DRAFT DISCUSSION DOCUMENT

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Climate Finance: Annotated Questions Document

CCXG seminar breakout session 2a and 3a

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The ideas expressed in this paper are those of the authors and do not necessarily represent views of the OECD, the IEA, or their member countries, or the endorsement of any approach described herein.

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1. Background

This document highlights key questions for discussion in the two climate finance sessions of the Climate Change Expert (CCXG) Global Forum. It focuses on the tracking and reporting of climate finance and builds on previous CCXG analysis (e.g. Clapp *et al.*, 2012 and Buchner *et al.* 2012) as well as other relevant literature and project examples (highlighted in section 5).

The outcome of COP 17 included a reiteration that "developed country Parties commit, in the context of meaningful mitigation actions and transparency on implementation, to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries" (UNFCCC 2011). While it is clear that both public and private flows are eligible to be counted towards this USD 100 billion commitment, there are as yet no agreed definitions of what constitutes "mobilised" climate finance nor which instruments, flows and project types could count towards this financial commitment. Thus, the boundary of what could count towards this USD 100 billion is unclear (for a fuller discussion see *e.g.* Clapp *et al.*, 2012 which highlights questions and tracking implications of specific types of climate finance flows).

Some systems to track climate finance already exist (as outlined in *e.g.* Buchner et al. 2011). For example, the OECD's DAC-CRS database tracks climate-related ODA. However, none of the systems currently in place give a complete picture of climate finance flows. Information on private sector finance flows is particularly patchy. Thus,, there is limited information available to date on what climate finance that has been mobilised or leveraged, and the information that is available is not consistent or comparable.

Further, while it is national governments who have reporting obligations under the UNFCCC, not all private climate finance flows could necessarily be disaggregated to a country-specific level (*e.g.* flows from a private entity jointly owned by companies domiciled in different countries). Moreover, national governments do not necessarily have access to all relevant information. This includes private climate finance outflows from developed countries, and also private and public climate finance inflows to developing countries (for example, as outlined in Godlove 2012, climate finance flowing to developing countries may bypass government tracking systems and go directly to projects or project implementers).

The aim of the discussions in the CCXG Global Forum is to build on previous discussions and analysis to explore different aspects of these issues. This "questions document" outlines some key questions on tracking and reporting climate finance and their implications. It is structured so that each heading corresponds to a session in the seminar, and outlines two key questions for discussion in that session. Working through these questions could help relevant actors identify what needs to be done within the context of the United Nations Framework Convention on Climate Change (UNFCCC) in order to move the climate finance issue forwards, as well as what can be done in parallel in the interim period until specific definitions or methods have been agreed.

2. Determining which instruments, policies, actions count as mobilising climate finance

There is a wide range of possible interventions (policies, financial instruments, measures, specific actions on projects etc.) that could be considered as mobilising climate finance (*see e.g.* OECD, 2012; CIF, 2012; Nafo, 2012). These include policies initiated by different levels of governments (*i.e.* public sector), financial instruments used by banks, as well as measures by companies and/or organisations and project-specific actions. For example, policies used to mobilise climate finance could include those initiated at different levels of governance (local, national and/or international), those involving different actors (public, public/private, private) and/or those focused directly or indirectly on a climate

response (*e.g.* international support for domestic climate policy reforms versus changes to different aspects of a country's enabling environment as it relates to inward investment and/or climate-friendly actions).

In terms of specific actions, these could have a direct or indirect climate impact (*e.g.* be focused on a specific project versus the creation of a credit line), take place over a short or long time period, and/or occur at different stages of a project or programme (*e.g.* from pre-feasibility through to implementation). Other measures such as guarantees could also help to mobilise climate finance. The AGF (2010) and the report on climate finance paper prepared for the G20 ministers by the World Bank Group with OECD and others (WBG *et al.* 2011) indicate that "wholesale" (or upstream, general enabling environment) measures are likely to have more impact in the longer term. However, WBG *et al*. highlight that "arriving at reasonable estimates of such broad potential changes is a difficult challenge".

Key questions

1. *Is guidance needed on what interventions could "count" as mobilising climate finance – and if so, what would they be?*

Implications of YES	**Implications of NO**
An initial list would need to be established. Who would establish this and on what information would it be based? Is there convergence on some of the items that could be included (*e.g.* public sector policies) or excluded (*e.g.* carbon market flows)? Given that appropriate interventions may vary depending on the country, context, technology type, etc, such a list may not be straightforward to establish.	Transparency and consistency of information provided is compromised
What would the boundary of any eligible instruments be in terms of policy and flow types, actions, projects and time? For example, could it include indirect interventions such as improving access to climate finance and financing pre-feasibility studies?	

