12,000, serve as initial funding to help local leaders launch and implement initiatives aimed at protecting marine species and habitats.

Some examples of the most recent funded projects include 'Comunidad y Bioversidad' working with local fishing communities to develop a tool that allows fishing cooperatives in Mexico to make informed decisions regarding adaptation strategies to climate change, and 'Amigos de las Tortugas Marinas' using a drone with a thermal camera to identify and protect common nesting grounds of endangered leatherback and hawksbill turtles in Puerto Rico.[114]

+ STRENGTHS

- Supports early-stage, high-risk ideas that could introduce groundbreaking conservation technologies or financial models.
- Unlike traditional grants or loans, seed funding does not require immediate returns or established proof of success, allowing experimental approaches to be tested.
- Provides essential capital at the ideation and prototype stage, enabling projects to develop into viable business models or attract larger funding sources.
- Typically easier and faster to secure compared to larger grants, allowing for a more agile response to emerging conservation challenges.
- Can support sustainable business models within MPAs, such as eco-tourism ventures or blue carbon projects.

114. McCloy, D.C. (2024) Aquarium's Marine Conservation Action Fund (MCAF) celebrates 25 years of supporting local ocean conservation projects around the world that have a global impact on marine animals & ocean health. New England Aquarium website.

WEAKNESSES

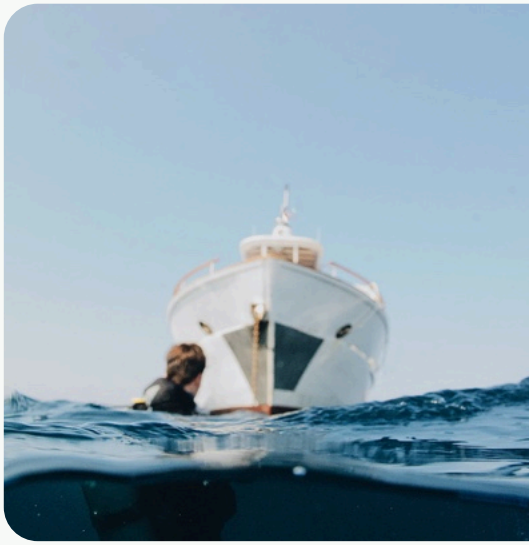
- Primarily supports early-stage initiatives, often lacking mechanisms to fund long-term implementation or scaling of conservation projects.
- Typically provides small-scale financial support, which may be insufficient for infrastructure-heavy MPA projects requiring substantial investment.
- Seed funding does not provide ongoing financial sustainability for MPAs; projects still need to secure additional funding later.
- May not be suitable for routine MPA management activities like enforcement, monitoring, and maintenance, which require steady and predictable funding.
- While seed funding helps start projects, many struggle to transition to financial self-sufficiency or to secure follow-up funding.

Choosing what fits my **MPA**

Marine Protected Areas and Other Effective Area-Based Conservation Measures require stable, long-term financial strategies to fulfill their conservation goals. As seen in previous sections, adopting a business-oriented approach helps MPAs structure their financial strategies by applying key principles from the business world: identifying their value proposition, defining their operational model, and formulating a strategic plan to ensure sustainability.

By now, after completing the Business Model Template and the Business Plan Template, the users of this guide should have a clear understanding of their site's:

- **Mission and purpose**, defining its ecological, economic, and social role.
- **Stakeholder landscape**, including local communities, policymakers, and private sector partners.
- **Financial situation**, including existing funding sources, budget gaps, and revenue potential.
- **Legal framework**, determining which funding mechanisms are legally feasible.
- **Operational needs**, such as enforcement, monitoring, and restoration efforts.



From Analysis to Action: Making Strategic Financial Decisions

With this information in hand, the next step is to **connect financial planning to action**. This section serves as a decision-maki**ng guide, helping MPA managers:**

1. **Assess their financial and legal context** to determine which financial gaps and opportunities exist.
2. **Match MPA characteristics to potential financial mechanisms** using a structured approach.
3. **Evaluate the feasibility of different financial mechanisms** based on revenue potential, ease of implementation, legal restrictions, and stakeholder acceptance.
4. **Select and prioritise financial mechanisms** that align with their MPA's needs and long-term sustainability goals.

This section does not advocate for a one-size-fits-all solution. Instead, it provides a methodological approach to help each MPA determine the financial mechanisms that best fit its geographic, ecological, social, and governance context.

