Towards Climate Finance Transparency

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with Rachel Rank

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About this paper

This paper maps the broad landscape of funding to enable adaptation and mitigation of climate change, and the systems for monitoring it. These include systems which label the money as ‘aid’ as well as those that have been developed to assess climate finance specifically.

Discussions on the relationship between aid transparency and climate finance have tended to focus on the issue of how to determine ‘additionality’ between the two categories of funding and assess whether developed countries are meeting their international funding commitments. The definition of additionality remains unresolved. Nevertheless, this should not be the end of the discussion about aid transparency and funding for climate change action.

It is clear that however climate finance is defined for the purpose of high level accounting, funding for development and for climate change adaptation and mitigation will not be two completely distinct streams in practice. The definitional question should therefore not be allowed to become a roadblock which prevents practical steps being taken to bring greater synergy and comparability between systems set up to promote transparency in aid, and those that seek to identify and track climate finance flows.

Indeed, greater transparency and clearer understanding of the funding that is being disbursed can only be helpful in building trust and supporting discussions to resolve definitional dilemmas. Greater transparency will also help to reduce the high transaction costs, inefficiencies and fragmentation associated with multiple tracking systems covering overlapping actors, objectives, activities and financing streams.

This paper seeks to provide a background and framework on transparency and reporting that makes sense to both those focused on tracking climate finance and improving aid transparency. It proposes a set of recommendations which would offer a pathway towards appropriate convergence around a more coherent set of tools for publishing and sharing data, while maintaining the proper role of the Conference of the Parties of the UNFCCC in agreeing definitions and setting the terms for Monitoring, Reporting and Verification of action against international climate finance commitments.

A key lesson from aid transparency is that while high quality statistics are crucial, so too is detailed, accessible and timely information to meet the needs of different information users. The International Aid Transparency Initiative is a key innovation which seeks to demonstrate that this doesn’t have to be a choice. Internet based data standards provide a bridge between different systems and users, unlocking data from being presented in multiple, inconsistent individual databases and reports and providing for both flexibility and standardisation.

Ultimately however, the question is not how to build the most elegant system to track volumes of finance, but how to use transparency to enhance and demonstrate the effectiveness of international collaboration in creating both environmental and economic benefits. We hope this paper provides a useful basis to bring together those working on different areas of this question to explore synergies and gaps and to work together towards this common aim.
Acknowledgments

This paper is jointly published by aidinfo and Publish What You Fund. It was written and researched by Maya Forstater with editorial support from Rachel Rank.

It builds on the work of many institutions in the fields of aid transparency and climate finance including, amongst others, the Organisation for Economic Co-operation and Development, Open Climate Network, Climate Policy Initiative, International Institute for Environment and Development, Overseas Development Institute, World Resources Institute, AidData and Transparency International. The emerging body of work from these and other organisations calls for greater transparency about climate finance flows, harmonisation between climate change and aid transparency practices, and acceleration of learning and collaboration between researchers, practitioners and policy makers working on aid transparency and climate finance.

The report has benefited from the valuable input and advice from a range of experts. This has included Mark Brough, Karin Christiansen and Liz Steel from Publish What You Fund; Carolyn Culey and Simon Parrish from aidinfo; Barbara Buchner from the Climate Policy Initiative; Timmons Roberts from AidData; Kathy Sierra from the Brookings Institution; Neil Bird and Smita Nakooda from the Overseas Development Institute; Benito Muller from the Oxford Climate Policy Institute; Simon Zadek from the Global Green Growth Institute; Taryn Fransen and Kirsten Stasio from the World Resources Institute; Brian Hammond from the International Aid Transparency Initiative Secretariat; Ari Huhtala from the World Bank (now at Climate Development Knowledge Network); and Sally Nicholson from the World Wildlife Fund. I am grateful to them all for their time and willingness to share ideas.

Maya Forstater

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Executive summary

International flows of funding and associated technology transfer have been identified as crucial, both to unlock specific climate change mitigation and adaption opportunities which would not otherwise be viable, and as a prerequisite for reaching an ambitious global deal that ratchets up the actions that each country is willing to take within its own domestic economy.

This finance includes public and private sources, climate related aid, official ‘climate finance’, South to South transfers and carbon markets, and there are already a plethora of overlapping systems for mapping and tracking many different elements.

However no one system provides overall coverage, and researchers trying to use the data to answer questions about the extent, nature and effectiveness of international funding remain frustrated by the gaps and weaknesses. Better information is needed to support coordination, planning, effectiveness, learning and integrity, as well as mutual accountability for high-level commitments and targets.

Comparable information that can be accessed at a geographic, project and thematic level and including different types of funding flows is crucial to successfully managing for results – supporting better decision-making, integrity and accountability. There are inherent equity, efficiency and effectiveness dilemmas in the setting of baselines and sharing of costs and benefits in the transition to low carbon, climate resilient economies. Transparency is crucial, but not sufficient to enable these debates to take place in public and allow affected people to have access and input to decision-making.

Currently information systems on climate finance are patchy. Consistent definitions and standards of reporting are lacking and the information is not made available in a way that allows it to be easily gathered and used. Given these gaps and inconsistencies, there are already several processes underway to revise, improve and standardise coverage, both within and alongside UNFCCC processes.

It is clear that aid transparency tools can not be expected to solve the tightly knotted political debates around how to assess additionality and the how much of the relative contribution of public versus private funding should be counted towards the US$ 100 billion target.

However tools and approaches developed to support aid transparency offer the potential to strengthen the availability of useful and robust data to support effective and open deployment of funding for climate action, and exploration and communication of leverage and co-benefits.

In particular, the International Aid Transparency Initiative (IATI) offers a common language for decentralised publishing of data about international funding flows and investments. This approach would lend itself well to serving the needs of the different users of information, and integrating information on funding available for development and climate purposes from different sources, without blurring the distinctions in purpose and accountability of different streams and definitions.

Adopting and adapting the ‘open data’ approach used by IATI for climate funding flows offers an opportunity to strengthen both the transparency of climate change funding flows and the availability
of information on the climate compatibility of aid portfolios. This paper outlines three key steps to realise these opportunities:

- **Small changes** – The IATI standard already incorporates information on climate finance, based on the OECD Rio Policy Markers. However, as is the case with the OECD aid statistics dataset, this means it only enables users to publish a limited degree of information on whether aid is aligned to climate goals. Small modifications to the IATI standard could allow users to provide additional detail on climate actions and impacts as part of their IATI publication, making it more useful for those seeking timely, detailed information on funding for climate action.

- **UNFCCC compatibility** – IATI is already set up to be compatible with the OECD CRS system. This means that organisations that publish their aid data in IATI format can use this to compile their report to the OECD. Similarly an additional set of elements, or a separate module could be developed together with the UNFCCC which would enable countries to publish information using the IATI standard which would also meet UNFCCC reporting requirements. This would mean that users could easily cross reference between the biannual reports that funders make to the UNFCCC and more detailed ongoing activity level data on disbursements and results, and could also access information on other climate relevant funding flows.

- **A different approach to building a registry** – The planned UNFCCC Registry will introduce a further upstream system for reporting on finance available and matched with needs. The tendency so far is to develop discrete, centralised data systems. The decentralised publish-and-register approach demonstrated by IATI offers a more effective model to the central database, and a useful template to the UNFCCC as they seek to develop a “dynamic, flexible web-based registry”.

None of these recommendations imply an answer to the question of what extent climate finance should be considered as aid, nor do they involve a change in the overall accountability for monitoring, reporting and verification of finance under the UNFCCC. They simply offer an approach for making data more accessible and useful.

Recommendations to explore and advance these synergies are that:

- **Organisations working on climate finance transparency and aid transparency** should continue to strengthen collaboration on metrics, tools and approaches to advance learning and compatibility. This would involve relevant government agencies, expert organisations, researchers in the different fields and international organisations such as the UNFCCC, OECD and IATI.

- **Funders** should seek to provide detailed, accessible and timely information to meet the needs of different information users. While recognising the distinction between climate finance and aid, the principles and best practices of the approach to transparency taken by the aid community offers a useful guide in doing this within climate finance. Many agencies already use the IATI standard to publish information on climate funding flows as part of their commitment to aid transparency. In countries where other non-traditional agencies are also taking on public climate finance roles, IATI users should encourage and support their sister agencies to also adopt the IATI standard in relation to climate finance flows.
• **Publish What You Fund** should strengthen its coverage and discussion of climate finance issues in its Aid Transparency Index and work with others to encourage and enable IATI to be more widely used as a tool to support transparency of funding for climate change action.

• **The IATI Steering Committee** should initiate a process to identify opportunities and solutions for integrating basic additional climate-related codes and data fields into the standard.

• **IATI and the UNFCCC** should engage to explore the potential for the IATI data format to support reporting to the UNFCCC. This might mean integrating a full set of climate finance elements into the IATI standard, or developing a separate module.

