

Can climate finance commitments be fulfilled legitimately if multilateral coordination remains limited?

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Abstract

Developed countries have pledged to mobilize climate finance for developing countries reaching US\$100 billion a year by 2020. Meeting this commitment will require approaches to effort-sharing and harnessing innovative sources of finance that are capable of meeting internationally recognized principles of legitimacy. We compare the merits of unilateral and multilaterally coordinated approaches to (i) determining countries' shares of global financing commitments; (ii) developing guidelines for the eligibility of public and private sources; and (iii) designing innovative sources of finance. In each area a different mix of unilateral and coordinated approaches will be required. Unilateral choices about effort-sharing, while offering the potential for widening the group of contributing countries, are likely to be inadequate for fulfilling the collective commitment. Unilateral policies on eligibility will face problems of transparency and acceptability to developing countries. For these reasons, coordinated approaches to effort-sharing and eligibility of sources will be important. A range of unilateral sources could be scaled up fairly rapidly, and some unilateral measures may stimulate efforts to overcome existing roadblocks to coordination. However, over the longer term coordinated sources will also be necessary to address concerns of efficiency and acceptability to developing countries.

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Introduction

Recent outcomes of multilateral climate change negotiations under the *United Nations Framework Convention on Climate Change* (UNFCCC) have recognized that substantial funding is necessary to address the constraints that developing countries face in limiting their rising share of global greenhouse gas emissions and adapting to the impacts of climate change. Through contributing to the avoidance of dangerous global climate change, mitigation finance provides global benefits to wealthy and poor countries alike. Adaptation finance, as well as providing local or regional benefits to those vulnerable to climate change, may play an important role in building the trust necessary to secure meaningful participation of developing countries in coordinated efforts to reduce global greenhouse gas emissions.⁴ Climate finance is widely seen to advance the UNFCCC's principle of "common but differentiated responsibilities and respective capabilities", according to which prosperous countries have a responsibility to provide finance due to their proportional contribution to cumulative emissions to date and their capacity to assist the poor.⁵

Under the 2009 Copenhagen Accord, developed countries pledged to mobilize long-term finance of US\$100 billion a year by 2020 on the proviso of developing countries making progress on mitigation and transparency.⁶ The existing commitment is thought to amount to only part of the total financing needs for climate change action in developing countries.⁷ Nevertheless, since many developed countries remain under tight fiscal conditions, the challenge of reaching the commitment should not be underestimated.

The question of how to finance action on climate change in developing countries involves dilemmas of agreement between rich and poor countries, cooperation among developed countries, and domestic follow-through on significant international commitments. Achieving the 2020 commitment will require policy approaches that are legitimate in the eyes of both developed and developing countries, as otherwise the difficulties in achieving and maintaining cooperation will be exacerbated.

⁴ Rübhelke 2011; Bowen 2011.

⁵ UNFCCC 1992, Article 3.1; see also Rajamani 2006 and Dellink et al. 2009.

⁶ UNFCCC 2009, Paragraph 8.

⁷ Haites 2011:966; see also World Bank 2009, 263. See also Table 2 below.

One of the flashpoints for debates about legitimacy is the extent to which efforts to generate climate finance should be pursued through unilateral or multilaterally coordinated approaches. Multilateral coordination on finance offers the potential to institutionalize approaches that are acceptable to a wide range of parties. However, difficulties in reaching agreement may hamper the timely scale-up of funding. Negotiations have made progress on establishing channels for allocating funds, notably through the creation of the Green Climate Fund (GCF). However, little headway has been made in identifying sources of funding for existing commitments, which is arguably the more pressing problem. Without an expanded range of sources, new institutions such as the GCF could become an “empty shell”.⁸ While unilateral action by contributors to raise funds may offer greater speed and scope for innovation, it may also fail to strike an appropriate balance between the interests of contributors and recipients.

We aim to improve theoretical understanding of how different degrees of international coordination may affect the legitimacy of measures to generate climate finance. We also pursue the practical aim of identifying important policy considerations that could assist policymakers in constructing a package of funding sources. We begin by outlining a conceptual framework for evaluating options for generating climate finance, followed by a brief snapshot of the current architecture of global climate finance. We then evaluate the implications for the legitimacy of different levels of international coordination in three major policy areas: (i) determining countries’ shares of the collective commitment; (ii) developing guidelines for the eligibility and accounting of public and private sources; and (iii) designing innovative sources of finance. We argue that in each area a different mix of unilateral and coordinated approaches will be required in order to achieve a timely scale-up of funding while maintaining domestic and international legitimacy.

Assessing the legitimacy of options for generating climate finance: a conceptual framework

Definitions and scope of analysis

How to define climate finance is a contested issue. Below we address debates about the eligibility of particular sources of finance, but on a preliminary basis we use the following

⁸ Schalatek et al. 2012, 1.

working definition: “financial flows that have greenhouse gas mitigation or adaptation as an explicitly stated objective, or as a main outcome”.⁹ The institutional architecture of climate finance is commonly considered to comprise three components: (i) generating funds; (ii) delivering (or allocating) funds; and (iii) overall governance.¹⁰ While all three components are inter-related, they are to a significant degree analytically distinct. In particular, with some exceptions to be discussed below, most sources for generating finance are compatible with a wide range of options for designing delivery channels.¹¹

We focus on the generation of international funding for developing countries, an aspect of climate finance that remains significantly under-researched. Several authors have analyzed the potential of an individual source of finance,¹² but very few have compared possible sources.¹³ The 2010 report of the High-Level Advisory Group on Climate Change Financing (AGF), established by the United Nations Secretary-General, remains the most substantial multilateral contribution to policy analysis of financing sources.¹⁴ However, the AGF left many controversial issues unresolved.