2. *What are the reporting implications of identifying specific interventions to count as mobilising climate finance towards the USD 100 billion commitment, and others as not?*

Implications of specifying some eligible interventions	**Implications of having no specified eligible interventions**
Reporting information on <u>how</u> individual flows have been mobilised will increase the level of transparency (and therefore the ease of measurement, reporting and verification - MRV), but may highlight inconsistencies between countries.	Not needing to associate specific flows with specific interventions would lower the overall reporting burden (and lead to shorter reports),[3] but it would be difficult to identify inconsistencies in approaches by different countries.
Country reports would either need to confirm that only specific interventions have been used, or would need to report on the interventions used for individual flows.	Measurement, reporting and verification (MRV) will be difficult if countries only report on the levels of finance that have been mobilised and not how it has been mobilised, or by which entity.

[3] Note that project-specific information on climate-related Offical Development Assistance (ODA) is included by Development Assistance Committee (DAC) countries in their submissions to the OECD-DAC Creditor Reporting System (CRS).

3. The effectiveness of different instruments, policies, actions in mobilising climate finance

The effectiveness of different instruments, policies and actions in mobilising climate finance will depend on many factors, including:

- the overall aim of the intervention (of which climate may only be one component – noting that measures of effectiveness for mitigation and adaptation climate projects are likely to be different);
- whether the intervention is direct or indirect *(e.g.* financing a specific project vs. a credit line or climate fund);
- the type of instrument used, including whether it provides any incentives for private sector involvement (*e.g.* via the carbon market);
- the stage of commercialisation/costs of the project technology, as well as the project size.

For example, the AGF (2010) estimates that different types of interventions can leverage between 2 and 20 times the level of direct funding provided. Estimates for national development banks range from 2 to 25, depending on the type of intervention (IDB, 2012 draft). There is also variation in the estimated amount of leverage for a given type of intervention, such as guarantees (AGF, 2010; ODI, 2011; IDB 2012 draft).

How effectiveness is measured, and particularly over what timescale, will significantly impact estimates of how effective climate finance has been. Further, it is important to distinguish between the effectiveness of interventions in mobilising climate finance and the overall effectiveness of a project or action (which may be judged on different, non-financial, criteria).

Key questions

1. *What are the lessons learned to date on the effectiveness of leveraging private climate finance, i.e. the advantages and disadvantages of different instruments?*

2. How can we enhance effectiveness and tap into the instruments that are available?

4. How "mobilised" or "leveraged" climate finance has been assessed to date

Different organisations refer to "mobilising", "catalysing", "leveraging" and "co-financing" of private and/or public climate-related flows. At present, there is no single definition of these terms (Brown *et al*., 2011), which are sometimes used inter-changeably. Given the current lack of private sector data on climate-specific investment, there is growing interest in identifying the level of private climate flows that have been leveraged by the public sector and some initial leveraging factors for different instruments have been estimated (*e.g.* AGF, 2010).

Examining definitions used for leverage ratios indicate that there can be significant differences. For example, some entities highlight private finance mobilised (*e.g.* the Department for International Development in the UK), whereas others include both public and private (*e.g.* the Climate Investment Funds). Some calculate the leverage of concessional loans only (*e.g.* Nafinsa – the national development bank of Mexico) whereas others include concessional and non-concessional loans (*e.g.* the International Finance Corporation). Some exclude co-financing from the recipients (*e.g.* for Global Development Alliances at the US Agency for International Development) whereas others

include it (*e.g.* the Global Environment Facility). These mean that information currently reported by different organisations on finance leveraged/mobilised is neither comparable nor consistent. It also means that simply summing the different amounts of "leveraged" climate finance from different organisations would lead to double counting.

Key questions

1. *National governments are tasked under the UNFCCC with reporting on their climate responses, including climate support. . However, national governments may not have a full picture of climate finance flows in their country – particularly for private climate finance. Is guidance needed on how to estimate the levels of climate finance mobilised or leveraged in their reports to the UNFCCC and what role governments (*vis-à-vis *organisations/entities) should play in this regard?*

Implications of YES	**Implications of NO**
Developing and applying guidance would allow for greater consistency between different country reports and reduce the risk of double counting.	Transparency could be improved if country reports include detailed information. However, lack of guidance would mean that reports would not necessarily be consistent and the information from them could not be meaningfully collated. This would mean that it would be more difficult to assess whether or not the USD 100 billion commitment has been met.