*Complemented by **STEP 4-7** Blue4All MPA FINANCE PLANNER*

By the end of this section, MPA managers should be able to confidently identify, implement, and test financial mechanisms that strengthen their long-term financial resilience, ensuring effective conservation and sustainable management of marine resources.

Selecting the right financial mechanisms for an MPA requires a structured approach that takes into account financial needs, legal constraints, operational capacity, and stakeholder engagement. This framework helps MPA managers navigate the decision-making process systematically, ensuring that selected financial tools align with their conservation goals and long-term sustainability.

Step 1: Assess Your MPA's Financial and Legal Context (Eligibility)

Before selecting financial mechanisms, MPA managers must analyze their current financial landscape and the legal framework that governs their site. Key questions to address include:

Financial Situation

- Based on the tools used, what is the MPA's total budget?
- What percentage of funding needs are currently met?
- What is the funding gap that needs to be closed?

Legal and Governance Framework

- Does national or regional legislation allow revenue generation within the MPA?
- Are there restrictions on charging user fees, selling carbon credits, or accepting private investment?
- Are MPAs in the country eligible for public funding, EU-funded projects, or subsidies?

Existing Revenue Streams

- What funding sources does the MPA currently rely on (e.g., government funding, grants, tourism fees, corporate sponsorships)?
- How stable and predictable are these funding sources?
- Has the MPA already attempted alternative financing models (e.g., crowdfunding, conservation agreements, public-private partnerships)?

📌 **Action Point:** Use the table below to summarize the MPA's financial and legal situation.

Key Factor	Current Status	Constraints/Opportunities
Annual Budget	€X/year	
Funding Gap	€X/year	
Legal Restrictions	*E.g. Entrance fees allowed but corporate sponsorships limited*	*E.g. Requires stakeholder negotiation*
Current Revenue Sources	*E.g. Public funding + EU project grants*	*E.g. Unstable due to changing priorities*

Step 2: Identify Financial Mechanism Categories That Fit Your MPA (Eligibility)

Once the legsl landscape is clear, MPA managers should match their characteristics to potential financial mechanisms. Below is a decision matrix that helps identify which mechanisms fit different types of MPAs.

⚠️ This is not a rigid classification but rather a way of thinking about financial options. Many mechanisms fit into multiple categories, and MPAs should consider overlapping opportunities when identifying the most suitable funding strategies.

📌 **Action Point:** Highlight the most relevant financial mechanisms for further analysis in your MPA

MPA Characteristics	Best-Fitting Financial Mechanisms
High tourism potential (MPA receives many visitors annually)	Entrance fees, Eco-tourism packages, Concession agreements & revenue sharing, Eco-certification programs, Private sector partnerships
Strong ecosystem service value (MPA provides essential services like carbon sequestration, spillover fisheries, coastal protection)	Blue carbon credits, Payments for Ecosystem Services (PES), Habitat banking, Marine biodiversity offsetting, EU-funded ecosystem service projects
Limited visitor traffic but high biodiversity significance (MPA is critical for conservation but has few visitors)	Philanthropic grants, Research partnerships, EU conservation funding, Debt-for-nature swaps, Marine conservation agreements, Endowment funds
Government co-managed MPA (MPA is managed by government agencies or in partnership with NGOs)	Public funding & tax revenues, Subsidies & tax breaks, Environmental penalties & fines, EU-funded projects, Climate adaptation funds
MPA in a developing economy (Limited local funding sources, but high international interest in conservation)	Debt-for-nature swaps, Offset payments for international projects, Crowdfunding, International conservation funding, Regional biodiversity funds
MPA with active community participation (Strong local involvement in management and decision-making)	Community membership fees, Community-based crowdfunding, Cultural and heritage-based contributions, Sustainable small-scale fisheries licensing, Co-managed resource agreements
MPA exposed to climate-related risks (Prone to hurricanes, coral bleaching, sea-level rise)	Parametric insurance, Climate risk insurance, Catastrophe bonds, Risk pooling mechanisms, Nature-based climate adaptation funding
MPA with potential for sustainable fisheries & marine resource use	Rotational & exclusive fishing licenses, Sustainable seafood branding, Non-extractive licenses & permits, Blue bonds for fisheries management

continues next page...

contiuation...

