

Tracking and enhancing international private climate finance in the Southern-Mediterranean Region





Follow the UfM Secretariat on:

ufmsecretariat

@UfMSecretariat

union-for-the-mediterranean

22nd of January 2019 - reviewed 18/02/19

Commissioned by:

Secretariat of the Union for the Mediterranean Palacio de Pedralbes Calle Pere Duran Farell, 11 08034 Barcelona, Spain



Submitted by:

eco-union c/Palau 4 08002 Barcelona, Spain www.ecounion.eu

With financial support from:



Authors:

Contents

Contents	4
Glossary	6
Executive summary	2
Introduction	3
Limitations	4
Review of existing guidelines and methodologies	5
Introduction	5
Methodologies set forth by the OECD	5
Methodologies and Guidelines within the UNFCCC umbrella	8
Methodology developed by Multilateral Development Banks	12
Methodology by Bloomberg New Energy Finance (BNEF)	13
Methodology used by the CPI	14
Climate finance studies within the SEMed region	15
Method used by an ONG: the example of Oxfam	17
Conclusion	18
Identification and review of economic databases	20
Overview	20
Public databases	21
	24
Commercial databases	24
National central banks	26
Sectoral business associations	29
Data from non-governmental organisations	31
Conclusion	33
Relevant data extraction for years 2016 and 2017	33
Data concerning international private investments on renewable energy projects	33
OECD DAC data	37

Assessments of the outcomes	39
Analysis of the extracted data	39
Assessment of tracking finance methodologies	41
Barriers to mainstream private climate finance	42
Barriers to involve the private sector	42
Conclusions	46
Recommendations	48
Tracking Private Climate Finance	48
Mobilising Private Climate Finance	49
Conclusions	50

Glossary

AAF	African Agriculture Fund;	IM	Institut de la Méditerranée;
BFIs	Bilateral Financial Institutions;	Invest	cash flow analysis;
BNEF	Bloomberg New Energy Finance;	IRENA	International Renewable Energy Agency;
CDP	Carbon Disclosure Project;	LTIA	Long Term Infrastructure Investors Association;
CF	Climate-related Finance;	MDBs	Multilateral Development Banks;
CFU	Climate Funds Update;	NAICS	North American Industry
CIVs	Collective Investment Vehicles;		Classification System;
Consult	Consultations;	ODA	Official Development Assistance;
COP	Conference of the Parties;	ODF	Official Development Finance;
CPI	Climate Policy Initiative;	ODI	Overseas Development Institute;
CRS	Creditor Reporting System;	OECD	Organisation for Economic Co-operation
DAC	Development Assistance Committee;		and Development;
DFIs	Development Finance Institutions;	OME	Mediterranean Observatory for Energy;
Econ	Econometric techniques;	PE	Private Enterprises;
EE	Energy efficiency;	PF	Private Finance;
EDF EN	EDF Energies Nouvelles;	RCFC	Regional Climate Finance Committee for Climate Action;
ERF	Economic Research Forum;	RE	Renewable Energy;
FDI	Foreign Direct Investment;	SCF	Standing Committee on Finance;
FRV	Fotowatio Renewable Ventures;	SEI	Sumitomo Electric Industries;
FT	Financial Times;	SEMed	Southern and Eastern Mediterranean;
FTSE	Financial Times Stock Exchange group;	SME	Small and Medium Enterprises;
GABC	Global Alliance for Buildings and Construction:	SOEs	State-Owned Enterprises;
GBP	Climate Bond Principles;	UAE	United Arab Emirates;
GCF	Green Climate Fund;	UfM	Union for the Mediterranean;
GE	General Electric:	UNCTAD	United Nations Conference on
	,		Trade and Development;
GEF	Green Environmental Facility;	UNFCC	United Nations Framework Convention on Climate Change;
ICB	Industry Classification Benchmark;	110.4	•
ISIC	International Standard Industrial Classification system;	USA	United States of America;
IEA	International Energy Agency;	VE	Venture capitals;

Executive summary

In the global commitment to fight climate change, the involvement of the private sector is critical to increase the amount of financial flows into mitigation and adaptation projects, particularly necessary in the MENA countries. However, the current lack of data concerning international private climate finance is a significant obstacle for fully capturing the state of total climate finance in the MENA region, and therefore limits the ability of governments to make informed choices in their attempts of scaling up climate finance. This study aims at providing a better understanding of the required steps for achieving a complete picture of international private climate finance flows in the MENA region, by assessing the opportunities and limitations of the available data and methodologies, as well as laying out the current barriers for tracking and mobilising international private climate finance in the region. Hence, its leads to concrete recommendations for tracking and attracting international private climate-related investments.

Unfortunately, the existing guidelines and methodologies for estimating international private climate finance set forth by the OECD, the UNFCCC, Multilateral Development Banks (MDBs), Bloomberg, or the Climate Policy Initiative (CPI), among other main climate finance actors, are either complex to implement (requiring project based data difficult to obtain); use subjective proxies, hypothesis or estimations; or lack transparency, exhaustiveness and consistency (commercial, private or national sources). Potential databases tracking and estimating international private climate finance at national or regional level are currently coming mainly from public and commercial sources, as well as from national central banks, sectoral business associations, and NGOs. In general, there are not offering a reliable, comprehensive and transparent data on international private climate finance. The OECD DAC appears to be today the only public database that can be used within a robust methodology to estimate mobilised private finance by Official Development Aid (ODA) from OECD countries. On the other hand, commercial databases provide detailed data on private finance but fall short in capturing investments beyond renewable energy (RE).

Foreign Direct Investments (FDI) on renewable energy projects in Egypt, Morocco, Turkey, and Jordan for the years 2016 and 2017 were analysed to give insights on the international climate finance trends in the MENA region. The data illustrates that RE projects are attracting a considerable amount of foreign private investment. In terms of amount of financial flows, the data records a total of \$8960 million in financing, of which \$4480 million (50%) were invested in solar farms, \$3731 million (42%) in wind farms, \$467 million

(5%) in a geothermal project, and \$281 million (3%) in hydroelectric projects. Although solar projects receive most of the private investments, data on more countries would be needed to see if this is a pattern for the whole of the SEMed region. In sum, the data shows that **Turkey** is a major recipient of international private investment in RE projects, followed by **Egypt, Morocco, and Jordan**. Nevertheless, the data also shows that there are significant **data gaps** that the database providers cover with broad estimations. Concerning, the **OECD** data, once the financial instruments are all identified within upcoming OECD DAC surveys, pro rata methodologies can be used to estimate mobilised private climate finance from public bodies that report to the OECD. In all, even if commercial databases improve the quality of their data, and the OECD DAC or the UNFCCC further develop their guidelines for estimating private finance mobilisation, the methodologies will continue to miss a significant portion of climate-related investments, especially concerning adaptation in non-energy sectors.

While looking at raising international private climate finance in the MENA region, essential **regulatory barriers** remain today the lack of **stringent climate national legislation** and the continued support to carbon-intensive industries through **fossil fuel subsidies**. Furthermore, **inadequate development planning**, **lack of public-private dialogue and poor business-support mechanisms** result in inefficient, insufficient and unbalanced engagement of the private sector. Concerning **financial barriers**, the unachieved **regional integration** and the lack of **green financial instruments** slow down the emergence of international private finance at the scale needed. Regarding **technical barriers**, the unmatured taxonomy of green and climate finance activities, such as green loans and green assets, represents an obstacle for tracking climate finance. Most importantly, the current **absence of reporting** on private climate finance at national/regional level and an **unharmonized standard tracking system** makes it difficult to estimate the current state of international private climate finance, and therefore further complicates any effort of upscaling private-investment in climate-related activities. Furthermore, Small and Medium Enterprises (SMEs) developing a climate-related project often lack the **technical knowledge** to attract international private finance.

As a set of recommendations on improving tracking and attracting more international private climate finance in the MENA region, we believe that governments should **support investors to report** on their climate-related investments. MENA governments could facilitate **harmonisation and systematisation mechanisms** anticipating the development of a future, internationally agreed tracking system at global level. For instance, national agencies could identify FDIs that are climate-related. Another step would also be to develop **indicators** that measure the amount of funding that benefits **local actors**. The launch of thematic or sectorial **field experiments** could be combined with more political **business & climate coalitions** to engage and give visibility to the targeted actions and initiatives, either at Mediterranean, MENA region or national/local levels. Furthermore, MENA countries should engage with **climate-friendly international investor groups** that call for stringent climate policies and an adequate political support among other measures to offer stable and predictable markets conditions for international investment into climate projects.

Introduction

This study provides an overview of the available data for estimating international private climate financial flows to the Southern and Eastern Mediterranean (SEMed). It complements the previous UfM Climate Finance studies focused on international public climate finance, developed in the framework of the UfM Ministerial Declaration on Environment and Climate Change in 2014 where UfM Member States expressed their desire for increased cooperation, through the Regional Climate Finance Committee for Climate Action (RCFC).

The current data limitations concerning international private climate finance are a significant obstacle for fully capturing the state of total climate finance in the SEMed region, and therefore limits the ability of governments to make informed choices in their attemps of scaling up climate finance. However, this study aims at providing a better understanding of the required steps for achieving a complete picture of international private climate finance flows in the SEMed region. It does this by assessing the opportunities and limitations of the available data and methodologies, as well as laying out the current barriers for tracking and mobilising international private climate finance in the region. Hence, leading to concrete recommendations for tracking and attracting international private climate-related investments.

Limitations

While we strongly support the need for an assessment concerning international private climate finance, we would like to manage expectations in the sense that within this project data and information were not easily available. This issue is highlighted by OECD¹ and the *UNFCCC Biennial Assessment and Overview of Climate Finance* flows.

Free public databases are lacking details and accuracy to interpret, while private databases are rather expensive and limited to particular sectors/projects (large renewable energy facilities) or specific financial flows (such as FDIs). Also, the data gathered by national governments or statistics agencies are either not published, partial, inconsistent or outdated. One of the outcomes of this report is to identify and recommend methodologies to realise overviews of international private climate finance in the targeted countries.

¹ Caruso, R. and R. Jachnik (2014), "Exploring Potential Data Sources for Estimating Private Climate Finance", OECD Environment Working Papers, No. 69, OECD.

Review of existing guidelines and methodologies

Introduction

There is currently no standardised methodology to estimate international private climate finance. The limitations on the relevant databases for both tracking private investments and climate-related investments (discussed in the following chapter), has forced a wide-range of relevant actors to come up with different methodologies on estimating international private climate finance. Due to the lack of consensus on the parameters that compose climate-related private investments (e.g., the boundaries of climate finance, the definition of private, and so forth) the scope of the methods focus on different variables and have, therefore, varying limitations of measurement. For this chapter, a literature review was undertaken to assess the methodologies created by distinct organisations, such as UNFCCC, OECD, or CPI. Furthermore, its current and future relevance for the targeted countries were also evaluated.