• **The UNFCCC** should consider using a decentralised, ‘open data’ approach that is compatible to IATI for its planned registry of support needs and resource availability.
1. The landscape of funding for climate smart development

1.1 The economies of climate action

‘Climate Smart Development’ is a vision of economic growth that is increasingly decoupled from greenhouse gas emissions, and which at the same time enables countries and communities to become more resilient to weather events and shifts in underlying climatic patterns. Economic and technology analysis confirms that this shift to low carbon and climate resilient economic growth can be achieved at reasonable cost, averting much costlier outcomes.5

While the bulk of greenhouse gases currently in the atmosphere are associated with the historic emissions by developed countries, the bulk of future emissions, and the opportunities to avoid them will come from those that are still considered developing countries today. These opportunities are broadly spread between agriculture and land used (with conservation of tropical forests), switching to lower emission fuels, renewable energy and nuclear and energy efficiency in buildings, industry and transport. Some estimates are that up to half of these technical opportunities have the potential to be achieved at no cost (or indeed at a saving), while the other half entail additional ‘incremental’ costs.6

At the same time, the impacts of climate change will not be evenly distributed – the poorest countries and people will suffer most because of their geographic disadvantage, their dependence on agriculture (the most climate sensitive of all economic sectors) and the difficulty of adapting to climate change in the face of low incomes, inadequate health provision and low-quality public services. At the same time many of the technologies, technological capacity, and capital stocks which are needed to solve the climate challenge are concentrated in the developed world (although quickly being joined by the investment capital and technological capacity of the rapidly industrialising countries).

Despite the technical feasibility of mitigating and adapting to climate change, and the economic rationale for taking these steps, change is not happening at the scale and speed which is needed, held up by the ‘wicked problem’ of developing a system to deal with the global public good nature of climate change action and impacts.

The overall challenge is one of economics; shifting from our current situation in which incentives continue to concentrate resources (political will, capital investment, technological innovation and deployment) towards areas of high emission intensity, to one where resources are directed towards choices, technologies and sectors which deliver improvements in human welfare with a lower intensity of emissions. At the same time it is crucial to ensure that the additional cost of responding to climate changes do not fall disproportionately on those least able to bear them.

There is broad agreement on the solution: on one hand introduce a shadow price on carbon (whether through regulation, energy standards, taxes or cap and trade systems, and also through removing subsidies on fossil fuels and energy) and on the other use public policies to positively direct resources towards the areas where they are needed within and between countries – research and development for low carbon technologies, adaptation by the most vulnerable and overcoming the additional costs of lower carbon solutions where they remain unaffordable. Both of these sets of
measures aim to shift private investment (including at a household level) away from high-carbon and climate vulnerable assets and activities into low carbon, climate resilient alternatives.**

1.2 International agreement

The UN Convention on Climate Change (UNFCCC) is our global attempt to put in place a system to both secure ambitious action on a country-by-country basis and to create a mechanism for making financial transfers between developed and developing countries. This is set out in Article 3 of the Convention which states that “parties should protect the climate system for the benefit of future and present generations of human kind on the basis of equity and in accordance with their common but differentiated responsibility and respective capabilities. Accordingly, developed countries should take the lead in combating climate change and the adverse effects thereof”.

This reflects the strongly argued position of developing countries that they should not be expected to accept responsibility for addressing global problems caused by the historical patterns of industrialisation and consumption by developed countries.**

The UNFCCC therefore divides countries into Annex 1 (developed countries and economies in transition) expected to fund their own climate actions; non-Annex 1 (developing countries) that should undertake voluntary, nationally appropriate actions with support; and Annex 2 (member countries of the Organisation for Economic Co-operation and Development (OECD) at the time of the agreement) that should provide climate finance.

Under Article 4.3 developed countries commit to provide funding for the “agreed full incremental costs” of climate change in developing countries, meaning the cost differential between achieving development goals in the context of climate change compared with a business-as-usual scenario (for example, the difference between generating KWHs of energy from renewables compared to the equivalent cost of generating the same amount of energy from fossil fuels).

Where developing countries agree to take action to mitigate climate change by reducing emissions growth this is conditional on developed countries providing adequate, predictable, reliable, new and additional resources. This link between action and funding, laid out in Article 4.7, was positively reaffirmed in the Bali Action Plan in 2007 and reiterated in many of the letters by individual developing countries signing onto the Copenhagen Accord. It is notable however that the Durban Platform agreed at the end of 2011, sets the stage for the development of a new protocol under the Convention to be implemented after 2020 that will be applicable to all Parties.

For adaptation, while there is no legal agreement that funding is compensation or reparation for damages under the polluter pays principle, it is morally recognised as an obligation based on “causal responsibility” rather than a voluntary contribution to development assistance.**

In order to operationalise the climate finance commitment a wide range of funding vehicles have been set up (see exhibit 1). And in 2009 in Copenhagen, and formalised in Cancún in 2010, developed countries made a collective commitment to mobilise funding towards the costs of responding to climate change in developing countries, with a headline figure of US$ 100 billion per year by 2020, with ‘fast start funding’ of US$ 10 billion a year in the first three years.
Exhibit 1: Climate finance vehicles

A Global Green Climate Fund (GCF) is under development. It is intended to be the mechanism through which a large share of scaled-up global climate finance is channelled for adaptation, mitigation and reducing emissions from deforestation and forest degradation (REDD).

The Global Environmental Facility (GEF) was established in 1991 and serves as an operating entity of the financial mechanism of the UNFCCC. 39 countries pledged just over US$ 1 billion for 2006–2010. The GEF also administers the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) with the guidance of the UNFCCC Conference of Parties.

The Climate Investment Funds (CIFs) were established in 2008 and are administered by the World Bank in partnership with regional development banks. They consist of a Clean Technology Fund that receives the majority of these funds (US$ 4.1 billion), the Pilot Program for Climate Resilience (PPCR), the Forest Investment Program (FIP), and the Scaling-Up Renewable Energy Program for Low Income Countries (SREP).

The Adaptation Fund (AF) of the Kyoto Protocol is financed through a 2% levy on the sale of emission credits from the Clean Development Mechanism and became operational in 2009. It has a total capitalisation of US$ 250 million.

The UN-REDD programme was also made operational in 2008 with the support of Norway and Denmark to provide pilot funding for reducing emissions from deforestation and forest degradation.

Multilateral development banks, in addition to administering climate specific trust funds, they increasingly incorporate climate change considerations into their core lending and operations.

International finance institutions such as the European Investment Bank (EIB) and the International Finance Corporation (IFC) also direct funding raised on the international capital markets towards low carbon and climate resilient development.

Bilateral institutions account for a large and growing share of climate finance. These include climate specific funds such as Germany’s International Climate Initiative (partly funded through the sale of national tradeable emission certificates), the UK’s International Climate Fund and Norway’s International Forest Climate Initiative as well as funding through existing development agencies such as USAID and CIDA, and non-ODA funders such as Ex-Im banks and Credit Guarantee agencies.

National funds have been established by several recipient countries including Bangladesh, Brazil, China, Ecuador, Guyana, Indonesia, the Maldives and Thailand. In many countries the United Nations Development Programme (UNDP) acts as the administrator of these funds. In Brazil this role is taken by the National Development Bank BNDES.

The Clean Development Mechanism is a market mechanism developed under the Kyoto Protocol which allows entities with emission reduction requirements in developed countries to buy certified emission reduction (CER) credits from projects in developing countries.

Philanthropy and the voluntary carbon market are a small but potentially significant avenue of finance, particularly for adaptation and REDD, as well as for projects addressing energy and water access and delivering climate mitigation co-benefits.

Climate Bonds are an innovative mechanism being developed to allow companies to raise funding on corporate bonds, portfolio bonds and project development bonds linked to contribution to a low carbon economy.10

1.3 “Climate finance” and other finance

“Climate finance” then, is identified as the flows mobilised to meet the commitments made within the UNFCCC. While what counts as climate finance remains chronically underdefined, what is clear is that specific climate finance flows are only a small part of the landscape of resource flows which impact on the ability of a country to shift towards climate smart development.

On the domestic side, international funding forms one contribution towards overall public (and public directed) budgets in relevant areas such as forest conservation, renewable energy development, flood defenses and agricultural development. This in turn is only a subset of overall public spending relevant to these sectors which may not have climate related aims (and indeed may undermine them, such as through fossil fuel subsidies). Public spending and investment in turn is only a part of the overall economy, in which decisions are being made every day with implications for the carbon intensity and climate resilience of industries, infrastructure and household incomes.

On the international side, funding flows with the potential to advance or impede transformation towards climate smart development are wider than those designated as “climate finance”. Private investment flows dwarf the public transfers, and increasingly both private and public flows are also coming from developing countries, particularly the rapidly industrialising countries of Asia, and the BRICS.
1.4 Leveraging impact

A key distinction in assessing the magnitude and effectiveness of climate finance flows is in relating them to other parts of the funding landscape. In particular the differentiation is made between the *incremental spending* needed to address climate change, the amount of additional investment this mobilises and the *overall investment* (gross investment) that would result.

For example, developing a stronger sea wall or a renewable energy source instead of a coal-fired power station requires greater capital investment than the alternative. The private sector will provide the overall investment if the risk-return ratio is favourable, or can be made favourable through public policies and public-backed risk mitigation instruments. However the incremental cost of providing the service will rise, and this would be passed on to consumers, households and taxpayers locally, unless compensated through international funding.

It is estimated that US$ 10 trillion of new capital and infrastructure will be invested annually in developing countries by 2015. As the UNFCCC states, climate finance is intended to cover the *incremental costs* of greening this investment and making it resilient. Technical estimates of the annual *incremental costs* needed globally are in the region of US$ 2-300 billion.

