MEDITERRANEAN ACTION PLAN (MAP)
REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR THE MEDITERRANEAN SEA (REMPEC)

First Coordination Meeting on the Mediterranean Strategy for the Prevention of, Preparedness, and Response to Marine Pollution from Ships (2022-2031)

REMPEC/WG.52/INF.6
28 October 2022
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Floriana, 29 November - 1 December 2022

Agenda Item 5: Resource mobilisation

Draft regional fund-raising strategy to support Mediterranean coastal states in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SO_X ECA and linked compliance measures, together with an overview of potential key finance and funding opportunities, actors, and mechanisms

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REMPEC
Malta, 2022

Note by the Secretariat

This document presents the draft regional fund-raising strategy to support Mediterranean coastal states in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SO_X ECA and linked compliance measures, together with an overview of potential key finance and funding opportunities, actors, and mechanisms, which were prepared by the Secretariat pursuant to Decision IG.25/14 on the Designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (Med SO_X ECA) pursuant to MARPOL Annex VI.

Overview of potential key finance and funding opportunities, actors, and mechanisms, in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SO_X ECA and linked compliance measures

Background

1. The Twenty-second Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its Protocols (COP 22) (Antalya, Turkey, 7-10 December 2021), adopted Decision IG.25/14 on the Designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (Med SOX ECA) pursuant to Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL), which, amongst others:

   .1 urged the Contracting Parties to ratify and effectively implement MARPOL Annex VI, as soon as possible, if they have not yet done so, at least by the date of entering into force of the Med SOX ECA, to the extent possible; and

   .2 requested the Secretariat (REMPEC) to provide technical support for the implementation of this Decision, in synergy with the International Maritime Organization (IMO), and other relevant stakeholders, through technical cooperation and capacity-building activities, including financial support and resource mobilisation activities; and

   .3 encouraged all stakeholders, including the shipping industry and other Partners to contribute to and support the designation and implementation of the Med SO_X ECA.

2. In this context, REMPEC prepared the draft regional fund-raising strategy to support Mediterranean coastal states in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SO_X ECA and linked compliance measures, together with an overview of potential key finance and funding opportunities, actors, and mechanisms, which are presented respectively in Annex 1 and Annex 2 to the present document.

Action requested by the Meeting

3. The Meeting is invited to take note of the information provided in the present document.

Annex 1

Draft regional fund-raising strategy to support Mediterranean coastal states in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SOX ECA and linked compliance measures

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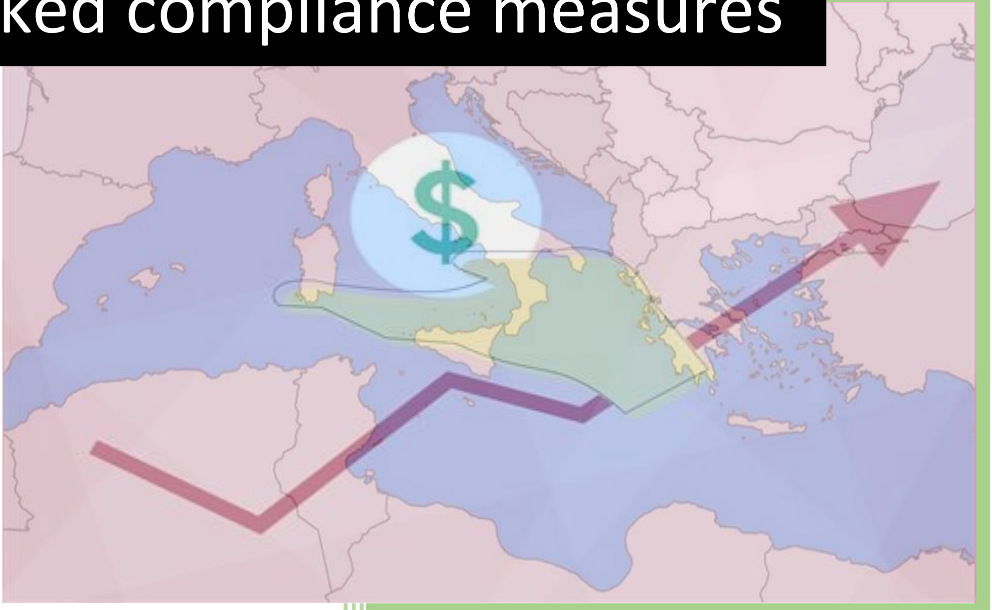
Draft regional fund-raising strategy to support Mediterranean coastal States in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SOx ECA and linked compliance measures



December 2021

Prepared by Capt. Sukhjit SINGH

REMPEC Consultant

Disclaimer

This activity was financed by the Mediterranean Trust Fund (MTF) and implemented by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), in cooperation with the International Maritime Organization (IMO) and the Mediterranean Action Plan (MAP) of the United Nations Environment Programme (UNEP).

The views expressed in this document are those of the Consultant and are not attributed in any way to the United Nations (UN), UNEP/MAP, IMO or REMPEC.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the UN Secretariat, UNEP/MAP, IMO or REMPEC, concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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Executive Summary

The Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its Protocols adopted the Road Map[1] for a Proposal for the Possible Designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (Med SO_X ECA) pursuant to MARPOL Annex VI, within the Framework of the Barcelona Convention.

Capacity building and technology-based investments will be required to support the implementation and effective compliance of the Med SO_X ECA. With an overview of existing financial mechanisms, mapping them with expected needs will assist in developing practical approaches on innovative funding schemes. The integrative approach to financial mechanisms is expected to share risk while taking advantage of collective mechanisms to increase the efforts aimed at sustainable maritime transport. Based on the current allocation of support and targeted areas, there is dearth of support for maritime projects.

New opportunities and challenges affect Environmental Funds. Over the last two decades some of these have to do with the recession, donor governments feeling stretched, and COVID-19 challenges recently. But there are deeper issues linked to changes in perspective and priority of the donors. What has remained constant is the need to continue mobilising resources to address the escalating environmental problems, including issues very specific to certain regions.

This document builds upon the "*Overview of potential key finance and funding opportunities, actors, and mechanisms, in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SO_X ECA and linked compliance measures*" (REMPEC, 2021) to develop a fund-raising strategy with a view to facilitating to secure funding towards implementation and enforcements needs for the Med SO_X ECA.

[1] https://www.rempec.org/en/our-work/pollution-prevention/hop-topics/med-eca/med-eca

The document introduces some of the innovative fundraising concepts towards the specific targeted outcome.

Aim of the draft strategy

The principal objective is to propose a regional fund-raising strategy to support Mediterranean coastal States in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SO_X ECA and linked compliance measures.

Due to the varying level of domestic regulatory framework, human and institutional capacities, and domestic financial resources, the Contracting Parties to the Barcelona Convention need investments to adequately support the capacity building and technological measures, required for the implementation of the Med SO_X ECA.

1.0 Introduction

The document entitled "*Overview of potential key finance and funding opportunities, actors, and mechanisms, in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SOX ECA and linked compliance measures*" (REMPEC, 2021) highlighted the key actors and potential financial mechanisms which can be utilised to implement and comply with the requirements of MARPOL Annex VI and the Med SO_X ECA.

1.1 Where are we now.

The Mediterranean Action Plan (MAP) was established in 1975 as a multilateral environmental agreement in the context of the Regional Seas Programme of the United Nations Environment Programme (UNEP). The Contracting Parties to the Barcelona Convention (21 Mediterranean coastal States and the European Union) have progressively erected a uniquely comprehensive institutional, legal, and implementing framework integrating essential building blocks for sustainability in the Mediterranean. UNEP/MAP Programme(s) of Work (PoWs) is primarily financed by the Contracting Parties to the Barcelona Convention through the assessed contributions to the Mediterranean Trust Fund (MTF). Other sources of funding include discretionary contributions from the European Union and ad hoc voluntary contributions by other Contracting Parties to the Barcelona Convention, the host country contributions, project funding by the Global Environmental Facility (GEF) and the European Commission, and other ad hoc donors.

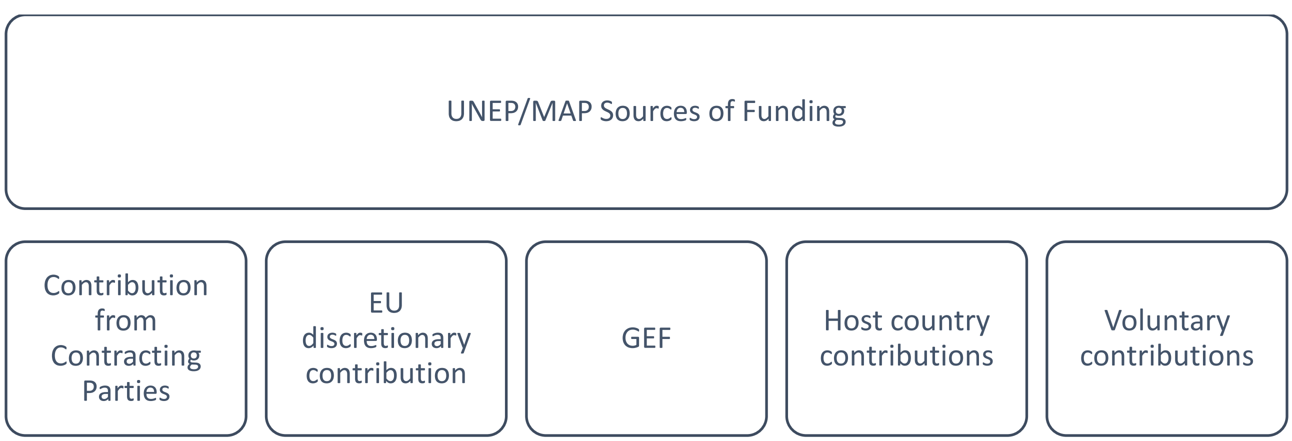

Fig 1: Summary of UNEP/MAP sources of funding

1.2 The current challenge

The mandate of UNEP/MAP has increased significantly over the time, addressing emerging issues of priority for the region. The Contracting Parties to the Barcelona Convention have held discussions on the possible designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (Med SO_X ECA), which will need resource allocation for successful implementation and monitoring. The enlarged scope of action of MAP as reflected in the UNEP/MAP Mid-Term Strategy 2016-2021 (MTS), is structured around seven different themes with a considerable number of strategic outcomes and outputs.

However, this broadened mandate has not been accompanied by a proportionally higher provision of resources. As a result, the current allocation of assessed contributions (MTF) does not provide sufficient resources to fully meet the financial requirements of the biennial PoW[2].

Attracting investments in any business of a larger scale, usually requires a credit record, collateral, and the promise of secure returns, making such investments less accessible for small operators or ports with lower volumes. At the same time, the international public funds committed to achieve the SDGs either hardly reach maritime sector or are insufficient to meet the needs for transformation. Such transformation also requires a paradigm shift towards an approach where maritime sector is integrated into the regional / national environmental action plans.

[2] Updated Resource Mobilization Strategy, as set out in Annex I to Decision IG. 23/5 on the Updated Resource Mobilization Strategy (UNEP(DEPI)/MED IG.23/23)

2.0 Identifying the financial needs

Sound financial and economic analysis during project design, appraisal and implementation plays a key role in achieving the desired economic outcomes and increasing the likelihood of sustained economic benefits of a project. It provides the grounds for making decisions on investment financing based on its financial and economic viability. While IFIs and governments require financing needs to be conducted at the project appraisal stage, it is also increasingly considered to be an important instrument for identification, design, and implementation. This activity mapped with needs assessment will have two key results which will also assist in identifying the economic and financial benefits from the implementation of the Med SO_X ECA.

The financing needs can be divided into two main categories based on needs as depicted figure 2 below.

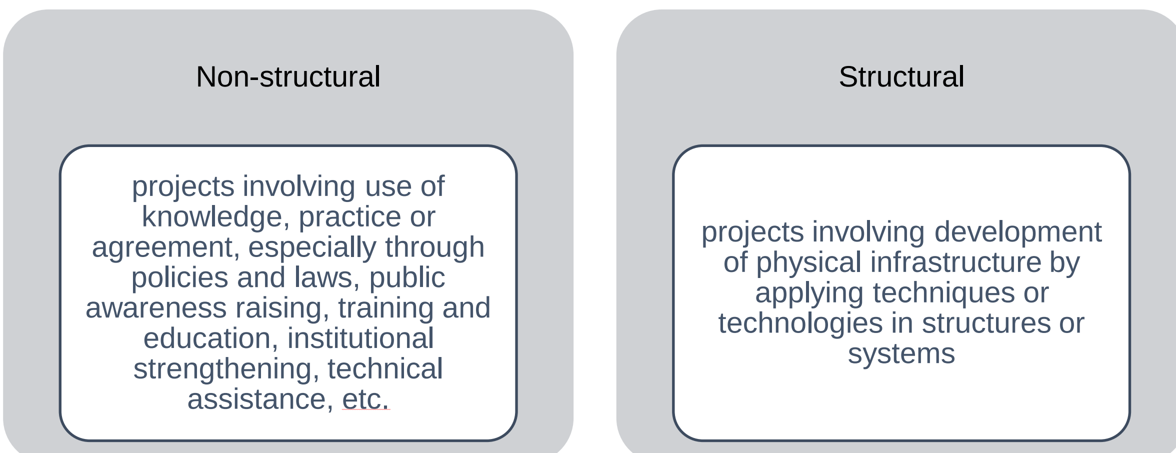

Fig 2: Two categories of projects need's requiring finance

The project needs towards implementation of the Med SO_X ECA, can similarly be identified into two main categories among relevant stakeholders (See Appendix 1 - Actors and Investment Needs):

- Capacity Building
- Infrastructure & technological investments

Once the needs assessment is carried out, the needs can be further categorised based on the stakeholder-based approach. Given the difference in legal and institutional environment within parties to the convention, categorisation of maritime stakeholders with respect to the implementation of the Med SO_X ECA will identify the investment risks and type of projects required to lower the investment risks. Therefore, need for funding will be more targeted at creating an enabling environment for non-state actors to invest and play key role in achieving implementation of the Med SO_X ECA.

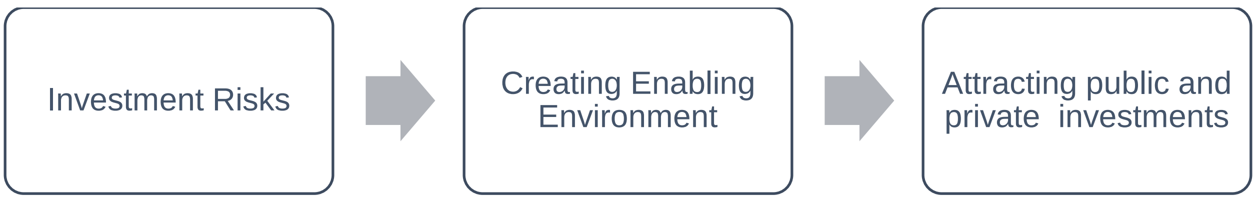

Fig 3: Role of funding in creating enabling environment for private sector

Given the nature of project and involvement of non-state actors (Ship operators, Bunker suppliers, etc.), three prong approach is suggested to engage with stakeholders in support of funding. The three aspects are mutually supporting, and stakeholders may be engaged through more than one aspect at a time.

