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Development finance and climate finance : achieving zero poverty and zero emissions

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Development finance and climate finance

Achieving zero poverty and zero emissions

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The relationship between development finance and climate finance is a key political issue. Some (particularly least developed country (LDC) climate negotiators) stress the differences. Others (most bilateral development agencies) stress the similarities. But understanding this relationship has now become urgent. We must distinguish between different types of international climate finance (adaptation and mitigation) and recipients of these funds (LDCs versus middle-income countries). In LDCs, links between adaptation finance and development finance are strong and so this should be counted as official development assistance (ODA). But in middle-income countries, links between mitigation finance and development finance are weak, so instead this should be additional to ODA and counted as the new metric of total official support for sustainable development (TOSD).

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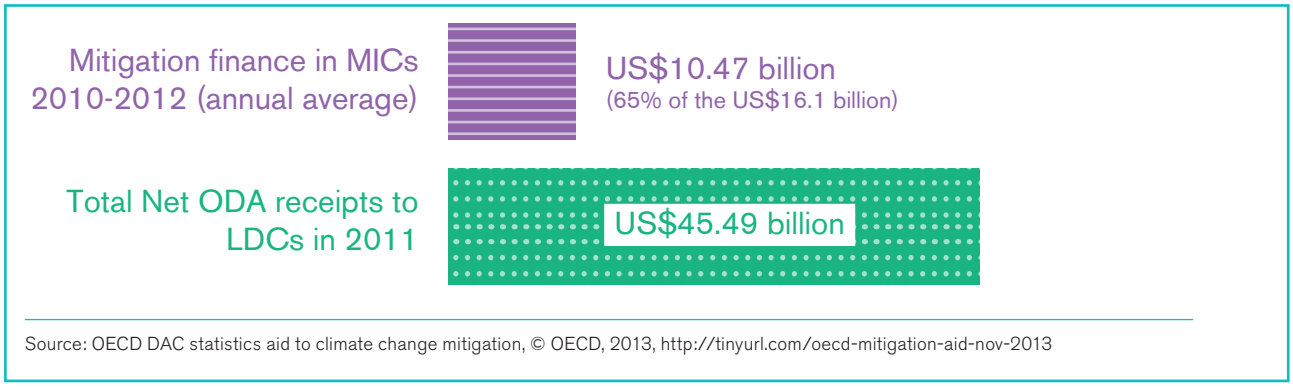
Acronyms

CDM	Clean Development Mechanism
DAC	Development Assistance Committee
FfD	Finance for Development Conference, forthcoming July 2015
GHG	Greenhouse gases
INDC	Intended nationally determined contribution
IRENA	International Renewable Energy Agency
LDC	Least developed countries
MIC	Middle-income countries
ODA	Official development assistance
OECD	Organisation for Economic Cooperation and Development
SDGs	Sustainable Development Goals
TOSD	Total official support for sustainable development
UNFCCC	United Nations Framework Convention on Climate Change

Summary

- **International public climate finance and its links to development finance are key to the negotiations on financing for development, the Sustainable Development Goals (SDGs) and climate change.** Official development assistance should focus on achieving climate-resilient SDGs – particularly in least developed countries (LDCs) – and not on narrow climate mitigation (which used US$10 billion of bilateral aid in 2013) or narrow adaptation projects (which used US$3.4 billion of bilateral aid in 2013).
- **Despite its widespread use, the term 'climate finance' has no agreed definition.** Climate finance includes different sources of supply: from domestic and international, public and private sources. It also includes different types of demand: investments in OECD countries, least developed countries (LDCs) and middle-income countries (MICs) for climate adaptation and mitigation. This report uses the definitions provided by the Organisation of Economic Cooperation and Development (OECD), or 'Rio markers'.
- **International development finance will need to increase and become more effective, particularly in least developed countries, to meet the SDG target of eradicating extreme poverty by the year 2030.** Estimates suggest that the annual incremental costs up to 2030 of SDG achievement (in constant 2010 prices) will be about US$70 billion for health, US$40 billion for education, US$40 billion for food security and US$22 billion for water and sanitation.[1] Almost all of these costs will need to come out of public funds. This makes an estimated US$170 billion per year required compared to current bilateral aid disbursements of US$134 billion in 2013.
- **International public climate finance is growing, particularly for mitigation in middle-income countries, and there is some evidence that it is crowding out finance for core SDG provision, particularly in least developed countries, where aid is falling.** Bilateral climate aid was US$23 billion* in 2013 or 17 per cent of total bilateral aid, with 60 per cent of this US$23 billion going on mitigation, primarily in middle-income countries. 'Principal' spending on mitigation in middle-income countries was US$8 billion in 2013 or 6 per cent of total bilateral aid commitments.[2] This contrasts with a declining share of total ODA for LDCs which fell to 40 per cent of total bilateral aid in 2012.[3] Climate mitigation finance for middle-income countries was equivalent to almost a quarter of total ODA to LDCs as shown in Figure 1.
- **Climate adaptation finance, particularly in least developed countries, is hard to separate from development finance – and all bilateral donors count this as official development assistance (ODA).** It is important to spend both on basic SDG provision for health, education, water/sanitation and food security as well as to make sure that SDG spending is resilient to climate change. These related objectives of SDG provision and climate resilience and the need for increased ODA financing to achieve climate-resilient SDG provision should be recognised

Figure 1. Comparing MICs mitigation finance with LDCs total development finance



Source: OECD DAC statistics aid to climate change mitigation, © OECD, 2013, http://tinyurl.com/oecd-mitigation-aid-nov-2013

* This is the share of official development assistance (ODA) where climate was marked as 'principal' so the project would not have gone ahead if climate change was not an objective.

at the forthcoming Financing for Development Conference (FfD) in Addis Ababa in July 2015.