Legitimacy in generating climate finance

The theoretical framework we apply proceeds from the commonly held view that legitimacy is an important principle for designing and evaluating institutions for global environmental governance.¹⁵ Legitimacy as a normative concept may be defined as the justification of authority.¹⁶ On this understanding, an institution is legitimate “if there are good reasons in support of its claims to authority, and illegitimate if not”.¹⁷ Legitimacy provides an important standard for evaluation particularly where there is reasonable disagreement about what principles of justice or fairness require, as has long been the case in North-South climate

⁹ Buchner, Brown, et al. 2011, 12-13.

¹⁰ Pickering and Wood 2011.

¹¹ Bowen 2011, 1026.

¹² See for example Hepburn and Müller 2010.

¹³ Exceptions being Bowen 2011 and Hof et al. 2011.

¹⁴ AGF 2010.

¹⁵ Bernstein 2005; Ballesteros et al. 2010; Biermann and Gupta 2011.

¹⁶ Bodansky 1999, 601; compare Biermann and Gupta 2011, 1858.

¹⁷ Bodansky 1999, 601.

politics.¹⁸ While some research has assessed the legitimacy of specific sources of climate finance¹⁹ and the fairness of effort-sharing options,²⁰ the few articles that have addressed legitimacy in climate finance at a broader level have tended to place greater emphasis on delivery and governance rather than generation of funds.²¹

Nevertheless, countries have conducted debates on the generation of climate with reference to a widely employed—albeit variously interpreted—range of criteria. These criteria could provide a basis for identifying what a legitimate (if not fully just) climate finance regime should look like. The criteria we adopt are based primarily on those set out in the Copenhagen Accord and the AGF report (Table 1).²² The only supplementary criterion we include is that of the participation of affected parties, which is widely considered to be an important component of legitimacy in international governance.²³ Our list is not exhaustive, and for parsimony some possible criteria have been combined. In particular, efficiency and equity are treated as components of legitimacy rather than as standalone principles.²⁴

Our criteria are categorized according to a distinction between “output” and “input” legitimacy that is common in the literature.²⁵ Output legitimacy captures the *effectiveness* of a particular institution. Here we understand effectiveness in generating climate finance not only in terms of the adequacy of funds raised, but also the substantive impacts of generation on other policy areas (including the national budgets of contributing countries and flows of development assistance). Input legitimacy typically captures the justification for *procedures* adopted by an institution. The criterion of political acceptability could be understood as a measure of the “popular” or “sociological” legitimacy of the policy in question (that is, the extent to which the policy is *perceived* to be legitimate).²⁶ For simplicity we categorize acceptability under input legitimacy, while recognizing that the overall acceptability of a

¹⁸ On the role of legitimacy in circumstances of disagreement about justice, see Buchanan and Keohane 2006; on North-South climate politics, see Roberts and Parks 2007 and Kartha 2011.

¹⁹ Lövbrand et al. 2009.

²⁰ Dellink et al. 2009.

²¹ Ballesteros et al. 2010, Schalatek 2012.

²² Compare also the criteria in Hof et al. 2011; Schalatek 2011.

²³ See Bernstein 2005, 147; and Schalatek 2012, 952; see also Biermann and Gupta 2011, 1860 on the synonymous idea of inclusion.

²⁴ Contrast Gupta et al. 2007, 751.

²⁵ On this distinction, see Biermann and Gupta 2011, 1858.

²⁶ See Bodansky 1999, 601; Bernstein 2005, 156.

policy could also be influenced by perceptions of its output legitimacy. As Lövbrand et al observe, to be fully legitimate, rules and institutions require both input *and* output legitimacy, but different policy options may give rise to tradeoffs between the two types of legitimacy.²⁷

Although the AGF's criteria were used specifically to evaluate possible sources of finance, many of the criteria can also be extended to options for effort-sharing and eligibility guidelines. The overall legitimacy of institutions for climate finance will also depend on how options for delivering finance fare against comparable criteria. However, in keeping with the scope of our analysis, we focus on whether policy options provide a legitimate response to addressing the gap between current funding and the 2020 commitment, rather than how effectively funds are used (while noting interactions between generation and allocation where relevant).

²⁷ Lövbrand et al. 2009, 77.

Table 1 Criteria for evaluating options for generating climate finance

Principles	Criteria
Output legitimacy (effectiveness)	<ol style="list-style-type: none"> 1. <i>Adequacy</i>^{*#}: is the package of financing sources adequate to fulfill the commitment? 2. <i>Reliability</i>^{*#}: How much confidence is there about the stability of future revenue? 3. <i>Efficiency</i>[#]: Does the source create incentives to reduce greenhouse gas emissions, and does it reduce or exacerbate economic distortions? 4. <i>Practicality</i>[#]: How feasible is implementation? How quickly can the source be scaled up? 5. <i>Additionality</i>^{*#}: Is the source likely to add to or displace existing resources available to developing countries? 6. <i>Equity</i>[#] and <i>incidence</i>[#]; Does the financing burden fall disproportionately on poor countries or individuals?
Input (procedural) legitimacy	<ol style="list-style-type: none"> 7. <i>Transparency</i>[*] and <i>accountability</i>: Can flows be adequately measured, reported and verified? 8. <i>Participation</i>: Are affected parties involved in decision-making? 9. <i>Acceptability</i>[#]: Is the source likely to be accepted by domestic constituencies and by other countries?

