GREEN FINANCE IN THE MEDITERRANEAN

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Executive Summary

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Layout: Núria Esparza
ISSN: in process
Legal deposit: B 9389-2018
March 2018

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Executive Summary

The emergence of systemic environmental problems, from global warming to biodiversity loss, requires a deep integration of sustainability concerns into the mechanisms of the global economy through the use of new forms of finance, both from the public and private sector. In the Mediterranean region, green finance holds the promise of a widespread and integrated way to address sustainability challenges.

The **definitions of green finance** in the broader context of the green economy refer to diverse institutional and academic frameworks. In general, the concept of green finance is not yet defined accurately, and it would be advisable to provide a more precise classification at the theoretical and political levels. The general field of green finance, covering all forms of green economy financing, should in particular be distinguished from the specific sub-category of climate finance, which finances activities aimed at fighting climate change under the Paris Agreement.

Public supranational institutions are clearly leading the path towards green finance in the Mediterranean, each one with its own strategy, instruments and ambitions, which would deserve to be more consistent and coherent. Those international financial institutions, such as the EIB, EBRD, World Bank and European Union, play a key role in financing green and climate initiatives through traditional (grants, loans) or innovative (green bonds, equity, etc.) financial instruments.

Countries of the North (France, Italy, Germany) and the South (Morocco, Egypt, Turkey) of the Mediterranean play a key role in promoting green and climate finance through national development agencies, ministries and other governmental institutions. As far as European countries are concerned, aid programmes are great funders of green and climate initiatives in developing countries, including those in the southern Mediterranean. In the case of Morocco, Egypt and Turkey, they have developed specific strategies implemented by national agencies, often with the financial collaboration of other international institutions.

In the field of **private green finance,** a rapidly expanding industry is emerging, which is crucial for the future of the green economy. In a time of increasing constraints on public budgets, a market-based financing could provide the capital needed to bridge the financial gap that green projects tend to face. Forecasts for the coming years indicate further growth in private green financial flows, especially for green bonds. Examples and good practices of green finance by private companies, banks and other financial operators in the Mediterranean are described.

A qualitative survey to key national and regional green finance practitioners highlights the lack of commitment of national stakeholders, in particular at the city and region level, and the need for increasing awareness, designing relevant policies and mainstreaming innovative financial tools.

Finally, the **recommendations** for policy-makers are to establish clear definitions for green and climate finance, ensure strong leadership to achieve the financial sector's commitment, scale up funding and improve transparency. Only by succeeding in integrating the financial system into a sustainable economy will it be possible to address the challenges that current environmental problems bring to us.

Green Finance for a Sustainable Future

Paris Agreement and Sustainable Development Goals

The **Paris Agreement on Climate Change** and the **2030 Sustainable Development Goals (SDG)** agenda, both approved in 2015, were major turning points in global governance, translating the growing environmental awareness into a shared path towards a low carbon, inclusive and green economy. They also highlight the need for better and greater financing to implement such a green and inclusive economy.

Article 9 of the **Paris Agreement** indeed stipulates that developed countries will provide financial resources to assist developing countries with respect to both mitigation and adaptation by providing **$100 billion annually by 2020.**[1] Additionally, Article 2 urges to "*make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.*"

The United Nations Conference on Trade and Development (UNCTAD) highlights that achieving the **Sustainable Development Goals** (SDGs) will take between **$5 to $7 trillion,** with an investment gap in developing countries of about $2.5 trillion.[2]

Figure 1. Sustainable Development Goals

Source: UN

Seeing the scale of this investment, it is therefore inevitable to rely on **mobilising public financing, private actors and institutional investors** on a large scale, as well as achieving a climate-friendly reallocation of existing capital flows to finance the green

1 http://unfccc.int/cooperation_and_support/financial_mechanism/items/2807.php
2 http://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=194

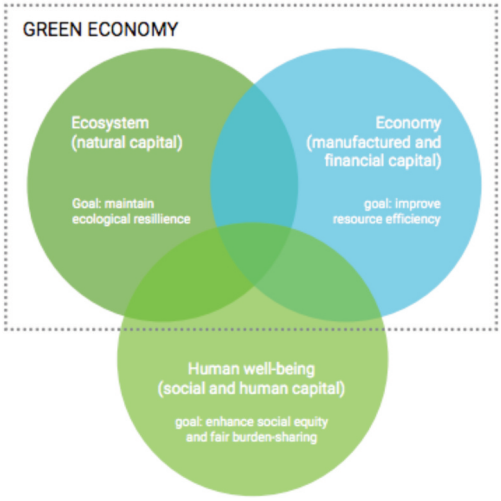
infrastructures, businesses and initiatives needed for environmental sustainability in the Mediterranean region and globally.

Green Economy, Climate and Finance

Green Economy

According to the United Nations Environmental Programme (UNEP), the green economy is an economy whose aim is to *improve human well-being and social equity while significantly reducing environmental risks and ecological scarcity.* In this type of economy, revenue growth and employment come from public and private investments that reduce carbon emissions and pollution, enhance the rational use of resources and energy efficiency, and prevent loss of biodiversity and environmental services. In simple words, the European Environment Agency (EEA) defines the green economy as the one that ***generates increasing prosperity while maintaining the natural systems that sustain us.***

Figure 2. Green Economy Framework



Source: EEA

Green Finance

Green finance refers to the financing of public and private investments in environmental goods and services as well as **prevention, minimisation and compensation of damage to the environment** and to the climate. It also integrates the funding of public policies that encourage environmental-friendly behaviours such as Sustainable Consumption and Production (SCP) patterns.

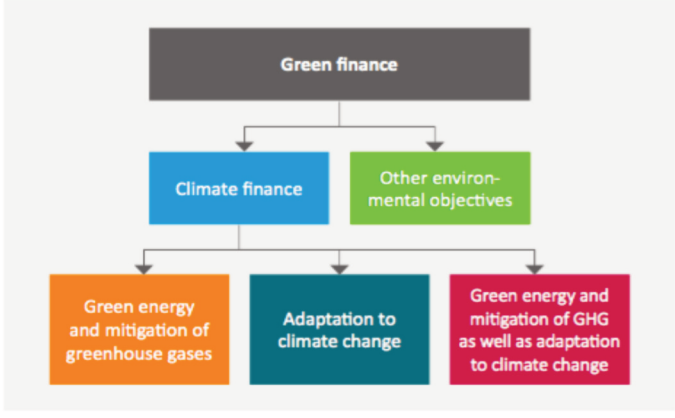
Figure 3. Green Investments

Source: Nannette Lindenberg, DIE

Climate Finance

Climate Finance is a specific branch of green finance explicitly focusing on climate change in terms of **mitigation, adaptation and research investments.** In a broad definition, climate finance is described by *the financial resources paid to cover the costs of transitioning to a low-carbon global economy and to adapt to, or build resilience against, current and future climate change impacts.*[3]

Figure 4. Green Finance



Source: IDFC

3 Climate Policy Initiative (2014), What is Climate Policy?

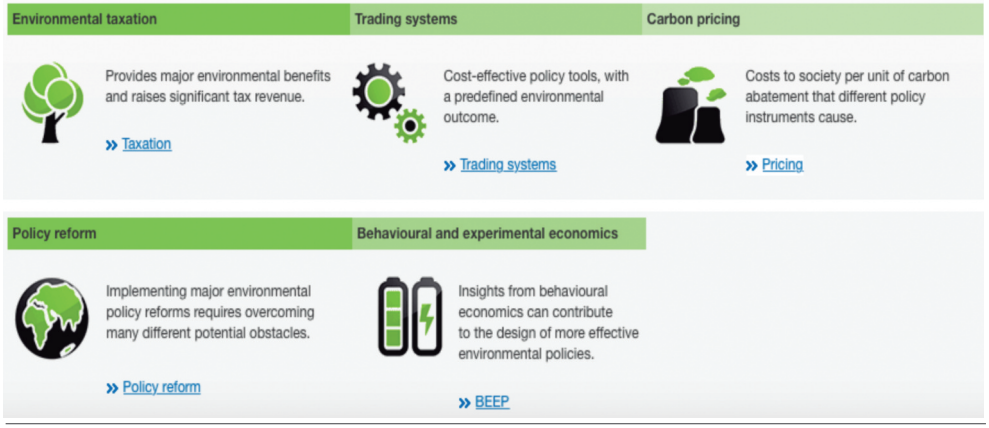
Policies and Instruments

Countries, regions and cities have different policies, tools and instruments to support a transition towards a green economy in their territories and communities.

Environmental Policies

Environmental policies include fiscal policies such as pricing, taxing and trading instruments that encourage broad-based action to reduce environmental damage as well as reforming existing policies to facilitate the green economy transition. There are other non-monetary instruments to tackle the consequences of climate change such as regulations (norms and legislation) implemented by governments or public institutions to directly influence the behaviour of economic agents.

Figure 5. Environmental Policies Tool Box



Source: OECD

Green Financial Instruments

Climate funds largely offer traditional grants and concessional loans, but the use of innovative instruments such as green bonds, guarantees and equity is increasing, particularly as funds seek to enable private investment.

Grants ensure that the least developed countries with poor financial resources are adequately supported to face climate change impacts. **Concessional loans,** the largest part of climate finance, are mainly used for developing countries to fund projects that show rates of return below market rates through the provision of cheaper credits.

Green bonds use the debt capital market to raise funds to finance large-scale Low Carbon, Climate Resilient (LCR) infrastructure projects, assets or businesses. The

9 http://www.oecd.org/cgfi/

issuance of labelled green bonds grew further in 2017 with $221 billion issued, whereas the amount of "climate-aligned", but (as yet) unlabelled bonds accounted for $895 billion.[4]

The **credit guarantee** schemes are particularly useful in the environmental sector as credit risk is perceived to be the key barrier to accessing finance.[5] Expanding its use can help "crowd in" private sector resources due to its ability to partially underwrite risks.[6]

Green equity and venture capital allow private institutions to invest in sustainable projects and businesses at the earlier stage of their development. Equity investors can invest in green initiatives through mutual funds, exchange-traded funds and stocks. Venture capital can support green start-ups to secure the funding required to grow.