- **International public finance for climate-resilient SDG achievement will be the best way to achieve transformational climate adaptation, rather than specific 'adaptation' programmes.** A richer, healthier, better-educated population is the best way to achieve transformational adaptation – moving away from agriculture and other weather-dependent livelihood activities and having the education, finances and institutions to be resilient in the face of a climate shock. This is more cost effective and long lasting than standard climate adaptation projects.
- **Country budgets should form the basis of national integrated financing frameworks for sustainable development**. International public development and climate finance should move towards a greater use of country systems through the national planning and budgeting process. Where these country systems are weak as in fragile states, which may also be prone to climate vulnerability, development partners should provide support for public financial management.
- **Domestic private finance is driving climate mitigation in middle-income countries (MICs) and the costs are falling rapidly so the role for international public finance is limited.** Mitigation investments are basically driven by domestic private funds incentivised by an enabling national policy framework: 78 per cent of the private renewable investment in 2013 was invested in its country of origin. The vast bulk of renewable energy investments in developing countries are happening in MICs with China, India and South Africa making up 72 per cent of the developing world total of US$93 billion. This is particularly the case with China, which is now the world's largest renewable energy investor at US$53 billion in 2013. These renewable investments in China, India and parts of South America are now competitive in price with OECD renewable energy costs and sometimes cheaper. These investment flows also benefit LDCs as they are the most vulnerable to climate change. The role for international public finance is limited with the key driver being the domestic policy framework of MICs.
- **To ensure finance for core SDG achievement, international public climate finance for mitigation in middle-income countries (which reached US$8 billion or 6 per cent of total aid in 2013) should not be counted as official development assistance (ODA) as it is now.** This will limit any crowding out or diversion of ODA money from core SDG provision, and provide a more accurate picture of development-related finance. Other attempts to resolve this debate over 'new and additional' climate finance have not made progress and are not very useful whilst most countries are well below the 0.7 per cent gross national income target for ODA. This approach is consistent with the OECD's recent move to measure total official support for sustainable development (TOSD) so that OECD countries can still report on their climate-mitigation finance to MICs, but as TOSD not as ODA.
- **International public finance for mitigation in middle-income countries (MICs) needs to be carefully assessed.** Even if it is not counted as ODA, developed countries will have incentives to finance mitigation in middle-income countries both for commercial reasons (to promote their technology) and to meet their own climate reduction targets. Switzerland, the first country to formally commit in March 2015 to greenhouse gas reductions in the run-up to the Paris climate conference in December 2015, stated that 40 per cent of its halving of GHG reductions may be attained through 'projects carried out abroad'. The value addition of international support for climate mitigation in MICs would seem to be to assist in an effective national policy framework such as the introduction of a carbon price or feed-in tariff for renewables. However, where OECD countries are seeking to meet their international GHG targets the emphasis may instead be on stand-alone mitigation projects. But in deciding their approach, OECD countries need to be consistent – either OECD countries can invest in mitigation in developing countries as this will be cheaper than domestic reductions (as Switzerland has decided) or OECD countries can support mitigation in developing countries to make their technologies less costly. To pursue both options simultaneously is a contradiction.
- **With least developed countries (LDCs) becoming less poor and more resilient through international public finances and middle-income countries (MICs) becoming less polluting through domestic private finances, this will be the most effective use of finances to reach zero poverty and zero climate emissions.**

Development finance or climate finance?

Climate finance is still an emerging area. The lack of clarity about the relationship between development finance and climate finance is a key political issue. This section provides both an introduction to the issues and suggestions for ways forward.

1

The relationship between development finance and climate finance is a key political issue as certain groups (particularly LDC climate negotiators) stress the need for climate finance to be different from development finance, while others (most bilateral development agencies) stress the similarities and synergies between climate and development finance.[4] [5] [6] [7]

Those who stress the differences between development finance and climate finance highlight the text in the United Nations Framework Convention on Climate Change (Article 4.3) that climate finance should be 'new and additional' and that climate finance is based on the 'polluter pays principle' with the countries that industrialised first, responsible for the bulk of historical climate emissions. In contrast, development finance, as measured by official development assistance (ODA), is based on global 'solidarity'.

While those who stress the similarities between development finance and climate finance point to the need for development finance to be climate proofed, for climate finance to have maximum development benefits and for climate finance to learn the lessons from aid in terms of effective delivery at country level.

The lack of clarity about the relationship between development finance and climate finance continues because climate finance is an emerging area with no internationally agreed definition and no international coordination like the OECD Development Assistance Committee (DAC) for official development assistance (ODA). For the purposes of this paper, we use the DAC Rio marker definitions of types of climate finance as set out in Box 1.[8]

Defining the relationship between development finance and climate finance has increased in urgency as the climate negotiations heat up for the Paris Conference in December 2015 around a climate agreement, including how to implement the Copenhagen Accord to mobilise US$100 billion of climate finance per year. The links between climate finance and development finance are also relevant to the Financing for Development (FfD) conference in Addis Ababa in July 2015. At the country level the issue is urgent as climate finance is creating parallel systems for delivery that do not adequately learn from the experience with development finance.

BOX 1. PRINCIPAL AND SIGNIFICANT RIO MARKERS FOR CLIMATE MITIGATION AND CLIMATE ADAPTATION

The **mitigation marker** contributes to the objective of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration.

The activity contributes to:

a) the mitigation of climate change by limiting anthropogenic emissions of GHGs, including gases regulated by the Montreal Protocol

b) the protection and/or enhancement of GHG sinks and reservoirs

c) the integration of climate change concerns with the recipient countries' development objectives through institution building, capacity development, strengthening the regulatory and policy framework, or research, and

d) developing countries' efforts to meet their obligations under the Convention.

The activity will score 'principal objective' if it directly and explicitly aims to achieve one or more of the above four criteria.

An activity contributes to **climate adaptation** if it intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience.

This encompasses a range of activities from information and knowledge generation, to capacity development, planning and the implementation of climate change adaptation actions.

Principal (primary) policy objectives are those which can be identified as being fundamental in the design of the activity and which are an explicit objective of the activity. They may be selected by answering the question 'would the activity have been undertaken (or designed that way) without this objective?'

