MONITORING AND REPORTING ON FINANCIAL FLOWS RELATED TO CLIMATE CHANGE

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EXECUTIVE SUMMARY

Mitigating and adapting to climate change increases the cost of development. Considerable resources are needed in addition to the present levels of official development assistance (ODA) to complement rather than undermine the efforts and progress towards the achievement of development objectives including Millennium Development Goals (MDGs). The panoply of types and sources of financial flows is extremely broad and includes both new instruments established to address climate change as well as core development and investment finance shifting towards low carbon solutions and adaptation. In this complex landscape, keeping track of financial support to adaptation and mitigation will be a challenge.

Following the mandate provided in the Strategic Framework for the World Bank Group (WBG) on Development and Climate Change, an internal *discussion paper* on the challenges related to monitoring such flows has been prepared by World Bank staff in consultation with UNFCCC and OECD.

The *first part focuses on tracking, monitoring and reporting various types of flows*, primarily from ODA and other public sources, but also briefly reflecting on flows from private sources. It briefly reviews available information on the various (current and upcoming) financial and investment flows to support climate action in developing countries as a first step in assessing the challenges associated with monitoring of such flows. It considers both *climate finance* (i.e., the amount of additional resources required to catalyze the shift of a much larger volume of public and private development investments to climate-friendlier options) and *underlying finance* (i.e., the almost 10 to 20 times larger amount of financial and investment flows in developing countries that must be increasingly put to climate action).

The *second part on focuses on possible ways of tracking additionality in ODA flows* only, with the aim to stimulating the discussion within the World Bank Group and its partners on this issue. It describes the various perceptions of different groups of countries as well as possible baselines, benchmarks and tools for tracking progress. It concludes that the future technical solutions for monitoring official (ODA and non-ODA) financial flows towards climate action will most likely be a combination of the application of (current and improved) OECD DAC Rio Markers, more consistent reporting by MDBs, and reporting by UNFCCC on new funding through levies, and increased capacity by recipient countries in tracking incoming flows, etc. *Increasingly reliable, comprehensive and transparent reporting is needed to demonstrate that new climate finance instruments are not introduced at the expense of those targeting other objectives.*

The *thirds part provides proposals for further action* by developed and developing countries, the UN system and MDBs.

1. INTRODUCTION

Mitigating and adapting to climate change increases the cost of development. The emerging and yet incomplete cost estimates of additional investments needed in developing countries - by public and private sources - are on the order of hundreds of billions of dollars a year for several decades. These resources are needed in addition to the present levels of official development assistance (ODA) so as to complement rather than undermine the efforts and progress towards the achievement of development objectives including Millennium Development Goals (MDGs)[1]. Current climate-dedicated financial flows to developing countries, though growing, cover only a fraction (less than 5%) of the estimated amounts that developing countries would need over several decades.

The panoply of types and sources of financial flows is extremely broad and includes both new instruments established to address climate change (various UNFCCC funds, CIF, etc.) as well as core development and investment finance shifting towards low carbon solutions and adaptation. In this complex, ramified landscape, keeping track of financial support to adaptation and mitigation will be a challenge. This is particularly the case in the context of *measurable, reportable and verifiable support to climate action in developing countries*. Challenges are multiple and encompass (at least) the following:

- Comprehensiveness of coverage (funds under UNFCCC, climate-specific funds under other agencies, other bi- and multilateral assistance channels for public sector flows and a multitude of private sector financial and investment flows);
- Consistency and harmonization of information across so many channels with different degrees and levels of detail, frequency of reporting, review process;
- Relationship between financial flows to support climate action and Millennium Development Goals.

As a background for this discussion, it is important to bear in mind the evolution of the ODA concept. ODA is currently defined as those flows to countries and territories on the DAC List of ODA Recipients and to multilateral development institutions on the condition that they are:

> i. provided by official agencies, including state and local governments, or by their executing agencies; and
> ii. each transaction of which
>
> a) is administered with the promotion of the *economic development and welfare of developing countries as its main objective*; and
>
> b) is *concessional* in character and conveys a grant element of at least 25% (calculated at a discount rate of 10%).

The original concept was developed within the context of increasing income and productive assets. This context has changed over time to include other development concerns such as the environmental sustainability. When recording ODA flows addressing mitigation or adaptation

[1] See *Development and Climate Change – A Strategic Framework for the World Bank Group* (2008)

action, the challenge is to assess the *incremental* value of the contribution concerned. Ways should be found to:

- *channel funds* to meet these incremental needs (driven be efficiency, effectiveness, fairness and equity concerns), and
- *report* on financing allocated to meet these incremental needs.

The question of the baseline for "new and additional" ODA financing (see chapter 3. below) and specific financing architecture will be subject to extensive debate between countries and no agreement is likely to be achieved in the near future. Irrespective of the outcome of this political process, financial flows toward climate change need to be recorded and codified in a systematic and mutually agreed manner to allow substantive analysis and reporting, tracking progress made in implementing the Copenhagen and post-Copenhagen decisions.

Following the mandate provided in the Strategic Framework for the World Bank Group (WBG) on Development and Climate Change[2], this internal paper will focus on the challenges related to monitoring such flows. The first part focuses on tracking, monitoring and reporting various types of flows, primarily from ODA and other public sources, but also briefly reflecting on flows from private sources. The second part on focuses on possible ways of tracking additionality in ODA flows only, with the aim to stimulating the discussion within the World Bank Group and its partners on this issue.

This report will not attempt to provide quantitative information on financial flows, which will be done in separate future documents by UNFCCC, OECD/DAC, etc.

2. CURRENT PRACTICES AND CHALLENGES IN MONITORING

This section briefly reviews available information on the various (current and upcoming) financial and investment flows to support climate action in developing countries as a first step in assessing the challenges associated with monitoring of such flows.[3] It considers both *climate finance* (i.e., the amount of additional resources required to catalyze the shift of a much larger volume of public and private development investments to climate-friendlier options) and *underlying finance* (i.e., the almost 10 to 20 times larger amount of financial and investment flows in developing countries that must be increasingly put to climate action).

More precisely, *climate finance* can be mobilized through a range of instruments, from a variety of sources, both international and domestic, both public and private, such as primary CDM

[2] Action Area 2: "Mobilizing additional concessional and innovative finance", states that: "The WBG will address the need for better monitoring climate-related finance by working with the UNFCCC Secretariat, UNDP, the UN Statistical Division, and the Development Assistance Committee (DAC) of the OECD on developing consistent and comprehensive monitoring and systematic reporting of financial flows to support developing countries' efforts in mitigation and adaptation, including the provision of new and additional financing for meeting the incremental cost imposed by climate change. This work will build on and extend existing initiatives, such as the WBG's annual review of the carbon market and carbon revenue flows and the recent inclusion of DAC of markers for mitigation-related funding in its reporting of bilateral aid. Particular attention will be given to clarifying the sources and flows of adaptation-related financing."

[3] Interested reader may consult Corfee-Morlot, Guay, and Larsen (2009) who examined in depth availability and quality of information on mitigation support, *i.e.*, comprehensiveness, granularity, consistency, frequency of updating, reporting, review process, all specifications that are crucial in the context of the MRV discussion. See J. Corfee-Morlot, B. Guay and K. Larsen (2009). Financing Climate Change: Toward a Framework for Measurement, Reporting and Verification of Mitigation; OECD-IEA (2009).

transactions (essentially private sector flows from developed countries to developing countries through a market-based mechanism), GEF grants (multilateral concessional climate-change dedicated funding) or domestic resources governments in developing countries are mobilizing (see recent announcement by Maldives of a daily tax on tourism whose proceeds would be earmarked for climate action). With respect to uses, climate finance can cover the additional costs and risks of climate-friendlier investments and development programs,[4] facilitate enabling policies, regulatory frameworks, institutions and markets in support of adaptation and mitigation, and support research, development and deployment of new technologies. *Underlying finance* relates to financial and investment flows in developing countries, from multiple sources, both public and private, both international and domestic (e.g., foreign and domestic private sector investment, national development budget and international development assistance) that are increasingly put to climate action.