Impact – Utilising reach, network and experience aim to facilitate creating technical partnerships between the private and public sector. During the implementation period, regionally supported approach benefits in increasing country engagement with the private sector in order to leverage the expertise and skills of businesses in support of meeting the needs articulated in country strategic plans towards implementing the Med SO_X ECA. The needs driven approach is expected to offer efficiencies and cost savings over the strategy period because of collaboration with the private sector through long-term and innovative engagement approaches, which will benefit enforcement of the sulphur regulations.

These technical and capacity building partnerships aimed at increasing local level impact supported with an appropriate impact measurement methodology will also enhance access to other sources of funding.

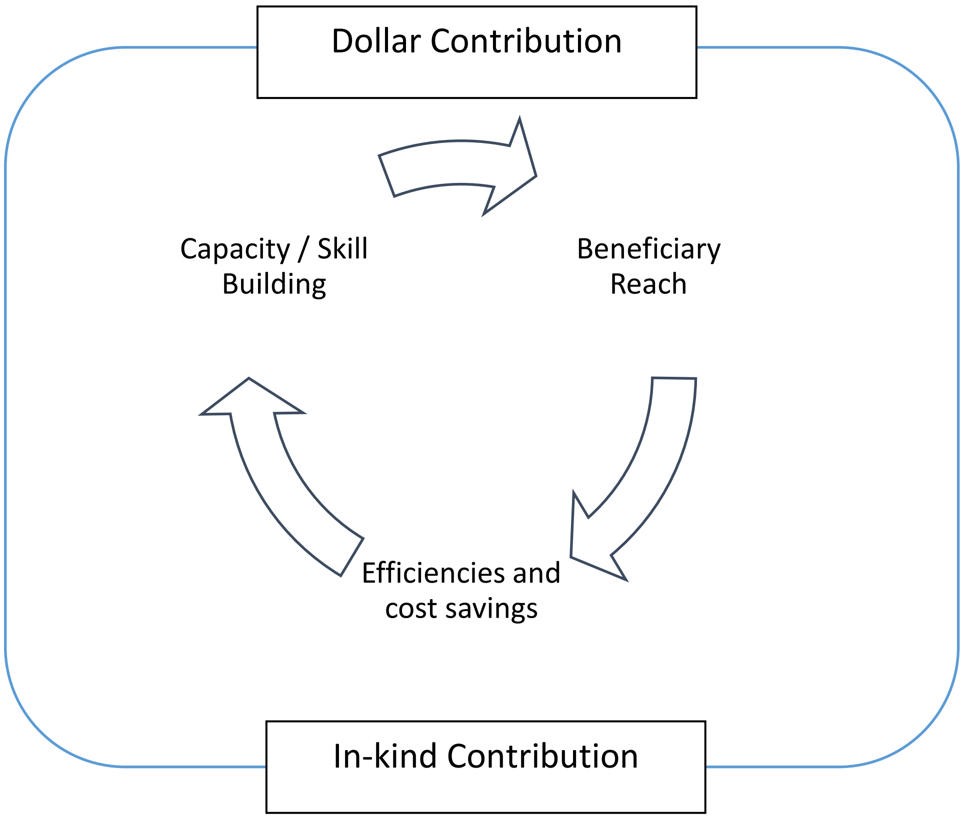

Fig 4: Three key aspects of assessing partnership impact (needs and support)

Income – Sharing the financial needs of the project among, the stakeholders and traditional sources of income will develop a sustainable stream of flexible income through a new approach. Investing in creation of a Regional Industrial Alliance (RIA) with a digital-led fundraising strategy to engage stakeholders worldwide will expand the yearly contributions from businesses and foundations.

Innovation - The third aspect allows to explore new modes of engagement with donors to find innovative and collaborative solutions for the objectives of the project, through new modalities and new ways of working. Activities under this aspect will support impact and income activities and goals. Innovation is needed to synergise and link the national development strategies, national maritime strategy and policy, vulnerability and climate risk assessments, economic and environmental studies to the desired outcomes of the implementation of the Med SO_X ECA. This will enhance the funding availabilities as due diligence of financial institutions involves examining the alignment of project activities with plans, policies and strategies set at local, national, and international levels.

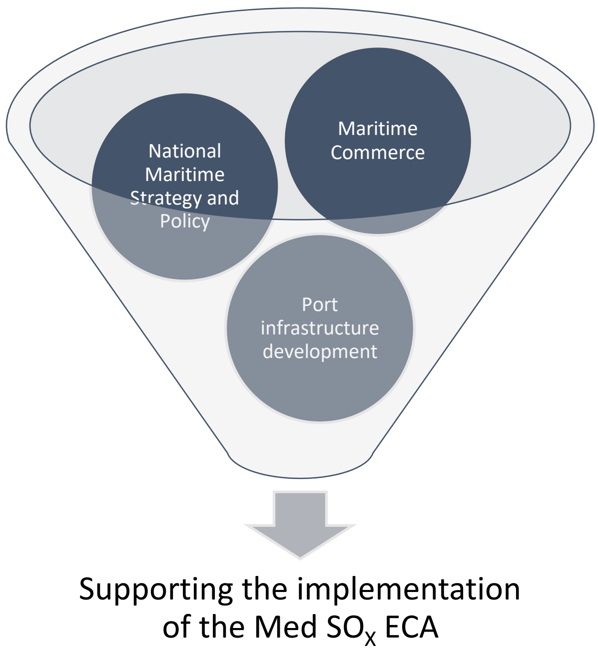

Fig 5: Synergising the implementation of the Med SO_X ECA with wider development plans

The three aspects are interrelated and mutually supporting, and partners may be engaged through more than one aspect at a time. For example, many private sector partners provide funding along with their technical expertise. Given the focus on impact partnerships as the most valuable way of engaging with the private sector, these two means of support are divided between the impact and income aspects.

3.0 Financing modalities

While the traditional financial support through grants and project-based funding continues, there is need to expand the donor universe. The financial support required to facilitate the needs identified for capacity building and technological investments (inclusive of infrastructure) will vary among stakeholders and Contracting Parties to the Barcelona Convention. To enhance the further reach to established fund providers for the environmental projects, initial requirements will need to be more focused on the countries which are still not party to the MARPOL convention.

The financial modality must aim at reducing the investment risk and promote role of non-state actors. Grand based funding is usually aimed at capacity building and pilot projects. Grants are provided for investment support, policy-based support and/or technical assistance and advice.

The technical and infrastructure investments are more capital intensive and will require guarantees or bonds to de-risk the investments. Lately, regional development banks and multilateral development banks have increasingly played role in climate finance to cover commercial and non-commercial risks.

Fig 6: Funding instruments to be explored for infrastructure development

In approaching new donors / fund providers, arguments must be made towards:

1. The local ownership of the activities highlighting capacity building, policy initiative and critical need of finance support to facilitate the paradigm shift in fuel used by maritime industry.
2. The nature of problem and its wide impact and need for wider solution especially given its transboundary nature.
3. The responsibility of developed nations to contribute to a regional public policy issue, and to do so in solidarity with other developing nations of the region.

Given the role of private sector in implementation, foreign direct investment (FDI) in port infrastructure is an attractive policy option promoting availability of finance in developing countries. From the viewpoint of the project, it may provide the basis for cost sharing model and attract funds from other donors as, it can enhance growth and innovation, create jobs, and develop human capital, and environmental sustainability.

Based on the choice of model, it may be attractive to build a case for seed funding aimed at the relevant legislative and institutional adjustments as legislation to facilitate the privatisation of certain port assets may be necessary.

4.0 Developing Fundraising approach

To ensure the necessary transition towards the Med SO_X ECA, governments and enterprises in the Mediterranean region needs to build on a mix of regulatory and economic instruments. It will need technological and social innovations supported with multiple financing sources targeting sustainable investments.

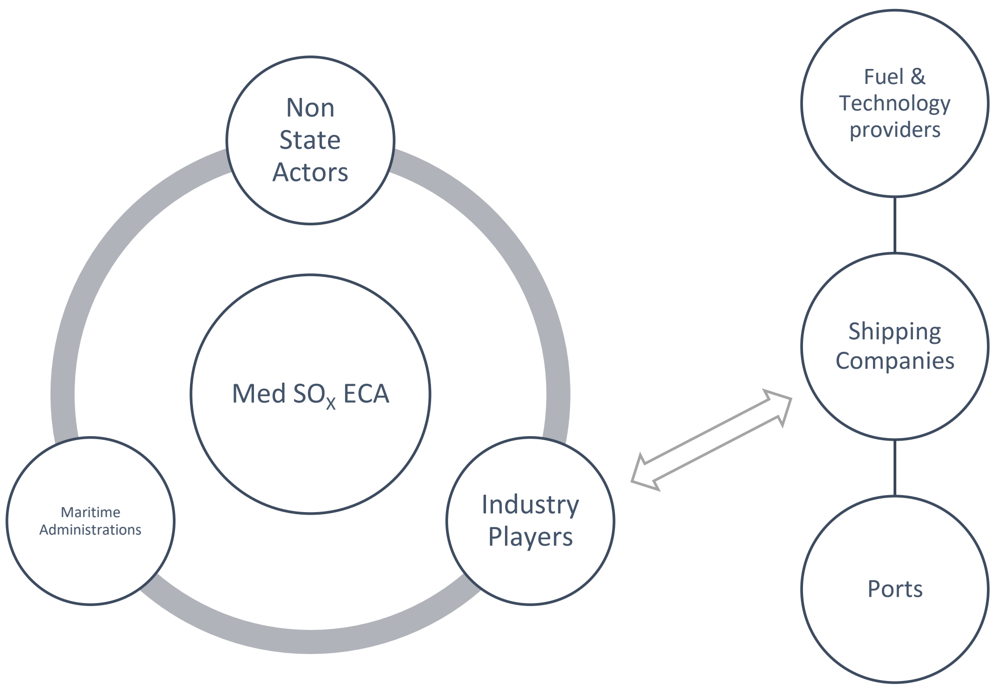

Fig 7: Stakeholder engagement aimed at fundraising

Based on stakeholder engagement and needs assessment the approach to funds can be divided among two approaches:

1. Prioritising needs-based partnerships for impact at the country level: Based on the type and scope of needs required for funding requests for the implementation of the Med SO_X ECA must take into account the involvement and ownership by private sector. Consortiums of state and non-state actors can provide cost sharing models and justify donor investments aimed to develop required capacity and technology transfer.

2. Eligibility Based Approach – the current architect of climate financing is complex but offers an opportunity to synergise needs of the maritime projects with wider development needs. Where contracting governments are not directly eligible for donor funding a regional approach is suggested. And at the same time, national ownership of related activities may allow funding from donors aiming national entities.

Strategy must remain fluid and be able to blend activities needed to finance the implementation of the Med SO_X ECA with donor behaviour and thematic areas. Continuous analysis and findings from stakeholder engagement and donor feedback must inform the strategic direction.

Sufficient focus must be maintained within regional industry alliance and partnership approach at the regional and local level to successfully identify and nurture these diverse partnerships sustainably towards targeting available finance.

The private – public partnerships can contribute towards increasing its fundraising appetite significantly through making adequate up-front investment.

Establishment of the project specific focus areas, scope, and guiding principles will increase collaboration with wide range of non-state actors, from multinational corporations to local entrepreneurs, academic institutions, and civil society actors. However, the strategic focus through this collaboration must have the potential to improve impact and increase funding from individuals, foundations, and businesses, ranging from large global corporations to local small- and medium-sized enterprises, regardless of operational context, ownership, or structure. There may be a need to acknowledge within the proposed project approach that the private sector partners can simultaneously have both a partner and a procurement relationship.

4.1 Donor Marketing and Relationship Management

Donor relationship management is the process of thoughtfully and proactively cultivating relationships with new donors and stewarding current donors in order to maximise donor retention, engagement, and investment. It typically requires clear segmentation and prioritisation of donors and leads to the formulation of clear goals and action plans for how beneficiary will interact with a given donor segment to achieve desired results.

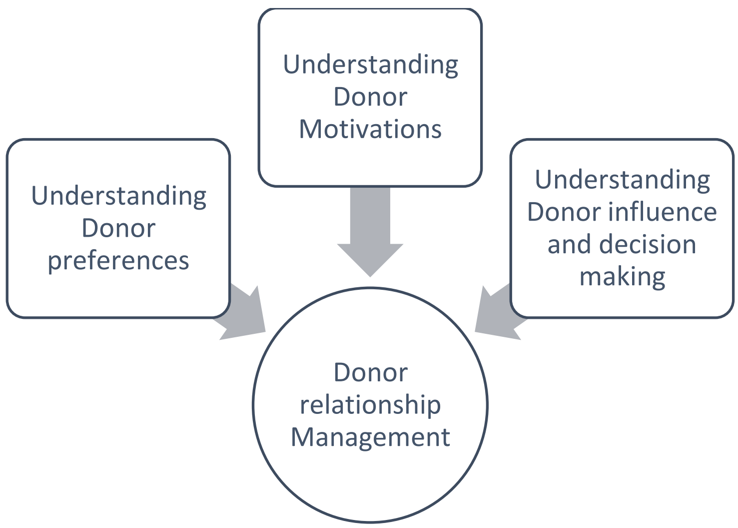

Fig 8: Managing Donor relationship

An effective communication and visibility plan must be developed to profile the donor along with how project impact will be measured. Throughout donor engagement efforts, seek to gain feedback from donors about their satisfaction with the relationship.

Fig 9: Key aspects of Donor Marketing

4.2 Key Potential Donors[3]

Name	Priority	Application Process
EU	Enabling stakeholder participation in governance schemes and instruments. Support for the implementation of environmental and climate plans developed at regional, multiregional, or national levels	Regional basis for various funds under EU
GCF	Development of port infrastructure (climate mitigation and adaptation including climate resilience)	Project funding is channelled through Accredited Entities (AEs) and intermediaries. AEs are either Direct Access Entities – sub-national, national, or regional organisations – or International Access Entities including United Nations agencies, multilateral development banks, international financial institutions, and regional institutions. Direct Access

[3] Overview of potential key finance and funding opportunities, actors, and mechanisms, in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SO_X ECA and linked compliance measures (REMPEC, 2021).