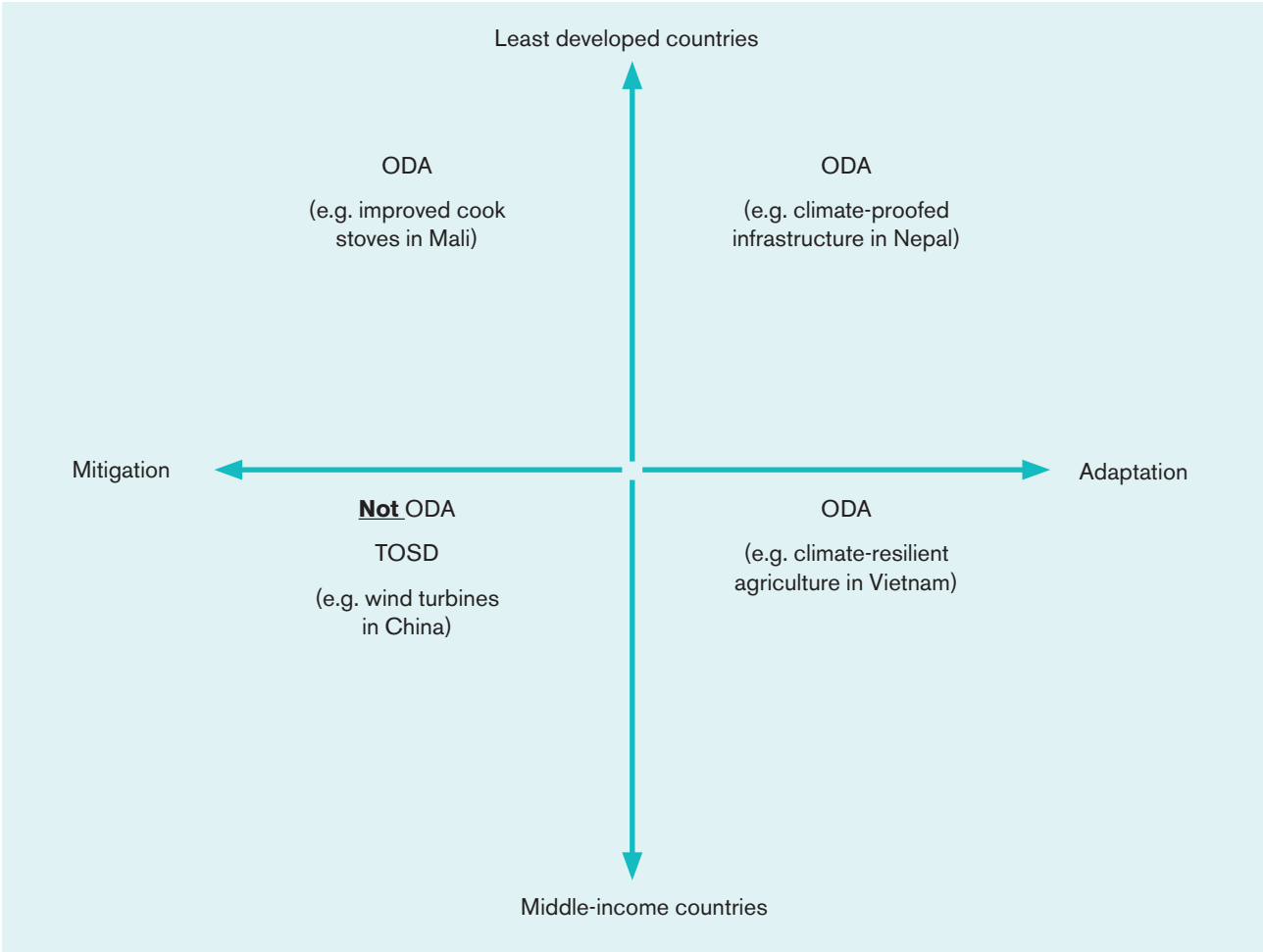
Significant (secondary) policy objectives are those which, although important, are not one of the principal reasons for undertaking the activity.

Source: Handbook on the OECD-DAC climate markers, © OECD, 2011, www.oecd.org/dac/stats/48785310.pdf

Whatever the UNFCCC states about 'new and additional aid', currently all DAC donors count their climate-related spending as ODA – which now makes up 17 per cent of total bilateral ODA. The bulk of this spending goes to MICs for mitigation.

To move the debate forward, it is useful to distinguish between the different types of international climate finance (adaptation and mitigation) and between the recipients of these funds (LDCs versus MICs). For adaptation finance, the synergy with development finance is very strong so this should be counted as ODA. But for mitigation financing in MICs, the links to development finance are weak and so this should be additional to ODA, and instead be counted by the new OECD metric of total official support for sustainable development (TOSD) as set out in Figure 2.

Figure 2. Climate finance compass: adaptation, mitigation, LDCs and MICs



Is mitigation finance crowding out poverty reduction?

In terms of international public climate finance, there are fears that mitigation finance for middle-income countries may be crowding out core poverty reduction. For LDCs whose core development priorities are education, health and job creation, the concern is that if there is an increase in climate-related mitigation finance, these priorities may receive less international funding.

2

There is some evidence that this crowding out is occurring. Currently development finance is rising, but most measures of development finance (as compiled by the OECD DAC) include climate-related ODA. The non-climate portion of ODA has actually been rising much more slowly and aid for LDCs has been falling.

Total international public climate finance (multilateral and bilateral) was US$37 billion in 2013. This US$37 billion included 61 per cent mitigation only, 26 per cent adaptation only and 13 per cent addressing both adaptation and mitigation. Bilateral climate aid committed in 2013 was US$23 billion or 17 per cent of total bilateral commitments at US$134 billion, see also Figure 3).

This is a significant increase over time. Time series data on total climate-related ODA is not available, but the OECD has bilateral climate data over the last decade, which shows that the annual climate-related ODA rose from US$14.6 million in 2008–10 to US$20 billion in 2011–13 (see Figure 4).

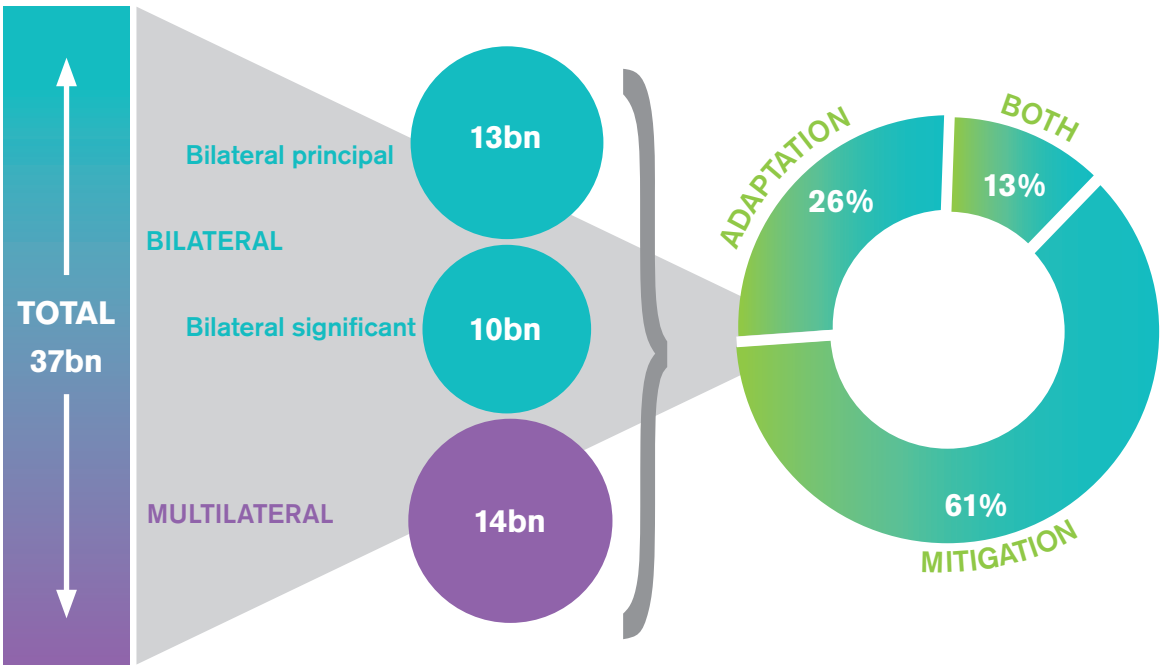
This data includes both aid where climate is 'significant' i.e. projects redesigned to take account of climate, which relates to many adaptation projects and 'principal' i.e. projects that would not go ahead if climate was not an objective, which relates to many mitigation projects as shown in Figure 5.

'Principal' spending on mitigation in 2013 was just over US$10 billion or 7 per cent of total bilateral aid commitments, of which an estimated US$8 billion or 6 per cent of total bilateral aid was for mitigation in middle-income countries.