Methodologies set forth by the OECD

The OECD Development Assistance Committee (DAC) has been at the forefront for developing methodologies on estimating publicly-mobilised private climate finance in developing countries, either (i) private finance mobilised directly by public finance or (ii) private finance mobilised by capacity building.

Private finance mobilised by public finance

Description

This method aims to estimate the amount of private climate finance developed by Official Development Finance (ODF) from public bodies reporting to the OECD DAC, such as Bilateral Financial Institutions (BFIs) and Multilateral Development Banks (MDBs). The OECD DAC has so far developed pro rata methods for syndicated loans, developmental guarantees, shares in collective investment vehicles (CIVs), direct investments in companies and credit lines.

Sources

- OECD DAC CRS (Creditor Reporting System) database;
- OECD DAC surveys to the reporting BFIs, MDBs, and other financial bodies;
- Project-level data from the database of the reporting financial bodies.

Methodology

The OECD gathers the investments related to mitigation and adaptation reported with the DAC Rio markers². Private finance is attributed to all public finance providers to a project in order to minimise double counting. Furthermore, the OECD DAC CRS surveys are used to identify the specific financial instruments provided by the ODF. The latest questionnaire was conducted in 2016 and concerns 2012-2015 financial flows. Additional project level data can be used to gain further insight into co-financing. Finally, once the financial instruments have been identified at the activity-level, the attribution of mobilised private finance is calculated for each type of instrument, using pro-rata methods. These estimations assume that investors would not participate in the project without public involvement.³

Limitations

As mentioned earlier attribution methods are so far limited to syndicated loans, developmental guarantees, shares in collective investment vehicles (CIVs), direct investments in companies and credit lines. However, the OECD DAC is developing methods for estimating attribution for grants, stand-alone loans and other instruments. Nevertheless, this method does not capture investments that are independent of Official Development Finance reported to the OECD DAC. Hence, mobilisation provided by national development banks and other public finance without a developmental agenda remains out of the scope of this method.

Relevance for the present study

Additional information on financial instruments is required to estimate mobilised private finance for the targeted countries. Hence, upcoming OECD DAC surveys to the public financial providers may facilitate the estimation of mobilised private climate finance in the SEMed region. However, given the current data limitations and the workload required for calculating mobilisation, this scoping study is limited to assessing the feasibility of estimating mobilisation in the SEMed region (see chapter six).

² Rio markers are a scoring system in which development co-operation activities are "marked" as targeting the environment or the Rio Conventions as the "principal" objective or a "significant" objective, or as not targeting the objective. http://www.oecd.org/dac/environment-development/rioconventions.htm

³ For summary see: <u>https://prezi.com/f8hfahbjrkom/dac-work-on-mobilisation-web/</u>

Estimating the effect of capacity building and policies on private finance

Description

The OECD DAC has been working on additional methods to capture the data gaps present in estimating mobilised private finance directly from public finance, through three types of approaches:

- cash flow analysis (Invest);
- consultations (Consult);
- econometric techniques (Econ).

Sources

OECD DAC, donor, and other databases; surveys and interviews; broader country and project-level data.

Methodology

Invest

This method requires data on financial structures of individual projects and on the value of financial support provided by targeted policies. It assumes public interventions as face value for one-off project-level cofinance, and discounts present value for policies providing recurrent support. This method also assumes that private finance is mobilised by both, project-level public co-finance and support from policies. Furthermore, to estimate the attribution of private finance it uses a pro-rata calculation based on volume.

Consult

This method is a consultation-based approach. Theoretically, it can account for all types of public interventions and instruments, and the valuation of relies on the subjective perception of the respondents to the consultation. The consultations are usually directed at the project level. This method assumes that mobilisation of private finance derives from a mix of public policies, co-finance, and enabling conditions. In contrast to the other methods, attribution of mobilisation is estimated from the opinions of the consultees.

Econ

The econometric-based approach uses mathematical and statistical techniques to estimate partial correlations between private finance and various factors related to public interventions. The scope of this method depends on the different type of data available. Nevertheless, this method does not actually estimate attribution of private finance, but an indication of the relation between private finance and public interventions.

Limitations

The Invest and the Consult approach require tedious and significant work at the project level. Furthermore, as conditions vary significantly from project to project, results in one project cannot be extrapolated to other projects in order to make rough estimations. On the other hand, the Econ approach does not specifically calculate a value of mobilised private finance.

Relevance for the present study

These methods require capabilities that exceed the possibilities for this study. However, they are interesting methods to consider for future assessments of private climate finance within the targeted countries.

Methodologies and Guidelines within the UNFCCC umbrella

The UNFCCC biennial reporting guidelines recommend annex II parties to report on private climate finance where ever possible and feasible. However, few countries have reported on private financial flows, and some have manifested the difficulty in solving the barriers, such as the definition of private, the attribution, and the causality; as well as the lack of data. The UNFCCC's 2018 report, *Biennial Assessment and Overview of Climate Finance Flows*, records different methods apart from those set forth by the OECD DAC explained above, which aim to estimate mobilised private finance and estimating broader climate-related private investment by sector.

Tracking private climate finance mobilized through the Green Environmental Fund

Description

The Green Environmental Facility (GEF), a fund of the UNFCCC's Financial Mechanism, gathers information on the complete financial picture of the projects it funds. The GEF recommends agencies recipient countries and executing partners to collaborate in the monitoring and reporting of any co-financing activities for GEF-financed projects.⁴

Sources

Donor and project-level reporting.

⁴ The methodology is not detailed, though more information can be found in https://www.theaef.org/sites/default/files/documents/Cofinancing Guidelines.pdf

Methodology

Direct reporting to the GEF from the funders and the recipients.

Limitations

This method is limited to GEF projects.

Relevance for the present study

Information on GEF projects may provide additional information useful for the study, but cannot be a primary method. Furthermore, it does not provide methodological insight for estimating private climate finance more broadly.

Methods for tracking broader climate-related private finance

Description

- Climate-related foreign direct investment (FDI) flows:
 - Tracking FDIs and investment in Renewable Energy (RE) have been the traditional method for estimating private climate finance.
- Energy efficiency (EE) investment developed by the International Energy Agency (IEA):

For the 2013 data of the 2016 UNFCCC Biennial Assessment, the IEA estimated investments in energy efficiency based on changes in energy intensity in major economies and the weighted average price for global energy. It estimated global investments in EE, by multiplying the change in energy intensity by the average price.⁵

Sources

FDI flows and RE investments can be tracked with commercial databases. Energy intensity can be tracked with different country-level and international databases, such as IRENA.

Methodologies

⁵ UNFCCC Standing Committee on Finance (2018) 2018 Biennial Assessment and Overview of Climate Finance Flows Technical Report, p.39

Tracking private FDI flows and investments in RE may differ according to the database (see following chapters). In the 2016 UNFCCC Biennial Assessment, the IEA estimated global investments in EE, by multiplying the change in energy intensity by the average price.⁶

Limitations

Despite the extensive data gaps and limited scope of measurement, FDI's and RE investments are currently the most practical method for estimating international climate private finance. However, this method misses a significant amount of climate-related financing due to the broadness of the classification systems of the sources. On the other hand, the IEA method tracks global investment, and it is not country-specific.

Relevance for the present study

Data on FDI and RE investments may be a feasible method for roughly estimating international private climate finance for this study. However, this method requires access to commercial databases, and thus due to budgetary constraints, estimations may be limited to a few countries.

Outcomes of COP24: The Paris Rulebook

At COP 24 the parties decided on the general terms of communicating the obligations of Article 9 related to climate finance. While developing countries are only encouraged to provide information on climate finance voluntarily, developed countries are obliged to biennially communicate quantitative and qualitative data relevant to Article 9(1) and (3).

Concerning climate finance in general, the information should include:⁷

- Information on relevant methodologies used to project levels of finance; information on challenges and barriers encountered;
- Information on channels and instruments;
- information on recipients, targeted groups, sectors, and gender responsiveness;
- Information on types of support: adaptation, mitigation, technology transfer and capacity building;
- Information on the factors that providers of climate finance look for in evaluating proposals, in order to help to inform developing countries;
- Information on how Parties are ensuring a balance between finance directed to mitigation and adaptation.

⁷ UNFCCC (2018) Proposal by the President Informal compilation of L-documents (hereinafter: Paris Rulebook) (Version 15/12/2018 19:27), VI, Annex, p.47.

Regarding specifically private climate finance, the information should include:⁸

• Information on plans to mobilize additional climate finance, including on the relationship between public interventions and the private finance mobilized.

Furthermore, the Rulebook obliges developed countries to provide information laying out assumptions, methods, and definitions, including:9

- How double counting between multiple Parties involved in the mobilization of private finance through public interventions was avoided;
- Information on methodologies and assumptions used to attribute the mobilized investments through public interventions, if possible relative to the type of instrument used for the mobilization;
- Information on how finance is attributed between multiple recipient countries, in cases where a project involves multiple recipient countries and where this information is reported on a countryby-country basis;
- The definition of public and private finance, especially where entities or funds are mixed;
- Information on how private finance was assessed as mobilized through public interventions, including on clear causal links between public interventions and mobilized private finance, where the activities would not have taken place in the absence of the Party's interventions.
- Information on the point of measurement (e.g. point of commitment, point of disbursement) of the private finance mobilized by the public intervention, to the extent possible in relation to the type of instrument or mechanism used for the mobilization;
- Information on the assumed boundaries of mobilised finance.
- All information on amounts mobilised shall be in United States dollars and domestic currency, with the face value and, on a voluntary basis, the grant-equivalent value;¹⁰

In addition, regarding Article 10, on technology transfer, the Rulebook requires quantitative and qualitative information on support for technology development and transfer, including whether an activity is undertaken by the public and/or private sector. 11

In all, the Paris Rulebook establishes climate finance reporting requirements mandatory for developed countries and voluntary for developing countries. This information will provide useful information on the methodologies used for estimating mobilised finance by public interventions, though it does not establish a standardised methodology. Hence, future decisions should attempt to agree on a standard methodology for

⁸ ibid.

⁹ ibid, p.84.

¹⁰ ibid, p.85.

¹¹ ibid, p.87.

accounting mobilised finance from public interventions, as well as to further agree on a standard method to estimate total private climate finance, including private climate finance targeting adaptation.