MPA Characteristics	Best-Fitting Financial Mechanisms
MPA with high private sector interest (Located near major economic zones, coastal developments, ports, or renewable energy sites)	Corporate sponsorships, Public-private partnerships (PPPs), Port & harbor environmental levies, Blue bonds for sustainable development
MPA with strong research & education focus (Used for marine science, training, and innovation)	Research access fees, Training and certification programs, Educational partnerships & virtual programs, Blockchain-based conservation tokens

Step 3: Evaluate the Feasibility of Each Financial Mechanism (Implementation and Management Feasibility)

Not all financial mechanisms will be feasible for every MPA. Each option should be assessed based on four key factors:

1. **Financial Potential** → How much revenue can this generate?
2. **Administrative Complexity** → How difficult is it to implement and manage?
3. **Legal Compliance** → Does it fit within the legal and governance framework?
4. **Stakeholder Buy-In** → Will communities, businesses, and policymakers support it?

📌 **Action Point:** Use the worksheet below to evaluate the feasibility of potential mechanisms.

Example:

Financial Mechanism	Potential Revenue (€)	Complexity	Legal Fit	Stakeholder Support
Entrance Fees	€50,000/year	Medium	Allowed	Tourists likely to pay
Blue Carbon Credits	€80,000/year	High	Allowed	Needs investor buy-in
Corporate Sponsorships	€30,000/year	Low	Allowed	High interest from companies

Financial Mechanism	Potential Revenue (€)	Complexity	Legal Fit	Stakeholder Support

Step 4: Select and Prioritise the Best Financial Mechanisms

Based on feasibility analysis, MPAs should prioritise financial mechanisms based on the following principles:

1. **Quick Wins vs. Long-Term Strategies**
   - Short-term (0-2 years): Easy-to-implement mechanisms (e.g., crowdfunding, sponsorships, entrance fees).
   - Mid-term (3-5 years): Medium complexity mechanisms requiring legal approval (e.g., carbon credits, conservation trust funds).
   - Long-term (5+ years): High-impact but complex mechanisms (e.g., endowment funds, risk financing).
2. **Diversification of Funding Sources**
   - Avoid relying on a single revenue stream (e.g., if tourism collapses, the MPA should have alternative sources).
   - Blend traditional and innovative mechanisms (e.g., mix EU funding, corporate sponsorships, and ecosystem service payments).
3. **Adaptive Management Approach**
   - Pilot and test new financial mechanisms before full-scale implementation.
   - Continuously monitor financial performance and adjust strategies based on real-world results.

📌 **Action Point:** Use the table below to prioritise financial mechanisms.

Example:

Financial Mechanism	Priority Level	Justification
Corporate Sponsorships	Short-term	Easy to implement, strong local interest
Blue Carbon Credits	Mid-term	Requires external validation but high revenue potential
Endowment Fund	Long-term	Ensures financial stability but requires large initial investment

Financial Mechanism	Priority Level	Justification

The steps layed out in this section can be complimented by utilizing science-based tools, such as the ones presented in Section 6.

Now that you have identified the financial mechanisms that best suit your site, the next phase is implementation. This involves:

1. **Developing an Action Plan** – Setting milestones, responsibilities, and timelines for introducing selected financial mechanisms. If you filled in fully the Business Plan section, then you have it ready 👍
2. **Engaging Stakeholders*** – Communicating with communities, businesses, and policymakers to build support and secure partnerships.
3. **Monitoring & Adjusting** – Establishing performance indicators to track revenue generation, stakeholder engagement, and financial sustainability. You have the tools to track the financial gap after implementing new mechanisms.
4. **Scaling Up & Securing Stability** – Expanding successful financial strategies and exploring new funding opportunities to enhance long-term resilience.

** **See Annex II** for a Guide on Stakeholder Engagement in MPA Financial Strategy Development*

7 Financial Tools and Financial Strategy

Enhancing Decision-Making with Financial Planning Tools

A range of tools is available to support MPA managers in developing robust financial strategies that promote long-term sustainability. These tools are designed to integrate diverse data sources, enabling the modeling of financial feasibility and suitability tailored to specific MPA contexts.

Therefore, based on existing science based tools, the Blue4All Project developed a Excel-based decision support tool that helps MPA managers develop their financial strategy.