Mitigation finance was 65 per cent targeted at middle-income countries (and this figure may be much higher, as 21 per cent is unspecified) as shown in Figure 6, while adaption was 43 per cent targeted at middle-income countries.

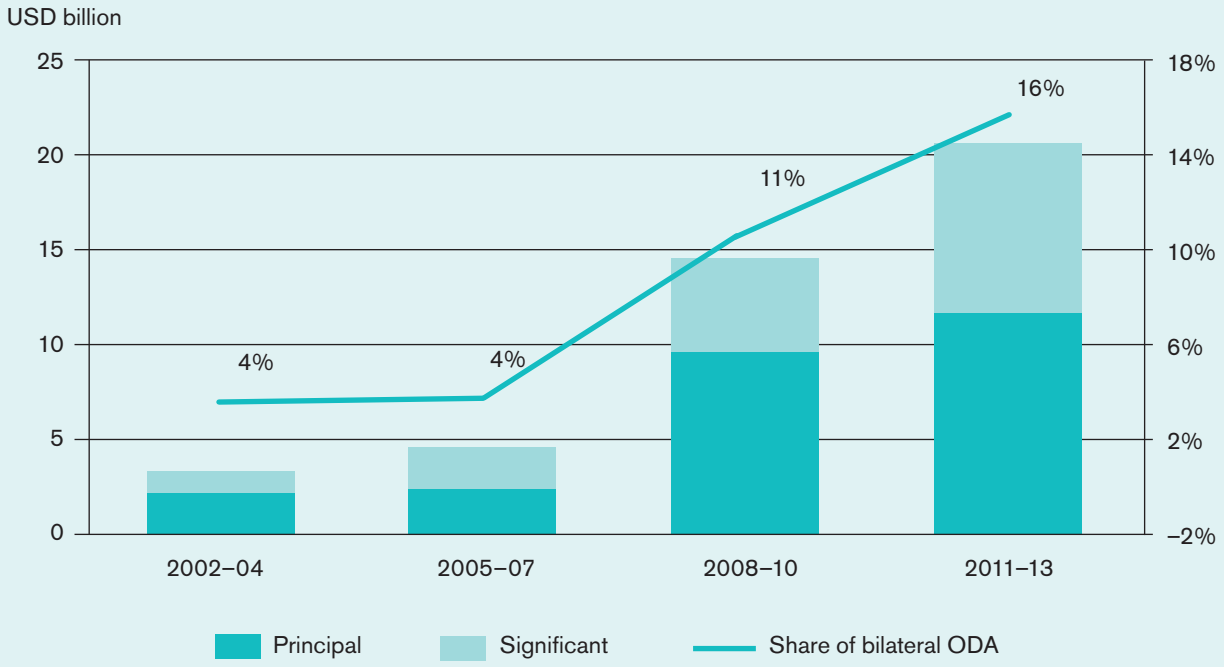
This mitigation finance includes energy, the general environment, transport and storage (see Figure 7).

Figure 3. Multilateral and bilateral climate aid in 2013



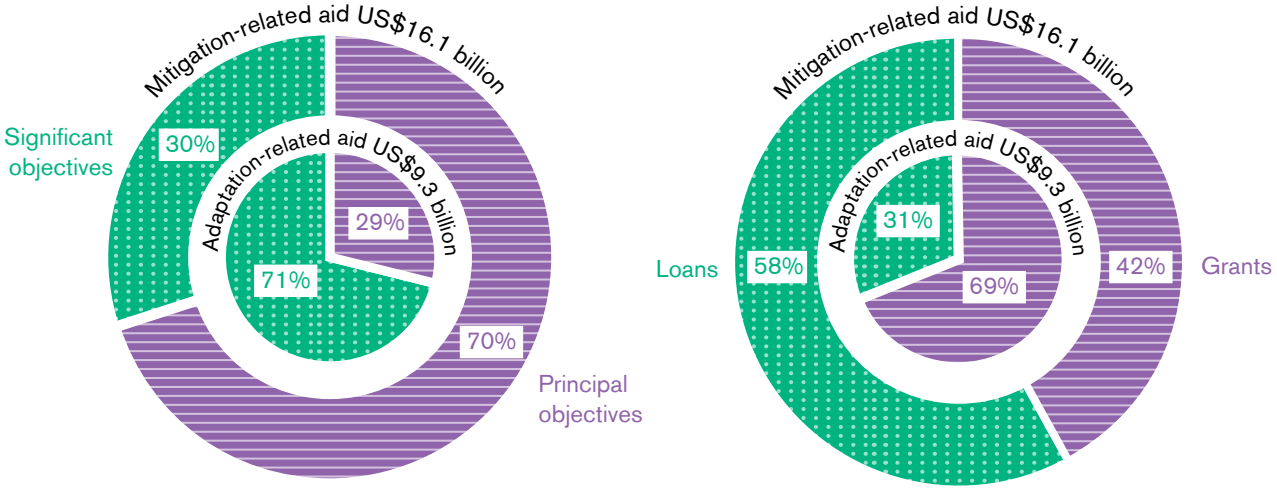
Source: Climate-related development finance in 2013: improving the statistical picture, © OECD, 2014, www.oecd.org/dac/environment-development/Climate-related%20development%20finance%20FINAL.pdf

Figure 4. Trend in bilateral climate-related ODA, three-year annual averages



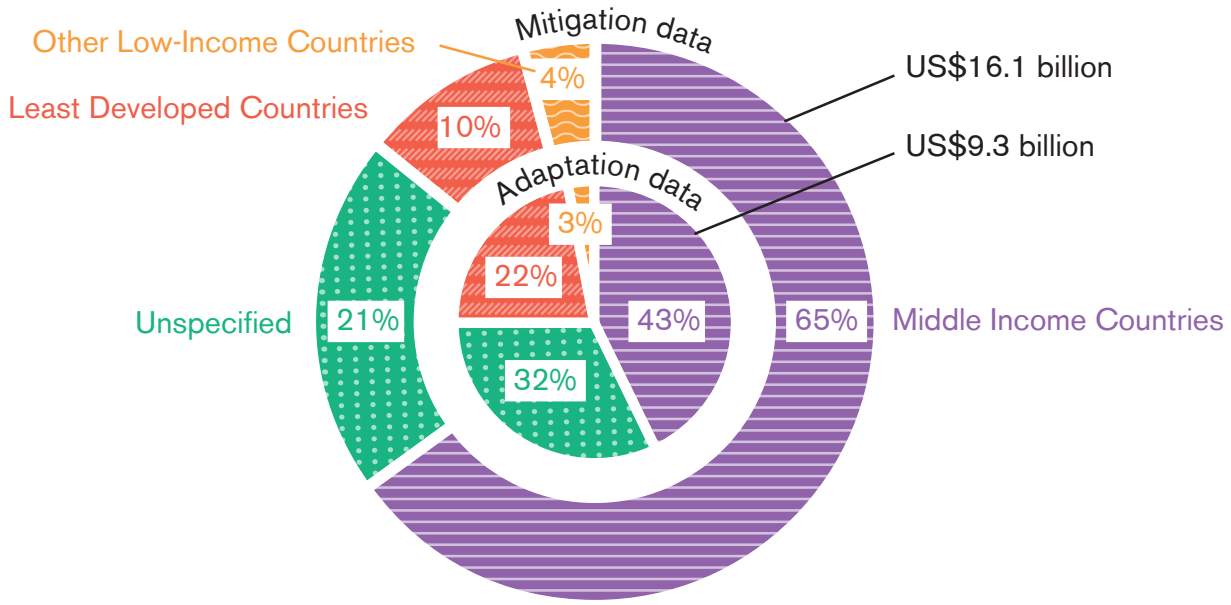
Source: Climate-related development finance in 2013: improving the statistical picture, © OECD, 2014, www.oecd.org/dac/environment-development/Climate-related%20development%20finance%20FINAL.pdf