In a number of countries, governments have set up a **Green Investment Bank** (GIB) as a national or local public entity to facilitate private investments into domestic Low Carbon, Climate Resilient (LCR) infrastructure. GIBs are an innovative tool to mobilise institutional investors, such as pension funds, insurance companies and sovereign and mutual funds into the green finance sector.[7]

4 CBI, Bonds and Climate Change, the state of the market in 2017,
https://www.climatebonds.net/resources/reports/bonds-and-climate-change-state-market-2017
5 https://openknowledge.worldbank.org/handle/10986/2627
6 ODI, Six development finance proposals to expand climate investment, March 2017.
7 http://www.oecd.org/environment/green-investment-banks.htm

Regional and Global Public Actors

We review the green finance strategies and initiatives of the main financial actors in the Mediterranean region, in particular Multilateral Development Banks (WB-IFC, EIB, EBRD, AfDB), the European Commission and dedicated climate funds (CTF).

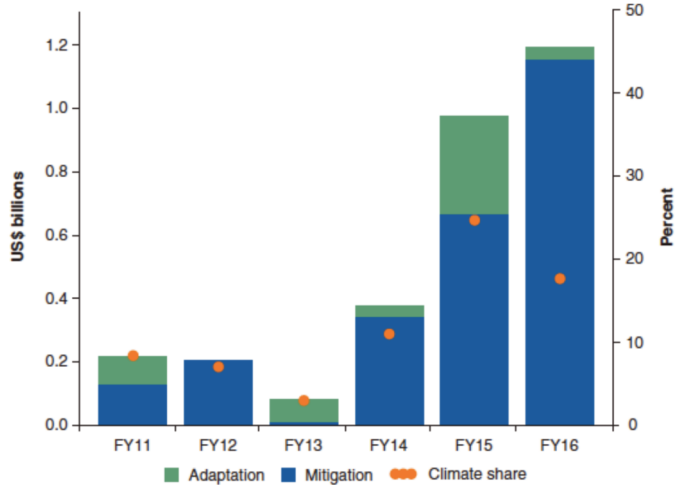
Multilateral Development Banks

Multilateral Development Banks (MDBs) are among the biggest actors of climate financing. Although there is nowadays a need to diversify green finance and leverage private sector resources, it remains clear that International Financial Institutions (IFIs) still play a major role in the battle against climate change.

World Bank

The **World Bank Group's Climate Change Action Plan** adopted in 2016 lays out concrete steps to help countries tackle climate change and deliver on their national climate plans submitted for the Paris Agreement, the so-called **Intended Nationally Determined Contributions** (INDCs). Globally, the WBG aims to increase the **climate-related share of its portfolio from 21% to 28%,** up **to $29 billion a year by 2020.**[8] Its private sector arm, the International Finance Corporation (IFC), plans to catalyse $13 billion in private sector capital annually by 2020 to climate sectors through mobilisation, aggregation, and de-risking products.

Figure 6. World Bank Group lending in the Middle East and North Africa (MENA)



Source: WBG

8 World Bank (2016), World Bank Group Climate Change Action Plan 2016-2020, https://openknowledge.worldbank.org/handle/10986/24451

In the **Mediterranean,** the WBG has specific projects dedicated to the Middle East and North Africa (MENA) region related to energy (Jordan, Morocco, Turkey) or water (Tunisia). Between 2011 and 2015, the average climate funding was **$400 million per year,** with activities mainly focused on mitigation. Between 2015 and 2016, this number rose by 29%[9] However, there is still great potential to grow WBG climate co-benefits in this region, in particular on agriculture, cities, transport and water.

European Investment Bank

The European Investment Bank (EIB), as the public bank of the European Union, published its climate strategy in 2015 with the aim of *mobilising the finance needed to achieve the worldwide commitment to keep global warming to below 2°C and to adapt to the impacts of climate change.*[10] Today, the EIB has a commitment of "at least" **25% of its lending portfolio to Low Carbon, Climate Resilient growth** that concerns mostly energy and transport sectors inside and outside the EU. In 2016, the EIB provided €17 billion to support environmental projects and over €19 billion to help mitigate climate change, which represents 26% of total EIB lending.[11]

In 2002, the EIB created the **Facility for Euro-Mediterranean Investment and Partnership (FEMIP)** to encourage the modernisation of the Mediterranean Partner Countries' economies focusing on private sector support and the creation of an investment-friendly environment. For the period 2014-2020, FEMIP has been allocated €9.6 billion in lending in support of projects in the Mediterranean Partner Countries. Since 2014, over **30% were in favour of climate action,** in sectors such as transport, energy, water and private sector credit lines.[12]

The EIB is one of the major players in climate financing, being the first issuer of Green Bonds in 2007. However, there is still more effort to be made to cease investments in fossil fuel infrastructure. In fact, since the Bank revised its energy lending criteria in 2013 the support for fossil fuel remained at a high level (€8.5 billion globally).[13]

European Bank for Reconstruction and Development

The European Bank for reconstruction and Development (EBRD) is a multilateral development investment bank owned by 65 countries and the EU institutions. It invests mainly in private enterprises, together with commercial partners. The Bank primarily supports countries within its region of operation, from Central Europe to Central Asia, as well as the southern and eastern Mediterranean.

9 Ibid.

10 EIB (2016), Climate Strategy, Mobilising finance for the transition to a low-carbon and climate-resilient economy, http://www.eib.org/attachments/strategies/eib_climate_strategy_en.pdf

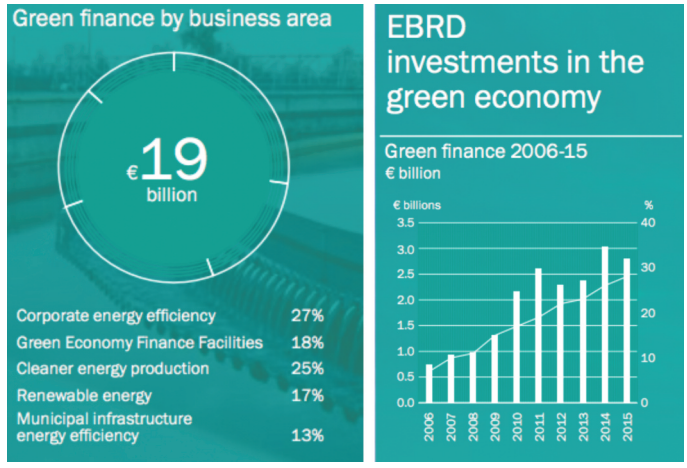
11 EIB website, Climate and Environment.

12 EIB (2014), FEMIP instruments.

13 http://bankwatch.org/news-media/for-journalists/press-releases/eib-climate-action-undermined-banks-fossil-fuel-lending

The EBRD released its **Green Economy Transition** (GET) approach in 2015 to increase green financing to at least **40% of total annual investments by 2020,** more than half to come from the private sector.[14] The focus of the EBRD is on energy efficiency in cities, industries and utilities. In 2015, 30% of its total €9.4 billion was dedicated to sustainable investments in energy and resource finance. The Bank is also increasing its activity in climate adaptation, providing €1 billion (worth €3.6 billion) for adaptation measures, of which **40% is spent in the private sector.**[15]

Figure 7. EBRD Investments in the Green Economy



Source: EBRD

Since 2012, the Bank has extended its activities to **four Mediterranean countries: Egypt, Morocco, Tunisia and Jordan.** The focus in this region is largely on developing economic growth by opening *open and sustainable market economies* and making their economies *more competitive and resilient,* supporting **renewable energy and energy efficiency.**[17] It has so far invested €3 billion in about 100 projects in the region but without making a clear distinction of which part of those investments could be labelled as "green". However, the Bank is actively cooperating with the Global Environment Facility (GEF) and the Climate Investment Funds (CIF).

The EBRD established the **Environmental Sustainability Bond Programme** (ESBP) with the goal of financing projects in the field of renewable energy and energy efficiency as well as environmental infrastructures.[18] In 2015, the EBRD approved a $250 million financing framework for private sector renewable energy generation in Morocco, Egypt, Tunisia and Jordan.[19]

14 UNFCCC (2016), Roadmap to 100 USD billions, http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload/261_295_ 131233554162587561-Roadmap%20to%20the%20US$100bn%20(UNFCCC).pdf

15 EIB website (2016), Sustainable Resources and Climate Change, Sustainable Energy Initiative (SEI), Climate Change Adaptation.

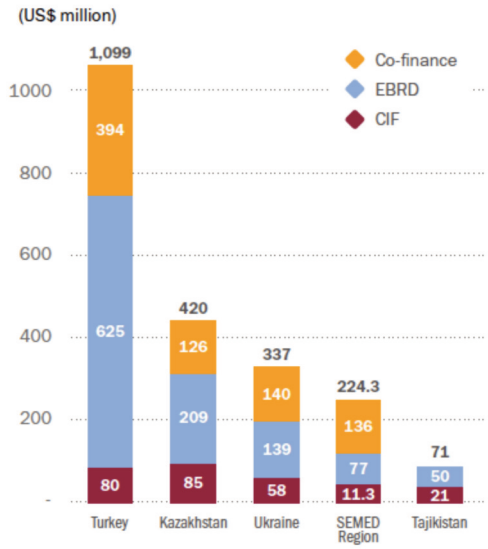
16 EBRD (2016), Green Economy Transition.

17 EIB website, The Southern and Eastern Mediterranean region.

18 EIB website, Environmental Sustainability Bonds.

19 http://www.ebrd.com/news/2015/ebrd-earmarks-us-250-million-for-private-sector-renewables-in-semed.html

Figure 8. Climate Finance from EBRD in Partnership with CIF in 2015[20]



Source: EBRD[21]

The EBRD is one of the most important green finance players in the southern Mediterranean region, in particular in terms of the clean energy sector. However, like the EIB, some investments are still in projects involving fossil fuel energy. Research has shown that between 2012 and 2014 close to 70% of the Bank's financing in the SEMED countries' energy sector was for oil- and gas-based electricity.[22]

African Development Bank

The African Development Bank (AfDB) developed in 2009 a climate change strategy to support African countries to tackle the consequences of climate change. The AfDB developed a 2011-2015 Climate Change Action Plan to invest around 46 billion over the 5-year period for Low Carbon, Climate Resilient and development in Africa. It includes investments of almost $8 billion by 2015 to reduce the continent's vulnerability to climate change and sustain the change to economies producing fewer greenhouse gas (GHG) emissions.