Methodology developed by Multilateral Development Banks

The report Joint MDB reporting on private investment mobilization: methodology reference quide12 (April 2017) explains how the MDB Task Force calculates private investment mobilised by MDBs and DFIs.

Description

This methodology assesses mobilised private financed by an MDB on a project-by-project base. Hence, as with the OECD method, the scope misses any mobilisation non-related to public financing. The sources included in this method is the commitments of the MDBs and the private-cofinancing. Private-co-financing can be 'Private Direct Mobilisation,' which involves private investment due to the active involvement of an MDB, or 'Private Indirect Mobilisation,' which is private financing in connection to a project for which an MDB also provides finance. This method includes all financial instruments, which may be as both private direct mobilisation and indirect depending on the specific project.

Sources

Databases from the MDBs, as well as additional project-level data.

Methodology

Once the financial instruments have been identified, attribution methods vary for estimating private cofinancing, private direct mobilisation, and private indirect mobilisation.

- For estimating private co-financing, a pro rata formula is used to calculate the percentage of cofinance attributed to the countries of a region. The formula depends on the income group of the countries (low-income countries, middle-income countries).
- For estimating private direct mobilisation, mobilisation is attributed at its full value, minus any adjustments in the case of guarantees or URTs.
- Private indirect mobilisation is attributed on a prorated basis, in relation to the reporting MDB's share of all commitments attributed to all MDBs in an activity.

¹² World Bank (2017) Joint MDB reporting on private investment mobilization: methodology reference guide.

Limitations

Similar to the OECD DAC method, estimating mobilisation misses on any private finance mobilised by development bodies that do not report to the OECD DAC. On the other hand, this method does distinguish between direct and indirect mobilisation and does cover all instruments. However, this approach does require more work capacity to conduct the estimations.

Relevance for the present study

While this method can be applied for this study, the OECD DAC method on private climate finance mobilised by Official Development Finance seems more appropriate to test in relation to the work and budget capacities for this scoping study.

Methodology by Bloomberg New Energy Finance (BNEF)

Description

BNEF, like other commercial databases, tracks project-level data on RE investment, and to a certain degree, investments in energy efficiency and electric vehicles market. Most of the recorded projects are within the G20 countries, though it includes projects in other countries. The cost of the subscription is around \$25,000 per year.

Sources

Multiple corporate sources.

Methodology

Regarding RE it only accounts for projects above a certain size. Furthermore, it estimated the value of undisclosed investments based on similar transactions in relation to the technology and country. Concerning energy efficiency, it only accounts for the limited number of identifiable investments. Furthermore, it does not conduct systematic quality assessments of the data. In sum, there is a lack of methodological transparency regarding methods for estimations used where data is not available.

Limitations

BNEF database is expensive with very limited capture of climate finance beyond RE investments, significant data gaps which are complemented with estimations that lack methodological transparency.

Relevance for the present study

Commercial databases, such as BNEF, can be an essential source for providing insight into private climate finance. However, due to budgetary constraints, commercial databases may be consulted for a limited number of countries.

Methodology used by the CPI

Description

The Global Landscape of Climate Finance¹³ is an annual report on the state of climate finance published by the CPI. Nevertheless, its data on private climate finance derives mostly from BNEF data. Specifically, it provides estimations on annual regional data for both public and private data up to the year 2016.

Sources

- Bloomberg New Energy Finance (BNEF) (commercial database);
- Other sources: Weiss (2017) regarding installed capacity in 2015 and 2016;
- REN21 (2015) for "system capital costs."

¹³ Buchner, B. et al. (2017) Global Landscape of Climate Finance 2017. Climate Policy Initiative. Retrieved from: https://climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2017/.

Methodology

Steps adopted to estimate private climate finance:

- Analysis of financing data on nearly 8000 large-scale RE projects within the BNEF database;
- Accounted for small-scale RE projects using the BNEF database;
- Estimation of "Households, corporates, and governments' investments in solar heating systems" based on Weiss et al. (2017) and REN21 (2015). For 2016, total estimated additions for 2016 from Weiss et al. (2017) were broken down by the 2015 segment proportions. Estimates for 2015 and 2016 were \$15 billion and \$13 billion, lower than 2014's estimate of \$18 billion.
- To ensure figures are conservative and to avoid double counting with asset finance projects tracked through the BNEF project-level data analysis, they assumed the lower bound of SHS capital costs.

Limitations

Due to data limitations as well as methodological and definitional issues, the Landscape report treats partially or fully state-owned enterprises (SOEs) as private entities. Private climate finance only covers RE projects (hence mostly mitigation).

Relevance for the present study

The access to the database used for this study (BNEF) is over our budget. Furthermore, the scope is fairly limited to RE investments.

Climate finance studies within the SEMed region

The 2017 UfM climate finance study on the SEMed region¹⁴ is the first study of its kind for the targeted region. Although it is covering only international public finance, it is interesting to review its methodology and its potential relevance to estimate related private finance.

Description

This study focuses on public finance within the SEMed region: Albania, Algeria, B&H, Egypt, Israel, Jordan, Lebanon, Mauritania, Montenegro, Morocco, Palestine, Tunisia, and Turkey, as well as (to the extent possible) Libya and Syria.

¹⁴ Midgley, A. et al. (2017) Climate Finance Study. Union for the Mediterranean. Retrieved from: https://ufmsecretariat.org/wpcontent/uploads/2017/11/UfM-Climate-Finance-Study.pdf.

Sources

Data from bilateral and multilateral donors, as well as 57 additional climate funds, programmes and initiatives from public and private donors, which form part of the OECD Climate Fund Inventory. OECD DAC, CFU, and donor databases were also consulted. In addition, questionnaires and interviews were conducted.

Methodology

- Phase 1: Assessment of all relevant climate funds identified in OECD Climate Fund Inventory Report. Furthermore, information was gathered from the Climate Funds Update (CFU) database (CFU, 2016) and donor websites, databases, annual reports and related documentation. Questionnaires were sent to donors to gather more accurate information on their climate finance tracking records and climate finance definitions. Where possible, this was followed by interviews confirming the details of the projects.
- Phase 2: An extended assessment was undertaken to bridge the gaps in public records and the lack of initial response to questionnaires during the first phase. Data accuracy was verified through a comparison with aggregates from the 2016 annual MDB Climate Finance Report, historical trends from the OECD DAC database; and information provided by donors directly, during interviews. For this purpose, a total of nearly 70 stakeholders and institutions were contacted via email and telephone.

The finance was classified as:

- Purpose of funding (mitigation, adaptation)
- Financial instruments used (i.e. grants, loans and grant/loan combinations) b)
- Type of project (i.e. "hard" infrastructural projects or "soft" funding for capacity building, credit lines, technical assistance or readiness support.
- Nature of the beneficiary (i.e. finance provided to public or private entities). Finally, a broad analysis of climate finance reporting and tracking procedures was conducted. An assessment of the eligibility criteria of selected IFI's and donors that were found to be relevant in the SEMed region (Annex I) complemented the analysis. Overall, the data collected in this assignment provide only a snapshot of climate finance to the region.

Relevance for the present study

While the databases and methods, such as conducting questionnaires and interviews, are useful, this study does not provide, logically since it as not its goal, insight on how to estimate mobilisation of private climate finance from public finance. However, this study is an appropriate starting point, as international public climate finance is a main driver to attract private investments.

Method used by an ONG: the example of Oxfam

The Climate finance shadow report 2018: Assessing progress towards the \$100 billion commitment¹⁵ offers an assessment of the different reported investments in adaptation and mitigation action made in order to reach the \$100bn goal. Given its focus on the latest donor figures for 2015-16 and more specifically the public sector, it is pertinent to review their methodology.

Description

This 2018 Oxfam report assesses the progress towards the \$100bn goal, the origin of the money invested, the main destinations concerned, the main sectors receiving the funds, and the manners by which the donors are counting the finance they report. It also offers a set of recommendations about the most efficient ways to report and account for investments depending on their source and type.

Sources

This report bases its assessment on combined data from the main OECD reports about bilateral and multilateral donors, private and public donors and other external development green finance statistics. The report also assesses the data of the UNFCCC Standing Committee on Finance's (SCF) first, second and third biennial reports. Furthermore, it treats the collected analysed statistics through Common Tabular Format tables.

Methodology

- Measuring the difference between what donors report and net climate-specific assistance.
 - Phase 1: The report calculates the net climate specific assistance by estimating the grant equivalent of the loans and other non-grant instruments, instead of their full face value, using donor averages for concessional Official Development Assistance (ODA) loans in 2015-16. These estimates count grants at 100% and non-concessional instruments at 0%. Due to inconsistent data, concessional instruments other than grants are counted in line with each country's average grant element of ODA loans in 2015-16 as reported to the OECD.
 - Phase 2: For projects covering only partially climate action (taking place in the context of broader development projects), Oxfam assumes 20% of the full project value at the lower end of their estimates, and 50% at the higher end. This allows to alleviate the lack of rigour and overstated funds of the Rio Marker methodology.

¹⁵ Oxfam (2018). Climate Finance Shadow Report 2018. Available at: https://www.oxfam.org/en/research/climate-finance-shadow-report-2018.

- Phase 3: These estimate of net climate-specific assistance, based on OECD reported figures, are then compared to reported bilateral finance in biennial reports to the UNFCCC, that can include funds that are not reported to the OECD.
- **Recommendation:** Reach an agreement on the rules and accounting standards in order to reflect the real value of climate finance to developing countries: report the grant equivalent of non-grant instruments and count 'net climate-specific assistance' in their climate finance reports to the UN Framework Convention on Climate Change to better reflect the climate-relevance of provided funds.

Relevance for the present study

While the databases and methods used to measure and account for gaps in climate finance estimations are useful, this study does not provide insight on how to estimate mobilisation of private climate finance from public finance.

Conclusion

Given that no agreement has been reached on precise definition of the different types of climate finance in respect to their sources, there is no harmonised system for estimating and accounting private climate finance. Therefore, each of the assessed methodologies refers to a certain definition of what it considers as



private climate finance, on top of the different methods and instruments used to evaluate flows and stocks. While some distinguish between private finance mobilised directly by public finance and private finance mobilised by capacity building, others do not or only consider RE projects as private climate finance. It seems that in each case, the methodologies used cover only partially private climate finance estimations making different databases and methods difficult to compare and merge.

Identification and review of economic databases

Overview

We have identified and assessed the quality, consistency and availability of different public and private database on private international climate finance flows, including World Bank, UNCTAD, Climate Policy Initiative, Bloomberg, FT, among others. We have tried to evaluate its current and future relevance for the targeted countries. We have also screened the information published by national agencies from targeted countries in charge of monitoring international or climate finance to have an overview of the kind of data they could provide at present or in the near future.