Note: Markings against criteria indicate whether they are mentioned (either verbatim or in synonymous terms) in the Copenhagen Accord () or the AGF report (#).*

The legitimacy of coordinated and unilateral climate policies

The choice of whether to adopt unilateral or internationally coordinated policies features prominently in climate policy generally. The dilemma is often framed as a distinction between “bottom-up” and “top-down” approaches,²⁸ or (in related but not fully equivalent terms) between “fragmented” and “integrated” modes of governance.²⁹ Each of these contrasts represents not a binary choice but endpoints on a spectrum of possible approaches.

There are competing arguments for the legitimacy of coordinated or nationally driven approaches to climate policy. Multilateralism is often considered to be the gold standard for legitimacy in international governance, based on the view that consensual multilateral decision-making offers greater scope for democratic decision-making and deliberation and helps to curb abuses of power.³⁰ Hare et al argue that only coordinated or top-down approaches to mitigation will be able to circumvent free-riding problems, and that coordinated accounting rules can reduce transaction costs and enhance transparency.³¹ Biermann et al note that more fragmented governance architectures may favor the interests of developed countries, whereas multilateral forums tend to favor developing countries, in particular if all countries are represented.³²

Proponents of unilateral or bottom-up climate policy measures argue by contrast that such measures may promote legitimacy by supporting innovation and national ownership and progressively building the mutual trust needed to sustain cooperation.³³ These arguments are often coupled with the view that strong uniformity of policy measures across countries is likely to be unattainable. In an important counterpoint to the role of state consent in guaranteeing legitimacy, Gregory Shaffer and Daniel Bodansky observe that the failure of multilateral negotiations (despite their procedural legitimacy) may risk illegitimate outcomes, thus justifying some forms of unilateral measures aimed at overcoming collective inaction.³⁴

²⁸ Hare et al. 2010; Bodansky 2011.

²⁹ Biermann et al. 2009.

³⁰ Compare Shaffer and Bodansky 2012, 38; Biermann et al. 2009, 30.

³¹ Hare et al. 2010, 604.

³² Biermann et al. 2009, 30.

³³ See for example Keohane and Victor 2011; Bodansky 2011.

³⁴ Shaffer and Bodansky 2012, 38-39.

As subsequent sections will outline, many of the legitimacy tradeoffs between unilateralism and multilateralism in climate policy generally are also applicable to the generation of climate finance. However, we cannot readily assume that the case for or against multilateral coordination will be equally strong across all areas of climate policy, or even across all components of climate finance. Liane Schalatek argues, for example, that legitimacy in climate finance will require not only more democratic multilateral coordination, but also a significant degree of decentralization of decision-making to national and sub-national levels in the delivery of funds.³⁵ While decentralized delivery may help to overcome problems such as asymmetric information about recipients' needs, it is not apparent that delegation to sub-national levels is of comparable importance for legitimacy in generation.

Global climate finance: a snapshot of the current architecture

Following limited flows of bilateral and multilateral funding in the decade after the adoption of the UNFCCC in 1992, climate finance only began to ramp up with the initiation of the Clean Development Mechanism (CDM; established under the 1997 Kyoto Protocol), which enables firms in developed countries to claim credit for emission reductions in developing countries.³⁶ Climate finance under the UNFCCC received a major boost with pledges by developed countries in the 2009 *Copenhagen Accord* to provide climate finance approaching US\$30 billion between 2010 and 2012 (“fast-start finance”) and to mobilize long-term finance of US\$100 billion a year by 2020 from a range of sources “in the context of meaningful mitigation actions and transparency on implementation” by developing countries.³⁷

Some estimates indicate that pledges by individual national governments now cover virtually all of the \$30 billion commitment, although by late 2011 only around a third of the total had been disbursed to recipient countries.³⁸ Fast-start contributions are shown in Table 2, along with comparisons of magnitudes of other relevant financial flows, indicating that the \$100 billion target is sizeable but not overwhelmingly large in the context of other flows.

³⁵ Schalatek 2012, 952.

³⁶ See generally Michaelowa and Buen 2012.

³⁷ Copenhagen Accord, para 8.

³⁸ Ciple et al. 2012

Table 2. An overview of financing magnitudes (US\$ billion per year)

a) Global aid from OECD DAC donors (2011)	135
b) OECD budgetary support and tax expenditure for fossil fuel production or use (2011)	80+
c) Private commercial flows of climate finance to developing countries (2009-10)	55
d) Estimated climate investment needs (2030)	167-275
e) Copenhagen Accord climate finance commitment (by 2020)	100
f) Fast-start climate finance (2010-12)	11 pledged (9 committed)
g) Funding gap between fast-start pledges and 2020 pledges (e-f)	89

Sources: (a) OECD 2012b; (b) OECD 2012a; (c) Buchner, Falconer, et al. 2011, 8; (d) World Bank 2009, 263 (constant \$2005); (f) World Resources Institute 2012.

Other recent analysis estimates that annual climate-related aid flows amounted to \$23 billion in 2010, thus considerably exceeding what has been explicitly pledged as fast-start finance.³⁹ Once private flows are included, annual flows of climate finance (averaged over 2010-11) may already exceed \$100 billion a year.⁴⁰

The current architecture for generating and delivering climate finance remains highly fragmented.⁴¹ The lack of coordinated accounting rules or mechanisms for tracking flows inhibits the transparency of current arrangements. To date the large bulk of fast-start contributions has been drawn from national governments' aid budgets and delivered through

³⁹ OECD 2011.

⁴⁰ Buchner et al. 2012, 17.

⁴¹ Stadelmann et al. 2012, 130.

existing multilateral and bilateral development institutions. Both contributing and recipient countries have recognized that the present architecture will require significant reform and expansion to ensure it is capable of meeting long-term commitments.