2. *How can double counting of climate finance flows (public and private) be identified and/or avoided?*

5. What we can learn from the current data on leverage ratios

As discussed, definitions of "leverage" vary widely across organisations, leading to various methods to calculate leverage ratios. This means that it is difficult to compare leverage ratios as presented by different organisations because they have been calculated in different ways. In order to develop a comparable set of data, this paper analyses funding for fifty separate projects, drawing data from publicly available sources (*e.g.* those benefiting from multilateral development bank finance as well as Clean Development Mechanism projects). The sample size is small due to the challenge in gathering complete data; inconsistencies across available information (in terms of level of detail with respect to project contributors and types of financial instruments used), infrequent updates and confidentiality concerns make it difficult to map each project's financial flows.

Nevertheless, it is clear (see Table 1) that leverage ratios vary widely among project types (*i.e.* between adaptation and mitigation projects; within the latter, also among different renewable energy projects), recipient countries, project sizes, financial instruments and mobilising entities (*e.g.* the Private Infrastructure Development Group vs. the Climate Investment Fund). Table 1 also shows that the definition of leverage used (and therefore the associated leverage ratio) can vary. For reference, the projects examined for this paper have identified seven broad "buckets" that sources of financing may fall into:

A) direct funding from the reporting entity[4],

[4] "Reporting entity" refers to the government, multilateral organisation, private entity, etc that reports information on its climate finance provided. Such entities frequently also list other sources of funding, including from other governments and/or multilateral development banks (MDBs) who may report separately (*e.g.* the CIF reports on how much non-CIF finance is "mobilised"). This means that reports cannot currently be summed without the risk of double counting, as multiple sources may report the same project.

B) indirect funding from the reporting entity (*e.g.* in-kind support),

C) public concessional funding from Annex I countries (some – but not all - entities distinguish concessional from non-concessional public flows),

D) public non-concessional funding from Annex I countries,

E) private-sector funding from companies located/domiciled in Annex I countries,

F) private-sector funding from companies located/domiciled in non-Annex I countries and

G) domestic public funding from the non-Annex I country in which the climate measure, action or project is occurring.

Table 1 highlights three of the possible ways that leverage ratios could be calculated using the categories A-G as outlined above, and the associated variation in leverage ratios found using these different calculation methods.

Table 1:Selected experience with calculation of leverage ratios

Definition	**How the reporting entity leverages other funding***	**How Annex I (AI) public funding leverages other funding**	**How AI public funding leverages AI private funding**
Formula	$\frac{C+D+E+F+G}{A+B}$	$\frac{[A+B+]E+F+G}{[A+B+]C+D}$	$\frac{E}{[A+B+]C+D}$
Range of leverage ratios for 50 projects (financed by a mix of instruments)	0.2 to 78.4	0.0 to 55.0	0.0 to 3.5
Range of leverage ratios for five wind energy projects in the Middle East and North Africa region (primarily debt-financed)	0.0 to 4.31	0.0 to 1.73	0.0 to 1.55

* The reporting entity could vary, so the formulae will change to reflect this.

Key questions

1. *There are different possible roles for leverage ratios, including as a proxy to forecast the amount of [additional] climate finance mobilised or as an estimate of private finance flows. Determining the role will have further implications for how leverage ratios are calculated and interpreted. How can leverage ratios help us to understand climate finance flows currently, and how could this change in future?*

2. *How can a more robust methodology for calculating leverage ratios be developed? Can more detailed labelling of reports (*e.g. *domestic private vs. international private flows, separating concessional from non-concessional loans) help to compare ratios in the meantime?*

6. Which project types and flows count as climate finance

Climate finance can flow from different actors (*e.g.* public or private, national or international) and be mobilised by different interventions (*e.g.* public policies, opening of a credit line, etc). Climate finance can also be mobilised via different financial instruments (*e.g.* guarantees, loans, grants, equity) and be directed towards different types of projects (*e.g.* renewables, forestry, energy efficiency, etc). At present, although there seems to be convergence on some flows and projects that could count towards climate finance, there is no agreement. Agreeing detailed eligibility criteria for project types and financial flows to count towards developed countries' collective USD 100 billion commitment on climate finance would increase consistency amongst country reports. Any such decisions would need to be made in the UNFCCC framework. However, experience with trying to negotiate detailed eligibility criteria in the UNFCCC context shows that this is not necessarily straightforward.

The aim of discussions in this session is to highlight a realistic aim for negotiations on this issue and to identify progress that can be made in tracking climate finance in the short term, *i.e.* in the absence of decisions on the matter.

Key questions

1. *Are decisions needed at the international level on what project types and/or flows are eligible to count towards developed countries' collective USD 100 billion commitment?*

Implications of YES	**Implications of NO**
Definitions would need to be developed. For mitigation activities, this could build on the list for mitigation activities drawn up by the MDB working group (see Annex A).[5] For adaptation activities, this would require drawing up a new list.	Do individual reports from countries and/or entities need to clarify what is included? If so, to what level of detail (*i.e.* do specific flow types/projects need to be reported alongside the associated amount flowing)?
For flow types, an initial "working definition" list could be drawn up (comprising *e.g.* equity, grants, debt (including loans, bonds, capital markets), technical assistance, guarantees, swaps, or other risk-mitigating instruments).	How could different flows be quantified? For loans, for example, should the level of concessionality affect how these are accounted for? Should risk mitigation instruments, which improve the risk-return profile for private investors but do not require an initial payout, be included?