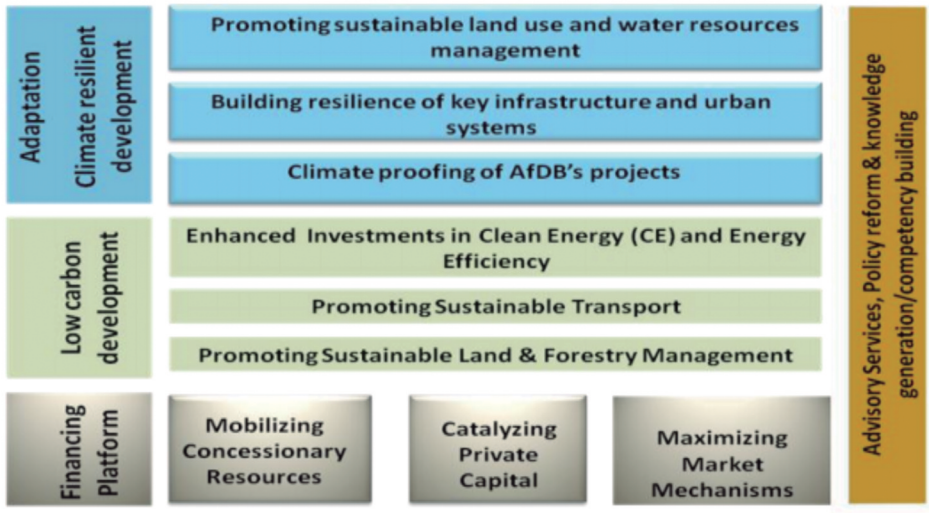
The AfDB uses a multiplicity of instruments to finance and invest in climate resilient projects as well as adaptation and mitigation. It is based on the AfDB's own resources but also on the contribution of its partners, multilateral and bilateral institutions, and the private sector.

20 EBRD (2014), Climate finance global partnerships, Accelerating the response to Climate change in 2015, http://www.ebrd.com/documents/climate-finance/get-climate-finance.pdf

21 Ibid.

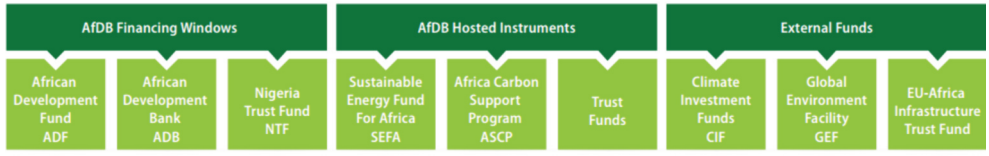
22 Sikorova, K. (2015), The EBRD: Fueling the future, or stuck in the past?, CEE Bankwatch Network.

Figure 9. African Development Bank Climate Change Programme



Source: AfDB

Figure 10. AfDB Energy, Environment and Climate Financing Instruments



Source: AfDB [23]

The AfDB Green Bond programme facilitates the achievement of the Bank's priority of green growth through the financing of eligible climate change projects such as the Ouarzazate Solar Complex Project in Morocco or the Gabal El-Asfar Wastewater Treatment Plant in Egypt.

General Assessment

MDBs are key players to implement green finance and leverage investments from public and private actors in order reach the transition towards the green economy. They set themselves targets and goals for 2020 through strategies that are – although in general similar and directed to the same kind of projects – different in terms of ambition and implementation. The following table summarises the targets set for 2020 compared to the current share of the Banks' portfolio directed toward climate projects.

23 African Development Bank Group (2012), Powering a Climate-Smart Africa.

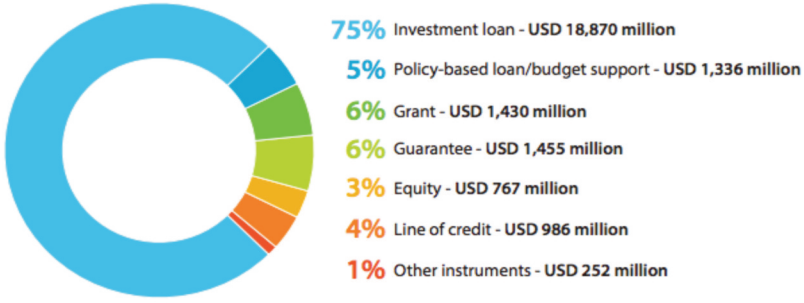
Table 1. MDB Targets to Support Climate Action (Globally)

MDB	Part of climate financing over total portfolio in 2016 (in % and USD)	Future commitments to support climate action by 2020 (in % and USD)
WBG	18% - USD 11.5 billion	28% - USD 16 billion
EIB	21% - USD 4.2 billion	35% - USD 7.2 billion
EBRD	32% - USD 3.4 billion	40% - USD 4.3 billion
AfDB	9% - USD 1.6 billion	40% - USD 2.2 billion

Source: Joint MDB Report on Climate Action, 2016

In line with the Paris Agreement, commitments for 2020 are higher than the current levels. However, there are no further commitments beyond 2020 and the majority of investments are not labelled as green. The loan remains the main instrument used to finance green projects accounting for three quarter of all the MDBs' investments globally.

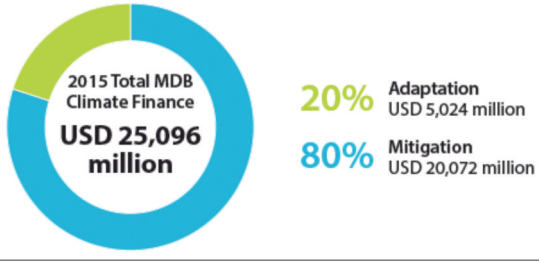
Figure 11. Total MDB Climate Finance by Instruments



Source: Joint MDB Report on climate action, 2015

On a global scale, MDBs climate finance is being mainly spend on mitigation (80%) and much less on adaptation (20%).

Figure 12. Total MDB Climate Finance by Type



Source: Joint MDB Report on climate action, 2015

European Union

EU Climate Strategy

The EU climate strategy is set in the **2020 climate and energy package** and the **2030 climate and energy framework,** with the aim of allocating **20% of its budget for 2014-2020** – as much as €180 billion — to climate change-related action.[24] To achieve this objective, climate actions have been integrated into major EU spending programmes, such as cohesion policy, regional development, energy, transport, research and innovation and the Common Agricultural Policy (CAP). The EU's external development policy will also contribute to achieving the 20% commitment, with an estimated €1.7 billion in 2014-2015 and €14 billion over the years 2014-2020 for climate spending in developing countries.[25]

Within the EU, several instruments were developed to finance this transition such as the **LIFE Programme** with €3.1 billion of investment in environment projects since its creation in 1992. It includes a dedicated sub-programme for climate action with €864 million of co-financing between 2014 and 2020, tripling the climate budget compared to the LIFE+ programme in 2007-2013.[26] The **Natural Capital Financing Facility** (NCFF) provides loans or equity investments for revenue-generating or cost-saving pilot projects promoting the preservation of natural capital. The **Private Finance for Energy Efficiency** (PF4EE) instruments provide loans for investments in energy-efficient projects prioritised by the National Energy Efficiency Action Plan.

EU Mediterranean Initiative

The EU environmental action for the Mediterranean region is supported by the **Horizon 2020 (H2020) initiative.**[27] Endorsed by Euro-Mediterranean countries, it aims to tackle the pollution sources in the Mediterranean Sea linked to municipal waste, urban waste water and industrial pollution through investment in green facilities, capacity-building activities and shared environmental information systems. In 2016, it was relaunched as the **SWIM-H2020 SM Project** (Sustainable Water Integrated Management and Horizon 2020 Support Mechanism for 2016-2019). It aims to help reduce marine pollution and a sustainable use of scarce water resources in the Middle East and North Africa (MENA) countries.[28]

EU Blending Facilities

Besides traditional forms of support, the EU blending facilities mobilise additional financing from private and public sources for climate change action, complementing other aid modalities. Blending is the combination of EU grants with loans or equity

24 https://ec.europa.eu/clima/policies/strategies/2020_en

25 https://ec.europa.eu/clima/policies/international/finance_en

26 http://ec.europa.eu/environment/life/funding/lifeplus.htm

27 www.h2020.net

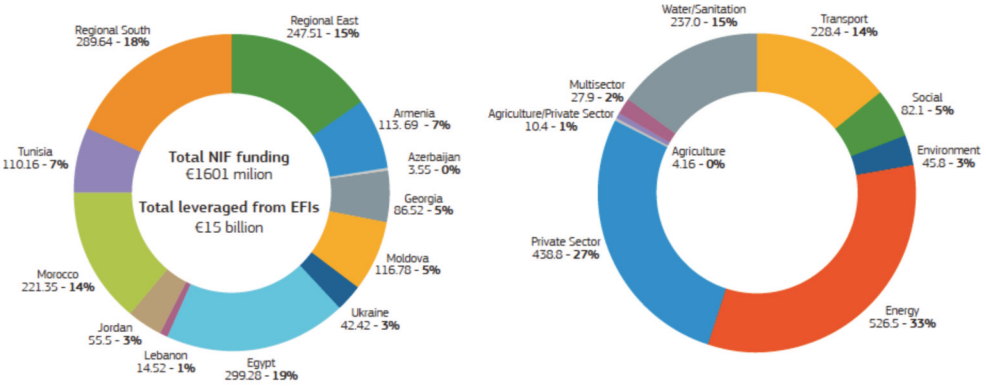
28 www.swim-h2020.eu

from public and private financiers. EU grants can take different forms: investment grant and interest rate subsidy, technical assistance, risk capital, and guarantees. EU regional blending facilities operate in all regions of EU external cooperation and help partner countries transition to Low Carbon, Climate Resilient economies.[29] Between 2014 and 2020, the EU expects to double the volume of grant finance to €2 billion, aiming to mobilise projects of about €50 billion, mainly in energy and transport sectors.

Neighbourhood Investment Facility (NIF)

For the Mediterranean, the blending facility used is the Neighbourhood Investment Facility (NIF). This instrument belongs to the European Neighbourhood Instrument (ENI), the funding mechanism for implementing EU policy in the Mediterranean countries, and has climate change as one of the major challenges of the Region.[30] The NIF provides grants, technical assistance or guarantees in support of loans.

Figure 13. Neighbourhood Investment Facility (2008-16)



Source: European Commission[31]

Sustainable Finance Initiative

In late 2016, the European Commission established a High-level Expert Group on Sustainable Finance to advise on developing a comprehensive EU strategy on sustainable finance.[32] It delivered its final report in early 2018 with strategic recommendations: develop a common classification system (taxonomy), define the duties of investors, improve disclosure of financial institutions, design an EU label for green investment funds, integrate sustainability in the European Supervisory Authorities (ESAs) mandate, and launch a European standard for green bonds.