Defining national shares of multilateral commitments

Apportioning responsibility for fulfilling the collective commitment among different actors is crucial for underpinning timely planning to scale up funding. The commitment will be met through an as yet unspecified mix of public and private sources.⁴² Challenges in attributing flows of private capital to individual countries mean that shares attributable to national governments may apply only to a subset of the global commitment, for example public contributions to the Green Climate Fund. Whether individual shares add up to the total commitment required (regardless of how individual shares are apportioned) is clearly an important measure of the output legitimacy of institutional arrangements for climate finance. But also important for legitimacy—particularly in the eyes of those who are required to contribute—is whether the financing burden is shared transparently and equitably.

Defining the group of contributing countries

In order to estimate individual country shares, it is first necessary to define the group of contributors. Country groupings central to the broader UNFCCC framework play a dominant role in defining who contributes finance. Current commitments under the UNFCCC require only “developed” countries to contribute funds, generally understood as parties listed under Annex II of the Convention. Parties listed in Annex II are mostly industrialized nations that were members of the OECD in 1992, the year in which the Convention was adopted. Annex II countries form a subset of Annex I, which also includes “Economies in Transition” that are primarily members of the former Soviet Union. Most Economies in Transition are currently neither contributors to nor recipients of finance. Developing (non-Annex I) countries are the primary recipients of climate finance.

A number of parties have argued that current membership of Annexes is not reliably tied to objective criteria.⁴³ In particular, a number of countries with relatively high per capita emissions and income are included in neither Annex I nor Annex II, including some wealthy

⁴² Copenhagen Accord, para 8.

⁴³ Pickering et al. 2009, 36-37.

oil-exporting countries such as Bahrain, Kuwait, Qatar and the United Arab Emirates. Furthermore, a number of larger newly industrialized countries are now at high income levels but remain outside Annex I/II, notably South Korea and Singapore. Adopting more objective criteria for defining the group of contributors—and the consequent broadening of the contribution base now and progressively over time—could improve the adequacy and predictability of climate finance as well as its acceptability to existing contributors. A broader group of contributors could have a significant impact on Annex II countries' share of the overall commitment.⁴⁴ The adoption of objective criteria would also improve horizontal equity by ensuring that countries with similar levels of income and emissions participate in the global commitment.

Nevertheless, attempts to redraw Annex membership are likely to encounter considerable resistance from non-Annex I countries, raising the question of whether multilateral coordination alone should be the focus of efforts to broaden the contribution base. In this regard, unilateral pledges by wealthier non-Annex II countries could play an important role in breaking the current impasse. Some economically advanced non-Annex I countries (including Brazil, South Korea and Mexico), for example, have indicated a willingness to provide climate finance to poorer developing countries on a voluntary basis. Over the longer term, unilateral initiatives could help to underpin support for multilateral reform of contributor groups.

Criteria-based approaches to determining country shares

Shares of individual countries could be determined on a national or internationally coordinated basis. Countries made their individual fast-start commitments in an apparently ad hoc fashion in the form of pledges announced at the 2009 Copenhagen conference and in the months thereafter. Although countries consulted one another in advance of announcing their pledges, no collective rationale was provided for the resulting share of contributions. Few countries have set out their rationales for the level of their individual pledges.⁴⁵

As with “bottom-up” approaches to mitigation pledges, a nationally driven approach to finance commitments can help to take account of individual circumstances that may affect the ability of countries to act. However, such approaches may lack transparency, potentially

⁴⁴ Houser and Selfe 2011, 6-7.

⁴⁵ Cipler et al. 2011.

leading to perceptions that countries are either being forced to do more than—or getting away with less than—their fair share. A coordinated approach to effort-sharing can help to build common expectations and pre-empt future disputes. Embedding agreed expectations within the framework of the UNFCCC would enhance transparency and accountability.

A proposal widely favored by developing countries is to calculate shares on the basis of a coordinated scale of contribution, whereby a common formula or index is applied to all contributing countries. Scales of contribution have been adopted for several other international funding mechanisms, including the Scale of Assessment for core contributions to the United Nations, a modified form of which is used for contributions to the Multilateral Fund to address ozone depletion.⁴⁶ Moreover, the European Union has supported the use of a uniform scale for calculating financing commitments.⁴⁷ Other countries, however, including the United States, are reluctant to countenance formulae for sharing either mitigation or financing efforts.⁴⁸

A major challenge in developing common expectations about country shares is to identify what kinds of criteria should be taken into account. Many proposed approaches identify responsibility and capacity as two key criteria for countries' shares.⁴⁹ These criteria are usually quantified in terms of emissions and national income, although perspectives vary on the data sources and parameters that should be used.⁵⁰ In addition to responsibility and capacity, one could argue for inclusion of a third criterion comprising existing scales of contribution or ad hoc shares of other funding such as Official Development Assistance (ODA; hereafter "aid"). Such arrangements may track countries' overall economic capacity, but do not take account of responsibility for emissions.

As with choices about the scope of the contributing group, the choice of indicators may make a substantial difference to individual countries' shares. Table 3 shows illustrative shares for Annex II members (listing individually the five largest contributors of fast-start finance) according to a range of indicators intended to reflect the three criteria outlined above.

⁴⁶ Barrett 2007, 113, 117.

⁴⁷ European Commission 2011.

⁴⁸ Houser and Selfe 2011, 7.

⁴⁹ Dellink et al. 2009; European Commission 2011.

⁵⁰ See generally Müller et al. 2009; Botzen et al. 2008; Dellink et al. 2009; Baer et al. 2008.