Figure 5. Grants and loans, principal objectives and significant objectives



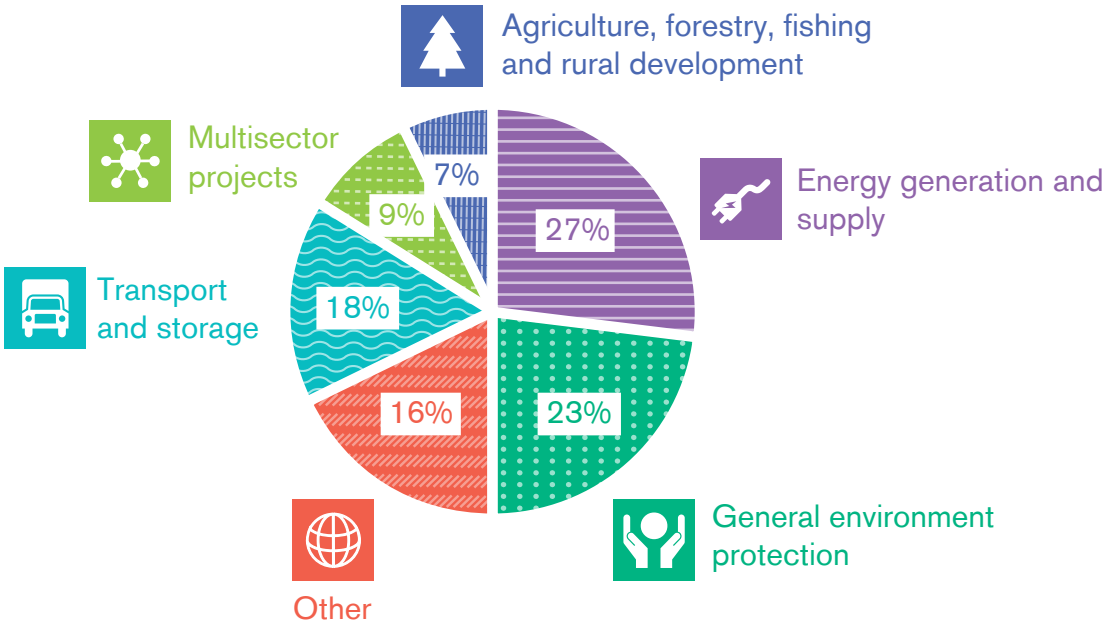
Sources:
OECD DAC statistics aid to climate change adaptation, © OECD, 2014, http://tinyurl.com/oecd-adaptation-aid-may-2014
OECD DAC statistics aid to climate change mitigation, © OECD, 2013, http://tinyurl.com/oecd-mitigation-aid-nov-2013

Figure 6. Income groups receiving mitigation-related aid versus adaptation-related aid



Sources:
OECD DAC statistics aid to climate change adaptation, © OECD, 2014, http://tinyurl.com/oecd-adaptation-aid-may-2014
OECD DAC statistics aid to climate change mitigation, © OECD, 2013, http://tinyurl.com/oecd-mitigation-aid-nov-2013

Figure 7. Mitigation-related aid by sector



Source: OECD DAC statistics aid to climate change mitigation, © OECD, 2013, http://tinyurl.com/oecd-mitigation-aid-nov-2013

Development finance is still urgently needed

Public international finance is still needed for SDGs on poverty, health and education particularly for the least developed countries. And this finance – an estimated US$170 billion per year compared to existing ODA commitments of US$135 billion in 2013 – will almost all need to come from public funds.

Estimates suggest that the annual incremental costs up to 2030 for SDG achievement (in constant 2010 prices) will be about US$70 billion for health, US$40 billion for education, US$40 billion for food security and about US$22 billion for water and sanitation.[1]

This paper recommends that the key issue is to use the limited US$135 billion official development assistance spent by DAC members each year to increase spending on this basic poverty reduction for SDG achievement – food security, education, health, water and sanitation. This is currently not happening and the absolute amount of aid for poverty reduction in LDCs is falling.

In 2012, LDCs received 40 per cent of total DAC funds[9] or about US$50 billion. In contrast, MICs received over US$8 billion on mitigation finance which is equivalent to about 15 per cent of the total development finance given to LDCs. Given the emphasis in the SDGs on reaching zero extreme poverty within a generation, there needs to be a target that increases ODA to LDCs. This debate is currently underway and DAC members are discussing a 50 per cent target for total bilateral aid for LDCs.[9]

The recommendation is that the Financing for Development Conference should include a commitment that a minimum percentage of international public finance is spent in LDCs and on core SDGs of food security, education, health, water and sanitation.

This basic spending on poverty reduction will help to achieve the SDG goal of zero extreme poverty in our generation. It will also be the most effective form of climate adaptation in the future. How this is possible is set out below.

Why the best climate adaptation is resilient poverty reduction

A richer, healthier, better-educated population is the best way to achieve transformational adaptation. Studies show that better-educated individuals, households and countries have the capacity to reduce exposure to climate risks and recover quicker from the impacts of climate change.

4

Transformational adaptation includes moving from climate prone areas through migration, moving away from agriculture and other weather dependent activities and having the education[10], resources[11] and stronger institutions[12] to be resilient to climate shocks.