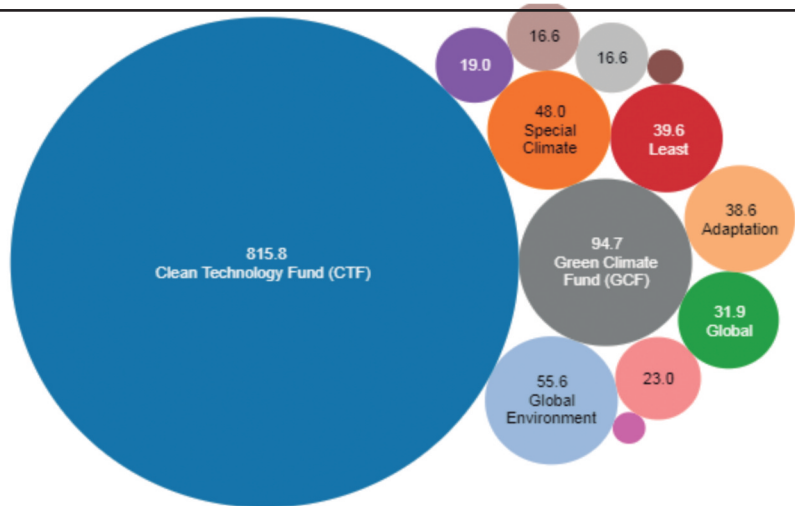
31 European Commission, Neighbourhood Investment Facility (NIF) Operational Annual Report 2016, https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/nif-oar2016_en_200617_web_version.pdf

32 https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en#overview

Multilateral Climate Funds

Multilateral Climate Funds (MCF) are financial instruments managed by MDBs with contributions from public and private actors.[33] In the MENA region, the **Clean Technology Fund** (CTF), part of the Climate Investment Funds (CIF), is the main financer by far. Between 2003 and 2016, it has provided $816 million, most of the projects being located in Morocco and Egypt for climate mitigation purposes.[34]

Figure 14. MCFs Funds in the MENA Region



Source: ODI[35]

The action of Multilateral Funds is mostly concentrated in a small number of large projects in the form of loans with a total of **$1.2 billion for 94 projects** mostly directed to mitigation (83%) despite growing adaptation needs for water conservation and food security.[36] They should also develop equity investments and guarantees to offer a broader suite of financial instruments.

33 OECD, Climate Policy Initiative (2015), Climate finance 2013-14 and the US 100 billion goal, http://www.oecd.org/env/cc/OECD-CPI-Climate-Finance-Report.pdf

34 ODI, Climate Funds update (2016), Climate Finance Regional Briefing: Middle East and North Africa, https://www.odi.org/sites/odi.org.uk/files/resource-documents/11042.pdf

35 Ibid.

36 Ibid.

National Public Actors

In the wide spectrum of public green finance, national agencies, acting on behalf of their respective governments, are major actors to fund the preservation of the environment and the fight against climate change both at national and international levels. [37] We focus here on the green and climate finance initiatives from three northern (France, Italy and Germany) and three southern Mediterranean countries (Egypt, Morocco and Turkey).

France

French Agency for Development

The French Agency for Development (AFD) is the French state-owned public development finance institution that works in developing countries. In 2017, the AFD invested around €9.4 billion distributed in 600 projects in 108 countries.[38] The AFD has two main financial subsidiary institutions: **Proparco,** supporting the private sector via long-term financial tools on commercial terms (loans, equity investments and guarantees), and **FFEM,** a public fund dedicated to the environment in developing countries.

In terms of **climate finance,** the AFD committed over €3.5 billion in 2016 to finance 83 climate projects on renewable energies, energy efficiency, clean transport, forest protection, agro-ecology and climate change adaptation, [39] thus representing around 10% of international public climate finance for developing countries. [40] For 2016-2020, the agency plans to allocate **50% of its total investment to climate** projects globally.[41] The agency developed a specific action plan for the Mediterranean and North Africa region with a thematic focus on **energy, urban transportation and water.** In 2016, climate projects accounted for **67% of financing** in the Mediterranean. FFEM was particularly active in Jordan (water), Turkey (forests) and Morocco (renewable energy). [42]

France has provided $4 billion in 2015 and $3.2 billion in 2016 in climate-related development finance, its main Mediterranean receivers being Jordan (444 million), Turkey (333 million), Tunisia (173 million), Egypt (122 million) and Morocco (117 million).

37 Overseas Development Institute (2016), The Global Climate Finance Architecture, https://www.odi.org/sites/odi.org.uk/files/resource-documents/11021.pdf

38 AFD (2016), Infographics AFD 2016 Results, http://www.afd.fr/home

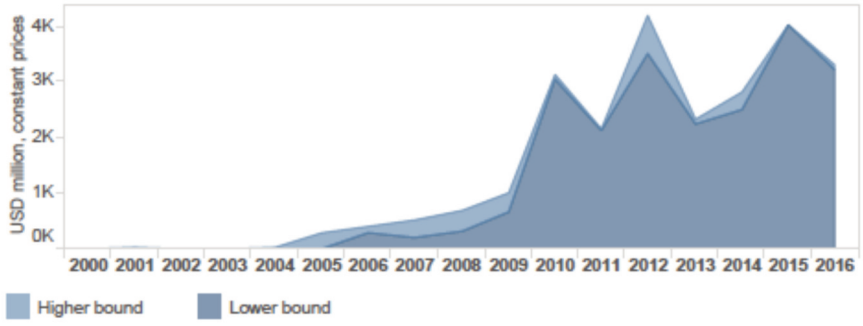
39 Ibid.

40 CPI (2011), The Landscape of Climate Finance, http://www.gwp.org/globalassets/global/toolbox/references/the-landscape-of-climate-finance-cpi-2011.pdf

41 AFD (2010), AFD and Climate Change, http://www.afd.fr/webdav/shared/PORTAILS/PUBLICATIONS/PLAQUETTES/AFD-Changement_climat_GB.pdf

42 FFEM (2015), Rapport Annuel 2015, https://www.ffem.fr/fr/rapport-annuel-2015

Figure 25. French Climate-Related Development Finance (2000-16)



Source: OECD[43]

French Financial Ecosystem

In the past few years France has been active in improving the integration of sustainability issues into financial decision-making through environmental information and market analysis. Environmental, social and governance (ESG) reporting requirements were introduced in 2001, and strengthened in 2015 with the **Law on Energy Transition for Green Growth** (EETG).[44] In 2016, the French government launched the Energy and Ecological Transition for Climate Label (TEEC) to spotlight the investment funds that finance the green economy and to encourage companies to report the green share of their activities.[45] France has also enabled public financial institutions such as the CDC and BPIFrance to leverage regulated savings accounts and other sources of capital to provide financing in line with sustainability mandates, committing to mobilise €15 billion towards low-carbon transition by 2017.[46] French institutions have finally played a leading role in the development of the green bonds market and the development of the Paris financial market as a hub for sustainable finance.[47]

Germany

German International Climate Finance (BMZ and KfW)

In 2016 the German government committed around €**3.4 billion** in official budget funds for climate change mitigation and adaptation through its **Ministry for Economic Cooperation and Development** (BMZ), becoming the **largest bilateral donor of climate finance.**[48] Furthermore, Germany also raised funds on the capital market through **KfW,** its public bank, adding a further €**5.2 billion** in loans, shareholdings and other

43 https://public.tableau.com/shared/MJXS8GFTK?:toolbar=no&:display_count=no

44 http://www.gouvernement.fr/en/energy-transition

45 http://www.climatefinanceday.com/wp-content/uploads/2017/12/EXECUTIVE-SUMMARY-finance-verte-sircom-v3.pdf

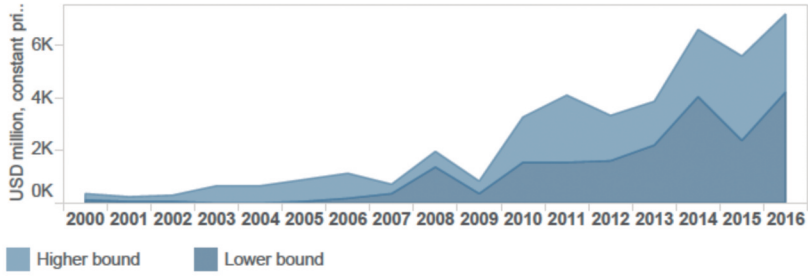
46 http://unepinquiry.org/publication/france-country-report/

47 http://www.paris-europlace.com/en/our-priorities/sustainable-finance

48 BMZ (2017), Financing climate action – Germany as a responsible partner, http://www.bmz.de/de/zentrales_downloadarchiv/cop23/climate_finance/Financing_Climate_Action_Germany_as_a_responsible_partner_2017_BMZ.pdf

capital market funds. Germany's public contributions to international climate finance thus totalled €**8.5 billion in 2015.** Furthermore, the German government contributes to mobilising private capital of more than €**1.4 billion.** This means that in 2016 the German contribution from all sources was €**10 billion.**

Figure 16. German International Climate Finance (2000-16)



Source: OECD[49]

In 2016, the bilateral climate finance provided by the BMZ was fairly balanced between adaptation (48%) and mitigation (52%). The main Mediterranean country receivers were Morocco (255 million in 2016), Turkey (165 million in 2016), Tunisia (286 million) and Egypt (102 million in 2015).

Italy

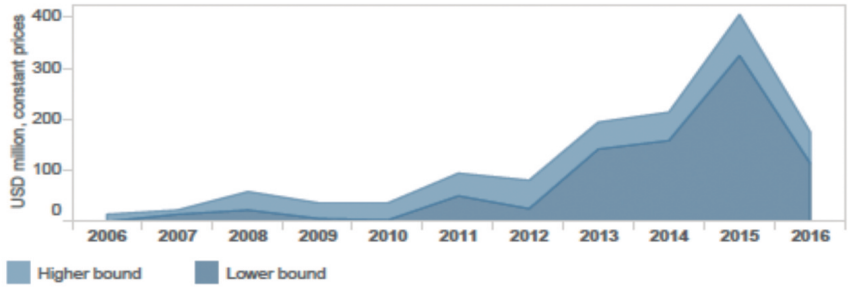
Deposits and Consignments Fund (CDP)

Cassa Depositi e Prestiti (CDP) is a public Italian investment bank, being the third largest Italian bank according to the total assets owned (€400 billion in 2015). The 2016–2020 Business Plan identifies environment as one of the key areas of intervention both nationally and internationally.[50] One of its climate instruments is the **Kyoto Fund** established by the 2007 Italian Finance Act to finance measures to reduce greenhouse gas emissions, with €**600 million** available. The **European Energy Efficiency Fund** (EEEF) supported by the European Investment Bank (EIB) and the European Commission, promotes investments on energy saving and alternative energy sources with €**265 million** for local and regional public bodies and private companies such as public service companies, public transport providers, social housing associations, and energy providers. CDP also supports the adoption by Italian companies of low environmental impact production techniques through the **Sustainable Growth Fund,** offering subsidised loans with a financial allocation of €**350 million.**

49 BMZ (2015), Together for a common cause - Germany's contribution to international climate financing.
50 https://en.cdp.it/What-We-Do/Activities/Business-Plan/2016-2020-Business-Plan.kl

At international level CDP manages the MATTM fund from the Ministry of the Environment, Territory and Sea (MATTM) to promote climate projects in developing countries. To date, the ceiling amounts to €54 million, which is likely to increase in the future.