A hypothetical scenario illustrates the impact that uncoordinated choice of indicators on the basis of national self-interest might have. If each of these countries chose the indicator that minimizes its own contribution, the sum of pledges will fall considerably short of the aggregate funding required (63 per cent of aggregate funding in this example; see second-last row of Table 3). However, if countries can only choose between measures based on capacity and responsibility (as in the bottom row), the sum of pledges only falls by about 16 per cent of the funding required, thus substantially reducing the shortfall. This is because income and emissions levels are correlated.

Table 3. Relative contributions from Annex II countries compared across different indicators⁵¹

Percentage of Annex II contribution		Australia	EU Annex II member states	Japan	Norway	US	Other Annex II	Total
Responsibility (emissions)	Current (2008-10 incl LULUCF)	4.7	29.6	9.9	0.2	48.6	7.0	100
	1990-2010 (incl LULUCF)	4.3	31.7	9.9	0.3	47.4	6.4	100
Capacity (income)	GDP (2008-10, PPP)	2.5	38.0	12.4	0.7	41.4	5.1	100
	GDP (2008-10, MER)	2.8	40.5	13.2	1.1	36.8	5.6	100
Existing pledges	Fast-start finance	1.8	24.2	44.2	2.9	22.1	4.7	100
	UN Scale of Assessment (2012)	2.5	46.7	15.9	1.1	27.9	5.9	100
Equal weighting of responsibility and capacity indicators		3.6	35.0	11.4	0.6	43.5	6.0	100
Lowest share (all indicators)		1.8	24.2	9.9	0.2	22.1	4.7	62.9
Lowest share (responsibility and capacity indicators only)		2.5	29.6	9.9	0.2	36.8	5.1	84.1

One possible response to the concern about shortfalls resulting from uncoordinated effort-sharing is that they may be counterbalanced by countries that instead choose to exceed objective measures of their fair share. Indeed the collective fast-start pledge appears to have been fulfilled only because the pledges of Japan and Norway considerably exceeded responsibility- and capacity-based estimates of their share.⁵² Although effort-sharing formulae could exert a “leveling-down” effect that reduces the likelihood of countries

⁵¹ Emissions data are from national reports to the UNFCCC; GDP data are from IMF 2011; fast-start finance data are from World Resources Institute 2012; UN Scale of Assessment figures are from United Nations 2011.

⁵² Compare Cipler et al. 2012.

exceeding their fair share, this is arguably a small price to pay for addressing the larger risk—which will only continue to become more pressing as the size of the aggregate commitment increases—that countries will fall well short of their fair share.

Accounting for public and private sources of funding

The 2020 financing commitment involves a pledge by governments not merely to directly “provide” (as under the fast-start commitment) but to “mobilize” funds “from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance.”⁵³ Precisely which sources should be eligible remains highly contentious.

Contributing countries have generally preferred flexible eligibility criteria that minimize the fiscal impact of meeting their commitments, especially if they allow the inclusion of existing sources of public funding (particularly aid) and private financing flows. Developing countries, while concerned about adequacy, have long criticized the use of aid to meet climate finance commitments, as well as expressing reservations about the use of private finance to meet commitments made by governments.⁵⁴

Additionality and the role of aid

Parties to the UNFCCC have pledged to contribute climate finance that is “new and additional.”⁵⁵ The AGF defines additionality as “the extent to which new resources add to the existing level of resources (instead of replacing any of them) and result in a greater aggregate level of resources.”⁵⁶ However, there is no agreed definition of additionality, and parties’ interpretations of the concept vary widely.⁵⁷ Developing countries have proposed strict approaches to measuring additionality, often based on the idea of maintaining a clinical separation between climate finance from aid. Most developed countries do not count their climate finance commitments altogether separately from aid (one exception is the Netherlands⁵⁸).

⁵³ Copenhagen Accord, para 8.

⁵⁴ See for example India 2009; see also Zadek 2011, 1059.

⁵⁵ UNFCCC, Art 4.3; Cancun Agreements, para 97.

⁵⁶ AGF 2010, 26.

⁵⁷ Stadelmann, Roberts, et al. 2011.

⁵⁸ Netherlands 2010.

The inclusion of the additionality criterion in decisions on climate finance stems to a large extent from developing countries' longstanding concerns about the diversion of aid funds from existing development priorities in order to pursue international environmental goals.⁵⁹ Developing countries have also argued that climate finance is owed to them as a matter of right rather than of charity due to developed countries' proportional responsibility for contributing to the problem of climate change.⁶⁰ Developed countries frequently justify more flexible interpretations on the basis of the complementarities between addressing climate and development objectives.⁶¹

Divergent positions on the use of aid not only reflect different views about legitimacy in the generation of climate finance, but also illustrate how choices about generation may become entangled with concerns about legitimacy in delivery. Although funding may be counted under the OECD's official definition of aid without being delivered through traditional aid agencies, much climate finance has indeed been delivered through existing national and multilateral development institutions, and mostly outside dedicated UNFCCC climate funds.⁶² Developing countries, seeing many of these channels as favoring developed countries' interests, have called for climate finance to be delivered through institutions that they consider to offer greater input legitimacy, typically those under the auspices of the UNFCCC.⁶³

The difficulty of demonstrating the additionality of aid contributions provides a salient reason for preferring the use of climate finance from new sources. The newness of a source of public funding may provide a plausible proxy for additionality, albeit a partial one since earmarked revenue could still displace some existing flows from national budgets.⁶⁴ However, if developed countries consider it necessary to rely on some funding from national budgets, it will be essential to develop robust and transparent agreed interpretations of additionality in order to reduce mistrust about double-counting of commitments. One positive step in this regard was the UNFCCC decision in 2010 requiring contributors to include in future

⁵⁹ See Jordan 1994; Stadelmann, Roberts, et al. 2011, 175.

