

Private Sector Finance and Climate Change Adaptation

How can voluntary private finance support adaptation in developing countries?

Key Findings

- **The private sector is already an important source of climate finance.** Multilateral and bilateral development banks, for instance, issue generic bonds as a means of raising private finance from capital markets, some of which is then used to support projects that deliver climate change outcomes. However, the major focus of the private sector to date has been on supporting mitigation activities.
- **There is an emerging market for raising new finance from the private sector for adaptation.** Recent signals from large institutional investors suggest that further capital could be raised specifically for adaptation activities, provided the right investment products are available.
- **There are various ways in which private finance can support adaptation.** Debt, in particular, can be used as an enabling instrument for both publicly and privately initiated adaptation, including direct project lending and credit lines to local finance institutions. However, to reach the poor, finance may need to be delivered in new ways, including through microfinance products.
- **Voluntary private finance for adaptation is not new and additional.** The forms of finance that can be made available via the private sector to support adaptation – predominantly debt and equity – do not necessarily meet the ‘new and additional’ criteria of developing countries. However, it can fill the gap if the overall scale of public finance for adaptation remains insufficient.
- **Private finance will not be distributed evenly,** but instead heavily concentrated in large emerging economies and resource rich countries. Public finance, and development cooperation more broadly, therefore have crucial roles to play in ensuring adequate finance is available to those countries not benefiting from private flows, and in creating conditions that leverage more private finance.

Private sector roles supporting adaptation in developing countries

The impacts of climate change will be felt most heavily in developing countries, where changes in temperatures, rainfall patterns, sea level and storm conditions will exacerbate existing livelihood risks and create new ones. Possible adaptive responses to reduce vulnerability to climate risks can encompass a very wide spectrum of activities, from addressing underlying drivers of vulnerability through poverty-reduction strategies and economic diversification, to buffering against specific climate change impacts such as by the construction of flood defences.

Across this spectrum, the private sector could take on various roles that contribute to the UNFCCC’s aims¹ of *scaling up*, *optimising* and *shifting* adaptation finance. While ‘climate proofing’ of private sector investments is important, the role of the private sector is not limited to managing its own climate exposure. There are also emerging business opportunities in helping others to reduce their climate risks, for example:

- generating new finance, to help fill the massive deficit in available funds for adaptation;
- designing, manufacturing and distributing goods and services that can help reduce the vulnerability of individuals and communities to climate change; and,
- providing risk management tools, including insurance.



¹ See the United Nations Framework Convention on Climate Change report, *Investment and Financial Flows to Address Climate Change: An Update* (Technical paper, FCCC/TP/2008/7, November 2008).

Case study: World Bank/SEB 'Green Bonds'

In 2008, Swedish Bank SEB partnered with the World Bank to issue 'Green Bonds'². SEB initiated the collaboration in response to demand from Scandinavian investors, predominantly pension funds and insurance companies, who sought a product into which they could channel very large sums of investment earmarked specifically

for climate change measures.

By November 2010, four World Bank Green Bond issues had raised around USD 1585 million from both private and public investors. SEB indicated that around 20 per cent of the initial bond release was set aside specifically for adaptation projects. In general, the World Bank will use adaptation

funds to provide loans for:

- flood protection (including reforestation and watershed management);
- food security and stress-resilient crops; and,
- sustainable forest management and 'avoided deforestation'.

Of these different roles, insurance has received the most attention. So far there has been relatively little focus on other forms of private sector engagement with adaptation. The question of how the private sector can *generate new finance*, in particular, is important not only because there is a major shortfall in funding available to developing countries for adaptation but also because new finance will create market conditions that can attract private sector innovation in the development and deployment of goods and services that reduce vulnerability.

The need for new adaptation finance

Adaptation finance remains a central issue in UNFCCC climate negotiations. The main political outcome of COP15 negotiations in 2009, the Copenhagen Accord, included a commitment from industrialised countries to scale up finance to developing countries. This included a commitment to mobilise USD 30 billion over the period 2010–12 and USD 100 billion a year by 2020. The text of the Accord indicates this “*will be sourced from public and private, bilateral and multilateral, including alternative sources of finance*”. At this stage there is a lack of clarity on many important issues, including how different sources and channels of finance will be drawn on and interact.

What is certain is that any agreed public finance is unlikely to ensure sufficient resources for developing countries for two reasons. First, because the effects of climate change cannot be precisely predicted, neither can the costs of adapting to these effects, so any amount agreed now will prove inadequate if costs are higher than predicted. Second, any finance-generating measures introduced as taxes of some kind (such as for the Adaptation Fund or auctioning of emission allowances under carbon trading schemes) are subject to market volatility and therefore ultimately unpredictable in scale.