The **Blue4All Finance Planner** draws on extensive literature reviews and existing tools to provide a fit-for-purpose, practical resource for European MPAs. It operationalizes scientific insights into usable formats for MPA practitioners, aligning financial planning with conservation goals.

While MedPLAN provides the structure for cost-revenue analysis and Bohorquez et al. offer a deep dive into financing mechanism suitability, the Blue4All tool brings these elements together in an integrated process, tailored specifically for the European MPA context.

This Annex provides a detailed overview of both tools, while Section 6 offers a comprehensive guide to developing a financial strategy. These tools are intended to complement and support the step-by-step process outlined in Section 6, aiding MPA managers in making informed, strategic financial decisions.

The Blue4All MPA Finance Planner

The Blue4All MPA Finance Planner is a science-based, Excel-based tool developed under the Blue4All project as part of Work Package 2: Science-based tools for socio-economic and governance solutions, specifically within Task 2.4 on innovative revenue streams and business models.
The tool is designed to help MPA managers develop robust, context-specific financial strategies through a structured, step-by-step process. It integrates and builds upon the methodologies of two key reference tools: the MedPLAN Tool, which focuses on financial gap analysis, and the Bohorquez et al. (2022) tool, which systematically assesses the suitability of financing mechanisms for MPAs based on governance, ecological, and feasibility criteria.

Purpose and Functionality

The **Blue4All MPA Finance Planner** is designed to assist MPA managers in developing robust, science-based financial strategies tailored to their specific context. Its primary function is to help identify the financial needs of an MPA, assess existing and projected revenues, and determine the financial gap that must be addressed to ensure long-term sustainability.

The tool allows managers to model different financial scenarios, evaluate potential funding options, and build a comprehensive strategy by combining cost-saving measures, enhancements to existing revenue streams, and the integration of new financing mechanisms. It brings together the structural clarity of the MedPLAN tool, which focuses on cost and revenue analysis, with the strategic insight of the Bohorquez et al. (2022) tool, which assesses the feasibility and suitability of financing mechanisms.

The Finance Planner guides users through a structured, step-by-step process that culminates in the development of a tailored financial strategy, grounded in real data and practical considerations. Designed for flexibility and ease of use, the tool accommodates a variety of MPA types and governance settings, making it a valuable resource for strengthening the financial resilience of MPAs across Europe.

Using the Tool: A Step-by-Step Guide

To maximize the value of this tool, you will follow these steps:

- **Assess Recurring and Investment Costs** – Identify and project all operational and capital costs over a multi-year period.
- **Identify Current Revenue Streams** – Map current and historical funding sources, and estimate future income from existing mechanisms.
- **Calculate the Financial Gap** – Automatically compares costs and revenues to determine annual and total funding shortfalls.
- **Evaluate Suitability of Financial Mechanisms –** Assess potential financing options using customized criteria based on the Bohorquez et al. framework.
- **Select the Best-Fit Mechanisms** – Use suitability scores and guiding questions to select appropriate financing solutions.
- **(Optional) Engage Stakeholders –** Facilitate participatory evaluation of preferred funding options (if stakeholder consultation is planned).
- **Define a Financial Strategy** – Build a realistic, action-oriented strategy combining cost savings, enhancement of existing revenues, and implementation of new funding sources.

ACCES THE TOOL HERE

8 Conclusion

Marine Protected Areas and Other Effective Area-Based Conservation Measures are essential for preserving biodiversity, safeguarding ecosystem services, and ensuring the long-term resilience of marine environments. However, as highlighted throughout this guideline, **financial sustainability remains one of the greatest challenges** to their effective management. Without stable, diversified, and well-planned funding, many MPAs risk becoming paper parks—protected in name but lacking the resources to enforce regulations, restore habitats, and engage stakeholders effectively.

From Planning to Action: A Business-Oriented Approach to Conservation

This guideline has demonstrated that adopting a business mindset—one that focuses on structured planning, financial diversification, and strategic investment—can significantly enhance the long-term sustainability of MPAs. Throughout the document, we have provided MPA managers with:

- A **Business Model Template** to help define the ecological, social, and economic value of their MPA.
- A **Business Plan Template** to translate strategic goals into concrete financial and operational actions.
- A **Comprehensive Overview of Financial Mechanisms**, both traditional and innovative, that can be adapted to an MPA's specific context.
- The **Tools** to assess the existing **Financial Gap** and **forecast** the inclusion **of new mechanisms**

By following these steps, MPA managers should now have a clearer path forward—one that allows them to move beyond dependency on short-term grants and project-based funding toward self-sustaining financial models that ensure long-term conservation success.

