

This PDF is auto-generated for reference only. As such, it may contain some conversion errors and/or missing information. For all formal use please refer to the official version on the website, as linked below.

# Global Climate Change Finance

<https://www.e-ir.info/2016/05/23/global-climate-change-finance/>

SIMONE LUCATELLO, MAY 23 2016

**This is an excerpt from *Environment, Climate Change and International Relations*. Download your free copy on E-International Relations.**

Climate change finance and its implementation instruments belong to the broader field of international environmental aid (IEA), which is defined by the OECD as the sum of bilateral and multilateral economic support to developing countries for environmental purposes (OECD, 2012). Over the past 40 years a wide range of responses to environmental problems has been implemented through a set of interacting systems with multiple actors at different scales. Conventional responses at national and global levels include the creation of rules, laws and institutions, with international organisations established to serve as conveners at the global scale. An important pillar of this global strategy for the environment are the economic and financial initiatives. The environment has been high on the agenda ever since the Rio Earth Summit in 1992 and recent focus on the economics of climate change is shifting attention to the costs of climate change mitigation and adaptation for developing countries.

Dominant international literature on global aid effectiveness stresses the point that multilateral aid is preferable to bilateral aid. In order to prove it, most of the studies use empirical methods to draw inferences from highly aggregated cross-national time series data (Abbott and Gartner, 2011). General findings from this literature state that multilateral channels such as the World Bank, the Global Environment Facility (GEF), those controlled by the United Nations (UN) and/or the various regional development banks generally provide greater control to recipient countries. Findings point to the fact that multilateral agencies fund different countries and projects compared to bilateral donors, and multilateral assistance tends to target poorer countries with greater needs (Isenman, 2011). Multilateral aid also tends to be less political, is associated with better outcomes, and appears better able to impose more effective delivery (Martens et al., 2001).

However, there are great challenges in engaging with the multilateral system, which has become increasingly complex. It comprises well in excess of 200 agencies, adding to fragmentation and duplication. While some agreements appear to be high performers (like the Montreal Protocol and to some extent the Kyoto Protocol), the effectiveness of others is seen as limited. Concerns about agreements performance range from perceived institutional complexity, lack of transparency, higher absolute costs and insufficient evidence of effectiveness, among others. With increasing pressure on domestic budgets, donor governments have been placing much greater emphasis on assessing the effectiveness and relevance of different environmental agreements as a guide to how best to distribute both their resources and their staff time between them (Dinham, 2011).

When we narrow down to environmental aid effectiveness (EAE), there is an open debate about how green aid is better delivered multilaterally than to via bilateral channels. The analysis of different databases (like Aid-Data) tells us that environmental aid is increasingly being allocated bilaterally, through national aid agencies, rather than multilaterally, through the international organisations and channels created for this purpose. If we look at historical trends, between 1990 and 2008 the amount of environmental aid channelled through multilateral institutions increased by roughly 16 per cent. In contrast, bilateral environmental aid levels more than doubled over the same period, going from US\$3.6 billion to US\$6.5 billion. In relative terms, 58 per cent of environmental aid was allocated through multilateral agencies in 1990–94. By 2005–08, this figure had dropped to 42 per cent (RECOM, 2013). Therefore, in contrast with global trends, evidence shows that bilateral green aid is 'preferred' by donors as an

# Global Climate Change Finance

Written by Simone Lucatello

effective way to deliver aid, even though further research on specific case studies are required in order to strengthen our understanding of this.

If our understanding of global climate finance is fragmented, the puzzle can be even more complicated when we transfer analysis to regional mechanisms. For example, resources within Latin America and the Caribbean (LAC) region are mostly concentrated in the biggest economies of the region, such as Mexico and Brazil. By contrast, the rest of the countries and in particular those countries which are highly exposed to climate change risk (such as those conforming Central America) have received limited environmental aid so far.

## Climate Change Finance: Mechanisms and Implementation

International negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) are at a crossroads. At the end of 2015, governments gathered in Paris for the climate summit (COP-21), which successfully framed the new international and universally binding climate agreement. However, to reach this overarching goal requires not only a high political level of ambition but also practical commitments by the international community, particularly in relation to the topic of climate finance. According to recent estimates from COP-21, the public finance offered by developing countries, will result in at least US\$18.8 billion per year by 2020 and all multilateral development banks have pledged to scale up climate finance in developing countries substantially by 2020 to more than US\$30 billion per year (Nakhooda, 2015).