Most databases on economic flows use three different classification systems:

- The International Standard Industrial Classification system (ISIC), developed by the United Nations Statistics Division.
- The Industry Classification Benchmark (ICB), a proprietary standard initially developed by the Dow Jones and FTSE, both stock-market indexing firms, and used for example by commercial data providers such as Thomson Reuters (ICB, 2010).
- The North American Industry Classification System (NAICS), an international standard developed and used for national official statistics by Canada, Mexico, and the United States, as well as used by various commercial data providers such as Dealogic, FactSet, and Thomson Reuters (NAICS, 2012).

These classification systems, as well as non-standard classification systems, are made to track economic activity at large, and thus are too broad to identify private finance, needless to mention private climate finance. Therefore, the challenge is twofold: to determine the climate-related investment within the sectoral categories embedded within the classification system, and; as databases often report total finance, disaggregating the private finance from public finance.

Climate finance goes well beyond renewable energy (RE), it embarks all sectors. However, these systems are not specific enough to capture the financial flows related to all mitigation and adaptation activities. Even within climate-related sectors, it is unclear where to establish the boundaries of climate finance. For

instance, it may be imprecise to include all categories regarding the manufacturing, research, and retail trade of RE as climate finance.16

Delimiting boundaries is even more complicated concerning adaptation. When identifying potential climate adaptation-related sectors, such as concerning water, it is difficult to assess which activities are related to adaptation as, depending on the location and project specifications, the same activity regarding water can both improve or worsen the climate resilience of the environment.¹⁷

However, commercial and public databases often contain one or more standard classification system that enables mapping activities within different classification systems. Hence, potentially, similar data, such as project-level data, could be contrasted with other databases to gain additional information. 18 Furthermore, as the investments of an institution may fall within the scope of more than one sector codes, summing up all the values would likely lead to double counting. 19

Public databases

Most of the reviewed public databases lack separate information concerning private finance. The few exceptions are not practical for tracking climate finance or are outdated, such as the WB-PPI RE, which records data on private investment in RE up to 2012. Out of all the reviewed public databases, the OECD DAC is the one that can be used within a methodology to estimate mobilised private finance by public finance from OECD countries. Hence, using OECD DAC would result in not capturing private investments in projects that have received public funding from bodies that do not report to the OECD DAC, such as relevant regional MDBs—like the Islamic Development Bank (IDB) and the African Development Bank (AfDB)—as well as national central banks from the SEMed countries. Though, the other public databases are too general to use for the elaboration of an estimation of private finance.

The OECD DAC database contains bilateral commitment data on aid in support of climate change mitigation and climate change adaptation, as well as environmental sustainability and desertification. However, as OECD DAC members can mark investments as related to both mitigation and adaptation, adding the total of both would lead to double counting. Most databases allow for querying based on the primary sector code, determined based on importance or revenue generated, or all sector codes assigned to that actor. This can

¹⁶ see Caruso, R. and R. Jachnik (footnote n. 1) p.19.

¹⁷ ibid, 23.

¹⁸ ibid, 22.

¹⁹ ibid, 23.

mean that the same actor, as well as its associated investments, may appear in multiple sectors, which would need to be reconciled if aggregating data across sectors to avoid or at least minimise double counting.

The OECD's Research Collaborative on Tracking Private Climate Finance has so far developed methodologies to estimate mobilised private finance from the following instruments: public guarantees, syndicated loans, shares in collectives investment vehicles, direct investment in companies, and credit lines. With their latest survey to OECD DAC members, they have calculated mobilised private finance for each instrument from 2012 to 2015, of which 81% went to mitigation, 3% to adaptation, and 16% to both.²⁰

Table 1: Review of public databases on international financial flows

Data bases	Relevant	Country-	Sector-	Private-	Climate-	Years	Comments
	data	level	level	specific	specific		
UNCTAD ²¹	FDI	Yes	No	No	No	2016-17	No private finance
							No data for Libya and
							Syria
OECD-FDI ²²	FDI	Yes	No	No	No	until	Data only until 2013
						2013	
WB-PPI RE ²³	Private	Yes	No	Yes	Yes	2012	Data only until 2012
	investment in						
	RE						
UNFCCC CDM	Investment in	yes	No	No	Yes	2016-17	Mostly public finance,
pipeline ²⁴	CDM projects						no separated data on
	in host						private finance. See
	countries						Excel of CDM pipeline
OECD-DAC ²⁵	Private	Yes	NO	Yes	NO	2016-17	No sectoral nor climate
(Section: "Flows	investment						tracker
by provider and	from donor						
recipient":	to recipient						
"Private direct							
investment"							
OECD-DAC ²⁶	Investment in	Yes	Yes	NO	YES	2016	Does not show private
("Aid activities	climate						finance; No data for
targeting Global	change						2017.
Environmental	mitigation						
Objectives")							

²⁰ OECD (2017). Private finance for climate action: estimating the effects of public interventions. Policy perspective, OECD Research Collaborative on Tracking Private Climate Finance.

²¹ http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?IF ActivePath=P,5&sCS ChosenLang=en

²² https://stats.oecd.org/Index.aspx?DatasetCode=FDI FLOW INDUSTRY

²³ http://ppi-re.worldbank.org/data

²⁴ http://cdmpipeline.org

²⁵ https://stats.oecd.org/Index.aspx?DataSetCode=RIOMARKERS

²⁶ https://stats.oecd.org/Index.aspx?DataSetCode=RIOMARKERS; see also the related "Climate-related development finance data visualisation portal: http://www.oecd.org/dac/financing-sustainable-development/development-finance-topics/climate-change.htm

	and adaptation						
OECD-DAC CRS ²⁷ "Creditor Reporting System"	Private finance to climate relevant sectors (also selectable: public finance)	Yes (recipien t)	Yes	NO	Yes (climate- related sector e.g. RE total, solar energy)	2016-17	Flow category "private development finance" is blank for all years

Source: eco-union

²⁷ https://stats.oecd.org/Index.aspx?DataSetCode=RIOMARKERS



Commercial databases

Access to commercial databases is beneficial to estimate private climate finance as they often have information on private finance at the project level. Nevertheless, they fall short in capturing private climate finance beyond investment in renewable energy. The most comprehensive database is the Bloomberg New Energy Finance (BNEF). BNEF captures information concerning investments in projectlevel financial flows, as well as well as, private equity, venture capital, mergers and acquisitions, and equity market transactions.

In addition to RE projects, it recently started to report investments in electric vehicles (though this is likely to be an insignificant amount for the targeted countries of this study). Regarding energy efficiency, it identifies investment in a limited amount of data where it is identifiable. Furthermore, BNEF does not specify the portion of debt or equity to the financiers and includes a substantial undisclosed value of transactions in clean energy assets (e.g. 59% of non-annex I countries assets in clean energy are not disclosed for the period 2011-2012).

Table 2: Review of commercial databases on international financial flows

Databases	Relevant data	Cou nty- level	Sector- level	Projectl evel	Private - specific	Climate- specific	2017	2017	comment
BNEF ²⁸	Private and hybrid investment in RE projects and electric vehicles	Yes	Yes	Yes	Yes	No	Yes	Yes	Tracks projects over a certain size; Data shortages: PE/VC flows, clean energy assets
Financial Times ²⁹	FDI in RE projects	Yes	Yes	Yes	Yes	No	Yes	Yes	Tracks projects of all minimum size. Classification
Dealogic ³⁰	loans and equity capital markets to RE projects	Yes	Yes	Yes	Yes	No	Yes	Yes	system: NAICS May not cover African countries? Classification
FactSet ³¹	Private equity transactions, M&A, and private ownership	Yes	Yes	Yes	Yes	No	Yes	Yes	system: NAICS Classification system: SIC, NAICS 2007 Data shortage: PE/VC flows,
Preqin ³²	Private Equity, infrastructure investment to RE projects	Yes	Yes	Yes	Yes	No	Yes	Yes	, /

²⁸ https://www.bnef.com
29 https://www.fdimarkets.com
30 https://www.dealogic.com
31 https://www.factset.com
32 https://www.preqin.com

Thomson	ThomsonOne:33	Yes	Yes	Yes	Yes	No	Yes	Yes	Classification
Reuters	Project finance,								system: SIC,
	PE/VC; Eikon:34								NAICS.
	Debt, Bonds RE								
	projects								

Source: eco-union

National central banks

Introduction

National central banks are recipients of international financial flows and thus it is plausible that their databases may include useful data for estimating international climate finance, and specifically international private climate finance. However, the screening suggests that the most relevant data is on FDIs, which is already reported in the UNCTAD database.³⁵ Hence, international public climate finance is not tracked in the databases of national central banks.

Table 3: Review of national public agencies tracking international investment in SEMed countries

Country	Agency	Description	comment
Albania	Bank of Albania ³⁶	Quarterly FDI by donor country	No private finance (PF)
			No climate-related finance (CF)
Algeria	Banque d'Algerie ³⁷	Multiple data	No PF
			No CF
Egypt	Central Bank of Egypt ³⁸	Yearly total FDI t by donor country	No PF
		since 2004	No CF
Bosnia &	Central Bank B&H ³⁹	Quarterly FDI	No PF
Herzegovina			No CF
Israel	Bank of Israel ⁴⁰	Total private banking and non-banking	No CF
		international investment	
Jordan	Central Bank of Jordan ⁴¹	Yearly total FDI	No PF
			No CF
			Total: can't see by donor country.