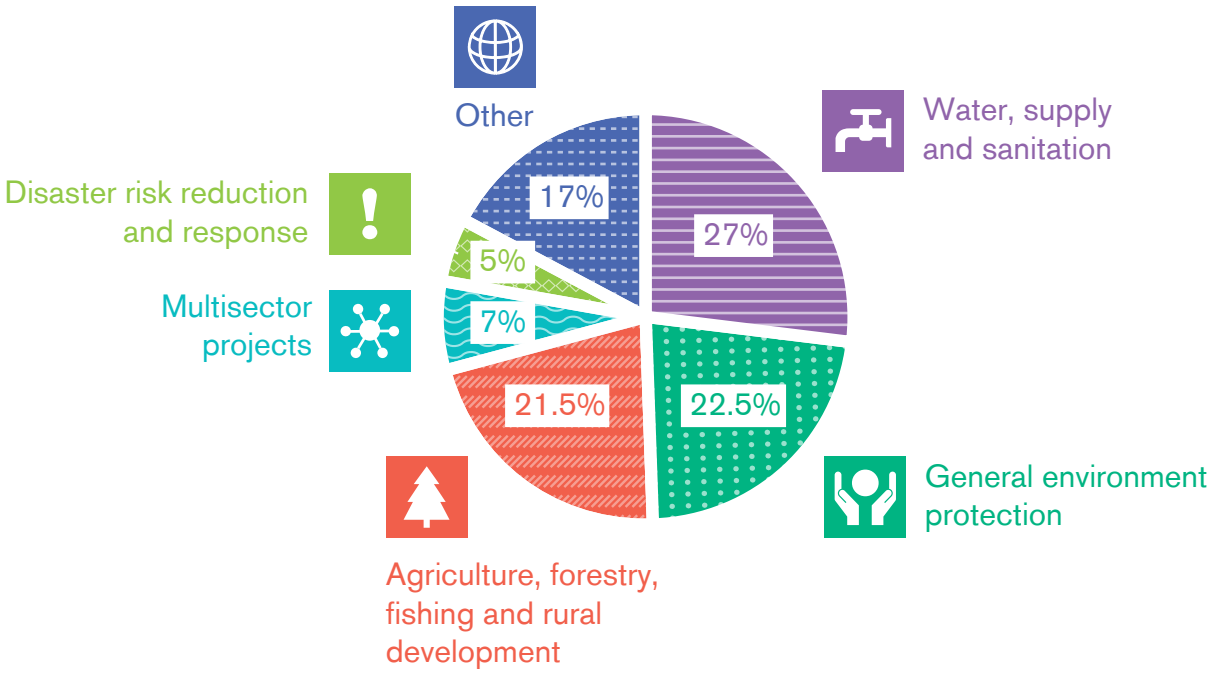
It will also be important to make sure that SDG provision is climate resilient. Already US$7.3 billion of the bilateral climate adaptation finance in 2013 was 'significant' or combined with other objectives showing that climate adaption was being 'mainstreamed' into SDG investments.[2]

Figure 8 illustrates adaptation finance by sector, showing a large share for water supply and sanitation, general environment and agriculture and rural development.

However, US$3.4 billion of the 2013 bilateral climate adaptation ODA was 'principal' and therefore only focused on climate adaptation objectives.[2] This latter funding on narrow 'climate adaptation-specific' projects seems likely to be less effective than climate resilient SDG provision. This need to mainstream climate adaptation is borne out by UNDP[13] recommendations:

Experience has shown that it is counterproductive to create standalone institutions charged with responsibility for climate change risk management. Climate change cannot be the sole responsibility of any single institution, or professional practice. Instead, it is important to strengthen existing systems of governance, including those at the regional level that can promote 'bottom-up' effective adaptation. Line ministries responsible for the provision and management of public goods, food production and water management, need to be fully accountable for maximising the efficiency of public goods and services, while minimising the fiscal burden from climatic losses. Fundamentally, the persuasive nature of climate change requires a behavioural shift and the mainstreaming of adaptation into development and investment decision-making processes at all levels of society in the coming decades.

Figure 8. Adaptation-related aid by sector



Source: OECD DAC statistics aid to climate change adaptation, © OECD, 2014, http://tinyurl.com/oecd-adaptation-aid-may-2014

Why climate mitigation finance in MICs should be additional to ODA

To ensure finance for core SDG achievement, international public finance for mitigation in middle-income countries (which reached US$8 billion or 6 per cent of total aid in 2013) should be additional to official development assistance.

Requiring climate mitigation finance in MICs to be additional to ODA will limit any crowding out or diversion of ODA money from core SDG provision.

Other attempts to resolve this debate over 'new and additional' climate finance have not made much progress or seem nearer to any global agreement. The two main recommendations have been that climate finance is 'new and additional' once countries meet their 0.7 per cent gross national income target for ODA. However, so far only five countries have achieved this: UK, Norway, Sweden, Denmark and Luxembourg, so it would not apply to the majority of DAC members and even these five countries still count climate finance as part of their ODA.

The second main suggestion for 'new and additional' climate finance is finance that is raised in innovative ways such as airline taxes or a financial transaction tax etc. However, to date such schemes have not started operating on a large scale with the revenue generated being used for climate finance.

In this context, this paper recommends a way forward. For adaptation finance, the synergy with development finance is very strong so this should be counted as ODA. But for mitigation finance in MICs, the links to development finance are weak and so this should be additional to ODA, and instead counted by the new OECD metric of total official support for sustainable development (TOSD) as set out in Box 2.

BOX 2. TOTAL OFFICIAL SUPPORT FOR SUSTAINABLE DEVELOPMENT

Total official support for sustainable development (TOSD) is defined by the OECD to 'cover activities promoting and enabling sustainable development, including contributions to global public goods when these are deemed relevant for development and aligned with developing countries' priorities, recognising that providers themselves may benefit from such activities'.[14]

This approach will be promoted by the OECD DAC revisions to how aid is defined, which discounts loans and gives more weight to grants. As Figure 5 shows, mitigation finance is already 58 per cent loans, while adaption finance is 69 per cent grants. But the recommendation of this paper is to go further and discount mitigation finance to MICs altogether as ODA.

These recommendations are consistent with other recent conclusions. Lord Stern in a March 2015 paper concluded that additionality is

> *… very hard to nail down because development and climate actions are so inter-twined in many areas, and because it is so hard to answer the question 'what total resources would have been made available under ODA in some year (say, 2025) if we had never heard of climate change?' We can probably say that the readiness to provide ODA will have been increased with the recognition of climate change as a problem because (a) development has become more difficult and (b) the donor gains from climate action in another country. But how much such an increase might be is extremely difficult to understand or measure.*[15]

Even more explicitly, Homi Kharas and John McArthur of the Brookings Institution[16] recommend that:

> *… Specifically, mitigation finance should be additive and separate from ODA. This is for two reasons. First, the greatest quantitative needs for mitigation finance are in the fast-growing emerging middle-income economies that are on track to contribute the greatest increments in greenhouse gases. For example, India, Indonesia and Brazil have been the largest recipients of fast-start financing since they have the greatest scope for mitigation […] For these and other countries with similar financing challenges, mitigation finance could also come through advantageous rates in non-concessional public lending, although ODA might be merited for supporting project preparation.*
>
> *Meanwhile, adaptation will in most cases be more naturally integrated with ODA. For example, low-income Sahelian countries in Africa face major climate challenges that can best be addressed through efforts to support irrigation and drought-resistant agricultural technologies. Grants to support such agricultural efforts should be counted as ODA and also, where appropriate, tagged as adaptation. A different adaptation priority is exemplified in the many parts of Asia that face enormous flood risks. These countries similarly deserve external support to expand, for instance, flood-resilient agriculture and urban infrastructure. But the middle-income countries in this region would receive the support through loans provided on advantageous terms, rather than grants.*

There is one important caveat and that is the finance that combines both mitigation and adaptation – which was about 13 per cent of the total climate finance. It is proposed that where this is spent in middle-income countries this is counted as additional to ODA to reduce any incentives to over-report ODA.