Figure 17. Italian Climate-Related Development Finance (2006-16)



Source: OECD[51]

Italy provided $404 million in 2015 and $175 million in 2016 on climate-related development finance, the main Mediterranean country receivers being Egypt (21 million), Tunisia (17 million) and Lebanon (6 million).

Italian Dialogue on Sustainable Finance

In 2016, the Italian Ministry of Environment, Land and Sea, in partnership with UN Environment, launched the **National Dialogue on Sustainable Finance** to identify practical market and policy options to mobilise Italy's financial system for sustainable development and climate action. The dialogue identified increased actions by financial institutions across the banking, capital markets, institutional investment and insurance sectors. It also recognised the barriers that prevent the scaling up of sustainable finance, including mispricing, short-termism, and low levels of awareness and capability. The dialogue identified 18 specific options, grouped in four areas: policy frameworks, financial innovation, market infrastructure; and knowledge building.[52]

Morocco

Morocco is a country highly vulnerable to the impacts of climate change. Its water resources are limited and the region as a whole suffers from regular scarcity, particularly around its coastal and desert areas. However, Morocco has developed a strong public and private sector capacity to become less dependent on official development assistance. In recent years, the country has given high priority to climate change and environmental issues, becoming a regional leader in renewable energy.

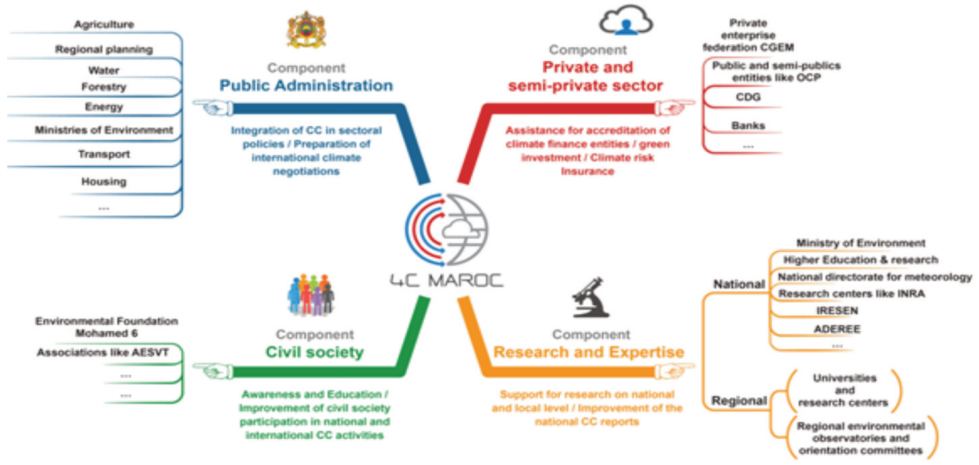
51 https://public.tableau.com/shared/5F3795KN6?:toolbar=no&:display_count=no

52 UNEP (2016), Financing the future - Report of the Italian National Dialogue on Sustainable Finance, http://unepinquiry.org/publication/financing-the-future/

Climate Policies and Strategies

In line with its international commitments, Morocco adopted the **National Charter for Environment and Sustainable Development** in 2009 with two national strategies on Environmental Protection (SNPE) and Sustainable Development (SNDD).[53] In addition, it established the **Climate Change Competence Centre** to coordinate all the actions in the field of climate change and sustainable development.

Figure 18. Moroccan Climate Change Competence Centre



Source: 4C[54]

In 2008, Morocco adopted its National Energy Strategy, which established a target of 42% of renewable energy capacity by 2020. This plan was renewed in 2016 with a new target of 52% renewable energy for 2030. The projects implemented receive funding from a variety of sources both at domestic and international level. Domestic resources include public expenditure and budget resources, electricity tariff and energy subsidies, market formation and readiness. International resources include international climate funds such as the Adaptation Fund (AF), the Green Climate Fund (GCF) and the Global Environment Facility (GEF), among others. The Moroccan Sustainable Energy Financing Facility (MorSEFF) is a €110 million credit facility, supported by EBRD, EIB, AFD and KfW, dedicated to financing energy efficiency and small-scale renewable energy investments of private companies in Morocco.[55]

Ouarzazate Complex

A flagship project worth mentioning is the **Ouarzazate Complex,** Morocco's first large-scale solar power plant and the biggest project of this kind in the world. With an

53 http://www.environnement.gov.ma/fr/plan/80-categorieaccueil/597-la-charte-nationale-de-l-environnement-et-du-developpement-durable-suite-2

54 www.4c.ma

55 http://www.morseff.com/

estimated cost of **$9 billion,** the complex foresees the construction of five Concentrated Solar Power plants (CSP) between 2015 and 2020 for a total capacity of 2000 MW. The project is being financed by a multiplicity of actors, both at national and international level, through grants and loans. On the other hand, the Ouarzazate Complex is designed to be managed and financed as a public-private partnership (PPP) by bringing together private investors, international finance institutions (IFIs) and the Government of Morocco.

Figure 19. Public Financing Plan for the Noor Ouarzazate CSP Complex

Public Financier	Commitment in mio USD
African Development Bank (AfDB)	135
EC: European Commission	122
EC: European Investment Bank (EIB)	473
France: Agence Française Développement (AFD)	68
WB : International Bank for Reconstruction and Development (IBRD)	400
Gergamny: Kreditanstalt für Wiederaufbau (KfW)	884
Borrower: Government of Morocco/MASEN	357
Clean Technology Fund (CTF)	238
Total public finance commitment	**2.677**

Source: World Bank, 2016[56]

Sustainable Finance

Morocco's Central Bank has committed to sustainable development as part of its formal strategy and is taking its first steps in the field of green finance. It has convened workshops with commercial banks to explore regulatory and voluntary standards options towards developing a roadmap for finance reform for a green economy. Some banks have already introduced **Environment, Social and Governance** (ESG) initiatives. The Bank has also set up a working group on green finance. On the stock market, **Casablanca Finance Center** is a founding member of the **international network of financial centres for sustainability,** aiming to be the African hub for green finance.[57]

Egypt

Egyptian Environmental Affairs Agency

The Ministry for Environmental Affairs, established in 1997, is in charge of environmental policies through the Egyptian Environmental Affairs Agency.[58] The Agency's activities are planned through the **National Environmental Action Plan (NEAP),**[59] developed

56 http://projects.worldbank.org/P131256?lang=en

57 http://www.casablancafinancecity.com/wp-content/uploads/2017/09/Casablanca-statement-on-financial-centres-for-sustainability_Final.pdf

58 http://www.eeaa.gov.eg/en-us/aboutus/aboutministry/policies.aspx

59 http://www.egyptchm.info/?wpfb_dl=138

in consultation with central and local public bodies. The plan, to be updated within the new Sustainable Development Strategy **Egypt vision 2030,**[60] is an Agenda for Action over 15 years (2002-2017). The programme provides for initiatives in water management, air quality, marine environment, solid wastes management and biodiversity. The government finances the projects through its state budget and international assistance funds from development agencies of donor countries. In addition to the traditional public funding channels, the NEPA aims to develop private or non-conventional channels.

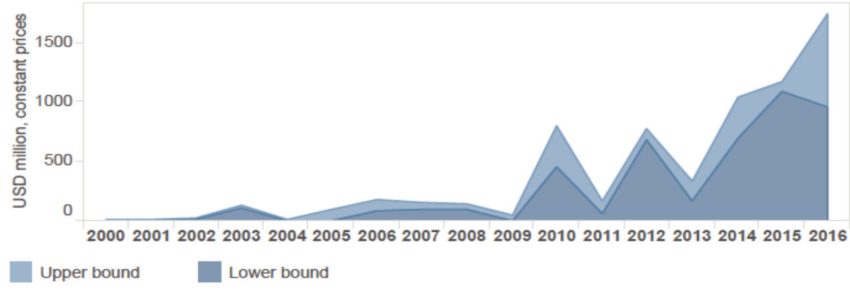
Sustainable Transport Project for Egypt[61] is an initiative developed between 2009-2017 by the Egyptian Environmental Affairs Agency, with a total investment of $44 million, 7 million funded by GEF and UNDP and 37 million by the Egyptian government and private sector. The goal is to reduce the growth of the energy consumption of the transport sector in Egypt, while simultaneously mitigating deteriorated urban air quality and traffic congestion.

The Industrial Energy Efficiency Project (IEE)[62] was started in 2013 with $4 million from the GEF and $24 million from the Egyptian government, both in cash and in-kind. The project, implemented by the United Nations industrial Development Organization (UNIDO), with the support of the Egyptian Environmental Affairs Agency, seeks to address industrial energy efficiency through an integrated approach that combines capacity-building and technical assistance.