³³ https://www.thomsonone.com/DirectoryServices/2006-04-

^{01/}Web.Public/Login.aspx?brandname=www.thomsonone.com&version=3.7.9.18833&protocol=0

³⁴ https://eikon.thomsonreuters.com/index.html

³⁵ http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740

³⁶ https://www.bankofalbania.org/Statistics/External sector statistics/Foreign Direct Investments/Foreign direct investments flow.html

³⁷ https://www.bank-of-algeria.dz/html/bulletin_statistique_EN.htm

³⁸ http://www.cbe.org.eg/en/Economicresearch/Statistics/Pages/TimeSeries.aspx

³⁹ https://www.cbbh.ba/content/read/29#vanjskiSektor

⁴⁰ https://www.boi.org.il/en/DataAndStatistics/Pages/MainPage.aspx?Level=2&Sid=28&SubjectType=2

⁴¹ http://statisticaldb.cbj.gov.jo/index?action=level2&lang=en&cat_id=17#

Lebanon	Banque du Liban ⁴²	Multiple data	No useful data found
Mauritania	Banque Central de Mauritanie ⁴³	No Access	Requires password
Montenegro	Central Bank of Montenegro ⁴⁴	Multiple data	No useful data found
Morocco	Bank Al-Maghrib ⁴⁵	Multiple data	No useful data found
Palestine	Palestinian Central Bureau of Statistics ⁴⁶	FDI by financial instrument (2010-2016)	No PF No CF Total: can't see by donor country.
Tunisia	Banque Central de Tunisia ⁴⁷	FDI by sector (energy) (2012-2017)	No PF No CF
Turkey	Central Bank of the Republic of Turkey ⁴⁸	Yearly total FDI	No PF No CF
Libya	Central Bank of Libya ⁴⁹	Multiple data	No useful data found
Syria	Central Bank of Syria ⁵⁰	Multiple data	No useful data found

http://www.bdl.gov.lb/webroot/statistics/
 http://www.bcm.mr/portail-statistique

⁴⁴ http://www.cb-cg.org/eng/index.php?mn1=statistics&mn2=monetary and financial statistics

⁴⁵ http://www.bkam.ma
46 http://www.bcs.gov.ps/site/lang_en/683/default.aspx
47 https://www.bct.gov.tn/bct/siteprod/tableau_n.jsp?params=PL120150,PL120140&la=an
48 http://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN/Main+Menu/Statistics/Balance+of+Payments+and+Related+Statistics
49 https://cbl.gov.ly/en/

⁵⁰ http://www.banquecentrale.gov.sy/reports/statistics.htm



Conclusion

The databases of national central banks have information on total financial flows trends. Few have data concerning FDIs. Nevertheless, data on total value of FDIs is too broad to estimate international climate finance. Only a couple national agencies offer more detailed information that may be useful, such as FDI by sector (Tunisia) and private banking investment (Israel). Therefore, national central banks could start to effectively track and report on international public climate finance and at least part of international private climate finance.

Sectoral business associations

Introduction

Considering the substantial data limitations in public and commercial databases, we have conducted a screening of international and sectoral associations to assess the data availability concerning climaterelated investments.

International associations

Long Term Infrastructure Investors Association (LTIA)

- Description: LTIIA is a not-for-profit international association composed of institutional investors and fund managers with responsibilities over long-term and open-ended infrastructure investment mandates.
- Usefulness: No database on finance volumes; maybe some of its listed members have relevant databases.

Carbon Disclosure Project (CDP)

- Description: CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.
- Database:
 - Cities, states and regions data: This is a public database on the different public RE targets across the world. This may give some insight in policies which are mobilising RE investment, but no data on finance.
 - Corporate data: This is a commercial data on trends, model emissions data and pinpoints emerging best practice.
 - Data for investors: This is a commercial data on GHG emissions.
- Usefulness: no data on finance

Global Alliance for Buildings and Construction (GABC)⁵¹

⁵¹ https://www.globalabc.org/

- Description: GABC is an initiative launched at COP21, as part of the Lima Paris Action Agenda. It aims to mobilise all stakeholders, including member states and non-state actors from the Buildings and Construction sector to scale up climate actions in the industry.
- Usefulness: No data on finance, It has a resource section with documents on nationally determined contributions (NDCs) relating to climate mitigation in the buildings and construction sector.

ANIMA Investment Network⁵²

- Description: ANIMA Investment Network is a multi-country cooperation platform for economic development in the Mediterranean.
- Usefulness: no data on finance.

Observatoire Méditerranéen de l'Energie (OME)53

- Description: OME gathers main actors of the energy industry in the Mediterranean area; a Platform for energy dialogue, cooperation and best practices exchanges in the Euro-Mediterranean Region.
- Usefulness: OME's flagship publication, Mediterranean Energy Perspectives 2018 edition examines energy sources, from fossil fuels to renewable energy, and fuel use in the production of electricity, and in all end-use sectors; and it provides two detailed scenarios to 2040, incorporating the NDCs targets.

.BusinessMed⁵⁴

- Description: BusinessMed is the principal representative of the private sector that reflects the interest of 22 Confederations of Enterprises around the Southern and Northern Mediterranean Countries.
- Usefulness: No energy-related or climate-related statistics.

FEMISE⁵⁵

⁵² http://www.animaweb.org/en

⁵³ http://www.ome.org/

⁵⁴ http://www.businessmed-umce.org

⁵⁵ http://www.femise.org/en/

- Description: The network gathers more than 90 members of economic research institutes, representing the 37 partners of the Barcelona Process. FEMISE is coordinated by the Economic Research Forum (ERF), Egypt and Institut de la Méditerranée (IM), France.
- Usefulness: No energy-related or climate-related statistics.

Sectoral associations

Wind Association

Screening of business associations was conducted at the country level, such as the Turkish Wind Energy Association.⁵⁶ However, no statistics were found on finance. Some have statistics limited to country-level and project-level power capacity, which can be useful for contrasting information. Nevertheless, for country-level statistics, IRENA⁵⁷ data is a more practical source.

PV associations

No statistics found on country-level business associations. No statistics found on finance. Nevertheless, for country-level statistics, IRENA⁵⁸ has statistics regarding capacity and consumption.

Conclusion

No data on finance has been found with a screening of sectoral and regional associations. Nevertheless, some associations have data regarding project-level capacity, this data, as well as country-level data provided by IRENA may be useful for developing proxy estimations.

Data from non-governmental organisations

Introduction

Considering the lack of reliable data from sectoral and regional associations and substantial limitations in public and commercial databases, we conducted a screening of relevant international non-governmental organisations to assess the data availability concerning climate-related investments.

⁵⁶ https://www.tureb.com

⁵⁷ https://www.irena.org/publications/2018/Jul/Renewable-Energy-Statistics-2018

⁵⁸ https://www.irena.org/publications/2018/Jul/Renewable-Energy-Statistics-2018

Screening for potential databases

Oxfam⁵⁹

- Description: Oxfam is an international confederation of aid organizations working lobbying governments, international organizations and corporations for fairer land policies and action on climate change.
- Usefulness: Despite its expertise in assessing green finance data, Oxfam does not have a database on green finance.

Greenpeace⁶⁰

- Description: Greenpeace is an independent non-governmental environmental organization promoting environmental sustainability at global, national and local level.
- Usefulness: No database, no data on climate finance

Overseas Development Institute (ODI)⁶¹

- Description: The ODI is an English independent think tank on international development and humanitarian issues with high-quality applied research, practical policy advice, and policy-focused dissemination and debate.
- Usefulness: no database nor collected green finance data.

World Resources Institute (WRI)⁶²

- Description: WRI is a global research organization working with leaders in order to promote evidence-based policies at the intersection of environment and development: climate, energy, food, forests, water, and cities and transport.
- Usefulness: no database nor collected green finance data.

⁵⁹ https://www.oxfam.org/fr

⁶⁰ https://www.greenpeace.org/international/

⁶¹ https://www.odi.org/

⁶² https://www.wri.org/

Conclusion

There is a lack of reliable databases on international private climate finance. Public databases, as well as national banks, lack separate information on private finance or are outdated. Sectoral and regional associations as well as other non-governmental organizations, such as Oxfam or Greenpeace, often do not have data on finance. In addition, out of all the reviewed public databases, the OECD DAC is the one that can be used within a methodology to estimate mobilised private finance by public finance from OECD countries. Yet, as members can mark investments as related to both mitigation and adaptation, adding the total of both would lead to double counting. When it comes to commercial databases, despite providing information on private finance at the project level, they fall short in capturing private climate finance beyond investment in renewable energy and more recently investments in electric vehicles.

Relevant data extraction for years 2016 and 2017

We have extracted, whenever technically and economically possible, the data through public and private databases to have an estimation of international climate financial flows in a selection of SEMed countries for years 2016 and 2017.

Data concerning international private investments on renewable energy projects

At the moment, most estimations on private climate finance are mainly based on data regarding private investments in renewable energy projects (e.g., Climate Policy Initiative: annual Landscape reports). As commented earlier, such data derives from commercial databases, which require lucrative annual subscriptions that are above the budget of this study. Nevertheless, to provide an idea of the available data on commercial sources we are able to provide an extract concerning data on international private investments in RE projects in Egypt, Morocco, Turkey, and Jordan for the years 2016 and 2017 from the Financial Times: FDI database. The original data also includes a short description of the project, jobs created, and more broader information on the investor company. This data on private investments in RE plants is certainly essential for mapping the landscape of the broader private climate finance.

Egypt

Table 4: Private FDIs in Renewable Energy in Egypt for year 2016

Investing Company	Source country	type	Capital investment (million USD)	Estimated
Alcazar Energy	UAE	Wind	200,3	Yes
Martifer Solar	Portugal	Solar	200,3	Yes
Schneider Electric	France	Solar	85,02	No
Engie (GDF SUEZ)	France	Wind	200,3	Yes
Siemens Gamesa Renewable Energy	Spain	Wind	200,3	Yes
Alcazar Energy	UAE	Wind	200,3	Yes
Siemens Gamesa Renewable Energy	Spain	Wind	200,3	Yes
TBEA SunOasis	China	Solar	200,3	Yes
Petrobel	Italy	Solar	200,3	Yes
			Total: 1687 million USD	

Source: FDI Intelligence

Table 5: Private FDIs in Renewable Energy in Egypt for year 2017

Investing Company	Source country	type	Capital investment (million USD)	Estimated
ACWA Power International	Saudi Arabia	Solar	77,5	Yes
ACWA Power International	Saudi Arabia	Solar	80,3	Yes
ACWA Power International	Saudi Arabia	Solar	32,1	Yes
ACCIONA Energia	Spain	Solar	180	No
EDF Energies Nouvelles (EN)	France	Solar	167,1	Yes
Enerray	Italy	Solar	167,1	Yes
Enerray	Italy	Wind	167,1	Yes
			Total: 871 million USD	

Source: FDI Intelligence

Turkey

Table 6: Private FDIs in Renewable Energy in Turkey for year 2016

Investing Company	Source country	Project	Capital investment (million USD)	Estimated
Akenerji Elektrik Uretim	Czech Republic	Wind	12,1	No

IBC Solar Turkey	Germany	Solar	210,7	Yes
IBC Solar Turkey	Germany	Solar	210,7	Yes
IBC Solar Turkey	Germany	Solar	210,7	Yes
IBC Solar Turkey	Germany	Solar	210,7	Yes
IBC Solar Turkey	Germany	Solar	210,7	Yes
Verbena Energy	United States	Geothermal	467,6	No
Meramges Enerji Uretim	Greece	Solar	1,1	No
Entegro Solar Enerji Sistemleri	Germany	Solar	1,6	No
Energo-Pro	Czech Republic	Hydroelectric	240	No
			Total: 1776 million USD	