⁶⁰ World Bank 2010, 17.

⁶¹ World Bank 2010, 17.

⁶² Stadelmann et al. 2012, 130.

⁶³ See Ghosh and Woods 2009.

⁶⁴ AGF 2010:26; Bowen 2011, 1025.

financing reports the understanding of additionality they have applied in meeting their commitments.⁶⁵ In formulating national guidelines, governments could draw on existing research that has outlined concrete options for measuring additionality.⁶⁶ We concur with Stadelmann et al that neither overly strict nor overly loose definitions of additionality are likely to strike the right balance of legitimacy to both contributing and recipient countries.

Private sources

The question of how to account for private sources of climate finance is both technically complex and politically vexed. Developed country governments have been upbeat about the potential to catalyze large amounts of private finance through modest public outlays. However, as Stadelmann et al have shown, if a flexible definition of private flows were adopted, private climate finance flows may already exceed the target of \$100 billion a year.⁶⁷ Many developing countries have argued that, as a matter of principle, pledges should be made primarily through public sources since governments bear ultimate responsibility for their international commitments.⁶⁸ Developing countries have also raised concerns about the additionality and predictability of private flows.⁶⁹

These concerns could be addressed to a substantial extent with suitable accounting methods. National governments may still justifiably be credited with “mobilizing” funds from private sources provided that there is a plausible causal link between public policy and private action. This may, for example, be the case of private finance facilitated through measures such as risk guarantees.⁷⁰ Moreover, as discussed below, in some circumstances public flows may be less predictable than private flows. However, credible methods for estimating the additionality of private sources are needed, particularly since gross flows of finance to developing countries may differ from the net flows they receive after input costs or loan repayments.⁷¹

⁶⁵ UNFCCC 2012, Annex I, para 13.

⁶⁶ Notably Stadelmann, Roberts, et al. 2011.

⁶⁷ Stadelmann, Castro, et al. 2011:iv.

⁶⁸ Compare Philippines on behalf of G-77 and China 2008.

⁶⁹ Compare Stadelmann, Castro, et al. 2011, 16.

⁷⁰ AGF 2010:23.

⁷¹ AGF 2010:24.

The considerable technical complexity of these issues—coupled with the risk that fulfillment of commitments could be fudged through lax accounting of private sources—suggests that a coordinated international effort to establish credible methods and accounting options is required. As with the eligibility of aid, an approach whereby contributing countries retain complete discretion over the eligibility of sources is likely to lack transparency and additionality and may thus be unacceptable to developing countries. This in turn is likely to undermine trust in negotiations. Accordingly, it would be desirable to establish a common set of guidelines for the eligibility of sources.

Designing innovative public sources of funding

The need for innovative public sources

Assuming that current global aid of around \$135 billion⁷² will rise (at least in nominal terms) until 2020, global aid budgets could in principle absorb the entire global climate finance commitment. However, drawing climate funds from aid budgets without increasing overall trajectories for aid by a similar amount will encounter strong political resistance from developing countries, as well as concerns from constituencies in contributing countries about diversion of funds from other development priorities.

Moreover, private or market-based finance is not well-equipped to become the exclusive means of addressing climate-related financing needs, particularly since many adaptation measures need to be addressed through public resources.⁷³ Even if private or market-based finance were to become important in the medium term, the short-term prospects for international carbon markets are subdued because of low demand from developed countries.⁷⁴

Despite a wide range of official and non-governmental proposals for innovative sources over recent years,⁷⁵ few have been translated into action. Among the limited range of examples are Germany's levies on funds from the national auctioning of emissions allowances under the European Union Emissions Trading Scheme.⁷⁶ The Kyoto Protocol Adaptation Fund

⁷² OECD 2012b (net ODA for 2011).

⁷³ Bowen 2011, 1021-22.

⁷⁴ World Bank 2011b.

⁷⁵ A sample of proposals can be found in AGF 2010; Hof et al. 2011; and World Bank 2011a.

⁷⁶ Stadelmann et al. 2012, 128.

(financed primarily through a two per cent levy on CDM revenue) represents one of the few innovative sources of multilateral adaptation finance established to date, although it has only generated a modest amount of total climate finance (attracting less than one per cent of total funding to dedicated climate change funds).⁷⁷ Beyond this, international progress on innovative sources has been limited.

Comparing unilateral and internationally coordinated sources

The AGF supported using a mix of revenue sources rather than a single instrument. Examples of sources that could be established unilaterally include (i) earmarking of revenue from domestic carbon pricing policies such as emissions trading schemes or carbon taxes; (ii) reducing domestic subsidies or tax concessions for the production or consumption of fossil fuels; or (iii) otherwise reallocating budgetary funding for climate finance purposes. Examples of sources for which the AGF considered coordinated implementation to be necessary or at least highly desirable include (iv) levies on international air and sea transportation; (v) the auctioning of international emissions allowances; and (vi) financial transaction taxes.

Unilaterally adopted sources could be established relatively rapidly and tailored to the national circumstances and preferences of contributors. Provided that the source does not result in significant adverse impacts on other countries (for example by diverting aid or requiring recipient countries to make substantial co-contributions), acceptability to developing countries could be more readily assured.

Yet, unilaterally adopted sources may have drawbacks. A potential disadvantage is that their efficacy may be undermined if other countries do not likewise adopt them. This is a particular concern for proposals such as a financial transaction tax, or in some circumstances a levy on shipping fuels, where some of the underlying activities could be relocated to avoid taxes or levies if only one or some countries imposed them (“leakage”).