Name	Priority	Application Process
		Entities are nominated by their NDA.
GEF (Greening Infrastructure Development Integrated Program) GEF-8 Integrated Program	Capacity Building Full-size or medium-size projects targeted at supporting implementation and compliance of MARPOL Annex VI and the Med SO_X ECA Small Grants Programme	With implementing partner, where country is eligible to receive World Bank (IBRD and/or IDA) financing or it is an eligible recipient of UNDP technical assistance through its target for resource assignments from the core (specifically TRAC-1 and/or TRAC-2).
EBRD	Mitigation and adaptation activities supported through capital grants that reduce the capital costs of a project or risk-sharing and guarantee facilities to expand investment outreach in countries or sectors where poor market conditions make financing difficult for borrowers.	Through implementing partners or project basis

Name	Priority	Application Process
EIB	Climate mitigation and adaptation projects	Direct loans and risk capital financing can be requested directly from the EIB. A comprehensive feasibility study should be submitted. For Mediterranean coastal States, FEMIP brings together under one roof the whole range of services provided by the Bank in support of economic development in the Mediterranean partner countries.

5.0 Conclusion

This draft fund-raising strategy can be used as a tool to assist the Secretariat and the Contracting Parties to the Barcelona Convention to work together and explore funding opportunities suitable for implementing MARPOL Annex VI and the Med SO_X ECA. A blended approach utilising Need based, and Eligibility criteria is suggested. Continuous, results-focused discussions must be done with non-state actors especially private sector to benefit from private finance. Actions must be taken at regional and national levels to synergise maritime projects as part of wider development projects to widen the donor base, increase delivery through partnerships and increase the efficiency and effectiveness of the project.

Appendix 1 - Actors and Investment Needs

Needs and Targets

This section identifies the main stakeholders and type of support required towards implementation of the Med SO_X ECA. The investment needs can be identified into two main categories among stakeholders:

- Capacity building
- Technology and infrastructure investments in the implementation and compliance enforcement for the Med SO_X ECA are presented in the figure below:

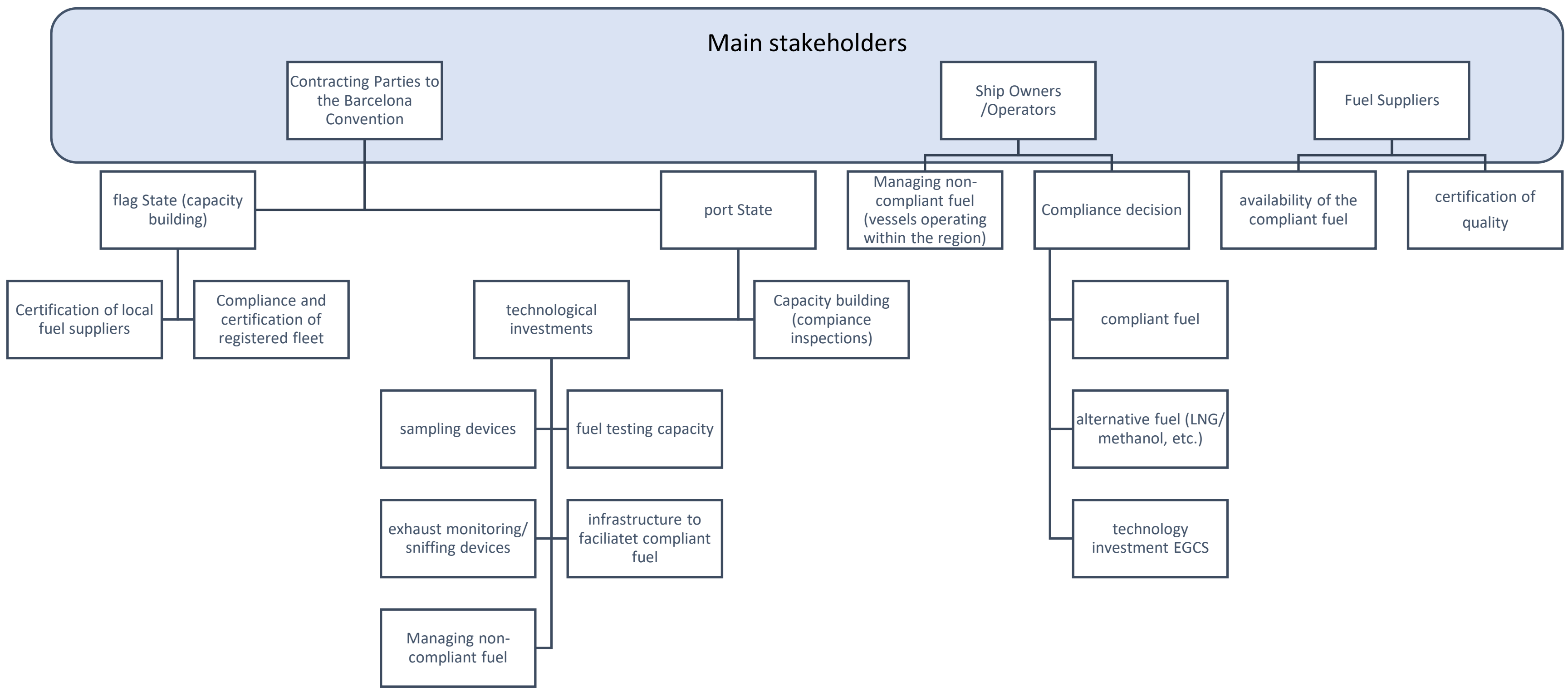

Fig 2: Main stakeholders and type of needs for effective implementation and compliance

Annex 2

Overview of potential key finance and funding opportunities, actors, and mechanisms, in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SOX ECA and linked compliance measures

MEDITERRANEAN ACTION PLAN (MAP)

REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR THE MEDITERRANEAN SEA (REMPEC)

Overview of potential key finance and funding opportunities, actors, and mechanisms, in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SOx ECA and linked compliance measures

December 2021

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REMPEC Consultant

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Executive Summary

The Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its Protocols adopted the Road Map[1] for a Proposal for the Possible Designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (Med SO_X ECA) pursuant to MARPOL Annex VI, within the Framework of the Barcelona Convention. In line with this road map, the Secretariat (REMPEC), along with providing continued assistance for the ratification and effective implementation of MARPOL Annex VI to the Contracting Parties to the Barcelona Convention, including through the assessment of the individual needs of the Contracting Parties to the Barcelona Convention that have not yet ratified MARPOL Annex VI, has been exploring the funding opportunities to address the identified needs as required before the designation of the proposed Med SO_X ECA.

Due to the varying level of domestic regulatory framework, human and institutional capacities, and domestic financial resources, the Contracting Parties to the Barcelona Convention will need investments in the capacity building and technological measures, required for the implementation of the Med SO_X ECA. These investments will aid and enhance the development in key areas of air pollution prevention from ships, especially implementation of compliance and journey to wider decarbonisation of the sector.

Capacity building and technology-based investments will be required to support the implementation and effective compliance of the Med SO_X ECA. With an overview of existing financial mechanisms, mapping them with expected needs will assist in developing practical approaches on innovative funding schemes. The integrative approach to financial mechanisms is expected to share risk while taking advantage of collective mechanisms to increase the efforts aimed at sustainable maritime transport. Based on the current allocation of support and targeted areas, there is dearth of support for maritime projects. There is greater need to integrate

[1] https://www.rempec.org/en/our-work/pollution-prevention/hop-topics/med-eca/med-eca

maritime agenda within relevant Sustainable Development Goals (SDGs) for greater coordination with wider programmes of action.

Aim of the overview

The principal objective of this overview is to identify potential key finance and funding opportunities, actors, and mechanisms, in relation to the ratification and effective implementation of MARPOL Annex VI as well as the implementation of the Med SO_X ECA and linked compliance measures, which could support the development of a regional fund-raising strategy to support Mediterranean coastal States to that end.

1.0 Introduction

The Mediterranean Action Plan (MAP) was established in 1975 as a multilateral environmental agreement in the context of the Regional Seas Programme of the United Nations Environment Programme (UNEP). UNEP/MAP and the Contracting Parties to the Barcelona Convention (21 Mediterranean coastal States and the European Union) have progressively erected a uniquely comprehensive institutional, legal, and implementing framework integrating essential building blocks for sustainability in the Mediterranean[2]. In addition, the Contracting Parties to the Barcelona Convention have held discussions on the possible designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (Med SO_X ECA). Figure 1 below highlights the main goals and steps with proposed timeline[3].

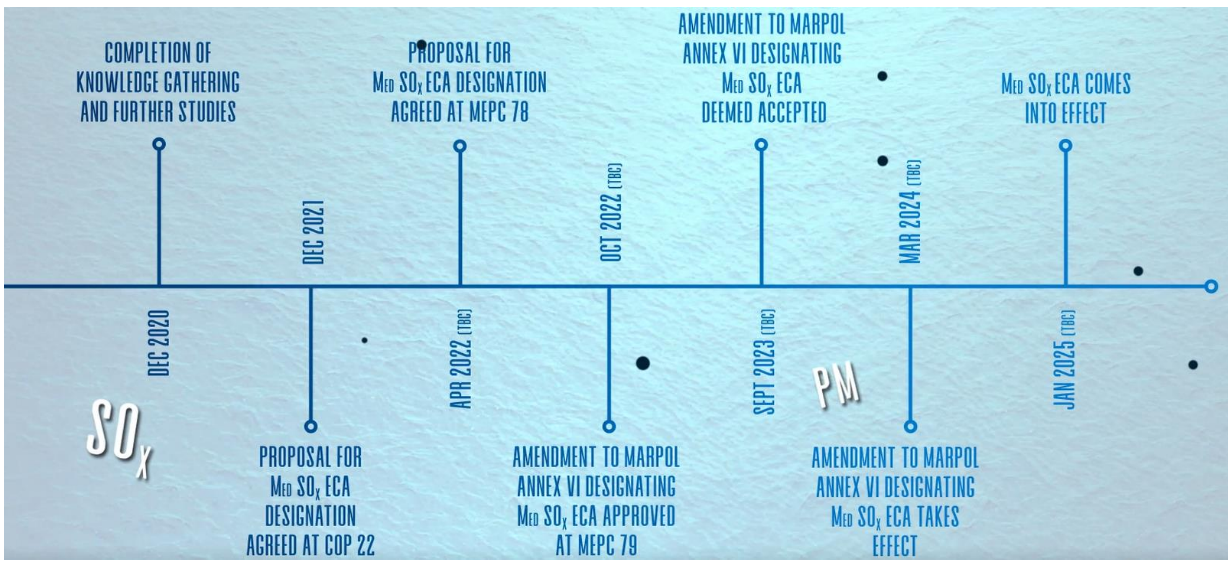

Fig1: Road map for designation of the Med SO_X ECA: Goals and Main Steps

The submission of the joint and coordinated proposal for the designation of the proposed Med SO_X ECA to the IMO (along with proposed amendments to MARPOL Annex VI) is expected for February 2022. An assessment of the individual needs of the Contracting Parties to the Barcelona

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[2] https://www.unep.org/unepmap/

[3] http://www.info-rac.org/cleanairday/storymap.html

Convention that have not yet ratified MARPOL Annex VI is also being carried out with a view to facilitating effective implementation.

As part of the road map, the knowledge gathering, and detailed study related to the additional economic impact evaluation were carried out. The key findings of the analysis of the economic impacts on ports and refineries inform that:

- Demand for goods and services, including passenger transport, will be unchanged due to vessels using 0.10% S m/m fuels
- Port competition will not be distorted by demand for 0.10% S m/m marine fuels
- Refinery competition will not be distorted by demand for 0.10% S m/m marine fuels

Another notable finding from financial investments perspective is that in long-run cost changes can be expected to signal an adjustment in the market, triggering cost efficiencies elsewhere in supply chain, cargo handling efficiency improvements, and innovation in transport, intermodal, and cargo handling procedures and technology.

This also signals that if the Contracting Parties to the Barcelona Convention, invest in regional capacity and technology uptake then the likelihood of a successful regional compliance can be realised. Also, mutual recognition of priorities will be a strong starting point for financial collaboration and the formation of partnerships. Contracting Parties to the Barcelona Convention have two major roles in implementation and compliance enforcement for the new proposed Med SO_X ECA requirements:

1. Role as flag State: Ratification of MARPOL Annex VI where not yest achieved. Compliance of the ship in their flag to the convention. From implementation perspective this will require investment in capacity building to conduct initial and annual inspections. However, majority of this role is expected to be outsourced to recognised organisations.
2. Role as port State: Compliance of the ship visiting their ports. This will need two-fold approach requiring investment in capacity building as well as technological requirements (sample testing, exhaust sniffers and infrastructure to facilitate supply of compliance fuel where expected).

Table 1: Contracting Parties to the Barcelona Convention - MARPOL Annex VI ratification status

Country Name	MARPOL Annex VI status (Ratification)
Albania	x
Algeria	-
Bosnia and Herzegovina	-
Croatia	x
Cyprus	x
Egypt	-
France	x
Greece	x
Israel	-
Italy	x
Lebanon	-
Libya	-
Malta	x
Monaco	x
Montenegro	x
Morocco	x
Slovenia	x
Spain	x
Syrian Arab Republic	x
Tunisia	x
Turkey	x

The financial support required to facilitate the needs identified for capacity building and technological investments (inclusive of infrastructure) will vary among stakeholders and Contracting Parties to the Barcelona Convention. The access to international financial support is also expected to be influenced by the status of MARPOL Annex VI ratification and EU membership (table 1 and table 4). This is vital especially given when majority of international financial support is aligned to policy support and priorities of the government.

