# Improving the measurement of climate finance and progress on the $100bn target

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This note responds to the UNFCCC call for evidence on measuring concessional climate finance and sets out recommendations based on forthcoming papers which: review development agencies' spending and approach to climate; review the literature on the effectiveness of climate mitigation spend.

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The issues of reliable measurement, progress towards the $100bn target and the good use of such financing are connected issues. This note highlights the main issues in measurement but also proposes reforms to the approach to measurement and targets for climate finance to enhance their effectiveness. We propose a way forward on measuring A) mitigation and B) adaptation finance; and C) progress towards the target and D) on potential formulation and measurement of the current and future climate finance targets.

## Measurement using Rio Markers

The issues with the recording and measurement of concessional finance for climate for mitigation and adaptation are well-documented (Wiekmans et al, 2017; Michaelowa et al, 2011; Adaptation Watch, 2016), and as we reach the target date for the $100bn commitment to be met, it seems clear that the marker methodology has led to significantly exaggerated levels of concessional climate finance being reported; and - as the OECD have pointed out - the markers are an inadequate for assessing target progress (OECD, 2012).

To address these shortcomings in measurement, we propose a distinct approach for the measurement of mitigation and for adaptation.

**A) Mitigation spend should report expected GHG impacts**

For mitigation, where the ultimate benefit is averting emissions or removing GHGs, the expected level of averted or removed emissions should be the criteria used to determine whether spend qualifies. However, there is clear evidence that spending, - which claims to be for mitigation - could be barely concerned with reducing emissions, or originally intended for completely different purposes. Some projects initially marked as having no mitigation focus were later designated as having a principal mitigation objective, such as a mass transit-system project in Bangkok implemented by Japan, with average annual disbursements of around $300 million. Others claim to have a principal mitigation objective but don't mention mitigation in any project documents (e.g. a Japanese investment in "Dedicated freight corridors in India worth $422 million in 2018). (Ritchie and Tahmasebi, forthcoming, based on CRS).

Given the substantial sums involved, the urgency of addressing climate change and the advances in knowledge, in order to record expenditure with a mitigation marker, **we argue that countries must report i) the expected emissions of the climate expenditure; and ii) an assessment of how this compares to a reasonable baseline and iii) the spend allocated to the reduction**. The first and second should also probabilistically incorporate any potential reductions from transformation or other indirect approaches[1]. Not only will this provide reassurance about whether projects are genuinely mitigation, but will also significantly improve the approaches to estimating emissions impacts, and also enable comparison and evaluation of mitigation approaches (Juden and Mitchell, forthcoming 2020), and encourage and track private green climate finance (Lehman, 2020). It would also enable stakeholders, and potentially the UNFCCC to consider a minimum threshold for GHGs mitigated per dollar of expenditure, which would avoid 'greenwashing' and encourage more-effective approaches (See annex III for more detail).

**B) Adaptation is difficult to distinguish from all ODA, and that's fine**

On adaptation, it will be crucial for lower income countries to have sufficient resources available to adapt to the impacts of climate change. However, it seems less clear that the best defence against climate change for lower income countries must meet the strict adaptation criteria[2] which states that activity relates to an adjustment. For example, transport infrastructure would appear to be important in ensuring climate resilience - but the *adjustment* to spend on that infrastructure may be minimal (see Annex I for a fuller explanation).

Whilst adaptation spend should be allocated according to need, we recommend that few constraints are placed on *how* that funding is spent. However, there should be a clear requirement for *all* projects funded from concessional finance to consider climate resilience: with additional adaptation incorporated if appropriate. In our new work

[1] For example, in the case of Research and Development spend, a project would need to provide some probability of identifying technological progress that could reduce GHGs. Similarly, an education programme on climate might aim to reduce the lifetime carbon footprint of those receiving it.

[2] The UNFCCC states that "any adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects which moderates harm or exploits beneficial opportunities" (UNFCCC, 2020).

reviewing development agencies approaches (Calleja and Mitchell, forthcoming 2020) we find that approach is partially but not fully undertaken.

OECD's guidance[3] allows agencies to record spend with only a small adaptation element as having a "significant" adaptation objective (ie essentially 'mainstreaming'). Providers may be partly driven by the target in supporting this approach but given the close links between adaptation and wider ODA, **using the marker to record some adaptation adjustment seems a reasonable approach to measurement.** This inclusive approach to adaptation spend does have implications for the target, which we return to below.