The diagram on the following page (exhibit 3) outlines in schematic form the relationship between public (and policy generated ‘innovative funding flows’) from North to South and some of the ways that it is blended with domestic and private sector funding sources to feed both into additional investment, and incremental costs.
This spaghetti of flows reflects the need to use scarce international public funding to influence the direction of much larger volumes of domestic funding and private investment. However, there remain large uncertainties about how in practice to best blend different funding streams effectively, how to measure performance, and how to apportion recognition for reducing emissions.13
2. Transparency matters

2.1 The case for transparency

Concerns about the transparency of funding for climate action are quickly rising up the agenda, as more funds are set up, more deals are done to mobilise resources, and more complex blends and innovative instruments are proposed.

Much of this attention is focused on the question of assessing whether the pledges made in Copenhagen and Cancún are being fulfilled. As the UN Secretary General highlighted at the opening of the UNFCCC 17th Conference of the Parties (COP17) in Durban in 2011, demonstrating that these pledges are being fulfilled is crucial to building trust amongst the parties: “On short-term, fast-track approach, $30 billion dollars has been pledged, and almost all of it has been identified in respective national budgets. However, recipient countries want to see greater transparency in how the funds are allocated and disbursed.” Martin Stadelmann, Timmons Roberts and Saleemul Huq, in a paper published by International Institute for Environment and Development, spell out that the concern of many poorer nations: “they fear that richer ones will fulfill the US$ 30 billion ‘fast-start’ climate finance promises by relabeling or diverting basic development aid, or by simply delivering on past climate finance pledges.”

Additionality is a key concern because climate finance and development aid have overlapping but not identical aims. While funding for climate change mitigation will tend to flow towards the rapidly industrialising middle-income countries where more of the urgent opportunities to reduce emissions are, this should not draw aid funding away from poorer countries. Equally if adapting to the impacts of climate change means that the cost of achieving development objectives increases, this increased cost cannot be said to be covered simply by relabelling existing aid funding as adaptation.

The concern that high level commitments will not be met or that commitments will remain so vague as to be meaningless has already played out before, notably in the case of the Bonn declaration signed by the European Union (EU) together with Canada, Iceland, New Zealand, Norway and Switzerland in 2001. The declaration included a commitment to provide US$ 410 million annually to developing countries for climate change activities by 2005. While the EU claims that they have delivered on their commitments, developing countries dispute this. Analysts studying the question have been unable to determine if the commitment has been met due to inadequate data and lack of clear criteria as to what counts. Without a clear definition and way of assessing whether funding delivered matches funding pledged, trust is eroded as recipients feel that promises are being broken, and funders are not able to demonstrate to their electorates, to other funders and to recipients that they are contributing a fair and agreed amount to the global effort.

However assessing fulfillment of high-level commitments is only one reason why more and better data about funding flows for climate action is needed.

The second reason is that better information supports better decision-making, both by recipient country governments and funders, as well as collectively through the UNFCCC. For governments, knowing how much funding they will receive to support adaptation and mitigation actions is crucial for integrating this funding into their budget cycle, delivering services, programmes and policies and
later accounting, auditing and assessment. Often climate mitigation decisions involve long-term investments; forests need to be conserved not just for one year but many, investors are not willing to finance renewable energy developments unless they know that the policies that make it viable are ‘investment grade’ for the future and backed by funding guarantees. In order to channel funding effectively, whether through bilateral or multilateral institutions or through funds under the guidance of the COP, it is crucial to know how funding needs and availability match up over the long-term and whether certain areas are becoming ‘darlings’ or ‘orphans’ for funding. These questions, it should be noted, although relevant to decision-making relating to UNFCCC climate finance, can not be answered with this data set alone. From the perspective of an energy minister considering committing to a programme of subsidy for renewables for example, the critical question is how much external support s/he can rely on and for how long, not whether it counts against a particular global target for aid or climate finance. Equally from the perspective of decision-making by funders, knowing about other funding being used which may not count as climate finance is an important piece of information in judging the need and cost effectiveness of different options.

One example of how more detailed information can be useful for supporting developing country decision makers, by enabling local planning and prioritisation of actions, comes from AidData’s work in Malawi. They have put information on aid projects from multiple donors into a single format and added a ‘geocoding’ tag (map reference) which allows users to combine this with other layers of location-based information to assess how climate change impacts and responses intersect.

Exhibit 4: Using smart climate finance data for local planning in Malawi

Since 2011, AidData has been working with the Robert S. Strauss Center’s Climate Change and African Political Stability (CCAPS) programme at the University of Texas at Austin to create an interactive mapping tool that overlays data on aid projects, climate change and conflict. The mapping initiative was the first of its kind, representing nearly 800 foreign aid projects from nearly 30 donors.

By providing geocoded project data combined with sub-national indicators of need, the partnership is demonstrating the viability of the concept of multi-donor mapping, with true country ownership. The geocoded dataset will be made public and will be used by Malawi’s Ministry of Finance to generate aid reports, catalyse new conversations with its donor partners, and improve aid effectiveness at the local level across the country.

“Being able to see in a map all the donor-funded activities in Malawi has transformed the way we think about development and positively helped our own planning effort,” said Hon. Ken Lipenga, Minister of Finance and Development Planning in Malawi.

Source: Aiddata.org

Another crucial reason for transparency is to hold those using funding to account, to ensure integrity and address the corruption risks inherent in mobilising large sums of public money. Transparency International’s 2011 Global Corruption Report on climate change highlights many of the challenges for climate finance transparency. The risks are large, since climate funding mechanisms are often new, complex and uncertain and because many of the regions where populations need most adaptation support and where tropical forests are under threat coincide with poor institutional records for public accountability. With large new funding flows being mobilised there is a danger that this will result in political leakage, gaming, rent-seeking, bureaucratisation and corruption, undermining rather than supporting low carbon development. Not only would this lead to an inefficient use of funds, it would cause greater vulnerability to climate disasters (due to substandard
work on adaptation infrastructure), and increased greenhouse gas emissions (due to crediting for spurious reductions).\textsuperscript{22} Furthermore, it could create a new form of ‘natural resource curse’ based on climate funding flows themselves undermining development gains and locking-in under development and poor governance. Likely too, it would fail to scale-up as funders and their domestic constituencies would resist putting additional money into a system which is broken so soon after being built.

**Finally there is a critical need for understanding the effectiveness of different funding instruments, mechanisms and policies** at catalysing emission reductions.\textsuperscript{23} This is somewhat different to the question of public budgeting effectiveness already discussed, as it concerns value for money for results, in particular carbon. A key question in considering carbon-effectiveness of different funding strategies is their ability to use scarce public funds to leverage private investment.\textsuperscript{24} Public funds can crowd-in private investment by taking on risks (such as public policy risk, country risk and technology risk) that the private sector is not ready to bear. Understanding how effective different mechanisms are at leveraging private finance is crucial for channeling funding in the most effective way. Equally, if the balance of risk and return is overly favourable to the private sector this will result in real and perceived charges of ‘corporate welfare’. Given the large sums of public money potentially involved, and the potentially even larger sums of private investment (and profit) to be catalysed this is a very real risk.\textsuperscript{25}

The table on the following page (exhibit 5) summarises each of these different uses for budget and financial disbursement data and illustrates the different types and levels of information that are likely to be useful in each case.
### Exhibit 5: Diverse data users and uses

<table>
<thead>
<tr>
<th>Purpose of data</th>
<th>Key question</th>
<th>Illustration of different data needs about financial flows</th>
<th>To be judged in relation to</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow monitoring of the fulfillment of commitments</td>
<td>Are funders fulfilling their commitments to the UNFCCC?</td>
<td>Funding flows claimed as disbursements in relation to UNFCCC pledges.</td>
<td>Regularly updated as to whether pledges have been fulfilled and dispersed</td>
<td>A clear definition of “climate finance” as it relates to UNFCCC commitments. Building trust by demonstrating individually and collectively whether global commitments are being met.</td>
</tr>
<tr>
<td>To enable better coordination in allocation of funding</td>
<td>How best should the funding available be used to match up to the need and opportunity?</td>
<td>Budgets available for adaptation, mitigation, and low carbon development. Overall trends in funding.</td>
<td>In advance and with several years’ visibility.</td>
<td>Funding gaps and leverage opportunities: NAMAs and NAPAs – National plans of action for adaptation and mitigation requiring funding. Other sources of funding available. Direct funding to meet mitigation and adaptation needs. Better allocation of public resources – planning and prioritisation of actions is transparent and encourages local ownership and long-term sustainability.</td>
</tr>
<tr>
<td>Support decision-making by recipient country governments</td>
<td>Is the funding being used for the purpose agreed?</td>
<td>Funding disbursed</td>
<td>Management information: quarterly and annually.</td>
<td>Public budgets and spending. Evidence of outcomes: power station built, irrigation systems financed, MW green power delivered, hectares of forest conserved, etc. Accountability of public spending to those most affected. Reduce corruption risks inherent in mobilising large sums of public money through new, complex and uncertain mechanism.</td>
</tr>
<tr>
<td>Enable those using funding to be held to account</td>
<td>What impact is it having on climate adaptation and mitigation outcomes?</td>
<td>Funding deployed, results achieved. Private investment leveraged.</td>
<td>Carbon emission reductions. Increase in resilience of vulnerable populations.</td>
<td>Support learning from trial approaches to catalysing low carbon development. Support system performance – enabling funding to be directed towards value-for-money action, leveraging private investment.</td>
</tr>
<tr>
<td>Enable robust assessment of effectiveness of climate finance</td>
<td>What impact is it having on climate adaptation and mitigation outcomes?</td>
<td>Ex-post and by project/mechanism design.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.2 The emerging patchwork

Transparency is critical. But as we have seen this is not the same as looking for a single big number for global climate finance. As Barbara Buchner, Jessica Brown and Jan Corfee-Morlot conclude in their review of climate finance tracking mechanisms; “The overarching aim of an improved framework for monitoring, reporting and verification of long-term climate finance will be to provide a clearer overview of international financial flows, trends, sources and purposes, so as to build trust among developed and developing countries through improved transparency and accountability, and to improve effectiveness of international action.”