2.0 Actors and Investment Needs

This section identifies the main stakeholders and type of support required towards implementation of the Med SO_X ECA. The investment needs can be identified into two main categories among stakeholders:

- Capacity building
- Technology and infrastructure investments in the implementation and compliance enforcement for the Med SO_X ECA are presented in the figure below:

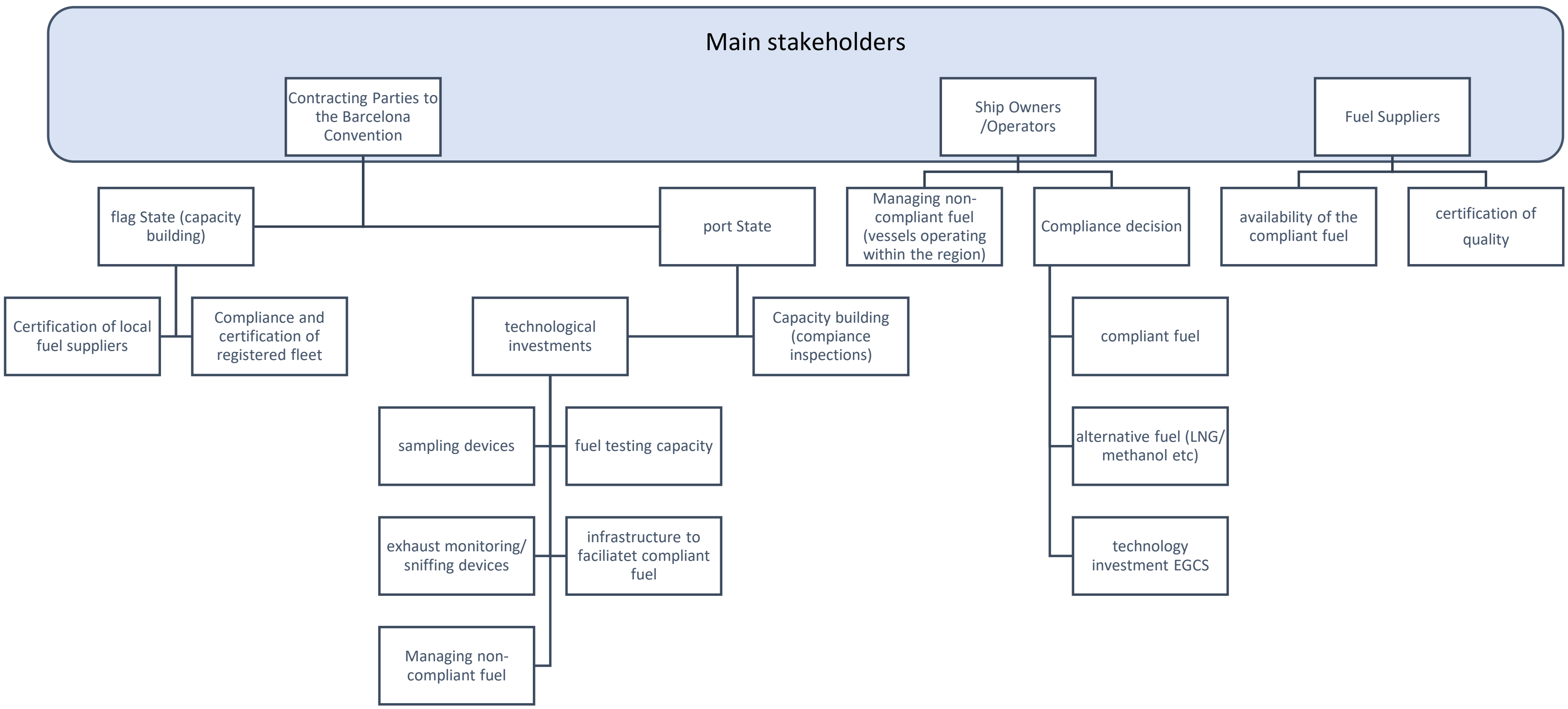


Fig 2: Main stakeholders and type of needs for effective implementation and compliance

3.0 Funding and financing mechanisms

To ensure the necessary transition towards the Med SO_X ECA, governments and enterprises in the Mediterranean region needs to build on a mix of regulatory and economic instruments. It will need technological and social innovations supported with multiple financing sources targeting sustainable investments.

The main types of financial instrument containing climate finance utilised include the following options:

ADVISORY SERVICES - MDB advisory services include advising national and local governments as well as private sector actors on a variety of topics, for instance how to improve their investment climate and strengthen basic infrastructure. The MDB tracks and reports the costs of managing advisory programmes, which may consist of staff time, studies, and training with clients. Similar to investments, some programmes are 100 per cent climate-related and some have a climate component tracked in the overall programme budget. Many MDBs work with governments, through technical assistance and advisory services, to help create policy and regulatory environments that can attract private finance. For example, the EBRD, the Islamic Corporation for the Development of the Private Sector of the IsDB Group, and the WBG worked with the Government of Egypt to develop a regulatory environment conducive to private investment in renewable energy, attracting international developers and co-financiers (the Benban Solar Park)[4].

EQUITY - Ownership interest in an enterprise that represents a claim on the assets of the entity in proportion to the number and class of shares owned. Equity investments increased its share of total climate finance flows, at 33% in 2019/2020 compared to 29% in 2017/2018.

GRANTS - Transfers made in cash, goods, or services for which no repayment is required. Grants are provided for investment support, policy-based support and/or technical assistance and advice.

[4] https://www.gihub.org/resources/showcase-projects/benban-solar-16-projects/

BOND - A type of bond, the issuance of which is done by a client and supported by an MDB, where the proceeds are applied exclusively to financing or re-financing, in part or in full, new and/or existing climate projects.

GUARANTEES - Guarantees are instruments provided by an MDB to cover commercial and non-commercial risk. Guarantees support private sector investments, commercial borrowing by sovereign or state-owned enterprises, and/or commercial borrowing by the sovereign for budget financing and to support reform programmes. Guarantees are extended for eligible projects that enable financing partners to transfer certain risks that they cannot easily absorb or manage on their own. Guarantees cover equity and a wide variety of debt instruments and support financial sector projects (including those of capital market investments and trade financiers and nonfinancial-sector business activities corresponding to activities across sectors).

INVESTMENT LOANS - Loans are transfers for which repayment is required. Investment loans can be used for any development activity that has the overall objective of promoting sustainable social and/or economic development, in line with the MDBs' mandates. Refinancing and Working Capital is also classified under investment loans. Refinancing is the replacement of an existing debt obligation with another debt obligation under different terms. Working capital is finance provided for operational expenditures. Working capital is considered to be climate finance if it leads to, enables, or supports the implementation and operation of activities included in the joint MDB methodology for tracking climate finance.

LINES OF CREDIT - Lines of credit provide a guarantee that funds will be made available, but no financial asset exists until funds have been advanced. Climate finance is the proportion of the credit line that is committed to activities defined as eligible in the MDBs' climate finance tracking methodologies.

POLICY-BASED FINANCING (PBF) - Financing for a public borrower that helps the borrower to address actual or anticipated requirements for development finance of domestic or external origins. Policy-based financing supports a programme of policy and institutional actions for a particular theme or sector of national policy. While it does not use the cost estimation approach for each policy action, disbursements of PBF are conditional on the borrower fulfilling their policy commitments in the lending agreement.

RESULTS-BASED FINANCING (RBF) - Results-based financing directly links the disbursement of funds to measurable results in a government-owned programme. RBF aims to increase accountability and incentives for delivering and sustaining results, improve the effectiveness and efficiency of government owned sector programmes, promote institutional development, and enhance the effectiveness of development.

4.0 Multilateral Climate Finance

Multilateral climate funds are funds that are provided by multilateral institutions such as; multilateral development banks, United Nations (UN) agencies, and the financial institutions that have been created within the framework of the United Nations Framework Convention (UNFCCC) itself.

4.1 Financial Intermediary Funds (FIFs)

In the changing global environment of development cooperation, trust funds have emerged as a significant pillar of the global aid architecture, used to address limitations in bilateral aid and fill perceived gaps in the operations of existing multilateral institutions, these are financial arrangements that typically leverage a variety of public and private resources in support of international initiatives, enabling global programs often focused on the provision of global public goods, preventing communicable diseases, responses to climate change, and food security.

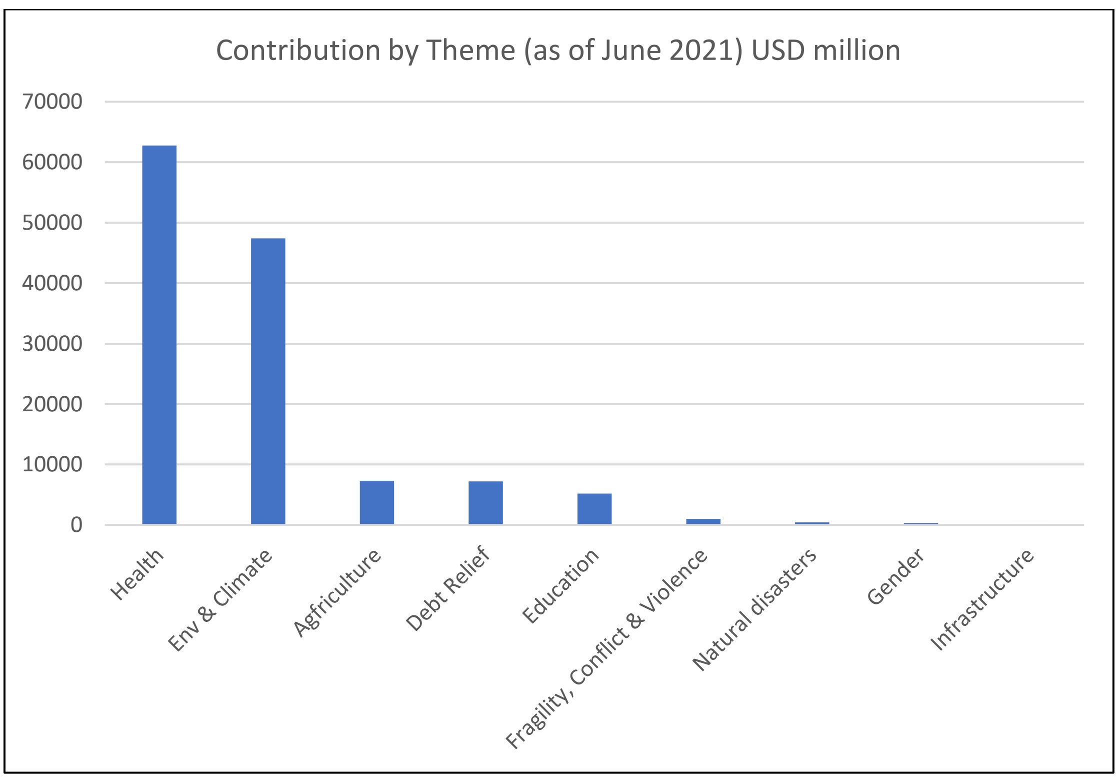


Fig 3: Financial Intermediary Funds (FIFs) Contribution by theme (2021)

The FIFs utilise innovative financing and governance arrangements which enable funds to be raised from multiple sources. These funds can be channelled in a coordinated manner to a range of recipients in the public and private sectors through a variety of arrangements. The World Bank's provides a distinctive role across FIFs as Trustee of the funds. For all FIFs, the World Bank provides a set of agreed financial services that involve receiving, holding, and investing contributed funds, and transferring them when instructed by the FIF governing body.

Trust funds are used strategically to complement the core WBG funding. They enhance global, regional, and country-level knowledge; provide targeted support to clients as a complement to IBRD and IDA funding; and provide funding to countries and clients that cannot receive IBRD and IDA funding.

Large volumes of funds are professionally managed, special financial services are provided to boost ODA's impact, and coordination is enhanced across MDBs, UN agencies and beyond. The 2015 Addis Ababa Action Agenda brought a keener focus on maximising impact from scarce official development assistance with more emphasis on leveraging private sector resources and MDB balance sheets. There has also been an expansion in the number of important actors in the international development landscape, including new international financial institutions, along with calls for closer collaboration across the system.

As a result, FIFs have become increasingly popular for several new initiatives. Figure 5 below presents the key funds under FIFs with total investment of USD 47401 million under environmental and climate change theme[5].

[5] https://fiftrustee.worldbank.org/en/about/unit/dfi/fiftrustee/funds

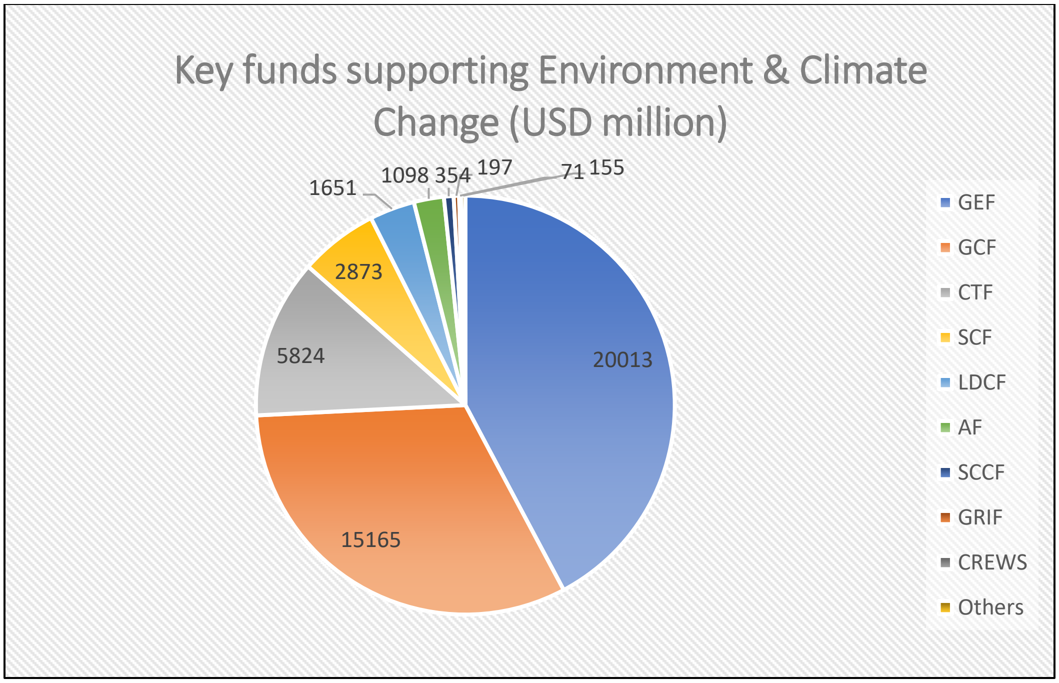


Fig 4: Various Funds under FIFs supporting Environmental and Climate change theme (2021)

4.1.1 Global Environment Facility Trust Fund (GEF)

The GEF is the largest funder of projects focused on global environmental challenges and a global partnership among 180 countries, international institutions, non-governmental organisations, and the private sector. GEF funds are available to developing countries and countries with economies in transition to meet the objectives of the international environmental conventions and agreements. In most cases, the GEF provides funding to support government projects and programs. Governments decide on the executing agency (governmental institutions, civil society organisations, private sector companies, research institutions).

Eligibility criteria

Countries can be eligible for GEF funding if:

- the country has ratified the conventions the GEF serves[6] and conforms with the eligibility criteria decided by the Conference of the Parties of each convention. (The MARPOL

[6] https://www.thegef.org/partners/conventions

convention is covered under the Multilateral Agreements on the International Waters and Transboundary Water Systems) ; or

- the country is eligible to receive World Bank (IBRD and/or IDA) financing or
- it is an eligible recipient of UNDP technical assistance through its target for resource assignments from the core (specifically TRAC-1 and/or TRAC-2).

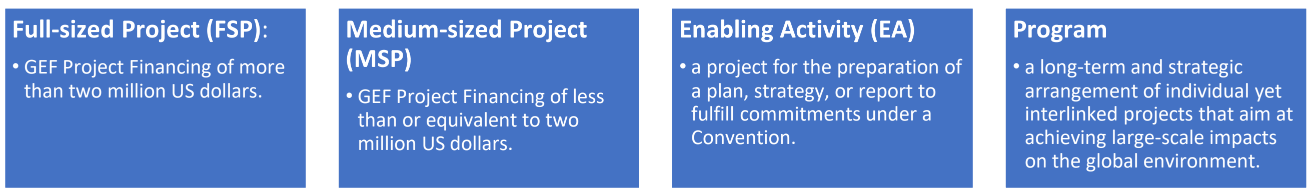


Fig 5: Types of projects modalities under GEF

The GEF provides funding through four modalities: full-sized projects, medium-sized projects, enabling activities and programmatic approaches. The selected modality should be the one that best supports the project objectives.