In the long term, the information on climate change financial flows should gradually capture the following (from the more specific flows of climate finance – 1 to 7, to broader and more ramified flows of underlying finance (8) and to lower degrees of concessionality):

1. Climate-specific additional resources under the aegis of UNFCCC (GEF, Adaptation Fund, etc.)
2. Resources from the carbon market
3. Concessional funding (ODA) from the DAC community specifically for mitigation and adaptation (including through MDBs)
4. Other than climate-specific ODA from the DAC community (including through MDBs)
5. Non-DAC donor support
6. Philanthropia
7. Estimates of resources mobilized in developing countries through internal reform (e.g., putting resources aside out of core budget or fiscal or pricing reform)
8. Non-concessional financial and investment flows in the public sector and private sector

Given the multiplicity of types of flows as highlighted above and information gaps, this section examines both sources and endpoints, as needed. It concludes that getting a full view of climate-related financial and investment flows would be a formidable challenge given possible inconsistencies across existing reporting systems, the many data gaps (with notably the challenge to identify the contributions of underlying finance to mitigation and adaptation – which unlike specific climate finance is not reported as is) and the complex web of flows (with possibility of double counting).

The section recommends to progress on harmonization and consistency of monitoring, with the Rio Marker initiative as a useful start. It also recommends a dual tracking system (on both sources and endpoints). Both will require continued efforts to strengthen the statistical capacity of developing countries. Getting a full view of climate-specific and climate-related financial and investment flows could undoubtedly help build trust and accountability, as recipient countries

[4] Additional upfront investment needs in developing countries consistent with global mitigation efforts to stabilize greenhouse gas atmospheric concentrations at 450ppm could amount on average to US$200 billion per year by 2020 and increase to US$400 billion per year on average one decade later. In addition, about US$75 to 100 billion could be required annually over the next 40 years to support adaptation to the inevitable amount of climate change developing countries will experience.

could monitor how assistance is delivered in line with commitments. In addition to identifying and quantifying climate-related financial and investment flows, this may also help monitor progress and facilitate the implementation of domestic climate-related priorities, as measuring success in attracting climate finance and leveraging underlying finance is crucial in evaluating which instruments are or may be most appropriate to stimulate climate action.

2.1. Climate-specific additional resources under the aegis of UNFCCC

Under this heading are regrouped resources of the **Global Environmental Facility**, or GEF (under the Climate Change focal area, as the financial mechanism of the UNFCCC), UNFCCC GEF-administered **Least Developed Country Fund** (LDCF) **and Special Climate Change Fund** (SCCF), and the **Adaptation Fund** (AF). These funds (with the exception of the Adaptation Fund) depend on voluntary contributions and are counted as ODA in OECD DAC countries. More details on these funds are provided in **Annex 1.**

The GEF trust fund devotes about US$250 million per year to climate change over 2007-10 (GEF-4) and so far since its inception, the GEF has invested US$2.7 billion to support climate change projects in developing countries and EITs, with another US$17.2 billion in co-financing.[5] It is the largest source of grant financing for mitigation[6] while UNFCCC special funds (about US$270 million altogether) have been critical to pilot adaptation projects and generate lessons to scale up climate-resilient growth as resources become available. For GEF projects, information includes recipient country, size of grant and total project cost (leverage) and objective (adaptation or mitigation, sector of action).

The main source of funding of the Adaptation Fund comes from a 2% share of proceeds on CERs issued to CDM projects. Depending on CDM project performance and price, the Adaptation Fund could manage in between US$300-600 million by 2012 which will not be sufficient to meet all the needs for adaptation action in developing countries. Hence, other climate-specific funds need to provide windows for adaptation and core development activities need to take climate resilience more into consideration. The AF Board has recently approved the Guidelines for Accepting Donations which outline the modalities for receiving donor funding in the AF TF in addition to the CERs. The Adaptation Fund Operational Policies and Guidelines outline the monitoring and reporting modalities at the project level, while a Results Based Management (RBM) and evaluation system is being developed for portfolio level monitoring and reporting.

2.2. Resources from the carbon market (transactions of emission reductions from projects based in developing countries)

So far, the **Clean Development Mechanism** (CDM) has been a major catalyst of low-carbon investment in developing countries, potentially channeling a large flow of new and additional resources. Over 2002-08, about 1,900 million Certified Emission Reductions (CERs) have been transacted on the primary market for an approximate value of US$23billion and some US$106 billion in low-carbon investment (of which, US$95 billion in clean energy investment) benefited

[5] GEF addresses the incremental costs of projects with global environmental benefits; it is by essence a co-financing source.
[6] Most of GEF support is for mitigation, except the Strategic Priority to Pilot an Operational Approach on Adaptation (SPA), a funding allocation within the GEF trust fund of US$50 million till 2010.

from CDM transactions over the same period.[7] More generally it is estimated that active projects that entered the CDM pipeline over 2002-08 could represent an investment of more than US$150 billion, should they materialize.[8] In comparison, sustainable energy investment in developing countries totaled approximately US$80 billion over 2002-08.[9]

Monitoring potential financial flows through CDM by host countries and technologies (project types) is a challenging task since the number of primary CDM transactions together with the diversity of players involved is increasing dramatically. In addition, volumes, prices and other specifics of transactions (like risk-sharing provisions) are confidential in a more and more competitive market. Last, a vast majority of CDM transactions on the primary market are forward purchase agreements with payment on delivery of emission reductions: depending on project registration and performance, the amount and schedule of payments may prove quite different. [10] Similarly, it is also difficult to get an accurate picture of investment in CDM projects: while their status along the CDM project cycle is public, it is unclear which of these projects have reached financial closure and are operational (except for those who have already been issued CERs). The lack of transparency of the primary project-based market (which by essence is virtually over-the-counter only) is one of the main *raisons d'être* of the State and Trends of the Carbon Market, an annual report prepared by the World Bank, with a focus on project-based transactions. Highlights from the 2009 edition are presented in Box 1.

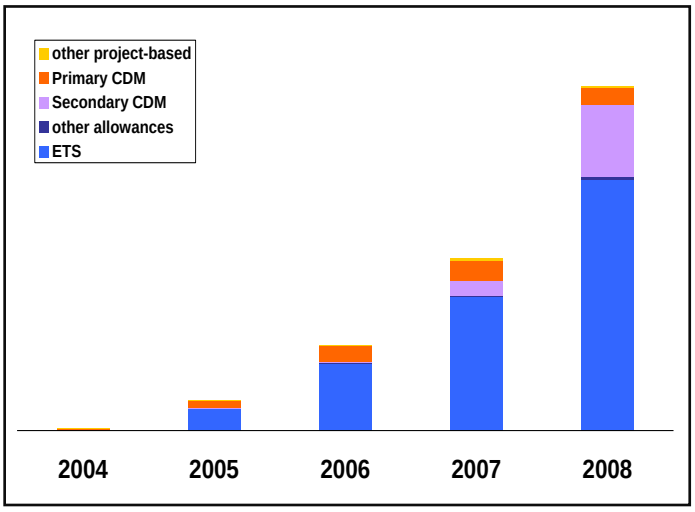
[7] Source, for both numbers: K. Capoor and P. Ambrosi (2009). *State and Trends of the Carbon Market 2009*, World Bank, Washington (DC). Global investment estimate is obtained by extrapolating World Bank CDM leverage ratio to estimated global CDM primary transactions. More than half of underlying investment is of domestic origin.

[8] This estimate is obtained by multiplying the amount of expected annual emission reductions from active projects in the CDM pipeline for a specific technology by the capital intensity of this technology. Technology-specific capital intensity estimates are calculated as the ratio of the sum of underlying upfront investment for all project activities or programs of activities for a given technology to the sum of their expected annual emission reductions, using data for CDM projects with a signed ERPA within the World Bank Carbon Finance Unit portfolio. This approach follows Seres and Haites' one. See: S. Seres and E. Haites (2008). *Analysis of Technology Transfer in CDM projects*. UNFCCC, Bonn.

[9] Source: after *Global Trends in Sustainable Energy Investment 2009*, UNEP, SEFI, New Energy Finance. Estimates of clean energy investments that benefit from CDM tend to be higher than actual sustainable energy investment in developing countries since many CDM projects are at an early stage (not operational, nor commissioned nor even at financial closure) when CERs are transacted.