Source: FDI Intelligence

Table 7: Private FDIs in Renewable Energy in Turkey for year 2017

Investing Company	Source country	Project	Capital investment (million USD)	Estimated
General Electric (GE)	United States	Wind	1200	No
Enerjisa Enerji	Germany	Solar	1,1	No
Akfen Yenilenebilir Enerji	United States	Solar	0,7	No
Enerjisa Enerji	Germany	Solar	9,1	No
RES Anatolia	United Kingdom	Solar	19,1	No
Bilsev Enerji Uretim	Czech Republic	Hydroelectric	41,3	No
Beyond Energy	Greece	Solar	1	No
			Total: 1272 million USD	

Source: FDI Intelligence

Morocco

Table 8: Private FDIs in Renewable Energy in Morocco for year 2016

Investing Company	Source country	Project	Capital investment	Estimated
Taqa Morocco (Jorf Lasfar Energy Company)	UAE	Wind	151,1	No
Enel Green Power	Italy	Wind	211,8	Yes
Enel Green Power	Italy	Wind	141,2	Yes
Enel Green Power	Italy	Wind	423,5	Yes
Enel Green Power	Italy	Wind	141,2	Yes
Enel Green Power	Italy	Wind	282,3	Yes
Sumitomo Electric Industries (SEI)	Japan	Solar	197,6	Yes
ACWA Power International	Saudi Arabia	Solar	103,5	Yes
ACWA Power International	Saudi Arabia	Solar	25,9	Yes
			Total: 1678 million USD	

Source: FDI Intelligence

Private FDIs in RE in Morocco for year 2017: There are no available data from provided source. This is due the absence of corporate announcements of RE investments in Morocco within this year.

Jordan

Table 9: Private FDIs in Renewable Energy in Jordan for year 2016

Investing Company	Source country	Туре	Capital investment	Estimated
Enerray	Italy	Solar	219.5	Yes
Fotowatio Renewable Ventures (FRV)	Saudi Arabia	Solar	219.5	Yes
Martifer Solar	Portugal	Solar	219.5	Yes
Martifer Solar	Portugal	Solar	219.5	Yes
			Total: 878 million USD	

Source: FDI Markets

Table 10: Private FDIs in Renewable Energy in Jordan for year 2017

Investing Company	Source country	Project	Capital investment	Estimated
ACWA Power International	Saudi Arabia	Solar	219.5	Yes
Yellow door	UAE	Solar	219.5	Yes
ACWA Power International	Saudi Arabia	Solar	219.5	Yes
Fotowatio Renewable Ventures (FRV)	Saudi Arabia	Solar	90	Yes
AES Jordan Solar	United States	Solar	50	No
			Total: 798 million USD	

Source: FDI Markets

Conclusion

The data provided above is an extract of the information available from the Financial Times FDI database. The original data also includes a short description of the project, jobs created, and more broader information on the investor company. This data on private investments in RE plants is certainly essential for mapping the landscape of the broader private climate finance.

OECD DAC data

In order to assess the progress of developed countries with their financial commitments to developing countries, such as the pledged of \$100Bn annually by 2020, and to measure their catalysing effect on private climate-related investments, the OECD has been working on developing standardised methods to estimate mobilised private finance by public bodies that report to the OECD DAC. This work has been developing by the DAC and the Collaborative Research.

Estimating mobilised private finance from public finance, requires attributing amounts of private cofinance at the project-level using volume-based pro-rata calculations that have been developed for different public finance institutions. Specifically, pro rata calculations have so far been developed for public guarantees, syndicated loans, shares in collective investment vehicles, direct investment in companies, and credit lines. For completing such estimations, one requires data on the volume of investments concerning public instruments gathered in the OECD DAC surveys to the different donor developmental bodies. However, the last survey covered the years 2012-2015.

See annex (section 9.2) for an excerpt on climate-related public development finance from both bilateral and multilateral sources to recipient country. This data does not account for the specific financial instrument required to estimate mobilised private finance. As noted, such info should be reported in future OECD DAC surveys.

Assessments of the outcomes

This chapter analyses the extracted data from the commercial database, and reflects on the required steps to estimate mobilised private finance from OECD DAC data. Besides, it also reflects on the methodological limitations of both methods for effectively tracking international private climate finance.

Analysis of the extracted data

Analysis of FDIs data on RE projects

The commercial data illustrates that RE projects are attracting a considerable amount of foreign private investment. Despite the limitations, this incomplete data reveals general trends of private RE investment in the region over the 2016-2017 period. Regarding the number of projects invested in by technology type, 34 investments in projects were to solar farms (66,7%), followed by 14 investments in wind farms (27,5%). In terms of amount of financial flows, the data records a total of \$8960 million in investment, of which \$4480 million (50%) were invested in solar farms, \$3731 million (41,6%) in wind farms, \$467 million (5,2%) in a geothermal project, and \$281 million (3,1%) in hydroelectric projects. Although solar projects receive most of the private investments, data on more countries would be needed to see if this is a pattern for the whole of the SEMed region.

At the country level, in Egypt private investment in solar energy accounted for 54% of the total, while wind projects received the remaining 46%. In Turkey, wind projects received the most investment with 39,7%, followed by solar (35,6%), geothermal (15,3%), and hydroelectric (9,2%). Regarding the 2016 investments in Morocco, wind projects also received the bulk of the investments with 80,5%, while solar projects received the remaining 9,5%. On the contrary, in **Jordan**, all RE investments over the period were in solar projects. Moreover, the data confirms that Turkey is an important recipient of financial investment, as the OECD reports that Turkey accounted for 58% of the mobilisation of private investment by public finance within European countries.⁶³

The data shows that the majority of private flows originated from the EU for the three selected countries. Specifically, EU corporations provided about 63% of the received private investment within the four

⁶³ Benn, J., C. Sangaré, and T. Hos (2017) Amounts Mobilised from the Private Sector by Official Development Finance Interventions. OECD Development Co-operation Working Papers no. 36, p.5. Retrieved from: https://www.oecd-ilibrary.org/development/amounts-mobilised-fromthe-private-sector-by-official-development-finance-interventions 8135abde-en.

countries, followed by private investment from Saudi Arabia (17,6%), the USA (7,8%), United Arab Emirates (7.8%), China (1,9%), and Japan (1.9%).



Chart 1: Capital investment (million USD), 2016-2017

Source: eco-union with data from FDI Markets

Analysis from OECD DAC data

As previously mentioned, the OECD has so far developed pro-rata methodologies to estimate mobilised private finance by the following Official Development Financial instruments: public guarantees, syndicated loans, shares in collectives investment vehicles, direct investment in companies, and credit lines. The OECD DAC CRS data details the climate-relevant public finance with Rio Markers on adaptation and mitigation. However, to gather details concerning the type of instruments used, one must first check the OECD DAC CRS to the donor institutions. However, the last survey, conducted in 2016, reports for the period 2012-2015.⁶⁴ In addition, project-level data should be consulted to gain complementary private co-finance information at project level. 65

Hence to calculate mobilised private climate finance from public finance for the selected countries, apart from the available OECD DAC CRS data marked as climate-relevant (as shown for Egypt for 2016 in the annex)

⁶⁴ ibid.

⁶⁵ See Caruso, R. and R. Jachnik (footnote n. 1).

one must access the OECD DAC surveys (for 2017 data will appear in 2019) as well as access to project-level data, potentially commercial data from BNEF or FT FDI. When the financial instruments are all identified at the project level, OECD pro rata methodologies can be used as explained in the OECD report on the converged statistical reporting directive.⁶⁶

This methodology is only limited to mobilised private finance by some financial instruments provided by public bodies that report to the OECD. Thus, it does not capture private investment mobilised as a result of public policies and capacity building. Hence, to fully capture mobilised private finance, one may also conduct a study at project or sector level to estimate private finance mobilised from public policies.⁶⁷

Assessment of tracking finance methodologies

The data provided by FT FDI, like other commercial databases, have significant data gaps and lack of methodological transparency. For instance, out of the 51 recorded investments by FT for both years, 42 are estimated expenditures. Hence, over 80% of the recorded investments are estimations. FT FDI uses an algorithm to estimate unreported values. The algorithm does estimations by using the average value of similar projects within the country or region.⁶⁸ In addition to the significant data gaps, this methodology does not cover a substantial amount of private investments in other climate-related areas, such as energy efficiency, water infrastructure, agriculture, land management, or biodiversity management among others. Therefore, commercial databases are not enough to see the full picture of private climate finance.

Other methodologies, such as estimating the amount of private investment mobilised in climate-related public investments can provide more insight into private climate finance beyond renewable energy investment. However, the level of detailed project-level data required out-passes the scope of this initial study. Nevertheless, the OECD methodology on estimating mobilised private finance has considerable limitations. Currently, the OECD has not developed a method for evaluating mobilised private investment from grants. Considering that a significant amount of the 2016 climate-related financial flows to Egypt are grants (see Annex), it may be currently difficult to capture all the mobilised private finance. However, the OECD is currently working to expand its methodology to cover grants, loans, and project-finance schemes.⁶⁹

⁶⁶ Benn J., V. Gaveau, and C Sangaré (2016) Converged Statistical Reporting Directives for The Creditor Reporting System (CRS) and the Annual DAC Questionnaire - Addendum 1 Annexes - modules A, B, and C. OECD. Retrieved from: https://www.oecd.org/dac/stats/DCD-DAC(2016)3-

⁶⁷ OECD (2017). Private finance for climate action: estimating the effects of public interventions. Policy perspective, OECD Research Collaborative on Tracking Private Climate Finance.

⁶⁸ Personal communication.

⁶⁹ UNFCCC Standing Committee on Finance (2018) 2018 Biennial Assessment and Overview of Climate Finance Flows Technical Report, p. 37.

In any case, tracking mobilised private finance misses on any private finance that is not mobilised through public finance, and thus excludes a considerable proportion of total private climate finance. The methodological limitations increase with adaptation investments as many private investments in energy efficiency, such as building restoration, is usually unreported and/or not tagged as climate-relevant. In all, methodologies for estimating private climate finance are improving but still fall short to be able to come up with robust estimations for the countries of the SEMed region. Even if commercial databases improve the quality of their data, and the OECD DAC and MDBs improve their methods for estimating mobilisation, the methodologies will continue to miss a significant portion of climate related investments.