Representatives of donor and recipient countries gathered virtually with members of the wider GEF community to discuss priorities and ambitions for the multilateral trust fund's next four-year funding cycle. The GEF-8 investment period, which will span from July 2022 to June 2026.

GEF 8, under its Climate change focal area highlights the goal to support developing countries to make transformational shifts towards net-zero GHG emissions and climate-resilient development pathways. The two main objectives are to[7]:

- Promote innovation, technology transfer, and enabling policies for mitigation options with systemic impacts

[7] https://www.thegef.org/sites/default/files/council-meeting-documents/2021_04_22_First_Meeting_GEF-8_PDs_Presentation.pdf

- Foster enabling conditions to mainstream mitigation concerns into sustainable development strategies

GEF – 8, also aims to support nations in transboundary cooperation in shared marine and freshwater ecosystems. Objective 2 covers Advance management in the Areas Beyond National Jurisdiction (ABNJ). Maritime navigation is considered as a driver causing degradation of ABNJ. Therefore, GEF will support actions that formulate and formalise cooperative legal and institutional frameworks built on TDAs/SAPs approach, towards addressing the multiple anthropogenic pressures, including climate related effects in the large marine ecosystems (LMEs). The TDA/SAP process consists of a Transboundary Diagnostic Analysis in which common fact finding, and scientific analysis identifies the shared threats in a given transboundary ecosystem This process leads naturally into the formulation of the Strategic Action Program, which is a politically endorsed document, that identifies the interventions needed to address the agreed threats in the region.

The GEF Small Grants Programme (SGP) is a unique GEF Corporate Program that provides financing and capacity development to CSOs and CBOs through projects that contribute to global environmental benefits while supporting local sustainable development. In GEF-8, SGP would sharpen its triple approach encompassing greater impact, innovation, and inclusion to promote community investments that identify, nurture, and replicate scalable local solutions to contribute to global environmental benefits. During GEF-8, SGP will continue to support Capacity Development and knowledge and learning.

4.1.2 Green Climate Fund (GCF)

The GCF is a legally independent entity with a full-time secretariat in Songdo, Republic of Korea, and is envisaged as an important multilateral fund that promotes a different model for fighting climate change.

Transformational planning and programming

1. By promoting integrated strategies, planning and policymaking to maximise the co-benefits between mitigation, adaptation and sustainable development.

Catalysing climate innovation

1. by investing in new technologies, business models, and practices to establish a proof of concept.

De-risking investment to mobilise finance at scale

- by using scarce public resources to improve the risk-reward profile of low emission climate resilient investment and crowd-in private finance, notably for adaptation, nature-based solutions, least developed countries (LDCs) and Small Island Developing States (SIDS).

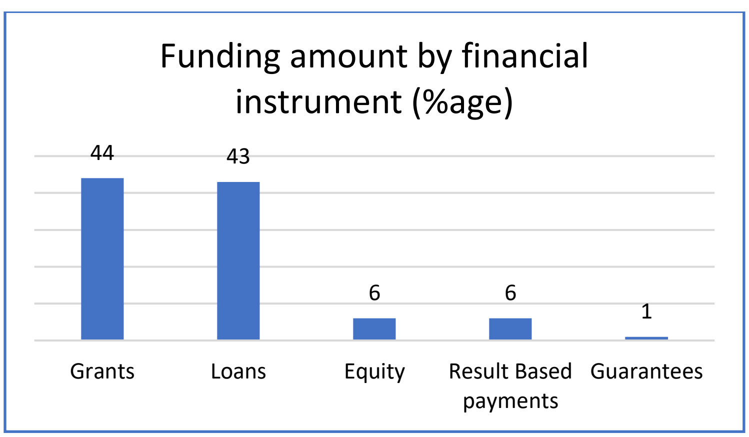
Mainstreaming climate risks and opportunities into investment decision-making to align finance with sustainable development

1. by promoting methodologies, standards and practices that foster new norms and values.

Fig 6: Four-pronged approach of GCF

Eligibility Country Driven - GCF's country-driven approach is underpinned by capacity-building support through its Readiness Programme that is available to all developing countries.

Financing instruments - financial support is provided through a flexible combination of grant, concessional debt, guarantees or equity instruments to leverage blended finance and crowd-in private investment for climate action in developing countries. This flexibility enables the Fund to pilot new financial structures to support green market creation.



The 87% of GCF support is via grants and loans. However, at this moment there are only 9 projects targeting transport sector inclusive of cross cutting themes. And only one directly aimed at the development of Port infrastructure.

In its current funding, GCF lacks direct funding into maritime transport projects. One main reason can be attributed to the country driven approach and lack of maritime priorities within national agenda.

GCF's first replenishment (2020-2023) is an important element of the financial commitments and is part of a long-term vision for the Fund, building it up to become a major global instrument for channelling public climate finance to mobilise the larger shifts in global financial flows required to achieve the Paris Agreement goals. The amount pledged exceeds the USD 9.3 billion announced at the Fund's previous pledging conference in 2014, even though some contributors have yet to pledge.

4.1.3 Clean Technology Fund (CTF)

Climate Investment Funds comprises two funds, the Clean Technology Fund, and the Strategic Climate Fund. The Clean Technology Fund provides new large-scale financial resources to invest in clean technology projects in developing countries, which contribute to the demonstration, deployment, and transfer of low-carbon technologies with a significant potential for long-term greenhouse gas emissions savings.

4.1.4 Strategic Climate Fund (SCF)

Climate Investment Funds comprises two funds, the Clean Technology Fund, and the Strategic Climate Fund. The Strategic Climate Fund provides financing to pilot innovative approaches or to scale-up activities aimed at specific climate change challenges or sectoral responses.

4.1.5 Adaptation Fund (AF)

The Adaptation Fund finances projects and programmes that help vulnerable communities in developing countries adapt to climate change. Initiatives are based on country needs, views, and priorities. The AF does not have a regional focus but focuses on developing countries that are particularly vulnerable to the adverse effects of climate change.

4.1.6 Special Climate Change Fund (SCCF)

The Special Climate Change Fund was established in November 2001 under the UNFCCC to finance activities, programs and measures relating to climate change that are complementary to those funded by the resources allocated to the climate change focal area of the Global Environment Facility Trust Fund. Currently, the objective of the SCCF is to support adaptation and technology transfer projects and programs those are country-driven, cost-effective, and integrated into national sustainable development strategies and take into account national communications or other relevant studies and information provided by the Party.

Table 2: FIF's featuring various financing instruments

FIF	**FIF Sources of Funding by Instrument**					**Financing Instruments used by FIF in implementation**			
	Grant	Loan	Capital	Bond	Others	Grant	Loan	Guarantee	Others
Global Environment Facility	X					X	X	X	X (equity and reimbursable grants)
Green Climate Fund	X	X	X	X		X	X		
Adaptation Fund	X				X (Certified Emissions Reduction)	X			
Clean Technology Fund	X	X	X			X	X	X	
Strategic Climate Fund	X	X	X			X	X	X	X (equity)

4.2 Multilateral development Banks (MDB's)

Multilateral development banks (MDBs) play an important role in financing developing countries' efforts to reduce emissions and protect against the effects of climate change.

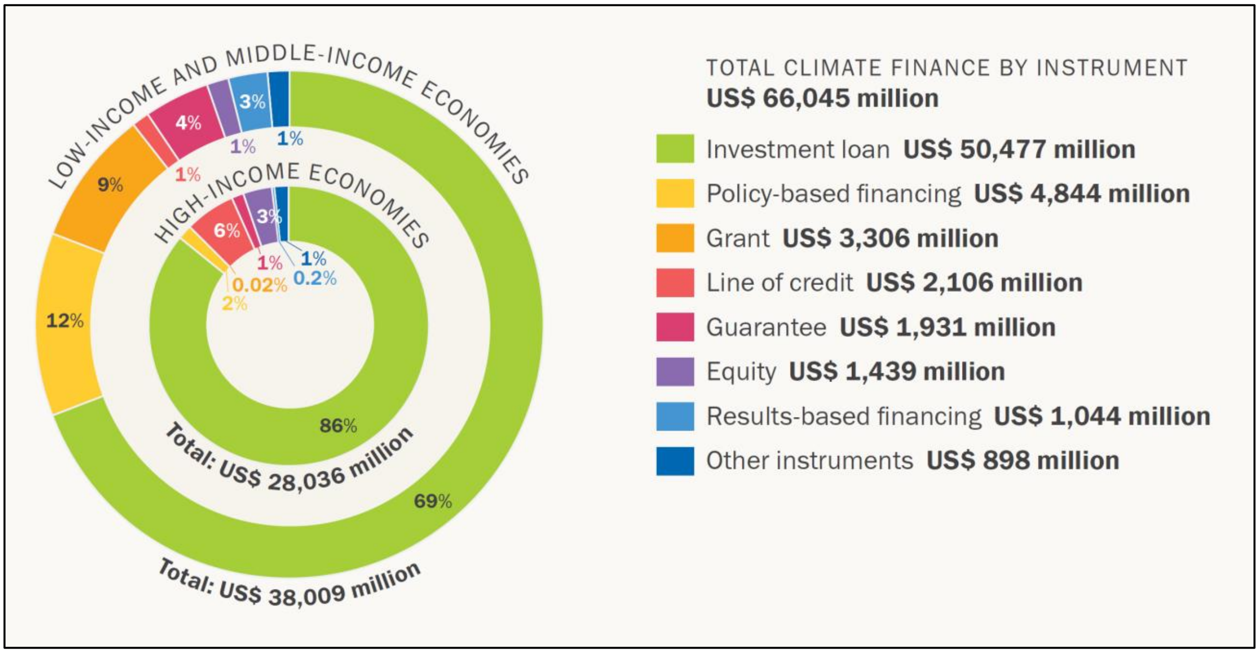


Fig 7: Total MDB climate finance by type of instrument, 2020 (in US$ million)[8]

Year 2020 was a critical waypoint for MDB climate finance. For one, it marked the due date for the climate finance targets many MDBs set in 2015. 2020 was also the year by which developed countries committed to mobilise $100 billion per year in climate finance for developing countries, with many developed countries channelling a significant share through MDBs. MDBs reported that 76 per cent of total climate finance was committed through investment loans.

[8] EBRD (2021) 2020 Joint Report on Multilateral Development Banks available at http://www.ebrd.com/2020-joint-report-on-mdbs-climate-finance-infographic

Table 3: MDBs' post-2020 Climate Finance Targets[9]

MDB	Pre-2020 Target	Post-2020 Target
AfDB	40% of approved finance per year by 2020	At least $25 billion for 2020-2025
ADB	$6 billion by 2020; $4 billion for mitigation and $2 billion for adaptation	$80 billion for 2019-2030, and 75% of projects (by number of projects rather than amount of financing) by 2030
EBRD	40% of annual commitments support environment/climate financing by 2020, providing $20 billion for 2016-2020	More than 50% of commitments support green finance by 2025
EIB	Global: $20 billion per year for 2016-2020, equal to at least 25% of overall lending Developing countries: 35% of total lending in those countries by 2020	Global: 50% of operations support climate action and environmental sustainability by 2025; €1 trillion (around $1.18 trillion) of investments in climate action and sustainability from 2021-2030 No developing country specific target yet
IsDB	None	35% of overall annual lending by 2025
IDBG	25-30% of commitments by 2020	At least 30% of finance from IDB, IDB Invest and IDB Lab (the three components of the IDB Group) for 2021-2024
WBG	28% of annual commitments by 2020	35% of overall financing from 2021-2025; 50% of IDA and IBRD climate finance to support adaptation and resilience

[9] EBRD (2021) 2020 Joint Report on Multilateral Development Banks available at http://www.ebrd.com/2020-joint-report-on-mdbs-climate-finance-infographic

4.2.1 The African Development Bank Group (AfDB)

Financial mechanism utilised			
Grant Award	Loan	Equity	Guarantee

The African Development Bank (AfDB) Group is the premier development finance institution in Africa with a mandate to spur sustainable economic development and social progress in the continent, thereby contributing to poverty reduction. The Bank Group achieves this objective by mobilising and allocating resources for investment in the continent; and providing policy advice and technical assistance to support development efforts. The African Development Bank's authorised capital of around $208 billion is subscribed to by 81 member countries made up of 54 African countries and 27 non-African countries.

Relationship between AfDB and EIB[10]

Over the past 5 years, the shared portfolio of the two institutions has grown to EUR 3.4 billion, leveraging a total investment of just under EUR 10.2 billion for 26 projects across the continent. Both institutions are committed to implementing the Sustainable Development Goals (SDGs), the African Union Agenda 63 and the Paris Agreement climate goals, which require leveraging all sources of finance and expertise – domestic and international – in a complementary fashion.

The purpose of the present Action Plan is to further develop our shared pipeline, increasing both the number of operations and the total volume of our shared portfolio; to better coordinate our investments and activities; and to share and learn across our mutual priority sectors. Both institutions agree to collaborate under the priority themes of Climate action and environmental sustainability (EU's Green Deal for Africa, AfDB climate action agenda).

[10] https://www.afdb.org/sites/default/files/2021/01/20/eib_afdb_joint_action_plan_2020-2022_final_19.01.2021.pdf

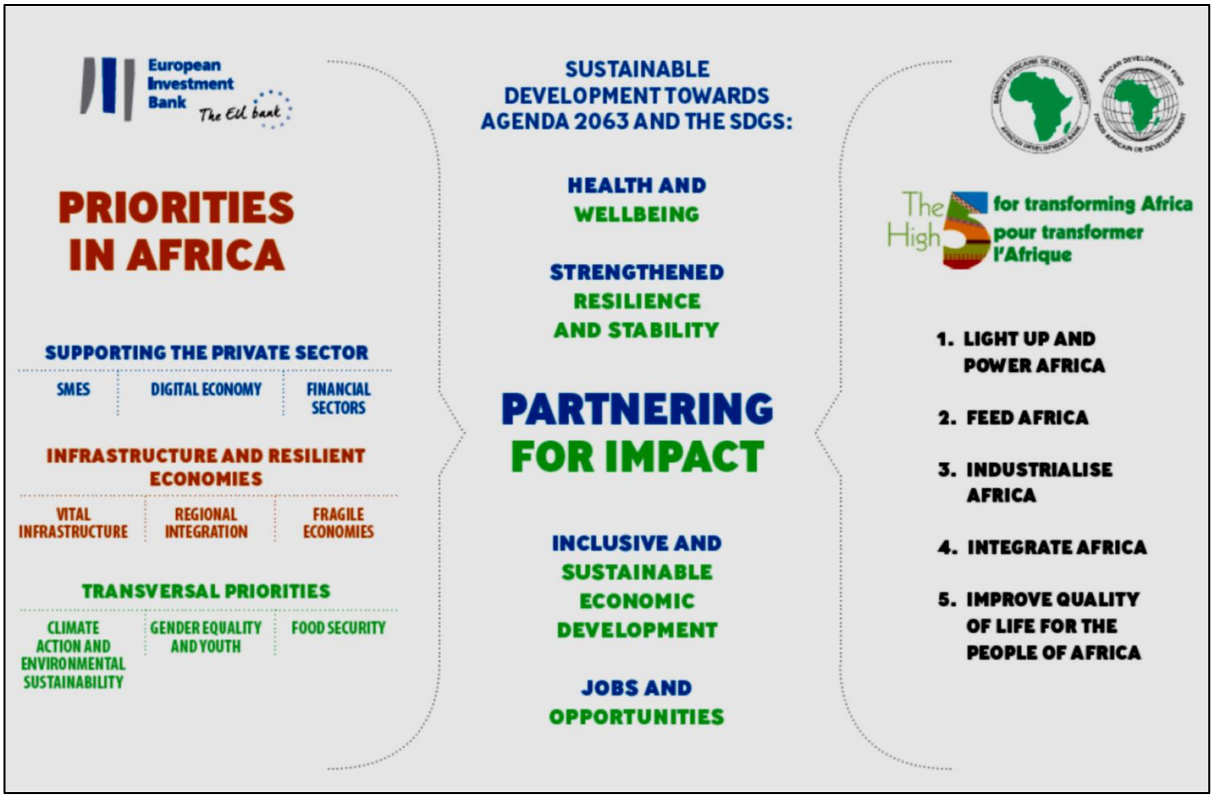


Figure 8: Partnering for Impact: The shared objectives of the AfDB's High 5 agenda and the EIB's Priorities in Africa.