Domestic private finance: driving mitigation, saving money

Domestic private investment is driving mitigation in MICs – with dramatic falls in costs. Renewable energy investments in developing countries reached US$93 billion in 2013, a slight fall from the previous year, partly due to declining costs. The latest evidence suggests that these investments – primarily driven by China at US$56.3 billion and India at US$6.1 billion – were overwhelmingly domestic private investments. Cost competitiveness was comparable or even lower than OECD countries.

The main source of investment by private renewable energy companies is asset finance – or domestic borrowing by companies – which provides 62 per cent of total global renewable energy investment, but more in most developing countries.[17] Table 1 below demonstrates that this asset finance particularly benefits renewable investments in three developing countries: China (largest global investor), India (fifth largest global investor) and South Africa (eighth largest global investor).

The mitigation investments are basically driven by domestic private finance incentivised by an enabling national policy framework. In 2013, 90 per cent of total global private renewable investment was invested in its country of origin. The role of international public investment is unclear as there is some evidence that public finance can crowd out private finance.[18]

According to the Climate Policy Initiative (CPI), the 'climate policy landscape' which uses a data set that gives slightly lower numbers for developing country climate finance concludes that:

> *The majority of finance flows remained within the country of origin. With USD 244 billion or 74 per cent of total climate finance originating and being invested in the same country, the strong domestic preference of climate finance remains pronounced. In 2013, USD 132 billion was invested in the same developed countries in which it originated. The same is true for USD 93 billion in developing countries.*[18]

CPI also states that:

> *Investors favoured domestic investment environments with which they were more familiar and which they perceived to be less risky. Private actors had an especially strong domestic investment focus with USD 174 billion or 90 per cent their investments remaining in the country of origin. The domestic focus of investment is certainly more pronounced for mitigation (78 per cent of finance remained in-country) than for adaptation (44 per cent of finance remained in-country).*[18]

While there are developing countries where renewable energy costs are high due to different kinds of risk, this is not the case for all countries or regions. Indeed there are developing countries such as China that may have lower renewable energy costs than OECD countries. The International Renewable Energy Agency (IRENA) has been collecting data on the levelised cost of electricity (LCOE) that allows comparisons across renewable energy technologies and countries including the cost of capital.[19] The 2013 IRENA review states that: 'China has some of the most competitive renewable costs in the world. Large- and small-scale hydropower projects are the most competitive, followed by biomass, wind power and solar PV.' The report also states that India is close to China in cost competitiveness. For other regions, the report concludes that 'The abundant bioenergy and hydropower resources in Latin America allow very competitive electricity generation from these two sources' and particularly that 'excellent solar resources in Peru and Chile, coupled with competitive costs for large-scale projects and the very high capacity factors achievable (27 per cent or more), mean that some projects in these countries are as competitive as anywhere in the world.' The 2013 IRENA report[19] showed China and India to be more price competitive than OECD countries in several technologies. This is more evidence that the need for international public finance to support climate mitigation in MICs may be over-stated.

The main sources of public investment in mitigation in developing countries are national development banks which contribute to asset finance through low interest loans or grants. This suggests that the role for international public finance for mitigation may be more limited than currently demonstrated by the pro-private sector policies of many DAC members – although they may have other motives for this finance as set out in the next section.

Table 1. 2013 renewable investments (by asset finance)[17]

	2013 (US$ BILLION)	% GROWTH ON 2012
Australia	2.1	97%
Brazil	2.6	–60%
South Africa	4.9	–15%
Germany	5.2	–29%
Canada	5.4	44%
India	5.4	–21%
Japan	5.6	98%
United Kingdom	8.9	18%
United States	19.8	–27%
China	53.3	5%

Incentives for developed countries to spend on mitigation in MICs

As the previous section has demonstrated, mitigation in MICs may be better left to the domestic private sector with a national enabling framework created by the national government. However, even if not counted as ODA, developed countries will have incentives to finance mitigation in middle-income countries both for commercial reasons and possibly to meet their own climate reduction targets.

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Many of the most active bilaterals financing climate mitigation such as Germany, the Netherlands and Denmark are also leaders in renewable technologies and so they have clear incentives to finance these investments in developing country markets.

There is also the issue of financing emission reductions through investments in other countries. Switzerland, the first country to formally commit to greenhouse gas reductions in the run-up to the Paris climate conference has stated that for the intended nationally determined contribution (INDC), 'Switzerland aims to reduce greenhouse gas emissions by 50 per cent relative to 1990 levels by 2030. At least 30 per cent of this reduction must be achieved within Switzerland itself. The rest may be attained through projects carried out abroad'.[20] In contrast, the EU (which has become the second to submit its INDC) has stated that there will be 'No contribution from international credits'.[21]

Where international public finance may be useful for climate mitigation in MICs is to assist in an effective national policy framework such as the introduction of a carbon price or feed-in tariff for renewables. However, where OECD countries are seeking to meet their international GHG reduction targets the emphasis may instead be on stand-alone mitigation projects.

This conclusion is supported by one of the initial assessments of the role of international public finance to support domestic private investment:[22]

> *Consequently, financial support provided by developed countries to support mitigation actions in developing countries will be more effective in addressing climate change, if it facilitates the transition towards low-carbon economies in developing countries, and is not purely focused on buying cheap tons of carbon.*

This focus of domestic private and international finance on mitigation in MICs has led some to argue for public international finance for mitigation investments in LDCs. However, mitigation expenditures are more likely to be cost effective in middle-income countries compared to LDCs as demonstrated by examples from the Clean Development Mechanism (CDM). The vast majority of CDM investments have gone to MICs due to greater cost effectiveness.[23] While this may seem to disadvantage LDCs, it is important to consider that climate mitigation anywhere will particularly benefit LDCs as they are the most vulnerable to climate change emissions.

Country systems for climate finance

Country systems through national plans and budgets should form the basis of national integrated financing frameworks for sustainable development. While there is a need to increase the volume of international public finance to support climate-resilient SDG achievement, particularly in LDCs, there are also issues about the quality and effective use of this finance and how these can be promoted through the use of country systems.

It is vital that adaption finance and development finance are blended together internationally to provide incentives for their delivery together at country level. To date, the roll-out of adaption climate finance has led to the setting up of parallel systems of delivery and has not learnt the lessons of the past 50 years in the effective delivery of development finance.