2. *Climate finance can flow via different channels and via different actors. However, the location of the actor does not necessarily reflect the source of the climate finance (see Clapp* et al. *2012 for a fuller discussion). Are decisions needed at the international level on where these flows can originate, as well as on the timeline for which an intervention can be assumed to mobilise finance?*

Implications of YES	**Implications of NO**
Further data-gathering would be needed on how the "boundary" of international, intertwined financial flows could be determined. Guidance may also be needed on how long a particular intervention could be considered to mobilise climate finance for. (Note that information on ownership is not always in the public domain.)	Reports could not necessarily distinguish between flows coming from developed vs. developing countries.

[5] The typology of mitigation activities as presented in the Joint MDB Report (MDB, 2012) by the African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, European Investment Bank, IDB, IFC, and the World Bank are listed in Annex A.

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Annex A: Joint MDB typology of mitigation activities (MDB 2012)

TYPOLOGY OF MITIGATION ACTIVITIES

Demand-side, brownfield energy efficiency3
Commercial and residential sectors (buildings)
 Energy-efficiency improvement in lighting, appliances and equipment
 Substitution of existing heating/cooling systems for buildings by cogeneration plants that generate electricity in addition to providing heating/cooling
 Retrofit of existing buildings: Architectural or building changes that enable reducing energy consumption
 Waste heat recovery improvements

Public services
 Energy-efficiency improvement in utilities and public services through the installation of more efficient lighting or equipment
 Rehabilitation of district heating systems
 Utility heat loss reduction and/or increased waste heat recovery
 Improvement in utility scale energy efficiency through efficient energy use, and loss reduction.

Agriculture
 Reduction in energy use in traction (*e.g.* efficient tillage), irrigation, and other agriculture processes

Industry
 Industrial energy-efficiency improvements through the installation of more efficient equipment, changes in processes, reduction of heat losses and/or increased waste heat recovery
 Installation of cogeneration plants
 More efficient facility replacement of an older facility (old facility retired)

Demand-side, greenfield energy efficiency4
Construction of new buildings
 Use of highly efficient architectural designs or building techniques that enable reducing energy consumption for heating and air conditioning, exceeding available standards and complying with high energy efficiency certification or rating schemes

Supply-side, brownfield energy efficiency
Transmission and distribution systems
 Retrofit of transmission lines or substations to reduce energy use and/or technical losses, excluding capacity expansion
 Retrofit of distribution systems to reduce energy use and/or technical losses, excluding capacity expansion
 Improving existing systems to facilitate the integration of renewable energy sources into the grid

Power plants
 Renewable energy power plant retrofits
 Energy-efficiency improvement in existing thermal power plant
 Thermal power plant retrofit to fuel switch from a more GHG-intensive fuel to a different, less GHG-intensive fuel type
 Waste heat recovery improvements

Renewable Energy
Electricity generation, greenfield projects
 Wind power
 Geothermal power
 Solar power (concentrated solar power, photovoltaic power)
 Biomass or biogas power that does not decrease biomass and soil carbon pools
 Ocean power (wave, tidal, ocean currents, salt gradient, etc.)
 Hydropower plants only if net emission reductions can be demonstrated

Transmission systems, greenfield
 New transmission systems (lines, substations) or new systems (*e.g.*, new information and communication technology, storage facility, etc.) to facilitate the integration of renewable energy sources into the grid

Heat production, greenfield or brownfield projects
 Solar water heating and other thermal applications of solar power in all sectors
 Thermal applications of geothermal power in all sectors
 Thermal applications of sustainably-produced bioenergy in all sectors, including efficient, improved biomass stoves

Transport
Vehicle energy efficiency fleet retrofit
 Existing vehicles, rail or boat fleet retrofit or replacement (including the use of lower-carbon fuels, electric or hydrogen technologies, etc.)

Urban transport modal change
 Urban mass transit
 Non-motorized transport (bicycles and pedestrian mobility)

Urban development
 Integration of transport and urban development planning (dense development, multiple land-use, walking communities, transit connectivity, etc.), leading to a reduction in the use of passenger cars
 Transport demand management measures to reduce GHG emissions (*e.g.*, speed limits, high-occupancy vehicle lanes, congestion charging/road pricing, parking management, restriction or auctioning of license plates, car-free city areas, low-emission zones)