[10] It is estimated that actual financial flows through the CDM primary market totaled only US$1.55 billion over 2002-2008 (or about 7% of commitments under ERPAs). N. Girishankar (2009). *Innovating Development Finance: From Financing Sources to Financial Solutions*. CFP Working Paper Series No. 1, the World Bank, Washington (DC)

Box 1: Carbon Market Doubled in 2008 despite Recession, but Biggest Opportunities yet to be Seized



Despite the turmoil in the financial world, the global carbon market doubled to US$ 126 billion (€86 billion) in 2008. Approximately US$92 billion (€63 billion) of this overall value is accounted for by transactions of allowances and derivatives under the EU Emissions Trading Scheme (EU ETS) for compliance, risk management, arbitrage, raising cash and profit-taking purposes. The second largest segment of the carbon market is the secondary market for Certified Emission Reductions (CERs), with spot, futures and options transactions in excess of US$26 billion (€18 billion), representing a five-fold increase in both value and volume over 2007.

Not as welcome is the news that the value of primary CDM transactions fell 12 percent to an estimated US$6.5 billion (€ 4.5 billion) in 2008. This drop was the result of a complex set of factors related to difficulty in obtaining financing for climate-friendly projects during the financial crisis, regulatory delays and uncertainty surrounding the future of the market under a new global climate change agreement expected to take effect in 2012.

Source: K. Capoor and P. Ambrosi (2009). *State and Trends of the Carbon Market 2009*, World Bank, Washington (DC).

While some public buyers (i.e., governments for their procurement programs – including funds and participation in funds - and international organizations for the funds and facilities under their management) achieve a certain degree of transparency (releasing information on the size of their carbon procurement programs, what has been committed so far by country or technology), such disclosure tends to be more an exception than the norm, most buyers indeed not disclosing anything about their carbon portfolio for reasons of confidentiality/competitiveness. In addition, whatever the amount of information on CER transactions, it does not give any idea of the actual payment flows (often contingent on credits delivery).

In this context, a solution to improve the quality of information could be sought on the seller's side, through Designated National Authorities (DNAs), who have to approve CDM projects in regard of their sustainable development priorities. In a handful of host countries (and notably China), DNAs play an active role in the CDM cycle and have a good overview of how the instrument can help achieve some national priorities and how sustainable investment is likely to benefit from CDM. Building on this experience, DNAs could record data on the status of CDM transactions and progress of CDM investments (provided they receive adequate capacity and

support) and disclose in an aggregate manner to preserve the confidentiality of these figures. This could include information on: (potential) financial flows through the carbon market, amount and origin (FDI or domestic) investment in CDM projects.[11]

2.3. Concessional funding (ODA) from the DAC community specifically for mitigation and adaptation

Donor support (through bi- and multi-lateral funds and initiatives) has been critical to mobilize resources for climate action over the last 18 months, in particular for adaptation.

Approved in July 2008, the **Climate Investment Funds** (CIF)[12] are a collaborative effort among the multilateral development banks (MDBs) and countries to bridge the financing and learning gap between present needs and a global climate finance architecture (being currently negotiated under UNFCCC). The CIF bring together a number of emerging initiatives to address climate change, thus providing coherence and avoiding proliferation of multiple smaller initiatives while increasing impact (and leverage on other sources). With over US$6 billion in pledges from 13 donors, all recorded as ODA, the CIF are comprised of the Clean Technology Fund (CTF), financing scaled-up demonstration, deployment and transfer of low-carbon technology for significant greenhouse gas (GHG) reductions; and the Strategic Climate Fund (SCF), financing targeted programs in developing countries to pilot new climate or sectoral approaches with scaling-up potential (so far, climate resilience, forestry and renewable energy in low-income countries). Climate-specific funds through MDBs have an important role in leveraging substantial amounts of financing from other sources: for instance the three investment plans endorsed under the CTF (Mexico, Turkey and Egypt) with a total funding envelope of over US$ 1 billion have leveraged over US$9 billion in co-financing.

In parallel, donors have established other bi- or multilateral initiatives, which can be delivered through MDBs or other executing agencies. Major examples include the Cool Earth Partnership (Japan, US$10 billion), the Environmental Transformation Fund-International Window (UK, US$1.6 billion), the International Climate Initiative (US$ 180 million p.a.), the Climate and Forest Initiative (Norway, US$580 million), two initiatives by Australia (totaling US$ UNDP-Spain MDG Achievement Fund (US$100+ million).[13]

As those are dedicated initiatives (i.e., whose chief purpose is to address climate change) and in a limited number, keeping track of the projects and programs they support is reasonably easy. Reporting may not be fully consistent across sources, however, given the diversity of donors and variety of delivery channels. In addition, for a number of bilateral initiatives, part of the funds will be distributed through multilateral initiatives, making it difficult to draw an accurate picture of upcoming climate change resources in developing countries.

2.4. Other than climate-specific ODA from the DAC community

[11] This would not be possible for projects developed along voluntary market standards, which are not regulated by a sovereign entity.
[12] A more detailed description of the funds is available in Annex 1.
[13] See Annex 1.

These encompass a large range of activities funded through grants or concessional lending of bilateral agencies in OECD DAC countries and through their contributions to MDBs, including:

- technical assistance (e.g., analytical work such as assessment of potential impacts of climate change for a given sector/region and options for climate-resilient investments or identification of mitigation opportunities and possible financing sources and mechanisms to address additional costs of low-carbon growth, or capacity building activities such as awareness raising and training around carbon finance potentials),
- support to climate-friendly projects (e. g., wind-farm or insurance scheme against current climate variability), including through the provision of guarantees and export credits, or
- through budgetary support (e.g., support to sectoral or regional development programs taking climate change into consideration).

Given many development projects or programs do deliver climate (co-)benefits (e.g., energy efficiency improvements, natural resources management), tracking ODA contribution to climate action in full is by essence difficult, with the exception of targeted funds and initiatives as discussed above. In addition, as ODA (as well as other forms of development finance) is increasingly delivered at a programmatic, strategic level (with low-carbon growth or climate-resilience as one of the outcomes), matching downstream results to specific upstream support is not an easy task (e.g., a policy and institutional reform in solid waste management with ODA support hopefully translates into better practices and additional investment for more sustainable waste management, with mitigation benefits: how to quantify these benefits?; how to attribute them specifically to upstream policy and institutional reform?).

To what extent then does other than climate-specific bilateral ODA already support mitigation?[14] The Rio Marker for climate change can provide a qualitative answer, by identifying aid activities that contribute to the objective of the UNFCCC[15] by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration. The Rio Marker for climate change (effectively for mitigation) also provides an estimate of corresponding funding.[16] In June 2008 (at the end of a 2005-07 trial period), the OECD DAC Working Party on Statistics approved the inclusion of the Rio Markers as permanent items of the CRS data collection system. (Partial) Data (see Table below) indicate that over the past few years, DAC donors have allocated between US$3-4 billion per year for climate-change-related aid (or about 3-4% of total ODA).

[14] If a country on the DAC list receives sovereign funding on concessional terms to promote development then this can be counted as ODA. Mitigation should logically not be counted as ODA since it covers a global public good and not development. However, GEF contributions are considered ODA so other donor funding for mitigation, such as the CTF, are considered ODA.
[15] Stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate change system.
[16] There are two other similar Rio Markers, one for desertification and one for biodiversity. The marker system emphasizes the policy objective of an intervention – as opposed to a sector code that identifies "the specific area of the recipient's economic or social structure which the transfer is intended to foster." An activity can have more than one policy objective.