**C) Progress on the $100bn target**

In terms of the progress towards the $100bn climate target, it is clear that "over-coding" of climate projects means that current provider discretion in the Rio marker methodology exaggerates climate expenditure (Weikmans et al, 2017). However, in assessing whether the target is met, this is a secondary issue. The primary issue is whether it is "new and additional". Our analysis of the relevant figures for the 24 Annex II parties[4] is that the total quantum of concessional finance disbursements[5] (ODA) has increased from $130bn in 2009 to $161bn in 2018, a rise of $31bn[6]. Whilst this figure could grow in 2019 and 2020, and will be supplemented by leveraged private finance (of perhaps $20bn based on the $14.5bn recorded in 2017), **it is clear that new and additional resources are well short of $100bn**.

This analysis relies on an interpretation of the target that takes 2009 concessional finance as the baseline for the target (see our Annex II below). Our analysis of Annex II countries suggest that 12 out of 23 interpret the commitment to mean *any* climate finance counts (Calleja and Mitchell, forthcoming, 2020). However, **it seems that such an interpretation cannot be both "new" and "additional" and we urge the UNFCCC to also take this view.** How each developed country contributes to meeting this target is a separate issue which UNFCCC need not address in its assessment.

We note that other evidence has called for the total amount of $100bn to be assessed on a grant equivalent basis (Oxfam, 2018). However, as that method was not commonly used when the target was agreed, and as the $100bn was agreed on the basis of the finance needs of developing countries (UNFCCC, 2015), rather than a measure of provider effort, **we propose it should be considered on a 'face value'** (ie disbursement) basis.

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[3] See the *OECD DAC Rio markers for climate handbook* (link)

[4] Annex II parties include: Australia, Austria, Belgium, Canada, Denmark, European Community, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States of America. We include ODA from the USA in these figures as they were signatories to the Paris Agreement and COP15 declaration at the time of signing, despite the intention to withdraw from the Paris Agreement made in 2017.

[5] Data sourced from the DAC1 tables, figures reported are gross disbursements in constant 2018 USD. We exclude EU Institutions to avoid potential double-counting.

[6] The UNFCCC figures also include spending classed as Other Official Flows (OOF), but gross OOF only increased by $0.6 billion between 2009 and 2018 (in current terms) (DAC table 2b)

**D) Revisiting the target**

As we make clear above, the target is a long way from being met; and the developed countries need to significantly step up their efforts. However, we do believe developing countries and the UNFCCC might consider adjustments to the target that could benefit all parties. In particular, we would recommend that **in terms of assessing the *adaptation* element, a necessary requirement is to assess whether there has been a sufficient increase in ODA** (or perhaps in cross-border ODA). This is simpler to assess, does not rely on the climate markers and would discourage 'green-washing'. A further commitment from agencies to properly assess all ODA allocations and projects against adaptation criteria would also be valuable. If a portion of the $100bn target was agreed for adaptation, this could also be converted into a (lower) grant-equivalent figure.

For mitigation, and particularly given its connection to issues in Article 6 relating to international cooperation and credit markets (Paris Agreement, 2015), spending must be more carefully monitored. In addition, as the main aim of such spend is global climate mitigation - a global public good - rather than developing country welfare[7] as required by ODA, then it should be accounted for separately. **We recommend climate mitigation spend is monitored as part of Other Official Flows (OOF)** and that it continues to do so on the basis of its nominal (net) value. A new paper from Charles Kenny sets out this case fully (Kenny, 2020).

**Conclusion**

Overall then, we conclude that the level of new and additional climate finance provided relative to 2009 is clearly insufficient to meet the climate pledge. The measurement of mitigation needs urgent attention to ensure that money is well-spent and reliably measured; and would best be undertaken outside of the DAC ODA measure. For the measurement of adaptation spend, it is difficult to distinguish between adaptation and wider development spend. Too tight a focus on a strict adaptation definition could limit the effectiveness of spend and so we favour the continued use of the current adaptation marker approach - that is, where spend has been adjusted for climate. In assessing 'new and additional' contributions, for at least the adaptation portion, an increase in ODA resources (of at least $50bn in disbursements) is a necessary but not sufficient condition for meeting the climate commitment. Once that is achieved a judgement can be reached on whether there is sufficient adaptation focus using the markers. Finally, the target itself could be adapted to help ensure that its ambition is achieved, and so that developing countries benefit to the fullest in how the money is allocated.