As a result, additional finance for adaptation may still be required. Given the huge financial flows internationally that are generated and governed by the private sector, the potential of private finance to serve this unmet demand should be considered. Indeed, the Bali Action Plan, in identifying the need for enhanced action on adaptation, prompts such consideration. The focus here is on the possible *voluntary* actions of the private sector, that is, supporting adaptation for commercial reasons rather than where the private sector is tapped to create public finance flows.

Drawing on capital markets to raise new finance for adaptation

In recent years there has been discussion around the potential for governments and financial institutions to issue 'climate bonds' in order to raise new finance from the private sector to support climate change measures. Bonds are an investment product used widely by both the public and private sectors to raise capital to fund major projects or be used for lending. Large institutional investors such as pension funds, insurance companies and banks commonly purchase bonds as a key, low-risk component of their investment portfolio.

International finance institutions active in climate financing already issue bonds in the capital markets to generate new finance for climate-related lending activities as a supplement to their public funds. For example, the European Investment Bank (EIB) raised EUR 3bn from capital markets for its *Facility for Energy Sustainability and Security of Supply*, established in 2007. Private investors are therefore already an important source of climate finance, albeit unknowingly when they are investing in generic bonds.

There is, however, potential to go further. Growth in so-called 'responsible investment' funds offers investors the ability to deliberately channel finance towards or away from certain activities. Here, climate change has emerged as a key theme (see box, above) and this emerging market could prove a fruitful source of new finance *specifically for adaptation* if the right investment products are made available.

How can private finance be used to specifically support adaptation?

To date, wider discussion of climate bonds has focused overwhelmingly on their potential to support *mitigation*, and the few existing climate bond products do indeed predominantly favour activities that reduce greenhouse gas emissions. This raises a question of the extent to which the capital market can specifically finance *adaptation*. Since commercial finance can be used³ for equity as well as for debt financing (either directly to projects or as credit lines to local commercial financial institutions), what kind of adaptation activities could attract equity or debt investors?

For equity, the project must have some fixed asset component and generate financial returns that can be captured through ownership, either a revenue stream or an increasing owner-

2 <http://treasury.worldbank.org/cmd/htm/WorldBankGreenBonds.html>

3 It can also support venture capital investments in new technology, although this is arguably less of a priority in relation to adaptation since many of the technologies and practices needed to reduce vulnerability to climate impacts are already available.

ship value (ideally, both). Many adaptation activities such as flood prevention infrastructure, health programmes and national disaster planning will therefore not attract equity investors. They do yield economic benefits, but these accrue to the wider community and cannot be captured within the project itself. Some projects in the agriculture or water sectors might be suitable targets for equity, although supporting adaptation through equity may otherwise be difficult.

Debt, however, can support a much wider range of activities. Viable lending requires that the recipient has access to a revenue stream that can repay the loan, but not necessarily that an individual project has a revenue stream attached. In the case of the public sector, lending may be supported against future tax revenues. From a public authority's perspective as borrower, where the potential costs of not financing flood prevention infrastructure or of not undertaking disaster preparedness planning outweigh the costs of the project, there is an economic case to seek loan finance. Whether loans to public authorities are attractive investments for the private sector will vary from country to country. It will be influenced, for instance, by the perceived ability of the recipient government to raise funds from its tax base to repay the loan.

In the case of adaptation actions initiated privately, for example a farmer deciding to switch crops or upgrade an irrigation system, potential borrowers in developing countries could be much smaller (in financial capacity) than private finance institutions are accustomed to. In such cases, private finance can instead provide credit lines to local finance institutions, including microfinance institutions. Amongst poorer communities, the borrower's creditworthiness is likely to be the major limiting factor. Private finance could conceivably be delivered at concessional rates ('soft loans') in cases where investors are seeking social and/or environmental outcomes as well as financial outcomes. Concessional finance can also be created by blending public and private finance through multilateral or bilateral finance institutions. However, structuring lending to offer concessional finance may not always be attractive to the private sector.

Front-end loading of public pledges

Another way in which private finance could support adaptation is by enabling pledges of future adaptation funding from Annex I countries to be converted into immediate finance. This means the funds can be distributed to developing countries straight away. This model has already been used in the area of public health by the International Finance Facility for Immunisation (IFFIm). Private finance is raised through bonds, and long-term government pledges for immunisation programmes are used to repay investors once the bond matures.

Making pledged finance available earlier – referred to as 'front-end loading' – could support activities where swift implementation would be beneficial, such as the urgent needs identified by the Least Developed Countries (LDCs) in their National Adaptation Programmes of Action (NAPAs), as well as capacity building which enables more effective adaptation responses to be developed over time.