Table 1. Climate-change-related (mitigation) aid by DAC members (annual commitments, current USD million)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Australia	10	15	14	2	3	3	-	20	21	73
Austria	1	..	3	4	3	1	9	13	24	10
Belgium	6	2	5	1	1	0	3	14	23	48
Canada	23	10	22	62	79	65	27	2	42	42
Denmark	18	1	4	85	76	71	100	216	93	191
Finland	38	17	14	7	3	2	..	..	..	39
France	64	10	14	19	5	9	19	200	327	481
Germany	491	847	224	148	202	596	610	870	1,095	..
Greece	..	..	..	..	1	1	1	1	1	12
Ireland	-	-	0	1	1	1	1	..	..	29
Italy	..	..	..	..	..	..	..	..	14	24
Japan	1,373	1,783	1,750	1,087	954	2,293	1,921	2,223	1,407	1,332
Luxembourg	..	..	..	..	..	..	..	..	..	..
Netherlands	46	38	62	153	128	97	265	175	228	..
New Zealand	1	0	0	..	1	1	2	8	13	3
Norway	62	71	42	66	41	57	..	..	..	..
Portugal	-	-	12	0	0	0	40	2	1	1
Spain	2	12	25	6	3	4	..	27	32	93
Sweden	29	18	13	2	7	9	8	3	22	7
Switzerland	4	5	5	5	13	18	..	..	20	33
United Kingdom	106	205	49	-	1	2	-	0	58	51
United States	171	224	168	98	75	119	114	34	31	56
EC	..	..	..	..	..	124	117	150	480	320
Total (partial)	***2,444***	***3,254***	***2,424***	***1,745***	***1,597***	***3,472***	***3,236***	***3,959***	***3,931***	***2,844***
% of ODA	5%	6%	5%	3%	3%	5%	4%	4%	4%	3%
Total Biodiversity (partial)	***1126.1***	***1048.0***	***890.3***	***1432.7***	***1476.2***	***2085.4***	***1963.4***	***2561.6***	***2834.9***	***3127.1***
Total Desertification (partial)	***953.2***	***679.8***	***554.2***	***912.2***	***842.7***	***1065.3***	***1362.8***	***1463.6***	***1780.5***	***1032.3***

Note: grey-shaded cells indicate where only partial information is available.
Source: http://www.oecd.org/document/11/0,3343,en_2649_34447_11396811_1_1_1_1,00.html

As they report their aid activities to the OECD Creditor Reporting System (CRS) database, DAC members also indicate the policy objective of aid activities (in this case, mitigation) and score its relevance with three values: "0- Not targeted"; "1- Significant objective"; "2- Principal objective." Not all DAC members report on the Rio Marker for climate change, leaving some data gaps. In addition, there is no percentage of aid activity amount associated to these scores: typically, activities marked as "significant objectives" do not address mitigation in their entirety. Therefore, for those who report, the Rio Marker for climate change provides an upper-bound of mitigation support. OECD has embarked on a process to assess and improve the quality of these Markers.

The Joint OECD DAC ENVIRONET and WP-STAT Task team is also in the process of developing a similar Marker to track adaptation-related activities in (bilateral) ODA. The World Bank has been a participant in this process. The draft definition and guidelines will be finalized during 2009 and the Adaptation Markers are likely to be introduced into the 2011 reports. Consequently trends revealed by the applications of these Markers cannot be meaningfully measured until 2014-2015.

Box 2: Drawing on their experience in providing economy-wide support for sustainable development and emerging climate finance instruments, MDBs have been responding to growing demand in "climate smart" investments and institutional and policy measures. They are a large source of development assistance with significant climate benefits, and importantly they are engaged in sectors that are critical for climate action. Over 2006-07, it is estimated that MDBs have engaged about US$4.2 billion annually in low-carbon investment, with an approximate leverage factor of 3.8, i.e. activity volumes that compare with bilateral ODA.

MDBs do not, however, report their activity in any consistent manner across institutions and information on adaptation is often scarce. Discrepancies for instance relate to sectors/categories classification or to engagement figures that combine own resources together with climate-specific resources and instruments (e.g., GEF or carbon finance). In addition, similarly to bilateral ODA marked as "Significant objective", there is no indication of a specific share of their own resources (be it ODA or not) that is dedicated to climate action. MDBs are actively improving their monitoring systems in this respect, in particular with regard to consistencies across agencies.

So far, the Rio Marker is the most advanced initiative to MRV financial and investment flows across a range of countries (on both ends) and sectors. Relatively simple and transparent to apply, the mandatory application of Rio Markers by all OECD countries in reporting their ODA could be a source of inspiration in the MRV debate. Those adaptation or mitigation projects marked with score 2 (principal) can the interpreted as being fully dedicated to climate action. However, those marked with score 1 (significant) can have several other thematic objectives as well and it is not possible to assess the comparative importance of adaptation and mitigation in overall project objectives. Thus no quantitative assessment is possible and overall the Rio Markers can only provide information on trends and orders of magnitude. Double counting with

other policy objectives is also not excluded. Some donor institutions (e.g. Belgium) are testing systems that attempt to capture a higher degree of detail either through a larger number of scores or through percentages. No such methodology has so far reached global application. The challenge of improving the Rio Markers in the long run is addressed in Chapter 3 below.

2.5. Non-DAC donor support

Aid from non-DAC donors continued on a strong upward trend in 2007, reaching US$5.6 billion (for those countries reporting to DAC) with Saudi Arabia accounting for close to 40%.[17] Among other major emerging non-OECD donors, India's development cooperation expenditure was about US$1 billion, Brazil's US$437 and Russia's US$210 million. Official numbers are not available for China but estimates place this number at US$1.4 billion. [18] South-South cooperation is beginning to provide larger amounts of resources for development, particularly in the productive sectors and infrastructure, two areas with potentially large impacts on both future GHG emission trajectories and vulnerability to climate change. The rise in non-DAC ODA make even more timely efforts to improve the monitoring of information about these flows, in particular in achieving greater comprehensiveness (magnitude of engagement and sources and recipients) and consistency (how it serves a number of purposes, notably climate action).

2.6. Philanthropia

Private actors, and most notably foundations and private companies, are becoming increasingly important players in development finance. Along with growing resources, their participation can emulate innovative partnerships to fund-raising (e.g., using new information technologies to mobilize resources and reach new partners) and financial solutions to development (e.g., around technology transfer). Private financial contributions for international purposes, as reported to the OECD, climbed to US$18.5 billion in 2007 (up 25% over 2006 levels), with the U.S. the largest source (66%).[19] These numbers, however, do not capture the full extent of private giving as reporting is neither exhaustive nor comprehensive (not all DAC countries do report and beyond DAC, little information is available)[20]. Estimates indicate that it could have been as high as US$49.1 billion in 2007 (47% of ODA, this same year), with US accounting for the largest share at 75%.[21] .

Much less is known about recipient countries and purposes (be it for climate-related activities or more broadly in climate-relevant sectors). Recent data indicate that US foundation giving for climate change for international purposes reached about US$338 million in 2007, or about 6% of their estimated international giving.[22] One-quarter of these flows funded policy work. Non-DAC countries received about US$327 million, with global programs leading (39%). [data for other OECD countries are even more fragile …]. To conclude, though information is scarce, scattered and hardly comparable, philanthropia flows to support climate action in developing

[17] Source: *Development Co-operation Report 2009*, OECD.
[18] All data from *Global Monitoring Report 2009*, World Bank.
[19] OECD database, aggregate "Net Private Grants".
[20] *The Index of Global Philanthropy and Remittances 2009* reports recent examples of the rise of philanthropy in emerging economies and data from the Gallup World Poll confirm also this trend. The exact scope (domestic or international solidarity) is unclear, though. Source: Center for Global Prosperity, Hudson Institute, Washington, DC.
[21] *The Index of Global Philanthropy and Remittances 2009*, op. cit.
[22] Source: The Foundation Centre, see *International Grantmaking IV: An Update on U.S. Foundation Trends* and specific focus on climate change.

countries compare to certain official multilateral flows in the same area, such as GEF or UNFCCC funds so far. This reinforces their importance and the needs to better coordinate and intensify partnerships to maximize impact of assistance.

2.7. Estimates of resources mobilized in developing countries through internal reform (e.g. putting resources aside out of core budget or fiscal or pricing reform)

A number of developing countries have in the past invested in options that serve both to advance development and limit growth of emissions or improve climate resilience. This is for instance the case of Brazil, who invested heavily in the use of biofuels (also for energy security purposes) or Thailand, with energy efficiency programs; a number of countries are also increasingly factoring in climate change considerations in their natural disaster management strategies. As they are experiencing the first impacts of climate change, developing countries are assessing potential and needs, defining measures, setting goals, and mobilizing finance. For instance, Bangladesh and Maldives have directed their own resources to protect their coastal regions from rising waters and several countries have introduced budget allocations for energy efficiency and renewable energy programs. Although important to consider in the context of policies aimed at shifting investment towards a more climate friendly outcome, very little information is available on energy subsidies or agriculture support, two important sectors for climate action. It is crucial to better quantify resources governments in developing countries are mobilizing for climate action, in particular to leverage those with other international instruments of climate finance.

