How to Mobilise USD 100 Billion? Wolfgang Sterk Wuppertal Institute for Climate, Environment and Energy, Germany

Climate finance is one of the core issues in the negotiations on a future climate regime. Article 3 of the United Nations Framework Convention on Climate Change (UNFCCC) commits industrialised countries to take the lead in combating climate change. As part of this leadership role, Article 4 of the UNFCCC mandates the Parties listed in Annex II of the Convention to provide "new and additional" financial resources to support adaptation and mitigation in developing countries and clearly conditions mitigation actions by developing countries on adequate financial support from industrialised countries. This balance between the efforts of developed and developing countries was reaffirmed by the "MRV for MRV" deal of the Bali Action Plan. At the conferences in Copenhagen and Cancún industrialised countries pledged up to 30 billion US-Dollar for fast-start finance over the period 2010-2012 and a long-term commitment to "mobilise" 100 billion US-Dollar per year by 2020 "from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources".

The provision of climate finance raises several questions, such as

- What are the financing needs? How to adequately estimate them?
- How to mobilise public funding, how to get from the USD 10 billion fast-start finance to the USD 100 billion?
- What should count towards the USD 100 billion? Gross or net flows (e.g. full volume of loans vs. grant equivalent)? Carbon finance? Private finance?
- What does "new and additional" mean?
- How to MRV the provision of climate finance?
- What should be the role and setup of the Green Climate Fund? What examples of successful funds exist and why have they worked?
- How to mobilise private finance and improve developing countries' access to capital?
- What is the relationship between the number of institutions involved in financing, adequacy and predictability?
- What is the relationship of climate finance to ODA? What lessons can be learned from ODA?

This paper aims to address the first three of the above questions. The "High-level Advisory Group on Climate Change Financing (AGF)" established by UN Secretary-General Ban Kimoon concluded that mobilising 100 billion US-Dollar is "challenging but feasible". It emphasised innovative public sources that could yield a double dividend in terms of mobilising funds and incentivising emission reductions, such as carbon taxes and auctioning of emission allowances from emission trading systems.

Looking at the AGF assessment it is noteworthy that the underlying assumptions are rather conservative. The AGF focuses its analysis on a medium-range carbon price that is not in line with achieving the 2°C target and assumes that only relatively low shares of revenues from carbon markets could be dedicated to international climate finance. If one hopefully assumes that emission caps will at some point be brought in line with the 2°C target and that revenues from international sources, in particular carbon-related sources in international transport, will be fully dedicated to climate finance, mobilising 100 billion US-Dollar does in fact appear as eminently viable. International aviation and shipping alone could provide as much as half of this amount and only a relatively minor share of 7% of the revenues of auctioning allowances

in industrialised countries would be needed for the other half. What is more, this would amount not to a gross but to a net transfer 100 billion US-Dollar.

Public Carbon Market Sources	Net (billion US-Dollar)
Auctioning of industrialised country allowances (carbon price 50 USD/t, 6%	42
of auctioning revenues dedicated to international climate finance)	
Levies on offsets (carbon price 50 USD/t, retained at current 2% of offset	3
issuances)	
International maritime transport (carbon price 50 USD/t, no net incidence on	38
developing countries, 100% dedicated to international climate finance)	
International aviation (carbon price 50 USD/t, no net incidence on developing	12
countries, 100% dedicated to international climate finance)	
Total	95

Table 1: Re-Calculation of Public Carbon Market Sources According to AGF

When looking at the financing needs for adaptation and mitigation in developing countries, there are various layers of finance needs which should not be confused with each other:

- Total investment refers to the totality of initial funding needed to invest in an asset, for example a power plant.
- By contrast, incremental investment is the difference between the initial investment needed for a low-carbon asset and the initial investment needed for a conventional one. Incremental investments are hence only a fraction of total investments.
- A further layer is the incremental cost, which are calculated as the net present value of all related cash flows over its lifetime (including investments, operating costs/gains and sometimes also capital costs). Incremental costs are usually lower than incremental investments in low-carbon assets due to lower operating costs.

The role of international climate finance clearly refers to incremental investment and incremental cost. Naturally, it is typically not governments but private actors who finance investments for insulating houses or building wind parks. But it cannot be expected that private actors will simply absorb the costs caused by choosing a less GHG-intensive investment. In addition, even where incremental costs are negative there are often also other formidable barriers to investment that need to be overcome.

When looking at studies on financing needs for adaptation and mitigation in developing countries, counting only net transfers towards the 100 billion commitment does in fact appear as the only interpretation that is adequate to the problem that is to be solved and the commitments made under the UNFCCC. Studies by the OECD/IEA, the World Bank and others indicate that 100 billion is likely to be the order of magnitude of the incremental costs alone, while related incremental investments are likely to amount to several hundred billion per year and related total investments are many multiples of 100 billion. The only interpretation of the developed countries' commitment that is adequate to the problem at hand is therefore to see it as funding to cover incremental costs and leverage the needed additional investment of several hundred billion dollars per year. Thus, the 100 billion US-Dollar need to be counted on a net basis, not a gross basis. Counting for example the full volume of loans and private investments towards the 100 billion commitment would amount to substantially undersupplying actual financing needs.

References

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