Climate Finance

Egypt is a receiver of international climate finance from main bilateral and multilateral donors. According to OECD data, in 2016 main funders were Japan ($786 million), EIB (316 million), World Bank (302 million), France (110 million), GCF (84 million), EBRD (81 million) and IFC (56 million).[63]

Figure 20. Egyptian Climate-Related Development Finance (2000-16)



Source: OECD[64]

60 http://sdsegypt2030.com/?lang=en
61 http://stp-egypt.org/en
62 http://ieeegypt.org
63 Ibid
64 https://public.tableau.com/shared/2368MZBFQ?:display_count=no

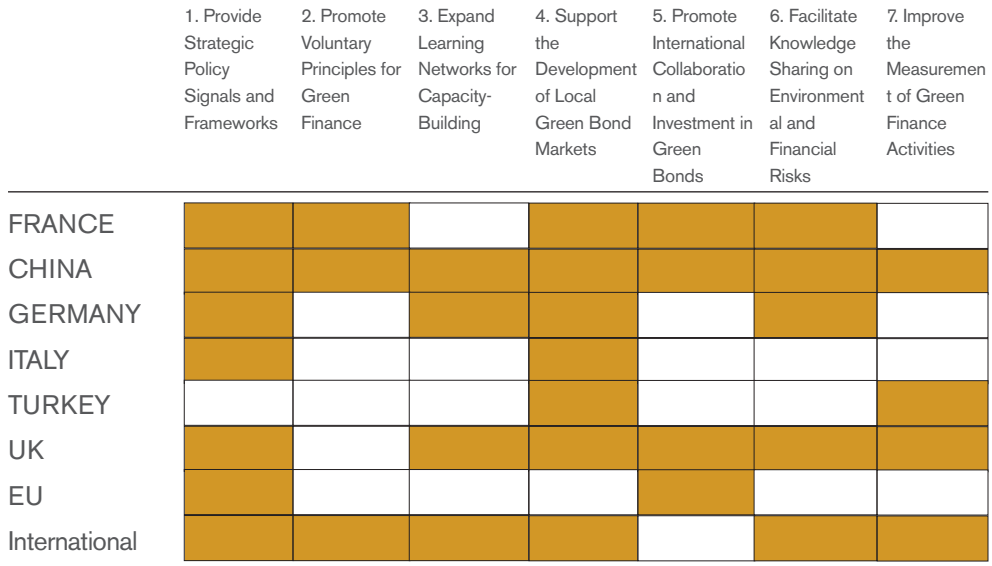
Sustainable Finance

Egyptian Stock Exchange introduced an **ESG index** (S&P/EGX ESG index) in 2010 in cooperation with Standard and Poor's to become the first market in the region and the second worldwide to have its own index whose main screening criteria are based on environment, social responsibility and governance performance of the listed companies.[65] The EBRD, AFD and EIB launched the **Green Economy Financing Facility** (GEFF) for Egypt in 2017, providing €140 million for loans on energy efficiency and small-scale renewable energy investments to private companies.[66]

Turkey

The **National Climate Change Strategy** for Turkey was approved in 2010 to disseminate energy efficiency, increasing the use of renewable energy resources, tackling climate change and providing the path towards a low-carbon economy. One of the basic principles was to increase access to the financial resources required for undertaking mitigation and adaptation activities through public and private channels. In 2011, the **National Climate Change Action Plan** (NCCAP)[67] was published, including goals for the period 2011-2023 on energy, buildings, transportation, industry, waste, agriculture, land use and forestry, climate change adaptation and cross-cutting issues.

Figure 21. Progress on Green Finance



Source: UNEP[69]

65 http://www.ecrc.org.eg/ESGIndex.aspx

66 https://ebrdgeff.com/egypt/

67 https://www.iea.org/policiesandmeasures/pams/turkey/name-36358-en.php

68 http://www.turseff.org/en

69 UNEP (2016), G20 Green Finance Progress - http://unepinquiry.org/publication/green-finance-progress-report/

In 2010, the EBRD launched the **Turkish Sustainable Energy Finance Facility** (TurSEFF)[68] to address shortcomings in the Turkish market for sustainable energy. Through this facility, the EBRD provides credit lines to local financial institutions for on-lending to small and medium-sized enterprises (SMEs) to finance energy efficiency and renewable energy projects. The EBRD used its own funding, as well as financing from the Clean Technology Fund (CTF) and the European Union, to support five major Turkish banks on lending products for sustainable energy, assessing loan requests and verifying the implementation of projects.

Global Assessment

A recent report from UNEP reviewed the progress on policies and strategies to promote and implement green finance. In the Euro-Mediterranean region, France, Germany, Turkey and UK were positively highlighted. At a world level, China remains the most active player with an ambitious programme on green and sustainable finance.

Green Finance and the Private Sector

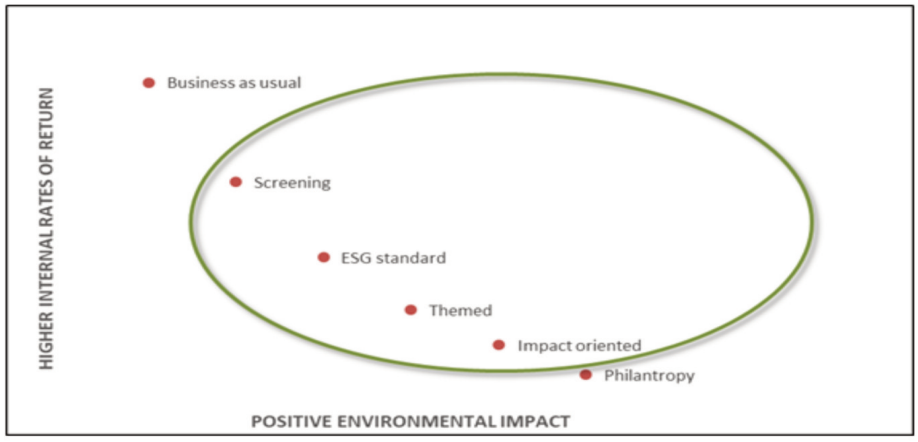
While the role of the public sector is crucial to establish the regulatory framework, send market signals and incentivise innovation, the private sector is clearly needed to scale up the flow of green investments. Here we provide an overview of the sector, mapping the actors, describing the main instruments, analysing the trends, sharing good practices and finally recommending strategies to mainstream green finance in the private sector.

Issues and Challenges

Financial Return and Investment Horizon

Investments usually range from traditional investments, looking primarily for high financial returns, to philanthropic grants, aiming exclusively at positive societal externalities. For private investors, green finance ranges from **impact oriented** (aiming at high environmental return, even with lower financial benefits) **to screening** (looking for high financial return from non-environmentally harmful sectors or companies) investments.

Figure 22. Investment Typology



Source: United Nations (2015)

However, this theoretical classification will not suggest that the environmental sustainability necessarily implies lower – or even null – profits. The industry's challenge is to succeed in making environmentally sustainable investments economically profitable in a market context. Often the issue is not the lower financial return of green investments but the **perception and belief of private investors** that there will be lower economic benefits. On the contrary, companies with a higher rating of environmental and social responsibility often generate positive yields in terms of sharing performance. In addition, the volatility of the most virtuous companies used to be lower.[70]

70 HBS (2011), The impact of corporate culture of sustainability on corporate behaviour and performance, http://www.hbs.edu/faculty/Publication%20Files/SSRN-id1964011_6791edac-7daa-4603-a220-4a0c6c7a3f7a.pdf

Another critical aspect of attractiveness of green investment is the timing of the financial return. The so-called ***tragedy of the horizon***[71] highlights that imminent systemic crises (especially environmental) force operators to cautious and short-term behaviours. The past economic crises have encouraged short-term investment while sustainable projects require a longer-term horizon.

Definition and Monitoring

Today there is a clear lack of **definition, legislation and institutional frameworks** on green finance at international and, for most countries, national level. It is necessary to agree on common green criteria through consistent, credible and transparent norms and standards. For example, a project to finance the reduction of the environmental impact of a coal power plant could be considered green, while a renewable energy plant built without respecting environmental standards might not be green. Furthermore, there could be a gap between environmental benefits (i.e. lower carbon emissions) and social impact (such as workers' rights or gender inclusiveness).

In order to promote green investments in financial markets, it is also necessary to implement a system of evaluation and control through reliable certifications and standards. The **Principles for Responsible Investment** (PRI), promoted by the UN in 2006, are voluntarily subscribed to by 1,380 financial companies with a total of 59 billion trillion assets under management.[72]Those principles envisage the assessment of investments according to the **Environmental, Social and Governance** (ESG) criteria to evaluate a company performance. Environmental ESG parameters look in particular at waste management, polluting emissions, energy, water and resources exploitation. Generally, ESG criteria are commissioned to ESG rating agencies, which provide independent evaluation.[73]

The **Green Bond Principles** (GBP)[74] provide issuers with guidance on launching credible green bonds, ensuring the investors the information necessary to evaluate the environmental impact of their investments. Another widespread norm, specific to the climate bonds market, is the **Climate Bonds Standard.** [75] However, green or climate bonds can be issued currently under a wide variety of voluntary standards, and no monitoring mechanism exists today to ensure compliance between them.

Informational Asymmetry

In the absence of a clear and shared definition of green investments, **informational asymmetry**[76] may occur as environmental data is not fully shared among actors involved

71 www.tragedyofthehorizon.com

72 www.unpri.org

73 Novethic (2013), Overview of ESG Rating Agencies, http://www.novethic.com/fileadmin/user_upload/tx_ausynovethicetudes/pdf_complets/2013_overview_ESG_rating_agencies.pdf

74 ICMA (2017), The Green Bond Principles 2017, https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-social-and-sustainability-bonds/green-bond-principles-gbp/

75 https://www.climatebonds.net/standards

76 G20 Green Finance Study Group (2016), G20 Green Finance Synthesis Report, http://unepinquiry.org/wp-content/uploads/2016/09/Synthesis_Report_Full_EN.pdf

in the economic transaction. Without credible guarantees, the market equilibrium decreases the economic competitiveness of environmental products. Additionally, identifying and monitoring sustainable investments entails transaction costs that reduce the financial returns of green investments. Current certifications are also based on soft law codes and voluntary standards that vary depending on industry or geographical location, making it difficult to compare them and determine their real value. In general, a greater financial disclosure is needed for the development of the green finance market with a public control mechanism to ensure the credibility of these instruments and of the whole industry.

Industry Overview

Actors

Private investments in the green finance sector come from a wide variety of actors, who largely correspond to traditional market players.[77]

Investment Banks: As green projects improve their financial return, investment banks and other financial actors (e.g. insurance companies) increase their interest in the green finance industry. Large banks in Europe, such as Intesa-Sanpaolo (Italy), BBVA (Spain) and Crédit Agricole (France) have developed various green finance initiatives.

Commercial Banks: This category comprises banks that decide to offer green savings products. A specific example, which adopts environmental sustainability as a general criterion for the entire business, is provided by the ethical banks, like Banca Etica in Italy and Fiare in Spain.

Private Companies: Large private companies have begun to issue green bonds to finance cleaner technologies, low-carbon infrastructures or green services. In the Mediterranean area, some utilities such as Italian Hera, Spanish Iberdrola or French Engie are raising green funding.

Investment Funds: Setting up an environmental fund to finance green projects is an efficient market-based solution to address environmental problems. In the Mediterranean region, the French BNP Paribas IP currently manages 8 green funds for an amount of €2.5 billion.

Foundations: An increasing number of private foundations issue grants targeting green projects that prove to involve long-lasting programmes. In the Mediterranean, institutions

77 Novethic (2015), Green financing: Are European banks and insurers contributing?, http://www.novethic.com/fileadmin/user_upload/tx_ausynovethicetudes/pdf_complets/Green-financing-are-european-banks-and-insurers-contributing.pdf

such as MAVA and European Climate Foundations are involved in green and climate initiatives.