2.8. Non-concessional financial and investment flows in the public and private sectors

Those are the very large flows of "underlying finance". Gross Fixed Capital Formation (GFCF) in developing countries totaled about US$3.99 trillion in 2007, essentially from domestic sources. Foreign Direct Investment (FDI) was one order of magnitude lower (US$522 billion or 13% of GFCF) as was financing via international capital markets, at US$718 billion (both of which are not exclusively used for new investment). At US$105 billion, Aid (ODA and other official aid) – a large part of which does not directly finance, but facilitates, new investment - was almost two orders of magnitude below (3.3% of GFCF).[23]

Current climate-specific flows to developing countries (between US$10 to 20 billion, as highlighted above) represent only a tiny fraction (0.25 to 0.5%) of GFCF in developing countries while expected additional investment needs (about US$200 billion by 2020, ramping-up to around US$400 billion ten years later) represent about 5-10% of current GFCF in developing countries (which will presumably and hopefully grow in time). This re-emphasizes the catalytic role of "climate finance": to cover additional costs and risks of climate-friendlier investments and development programs and create an enabling regulatory, market and technology environment to make low-carbon and climate-resilient options commercially attractive to investors.

So far, the contribution of financial and investment flows of underlying finance to climate-smart development is even more difficult to quantify than financial and investment flows of climate finance. In particular, when available (e.g., investment in energy infrastructure in country X), data do not systematically indicate the share of climate-friendly investment. Getting a better

[23] All data: *World Development Indicators* (2009), the World Bank.

picture of underlying finance is critical, however, to monitor the extent of this shift towards greener options, notably to assess success climate finance instruments in mobilizing resources to climate-friendly options.

UNCTAD, for instance, publishes annually the World Investment Report which covers global FDI trends and analyses in depth one selected topic related to foreign direct investment and development. However, even though information is available at a reasonable level of sectoral detail (not for every country), it is not possible to know to what extent these investments contribute to less carbon intensive and more climate resilient development. The same would apply to other international flows (e.g., international private debt or export credits) or domestic investment per sector.[24] A few sources provide information on some of the green investment (endpoint) as is the case for sustainable energy (UNEP/SEFI/New Energy Finance) but the level of disaggregation is not satisfactory.

3. RELATIONSHIP BETWEEN ODA AND NEW & ADDITIONAL FINANCING

There are different views on the question of how to measure additionality of climate change relative to Official Development Assistance (ODA). While a number of international financing mechanisms currently under discussion could be regarded as additional and reportable under ODA, for a large part of financial flows addressing mitigation or adaptation action this distinction remains challenging. This chapter will discuss the various perceptions of different groups of countries as well as possible baselines, benchmarks and tools for tracking progress, bearing in mind that whichever the method for monitoring is adopted, it is critical to ensure that scaling up public financing sources for achieving Millenium Development Goals and climate change action takes place hand in hand.

3.1. Differing views

Most *developing countries* consider climate change financing as entitlement and not aid. Accordingly, it should be considered as an obligation for those who caused the emissions historically, and not be structured as repayable loans. ODA is meant to help developing countries achieve Millennium Development Goals and the global commitment of OECD countries is to allocate 0.7% of their GDPs to this end by 2015. Funds addressing climate change are not a part of this commitment. Several developing countries have also already taken measures to minimize GHG emissions without jeopardizing the goals of economic growth and poverty alleviation. These efforts need to be accelerated and scaled up by additional funds from developed countries.

Many *OECD countries* have expressed the view that climate financing and development financing are closely linked at the project level and difficult to separate. Therefore all concessional aid irrespective of its use should be recorded as a part of their ODA. Some countries also see climate finance as part of their ODA contribution to support the MDGs related to environment.

[24] See discussion in Corfee-Morlot et al., op. cit.

UNFCCC makes clear that developed countries have to support developing countries in their efforts to mitigate GHGs. Specifically Articles 4.3 and 4.5 call for developed countries listed in Annex II of the Convention to provide "new and additional" financial resources to meet the "agreed incremental cost" of developing country implementation of other measures under Article 4.1.

There are strongly divergent views on the links between the ODA commitments and targets and climate finance of OECD countries. Those countries that have reached the 0.7% of GNI can easily consider all climate finance as additional. For those countries still below the commitments or without explicit targets this will be more complicated. The issue of complexity and possible options will be discussed in 3.2. and 3.3. below.

3.2. Complexity

In many situations, it is indeed difficult to separate climate action from development action, particularly in the case of adaptation. For instance, as can be seen from the following picture, building a seawall against rising waters is clearly an adaptation action whereas climate resilient road construction has also strong developmental implications:

Adaptation is Priority for Developing Countries

Strengthening Climate Resilience in Country-led Development Processes		
Action	**Financing**	**Examples**
Core Development	Domestic Budgets plus ODA	Investments in education & health, income- generation programs; etc.
Climate Resilient Development	Increased ODA plus Additional Climate Finance	Accelerated agricultural diversification; climate resilient road construction & irrigation systems, climate forecasting; capacity building, etc.
Adaptation	New & Additional Climate Finance	Seawalls; dikes; additional shelters & water-storage

Synergies between climate finance and development finance and win-win opportunities can help enable most effective and efficient adaptation

15

The complexity of the issue of separation between traditional ODA and additional resources can be further illustrated through some *examples* (**Box 3**):

Example 1: Technical assistance to plan for shifts and optimization of investments in existing and new energy and transport facilities (through incentives and support schemes) can be considered ODA whereas the resulting actual investments are a capital flow. All these funds have a developmental impact and the concessional part is in that sense ODA. How to measure the additional element in the sense that these interventions respond to climate change?
Example 2: Technical assistance to identify the scope and methods to expand the carbon market, to stimulate investment in clean technologies, etc. and possibly resulting concessional investments can be considered either ODA or additional as they respond to the challenge of climate change and would not necessarily be considered developmental without that challenge.
Example 3: An activity that must be taken only to reduce vulnerability to climate change is not a development investment. Although integration is an effective approach for putting adaptation into practice, the financing of adaptation needs to reflect that it is responding to the additional burden posed by climate change, quite distinct from the aggregate flow of resources towards overall economic goals (UNFCCC/TP/2008/7 para 97). However, integrating adaption into national development plans will be more cost-effective, if available resources for adaptation and development can be pooled, and if existing development processes and mechanisms can be strengthened. Additionality will be difficult to measure in such integrated approaches (hence the scoring system of Rio markers suggested to provide information on the trends and order of magnitude in ODA flows of OECD/DAC countries).
Example 4: Climate change funds under the GEF are only used to meet a project's incremental costs of implementing measures covered by Article 4, paragraph 1, of the Convention. The remaining costs (of national and local benefit) are borne by the recipient country including through support by other bilateral and multilateral donors. Although the incremental cost principle does not apply to the LDCF or to the adaptation window of the SCCF, a similar principle is applied, in that these funds are only available for meeting the additional costs of adapting to climate change. The technology window of the SCCF covers another type of full incremental costs, which the GEF defines as "simply the programmatic costs of removing the barriers so that the markets will become established and operate more efficiently". Thus, flows from these GEF-administered funds can be considered additional, but countries contributing to them still record their pledges to their ODA.

Terminology

There are *incremental* costs due to mitigation and adaptation to climate change that should not be an extra burden to developing countries and should therefore be covered by *additional* funding. However, *new* funds are not necessarily additional, if they result in a decrease of (other) ODA. The following definitions could be used:

- *New* climate finance relates to *sources* from which they are raised or *channels* through which they flow
- *Additional* climate funds are those which exceed existing *targets* or *flows*

Funds accumulated from *internationally agreed levies* (such as the Adaptation Fund from CDM or possible flows from taxes on aviation, maritime transportation or currency transaction) can be considered *new* funding as they are raised in direct response to the climate change challenge.