Furthermore, some unilateral sources may suffer from the so-called “domestic revenue problem”.⁷⁸ Funding raised from general (or consolidated) tax revenue is in direct and ongoing competition with other domestic demands for funding, making it difficult to ensure funding will be reliable over long periods of time. Climate finance sourced through the

⁷⁷ Climate Funds Update 2012.

⁷⁸ Hof et al. 2011, 616.

expansion of national aid budgets (which are typically funded through consolidated revenue) would be particularly susceptible to this problem. Hypothecation (or “earmarking”) of revenue for international climate finance from activities that are connected to greenhouse gas emissions—for example the production or consumption of fossil fuels—may be more plausible than from other activities.⁷⁹ However, it may still be politically difficult to earmark a substantial amount of such revenue for international purposes. Despite the advantages of earmarking, separating revenue and expenditure decisions is generally preferred in fiscal policy, since variations in expenditure needs for a particular policy objective are unlikely to mirror fluctuations in revenue from the earmarked source.⁸⁰ Related to the domestic revenue problem is the concern that aid and other unilateral sources may tend to confer a greater degree of “informal power” to contributors relative to recipients,⁸¹ particularly since the default allocation channel for unilateral sources will often be the contributor’s own channels (such as its national aid agency).

Coordinated implementation may help to overcome a number of concerns affecting unilateral sources. In particular, provided that widespread agreement can be reached, multilateral sources can help circumvent problems of leakage. In some cases, coverage may not need to be entirely global provided that a sufficient proportion of the global economy were to participate, as in the case of a financial transaction tax covering all major financial centers.⁸² Funding raised at the international level or under internationally harmonized mechanisms tends to be less vulnerable to the domestic revenue problem. For this reason, international sources are often seen to be more predictable. Multilateral sources may also help to underpin the stability and credibility of associated multilateral allocation channels such as the Green Climate Fund. More ambitious carbon pricing policies—a key ingredient for securing adequate funding in the AGF’s view⁸³—could be helped by greater multilateral coordination. Multilateral sources also present an accompanying range of challenges. First, some sources may be politically unacceptable to contributors, particularly if they are viewed as a form of global taxation (a particular concern of countries such as the United States). One possible

⁷⁹ Bowen 2011, 1024.

⁸⁰ See Bowen 2011, 1025.

⁸¹ Ballesteros et al. 2010, 310.

⁸² See {European Commission 2011}:9.

⁸³ AGF 2010, 5.

means of addressing this concern would be to design schemes so that revenue is collected not by a centralized multilateral agency but by national governments.⁸⁴ However, such schemes may in turn reintroduce a form of the domestic revenue problem.

Second, even if funds are collected through a centralized institution, the case for allocating funds for climate purposes may not be obvious. This is particularly the case for financial transaction taxes, where other constituencies could argue that the revenue should be used for other purposes such as promoting the stability of the global financial system or promoting international development. Finally, coordinated sources generally require navigating the decision-making processes of one or more multilateral institutions, which may result in delayed implementation or even deadlock.

Case study: raising revenue from international transport

Much discussion of innovative sources of climate finance has focused on the possibility of raising funds from international maritime and aviation transport, the greenhouse gas emissions of which are neither covered by existing domestic climate policies nor multilateral agreements like the Kyoto Protocol. Covering these sectors with a carbon price would create incentives to reduce emissions and create revenue from relatively low-taxed industries.⁸⁵ The transboundary nature of global air traffic and maritime transport strengthens the case for using associated revenue for climate change efforts which is likewise a transboundary issue. The potential magnitudes are large. The World Bank has estimated that a carbon charge on the two sectors could generate funding of around US\$22 billion a year by 2020 at a carbon price of \$25 per ton even once 40 per cent of total revenue is reimbursed to developing countries affected by the charges.⁸⁶ A key question remains as to whether the transboundary nature of these sectors also means that legitimate generation of funding from them will only be possible with a coordinated multilateral effort. We focus here on aviation, noting that many similar issues would also arise in relation to shipping.

Multilateral action has achieved very little to date in curbing the ongoing rise in emissions from international air transport. Article 2 of the Kyoto Protocol delegates action on addressing international aviation emissions to the International Civil Aviation Organization

⁸⁴ See for example Switzerland's carbon tax proposal (Switzerland 2008).

⁸⁵ Hepburn and Müller 2010.

⁸⁶ World Bank 2011a, 17.

(ICAO). However, progress in ICAO over the last decade has been hampered by the reluctance of the airline industry and many national governments to countenance imposing higher costs on travelers, as well as the rigidity of the international legal framework on civil aviation, which limits scope to tax fuel and to differentiate among developed and developing countries in applying regulatory measures.⁸⁷

Partly in response to this lack of progress, the EU initiated unilateral action to cover international aviation emissions under its Emissions Trading Scheme. A wide range of countries—including the US, China and India—opposed this move, arguing that it amounts to the unwarranted extraterritorial application of a domestic policy measure.⁸⁸ Developing countries also voiced concerns that their participation in the scheme is inconsistent with the principle of CBDR. More positively, ICAO subsequently agreed to form a High-Level Group to develop a framework and feasibility report for a global ‘market-based measure’ (MBM) by late 2013.⁸⁹ In response, the EU agreed in November 2012 to a one-year moratorium on the application of the aviation scheme outside the EU.⁹⁰

The EU case holds several implications for the choice between unilateral and coordinated adoption of funding sources. An important lesson is that political resistance to unilateral action may be significant even where other implementation challenges can be addressed. Imposing carbon levies on international aviation is widely considered to be technically feasible⁹¹, and depending on circumstances leakage could be limited even under unilateral implementation of a levy on aviation fuels.⁹²

The EU scheme might even have generated windfall profits for overseas airlines in its initial years,⁹³ but this has been insufficient to dampen international opposition. One factor that probably contributed to opposition is the fact that the EU initiative was primarily framed as a climate change mitigation measure with revenue accruing to the EU, rather than as a measure to generate international funding. The international legitimacy of other unilateral initiatives

⁸⁷ Oberthür 2003; Macintosh and Wallace 2009.