Consumers and retail investors: A key role in increasing green investments is consumer activity, which requires credit to buy green products, such as photovoltaic panels, energy efficiency windows and electric vehicles. Moreover, individuals' private savings can be geared towards investing in retail green products.

Instruments

Green finance products can be divided into four main categories.[78]

- **Retail:** green mortgages, green equity loans, green commercial building loans, green car loans, green deposit, green debit/credit card (donations to environmental charities).
- **Corporate banking:** green bonds, green project finance, green securitisation, green venture capital and private equity, green indices, carbon commodities, weather derivatives or catastrophe options.
- **Asset management:** green fiscal funds, green investment funds, carbon funds, catastrophe bonds (agriculture, tourism or construction sector).
- **Insurance:** car insurance (pay as you drive), home and business (environmental risks), carbon insurance.

Trends and Markets

Green Bonds

Green bonds are the financial instrument that has achieved a high degree of maturity and broader diffusion in green finance industry. The issuance of labelled green bonds grew drastically in 2017 with $221 billion issued, whereas the amount of "climate-aligned" but (as yet) unlabelled bonds accounted for $895 billion.[79]

At present, green bonds have been issued in 33 countries, including France (€33 billion), Germany (€18 billion) and Netherlands (€18 billion), behind the United States (€42 billion) and China (€33 billion), which lead the market.[80]

Green Funds

A green fund is a focused investment vehicle for companies engaged in environmentally supportive businesses, such as renewable energy, green transport, water and waste management, and sustainable living. In Europe, the green funds market is driven by the countries like France, UK and Switzerland.[81]

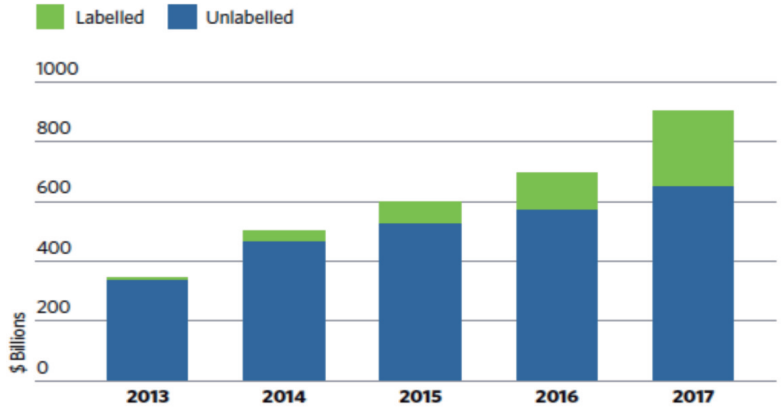
78 UNEP (2007), Green Financial Products and Services Current Trends, http://www.unepfi.org/fileadmin/documents/greenprods_01.pdf

79 CBI, Bonds and Climate Change, the state of the market in 2017, https://www.climatebonds.net/resources/reports/bonds-and-climate-change-state-market-2017

80 Ibid.

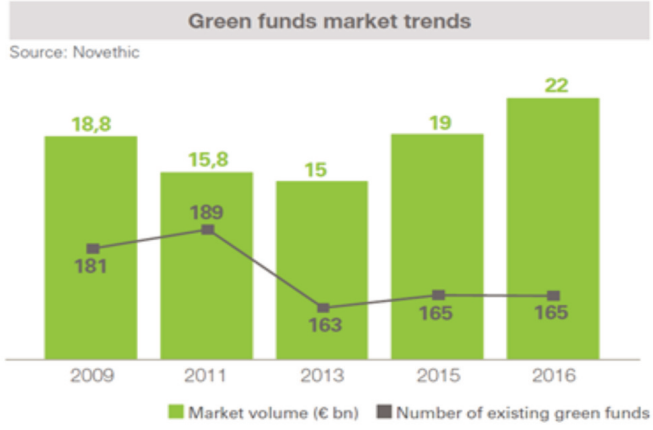
81 Novetic (2017), The European Green Fund market, http://www.novethic.com/fileadmin/user_upload/tx_ausynovethicetudes/pdf_syntheses/Green-funds-study-Novethic-Ademe-2017.pdf Ibid.

Figure 23. The Green and Climate Bond Market



Source: CBI[82]

Figure 24. Green funds in Europe



Source: Novethic[83]

In Europe, 165 green funds reach a total of €**22 billion** assets with a **growth of 47% over the past three years.** Institutional investors (both public and private) currently dominate the market with only 15% of the funds reserved for individual investors.[84]

Generational Price Premium for the Environment

Some economics studies show that the further we look at younger generation, the more people are willing to pay more for environmental goods. This trend, which can be observed in all Western consumer markets, can also be found in financial markets in

82 Ibid.
83 Ibid.
84 Ibid.

terms of willingness to pay for investing in green products. Looking at the investment industry, the generational differences are grossly the same founded in the willingness to pay more for environmental commodities. Data suggest that today's university students – or at least their contemporaries – have an outstanding responsible knowledge of what should or could be done with their savings.[85]

Good Practices in the Mediterranean area

Green Corporate Bonds

Some companies in the Mediterranean area have already begun to use green bonds to raise funds for projects with a positive environmental impact. The most active industry on this front is that of energy multi-utilities, as their business is closely linked to environmental issues (energy production, water distribution, waste management).

HERA (Holding Energia Risorse Ambiente) is an Italian multi-utility that operates in 265 municipalities. It provides energy services (gas, electricity), water (aqueduct, sewage and purification) and environmental (waste collection and disposal) to approximately 4 million citizens. In 2014, Hera Group was the first company in Italy to launch green bonds. The bond received requests equivalent of about three times its amount mainly raised by foreign investors (France, Germany and UK).[86]

Engie is a French energy company (former GDF Suez) operating in the field of electricity generation and distribution in the natural gas and renewable energy sector. In 2017, it issued its second green bonds of €1.5 billion, after having issued €2.5 billion in 2014. The proceeds of the bond will be used to finance renewable energy projects such as wind and solar farms, hydroelectric plants, energy efficiency and natural resources preservation. To be eligible, projects financed must meet environmental and social criteria reviewed by Vigeo Eiris, an independent environmental rating agency.

Green Banking

Some banks in the northern Mediterranean countries have begun to implement instruments and projects in the field of green finance.

BBVA, a multinational Spanish banking group, has established itself as the most active Spanish financial institution in green bonds in 2016. The Bank manages several large green bond operations for Acciona (Spanish energy utility), Iberdrola (Spanish energy utility), EDF (French energy utility) or Mexico City Airport. The commitment of the Bank to sustainability is part of its Responsible Business Plan.[87]

85 Standard Life Investments YouGov poll (2015) 86
http://www.gruppohera.it/gruppo/investor_relations/politica_finanziaria/emissioni/principali_sottoscrittori_bond/pagina43.html
87 https://accionistaseinversores.bbva.com/TLBB/micros/bbvain2015/en/strategy/responsible-business-plan/

Crédit Agricole, a mutual bank, is the third French bank for capitalisation. In 2010, they created the Sustainable Banking team with the purpose to assist the Bank's clients for environmental and social transactions. The main areas of intervention are green bonds (for EDF, EIB, Engie, Ile de France Region or the World Bank), green notes and impact investment (social bonds).[88]

Intesa Sanpaolo, the first Italian banking group for capitalisation, financed around € 27 billion worth of projects related to the production of renewable energy and geared to energy efficiency, to which the Intesa Sanpaolo Group contributed approximately € 11 billion. In 2016, 3% of Intesa Sanpaolo's total loans to business referred to environmental protection sectors, such as renewable energy, energy efficiency and environmental services, amounting to about € 1.7 billion.[89]

Piraeus Bank, the third largest Greek bank by capitalisation, was the first Greek bank to have an Environmental Management System (EMS), as well as EMAS and ISO environmental standards. Through implementing the co-funded EU LIFE programme, in 2009 the Bank established a Green Banking division to provide green mortgages for energy-efficient houses and green credits for the purchase of photovoltaic panels of efficient appliances. Piraeus Bank also encourages the participation of its employees and the wider public in volunteer actions regarding society, environment and culture through specific programmes.[90]

Ethical Finance

An alternative green finance model is provided by ethical banks. These financial institutions, unlike the traditional financial operators, make the integration of environmental and social responsibility their primary mission. However, it does not mean they are not providing competitive financial returns. A report[91] shows that the world's ethical banks record better performance than the so-called "too big to fail", delivering almost twice the amount of credit in proportion to budget assets (75% versus 40%), while loans are growing faster (+12% versus + 5%). In 2016, the Italian parliament approved a legal national framework to recognise the specificity of ethical banks, which will have tax rebates on reinvested earnings.[92]

Banca Etica,[93] an Italian cooperative bank founded in 1999, proposes ethical banking principles for individuals and businesses. Savings are only invested in projects providing environmental and social benefits. Potentially harmful economic sectors are excluded, such as fossil fuel energy, nuclear power and arms industry; and full loan information is published on the Bank's website to allow public and transparent auditing. Etica Sgr is

88 https://www.ca-cib.com/our-solutions/sustainable-banking

89 http://www.group.intesasanpaolo.com/scriptIsir0/si09/sostenibilita/eng_investimenti_responsabili.jsp#/sostenibilita/eng_wp_sostenibilita.jsp

90 http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3071

91 http://www.gabv.org/news/real-economy-real-returns-continuing-business-case-sustainability-focused-banking

92 http://www.gabv.org/in-the-press/itanlian-public-administration-choose-ethical-sustainable-finance

93 www.bancaetica.it

the Investment Management Company (IMCo) of Banca Popolare Etica, being currently the only Italian IMCo that establishes, promotes and manages mutual funds for sustainable investment. All investments are assessed according to 70 ESG criteria and should be higher than a certain threshold.

Fiare is a Spanish cooperative bank founded in 2005 in collaboration with the Italian Banca Etica. As for Banca Etica, the Fiare credit process is characterised by comprehensive assessment of both economic and non-financial elements (environmental and social impact) with a focus on social welfare, energy efficiency and renewable energy, environment, local farming, international cooperation, fair trade, and socio-cultural education.

Conclusions

Private operators in Mediterranean countries are beginning to develop new instruments and markets for green finance. The growth in the volume of business in recent years could lead to further market development over the medium to long term. However, some barriers must be overcome to allow for the development of the sector. In particular, the variety of certifications and absence of regulations hinder market transparency and increase credibility risks. The priority is therefore to promote the standardisation of green finance practices and enhance access to information.[94]

Starting from good practices developed by the market (PRI, GBP, Climate Bond Standards), intergovernmental organisations such as the EU could implement a public regulatory mechanism at international level to set up "hard law" standards for certification of green financial products, as well as to label and supervise private entities that carry out evaluations and issue certifications (like ESG rating agencies).[95] Clearly, given the complexity of the financial sector and the very wide variety of instruments used from bank deposits to derivative contracts the regulatory process requires a great effort from supranational and national institutions.