The key lesson from these 50 years is that development agencies providing international public development finance and adaptation climate finance should move towards a greater use of country systems through the national and local planning and budgeting process. The budget is the key national political and economic process for resource allocation and international public finance should be included in this process. The use of country systems for development and climate finance has a host of benefits that will:

- improve national ownership
- align development and climate outcomes through the process of the national development plan and budget
- transform economies by placing sustainable development at the heart of key economic decision making
- combine international and domestic finance, and
- ensure that sustainable development is integrated across the public sector and that there is an incentive framework for the private sector, rather than being delivered as stand-alone projects.[24]

Where these country systems are weak as in fragile states, which may also be prone to climate vulnerability, development partners should provide support for public financial management to manage climate and development finance. There is some evidence that while this is a challenging area, progress is possible.[25]

This use of country systems is less of a concern for mitigation finance as these tend to be more sector-specific, project-related investments in, for example, the energy and transport sectors.

Conclusions

Public international finance is best used for climate-resilient SDG achievement, particularly in LDCs, both to achieve the SDGs and to achieve transformational climate adaptation. While mitigation finance in MICs is driven by domestic private finance, any public international mitigation finance should be additional to ODA.

Most climate mitigation in developing countries will occur in MICs and this will be driven by domestic private finance with some national public finance (such as development banks) incentivised by an enabling national policy framework. International public finance has a limited role to play here although it may remain an attractive option for developed countries to achieve their own climate reduction targets.

For these reasons, climate finance for mitigation in middle-income countries should not be counted as official development assistance as it is now.

Notes

1 Sachs, J and Schmidt-Traub, G (2014) Financing sustainable development: implementing the SDGs through effective investment strategies and partnerships. http://unsdsn.org/wp-content/uploads/2014/11/Full-FSD-draft-for-public-consultation_clean.pdf

2 OECD (2014a) Climate-related development finance in 2013: improving the statistical picture. www.oecd.org/dac/environment-development/Climate-related%20development%20finance%20FINAL.pdf

3 OECD (2014b) Statistics on resource flows to developing countries. www.oecd.org/dac/stats/statisticsonresourceflowstodevelopingcountries.htm

4 Stadelmann, MJ, Timmons Roberts, J and Huq, S (2012) Baseline for trust: defining 'new and additional' climate funding. IIED: London. http://pubs.iied.org/17080IIED.html

5 Balesteros, A and Moncel, R (2010) Additionality of climate finance. World Resources Institute. www.un-ngls.org/IMG/pdf/WRI_-_Additionality_of_Climate_Finance.pdf

6 Brown, J, Bird, N and Schalatek, L (2010) Climate finance additionality: emerging definitions and their implications. Climate Finance Policy Brief 2, ODI. www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6032.pdf

7 World Bank (2010) Monitoring climate finance and ODA. Development and Climate Change series. http://siteresources.worldbank.org/ENVIRONMENT/Resources/DevCC3_Monitoring.pdf

8 OECD (2011) Handbook on the OECD-DAC climate markers. www.oecd.org/dac/stats/48785310.pdf

9 OECD (2014c) Targeting ODA towards countries in greatest need. www.oecd.org/dac/externalfinancingfordevelopment/documentupload/DAC(2014)20.pdf

10 Lutz, W, Muttarak, R and Striessnig, E (2014) Universal education is key to enhanced climate adaptation. *Science* 28, 1061–2.

11 Kahn, M (2005) The death toll from natural disasters: the role of income, geography, and institutions. *The Review of Economics and Statistics* 87: 2, 271–284.

12 Fankhauser, S and McDermott, T (2014) Understanding the adaptation deficit: why are poor countries more vulnerable to climate events than rich countries? *Global Environmental Change* 27, 9–18.

13 UNDP (2010) A toolkit for designing climate change adaptation initiatives. http://tinyurl.com/undp-2010-cc-toolkit

14 OECD (2014d) Background paper: towards more inclusive measurement and monitoring of development finance – total official support for sustainable development. http://tinyurl.com/oecd-2014-tosd

15 Stern, N (2015) Understanding climate finance for the Paris summit in December 2015 in the context of financing for sustainable development for the Addis Ababa conference in July 2015. www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2015/03/Stern-policy-paper-March-20151.pdf

16 Kharas, H and McArthur, J (2015) Nine priority commitments to be made at the UN's July 2015 Financing for Development Conference in Addis Ababa, Ethiopia. www.brookings.edu/~/media/Research/Files/Papers/2015/02/united-nations-financing-for-development-kharas-mcarthur/GlobalViews12015v2.pdf.

17 Frankfurt School (2014) Global trends in renewable energy investment 2014. Frankfurt School of Finance and Management FS-UNEP Collaborating Centre for Climate and Sustainable Energy Finance, the United Nations Environment Programme (UNEP) and Bloomberg New Energy Finance (BNEF). http://fs-unep-centre.org/system/files/globaltrendsreport2014.pdf

18 Buchner, B, Stadelmann, M, Wilkinson, J, Mazza, F, Rosenberg, A and Abramskiehn, D (2014) The global landscape of climate finance, 2014. Climate Policy Initiative (CPI). http://tinyurl.com/buchner-cpi-2014

19 IRENA (2013) Renewable power energy costs 2012: an overview. International Renewable Energy Agency. www.irena.org/menu/index.aspx?mnu=Subcat&PriMenuID=36&CatID=141&SubcatID=277

20 Switzerland (2015) Switzerland targets 50 per cent reduction in greenhouse gas emissions by 2030. www.news.admin.ch/dokumentation/00002/00015/index.html?lang=en&msg-id=56394

21 EU (2014) Intended nationally determined contribution of the EU and its member states. European Union. http://ec.europa.eu/clima/news/docs/2015030601_eu_indc_en.pdf

22 Neuhoff, K, Fankhauser, S, Guerin, E, Hourcade, JC, Jackson, H, Rajan, R and Ward, J (2009) Structuring international financial support to support domestic climate change mitigation in developing countries. Climate Strategies. http://tinyurl.com/climate-strategies-2009

23 Pueyo, A and Linares, P (2012) Renewable technology transfer to developing countries: one size does not fit all. IDS Working Paper 2012: 412. www.ids.ac.uk/files/dmfile/Wp412.pdf

24 Atteridge, A and Steele, P (2013) Financing for sustainable development: country systems for enhancing the coherence and effectiveness of development and climate finance. Independent Research Forum background paper. http://tinyurl.com/irf-2015-finance-sust-dev

25 ODI (2012) Public financial management in fragile states: grounds for cautious optimism? Conference report. www.odi.org/sites/odi.org.uk/files/odi-assets/events-documents/4954.pdf

The relationship between development finance and climate finance is a key political issue. Some (particularly least developed country (LDC) climate negotiators) stress the differences. Others (most bilateral development agencies) stress the similarities. But understanding this relationship has now become urgent. We must distinguish between different types of international climate finance (adaptation and mitigation) and recipients of these funds (LDCs versus middle-income countries). In LDCs, links between adaptation finance and development finance are strong and so this should be counted as official development assistance (ODA). But in middle-income countries, links between mitigation finance and development finance are weak, so instead this should be additional to ODA and counted as the new metric of total official support for sustainable development (TOSD).

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