4.2.1.1 The Middle-Income Country Technical Assistance Facility (MIC TAF)

With its tailored instrument, the African Development Bank Group (AfDB) is investing in supporting Africa's MICs to address these second-generation challenges through its Middle-Income Country Technical Assistance Fund (MIC TAF). The MIC TAF, hosted and funded by the AfDB, began operations in 2002 and was created in response to the needs of MIC countries towards enhancing capacity, and accelerating the preparation of quality bankable projects in support of their development goals. It can uniquely blend project preparation and technical assistance in MICs. In choosing the activities that can be financed from the resources of the MIC TAF, primary consideration will remain focused on activities which fall within the priorities articulated in the respective MIC's Country Strategy Paper. The project preparation and technical assistance are two main priority activities currently eligible for financing from the resources of the MIC TA Fund.

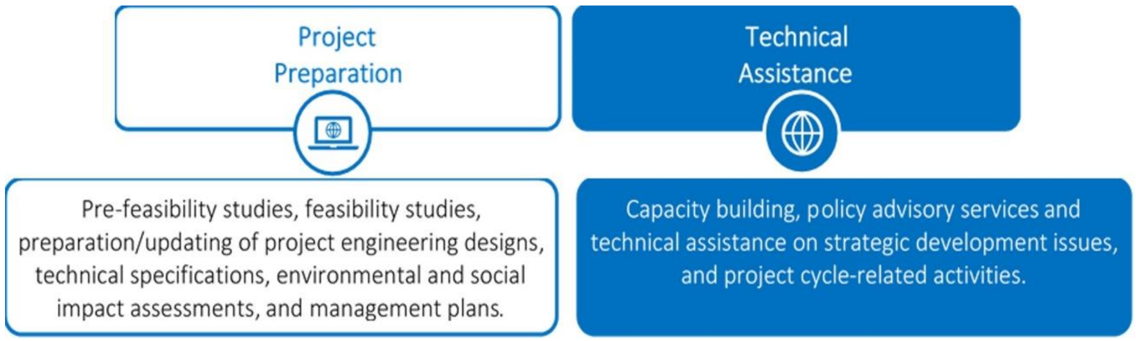


Figure 9: Two priority areas under MIC TA Fund

Ceiling per grant request: The maximum per grant is USD 1.43 million (August 2021). Resources of the MIC TA Fund may be used to finance both foreign exchange and local cost components of approved activities. Beneficiaries of the Fund are required to contribute at least 15 percent of the total cost.

4.2.2 The European Bank for Reconstruction and Development (EBRD)

Financial mechanism utilised			
Grant Award	Loan	Equity	Guarantee

The European Bank for Reconstruction and Development (EBRD) is an international entity with the mandate to promote transition towards a sustainable, open market economy and to foster innovation. Its work includes project investment, technical assistance, institutional capacity-building, and policy advisory services with a regional focus on central Asia, southeast Mediterranean, and Eastern Europe. The key areas of investment are divided under two activities, mitigation, and adaptation.

Fig 10: EBRD area of investment for climate mitigation and adaptation activities

4.2.3 The European Investment Bank (EIB)

Financial mechanism utilised			
Grant Award	Loan	Equity	Guarantee

The European Investment Bank (EIB) headquartered in Luxembourg, is an international financial entity whose main objective in developing countries is to provide finance and expertise for sound and sustainable investment projects, in both the private and the public sector, provide social and economic infrastructure, and address climate change, among others. EIB is currently operating in over 150 countries and has a mandate to operate in any developing country. Climate action is one of the top policy priorities for EIB, which integrates climate considerations across all its activities, in addition to financing climate mitigation and adaptation projects, thereby contributing to low-carbon and climate-resilient growth around the world and supporting the transition to a sustainable low-carbon future. The EIB conducts co-investment transactions through four main verticals as highlighted in Fig 9.

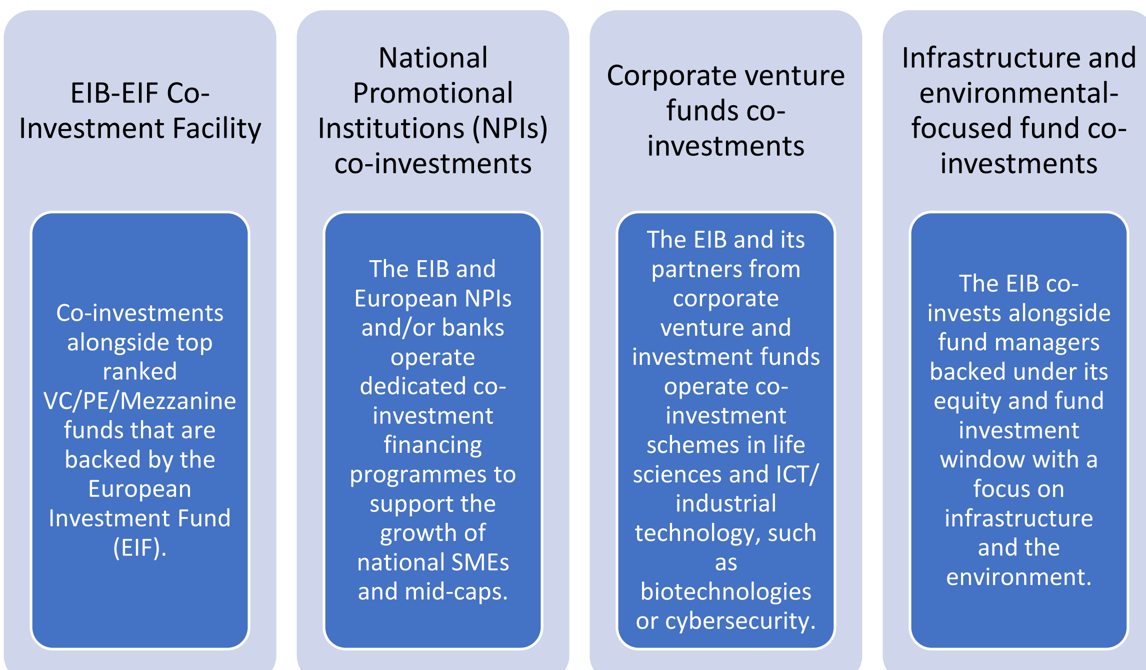


Fig 11: Four main verticals of the EIB

EIB also engages in equity and hybrid debt co-investments with top ranked funds and investment partners. Specially investments in equity and debt funds which are focused on projects dealing with climate action and/or infrastructure. EIB offers competitive loans that finance up to 50% of a project. EIB also offer grants through partnerships with EU Member States and other donors. Support includes technical assistance to share knowledge and expertise with the businesses receiving funding.

Eligibility - The beneficiaries of technical assistance are Bank borrowers including:

- the governments of partner countries.
- public utilities in the fields of infrastructure, water, energy, etc.
- operators in the financial sector and private promoters.

5.0 Bilateral Climate Finance

5.1 European Union

In the area of "Green transition: climate resilience, energy, and environment," the EU proposes, Green Growth and climate action. Actions will align with partners' National Determined Contributions (NDCs) under the Paris Agreement and will support the external dimension of the EU Green Deal.

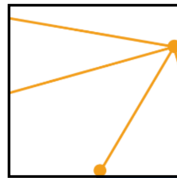
At regional level, to meet the scale of investment required and help public authorities whether central government or local authorities, to raise the necessary capital from both national and international private investors, the EU intends to explore ways to deploy innovative financing instruments, including Green Bonds. And where appropriate, the EU could support the regulatory framework at country level and support capital market development to create conducive conditions for green bond issuances.

5.1.1 The EU Multiannual Financial Framework (MFF) 2021 – 2027

EU MFF is the total budget the European Union has at its disposal to implement its internal and external policies for a seven-year period. To organise the funding efficiently, the EU budget is divided into headings – or spending categories – and programmes, which support groups of beneficiaries across EU policy areas. In principle, each programme supports a different policy area and group of beneficiaries. However, there are some cross-cutting priority areas that may receive funding from several programmes. Two such cross cutting priority areas are:

Green Transition

- Cohesion policy
- Common agricultural policy
- Just Transition Fund
- Horizon Europe
- Recovery and Resilience Facility
- LIFE programme
- Connecting Europe Facility



Fostering Investments

- InvestEU
- Cohesion policy
- European Fund for
- Sustainable Development+
- Single Market programme
- Recovery and Resilience Facility

5.1.2 European Maritime, Fisheries and Aquaculture Fund[11]

Fund facilitates the sustainable use and management of marine resources, the development of a resilient blue economy, and international cooperation towards healthy, safe, and sustainably managed oceans. It supports actions and investments that contribute to the protection of marine biodiversity and to sustainable and low-impact fishing and aquaculture activities. It also promotes the supply of high-quality and healthy seafood products to European consumers, supports the development of a sustainable blue economy in coastal communities, ***and contributes to maritime surveillance and international cooperation on ocean governance***.

Type Of Projects - Actions supporting improvement of fishing gear, facilities, and practices; innovation and sustainability of the blue economy sector; improvement of aquaculture facilities and ***greening of the sector***; and quality and sustainability of marine food sources. Theme and priorities include, promoting ocean governance through MSP: incorporating oceans' governance tools into the MSP process and in maritime spatial plans. For example by enabling stakeholder participation in governance schemes and instruments (e.g. management of marine resources,

[11] https://ec.europa.eu/info/funding-tenders/find-funding/eu-funding-programmes_en

protection of the environment), by providing capacity building and by promoting cooperation with third countries in issues of common interest in a sea basin or a shared ocean space.

Type Of Recipients: Stakeholders involved in the exploitation and management of marine resources, in particular fishers, aquaculture farmers, coastal communities, civil society organisations, marine scientists and public authorities. EU Member States (including overseas countries and territories (OCTs)), non-EU countries in the Atlantic, Baltic Sea, Black Sea, North Sea, and the Mediterranean, or having waters adjacent to EU Outermost Regions, under cross border Maritime Spatial Planning cooperation and only when its participation is necessary for the objectives of a given action and link with activities undertaken under Regional Sea Conventions. ***Individual proposals by the non-EU countries are not eligible***

Budget Implementation - Of the budget, 87 % is implemented under shared management. while 13 % is implemented under direct management. Funding is disbursed in the form of grants and procurements.

5.1.3 Programme for environment and climate action (LIFE)[12]

Objective of this programme is to achieve the shift towards a sustainable, circular, energy-efficient, renewable-energy-based, climate neutral and resilient economy; to protect, restore and improve the quality of the environment, including the air, water, and soil; to halt and reverse biodiversity loss and to tackle the degradation of ecosystems. The LIFE programme's financial allocation is implemented through four sub-programmes:

- nature and biodiversity
- circular economy and quality of life
- climate change mitigation and adaptation
- clean energy transition

Type Of Projects - Actions aimed at nature conservation, the development of circular economy, clean energy transition and fighting against climate change; support for innovative technologies; development of best practices; coordination and capacity building; support for the

[12] https://ec.europa.eu/info/funding-tenders/find-funding/eu-funding-programmes_en

implementation of environmental and climate plans developed at regional, multiregional, or national levels. The LIFE programme also aims finance projects aimed at improving air quality and conserving plant and animal species currently under threat.

Type Of Recipients - EU national or local authorities, private commercial organisations, and private non-commercial organisations (e.g. non-governmental organisations).

Budget Implementation - The budget of the LIFE programme is implemented through direct management. Funding is disbursed in the form of grants, procurements, and prizes.

5.1.4 Innovation Fund

The Innovation Fund is one of the world's largest funding programmes for the demonstration of innovative low-carbon technologies. It was to support across all Member States, innovation in low-carbon technologies and processes.

The second call for small-scale projects is planned to be launched in March 2022 with an expected budget of EUR 100 million and will remain open for five months[13]. The emphasis will be innovative projects that are ready for commercial deployment, for instance delivering installations to a customer in a new market segment. Apart from the main sectors, three key activities are also encouraged:

- products that substitute carbon-intensive ones
- net carbon removal innovations
- direct air capture.

5.1.5 Horizon Europe

Horizon Europe is the EU framework programme for research and innovation: it promotes excellence in research and provides essential support to top researchers and innovators to drive the systemic changes needed to ensure a green, healthy, and resilient EU. It also provides funding to develop research infrastructure and foster mobility within the EU. Lastly, it supports

[13] https://ec.europa.eu/clima/eu-action/funding-climate-action/innovation-fund/small-scale-projects_en

partnerships between Member States, industry, and other stakeholders to work jointly on research and innovation.

Type Of Projects - Research and innovation projects tackling societal challenges with an emphasis on EU industrial leadership, recovery, and the green and digital transitions (e.g. high-performance computing, artificial intelligence, data and robotics, batteries, smart cities, cancer and rare diseases, carbon-neutral and circular industry, blue economy, etc.).

Type Of Actions - Networking and coordination, research, innovation, pilot actions, market deployment actions, training and mobility actions, dissemination, and exploitation of results, etc.

Type Of Recipients - Scientists and academics, research organisations, universities, industry, small- and medium-sized enterprises, students, etc.

Budget Implementation - The programme is implemented directly by the Commission or through funding bodies that the Commission designates responsible. The programme may provide funding in the form of grants, prizes, procurements, and financial instruments.

5.1.6 European Regional Development Fund[14]

Fund is established to strengthen economic, social, and territorial cohesion in the European Union by reducing economic, social, and territorial disparities between its regions and supporting the full integration of less-developed regions within the EU's internal market. This fund supports the investment in innovation and research, the digital transition, small and medium-sized enterprises, the environment, and the net-zero carbon economy. It also addresses economic, environmental, and social problems in urban areas, with a special focus on sustainable urban development. In addition, it supports cooperation activities between regions in different Member States (under European territorial cooperation goal (Interreg)).