94 http://www.g20-insights.org/policy_briefs/fostering-sustainable-global-growth-green-finance-role-g20/

95 https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_es

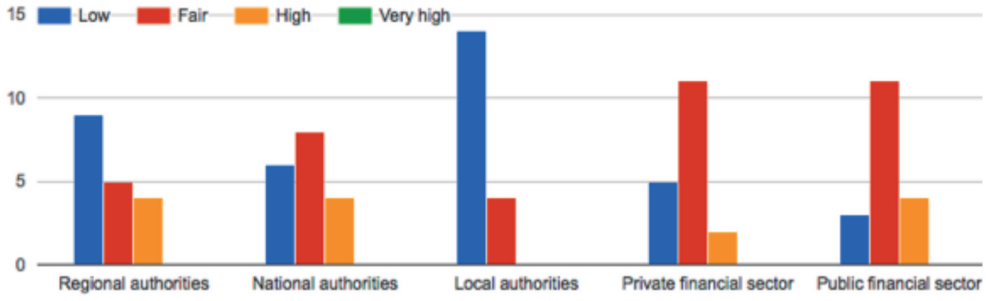
Perceptions from the Sector

This Qualitative Survey has been carried out to obtain a practical idea about the Green and Climate Finance (GCF) perception, strategies and actors in different types of institutions, regions and countries from key international finance experts. We present the main findings, views and ideas extracted from the survey.[96]

Actors and Barriers

Obviously, the financial institutions are largely identified as the main actors to implement GCF in the region at the national level (44% public and private together) and international level (22%). The level of commitment of GCF actors is rather low, particularly at the local and regional level.

Figure 25. Level of Commitment on Green/Climate Finance



Source: Own survey, 2017

The main barriers to green finance identified are the **commitment and awareness** of private (21%) or public authorities (15%), the lack of a national regulatory framework (17%), the inertia of the financial sector (15%) and the poor technical and political capability of policy-makers (13%). The traditional financial sector is seen as rather passive and the lack of a clear framework at national level especially to regulate and promote GCF is highlighted. The will of governments is therefore challenged to be in line with the needs of the Paris Agreement. Governments are under pressure to respect the Paris Agreement.

Main Instruments

Public regulation, environmental policies, green taxes and fiscal policies are considered by most of the experts as the main relevant tools to implement GCF. Innovative financial instruments such as green bonds, guarantees or venture capital

96 As a limited number of answers were received, the results may not be representative.

represent the third most important GCF tool, which is a good sign as it has demonstrated its efficiency.

Key Sectors

According to all participants, **energy** remains the sector where most GCF projects occur, along with the fight against climate change and renewable energy goals. However, we can see that some other sectors are attracting attention, such as **agriculture, housing** and **waste.** There is a real need for mainstreaming of the type of projects in which GCF is developed in order to integrate it in every sector in the future.

General Overview

Finally, most experts believe that the state of GCF in the region is quite weak. In particular, they highlight the **lack of an appropriate national strategy** that could promote and implement green and climate finance in the Mediterranean countries.

Challenges and Recommendations

Challenges

In regard to the assessment described above, a number of challenges to expand the use of green finance by public institutions and private investors have been identified.

Unclear definitions of green finance: The research in literature and documents of the financial institutions show that there is little information available on the definition of green finance, and in general the definition is broad and the detailed criteria are not defined. This lack of conceptualisation makes the assessment problematic as terms are not used consistently and data cannot easily be compared across sources, leading to uncertainty about which projects and investments can be evaluated and labelled as “green” or “climate-friendly”.

Absence of long-term targets: MDBs and other international financial institutions (IFI) have developed green or climate strategies generally in line with the objectives of the Paris Agreement. However, some are more ambitious than others. This lack of long-term vision, strategy and ambition can be problematic as many investments, especially in infrastructure, have long lifetimes. The survey supports the point that financial institutions should engage more, ideally reaching a 100% green (or sustainable) target in the long term.

Inertia of unsustainable investments: Despite the targets set by international agreements, there is still a great portion of investment from public financial institutions, national and supranational, going into the brown economy (such as gas pipelines, coal power plants, highways, etc.). There is a real need for phasing out of the support for the fossil fuel industry in order to reach the objectives of the Paris Agreement.[97]

Short-termism and weak market knowledge: The systemic crises (financial, environmental) in recent years have increased uncertainty about the future, pushing operators to cautious and short-term behaviours, while investment in sustainable projects usually requires a long-term time horizon. The perception or belief of private investors that there will be lower returns with green investment is also a major barrier to promote sustainable criteria.

Lack of transparency and homogeneity: The criteria with which a project is classified as "green" can be considerably different depending on the geographical area, the sector concerned or the subject that classifies it. In addition, the mechanisms for controlling voluntary certifications may not guarantee an adequate level of transparency, thereby undermining investor confidence.

97 https://bankwatch.org/news-media/blog/ebrd-fueling-future-or-stuck-past

Overcoming these criticalities is necessary to foster the development of green finance, especially in the private sector in order to achieve the goals set for climate change and sustainable development.

Recommendations

In regard to the findings described above, a number of recommendations have been determined to tackle the issues identified and to mainstream the use of green finance by public institutions and private investors.

Establish clear definitions for green finance: It is necessary to agree – ideally across all financial institutions – on common, transparent and credible criteria to define green and climate finance. A shared conceptual framework would help standardise financial tools and assessment instruments as well as increase governance, monitoring and transparency processes.

Ensure strong public leadership: Integrating the Paris Agreement's and SDGs' objectives into the financial sector requires strong leadership from the public institutions, in particular IGOs and IFIs. Collaborations between countries and financial actors should be based on a common strategy to reach green finance targets. Stronger international cooperation would also serve to share experience and know-how between financial operators and stakeholders.

Improve reporting and measurement: An open and transparent mechanism of measurement and monitoring of financial flows and its societal impacts is needed at international and national level. A standardised reporting system would unlock green investment flows and improve quality and efficiency of policies and regulations.

Raise awareness and technical capacity: It is crucial to raise environmental awareness and technical capacity of the private financial actors to scale up their involvement in climate and green finance. Innovative green financial tools and good practices should be mainstreamed, in particular the use of guarantees as they "crowd in" private sector resources and partially underwrite risks. It would also be useful to develop the bankability of smaller projects through more flexible and simple tools.

Increase MDB loans and grants to capital ratios: Expanding the loan portfolios to reach at least five to seven times equity would help extend the market size. Grants should also be in line with the "polluter-pays principle" of compensating developing countries

for the damage done by developed countries. They could also be used to leverage larger funding volumes, notably through concessional loans.

Improving regulation: Based on good practices from the market, a regulatory mechanism at international level should be implemented with all relevant stakeholders, including businesses, NGOs and academia. While the implementation of soft law mechanisms for certification of green financial products should be facilitated, the implementation of a hard law framework would provide clear, standardised and controllable criteria for green financial markets, with long-term incentives.

Conclusions

Green finance has clearly become a key part of the fight against climate change and environmental issues as traditional financial activities are not sufficient to implement a new economic model that considers sustainability as a structural element of society. For this reason, the public sector is required, on the one hand, to increase direct public investment in green activities and, on the other, to implement a regulatory system that encourages the involvement of the private sector, including through knowledge sharing, incentives and monitoring mechanisms.

Emerging signals and good practices are already in place in the Mediterranean region. Funding for green projects by public institutions is growing in accordance with international commitment. The growth of climate finance and the green bonds market is creating a sound baseline for the development of green investments. The strong cooperation between national and international institutions, the greater involvement of the private sector and the development of green initiatives in the southern countries will be crucial elements for green finance to increasingly become a structural component of sustainable development in the Mediterranean.

Acknowledgement

This report has been possible with the support of several actors and experts that have reviewed its content and participated to a technical workshop in Barcelona on 25th of May 2017 to validate its recommendations.

- Hussein Abaza, Senior Consultant (former UNEP Green Economy director)
- Mario Aymerich, European Investment Bank
- Majdi Calboussi, Project Officer, WWF North Africa
- Zeynep Cansever, MRV analyst, EBRD
- Nicolas Debaisieux, Climate Change expert, Union for the Mediterranean
- Roderick Egal, Director, IesMed
- Akram El Hosseiny, Environmental Expert
- Greg Ford, Senior Strategic and Policy Advisor, Finance Watch
- Raquel Garcia Monzón, Climate & Energy Officer, WWF Spain
- Maged K. Mahmoud, Senior Expert, Regional Centre for Renewable Energy and energy Efficiency
- Federico Mazza, Climate Finance Analyst, Climate Policy Institute
- Maeve McLynn, Finance and Subsidies Policy Coordinator, CAN Europe
- Luisa Nenci, Founder, SustainValues
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The European Institute of the Mediterranean (IEMed), founded in 1989, is a consortium comprising the Catalan Government, the Spanish Ministry of Foreign Affairs and Cooperation and Barcelona City Council. It incorporates civil society through its Board of Trustees and its Advisory Council formed by Mediterranean universities, companies, organisations and personalities of renowned prestige.

In accordance with the principles of the Euro-Mediterranean Partnership's Barcelona Process, and today with the objectives of the Union for the Mediterranean the aim of the IEMed is to foster actions and projects which contribute to mutual understanding. Exchange and cooperation between the different Mediterranean countries, societies and cultures as well as to promote the progressive construction of a space of peace and stability, shared prosperity and dialogue between cultures and civilisations in the Mediterranean.

Adopting a clear role as a think tank specialised in Mediterranean relations based on a multidisciplinary and networking approach, the IEMed encourages analysis, understanding and cooperation through the organisation of seminars, research projects, debates, conferences and publications, in addition to a broad cultural programme.

eco-union

Eco-union is an independent environmental Think and Do Tank founded in 2005 by a multidisciplinary group of professionals to reflect on the linkage between economy, society and ecology. The non-for-profit association aims to accelerate the transition towards sustainability of the Euro-Mediterranean region through research, advocacy and capacity-building activities. Recent works have been around green and blue economy, urban mobility, responsible tourism, clean energies and sustainable finance, among other issues. + info: www.ecounion.eu <http://www.ecounion.eu>

The MAVA Foundation is a family-led, Swiss-based philanthropic foundation whose mission is to engage in strong partnerships to conserve biodiversity for future generations