Many developing countries have stressed the importance of industrialised nations bearing greater responsibility for climate change, given both their historic and current greenhouse gases (GHG) emissions and their superior capacity to respond to climate change. On the contrary, developed nations are most in need of mitigation (especially middle-income countries) and adaptation actions (Brooks et al., 2011). In line with this argument, with the Bali Action Plan in 2007, the UNFCCC called for developed nations to provide finance for adaptation and mitigation actions to developing countries.

### *New and Additional Resources*

Since the Conference of the Parties (COP)-15 in Copenhagen in 2009, and at subsequent COPs (16, 17, 18, 19, 20); developed countries have agreed to provide 'new and additional resources' for adaptation and mitigation. For the long term they have committed to 'a goal of mobilising jointly US\$100 billion dollars a year by 2020 to address the needs of developing countries' through a 'wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance' (OECD, 2011). Efforts to both mitigate and adapt to climate change imply the use of a huge amount of resources, representing a great challenge to the international community and its commitment to support vulnerable countries. However, crucial questions about where this money should come from, who should pay and how and where the money should be delivered are still open for debate. As mitigation and adaptation measures involve a huge financial challenge, it is worth asking who pays for the costs of climate change. How many funds are available to the international community to address the phenomenon? How are these funds distributed and through which mechanisms?

Current principles governing climate change and the use of international funds are based on the provision of international financial aid to climate change mitigation and/or adaptation, which should be seen as additional to development assistance. This has been a central element of the international climate change agreements from the outset (Falkner, 2013). In fact, the UNFCCC – agreed in 1992 – stated that developed countries shall provide new and additional financial resources to developing countries. As Ivanova points out (2013), expanding the donor base, increasing funds availability and ensuring predictable and stable financial flows are currently the main priorities of international environmental governance.

The current international financial architecture for climate change is made up of three main sources. One is bilateral, which comes from direct cooperation between governments and executed through direct transfers from developed to developing countries. The second type of source is multilateral, focusing on climate investment funds and multilateral organisations like the World Bank and regional multilateral banks. A third source is the set of mechanisms

# Global Climate Change Finance

Written by Simone Lucatello

established by the UNFCCC, where governance processes of the funds and their implications have greater legitimacy under the regime of the Convention. These mechanisms include the Global Environment Facility (GEF), the Adaptation Fund (AF), the Climate Investment Fund (CIF) and, most recently, the Green Climate Fund (GCF), as well as new financial mechanisms such as results-based payments for reducing emissions from deforestation, degradation, forest conservation (REDD+) and clean energies (CEMDA, 2013). In addition, developing countries have increased their own spending, through their own national budgets, on activities related to climate change. However, the multidimensional and cross-cutting nature of climate change suggests that amounts of international public finance are still meagre given the magnitude of the phenomenon.

Currently, there are more than 50 international public funds, 60 carbon markets (formal and voluntary) and 6,000 private investment funds, which support so-called 'green' funding. In addition, multiple types of financing (such as Carbon 1, financing for REDD+, etc.) and a variety of tools for delivery and financing packaging (such as results-based sectoral approaches, payments, etc.) are rapidly emerging and evolving while posing additional new challenges. In the case of Mexico in 2012, the country – along with ten others – absorbed almost 45 per cent of the international resources for climate change (CEMDA, 2013). In addition, a growing number of recipient countries have set up national climate change funds that receive funding from multiple developed countries in an effort to coordinate and align donor interests with national priorities. Global climate finance architecture is therefore a complex matter.

As for the release of funds, the means currently available are mechanisms that are private and public in nature. These include grants, concessional loans, and equity and delivery mechanisms for resource-based projects under the framework of clean development mechanisms (CDM).