Key Takeaways: Ensuring Long-Term Success

Diversification is key	**MPAs cannot rely on a single funding source**. Combining multiple financial mechanisms creates financial resilience.
Legal and Governance Contexts Matter	Each MPA must **align financial mechanisms with existing policies** and, where necessary, advocate for policy changes that enable financial innovation.
Stakeholder Engagement is Essential	Sustainable financing depends on **community involvement, private sector engagement, and political support**. Financial mechanisms should be designed in a way that benefits both conservation and local communities.
Adaptive Management is Necessary	Financial sustainability is not static. MPAs must test, **monitor and refine** their financial mechanisms over time, ensuring they remain effective and responsive to changing circumstances.

Call to Action

The path to financial sustainability is neither simple nor immediate, but it is achievable with the right tools, knowledge, and strategies. As MPAs worldwide face growing challenges from climate change, overfishing, and habitat degradation, **securing long-term funding is no longer optional — it is imperative.**

MPA managers, policymakers and conservation stakeholders must now take **proactive steps** to **integrate financial planning into conservation management**, **experiment** with new funding models, and advocate for **stronger financial** and **governance frameworks** at local, national, and regional levels.

By leveraging the financial tools, strategies, and mechanisms outlined in this guideline, hopefully MPAs can move closer toward a future where funding is no longer a limitation but a driver of conservation success, ensuring that our Ocean remain protected for generations to come.

Interested in accessing more tools and in networking with other stakeholders working with ocean conservation?

Guide for a Stakeholder Engagement in MPA Financial Strategy Development

Stakeholder engagement is an essential component of financial strategy development in Marine Protected Areas (MPAs). However, it is important to distinguish the nature of this engagement. When specifically discussing stakeholder engagement in the financial strategy development, engagement does not equate to the transfer of power or shared decision-making. Instead, it serves practical purposes, including building local buy-in, promoting transparency, and gathering insights that facilitate smoother implementation.[115] The extent and form of engagement should be shaped by the financial tools being considered and the governance model of the MPA, as local perceptions impact the legitimacy, effectiveness, and long-term sustainability of environmental management decisions.[116]

Step 1: Understanding governance contexts

A critical first step is to assess the governance structure of the MPA, as this will influence both the relevance and the design of stakeholder engagement:

- Government-led MPAs typically require engagement centred on information-sharing and transparency.
- Community- or Indigenous-led MPAs may necessitate deeper, more inclusive engagement, particularly when financial strategies could impact customary practices.
- Privately owned MPAs may involve limited engagement, but it remains relevant where decisions affect external actors (e.g., tourists, adjacent communities).
- Co-managed MPAs benefit from fully integrated stakeholder engagement, involving all partners from early stages.

Understanding governance structures helps clarify both the degree of stakeholder engagement required and the appropriate lead actors in the process.[117]

Step 2: Clarifying the purpose of engagement

Stakeholder engagement should always have a clear and specific purpose. This ensures the process remains targeted and avoids unnecessary consultation fatigue[118]. Examples include:

- Communicating the rationale for a new visitor or user fee.
- Gathering local feedback on the suitability of potential funding sources.

116. Reed, M. S., et al. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. Journal of Environmental Management, 90(5), 1933–1949.
117. Bennett, N. J. (2016). Using perceptions as evidence to improve conservation and environmental management. Conservation Biology, 30(3), 582–592.
118. Jones, P. J. S., Qiu, W., & De Santo, E. M. (2013). Governing marine protected areas: Getting the balance right. UNEP.

- Soliciting implementation-related insights (e.g., seasonal fluctuations, user behaviours).
- Increasing acceptance of external or philanthropic funding.

Engagement is most effective when it supports public understanding, improves compliance, or enhances operational feasibility.

Step 3: Screening financial tools for engagement needs

Different contexts require different forms of engagement. While it's tempting to see more participation as better, this isn't always practical or effective. Practitioners must choose strategies that best recognise and support local communities' role in resource management[118][119]. Not all financial mechanisms require stakeholder engagement, and the depth of engagement should be calibrated to the visibility and potential impact of the tool. For instance:

- Philanthropic or donor-based funding typically does not require broad engagement.
- Tourism fees, local taxes, or entry permits often require targeted engagement to build acceptance.
- Public-private partnerships may benefit from selective stakeholder consultations, particularly to reassure local communities or address potential inequities.