Currently there are many different systems developing that seek to cater for the different users and covering funding available, budgeted and disbursed. These include existing and emerging systems under the aegis of the UNFCCC, as well as systems which capture other, and in some cases overlapping areas of funding for climate action, and information aggregators developed to try to make sense of this patchwork and cover some of the gaps:

- **Fast start funding reporting** – during the period of Fast Start Funding, parties are asked to report to the UNFCCC annually (in May 2011, 2012 and 2013) on the progress of their fast start funding (the EU reports at an aggregate level). Recipient countries are invited to report on “support received”.

- [www.faststartfinance.org](http://www.faststartfinance.org) is a website set up by the government of the Netherlands, with support from Denmark, Germany, Norway, the United Kingdom and a group of recipient countries, as well as international organisations. The website provides a portal for official, voluntary reporting on a nation-by-nation basis. However, individual country funding reports vary in granularity and detail and are not reported in a comparable format.

- **National Communications** – Annex II Parties to the UNFCCC are mandated to report on the levels of climate finance contributed in their regular National Communications to the UNFCCC. The quality of these reports is mixed and suffers from a lack of clear common definitions and reporting formats. At Cancún in 2010, the Parties to the UNFCCC agreed on more frequent reporting of actions and finance to the COP, every two years, rather than every five. Developing countries are asked to submit national communications every four years, in which they must report on “support received”. At COP17 in 2011, some more detail was agreed on what information developed countries should include in their biennial reports. The Subsidiary Body for Scientific and Technical Advice has been tasked with advancing the development of a common reporting format for finance. The aim is for Parties to adopt a common tabular format for data in December 2012 and overall new guidelines in 2014.

- **Individual countries** have created reports and websites on their climate finance strategies and performance, and on the funding managed by their bilateral funding institutions. Where project lists are not published, researchers have found that countries are often willing to release them on request, or under freedom of information legislation.

- **The Voluntary REDD+ Database** provides information on REDD+ financing, actions and results that have been reported to the REDD+ Partnership. It aims to improve effectiveness,
efficiency, transparency and coordination of REDD+ initiatives (related to forestry); and to support efforts to identify and analyse gaps and overlaps in REDD+ financing. The Database relies solely on data voluntarily submitted by countries and institutions. The core data concerns “arrangements”: agreements to undertake REDD+ related actions, involving funders and recipients. These include both planned and finalised agreements. Both funders and recipients can report to the database.

- **Multilateral funding institutions** and international financial institutions (IFIs) have released reports on the climate finance strategy and project lists. This is not a UNFCCC requirement, but multilateral funding institutions and development banks are under significant scrutiny to demonstrate to potential funders their effectiveness in using funds for adaptation and mitigation, and to demonstrate to developing countries their legitimacy to be part of the climate finance architecture. The World Bank in particular has put efforts into tracking the investments with adaptation and mitigation co-benefits even if they are not part of a climate specific fund. Since 2011, they have shared lessons and methodology in a working group with other multilateral development banks (MDBs), the UNFCCC secretariat, the UNDP and OECD.

- [Climatefundsupdate.org](http://www.climatefundsupdate.org) is a web-based database that provides information on international climate finance initiatives. It is maintained by two non-governmental organisations (NGOs), the Overseas Development Institute (ODI) and the Heinrich Böll Stiftung. It provides details of where and by whom bilateral and multilateral climate change funds are being developed (including national funds developed by recipient countries as implementing entities, such as the Amazon Fund). For each fund it compiles information on the scale of proposed and actual financing, and what the funds support, and details of themes, regions and particular projects.

- **OECD Creditor Reporting System** – Developed countries also report their Official Development Assistance (ODA) to the OECD’s Development Assistance Committee (DAC), and since 1998, they have been able to indicate which projects are aimed at helping mitigate climate change using the system of ‘Rio Markers’. Since 2007 reporting against the Rio Markers has been mandatory for members, and in 2011 a Rio Marker was also introduced for adaptation projects and activities. The Creditor Reporting System (CRS) of the OECD–DAC has a two year time lag and does not allow exact quantification of climate finance, but gives an indication of the policy objectives of bilateral aid and whether climate is a principal policy objective of the activity or a ‘significant’ objective. Funders only apply the markers to their own bilateral aid, not to funds applied through multilateral agencies. While it is only mandatory for members, the system can accommodate Rio Marker data from multilateral agencies or non-DAC members reporting through the system.

- **The UNFCCC Registry** – As part of the UNFCCC climate finance architecture it is planned to develop a registry to record the nationally appropriate mitigation actions (NAMAs) seeking international support, to facilitate the matching of financial, technological and capacity-building support for these actions. At COP16 in Cancún in 2010 it was agreed to set up “a registry to record national appropriate mitigation actions seeking international support and to facilitate matching of finance, technology and capacity building to these actions.” This is envisaged to form a core part of the post-2012 climate finance architecture.
• **Climate Finance Options** – A platform managed by the World Bank and UNDP which aims at providing comprehensive guidance on financial options available for climate action in developing countries. It provides access to information on the wide range of funds available from multilateral and bilateral institutions, as well as public and private sources. Users are invited to be a resource to share their experiences with investment projects and offer feedback and comments on ongoing projects.

• **The International Aid Transparency Initiative (IATI)** is a data standard and information registry to make information about aid spending easier to access, use and understand. It has been developed as a voluntary, multi-stakeholder initiative that includes donors, partner countries and civil society organisations (CSOs). It uses an open data approach, meaning the data can be accessed by different stakeholders and used in different ways. As the IATI standard builds on the OECD CRS system it currently provides for publishing of more detailed and timely funding information aligned to the Rio Markers for climate.

• **Clean Development Mechanism (CDM) funding** is subject to its own system of monitoring, reporting and verification, in terms of registration of eligible projects and entities entitled to sell emission reduction. However there is no single point for overall monitoring of funding flows from CDM to projects in developing countries.\(^{31}\)

• **Specialist funds mandated by the UNFCCC** – the Least Developed Countries Fund, the Special Climate Change Fund managed by the GEF, and the Adaptation Fund overseen by the Adaptation Fund Board report publicly on their funding, but also report to the UNFCCC, and in the case of the Adaptation Fund and the new Green Climate Fund through their governance structures, representing parties to the UNFCCC.

The following table (exhibit 6) summarises the coverage status and role played by each of these data-sharing sources and platforms.
### Exhibit 6: Data sources of funding for climate action

<table>
<thead>
<tr>
<th>Data source</th>
<th>What it covers</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fast start finance reports</strong></td>
<td>Funding from Annex II parties to non-Annex I parties for first 3 years.</td>
<td>Official: No common format, pdfs.</td>
</tr>
<tr>
<td><strong><a href="http://www.faststartfinance.org">www.faststartfinance.org</a></strong></td>
<td>Funding from Annex II parties to non-Annex I parties for first 3 years.</td>
<td>Voluntary, free text.</td>
</tr>
<tr>
<td><strong>Biennial reports to the UNFCCC</strong></td>
<td>Funding from Annex II parties to non-Annex I parties.</td>
<td>Official tabular format being developed, pdfs?</td>
</tr>
<tr>
<td><strong>Individual country and institutional reports</strong></td>
<td>Individual funder countries and intermediary institutions issue their own reports on their climate funding strategy.</td>
<td>Voluntary, free text.</td>
</tr>
<tr>
<td><strong><a href="http://www.climatefundsupdate.org">www.climatefundsupdate.org</a></strong></td>
<td>Details of climate specific funds.</td>
<td>Research based, hand compiled.</td>
</tr>
<tr>
<td><strong>OECD CRS system (Rio Markers)</strong></td>
<td>ODA with self reported climate objectives from DAC members and some others.</td>
<td>Official: common format, standard fields.</td>
</tr>
<tr>
<td><strong>UN Registry</strong></td>
<td>Funding available from bilateral and multilateral funders.</td>
<td>Official: Under development, centralised database.</td>
</tr>
<tr>
<td><strong><a href="http://www.climatefinanceoptions.org">www.climatefinanceoptions.org</a></strong></td>
<td>Funding from UN agencies and MDBs.</td>
<td>Voluntary, centralised database.</td>
</tr>
<tr>
<td><strong>International Aid Transparency Initiative (IATI) Registry</strong></td>
<td>ODA and other official flows, including by Rio Marker.</td>
<td>Voluntary</td>
</tr>
<tr>
<td><strong>Reporting by specialist climate funds to the UNFCCC</strong></td>
<td>Only funding that goes through the specialist funds.</td>
<td>Official, pdf and own database.</td>
</tr>
<tr>
<td><strong>Clean Development Mechanism</strong></td>
<td>Tonnes of carbon emission reductions registered.</td>
<td>Official certification system, but no central tracking of funds.</td>
</tr>
</tbody>
</table>
2.3 The IATI approach

While most of the systems described either provide information in their own database (requiring specific entry, or hand compiling) or as a series of separate pdf documents, the International Aid Transparency Initiative illustrates a different way of approaching the challenge of how to provide standardised and accessible information to meet different users’ needs.