## *Challenges*

In critical terms, the current proliferation of climate finance mechanisms increases the challenges of coordinating and accessing finance (Fankhauser and Burton, 2011). As mentioned above, climate finance involves flows of funds from developed to developing nations to help poorer countries to cut their emissions and adapt to the impacts of climate change. US\$356 million has been pledged and US\$749 million deposited to these funds since last year. The largest contributors to these funds were the United Kingdom (UK), the United States of America (USA), Germany and Japan. Between October 2012 and September 2013, US\$431 million were approved for new projects and US\$429 million disbursed to support 157 projects, a 23 per cent increase from the number of projects approved the previous year (Climate Funds Update, 2015).

In 2013, annual global climate finance flows totalled approximately US\$331 billion, falling US\$28 billion below 2012 levels. Public actors and intermediaries contributed US\$137 billion, which was largely unchanged from the previous year. Private investment totalled US\$193 billion, falling by US\$31 billion or 14 per cent from 2012. Climate finance flows were split almost equally between developed (OECD) and developing (non-OECD) countries, US\$164 billion and US\$165 billion respectively. The amount tracked flowing from developed to developing countries fell by US\$8 billion from 2012, to US\$34 billion, with multilateral contributions from development finance institutions (DFI) falling by US\$5 billion, and private investment contracting by US\$2 billion. Almost three-quarters of total flows were invested in countries of origin. Private actors had an especially strong domestic investment focus with US\$174 billion or 90 per cent of their investments remaining in the country of origin. This demonstrates that investment environments that are more familiar and perceived to be less risky are essential to influence investment decisions, highlighting the importance of domestic policy frameworks in unlocking scaled up climate finance flows.

Performance at regional level presents different features. Latin American countries, for example, have performed differently. According to the Economic Commission for Latin America and the Caribbean (ECLAC); since 2004 through 2012, US\$2.035 billion have been approved for 220 projects in the region. This amount increased 118 per cent over 2011. Of this total, US\$1.143 billion took the form of grants supporting the majority of approved projects. US\$892 million are provided in the form of concessional loans for 10 projects financed by the Clean Technology Fund (CTF) and one Forest Investment Program (FIP) supported project under the World Bank's Climate Investment Funds (CIFs), which are implemented in the region by the Inter-American Development Bank (IADB). As of October 2012, the total amount disbursed was US\$397.15 million for 110 projects (Climate Funds Update, 2015).

# Global Climate Change Finance

Written by Simone Lucatello

Most of this finance is provided as concessional loans. The Global Environment Facility has disbursed the largest volume of finance to the region to date: approximately US\$169 million in grants for 44 mitigation projects. The United Kingdom, Norway, Japan and Germany, are also investing in LAC. Japan and Norway are the largest bilateral contributors, with Japan providing US\$347 million mainly for mitigation in the private sector, while Norway has provided more than US\$337 million for two programs that support REDD+ (Cabral y Bowling, 2014).

However, part of this economic puzzle, is to understand if and how these funds are attending the most urgent climate problems in the region, such as the retreat of glaciers, which could lead to water stress for around 77 million people by 2020, and continued deforestation of tropical forests. Latin America and the Caribbean's vulnerability to the likely impacts of climate change, exacerbated by persistent income inequality and poverty, means that adaptation needs in the region must become more central to national sustainable development strategies.

## *Green Climate Fund*

An important attempt to put order to this complex puzzle has been the creation of a new instrument, the Green Climate Fund (GCF), which entered into force in December 2013. Through this mechanism, developing countries are keen to get financing without going through international institutions, like the World Bank, and being subjected to their rules and conditions. The GCF plans to provide US\$100 billion annually from 2020 to support mitigation and adaptation to address the problem. The GCF was proposed in 2009 during the Conference of the Parties of UNFCCC in Copenhagen (Denmark), and approved the following year at meetings of the COP in Cancun (Mexico, 2010). Mexico was one of the Fund's principal global promoters. Potential beneficiaries of this fund are mainly countries running transportation projects aimed to reduce carbon dioxide emissions but also include relocation efforts of communities affected by rising sea levels, drought and crop damage, and a long list of other projects. The Fund is governed by a board of 24 members with equal representation of developed and developing countries. Among the members are representatives of Chile, Peru, Colombia, Mexico, Cuba and Belize, who share the chair. The World Bank is the administrator of the interim fund during the first three years.