Type Of Projects - Productive investments in enterprises, infrastructure, and public policies across a range of topics; consultancy services and advice; studies.

[14] https://ec.europa.eu/regional_policy/en/2021_2027/

Type Of Recipients - Regional public and private entities, with special attention paid to disadvantaged regions and areas, notably rural areas and areas suffering from natural or demographic handicaps and outermost regions; and, indirectly, EU citizens, public or private organisations, and businesses.

Budget Implementation - The fund is delivered through shared management. The co-legislators establish the legal framework and the overall funding and determine the allocations by Member State and category of region. The Commission adopts the operational programmes and cooperates with Member States' administrations on the implementation. Funding is disbursed in the form of grants, procurements, and financial instruments.

5.1.6 Neighbourhood, Development, and International Cooperation Instrument – Global Europe[15]

Objective of this fund is to uphold and promote the EU's values, principles, and fundamental interests worldwide in order to pursue the objectives and principles of its external action. Specific objectives include the eradication of poverty, consolidating, supporting, and promoting peace, democracy, the rule of law and respect for human rights, and sustainable development and the fight against climate change. The instrument contributes to the promotion of multilateralism, and the achievement of the Sustainable Development Goals, the United Nations 2030 agenda, the Paris Agreement on climate change, and stronger partnerships ***with non-EU countries***, including ***with the European neighbourhood, based on mutual interests and ownership, with a view to fostering stabilisation, good governance and building resilience.***

It promotes cooperation with partner countries in the European neighbourhood, sub-Saharan Africa, Asia and the Pacific, and the Americas and the Caribbean.

Type Of Projects - Thematic actions focusing on human rights and democracy, civil society, stability, and peace, as well as on global challenges such as health, education and training, women's and children, work, social protection, culture, migration, and ***climate change***. The rapid-response component aims to strengthen the resilience of crisis-affected countries, linking humanitarian and development actions and addressing foreign policy needs and priorities.

[15] https://ec.europa.eu/info/funding-tenders/find-funding/eu-funding-programmes_en

Type Of Recipients - ***Non-EU countries*** and beneficiaries around the world, with a particular focus on least-developed countries; international organisations, private bodies, etc.

Budget Implementation - At least 25 % of the budget is allocated specifically to neighbouring countries and at least 36 % specifically to sub-Saharan Africa. A target of 93 % of all funds must go towards official development assistance***, 30 % towards climate-related projects*** and, indicatively, 10 % towards addressing migration and forced displacement, including fighting the root causes. Funding is provided in the form of grants, procurements, and budgetary support to partner countries.

5.3 FEMIP Trust Fund (FTF)[16]

Established in 2004, the FEMIP Trust Fund (FTF) aims to facilitate investment and address funding gaps in the EU's Southern Neighbourhood. The FTF focuses on four priority areas: access to finance for smaller businesses, ***infrastructure, the environment***, as well as research, innovation, and education. The trust fund also offers enhanced support through CAMENA, a dedicated climate-action envelope. FTF supports technical assistance throughout the project cycle, risk capital operations and capacity building.

CAMENA is a climate action envelope within the FEMIP Trust Fund (FTF) created with the support of the UK's Department for International Development (DFID) to fight climate change in the Mediterranean region. CAMENA does this by providing financial grants to regional partners for specific climate initiatives. Operations financed by CAMENA typically identify or prepare climate action projects, facilitate fund actions that act as a catalyst for climate investment or provide finance for risk capital operations. CAMENA operations are financed by the United Kingdom, the sole contributor to the CAMENA envelope.

5.4 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Financial mechanism utilised			
Grant Award	-	-	-

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is an international organisation that offers the following services: advice; human capacity development; network and dialogue management as well as mediation; and management and logistics. The entity supports long-term capacity-building and policy reform processes, and operates in all sectors relevant to sustainable development and climate change mitigation and adaptation, including renewable energies and energy access, energy efficiency, the measurement of reduction in greenhouse gas emissions, the use of climate-friendly technologies in industry, results-based

[16] https://www.eib.org/en/products/mandates-partnerships/donor-partnerships/trust-funds/femip-trust-fund.htm

financing for reducing emissions from deforestation and forest degradation, climate-resilient cities, climate risk management and insurance, and systems and ecosystem-based adaptation.

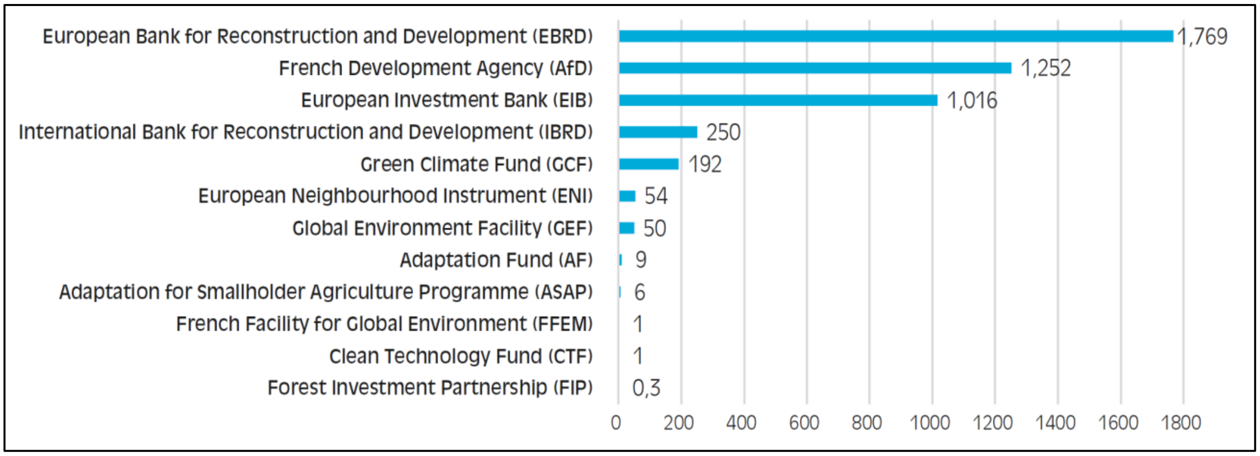


Figure 12: Climate finance from non-state actors in the Mediterranean region in million USD, 2018[17]

[17] https://planbleu.org/wp-content/uploads/2021/04/SoED_full-report.pdf

6.0 Private funds

6.1 International Finance Corporation

The International Finance Corporation (IFC), the private sector financial arm of the WB group, has its own implementation plan with 4 objectives:

- Scale climate investments to reach 28% of IFC's annual financing by 2020;
- Catalyse $13 billion in private sector capital annually by 2020 to climate sectors through mobilisation, aggregation, and de-risking products;
- Maximise impact through GHG emissions reduction and resilience;
- Account for climate risk – both the physical risk of climate impacts and the carbon asset risk in the IFC's investment selection.

6.2 Sustainable Maritime Infrastructure thematic fund

Eurazeo[18] announced the launch of the Sustainable Maritime Infrastructure thematic fund to finance more environmentally friendly infrastructure and technologies in the maritime sector that supports the transition to a low carbon economy. As a consequence, the fund will have the objective of pursuing sustainable development within the meaning of Article 9 of Regulation (EU) and will participate directly in the deployment of O+, the Group's ambitious ESG strategy - one of the pillars of which is the achievement of net carbon neutrality by 2040. To meet this ambition, the Fund will finance three types of infrastructure:

- ships equipped with advanced technologies that negate or
- curtail environmental harm, innovative harbour equipment, and
- assets that contribute to the development of offshore renewable energy.

The Fund is expected to support around fifty European facilities that will back the transition of the maritime economy to become carbon neutral by 2050 and in line with the ambition announced in the European Green Deal. Several renowned sovereign and institutional investors have already confirmed their involvement in the Fund, which has a target size of €300M.

[18] https://www.eurazeo.com/sites/default/files/presse/CP-ESMI-EN.pdf

7.0 Foreign direct investment (FDI)

Foreign direct investment (FDI) in port infrastructure is an attractive policy option for many developing countries. From the viewpoint of the host country, it can enhance growth and innovation, create quality jobs, and develop human capital, and raise living standards and environmental sustainability, for instance. By linking domestic firms to multinational enterprises (MNEs), it serves as a conduit for domestic firms to access international markets and integrate in global value chains.

Many ports in developing countries remain completely State-run, often with implications for port performance. Financial constraints can prevent government authorities from investing in modern equipment and information technology. Government responsibility for both port management and operations can limit responsiveness to the changing service demands of modern maritime shipping. With increasing competition among ports, and increasing needs for supporting visiting ships, the port sector regularly has to be upgraded and modernised. This requires huge capital resources and technology. However, the cost of modernisation can exceed the capacity of many countries, and hence one policy option is to capitalise on foreign direct investment. The positive contributory role of FDI on the port sector has been widely documented. FDI can support local enterprise development and promote the competitive position of both host (destination) and home (source) economy[19].

While many countries still follow public port models, others have introduced reforms that promote private sector involvement, particularly in the operation of port terminals. This has been seen to secure capital for port modernisation, as well as better organisational, management, and operational outcomes

The key questions are how to attract FDI to this strategic sector and what are its determining or motivating factors. The right policy conditions can boost FDI's ability to support port infrastructure development and promote the competitive position of it. However, the attractiveness or the ability of the port to attract investment will depend on the locational

[19] OECD (2015), Policy Framework for Investment 2015 Edition, OECD Publishing, Paris.

advantage and traffic volume accompanied by other influencing factors. For instance, FDI is positively and significantly attracted by GDP, air accessibility, road accessibility, internet infrastructure, being a capital city. And negatively deterred by high average salaries per employee, high corporate tax, and high start-up costs.[20].

The COVID-19 pandemic caused a dramatic fall in global foreign direct investment (FDI) in 2020, bringing FDI flows back to the level seen in 2005. The crisis has had an immense negative impact on the most productive types of investment, namely, greenfield investment in industrial and infrastructure projects[21]. In value terms, most project finance is in infrastructure – including transport infrastructure, power generation and distribution, and other utilities. The pandemic recovery and stimulus packages adopted in developed countries and regions, which focused largely on infrastructure, are therefore expected to provide a boost to international project finance. Infrastructure project finance in 2020 increased in telecommunication (62 per cent) but declined significantly in other key industries: energy (-28 per cent) and transport (-26 per cent).

FDI inflows to North Africa contracted by 25 per cent to $10 billion, down from $14 billion in 2019, with major declines in most countries. Egypt remained the largest recipient in Africa, albeit with a significant reduction (-35 per cent) to $5.9 billion in 2020. Attempts to promote FDI diversification include the recent agreement to activate the $16 billion Saudi–Egyptian investment fund that lists tourism, health, pharmaceuticals, infrastructure, digital technologies, financial services, education, and food as priority sectors.

Egypt is investing to become an energy hub by implementing 5 major refining and petrochemical projects, with investments of about $14 billion. Petroleum sector is currently implementing an integrated work program to develop and modernise the refining and petrochemical system in Egypt by raising the operating efficiency of the already existing refineries and adding new production units. In fiscal year 2020, as per governments estimation the total foreign investment in Egypt’s oil and natural gas was at $2.21 billion, 57.6 percent of the total $3.84 billion expected investment in the sector[22]. However, with increasing alignment of investors with goals of climate

[20] https://www.oecd.org/mena/competitiveness/EU-OECD-Background-Note-Geography-FDI-Southern-Med.pdf
[21] https://unctad.org/system/files/official-document/wir2021_en.pdf
[22] https://www.arabnews.com/node/1734586/business-economy

ambitions support to such projects may be diminishing. For example, EBRD's climate goals include increasing green investments to more than 50% of the total by 2025 and aligning all operations with the goals of the Paris Agreement by the end of 2022[23].

Flows to Morocco remained almost unchanged at $1.8 billion. Morocco's FDI profile is relatively diversified, with an established presence of some major MNEs in manufacturing industries including automotive, aerospace and textiles.

FDI to Algeria dropped by 19 per cent to $1.1 billion, with inflows mainly directed to the natural resources sector. In 2020, Algeria lifted restrictions that capped foreign ownership at 49 per cent, except in the retail industry and in strategic sectors, including infrastructure and natural resource processing. Although this could encourage the diversification of FDI, the impact may appear only after foreign investment recovers more broadly.

Inflows to Tunisia declined to $652 million from $845 million in 2019, a 23 per cent fall. The manufacturing sector attracted the most FDI (54 per cent), followed by energy (33 per cent).

Based on the choice of model, the relevant legislative and institutional adjustments must be made for private entry. Legislation to facilitate the privatisation of certain port assets may be necessary, and the PA may need to be restructured.