⁸⁸ van Renssen 2012.

⁸⁹ ICAO 2012

⁹⁰ European Commission 2012.

⁹¹ Haites 2009.

⁹² Jotzo et al. 2011.

⁹³ Malina et al. 2012.

could be enhanced by incorporating reimbursement arrangements for developing countries and linking schemes explicitly to climate finance commitments.⁹⁴

The EU case also highlights the complex dynamics between unilateral and coordinated action, with concerns that unilateral climate policy measures may collide with the more extensively regulated multilateral trading system and prompt retaliatory measures from affected countries.⁹⁵ However, the EU's temporary unilateral approach does appear to have goaded further multilateral progress within ICAO. As such, unilateral action could serve a valuable instrumental and strategic purpose.⁹⁶ Equally, even in the absence of multilateral agreement, unilateral initiative undertaken by a major economy may also spur other positive unilateral measures, since (as under the original EU approach) some countries could be exempted from compliance if they adopt "equivalent" domestic measures.⁹⁷

Synthesis and conclusions

In order to fulfill global climate finance commitments, significant hurdles need to be overcome not just politically and economically, but also at a conceptual and implementation level. We have analyzed how the choice between unilateral and coordinated approaches may affect the legitimacy of measures to generate finance. We have done so with a focus on three policy issues that national governments must address in developing a package of funding sources: estimating national shares; establishing how different sorts of flows should be accounted for; and designing innovative funding sources. The key findings of how the choice of approach may influence criteria of legitimacy are synthesized in Table 4 below. While unilateral approaches often fare more poorly on procedural criteria, the table suggests that the choice between unilateral and coordinated approaches cannot simply be characterized as one between output and input legitimacy, but rather represents a more complex set of tradeoffs.

⁹⁴ Müller 2012.

⁹⁵ Barrett 2011.

⁹⁶ Oberthür 2003; Shaffer and Bodansky 2012, 40.

⁹⁷ van Renssen 2012.

Table 4. Advantages (+) and disadvantages (-) of unilateral and coordinated approaches to fulfilling climate finance commitments

	Unilateral	Coordinated
Attributes common to all components	+: Practicality, <i>Acceptability (to contributors)</i> -: <i>Participation (of non-contributors), acceptability (to recipients)</i>	+: <i>Participation (of non-contributors), acceptability (to recipients)</i> -: Practicality
1. Effort-sharing	-: Adequacy, Equity, <i>Transparency</i>	+: Adequacy, Equity, <i>Transparency</i>
2. Eligibility of public and private sources	+: Adequacy -: <i>Additionality, Transparency</i>	+: <i>Additionality, Transparency</i> -: Adequacy
3. Designing innovative sources	-: Efficiency [source-dependent], <i>Acceptability (if other countries levied)</i>	+: Efficiency [source-dependent], <i>Acceptability (to levied countries)</i>

Note: Output legitimacy criteria are listed in plain text and input legitimacy criteria in italics.

Common to our analysis of effort-sharing and accounting methods is the conclusion that ad hoc nationally driven approaches, despite their flexibility, may undermine the international legitimacy of contributing countries' commitments, due to possible non-transparency in accounting and concerns over equity. However, securing multilateral consensus over which nations should provide how much funding, and how this will be accounted for, will be highly challenging.

In the interim, in order to steer a middle course between maintaining broad acceptability and ensuring a timely scale-up of funding, contributing nations should (i) base their estimated shares on plausible indicators of capacity and responsibility; and (ii) base their accounting frameworks on credible, conservative assumptions about additionality and the eligibility of private sources, while also seeking to encourage a wider range of promising sources.

Contributors should also report to the UNFCCC on the justifications they use for estimating shares and determining eligibility. This will not only boost transparency but could help to provide a basis for informed deliberations leading to a greater degree of international coordination.

Our analysis of options for innovative financing sources suggests that securing legitimacy will require the concurrent pursuit of unilateral and coordinated approaches. Raising revenue on a unilateral basis offers flexibility to take account of contributors' national circumstances and may allow faster ramp-up of financing volumes. Promising sources of this kind (with minimal effects on other countries) include allocating revenue from domestic carbon pricing schemes and the phase-out of tax exemptions for domestic fossil fuel production and consumption. Raising revenue from international sources of emissions—notably from international transport—should remain a high priority. However, as the example of the EU aviation scheme shows, unilateral policies can face substantial challenges in securing international acceptability.

The UNFCCC is likely to remain the most appropriate forum for measures to improve transparency in revenue generation, and to mobilize sources that are closely linked to the UNFCCC architecture such as levies on international emissions offsets. However, effective multilateral action will require progress through a range of other international forums, such as the G20 on core fiscal issues such as fossil fuel subsidies and possibly financial transaction levies, and specialist agencies such as ICAO and the International Maritime Organization (IMO) on international transport.

Meeting climate finance commitments remains squarely in the national interest of contributing countries. Scaling up the collective commitment by a factor of ten from the initial 2010-12 'fast-start' phase to 2020 will require identification of new sources and approaches, and rapid implementation. Mobilizing climate finance on a sustainable basis will require options that are economically efficient and politically viable within each nation while also maintaining the legitimacy needed to build trust and cooperation in international negotiations.

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