Barriers to mainstream private climate finance

While the role of the public sector is crucial to establish the regulatory framework for climate action as well as send market signals and incentivise innovation, the private sector is clearly needed to scale up the flow of climate investments in the SEMed region. The private sector is already implementing many initiatives to invest and increase resources in climate-related projects in the SEMed region. However, there are several barriers that need to be overcome to mainstream private climate finance in the region.

Barriers to involve the private sector

Regulatory and financial barriers

A fundamental barrier to private climate finance is the lack of stringent climate national legislation and the continued support to carbon-intensive industries. For instance, fossil fuel subsidies are widespread in the SEMed region.⁷⁰ Hence, it is crucial that SEMed countries ensure the phasing-out of their respective fossil fuel subsidies in order to increase climate-related investment. Some countries have already adopted significant cuts to fossil fuel subsidies. For instance, Egypt has implemented energy subsidy reforms in 2014 and 2016, which led to a price increase of most fossil fuel derivatives.⁷¹ In 2014 Morocco ended subsidies to

⁷⁰ IMF (2014) 'Energy Subsidies in the Middle East and North Africa: Lessons for Reform.' Retrieved from: https://www.imf.org/external/np/fad/subsidies/pdf/menanote.pdf.

⁷¹ Moerenhout T (2017) Energy pricing reforms in Egypt. 108 The Oxford Institute for Energy Studies 34-36. Retrieved from: https://www.oxfordenergy.org/wpcms/wp-content/uploads/2017/04/OEF-108.pdf

gasoline and fuel oil and reduced diesel subsidies. 72 In 2018, Saudi Arabia enforced subsidy cuts, which significantly increased prices of electricity and gasoline. 73 In addition, the lack of planning and establishing guidelines for climate-related private investments results in inefficient engagement of the private-sector⁷⁴. Thus, SEMed countries should adopt planning strategies for guiding private investors.⁷⁵

Increasing public climate finance is crucial to further mobilise private climate finance. The 2018 IPCC Special Report estimates that for a chance of staying within a global warming of 1.5 °C, between \$1.6 trillion and \$3.8 trillion must be invested annually in new energy infrastructure alone. CPI estimates that in 2016, total climate finance reached \$455 billion, of which \$230 billion was private finance. Hence, all public actors must rapidly upscale their commitments in order to mobilise the required private finance. Within the UNFCCC process, developed countries should fulfil and significantly increase the \$100 billion annual pledge to developing countries by 2020, in particular through the Green Climate Fund (GCF). Besides, Multilateral DFIs, such as the International Development Finance Club, which committed about \$200 billion of climate finance in 2017, should also increase their internal commitments. ⁷⁶ While, most of the SEMed countries are recipients of ODA, Israel, a OECD member, is a donor of ODA. In fact, most the private and public climate finance invested in Israel comes from domestic sources.⁷⁷ Hence, the challenges to further mobilise private climate finance is to adopt regulations to green the internal market, and to attract international finance from private non-developmental public and private institutions.

There is a current lack of green private financial instruments within the SEMed region. Acknowledging this issue, the Union of Arab Banks have recently called for a regulatory framework to green the financial sector, specifically, to incentivise green financial products. 78 Despite the increase of green bonds globally, it is uncertain the amounts invested in the SEMed region. Furthermore, only a few countries have issued green bonds.⁷⁹ Therefore, SEMed countries could adopt regulations creating public financed green bonds to mobilise private investments, and create the conditions in the financial market to incentivise private corporations in issuing green bonds. Regulations should take into account the Climate Bond Principles

⁷² See: Reuters (2014) 'Morocco ends gasoline, fuel oil subsidies.' Reuters, January 17, 2014. Retrieved from:

https://www.reuters.com/article/morocco-economy-subsidies/morocco-ends-gasoline-fuel-oil-subsidies-idUSL5N0KR2EV20140117.

⁷³ IEA (2018) 'Recent Developments'. Available at: https://www.iea.org/media/publications/weo/Recent%20developments 2018.pdf.

⁷⁴ eco-union (2016), State of Green Economy in the Mediterrannean. Avaliable at: http://www.medgreeneconomy.org/

⁷⁵ IFC (2017) Creating Markets for Climate Business: An IFC Climate Investment Opportunities Report. IFC, p.126. Retrieved from: https://www.ifc.org/wps/wcm/connect/974eedcb-f3d9-4806-b32e-73720e6f4ca7/IFC-Climate Investment Opportunity Creating Markets.pdf?MOD=AJPERES.

⁷⁶ IDFC (2018) IDFC Green Finance Mapping Report 2018. IDFC and CPI, p.8. Retrieved from: https://www.idfc.org/wpcontent/uploads/2018/12/idfc-green-finance-mapping-2018.pdf.

⁷⁷ Van de Tak, C. (ed.) (2017). Israel and International Climate Finance.Climate finance options and proposals for government decision making. ClimaSouth Policy Series, Paper n.3.

⁷⁸ Saab N., A.-K. Sadik (2018) Financing Sustainable Development in Arab Countries. Arab Forum for Environment and Development, p.14. Retrieved from: http://www.afedonline.org/webreport2018/intro.pdf.

⁷⁹ Morocco, issued its first sovereign bond in 2017. See: Wouters, F. et al. (2017) 'Financing solar projects in the MENA: 2017 and beyond.' MENA New Energy 2017 program, Dubai 25-26 April, p.2. Retrieved from:

https://infrastructure.cib.natixis.com/api_website_feature/files/download/1131/Financing-solar-projects-in-the-MENA-2017-and-beyond.pdf.

(GBP), 80 which provide voluntary guidelines on how to deliver bonds that are transparent and have environmental integrity. However, green bonds can be issued currently under a wide variety of voluntary standards, and no monitoring mechanism exists today to ensure compliance between them. In addition, SEMed countries should develop green funds aimed at mobilising private investment in the region. The challenge resides in offering guarantees and insurance that minimise the financial risk of private investors in climate-related activities. Hence, it is key to establish predictable markets that ensure long-term green investments, such as stringent climate regulations on corporations, finance as well as procurement.

Funds can be more effective in mobilising private finance when they are available at the local level. The bridges between the national and the subnational levels are very critical. This is especially true for climate adaptation, as the needs have often strong local specificities. Municipal or subnational governments can therefore better engage adaptation-related private finance⁸¹. There are actually a growing number of actors, platforms and institutions engaging non-states actors at the subnational or local level, such as R2082 (regions), C40 (cities) or Climate Chance (platforms of non-state actors)83. Most of them are active in the SEMed region and could be supportive of actions promoting private climate finance and the involvement of the private sector. R20 actually launched a specific subnational fund for climate action in Africa⁸⁴ to invest in clean energy, waste valorization or energy efficient lighting services to cities and regions in African countries. It aims to address the funding gap for infrastructure projects of between \$5-50 million in capital expenditure (CAPEX). Projects of this size, conceived and developed at the sub-national level, have the greatest potential to accelerate the reaching of the Sustainable Development Goals (SDGs) and the objectives under the Paris climate Agreement. However, considered too small for institutional investors, too large for sub-nationals and NGOs to finance or too risky (not bankable) for private investors, they are currently least-served by existing funding and development vehicles⁸⁵.

Technical Barriers

Small and Medium Enterprises (SMEs) developing a climate-related project often lack the technical knowledge to attract private finance. ClimaSouth has developed a guideline for drawing climate finance for project developers in the South Mediterranean countries. 86 SMEs with the following characteristics are more likely to pull private investment for their climate projects: (i) The SME or project is part of a larger organisation; (ii) the project is profitable; (iii) the sustainability component improves the image of the private funders.⁸⁷ Though, especially for projects regarding adaptation, private finance will have to come from sources that are not conditional for the profitability requirement. Hence, project developers have a better

⁸⁰ https://www.climatebonds.net/standard

⁸¹ http://www.oecd.org/cfe/Financing-Climate-Flyer.pdf

⁸² https://regions20.org/

⁸³ https://www.climate-chance.org/

⁸⁴ https://regions20.org/sub-national-climate-fund-sncf-2/

⁸⁶ Tippmann R. (2016) Accessing climate finance: a step-by-step approach for practitioners. ClimaSouth E-Handbook N.8.

⁸⁷ ibid, 19.

chance of securing investment where the project's activities are in line with the mandates of the organisations, corporations, and private institutions that finance them.88

Networks such as the UNFCCC Private Sector Initiative, which aims to catalyse the involvement of the private sector in adaptation projects, can be instrumental in improving technical skills and attracting private investments.⁸⁹ For SMEs initiating a climate-related project, the obvious first step to pull private finance is to ensure the backup of public finance. Though, the difficulties securing public finance may require relying on purely private finance from interested organisations. Project developers can attract private investment through debt or selling equity. Venture capitals (VE) are more likely than private enterprises (PE) to invest in the early stages of a project. Examples of VE/PE funds available for project developers in the South Mediterranean region, include the African Agriculture Fund (AAF) with its SME fund, LeapFrog investments fund. Africinvest-FMO or GroFin fund. 90

The lack of clarity to what constitutes green and climate finance activities, such as green loans and green assets, represents an obstacle for classifying and tracking climate finance, as well as identifying further opportunities for climate-related investments. 91 For example, private investment in rail transport may be considered as climate finance despite that it is powered with electricity generated from coal plants, and thus perpetuating coal-dependency⁹². There are numerous initiatives at European and global level aiming to define better green, climate or sustainable finance. The High-Level Group on Sustainable Finance 93 promoted by the European Commission is elaborating a taxonomy that could be very useful for the Mediterranean region. UN Environment also launched a flagship initiative (UNEP Financial Enquiry) to assess financial flows and influence the global financial sector. A similar work at the SEMed level could be useful based on the outcomes of related reports such as Green Finance in the Mediterranean published recently by eco-union and the European Institute of the Mediterranean⁹⁴.

Most importantly, the current lack of reporting on private climate finance and a harmonised standard tracking system makes it difficult to estimate the current state of private climate finance, and therefore further complicates any effort of upscaling private-investment in climate-related activities. Thus, for investors to better understand the potential risks and opportunities, there should be the disclosure of both public and private climate-related investments. 95 As explained in previous chapters, current initiatives at

⁸⁸ ibid, 20.

⁸⁹ ibid, 21.

⁹⁰ ibid, 22.

⁹¹ Saab N., A.-K. Sadik (footnote n. 77) p.14.

⁹² eco-union & IEmed (2017), Towards Green Finance in the Mediterrannean, http://www.iemed.org/recursoscompartits/pdfs/ExecutiveSummaryGreenFinance.pdf

⁹³ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance en

⁹⁴ eco-union & IEmed (2017), Towards Green Finance in the Mediterrannean.