[7] Official development assistance (ODA) is defined by the OECD Development Assistance Committee (DAC) as government aid that promotes and specifically targets the economic development and welfare of developing countries.

**Annex I - Classifying adaptation and mitigation - examples**

It is very difficult to distinguish between climate adaptation, and development more generally. For example, if finance is provided to create a road between a coastal and agricultural region this would likely enhance the climate resilience of the recipient country, for example in terms of accessibility. In undertaking that project, the materials and approach used should consider both adaptation (will the road need to cope with future additional drainage?) and mitigation (could the project's emissions be reduced at no or reasonable cost?). Even if no adjustments were deemed appropriate on adaptation or mitigation grounds, this project would still significantly enhance the area's ability to adapt to climate change. Conversely, even if some emissions were averted by altering the road's design, these will hardly qualify it as a climate mitigation project, because its contribution is tiny relative to its overall cost (and as a road project, it may still increase emissions overall).

In fact, this is a much more general issue - is there any example of a development project that doesn't enhance resilience to climate change? A settlement or infrastructure project in an area vulnerable to, say, a rise in sea levels and droughts could in principle weaken resilience[8]. In most cases, however, there is significant overlap between adaptation and development: a vaccinated or educated child surely stands a better chance in the face of a changing or volatile local climate. The same is true for a farmer benefitting from an agricultural productivity programme, or for an infrastructure project. Many of these projects should be adjusted for the potential risks and impacts of climate change, but drawing a line between those that qualify as adaptation is arbitrary.

**Climate mitigation projects** however, seem much easier to identify. Their main aim is to avert emissions relative to a baseline. This could be a demonstration wind farm in a low income country; or R&D that makes solar more feasible in particular rural settings. But it is much easier to draw a line between climate mitigation projects and development projects that are tweaked to reduce their emissions. Specifically, a mitigation project can and should assess its impact on emissions, and should be able to show a reduction commensurate with its funding. So, to qualify as a mitigation project, a project must have estimated emissions it hopes to avert and be able to show it does so at reasonable cost (based on cost per tonne of emissions averted). It is important to note that 'emissions averted' should combine both direct and indirect effects - so, if a single wind farm would increase the chances of a national roll-out, then future potential avoided emissions should be included on a probabilistic basis.

This might sound like a high bar, or a speculative exercise - but these are multi-year, multi-million dollar projects that claim to be mitigating climate change. If they aren't already undertaking this exercise - using the best evidence and scrutiny to support their estimates - then quite aside from whether they count towards climate finance, they are failing to even to set out their basic objective.

**Where does this leave measurement of climate finance estimates?**

Whilst adaptation finance is difficult to distinguish from most development finance, all development projects should be screened (and adapted) for climate resilience, and for

[8] As we note elsewhere, all projects should be assessed in the light of climate risks, which could lead to adaptation, or lead to a judgement that the project is not viable. In the latter case, it's worth noting that this avoids an important mistake - but would not be recorded as 'adaptation'.

mitigation opportunities, and it would be useful - to enable comparisons and learning - to track any additional or reduced spending arising from these adjustments. Where additional spend is allocated purely for mitigation, this can be recorded as such.

For mitigation, where the main benefit is addressing emissions, the level of averted emissions should be the criteria used to determine whether spend qualifies. The expected level of emissions per dollar of spend should be used to ensure the finance is genuinely for mitigation. If a mixed project contains mitigation costs, these can be scored towards mitigation if they exceed the same threshold.

**Annex II - Implications for progress on the target**
The target is specified as follows:

*"In the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance (UNFCCC, 2009)."*

We make a number of observations on the formulation of this target and combine with the insights above to move towards a proposal for its assessment.

First, the target was specified as an **annual face value, not as a share of economic output**. Given the long-standing 0.7% UN target, countries will have been well-aware of the implications of such an approach. Whilst countries that make climate finance additional to their 0.7% commitment show leadership and deserve credit, the agreement would or should have made clear if that was its intention.