[23] https://www.devex.com/news/egypt-pulls-ebrd-oil-refinery-project-amid-shareholder-concerns-102092

8.0 Overview of applicability and historical availability of finance

Table 4: Applicability of Contracting Parties to the Barcelona Convention to various funding mechanisms

	European Union Member	ODA LIST	EIB	FTF	CAMENA	African Development Bank Group	MIC TA fund
Albania	CC	UMI					
Algeria		UMI					
Bosnia and Herzegovina		UMI					
Croatia							
Cyprus							
Egypt		LMI					
France							
Greece							
Israel							
Italy							
Lebanon		UMI					
Libya		UMI	*	*			
Malta							
Monaco							
Montenegro	CC	UMI					
Morocco		LMI					
Slovenia							
Spain							
Syrian Arab Republic		LMI					
Tunisia		LMI					
Turkey		UMI					

	Lower Middle Income (per capita GNI $1 006-$3 955 in 2016)
	Upper Middle Income (per capita GNI $3 956-$12 235 in 2016)

CC – Candidate Country

** The EIB will start operating in Libya once it has signed a Framework Agreement with the country.*

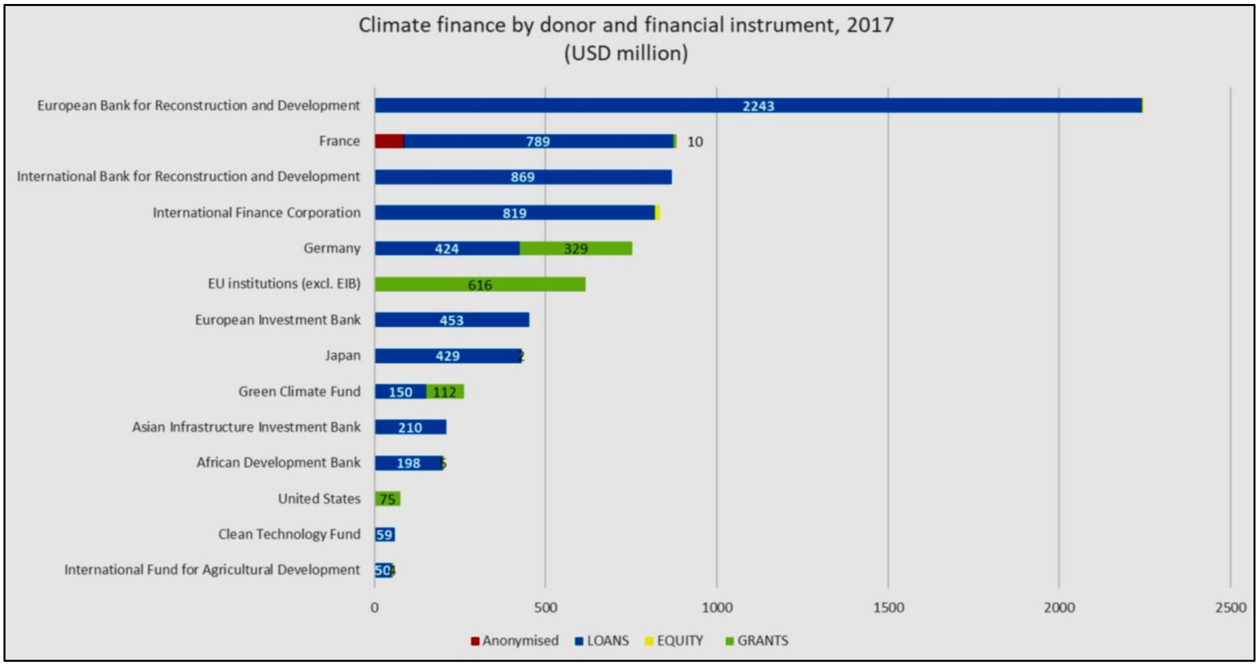


Fig 13: Climate finance by donor and financial instrument type[24]

Most climate finance to the SEMed region in 2017 was provided through debt instruments (i.e., loans, comprising 83% of the total), while grants comprised 16%, and the remaining 1% consisted of equity and investment vehicles as well as anonymised finance. Overall, loans comprised the greatest proportion of finance instruments from all provider categories (MDBs, bilateral donors, and multilateral funds). A total amount of USD 6.7 billion was committed as loans, whereas grants amounted to USD 1.3 billion. The remainder was provided in the form of equity and/or anonymised finance. In this context, loans are usually large sums whereas grants are divided up in many smaller amounts. This is reflected by the fact that a total of 223 loans was provided across all donor types, compared to 512 grants. Most loans were provided by the MDBs (167; of which 68 by the EBRD alone), followed by bilateral donors with 29 loans and climate funds with 26. Most grants came from bilateral donors (478); although in absolute amounts, even the major bilateral providers France and Japan extended mostly loans (Fig 13). Only the European Union and the United States of America stick out as bilateral donors that provide all their funding to the

[24] INTERNATIONAL PUBLIC CLIMATE FINANCE FLOWS TO THE SOUTHERN AND EASTERN MEDITERRANEAN COUNTRIES IN 2017 Final Report 2019 https://ufmsecretariat.org/wp-content/uploads/2019/12/ECA-Publication_Climate-Finance-Study.pdf

SEMed in the form of grants. Germany shows a balanced structure, with roughly 50% handed out in form of loans and 50% as grants.

Attracting investments in any business of a larger scale, usually requires a credit record, collateral, and the promise of secure returns, making such investments less accessible for small operators or ports with lower volumes. At the same time, the international public funds committed to achieve the SDGs either hardly reach maritime sector or are insufficient to meet the needs for transformation. Such transformation also requires a paradigm shift towards an approach where maritime sector is integrated into the regional / national environmental action plans.

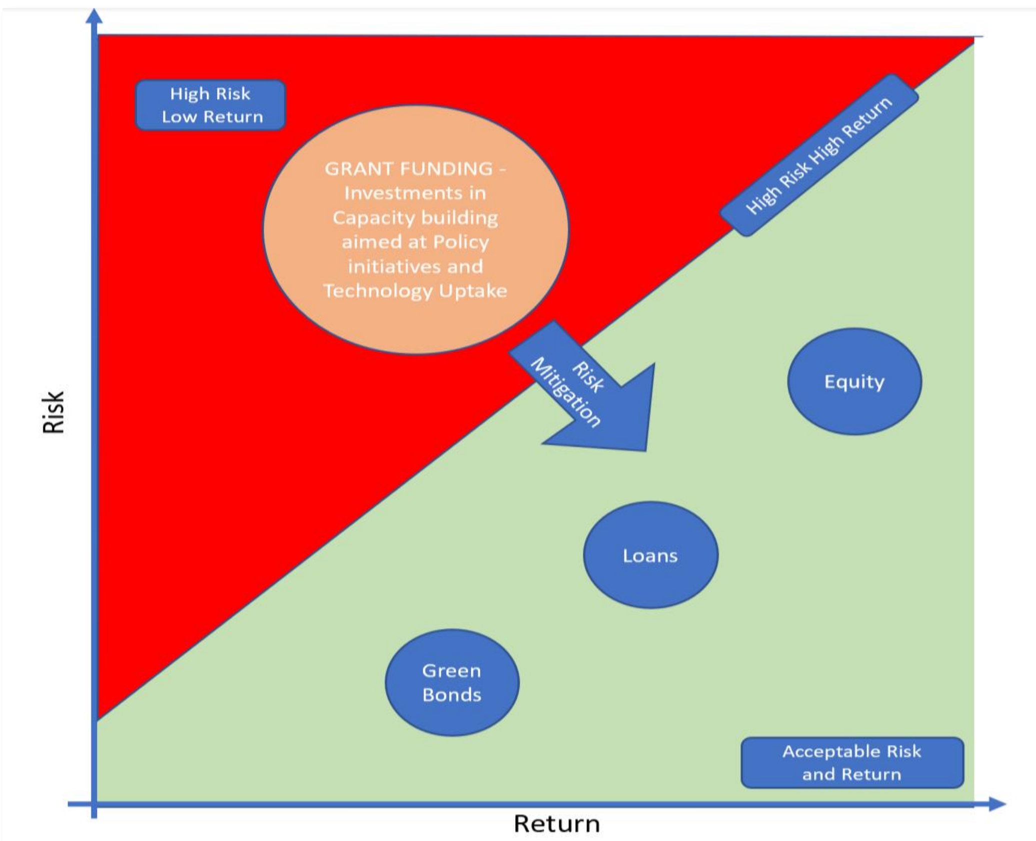


Fig. 14: Risk mitigating instruments for unlocking capital investment in SIDS and LDCs for sustainable maritime operations (adapted from Girling & Bauch, 2017)

As Fig. 14 above reflects, grants and subsidies, often provided by bi- and multilateral donor agencies, typically cover investments where risks are relatively high and expected returns low. When the latter are still limited but risks significantly lower, green bonds become a viable alternative. When returns increase while risks remain low to moderate, loans and equity appear as additional financial instruments. Given the challenges of transition phase, towards the Med SO_X ECA, investments are still needed in Capacity building and Technology uptake and infrastructure investment to reach in the lower triangle as the sphere of private commercial finance. This is applicable to southern Mediterranean coastal States. In short term, grants support to the regional projects and initiatives aimed at capacity building and promoting maritime decarbonisation and mitigating maritime emissions are still required. Capacity building aimed at policy initiatives including ratification of MARPOL Annex VI will be needed to create an enabling environment for private / commercial finance.

8.1 Key Potential financial resources

Name	Priority	Application Process
EU Funding	Enabling stakeholder participation in governance schemes and instruments Support for the implementation of environmental and climate plans developed at regional, multiregional, or national levels	Regional basis for various funds under EU
GCF	Development of port infrastructure (climate mitigation and adaptation including climate resilience)	Project funding is channelled through Accredited Entities (AEs) and intermediaries. AEs are either Direct Access Entities – sub-national,

		national, or regional organisations – or International Access Entities including United Nations agencies, multilateral development banks, international financial institutions, and regional institutions. Direct Access Entities are nominated by their NDA.
GEF (Greening Infrastructure Development Integrated Program) GEF-8 Integrated Program	Capacity Building Full-size or medium-size projects targeted at supporting implementation and compliance of MARPOL Annex VI and the Med SO_X ECA Small Grants Programme	With implementing partner, where country is eligible to receive World Bank (IBRD and/or IDA) financing or it is an eligible recipient of UNDP technical assistance through its target for resource assignments from the core (specifically TRAC-1 and/or TRAC-2).
EBRD	Mitigation and adaptation activities supported through capital grants that reduce the capital costs of a project or risk-sharing and guarantee facilities to expand investment outreach in countries or sectors where	Through implementing partners or project basis

	poor market conditions make financing difficult for borrowers.	
EIB	Climate mitigation and adaptation projects	Direct loans and risk capital financing can be requested directly from the EIB. A comprehensive feasibility study should be submitted. For Mediterranean coastal States, FEMIP brings together under one roof the whole range of services provided by the Bank in support of economic development in the Mediterranean partner countries.

8.2 Innovative Financial solutions

8.2.1 Blended Finance

Blended finance is broadly understood as the strategic combination of public and/or private development finance flows (e.g. aid and philanthropic funds) with other public or private capital to enhance resources for investment in key areas such as infrastructure. Much blended finance has been used to support investments in infrastructure development. The rationale behind blended finance is threefold:

- to increase capital leverage (aid and philanthropic funds are used to attract/mobilise additional public or private capital)

- to enhance impact (the skillset, knowledge and resources of public and private investors combined can increase the scope, range, and effectiveness of the project)
- deliver risk-adjusted returns (manage risks so that returns are in line with market expectations).

The European Commission has used blending facilities for example to fund projects in the fields of: energy (35 percent), transport (26 percent), water (20 percent), support to SMEs (small- and medium-sized enterprises) (11 percent), the social sectors (5 percent), and ICT (3 percent). Examples of the EU's blended financing facilities include the EU-Africa Infrastructure Trust Fund (EU-AITF), the Asia Investment Facility (AIF) and the Investment Facility for the Pacific (IFP). They aim to increase investment principally in infrastructure by blending grants with long-term loans from participating public or private financiers.

8.2.2 Green Bonds

They are a relatively new financial instrument that ties the proceeds of a bond issue to environmentally friendly investments. Issuers of bonds can be private companies, supranational institutions (such as multilateral banks) and public entities (municipal, state, or federal). Multilateral development banks and corporates have been the largest issuers of labelled green bonds to-date.

European Investment Bank through its "Climate Awareness Bond" supports lending for energy projects in high-income countries, although it has also used this financial instrument to lend to a number of middle and low-income economies. The AfDB Green Bond program facilitates the achievement of the Bank's corporate priority of green growth through the financing of eligible climate change projects.

8.2.3 Guarantees

As a type of "insurance policy" guarantees protect national or sub-national governments, banks, and investors from the risks of non-payment or loss of value in case of an investment. Guarantees for "development" are those extended with the promotion of the economic welfare and development of developing countries as the principal objective. Guarantees promise indemnification up to a specified amount in the case of default or non-performance of an asset (e.g. a failure to meet loan repayments or to redeem bonds, or expropriation of an equity stake). There are many private providers of guarantees, but in many developing countries, and for certain types of risks, only public (national or multilateral) providers are available. This includes in particular political risks. For commercial risks (e.g. credit, regulatory/contractual) that investors are unwilling or unable to bear there is usually a broader range of suppliers. All guarantees help the borrower to obtain financing at better terms than would be possible without the guarantee.

Guarantees are most effective when they are part of a broader effort to build the capacity of both banks and SMEs; on the one hand banks need to be able to better understand and assess risk and on the other hand, SMEs as borrowers need to better understand how to manage cash flows and assess financing needs.

8.2.4 Impact Investments[25]

Impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. Impact investments can be made in both emerging and developed markets and target a range of returns from below market to market rate, depending on investors' strategic goals.

[25] https://thegiin.org/

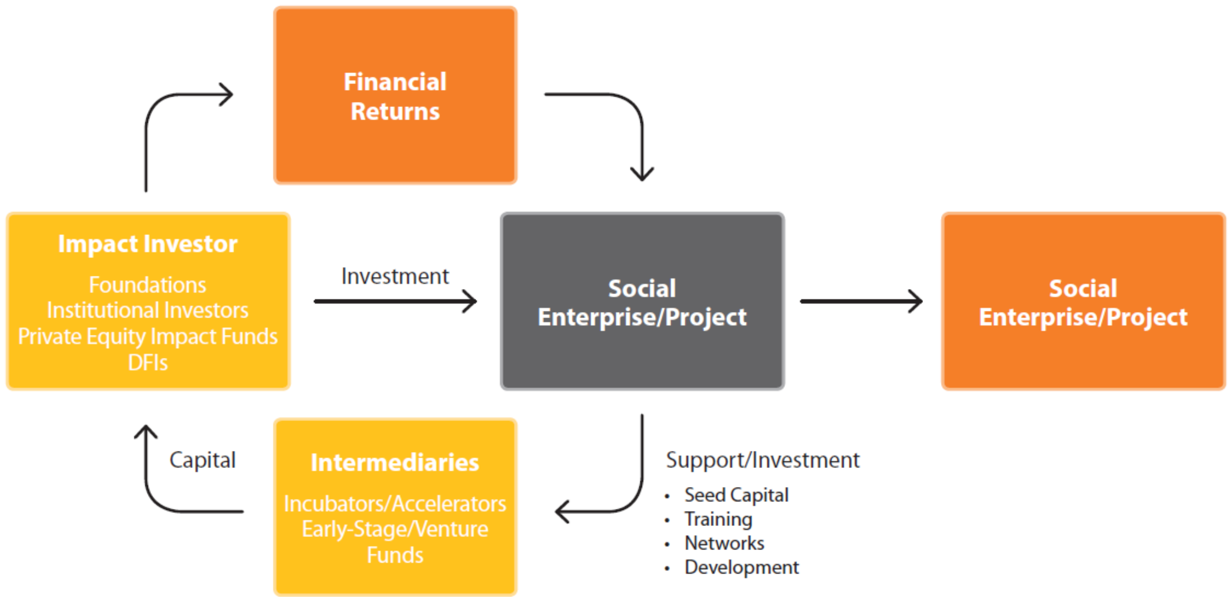


Fig 15: *The Impact Investment Process (Source: Omamuli, 2017)*

8.2.5 Enterprise challenge funds

Enterprise challenge funds are used by governments, development agencies and philanthropic foundations to channel matching funds to enterprises in developing countries to spur innovative, private sector solutions to sustainable development. They award grants or concessional finance to commercially viable businesses or projects to address a defined developmental problem (challenge) on a competitive basis.

Enterprise challenge funds (challenge funds) are established by a public entity, foundation, or development partner to provide financial contributions in the smallest possible effective amount to socially or environmentally worthwhile projects that are delivered by the private sector. The fund is a versatile instrument, a distinctive smart subsid that reduces the risks and costs of private investment while "challenging" the private sector to innovate for the public good. Challenge funds can thus leverage public financing to achieve better developmental outcomes, while influencing market behaviours through demonstration and imitation effects