In August 2012, the Fund's board met for the first time in Geneva, where they began to lay the foundations for operation. In this first meeting, a list of issues and pending tasks were drafted but no real progress was made in terms of effectiveness to implement operating mechanisms of the GCF. A second meeting of the board was held in Songdo, South Korea, in October of the same year and discussions began on the rules relating to the participation of observer countries. However, as on the previous occasion, the board did not fundamentally advance in the planning of activities (Lattanzio, 2014).

In 2013, the GCF board of directors had their third meeting in Berlin, at which various decisions were made. Notable among them were the 'additional rules of procedure', a set of actions for the operation of the GCF. It also details the participation and the role of civil society observers in the Fund, as well as the process for accreditation. The board met again in June 2013 in South Korea and in October in Paris. At these meetings progress was made in strengthening the operational structure of the Fund and demarcating the necessary tasks for prompt operation. Despite its slow development, in December 2013, the GCF was inaugurated at its headquarters in Seoul, South Korea. The launch was symbolic, since the Fund would not be fully operational until the second half of the following year.

At this stage, the Fund's finances are rather fragile. Several donor countries that had pledged to provide funds have not contributed as planned. In 2010, rich nations pledged to provide US\$10 billion a year between 2011 and 2013, and raise funds to US\$100 billion annually by 2020. Yet the influx of money has been much less – even falling by two thirds in 2013 compared to 2012. The Fund currently has only US\$40 million available; a promised sum by South Korea must also cover the administrative costs of the new headquarters. An important issue in creating the Fund is that resources will come from not only public transfers but also private investment. The idea is that innovative sources of financing supplement classical budgetary resources to support the Fund.

Nevertheless, the formal launch of the GCF involves huge challenges and the possible outcomes and impacts for recipients still await a verdict. First, the implementation of the Fund is still in the hands of the board and the

# Global Climate Change Finance

Written by Simone Lucatello

UNFCCC. The GCF is designed as an executive instrument of the UNFCCC with an 'independent' board, a general secretariat, etc. Negotiations in Durban concluded that the Fund would operate under the guidance of the COP of member countries and, unlike other funds (such as that of Adaptation), provide work under the guidance and the 'authority' of the COP. Such a subtle distinction signified profound differences for negotiators from China and the G77; they see in the second option (based on the model adaptation fund) a proposal which may leave decisions on the composition of the board and, especially, the use of funds in the hands of the countries of the global North (Lucatello, 2014).

## Conclusion

Within the broader context of international environmental aid, climate change finance plays an increasing role both in terms of gathering new financial support from donor countries directed to developing ones and in the number of actors and financial schemes available. There have been various initiatives, starting with international mechanisms such as the UNFCCC, the Kyoto Protocol (which expired in 2012) and the Montreal Protocol. Alongside regulatory efforts, the international community has driven transformation processes to provide countries with policies and technologies that can catalyse new investments, inserting climate change into existing national systems. Additionally, these efforts should provide significant support to build resilient systems, particularly for the poorest and most vulnerable developing countries, which are those that have contributed least to the accumulation of GHG in the atmosphere.

The available global funding and capacity to absorb these resources vary according to donor agencies, countries and private flows available. While developed countries have internal capabilities to generate and utilise climate funding, many developing countries lack the resources, skills or institutional systems and policies to use climate funding effectively. Such barriers are accentuated in countries with large vulnerable groups, such as the poor and women, thus threatening the attainment of the goals of poverty reduction and the future Sustainable Development Goals (SDGs). Moreover, major financial investments – from both public and private sources – are also required to transition national economies to a low-carbon path, reduce greenhouse gas concentrations to safe levels, and build the resilience of vulnerable countries to climate change.

However, as seen before, challenges to creating robust climate change finance are substantial: in developing countries, direct government funding is scarce and international environmental aid is becoming less concentrated. Pledges by international donors remain inadequate for the magnitude of the challenge of stabilising a steep trajectory of greenhouse gases. Additional financial investments must accompany national efforts to mitigate climate change effects, although rules, regulations and fiscal incentives ought to be strongly promoted by those who are in greater need for climate financial support. In this complex panorama, the global financial architecture for climate change is an evolving issue, where actors and rules are constantly engaging in transformation.