Such funds are not a part of the discussion on additionality with regard to ODA. For example, a paper by the UNFCCC secretariat on financing (FCCC/TP/2008/7) states: "In the light of the large disparity between requirements for funding to address climate change and the level of resources currently available to meet those requirements, the Bali Action Plan reiterates the need for the generation of new and additional resources. Funds sourced internationally through market-based mechanisms and taxation are, by definition, new and additional. Whether national contributions are new and additional depends on whether they are drawn from conventional fiscal revenue, and possibly count towards a country's ODA commitment, or whether they constitute new revenue from taxes on fossil fuels or GHG emissions."

However, should it happen that OECD countries for some reason would cut their ODA contributions while such *complementary climate funds* grow, in total there would NOT be an additional effect.

ODA

The definition of ODA is provided in the Introduction above.

The following table provides a simulation prepared by OECD DAC on ODA flows in 2010 if donors' commitments and public announcements are met.

Table 2: OECD-DAC SECRETARIAT SIMULATION OF DAC MEMBERS' NET ODA VOLUMES IN 2008 AND 2010

In constant 2008 USD million

The data below are not forecasts, but Secretariat projections based on public announcements by member countries of the OECD's Development Assistance Committee (DAC). The key figures from such announcements are shown as "Assumptions". To calculate net ODA and ODA/GNI ratios requires projections for GNI for 2010. For 2009 and 2010, the projections of real growth are taken from the OECD Economics Department interim projections to be published on 31 March. Pending updated country specific figures which will be available in June 2009, country specific real growth projections are available and used for each G7 country, whereas Euro area or total OECD real growth projections are used for most other countries. While calculations have been discussed at technical level with national authorities, the DAC Secretariat is responsible for the methodology and the final published results.

	2008 (preliminary)		Assumptions (ODA/GNI ratios)	2010			
						Real change in ODA compared with 2008	
Country	Net ODA (2008 USDm)	ODA/GNI		Net ODA (2008 USDm)	ODA/GNI	(2008 USDm)	Per cent
Austria	1 681	0.42%	0.51% in 2010	1 945	0.51%	264	16%
Belgium	2 381	0.47%	0.7% in 2010	3 361	0.70%	980	41%
Denmark [1]	2 800	0.82%	Minimum 0.8%	2 623	0.80%	- 177	-6%
Finland	1 139	0.43%	0.51% in 2010	1 300	0.51%	161	14%
France	10 957	0.39%	0.51% in 2010 and 0.7% in 2015	13 909	0.51%	2 952	27%
Germany	13 910	0.38%	0.51% in 2010	17 687	0.51%	3 777	27%
Greece [2]	693	0.20%	0.35% in 2010	1 145	0.35%	452	65%
Ireland	1 325	0.58%	0.6% in 2010 and 0.7% in 2012	1 307	0.60%	- 17	-1%
Italy [3]	4 444	0.20%	0.51% in 2010	10 866	0.51%	6 423	145%
Luxembourg	409	0.92%	0.93% in 2010 and 1% in following years	395	0.93%	- 14	-3%
Netherlands	6 993	0.80%	Minimum 0.8%	6 647	0.80%	- 346	-5%
Portugal	614	0.27%	0.51% in 2010	1 119	0.51%	505	82%
Spain	6 686	0.43%	0.56% in 2010 and 0.7% in 2012	8 271	0.56%	1 585	24%
Sweden	4 730	0.98%	1%	4 625	1.00%	- 105	-2%
United Kingdom [4]	11 409	0.43%	0.56% in 2010-11 and 0.7% in 2013	14 243	0.56%	2 834	25%
DAC EU members, total	**70 168**	**0.42%**		**89 441**	**0.56%**	**19 273**	**27%**
Australia [5]	3 166	0.34%	See footnote 5	3 266	0.37%	100	3%
Canada [6]	4 725	0.32%	See footnote 6	4 875	0.34%	150	3%
Japan [7]	9 362	0.18%	See footnote 7	13 310	0.28%	3 948	42%
New Zealand [8]	346	0.30%	See footnote 8	415	0.35%	69	20%
Norway	3 967	0.88%	1% over 2006-09	4 295	1.00%	327	8%
Switzerland [9]	2 016	0.41%	See footnote 9	1 862	0.40%	- 154	-8%
United States [10]	26 008	0.18%	See footnote 10	27 647	0.20%	1 639	6%
DAC members, total	**119 759**	**0.30%**		**145 110**	**0.39%**	**25 351**	**21%**

[1] Over the coming years, the Danish government will strive to increase ODA as a percent of GNI from the current level of 0.8%.
[2] Due to budgetary constraints, Greece has deferred its EU ODA target of 0.51% to 2012. Greece estimates it will reach an ODA/GNI ratio of 0.35% in 2010.
[3] The Italian authorities advise that Italy's ODA trend will be influenced by the constraints on Italy's public finance.
[4] This Secretariat simulation of 2010 ODA applies its previous estimate of the ODA/GNI ratio in 2010 (0.56%) to its current projections of UK GNI in 2010, expressed at 2008 prices and exchange rates.
[5] Australia expects to continue increasing its ODA. Australia has announced it intends to reach an ODA/GNI target of 0.5% by 2015-16 and in 2008 the Australian Government announced interim targets of 0.35% in 2009-10, 0.37% in 2010-11 and 0.38% in 2011-12. The figure here is discounted for inflation.
[6] Canada intends to double its 2001 International Assistance Envelope (IAE) level by 2010 in nominal terms. The Canadian authorities estimate ODA (composed in large part from the IAE) will be 5.1 billion Canadian dollars in 2010. The ODA figure shown here is adjusted for inflation and converted to USD at the 2008 exchange rate.
[7] Japan intends to increase its ODA by USD 10 billion in aggregate over the five years 2005-2009 compared to 2004. The Secretariat's estimate assumes USD 4.39 billion extra in 2009, compared to 2004, and uses this figure for 2010, supposing that the volume of net ODA in 2009 will be maintained. No adjustment is made for inflation.
[8] New Zealand has indicated an intermediate target of NZD 600 million. The Secretariat estimates an ODA/GNI ratio of 0.35% in 2010.
[9] The Swiss Parliament (the Council of States in September 2008 and the National Council in December 2008) has decided to increase ODA to 0.5% of GNI by 2015. The provision of additional resources to meet this objective will be decided after the approval of the additional frame credit in 2009. In the actual financial plan, the ODA/GNI ratio of 0.40% will be maintained from 2009 onwards.
[10] The United States does not issue or approve forecasts on projected ODA. The amount shown here is purely a Secretariat estimate. It is based on 2004 ODA plus USD 5 billion nominal per annum to cover the Gleneagles G8 commitments on increased aid to sub-Saharan Africa, Millennium Challenge Account, and initiatives on HIV/AIDS, malaria and humanitarian aid.

Source: OECD, 30 March 2009.

Current monitoring methods

The *Rio Markers* are an important initiative to improve the monitoring of climate finance flows. They have their shortcomings (see para 2.3. above), but they do provide an indication of trends and orders of magnitude that can be compared in a time span. They may lead to double counting with other development objectives. Although the Rio Markers for mitigation have been applied on a trial basis from 2005 and on an institutional basis from 2008, all OECD countries do not yet report on them. The Rio Markers for adaptation will not be applied until 2011. This means that it will take several years before there is data with sufficient coverage to allow meaningful analysis of all ODA contributors. In the meantime, tests with more comprehensive scoring or marking systems by some donor agencies may yield positive results that lead to a further refinement of the currently applied Rio Marker system to provide more quantitative data.

Before systematic data is available from Rio Markers or similar applications, several agencies (including the World Bank) have and will embark on portfolio review exercises which will provide results on ex-post analysis of their core grant or lending programs. Such ad hoc research coupled with regular data on flows to climate-specific funds will help to monitor the implementation of agreements.

3.3. Possible options

To make headway in understanding the complexities in monitoring climate finance flows, in improving the accuracy of tracking them and addressing the issue of additionality in relation to ODA, the following considerations are offered to the international discussion on this issue:

Redefining ODA or coining new terms?