IATI is not a database but an approach to enable funders to categorise and publish detailed information about development assistance in a timely, accessible and, crucially, in a comparable way. It is an open information standard which can be used by all providers of development assistance, including members of the DAC, non-DAC donors, providers of South-South cooperation, NGOs, private foundations and private sector organisations.

Users publish detailed information on their own websites about projects, programmes and budgets in a common markup language (XML) which is compatible both with their own internal aid management systems and their different reporting and transparency commitments, for example to the OECD Creditor Reporting System.

Organisations that use the IATI standard publish their data online using this standard format which is machine readable. They register the location of the data with the IATI Registry (www.iatiregistry.org). This enables information to be published once but then used in many different ways and by different people (and by automated data gathering programmes), while avoiding duplication of effort. The registry keeps track of which IATI data sets are available, what they cover, and where they are located and directs users (both human and automated) to the information rather than compiling it in a single database. (NB: while both IATI and the UNFCCC use the term registry to refer to a data repository, the UNFCCC Registry is envisaged as having a more multi-functional operation, whereas the IATI Registry is simply a system for signposting to standardised data. The two approaches could work together but the word registry in each case has a different meaning.)

The IATI standard makes use of the OECD CRS definitions, so that information that donors record for the purpose of publishing it through IATI can also be readily used to report to the CRS. However the system is not limited to providing data in a format determined by the OECD, or only covering Official Development Assistance. IATI also allows for integration of information on Other Official Flows (OOF) such as export credit payments, as well as private grants and private investment. Additional information designed to meet the needs of developing countries includes detailed location information (geo-coding), information related to individual projects, amounts received, whether the funds are in cash or in-kind and forward-looking budget information. Users can cross reference to existing project documentation on objectives, conditions, monitoring, outputs and results. Work is ongoing to establish recipient country budget identifiers to facilitate the inclusion of information published using the IATI standard into partner country budget documents and processes.

The following table (exhibit 7) summarises how IATI compares to the OECD CRS system.
## Exhibit 7: Comparison of IATI and the CRS

<table>
<thead>
<tr>
<th>CRS</th>
<th>IATI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central database. Available on web and CD-ROM.</td>
<td>Data published online by donors. Accessible by both people and machines through links from a registry (address book).</td>
</tr>
<tr>
<td>Covers all ODA from DAC members. Includes data from some non-members and most multilateral organisations such as World Bank and UNDP.</td>
<td>Covers primarily country programmable aid. Some aid agencies will not publish via IATI. Open to data about South-South cooperation, non-DAC official donors, private foundations and NGOs.</td>
</tr>
<tr>
<td>Published over a year in arrears.</td>
<td>Published and updated as often as donors want, and at least quarterly.</td>
</tr>
<tr>
<td>Subject to statistical scrutiny; data “of record”.</td>
<td>Management information, not statistics.</td>
</tr>
<tr>
<td>Primarily designed to meet the information needs of donors in order to monitor their aid flows and is maintained by them.</td>
<td>Designed to meet the information needs of a broad range of stakeholders, supported by multi-stakeholder process.</td>
</tr>
<tr>
<td>Focuses on aid spending by donors.</td>
<td>Allows developing countries to look specifically at aid inflows into developing countries.</td>
</tr>
<tr>
<td>Single classification system agreed by DAC donors.</td>
<td>Data will also be classified consistent with budget codes and classifications of recipient countries.</td>
</tr>
<tr>
<td>Provides historical data.</td>
<td>Includes as much forward-looking information as donors have available and are willing to publish.</td>
</tr>
<tr>
<td>Provides spending data and descriptions of each project.</td>
<td>Includes all CRS data about projects, plus additional information, such as documents, names of implementing organisations.</td>
</tr>
<tr>
<td>All data is provided by the donors.</td>
<td>Additional information can be published by other stakeholders and linked to project data, e.g. by recipient country governments, users of aid-financed services.</td>
</tr>
<tr>
<td>A single database for multiple purposes.</td>
<td>Information in standardised formats which allows the development of many different services tailored to users.</td>
</tr>
</tbody>
</table>

3. Challenges and gaps

While there are already a plethora of reporting and data management systems, the availability of data about overall and individual funding flows is currently poor. The Climate Policy Initiative (CPI) recently carried out an extensive study which cast a wide net and sought to capture all international funding flows that promote adaptation or development.\textsuperscript{32} They found that data was difficult to come by and hard to compare. They did not seek to come up with a number that could be equated with “climate finance” disbursed against UNFCCC pledges, since without a clear definition the number declared could differ not by a few percent but by a factor of 10.

Other reviews of specific reporting systems, such as the initial reporting of ‘fast start funding’ to UNFCCC and reporting on climate related aid through the OECD Rio Markers system agree that these systems deliver patchy information of variable quality, without a common platform or set of definitions to understand overlaps.\textsuperscript{33} These findings also mirror the findings of Publish What You Fund’s Annual Aid Transparency Index which rates agencies for the extent to which they publish comprehensive, timely and accessible information on budgets, disbursements, results and evaluations at an organisation, country and project level. Although this index does not explicitly focus on climate finance transparency, many of the bilateral and multilateral agencies that it covers are also major providers of climate finance.\textsuperscript{34}

The key weaknesses in the patchwork of systems relate to a lack of core definitions, the difficulties caused by a proliferation of mutually exclusive systems and the challenge of assessing leverage and impacts, and the fact that much information which would be useful to data users is not published.

3.1 Definitional dilemmas and double counting

Providing a robust assurance as to whether high-level targets have been met is not the only question, but it is a crucial one. The lack of clear definitions means that even the best efforts to report on fast start funding to date have not been able to answer this basic question which underpins trust in the ongoing negotiations.\textsuperscript{35}

A key dilemma in identifying and accounting for climate finance is identifying what is ‘new and additional’ funding; in other words funding for climate change which goes beyond existing commitments and plans for Official Development Assistance.\textsuperscript{36} Currently, all climate finance that meets ODA standards is double counted as aid. For example, 96% of contributions to the GEF are recognised as ODA.\textsuperscript{37} The UK’s GBP 1.5 billion Fast Start commitment has been reported to be reallocated from existing aid budgets.\textsuperscript{38}

The UN Secretary General’s High Level Advisory Group, co-chaired by the Prime Ministers of Ethiopia and Norway, and tasked to address some of the key questions surrounding climate finance in 2010 was unable to reach a conclusion, offering the view that “Operationalization of additionality, including through defining a reference case [...] is politically and analytically very difficult. Given likely pressures on existing sources and the difficulty of specifying a 2020 reference case against which additionality could be measured, a potential perspective is to treat the newness of a source as a useful, if partial, proxy for additionality. There are also other interpretations, however, such as taking
the view that the US$ 100 billion target should be measured in a way that would be additional to a 2020 official development assistance (ODA) reference case.”

Similarly, discussions within the DAC have been inconclusive. It was noted that “...a common DAC view would not be feasible at least in the near-term. Each Member Country had its own interpretation of this concept and would not likely agree on a common baseline against which to establish additionality. Maximising transparency with regard to countries’ climate change financing contribution was seen as the only way to alleviate this problem and ensure the credibility of DAC Members’ commitments and pledges.” The EU has also not been able at reach a common position on what is new and additional finance even amongst its own members. The European Commission is seeking to achieve a common European definition by 2013.

Counting additional finance against an agreed definition is not a particularly technical challenge (although some proposals are technically more tricky to implement than others). However, the intractability of this debate reflects unresolved political questions about how much public funding developed and developing countries really are willing and able to commit towards low carbon climate resilient development as part of the US$ 100 billion headline.

While it is not the role of this paper to seek to resolve this debate, we summarise below the range of proposals have been put forward for assessing the additionality of climate-related public funding.39

Exhibit 8: How to assess additionality?

<table>
<thead>
<tr>
<th>The OECD Development Assistance Committee defines Official Development Assistance as funding which is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>Provided by official agencies</strong>, including state and local governments, or by their executive agencies (either from their own budgets or from private sector borrowing).</td>
</tr>
<tr>
<td>• <strong>To developing countries</strong> (and to multilateral development institutions and NGOs) which includes all least developed countries and low and medium income countries that are not members of the G8 or EU or accession countries to the EU.</td>
</tr>
<tr>
<td>• <strong>Intended for the promotion of the economic development and welfare</strong> of developing countries as its main objective.</td>
</tr>
<tr>
<td>• <strong>Concessional</strong> in character with a grant element of at least 25% implicit in loan rates.</td>
</tr>
</tbody>
</table>

Loans are counted as aid at their full face value, but loan repayments are counted as a negative flow. Therefore loans which are fully repaid have no net contribution to measures of overall aid flow.