## References

Abbott, K. W. and Gartner, D. (2011). *The Green Climate Fund and the Future of Environmental Governance*. Earth System Governance Working Paper No. 16. Lund and Amsterdam: Earth System Governance Project.

CEMDA (2013). *La arquitectura financiera para el cambio climático en México. Retos y propuestas para una política financiera transparente y eficiente para la mitigación y adaptación al cambio climático en México*. [Finance Architecture for Climate Change in Mexico. Challenges and Proposals for a Transparent and Efficient Finance Policy for Climate Change Mitigation and Adaptation in Mexico].

Falkner, R. (ed.) (2013). *The Handbook of Global Climate and Environment Policy*. Chichester: Wiley Blackwell.

Brooks, N., Anderson, S., Ayers, J., Burton, I. and Tellam, I. (2011). *Tracking Adaptation and Measuring Development*. IIED Climate Change Working Paper No. 1. London: International Institute for Environment and Development.

# Global Climate Change Finance

Written by Simone Lucatello

Cabral y Bowling, R. B. (2014). Fuentes de financiamiento para el cambio climático. [Sources to Climate Change Finance]. No. 254. CEPAL.

Climate Funds Update (2015). *Latest Climate Fund Data*.

Dinham, M. (2011). *Study of AusAID's Approach to Assessing Multilateral Effectiveness. A Study Commissioned by the Independent Review of Aid Effectiveness to Assist in Their Overall Analysis of the Effectiveness and Efficiency of the Australian Aid Program*. Sidney.

Fankhauser, S. and Burton, I. (2011). *Spending Adaptation Money Wisely*. Centre for Climate Change Economics and Policy Working Paper No. 47. London: The Grantham Foundation/ESRC/University of Leeds/LSE

Ivanova, M. (2013). Reforming the Institutional Framework for Environment and Sustainable Development: Rio+20's Subtle but Significant Impact. *International Journal of Technology Management and Sustainable Development*, 12(3), 211-231.

Isenman, P. (2011). *Architecture, Allocations, Effectiveness and Governance: Lessons from Global Funds*. ODI Meeting on Climate Change. London: Overseas Development Institute.

Lattanzio, R. (2014). *International Climate Change Financing: The Green Climate Fund (GCF)*. Washington, DC: Congressional Research Service.

Lucatello, S. (2014). Global Financial Architecture for Climate Change and the Green Fund. In: L. Lázaro Rùther, C. Ayala Martínez, and U. Müller (Eds). *Global Funds and Networks. Narrowing the Gap between Global Policies and National Implementation* (pp. 190-197). Eschborn, Germany/Mexico City, Mexico: GIZ-Nomos-Instituto Mora.

Martens, B., Mummert, U., Murrell, P. and Seabright, P. (2001). *The Institutional Economics of Foreign Aid*. Cambridge: Cambridge University Press.

Nakhooda, S. (2015, December 12). *Climate Finance: What Was Actually Agreed in Paris?* Overseas Development Institute.

OECD (2011). *Busan Partnership for Effective Development Cooperation: Statement of the Fourth High Level Forum on Aid Effectiveness*. Busan, South Korea: OECD.

OECD (2012). *Development Perspectives for a Post-2012 Climate Financing Architecture*. Paris: OECD.

RECOM (2013). *Trends in Environmental Aid: Global Issues, Bilateral Delivery*. Research and Communication on Foreign Aid.

---

## About the author:

**Simone Lucatello** is a Full-time Researcher at Instituto Mora, a public research centre based in Mexico City. He is the Director of the Research Programme in International Cooperation, Development and Public Policy at the same institution. Lucatello holds a joint BA in History from the University of Venice Cá Foscari, Italy, and University College London (UCL). He also holds an MA in International Relations from the London School of Economics and Political Science (LSE) and a PhD in Governance for Sustainable Development from Venice International University (VIU), Italy. His research interests deal with disaster relief, climate change, humanitarian action and sustainability. Lucatello has worked as consultant to many United Nations agencies, including UNEP, UNODC, UNIC and OCHA, as well as the Inter-American Development Bank (IADB). He is author of more than ten books and many articles published in

## **Global Climate Change Finance**

Written by Simone Lucatello

English, Spanish, and Italian. He currently coordinates the Mexican Research Network on International Cooperation and Development (REMECID).