Although the context for ODA has expanded from economic development and welfare to include environmental sustainability, redefining ODA would make the monitoring of long-term trends prohibitively difficult and cause a considerable burden on the reporting institutions. For the sake of transparency and comparability of data, it is advisable to seek other ways to track climate and non-climate contributions within the existing definition.

OECD countries report resources provided to other countries as ODA if they meet specific criteria (see definition in the Introduction above) and not based on channels through which they are provided, as climate change is increasingly considered necessary in the promotion of sustainable economic development and welfare. Recognizing this inevitability and aiming at improving tracking climate finance also *within* ODA, the flows for development purposes (as understood) could be called *"ODA Classic".* A part of voluntary concessional contributions by OECD DAC countries for climate action will continue to be recorded as ODA. To make a distinction from "ODA Classic", such flows could be called *"ODA Climate".*

Mitigation will often be linked to measurable GHG targets and commitments thus making it easier to monitor progress and trends in both action and financing. Thus finding ways to distinguish and track mitigation action as "ODA Climate" will be relatively straightforward.

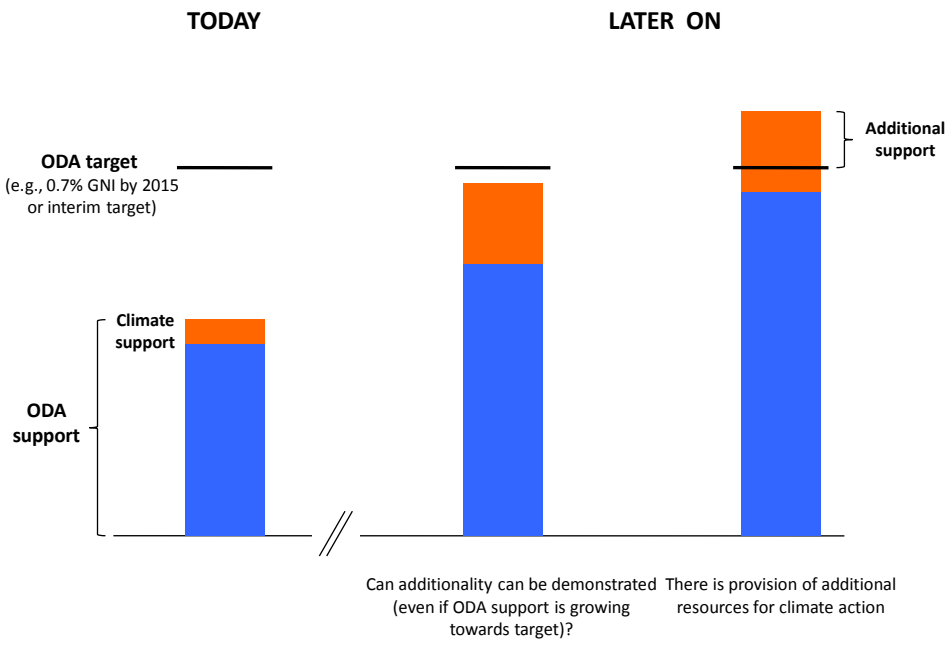
On the other hand, assistance to developing countries with adaptation to climate change is closely intertwined with actions targeting other development objectives, and tracking the share of "ODA Climate" in these cases will not be equally accurate. Determining the incrementality of climate action in development programs and projects will remain a challenge (see "Possible Methods" below).

Benchmarking?

Several EU countries have set interim targets for their ODA growth before reaching the collective target of 0.7% of GNI by 2015, for instance France, Germany and Italy are to reach 0.51% by 2010, etc. Such targets could provide a baseline for measuring the change in the contributions of such countries also with regard to climate financing.

For monitoring "ODA Climate" flows, the same baselines as for ODA could be used. Within this context, it is important to demonstrate a trend in development assistance that grows in the direction agreed in international negotiations and that does not have a negative impact on ODA directed toward MDGs. The following Chart 1 illustrates this.

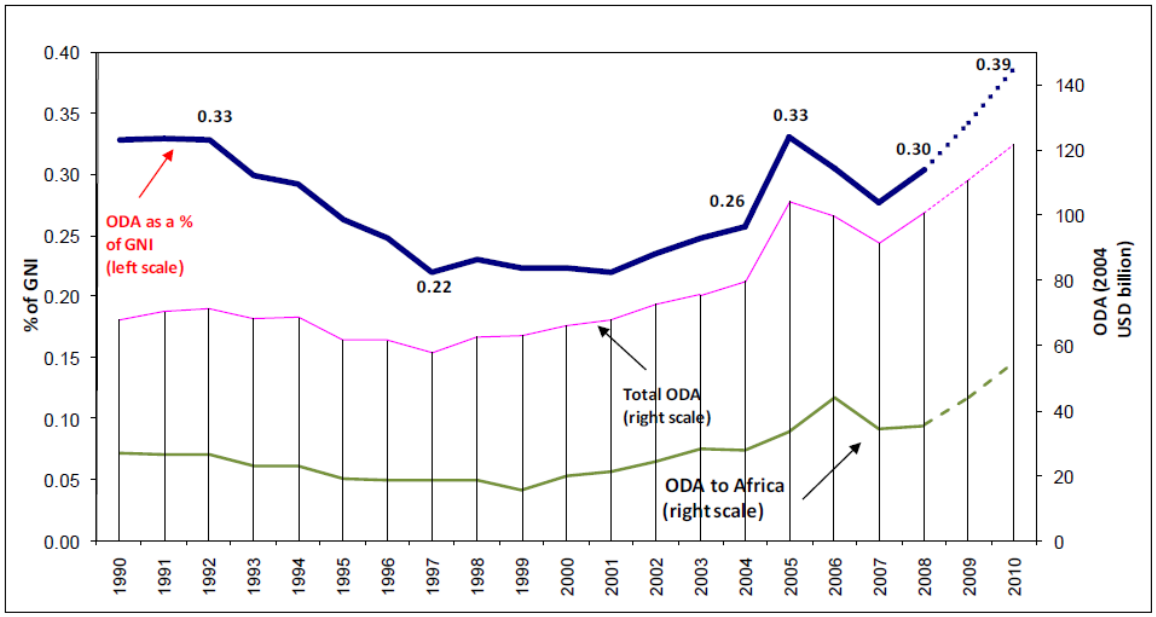
Chart 1: "ODA CLIMATE" IN RELATION TO "ODA CLASSIC"



While preliminary data from DAC suggests total ODA from DAC members rose to a record of $120 billion in 2008 - the highest dollar figure ever recorded - exceptional efforts are needed to fulfill donors' commitments, particularly at the time of fiscal constraints. In terms of 2005 donors' commitments (Total ODA from USD 80bn in 2004 to USD 130bn in 2010, ODA to Africa from 25bn to 50bn), the expected reduction of economic growth (and GNI) in the period 2008-2010, however, implies a commitment level of only USD 121 billion in 2010, expressed in 2004 dollars, or an increase of over USD 20 billion in real terms from 2008 - most of it directed to sub-Saharan Africa - to meet agreed targets. Therefore, the most likely outcome for major DAC contributors in 2010 and perhaps in 2015 will be the bar in the middle.

The following Chart 2 illustrates how baseline scenarios might be constructed. Further debate will be needed to determine whether to use such figures as a baseline.

Chart 2: DAC MEMBERS' NET ODA 1990-2008 AND DAC SECRETARIAT SIMULATIONS OF NET ODA TO 2009 AND 2010



Source: OECD, 30 March 2009.

Possible methods

Contributions to climate change in ODA flows to core multilateral funds and bilateral programs will remain an approximation. The *Rio Markers* introduced to OECD/DAC ODA reporting (already established for mitigation and being introduced for adaptation), will provide a basis for comparing trends in overall contributions on the one hand and trends in climate financing on the other, over a period of time. This will, however, require that they be applied by all donors in a consistent manner. It will still take several years before such consistent data is available. Also, as noted in chapter 3.2. above, Rio Marker 1 (significant) does not give information on the comparative importance of climate action and therefore does not give an accurate picture of the relative share of additional resources. In the coming years, an increasing share of ODA will qualify for Rio Marker 1. However, the mandatory and consistent application of Rio Markers by all OECD countries in reporting their ODA could advance the process of distinguishing and tracking contributions to emerging climate-specific funds as "ODA Climate".