⁹⁵ IFC (footnote n. 74) 128.

global level by OECD, UNFCCC, the French government (One Planet Summit) or CPI, among others, should be adapted and implemented in the region using adequate tools and mechanisms. Working directly with the national investment agencies, economic intelligence companies as well as the business associations could be feasible at a regional – or sub-regional – scale.

Soft Barriers

It is important to recognize specific soft barriers to private climate finance due to the lack of economic, political and social integration in the SEMed region that difficults the emergence of private climate finance at international level. The different countries in the SEMed region have very limited trade, business, scientific or knowledge exchanges, when compared to what happens in the EU-member countries of the Mediterranean region. Apart from reducing the economic competitiveness of the SEMed countries, it decreases the attractiveness and interest for international investors, looking for better financial returns in stable markets.96

Finally, and indirectly related to the previous barrier, the rather weak public commitment of business and public leaders towards climate change in the Region. Very few head of states or CEOs of SEMed companies are publicly engaged towards environmental sustainability. Their top priority remains political stability, stable business climate and socio-economic development. If we look at the number SEMed-based participants in Business & Climate platforms such as World Business Council on Sustainable Development (WBCSD), companies from Africa and Middle East are clearly under-represented with 1% of the total members⁹⁷. There are very few public forum promoting investments in green and low-carbon economy compared to other part of the world, although there are some few exceptions such as the Arab Forum on Economy and Development (AFED)⁹⁸ and recent high-level events launched in Morocco, Egypt⁹⁹ or Algeria.

Conclusions

As described previously, there is a significant number of barriers to mainstreaming private climate finance in the SEMed region. Concerning regulatory and financial barriers, lack of stringent climate regulations, poorly developed green financial instruments and inadequate management at the local level difficult the mobilization of private investments. Regarding technical barriers, many SME enterprises do not have the technical knowledge to invest in climate-related activities, or, more often, do not highlight the relevant part of their activities as being climate-related even if it is the case. Furthermore, the lack of clarity of what

⁹⁶ WEF & WB (2018), The Arab World Competitiveness Report 2018. http://www3.weforum.org/docs/Arab-World-Competitiveness-Report-2018/AWCR%202018.0724 1342.pdf

⁹⁷ https://www.wbcsd.org/Overview/Our-members

⁹⁸ http://www.afedonline.org

⁹⁹ https://ufmsecretariat.org/ufm-energy-and-climate-business-forum/

constitutes a climate finance activity, as well as inefficient data and harmonized tracking systems slow down private climate finance. Also, soft barriers related to the poor socio-economic and political integration within the region are decreasing the interest of international investors. Finally, the rather weak commitment of business and political leaders is impeding the scaling up of climate finance at the required speed.

Recommendations

Tracking Private Climate Finance

The present limitations illustrate that it is paramount that governments promote policies to support investors to report on their climate-related investments. Furthermore, public and private bodies should collaborate to create a standardised system to track international private climate finance. In this line, countries may consider taking similar steps as the EU, which in July 2018, has set up a technical expert group on sustainable finance with the task of developing a classification system that better identifies sustainable investments, as well as establishing guidelines to improve corporate disclosure. 100 In addition, countries should promote the recommendations of the Financial Stability Board on climate-related financial disclosures, which includes the disclose of methodologies, and assessments of risks. 101

By capitalising on existing reporting systems, SEMed governments should facilitate harmonisation and systematisation mechanisms anticipating the development of a future, internationally agreed tracking system. For instance, a first step could be for national agencies to identify FDIs that are climate-related.

Furthermore, SEMed public agencies could adopt OECD methodologies for estimating public and mobilised private finance, using Rio Markers. This would include information on the date of board approval of financing, the date of contract signing, the dates of disbursements, the repayments and the claims, as well as instruments at face value and grant equivalent. A tracking system for 'mobilised private climate finance' should explicitly include a baseline scenario analysis and multiple success indicators (both for policy and project preparations), as well as a clear report of all involved public and private co-finance.

An important step to ameliorate the barriers to tracking climate finance at the local level would be for fund providers to develop and adopt indicators that measure the amount of funding that benefit local actors. This would improve project-level data and facilitate estimations on mobilisation. Countries may also collaborate with commercial databases to enable the annual disclosure of private climate-related investments in order to facilitate researchers and policymakers in assessing the landscape of climate finance within the context of countries commitments to the Paris Agreement. Field initiatives to

¹⁰⁰ See: https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group_en

¹⁰¹ See, for instance, IFC (footnote n. 74) 128.

experiment new approaches such as the Global Innovation Lab for Climate Finance¹⁰², launched by the International Fund for Agriculture Development (IFAD) to help build climate resilience for smallholder farmers in Central and West Africa through innovative financial instruments, could be extend to other countries or sectors.

Mobilising Private Climate Finance

Probably the most efficient way to increase private climate-related investment is to implement stringent climate policies. Countries can mobilise private climate finance—from both domestic and international sources—by adopting carbon emission limits as required to stay within the temperature target of the Paris Agreement. So far, only Morocco has submitted an NDC that is in line with the 1.5°C target. However, through the principle of common but differentiated responsibilities, a large portion of the commitments declared by SEMed countries is conditional to receiving funds from developed countries. Thus, developed countries should engage proportionally more funds to the SEMed region.

Besides, SEMed countries should support and facilitate business commitment and public-private platforms promoting climate ambition, such as the climate-friendly international investor groups that manage trillions of USD in assets, calling for ending fossil fuel subsidies, increasing climate-related investment, emplacing a substantive carbon price, and committing to standardise climate-related financial reporting. 104 Starting with market-led good practices (PRI, GBP, Climate Bond Standards...), a regulatory or voluntary mechanism with a standardized system for green financial product certification should be implemented in each country. In addition, countries should find and attract credible corporate actors that advocate for climate action. 105

Mobilising green finance, and thus also climate finance entails phasing out brown finance and environmentally-harmful subsidies. This transformation can be done with regulatory changes within national legislation and the elimination of inadequate subsidies to fossil fuels. Hence, SEMed countries must regulate ensuring green over brown investment, in their jurisdiction, while developed countries home-state to many multinational corporations, should also ensure liability of its corporations within the brown economy, as it is starting to be done related to the Corporate Social Responsibility (CSR) of multinational companies in European countries such as France¹⁰⁶.

¹⁰² https://www.climatefinancelab.org/news/ifad-and-the-lab-launch-new-partnership-to-drive-finance-to-african-smallholder-farmerscombating-climate-change/

¹⁰³ https://climateactiontracker.org/countries/

¹⁰⁴ See: the 2018 Global Investor Statement to Governments on Climate Change. Retrieved from: http://theinvestoragenda.org/wpcontent/uploads/2018/12/GISGCC-FINAL-for-COP24-with-signatories 6-Dec-CORRECTION.pdf

¹⁰⁵ WRI, UN Global Compact, We Mean Business (2018) The Ambition Loop: How business and government can advance policies that fast track zero-carbon economic growth, p.44.

¹⁰⁶ https://www.diplomatie.gouv.fr/en/french-foreign-policy/economic-diplomacy-foreign-trade/corporate-social-responsibility/

SEMed countries must have in mind that urban areas are the primary sources of emissions. Hence, facilitating funds for climate action at the local level can be more effective than managing the destination of funds at the national or regional level. 107 Capacity building for ensuring investment can attract more private investment if both national and local authorities are involved. 108 This is especially true for investments in adaptation, as the requirements for adapting to climate change varies from locality to locality, municipal governments can better manage and mobilise adaptation-related finance.

Moreover, SEMed countries need to integrate climate/green finance in all relevant policy areas. Both climate policy and climate finance, including private climate finance, are no isolated areas. They are strongly linked with other policy areas, especially development policy and economic (export) policy. This is particularly true in SEMed countries where most implemented development projects tackle more than one aspect of sustainable development. Therefore, paying close attention to the integration of climate finance policy in other relevant policy areas would ensure a better continuity in and complementarity within projects.

To promote private climate finance, a close collaboration with the public actors in information-sharing and reporting mechanisms is essential. For instance, in Lebanon, the Ministry of Environment initiated the "Lebanon Climate Act," in collaboration with the Chamber of Commerce, the Central Bank of Lebanon, and civil society. The initiative promotes businesses to invest in climate-related activities at the local level and has a Monitoring, Reporting and Verification (MRV) system to track the progress of the investors' commitments, facilitate information sharing and assistance. In particular, to attract private investment in climate-related activities SEMed countries should adopt a strategic approach that identifies the **potential** investing risks that private players may face when investing climate-related activities in the region. This, could translate in annual guidelines for engaging private investment.

Conclusions

As described in the previous chapters, mainstreaming of international private climate finance in the SEMed region remains very challenging due to numerous obstacles and barriers going beyond the capability of a single institution or country. Apart from "traditional" environmental, financial or regulatory issues, the complexity, sensitiveness and uncertainties related to the broader political, social and

¹⁰⁷ One example of projects that aim at increasing access to finance at the local level is the "EU for Climate Action in the ENI Southern Neighbourhood", an EU funded initiative engaging local authorities from Algeria, Egypt, Jordan, Israel, Lebanon, Libya, Morocco, Palestine, Tunisia, and Syria. See: http://beirutenergyforum.com/p18/CLIMA-MED%20Project%20Overview%20Actions%20to%20Address.pdf 108 Agbemabiese L., et al. (2018). Enhancing climate finance readiness: A review of selected investment frameworks as tools of multilevel governance. CEEP, p.37, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3082542 (accessed December, 2018).

economic context require an integrated, innovative and ambitious strategy to be designed, developed and implemented collectively by a variety of relevant actors and stakeholders from both the public and private sector.

This common strategy should address soft and hard barriers with ambitious long-term goal(s) towards private climate finance- linked to the urgency and severity of climate change impacts in the region together with a more practical approach aiming at short term successes showing concrete benefits and building a virtuous circle to scale up best practices. The launch of thematic or sectorial **field experiments** could be combined with a more political business & climate coalition to engage and give visibility to the targeted actions and initiatives, either at Mediterranean, SEMed or national/local levels.



Union for the Mediterranean Union pour la Méditerranée الإتحاد من أجل المتوسط



ufmsecretariat.org

Follow the UfM Secretariat on:

- **f** ufmsecretariat
- @UfMSecretariat
- in union-for-the-mediterranean

Palau de Pedralbes | Pere Duran Farell, 11 | 08034 Barcelona, Spain Phone: 00 34 93 521 4100 | Fax: 00 34 93 521 4102