Currently, all climate finance that meets ODA standards is counted as aid. For example, 96% of contributions to the GEF are recognised as ODA.40 The UK’s GBP 1.5 billion Fast Start commitment has been reported to be reallocated from existing aid budgets.41

A number of proposals have been put forward to define climate finance which is new and additional to aid:

- **Allow each funder government to set their own definition of additionality.**
- **Only count funding over and above the ‘0.7%’ ODA goal** which has been adopted by many countries since 1970. In this definition only climate-related funding above the 0.7% goal would be counted against climate commitments, meaning that countries that had not reached the 0.7% goal could not count any public funding against climate goals.
- **Allowing funders to make the distinction between ‘ODA classic’ and ‘ODA climate’**. Under this definition developed countries would choose whether to count particular aid flows against their ODA goal or against their new and additional climate finance pledge (or in what proportions they count against each).42
- **Counting all public funding increases for climate action since 2009 as new and additional**. Under this definition any increase in the amount of climate-related ODA that governments provide since agreeing the Copenhagen Accord would be considered new and additional.
• Assessing funding increases against a ‘business as usual’ projection of aid volumes. This definition mirrors the way that emission reductions commitments by developing countries are most often made, against a projected baseline of business-as-usual.

• Only count funding disbursed through new UN channels, such as the Adaptation Fund or the Green Climate Fund.

• Only count funding generated through new mechanisms not related to ODA. This definition suggests a complete separation between ODA and climate change finance.

Another area of potential double counting is the question how to account for the funding flows and emission reductions related to the sale of certified emission reductions (CERs) through the Clean Development Mechanism. This provides a funding stream to reduce the incremental cost of climate action, however emission reductions achieved count against the national obligation of the country where they are finally retired; therefore if they are also counted against emission reduction targets in the country of origin this results in a double counting of emission reductions. Similarly, if financial transfers between the international buyer and the project developer are counted as part of the buyer country’s climate finance contribution, this means that a single transaction is double counted as meeting both their own emission reduction commitment and their climate finance commitment. To have any hope of meeting the goal of atmospheric stabilisation, the emission reduction targets set by developing countries and commitments made by developed countries have to add together, not substitute for each other. This issue has yet to be resolved.

Finally, there is the question of how private sector finance should be assessed and accounted for. The international agreement to mobilise US$ 100 billion annually by 2020 specified that this could include public, private and innovative funding mechanisms.

The High-level Advisory Group on Climate Change Financing was again unable to reach consensus on how to interpret this. “One perspective within the Advisory Group was that private flows should be measured on both a gross and a net basis. Whether gross or net is to be used, the relevant flows are those triggered by the public sector interventions in developing countries (such as risk-sharing instruments targeted at international climate investments). Some took the view that, since the challenges concern the finance of the net incremental costs that are to be incurred, only the net flow concept is relevant. Another perspective within the Advisory Group was that only gross private flows should be measured, given the methodological difficulties of defining a net measure and also the crucial role of overall gross flows in providing the necessary scale and in driving entrepreneurship and technological innovation.”

Funders are already beginning to use a broad definition of climate finance which goes beyond their own contribution to incremental costs to include the private investment mobilised by these public flows. The German government reports that it has allocated €66 million of resources to finance the Clean Technology Fund under the World Bank. By supplying this funding through the KfW development bank however, it is able to raise a further €59 million from the private capital market and counts the full value of €125 million against its pledge for Fast Start Funding. In addition, not only the grant equivalent contributions of concessional loans are counted towards the pledge, but the entire volume of concessional loan. This is consistent with the practice of aid reporting where funds provided by a government at their own risk and responsibility, regardless of the source of funds (taxation of or borrowing from the private sector), are included.
3.2 Overlapping systems

While the issues discussed will need to be negotiated to an agreement, other gaps and weaknesses are more technical in nature, resulting from the patchwork of incomplete, inconsistent, multiple and overlapping data standards and repositories which mean that even where data is provided it is difficult to analyse and use:

- **Multiple funder reporting requirements for different institutions.** With so many overlapping systems funders are required to report in different ways; for example to the OECD CRS system and to the UNFCCC biennial reports. This both increases the administrative burden, and decreases information quality. Inconsistent use of existing reporting guidelines has already been noted (e.g. reporting using different years and reporting periods, not using reporting categories consistently).

- **Inconsistent data standards and multiple repositories.** Identifying and tracking funding flows through bilateral and multilateral institutions, carbon markets and private investments and through the OECD CRS database, UNFCCC and national reports requires piecing together a puzzle of different information which may or may not relate to the same activities. A simple query such as finding out how much climate finance is being allocated towards wind energy, or to a particular region, cannot be performed without combing through multiple documents reporting data in different ways.

- **Incomplete coverage of funding lifecycle.** A key weakness of both Fast Start Finance reporting and the OECD CRS database is that they do not provide comprehensive information on how funds have been disbursed or delivered to specific projects, programmes and countries. This is a problem, as understanding how climate funding is being implemented requires understanding how the finance committed by donor countries is actually being delivered on the ground. Parties are not required to de-list projects that may have been listed in one year but are cancelled in a subsequent year.

- **Incomplete coverage of funders.** The OECD’s CRS database only provides detailed coverage of DAC members, while the UNFCCC reporting system only includes Annex II countries.

- **Over-aggregation.** Reporting into single systems tends to lead to over-aggregation of data to meet the need for particular users or headline figures. Current mitigation categories for UNFCCC national communications do not require financial data to be broken down by specific technologies such as gas, wind or solar, while adaptation categories leave out several important sectors such as water, forests, health, energy and infrastructure. Nor do the guidelines distinguish between funding for research and development, planning, assessments, capacity building, demonstrations or technology deployment, or between grants, loans and guarantees. The OECD DAC sector categories provide more detailed breakdown of some of these sectoral categories, but without identifying climate finance headline figures or allowing for simple cross-referencing with UNFCCC reports.

- **Poor usability.** Where the information is publicly-available, it is rarely available in a machine-readable format which makes re-use very difficult. Most data is organised in a way that supports searching by funder and by recipient country, but which makes it difficult to pull out information by technology, finance type, status of delivery, partner organisation or any other variable which diverse users might seek.
3.3 The challenge of assessing private sector leverage

Over and above the political question of what level and types of private sector finance may be agreed as eligible to be counted against the US$ 100 billion target, developing robust measures of leverage (and benefits of multi-party collaboration) will be crucial to showing whether and how public funds are most effectively used to influence the flow of private investment. Research efforts are being undertaken in this area, notably by the OECD and by the World Bank and other MDBs.

The basic mechanisms for public-private leverage are to buy down the incremental cost, offering a guaranteed income stream to investors, or to mitigate risk to lower the cost of capital. There are three key mechanisms used.44

1. **Blended finance.** Concessional loans which include an effective grant element, or equity stakes where governments take the ‘first loss’ position, can be used to crowd-in private investment. Public and private finance sources may be blended by developers themselves or through special purpose funding vehicles developed to induce additional private sector equity and loan investment at market rates. One example of this approach is the Climate Public Private Partnership Fund (CP3) being developed by the UK Government together with the Asian Development Bank and the IFC.45

2. **Risk mitigation instruments.** Public-backed risk mitigation instruments leveraging private capital, and drawing on the sovereign funders credit rating rather than directly on public funds. Public-backed risk mitigation instruments, such as loan guarantees, policy insurance, exchange rate liquidity facilities and export credit guarantees leverage public backing to induce private investment. The biggest players in this are the multilateral development banks and bilateral policy banks such as Germany’s KfW and Japan’s JICA.46

3. **Development and support for ‘investment grade’ policies.** Providing the funding for public policy measures which buy down the incremental cost, by reducing risks and providing the clarity, stability, predictability and long-term visibility of funding flows that will attract investors. For example, this could mean providing funding to support a feed-in tariff for renewable energy technologies, but also might mean technical support in developing sound energy procurement systems and regulations.47

By reducing the overall cost of capital on the investment side these measures, if well designed, have a corresponding effect in terms of reducing the incremental cost passed on to consumers or to domestic taxpayers. However the effective level of leverage is difficult to assess, and some of the measures themselves may be off-budget for the funder (such as loan guarantees) meaning that they do not show up at all in a basic assessments of committed and delivered funding.

The diagram on the following page (exhibit 9) illustrates how these three mechanisms interact with the basic funding flows that have already been mapped.
There are real technical challenges in assessing how successful public funding is in leveraging private investment. Furthermore, efforts in this area are hampered by the fear that the reason for measuring and maximising private sector leverage is to use it to reduce public commitments.

Funders have begun to report on leverage, but their figures are difficult to compare and can be misleading to interpret. Leverage ratios are often assumed to demonstrate how climate finance catalyses private investment, however in reality, the higher the leverage ratio, the lower the impact of the climate finance on project economics and therefore the lower the importance of climate finance for that particular project. This has been the experience of CDM funding where carbon finance tends to be the ‘icing on the cake’ for developers rather than providing any real financial leverage.

In some cases what is reported as leverage is actually public co-financing. While it can be valuable to combine funding from different sources (including public funding from different countries and aimed at different goals such as job creation, export promotion, climate mitigation and development) there is a danger when using the simple concept of co-financing to stand in for leverage that, if more than one funder has a climate mitigation motivation, the result is double-counting as everyone is leveraging everyone else and claiming the same impacts.