Also, contributor, recipient country or sector specific *portfolio analysis* can provide useful indications on trends in the implementation of international commitments.

As there is currently no universal agreement on ODA targets, one possible option could be to design and introduce *voluntary guidelines* for appropriate levels of additional climate finance based on agreed criteria (mixing ability to pay and emission record), and apply them to track trends by country.

Conclusions

As this process continues, somewhere between years 2013 and 2015 it will be possible to assess how OECD countries have met their commitments in ODA in general and in climate finance in particular. At that time, the issue of baselines and targets can be revisited. At that time, also an assessment of the usefulness of the Rio Markers and an introduction of a well tested, more refined and comprehensive system should be considered.

In summary, the *technical* solutions for monitoring official (ODA and non-ODA) financial flows towards climate action will most likely be a combination of the application of (current and improved) Rio Markers, more consistent reporting by MDBs, and reporting by UNFCCC on new funding through levies etc. *Increasingly reliable, comprehensive and transparent reporting is needed to demonstrate that new climate finance instruments are not introduced at the expense of those targeting other objectives.*

Providing exact and comparable figures on additional contributions to fund incremental expenses resulting from adaptation to and mitigation of climate change is extremely complex and probably not possible in an aggregated fashion. Experience with the GEF and Carbon Finance has demonstrated that while maintaining the environmental integrity of projects, proving the incremental costs related to climate action remains a challenge. In this context, while improving the monitoring of inputs and development of climate finance flows, it is crucial not to lose sight of the key objective of all ODA, i.e. *sustainable development outcomes*.

4. NEXT STEPS

The development community can directly or indirectly contribute to improve monitoring and accessing climate finance through, for instance, the following activities:

4.1. The use of *Rio Markers* for both mitigation and adaptation needs to be made compulsory and consistent in reporting on all ODA flows by OECD DAC countries. These Markers should be refined latest in 2015 following experience gained in their application and alternative, more detailed (preferably quantitative) systems tested by a number of donor institutions.

4.2. *Non-DAC donors* may wish to consider establishing systems that record and report on their ODA in a way comparable to that of OECD DAC countries.

4.3. In addition to monitoring and reporting on the flows at the global level by OECD/DAC, UNCTAD, MDBs and others, it is important that *developing countries* themselves be in a position to assess the magnitude of the public (DAC and non-DAC) and private sector flows (as described in chapter 2 above) related to climate action. Building this capacity will take time and resources and should be part of broader programs to track bilateral and non-climate specific flows, particularly in the poorest countries. This could be linked with the process of improving

the quality of National Communications to make them more transparent. Through their extensive presence in most countries, access to a range of financial instruments and expertise the World Bank, other MDBs and UNDP can play an important role in continuing building the capacity of their partners in integrating such monitoring tools into their development plans and in participating in global discussions on climate finance issues.

4.4. Development agencies such as UNDP, UNEP and MDBs should continue to strengthen the capacity of *CDM Designated National authorities* (DNAs) to record data on the status of CDM transactions and progress on CDM investments in developing countries.

4.5. *MDBs* should improve the monitoring and reporting on mitigation and adaptation action in their own portfolios in a manner consistent with (but not restricted to) methodologies adopted by OECD DAC.

4.6. Monitoring *non-ODA* climate financing flows (especially non-DAC countries concessional funds and private non-concessional flows) will be an interesting challenge and would benefit future assessments of progress made. This should be kept in mind when discussing the role of various institutions, including those in developing countries, in reporting on such flows.

4.7. To support developing countries in accessing both climate-specific and core funds available from various multi- and bilateral sources, UNDP and the World Bank are working on a joint *knowledge platform* on the internet to complement the UNFCCC-led Financing Platform. This will launched in 2010 and gradually build capacity in providing the following:

- Harmonized description of types of funds available gradually attempting to cover an increasing number of sources described under chapter 2 above,
- Examples of successful cases of bundling different types of grant and concessional funds and of enabling environments to leverage commercial funds,
- Tools and documents supporting more informed investment decisions, and
- New tested methods to track climate finance flows at the source and end point (dual tracking).

Annex 1 - Main Instruments for Financing Climate Action (A=Adaptation; M=Mitigation)

Climate-specific additional resources under the aegis of UNFCCC		
Adaptation Fund US$300-600 million by 2012 adaptation-fund.org	**A**	Funding mainly comes from a 2% levy on Certified Emission Reductions (CERs) issuance. Adaptation Fund Board (AFB) as operating entity served by a secretariat (GEF) and a trustee (WB).
Global Environment Facility (GEF) US$1 billion over 2007-10 gefweb.org	**M** **(A)**	Largest source of grant-financed mitigation resources. SPA is a funding allocation within the GEF TF to support pilot and demonstration projects that address local adaptation needs and generate global environmental benefits in all GEF focal areas.
UNFCCC GEF-administered Special Funds US$270 million gefweb.org	**A**	Least Developed Countries Fund (LCDF): helps in the preparation and financing of implementation of national adaptation programs of action (NAPAs) to address the most urgent adaptation needs in the least developed countries Special Climate Change Fund (SCCF): supports adaptation and mitigation projects in all developing countries, with a large emphasis on adaptation.
Resources from the carbon market		
	M	Primary CDM transactions: US$6.5 billion (2008), US$22.9 billion (2002-08) Voluntary market (OTC): US$54 million (2008), US$260 million (2002-08) Size of Carbon funds and facilities: US$16.1billion[25]
Dedicated concessional funding (ODA) from the DAC community		
Climate Investment Funds US$6.3 billion climateinvestmentfunds.org/	**M**	The Clean Technology Fund: to finance scaled-up demonstration, deployment, and transfer of low-carbon technologies.
	A **M**	The Strategic Climate Fund: (i) Pilot Program for Climate Resilience (PPCR) to help build climate resilience in core development; (ii) Forest Investment Program; (iii) Program to Scale up Renewable Energy for Low Income Countries.
US$ 10 billion	**M&A**	**Cool Earth Partnership (Japan)**
US$ 1.6 billion	**M&A**	**Environmental Transformation Fund – International Window (UK)**
US$ 180 million p.a.	**M&A**	**International Climate Initiative (Germany)**
US$ 580 million	**M&A**	**Climate and Forest Initiative (Norway)**
		International Forest Carbon Initiative (Australia)
US$ 180 million	**M&A**	**Global Climate Change Alliance (European Commission)**
US$ 160 million	**A**	**International climate Change Adaptation Initiative (Australia)**
US$ 135 million	**M&A**	**UNDP-Spain MDG Achievement Fund**

[25] Source: *Carbon Funds 2009/10*. Environmental Finance and Carbon Finance.

US$ 100 million US$ 52 million	**M**	**UN Collaborative Program on Reduced Emissions from Deforestation and Forest Degradation**[26]

Examples of non climate-specific support from Donors and MDBs		
Global Facility for Disaster Reduction and Recovery US$15 million for adaptation	**A**	Partnership within the UN International Strategy for Disaster Reduction (ISDR), focusing on building capacities to enhance disaster resilience and adaptive capacities in changing climate. In addition, there are specific instruments for climate risk management
Trust Funds and Partnerships; Guarantees	**M** **A**	Grant financing for knowledge products, capacity building, upstream project work/pilots, such as the MDTF for Strategic Framework for Development and Climate Change (under design); Partial risk guarantees to support development / adoption / application of clean energy technologies, including those not fully commercialized, in client countries.

[26] See additional information: http://www.mofa.go.jp/policy/economy/wef/2008/mechanism.html; http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/lc_business/env_trans_fund/env_trans_fund.aspx; http://www.bmu.de/english/climate_initiative/international_climate_initiative/doc/43517.php; http://www.regjeringen.no/en/dep/md/Selected-topics/climate/the-government-of-norways-international-.html?id=548491; http://www.climatechange.gov.au/government/initiatives/international-forest-carbon-initiative.aspx; http://europa.eu/legislation_summaries/development/sectoral_development_policies/r13016_en.htm; http://www.climatechange.gov.au/government/initiatives/international-climate-change-adaptation-initiative.aspx; http://www.undp.org/mdgf/environment.shtml;