Second, whilst concessional ODA is now **measured on a grant-equivalent basis** - it seems reasonable that the method in use at the time was the intended basis of such a commitment. This implies the target could be met purely through lending, perhaps even at non-concessional rates - but, that would appear to be its intent. Indeed, it appears to be specifically formulated as a total amount of finance available - not as an amount of donor effort which, again, all countries negotiating this text would have been aware of.

Third, the credibility of **estimates of private finance mobilised** should not be undermined by including increasingly upstream "indirect" measures of mobilisation, such as technical assistance provided to help improve policies and the investment environment for example. Such assistance may be valuable but the causal link between it and investment decisions is weak.

Fourth, on **"new and additional"** around half of Annex II countries (Calleja and Mitchell, forthcoming, 2020) argue that any annually approved climate finance should count towards the target. However, as others have noted (Stadelmann et al, 2010; Oxfam 2020), this is indefensible - new funding at the same or lower level as the previous year is clearly not additional. There is also some debate about what "additional" refers to - but as the target pertains to transfers from developed to developing countries, this must surely refer to existing flows between these two groups. Taking point two above (that this is a face value measure) it would seem that the sum of ODA and OOF[9] in 2009 - along with any relevant mobilized flows - was the baseline.

By combining the above interpretations of the target in combination with the conclusion that adaptation spend is very similar to wider development spend in enhancing resilience, it is clear that the public spend element of the target can be assessed based on the overall quantum of official finance provided to developing countries. This can be reliably and consistently assessed and verified; and speaks to the aim of the target of creating an additional $100bn of finance for mitigation and adaptation.

[9]Total gross OOF loans and grants from DAC countries increased by another $0.6 billion between 2009 and 2018, from $17.7 billion to $18.3 billion (constant prices)

**Annex III - Mitigation as a GPG and an adjusted target**

Climate mitigation and adaptation, though often both addressed in single projects, are fundamentally different objectives. Mitigation is a global public good (Kenny, 2020) - it benefits anyone affected negatively by climate change and, by definition, has very little benefit to the immediate recipient. Its effectiveness relates to its impact on emissions. Adaptation, by contrast, is intended for the benefit of the recipient - which is also the core concept behind aid, or ODA. Development projects can and should be assessed and adjusted to respond to both issues - but reporting on each needs to reflect their different purposes.

Mitigation spend should be recorded, tracked and categorised according to the spend, or portion of spend, that avoids emissions. Each project should record and report an 'emissions profile' which estimates its i) emissions, ii) the emissions it intends to avert, and iii) the spend allocated to doing so. This is basic information for any project whose aim is mitigation; and should be collated to enable full accounting for mitigation spend. Where this spend is thought to mobilise private investment, this private investment should also report its emission profile. In this way, mitigation efforts can be fully understood and accounted for. Finally, given the mitigation spend is not primarily for the recipient, it should not be classified as ODA and should be recorded elsewhere recognising its contribution to GPG and concessional character. As the policy variable of interest is the availability of such finance, represented by its face value, this would naturally be recorded by providers in "Other Official Flows" but with the supplementary information above.

As above, it is less important that adaptation spend is distinguished from wider development spend. Doing so risks artificially reducing or re-focussing spend on a particular aim or sector, when the appropriate approach is to ensure that all development spend takes into account the likely and potential impacts of climate. Effort should be put into understanding climate impacts on countries, projects and communities but not into judging whether a project is purely 'adaptation' or not.

A differential approach to measurement would also imply that the target should be reconsidered. As stated in Article 9.4 of the Paris Agreement,the target already envisioned a 'balance' between adaptation and mitigation[10] (Paris Agreement, 2015). We would propose splitting the target into two. One part would relate to the face-value of public and private mitigation efforts. These needn't be concessional but would need to demonstrate averted emissions at a particular level. The second part would relate to adaptation, and would relate to an increase in the total quantum of ODA. The sum of these two would need to be $100bn but it may be that providers and recipients might prefer a different balance and they could agree one - but otherwise the default should be an even split (currently, the public element is tilted towards mitigation). For providers, the mitigation portion could be cheaper to provide as it could be more loan-orientated and less concessional.

[10] the Green Climate Fund aims for a 50:50 split balance between mitigation and adaptation (GCF, 2020)

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