What is needed to increase private finance for adaptation?

The private sector understands what global mitigation objectives will mean for investment opportunities, however there

Limitations of private finance

Private finance has its limitations. For one, there are questions around whether finance delivered from the private sector meets the 'new and additional' criteria of developing countries. When delivered as commercial debt, this is doubtful. This does not of itself mean that private finance has no role to play, but rather that this role must be in addition to new flows of public finance.

Private finance to the developing world is also heavily concentrated, both regionally and sectorally. For example:

- In 2004, roughly 90 per cent of private investment flow into Asia went to China (67 per cent), India (14 per cent) and Malaysia (9 per cent) combined⁴. This means many of the LDCs may not see significant private finance. However, fostering private sector engagement with commercial lending opportunities in larger emerging economies might mean that more public finance can be directed to countries with a lower capacity to access debt.
- According to the World Bank's Private Participation in Infrastructure database, in Sub-Saharan Africa between 1990 and 2008 private investment in telecoms (USD 61 billion) and transport (USD 11 billion) swamps investment in the water and sewerage sector (USD 266 million). Of those investments in water – which is a key sector from an adaptation perspective – there were only 2 "greenfield" projects.

Private finance is also limited to being delivered via commercial instruments, namely debt and equity.

is considerably less awareness of opportunities associated with adaptation. By illuminating for *investors* the importance of adaptation from social and environmental perspectives, financial institutions could attract new 'responsible' capital. As the Green Bonds case illustrates, informed investors can drive new products and new investment strategies.

Along with raising investor awareness, there is a need to improve the understanding of *financial institutions* about emerging business opportunities, to change the perception that adaptation is difficult to support with commercial finance.⁵ The UNFCCC and others can play a facilitating role by illuminating ways in which adaptation can be a viable private investment target, and by making concrete adaptation projects clearly visible to the finance sector.

With sufficient awareness and buy-in from investors, opportunities arise to test out new products and approaches, as well as new ways of delivering finance to new markets, including via micro-finance schemes.

4 Source: Tomonori, Sudo (2009) Greening Recovery. Background Paper for Conference on the "Impact of the Global Economic Slowdown on Poverty and Sustainable Development in Asia and the Pacific", 28-30 September 2009, Hanoi, draft, 9 September, 2009.

5 Even the World Bank, which administers lending for adaptation under the Green Bonds initiative and which acknowledges that lending to the public sector in developing countries will be needed for climate adaptation, suggests that the role of private finance will be limited (See Chapter 6 of the bank's *World Development Report 2010*).

On the demand side, adaptation needs must be made more transparent to potential funders. The finance sector has relatively little experience in identifying and targeting adaptation activities, so it could be useful initially to partner with organisations that have considerable experience in development projects and have the networks and relationships needed to connect with adaptation projects. The multilateral and bilateral development banks could play this role, at least until private institutions themselves become more familiar with the markets they are targeting. Over time, private actors could develop experience and take on this role, as they do for traditional markets.

This policy brief is based on *Adaptation Finance under a Copenhagen Agreed Outcome*, by Åsa Persson, Richard J.T. Klein, Clarisse Kehler Siebert, Aaron Atteridge, Benito Müller, Juan Hoffmaister, Michael Lazarus and Takeshi Takama, published by the Stockholm Environment Institute (October 2009).



Recommendations

Raising awareness among the investor community

Investor interest in directing finance towards reducing climate risks could be stimulated by raising awareness among large institutional investors of the adaptation needs of developing countries and the introduction of the right investment products, for instance “climate adaptation bonds”.

Raising awareness among finance institutions

The UNFCCC, along with actors such as the UNEP Finance Initiative, can play an important role in raising awareness within the private finance sector of what adaptation to climate change means, both on the ground in developing countries and in commercial terms. It would be useful to map out some tangible case studies of how commercial finance can be used for adaptation measures, articulating the characteristics that will be of most interest to financial institutions. This would help stimulate the development of investment products tailored towards adaptation, and capitalise on the willingness of major investors to support adaptation.

Bridging the gap between finance and projects

There is a need for making potential adaptation projects clearly visible to funders, including those adaptation needs already articulated by developing countries (through NAPAs, for instance). The lack of a “project pipeline” with which private finance can engage will otherwise act as a barrier. This can be facilitated by multilateral and bilateral finance institutions, who have experience in financing projects in developing countries, as well as by developing countries themselves. The private finance sector may need to test new financial models in order to find ways of channelling finance to typically smaller recipients in poor regions.

Using public finance to help spread private finance more evenly

Using public finance for country risk guarantee schemes could help re-direct private finance towards countries that currently do not receive significant private flows.

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