This step ensures that stakeholder engagement is proportional and strategic rather than symbolic or perfunctory

Step 4: Stakeholder mapping and identification

Once a decision to engage stakeholders is made, the next step is to identify and map them effectively. A stakeholder map should include:

- Those directly involved in or affected by the financial tool (e.g., tourism operators, local authorities).
- Influential community figures and organisations (e.g., traditional leaders, NGOs).
- Communication partners who can help disseminate messages (e.g., youth groups, religious institutions).

Effective stakeholder mapping supports inclusivity, balances representation, and helps avoid elite capture or marginalisation of certain voices[120].

119. Idem
120. 116. Reed, M. S., et al. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. Journal of Environmental Management, 90(5), 1933–1949.

Step 5: Planning and conducting targeted engagement

The choice of engagement methods should reflect both the stakeholders involved and the specific engagement objectives. Suitable approaches may include:

- Workshops and one-on-one meetings for in-depth or sensitive discussions.
- Information sheets and visual materials to raise awareness of new financial tools.
- Surveys and interviews to collect operational feedback.
- Community forums or open dialogues to address concerns and clarify expectations.

Crucially, the purpose is to inform and listen, not to negotiate or co-design the entire strategy. Engagement should support, not stall, the decision-making process.

Step 6: Documenting and using insights

During and after engagement, it is essential to document key inputs and concerns. These may include:

- Practical implementation challenges (e.g., fee collection logistics, seasonal changes).
- Risks of non-compliance or resistance.
- Opportunities for adaptation or improvement.

Documentation should be concise and action-oriented, feeding directly into implementation plans. This helps demonstrate the utility of engagement and provides a record for future reference.

Step 7: Feed stakeholder insights into decision-making

Engagement only builds trust and legitimacy if stakeholders feel that their input has been considered meaningfully. Even if final decisions remain unchanged, explaining how feedback influenced or confirmed the strategy is vital. Inputs gathered through engagement- whether concerns, suggestions, or practical information- should be reviewed and, where appropriate, integrated into the final design and roll-out of the financial strategy. This step is crucial for demonstrating that participation leads to tangible outcomes, thereby building trust and long-term support.
Stakeholder inputs might:

- Shape how a tourism fee is introduced (e.g. offering low-season discounts to encourage year-round visitation)
- Influence the structure of a fee system (e.g. recommending tiered pricing for residents versus tourists
- Highlight the need for flexibility in timing (e.g. delaying the start of a new few until after a busy season)
- Flag risks of unintended consequences (e.g. fees pushing tourists towards unregulated zones)
- Shape how the financial tool is communicated (e.g. choosing trusted messengers or culturally appropriate framing to explain benefits).

Step 8: Communicating final decisions transparently

Even where stakeholder input does not change the financial strategy, communicating final decisions and their rationale is critical for building trust. This communication should:

- Clarify how and why the financial tool was selected.
- Explain its intended contribution to the MPA's long-term sustainability.
- Highlight any adjustments made based on stakeholder feedback.

Transparent communication closes the loop and shows that contributions were taken seriously, even if they did not lead to substantive changes [121].

Step 9: Monitoring and adaptive management

Finally, engagement should not end once the strategy is implemented. Monitoring stakeholder responses can help detect issues early and inform adaptive management, as effective MPA management relies on ongoing information feedback to meet its objectives[122].

Key questions include:

- Are stakeholders complying with the financial mechanism?
- Are there misunderstandings or signs of backlash?
- Is additional clarification or support needed?

Establishing a feedback loop ensures the strategy remains responsive and that future engagement is more targeted and effective [123, 124].

122. Pomeroy, R. S., Parks, J. E., & Watson, L. M. (2007). How is your MPA doing? A guidebook. IUCN.
123. Idem
124. Govan, H., et al. (2009). Status and potential of locally-managed marine areas in the South Pacific. SPREP/WWF/WorldFish/IUCN.

MPA Community Network

Blue4all

Guidelines for applying a business approach to the financial management of **MARINE PROTECTED AREAS**

2026

ISSUE 24