Research by the OECD Expert Group on Climate Change takes an overall view of climate finance as referring to “capital flows that target low carbon or climate resilient development”. They note that ultimately the definition agreed internationally for the purposes of monitoring international commitments will not be an only technical one, but will need to be developed through dialogue amongst both donor and recipient countries. However they highlight the technical difficulty of assessing incremental or net flows rather than gross investment.
Others argue that while exact and comparable figures on additional contributions to fund incremental expenses are probably not possible, the principle that climate finance is a catalytic contribution towards incremental costs should prevail, as the US$ 100 billion funding goal is the right degree of magnitude for incremental funding but a drop in the ocean towards the overall investment flows that this needs to influence.\textsuperscript{50}

Furthermore, it is not clear how gross private investment figures should be attributed to national funders. For example, a policy support measure funded by one government might leverage inward investment to a developing country by a firm from a third country, which itself has received export support from its own government: which country should be able to claim credit for this private investment? Equally, if a policy support measure leverages local investment would this be seen as beneficial because of local economic multipliers, or less valuable because less international leverage could be attributed. As a report to the EU points out, these are not simply accounting questions but could end up influencing the way that funds are applied to maximise their credited contribution to the US$ 100 billion target.\textsuperscript{51}

\subsection{3.4 From volumes to effectiveness}

While this paper has focused on the initial challenge of mapping funding flows, these questions of source, type and volume are the tip of the iceberg. In the end it is not the actual volume of funds that counts, but the effect that the funds have.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
\multicolumn{2}{|c|}{Exhibit 10: From volume to effectiveness to impacts} \\
\hline
\textbf{Funding flows} & \textbf{Climate finance instruments} & \textbf{Performance of economic actors} \\
\hline
\textbf{Key questions} & \\
Volume & How much? \\
& For what? \\
& Where? \\
& When? \\
Effectiveness & Crowd-in private investment? \\
& Fair balance of risk and reward? \\
& Behavior change? \\
& Results – GHG reduction, resilience, industrial change. \\
Impacts & Alignment of sustainability and economic competitiveness \\
& Rent-seeking or innovation? \\
& New technology (and risks) \\
& Winners and losers \\
\hline
\textbf{Transparency mechanisms} & \\
Resource tracking & Information standards on funding flows and budgets. \\
Certification & Robust methodologies for assessing mechanisms and intermediaries (e.g. CDM, climate bonds, blended funds) \\
Performance measures & Transparency on performance in terms of impacts on people, environment and economies by nation, industry, company, technology. \\
\end{tabular}
\end{table}
There is still a long way to go increase the understanding of effectiveness. While indicators such as tonnes of CO2 reduced are apparently standardised and generalisable, they are underpinned by assumptions about business-as-usual baselines which are open to significant technical differences of opinion, as well as political negotiation. At this level transparency about the numbers is not enough, since they are so difficult to interpret.52

Similarly, while the leverage ratio between public funding and private investment appears a clear metric, a recent review of the measurement of leverage found inconsistent definitions and methodologies and approaches. The study found that it was almost impossible to compare different instruments in terms of leverage and that additionality or causality of finance was difficult to prove. Furthermore, because of confidentiality agreements with project developers, the financial terms and conditions are often not disclosed at a project level. As a result, it is not possible for external stakeholders to evaluate whether the level of concessional finance was appropriate and needed.53

The response here has been to seek to develop robust methodologies and certification systems that assess complex claims. Such methodologies and certification systems include those developed under the Clean Development Mechanism, the voluntary carbon market (particularly for REDD) and proposals for sectoral crediting and standards for climate bonds, and the proposed verification function of the UNFCCC Registry.54

Finally, beyond this are questions about the overall performance of economies, investments, organisations and technologies and the extent to which they are directing finance, ingenuity and political will towards solving the challenge of climate compatible development.

Ultimately most people, including those making decisions on investments, will seek to assess the soundness of institutions and hold them to account for their performance, not to track funding flows. The design of mechanisms for transparency on funding for climate change action will need to support the evolution of systems and analysis which enable people to answer the questions ‘is this organisation effective?’, ‘is this institution addressing climate impacts across its whole portfolio?’ and ‘is this country promoting low carbon development?’.

3.5 Ongoing developments

There are already several processes underway to revise, improve and standardise coverage of existing climate finance reporting and tracking mechanisms, and to better understand effectiveness.

The UNFCCC is working on developing a common tabular format for biennial financial reports this year (by December) and the first reports will come out in 2014. This will be followed by a process of review and submission of views and experience of reporting a revision of the reporting guidelines. The aim is to adopt a new set of reporting guidelines in 2014 at COP20. The UNFCCC is also designing the prototype for its registry, to match funding availability and need, which is due to be finalised in December 2012 (see exhibit 11).

The OECD has established a Task Team on quantification of Rio Marker data. There are also proposals to expand Rio Marker data collection to cover non-DAC bilateral donors and multilateral agencies’ outflows and non-ODA public funding. They are also researching and developing options
for how to capture public funds used for leveraging private climate finance and climate finance extended through officially supported export credits.55

The EU is considering proposals for a new Monitoring Mechanism Regulation (MMR) proposal. The MMR proposal requires information on financial support to specify whether the support has been committed and disbursed, committed only or planned, for each year. This information has to specify whether the financial resources that Member States have provided are new and additional in the context of the UNFCCC and how this was calculated. Moreover, the information shall be presented by type of channel such as bilateral, regional or multilateral channels. Quantitative information has to be provided on financial flows based on the Rio Markers for climate change mitigation-related aid and climate change adaptation-related aid, and the methodology for determining this should be specified. The proposal asks for detailed information to be reported on assistance provided by both the public and private sectors to developing countries for mitigation and adaptation to climate change.

The World Bank has developed a new system to track projects with climate co-benefits amongst its portfolio. It tracks the percentage of project costs that provide direct climate action benefits. Project managers use standard guidance to assign a percentage share of costs for each project sub-component. Data is reviewed centrally at time of project approval for quality assurance and control, and can be aggregated up to portfolio level.56 There is also an MDB working group on tracking Climate Finance which is led by the African Development Bank.

Others are focused on assessing and screening the performance of organisations, or governments as an entity, rather than focusing on individual flows. IFIs and MDBs for example are developing tools and guidelines for assessing and guiding their overall investment portfolios. For example, the French Development Agency AFD, the German policy bank KfW and the European Bank for Reconstruction and Development have all developed tools for monitoring the Greenhouse Gas (GHG) emissions of their investments; while programmes such as the Global Reporting Initiative, the Greenhouse Gas Protocol and Carbon Disclosure Project are frameworks for individual companies and supply chains to understand and report their performance.

Exhibit 11: The proposed UNFCCC Climate Registry

There has been significant research, development and debate as to the functions and operation of the registry, what criteria and standards will be applied to qualify projects and programmes for posting on the registry, which funding sources it could include and how it might relate to national and sectoral registries. A Technical Working Group supported by NORAD, KfW and the World Wildlife Fund has hosted a series of discussions and publications exploring these options (see www.climateregistryoption.org).

According to their mapping, the Climate Registry would carry out a series of functions:

- Information management – a central posting medium through which statements of national needs and financing opportunities are rendered public. As projects and programmes move through implementation, independently verified results, lessons learned and formal reports are posted to inform all participants of progress, best practices and encountered challenges;
- Matching – proactively matching developing country needs with financial opportunities. When investment barriers or problems in meeting established standards and targets arise, the registry facilitates the acquisition of technical and financial support to move beyond those identified constraints;
- Regulatory – allows all participants, whether recipient or contributing, to have confidence in the
transparency, predictability and fairness of the Climate Registry. The regulatory function requires that standards, including measurable results, are established for the quality of national plans to be registered.

- **Verification** – establishes the processes by which recipient countries, donors and external technical agents verify compliance and delivery of agreed outputs and contributions. Both standards and methodologies are developed by UNFCCC technical bodies and approved by the COP but it is the registry that can ensure adherence through the independent verification process and the posting of results. The verification function can also provide a transparent accounting for new and additional financing from contributor countries.

Much still remains to be decided, including whether and how the registry will carry out all these functions, but the process of developing the information management function has been initiated, with the agreement at COP17 in 2011 to develop a flexible, dynamic, web-based platform to support matching of needs and resources. The registry will be managed by a dedicated team in the secretariat and will only include information submitted expressly for inclusion. Developed country parties, and entities entrusted with the operation of the financial mechanism, including the Global Environment Facility and the Green Climate Fund, multilateral, bilateral and other public donors, and private and non-governmental organisations are asked to submit information on the support available in terms of scope, amount and process for delivery. Following matching, parties and entities are asked to provide information on both internationally supported mitigation actions and associated support.

The plan is for the UNFCCC’s Subsidiary Body for Implementation to present a registry prototype in May 2012, and for the design to be finalised in December 2012 at COP18.

Academics, analysts and NGOs play a critical role in analysing the data which is made available and using it to build up and judge the overall performance of organisations, funders and financial mechanisms. A good example of this is the Open Climate Network’s work on developing a pilot country-by-country study which tracks not only climate finance flows, but also policy effectiveness and overall carbon intensity and green growth.
4. Recommendations

The aim of this paper was to assess the gaps and potential synergies between aid focused and climate focused transparency mechanisms.

It is clear that aid transparency tools can not be expected to solve the tightly knotted political debates around how to assess additionality and how much of the relative contribution of public versus private funding should be counted towards the US$ 100 billion target. However transparency about funding flows in practice is critical to support these debates. It is also important to enable better planning and decision-making and to support integrity and the understanding of effectiveness.

Tools and approaches developed to support aid transparency offer the potential to strengthen the availability of useful and robust data to support effective and open deployment of funding for climate action. Equally, information about the extent to which development activities and investments are exposed to the danger of becoming stranded by rising carbon prices or weather-related risk is likely to become material information for those concerned with achieving development outcomes.

Overall our recommendation is that organisations working on climate finance transparency and aid transparency should continue to strengthen collaboration on metrics, tools and approaches to advance learning and compatibility both:

- Between agencies within and across governments,
- Between expert organisations and researchers in the different fields, and
- Between international organisations such as the UNFCCC, OECD and IATI.

4.1 Getting beyond the hundred billion dollar question

Providing assurance that commitments are met is important. However, there is real danger that a singular focus on assessing ‘the big number’ is hampering efforts to make reporting on overall climate flows more robust.

As outlined in section 2, there are at least five good reasons for transparency in funding for climate action. In discussions on transparency of climate finance however, most of the focus too often is only on the first purpose – monitoring whether developed countries are fulfilling their high level commitments. There is a danger that the hundred billion dollar question will distort not only reporting, but the efficiency with which funding is applied – favouring mechanisms that are most easily ringfenced over those that mainstream climate adaptation and mitigation into decision-making on sector strategies, and which integrate them into national budgetary processes.

Recommendation

In reporting on how their funding contributes to climate change mitigation and adaptation, funders should seek to provide detailed, accessible and timely information to meet the needs of different information users. While recognising the distinction between climate finance and aid, the
principles and best practices of the approach to transparency taken by the aid community offers a useful guide in doing this within climate finance.

Publish What You Fund should strengthen the coverage and discussion of climate finance issues in its Aid Transparency Index which assesses transparency against the needs of many stakeholders, and already covers many organisations that handle climate finance. It should encourage and support the use of IATI for publishing information on funding for climate change action.

4.2 Information can speak the same language

Given the diversity of funding streams that aim to support climate action, the most likely scenario for effective monitoring will be a combination of methods, including tracking designated climate finance as it comes into the system from funders as one set of data, as well as tracking the adaptation and mitigation co-benefits of blended funding streams as another.

Rather than seeking a single definition, transparent methodologies can be established for reporting each stream. For example, the definition of climate finance for the purpose of tracking public funding flows should not be aggregated with data representing attempts to assess private funds leveraged. This would enable different users to look at gross investment and incremental funding flows depending on which they are interested in, rather than seek to combine both within a single definition.

That these methodologies are being taken forward – for example in the new Reporting Guidelines to be developed by the UNFCCC, evolution of the Rio Markers, and the co-benefits tracking systems being developed by the World Bank and other MDBs – are all positive steps. But although they cover overlapping funding streams they are running on different tracks. This is understandable given the existing difficulty in reaching agreement on core definitions in just one forum; however it misses the opportunity to make the information available in a common, consistent and useful format, whilst retaining definitional decision-making and monitoring and verification as the responsibility of the most relevant body.

The International Aid Transparency Initiative offers a common language for decentralised publishing of funding. This approach would lend itself well to serving the needs of the different potential users of information on climate finance flows, and integrating information on aid and climate finance, without blurring the distinctions in purpose and accountability of different streams and definitions.

The IATI standard already incorporates information on climate finance, based on the OECD Rio Policy Markers. However, as is the case with the OECD CRS, this only provides a limited degree of information. The appendix to this paper provides an initial set of suggestions for how coverage of climate action within the IATI standard could be refined to provide a bridge between the IATI data on budgets and projects and those seeking information in relation to climate adaptation or mitigation goals. This would provide a powerful mechanism to address many of the weaknesses in the current patchwork of reporting systems.
Ultimately IATI could be developed to provide a common data standard compatible both with UNFCCC and OECD reporting commitments. This would reduce repetitive work for funders, and make more information available for timely analysis at a country, sector and global level.

Recommendation

The IATI Steering Committee should identify and adopt a first basic set of additional climate-related codes and data fields to integrate into the standard.

IATI should engage and collaborate with organisations engaged in tracking climate finance and explore the potential to integrate a full set of climate finance elements into the IATI standard, or develop a separate module, which would provide more information related to climate impacts and action and allow users to use a common data standard for publishing information on aid and on UNFCCC finance.

Organisations using the IATI standard in countries where other non-traditional agencies are also taking on public climate finance roles should encourage and support their sister agencies to adopt the IATI standard in relation to climate finance flows.

4.3 Integrating forward and backward looking data

The planned UNFCCC Registry will introduce a further upstream system for reporting on finance available and matched with needs. The tendency we have seen so far is to develop discrete, centralised data systems. It is not yet clear for example whether the registry and the format for biannual reporting on climate finance will be linked. It is also not clear whether the registry will only provide matching with funding which meets the UNFCCC definition for ‘new and additional’ climate finance or whether it will incorporate other funding sources.

The decentralised publish-and-register approach demonstrated by IATI offers an alternative model to the central database, and a useful template to the UNFCCC as they seek to develop a “dynamic, flexible web-based registry”. The information management function of the UNFCCC Registry could be developed using a similar and compatible set of definitions to IATI. Using this approach to bring together forward-looking data about resource allocation frameworks, thematic and regional budgets and NAMAs could unlock this data and allow others to use it to combine with data about private sector and national sources of support, on a technology-by-technology or regional basis to support planning. It would allow funding data to be cross-referenced through geocoding, by sector or technology by users with indicators of need and vulnerability, such as those being developed by the Planetary Skin Institute.

Furthermore, if both forward-looking information in the UNFCCC Registry and backward-looking information on commitments, disbursements and results were published using the same IATI compatible information standard this would support both planning, tracking and accountability, as well as preventing the addition of a further incompatible reporting system.

Recommendation

The UNFCCC should consider using a decentralised, ‘open data’ approach that is compatible to IATI for its planned registry of support needs and resource availability.
Appendix 1 Strengthening the usability of IATI data for assessing funding for climate action

IATI offers the basis for a general purpose, standardised approach to managing and making available information about climate finance alongside development aid and other official flows.

This could mean developing a module or set of fields that would enable funders to use a common format and set of project and budget identifiers for publishing data to meet both their OECD reporting obligations and their UNFCCC reporting requirements, as well as providing additional information for other users. This would require collaboration between IATI and the UNFCCC to develop compatibility.

However, in the short term, a few simple additional data fields and code lists could be developed which would allow more detailed climate finance information to already be included in an organisation’s IATI dataset, in a standardised way. For example:

- **Elements included that would enable funding for climate goals to be identified** within forward-planning budgets (for the organisation itself, funded countries and funded institutions). This would allow the organisation to state what percentage of each budget is intended for climate mitigation, adaptation or REDD goals.

- **Percentage marking of climate finance commitments** in the activity standard would enable a funder to state what percentage of the funding for any project is for climate mitigation, adaptation or REDD. This would build on and be compatible with the current policy markers system, but would enable organisations to go beyond stating it as a principal or significant goal. This is comparable to the co-benefits tracking approach being taken by the World Bank and could build on their experience. It should be noted that the Bank estimates that it takes around 15 minutes for each project to be coded with this system.  

- **The development of a mapping of UNFCCC-relevant sectors** for marking the sectors in which climate change activities are taking place (for example: public budget support, renewables, energy efficiency, land-use change, REDD, agriculture, transport, etc.) would enable standardised tagging of key sectoral approaches to climate change action.

- **An additional ‘carbon purchase’ option** added to the ‘finance type’ field would enable organisations to indicate where a transaction was a purchase of certified emission reductions, or verified emission reductions.

The diagram (exhibit 12) on the following page highlights which climate finance flows could be easily tagged in this way (in orange) and which would be partially highlighted or would need more work, or the adoption of clearer definitions by the UNFCCC which could then be used by IATI (pale green boxes).
Exhibit 12: Climate finance flows that could be captured by IATI datasets
Towards Climate Finance Transparency

1. aidinfo works to enable people to gain access to and use information about aid and other poverty reduction resources. We work with donors and partner countries to secure international agreement from donors to publish information in a consistent format that meets the needs of aid information users. We receive funding from the Hewlett Foundation and from the UK Department for International Development: www.aidinfo.org


3. Maya Forstater is an independent researcher in the field of sustainable development: hiyamaya@gmail.com, hiyamaya.wordpress.com. Rachel Rank is the Research and Monitoring Manager at Publish What You Fund.


11. International Monetary Fund, World Economic Outlook database, April 2011.


20. Ibid.


25. Peirera, J. (2012), Cashing in on climate change?: Assessing whether private funds can be leveraged to help the poorest countries respond to climate challenges, Brussels: Eurodad.


27. Smita Nakooda, personal communication.

28. www.oecd.org/dac/stats/riocovenventions

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45 World Economic Forum (2011) op. cit.
50 Huhtula, A. (2011) op. cit.
57 www.planetaryskin.org