

1. Opportunities

(a) What opportunities do you see today for scaling up your organization's financing in mitigation¹ and adaptation²?

In broad economic terms there are limited opportunities for organizations to finance mitigation and adaptation per se. If one is to focus on mitigation of GHG emissions in the power sector, the opportunities are tangible, yet insufficient. In isolation, investment in the renewable energy sector jumped 32% in 2010, to a remarkable \$187 billion (excluding large hydro) or a total of \$211 billion. Renewable power capacity increased to 8% of total world electricity capacity in 2010. Nonetheless, in terms of electricity generated (given that some renewable energy resources are intermittent in nature), the share amounts to 5.4% of total power generated.³

The allocation of resources into regionally focused renewable energy funds has been dispersed, where successful examples are beginning to emerge in many countries driven by policy and regulatory frameworks. The opportunities exist but are relatively limited if compared with other sectors. For example, compared with other sectors, investment in renewables was equivalent to the value of the global luxury goods market (\$234 billion), a third of the global advertising market (\$640 billion) and a quarter of the value of OECD countries oil imports in 2010 (\$880 billion).⁴

A direct comparison to the fossil fuel sector indicates that total investment in fossil fuel capacity investment (into new power plants) was \$219 billion. Further to capacity investment, the fossil fuel energy sector consists of upstream oil and gas allocations too, where the investment was of the magnitude of \$470 billion in 2010.⁵ Additionally the sector is composed of billions of US dollars in investment into coal mines, conventional gas reserves and shale gas annually; all non renewable natural resources that impact on GHG emissions.

Further to this, stock market valuations of CNN Global 500 and the Financial Times Global 500 place fossil fuel companies at the top. Royal Dutch Shell, Exxon Mobile, BP, Sinopec Group and China National Power are five of the largest companies in the world, which compose the top 10 of the global economy. In the list of most profitable companies last year one also finds: Gazprom in second place, Exxon Mobil in third, Royal Dutch Shell in fifth, Petrobras at eighth and China National Power at seventeenth.⁶ The Financial Times Global 500 market values and prices Exxon Mobil, PetroChina, Royal Dutch Shell, Petrobras and Chevron all within the top 10 too.

This would indicate that shifting financing to a low carbon growth path needs strong economic signals and incentives. With such signals and incentives, financing mitigation and adaptation becomes much more achievable. But in the current world that is incentivised by profits generated based on fossil fuels, opportunities to invest in mitigation and adaptation are marginal.

In relation to the sector that has been directly developed as a result of the international climate regime, the carbon market, there are currently very narrow opportunities considering the persistent uncertainty that remains as to the international climate regime post 2012. According to the World Bank, "In 2010, the market volume and value of project based transactions fell by almost 50 percent from the previous year, to reach a total value of approximately \$1.5 billion. The two-digit annual decline in the size of the market in the last

¹ Reducing greenhouse gases and/or implementing strategies to capture and store carbon

² Measures to reduce the vulnerability of natural and human systems to climate change

³ UNEP, Global Trends in Renewables Energy Investment, 2011 Available at: <http://fs-unesp-centre.org/publications/global-trends-renewable-energy-investment-2011>

⁴ UNEP, Global Trends in Renewables Energy Investment, 2011

⁵ International Energy Agency, World Energy Outlook, 2010

⁶ CNN Global 500, 2011

three consecutive years (12 percent in 2008, 59 percent in 2009, and 46 percent in 2010) led the primary CER (pCER) market to its record low value since the entry into force of the Kyoto Protocol in 2005".⁷

(b) What are the possible avenues for bringing private sector finance into the GCF, for instance through climate bonds raised on the capital markets?

'Green' or 'climate' bonds need to be underpinned by real cash flows and by themselves cannot overcome the investment gap. Before being able to value a 'green' or 'climate' bond and consider any allocation (investment), the following questions would need to be answered:

- What are the assets backing the cash flow?
- How are the coupon and principle repayments calculated?
- What is the capital structure?
- What is the credit risk of the issuing institution; is it explicitly government backed?
- What is the size of the issue? What is its duration? What is the likely liquidity of the bond? Will the issuer support a market in these instruments? Is a yield curve to be created or will the issuer re-issue the same maturities over time?

(c) What are the opportunities for the GCF to support and leverage private sector investment in climate change mitigation and adaptation?

The GCF can have an important role in providing concessional loans or risk reduction mechanisms, such as credit enhancements, for developing countries. This role is, however, secondary in importance to domestic policies and international incentive structures that create real economy signals. To attract private sector investment in climate change mitigation and adaptation, decision makers must ensure that the design of the GCF has economic incentives as one of its primary considerations.

The development of the GCF is an opportunity to successfully leverage significant quantities of private capital through the introduction of new and innovative mechanisms. Creating a mechanism that can support action-based payments (subsidies) can generate a forward price for emission reductions through the use of fixed prices and reverse auctions, enabling significant private investment today while minimising costs and maximising the leverage and effectiveness of public funds committed to the GCF.

In essence, the GCF needs to have the flexibility to implement a mechanism that will provide a subsidy for action that is measured, reported and verified using CO₂ equivalent metrics. This type of mechanism sends clear and real economic signals to private sector actors by enhancing the revenue stream of mitigation actions/projects – it creates a forward price curve for emission reduction actions.

Different sectors would need support in different ways. Direct subsidies for renewable energy generation have proven successful and are the favoured mechanism by most if not all countries. Certification and tradable credits are being developed to incentivise action in energy efficiency in industrial sectors and power sectors in many countries too. Consequently the GCF would be redundant in its conception if it does not have the facility to supplement existing and new mechanisms and/or target underdeveloped sectors in a dynamic and evolutionary manner.

⁷ The World Bank, State and Trends of the Carbon Market for 2011 page 50. Available at:
http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/State_and_Trends_Updated_June_2011.pdf

2. Barriers

(a) Risks: In relation to investing in climate change mitigation and adaptation, which commercial, technological and political risks do you see as most difficult to deal with? What risks are associated with the overall investment environment? Which risks are better managed by the public sector and which by the private sector?

Political risk (understood broadly as including policy and regulatory risk) is out of the control of investors; hence it is impossible for private sector to manage such risk.

In this context, there is currently a lack of confidence from investors that countries are serious about delivering the goal of “reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2 degrees Celsius” as agreed by Heads of State and contained in the Copenhagen Accord and further established in the Cancun Agreements. Uncertainty around the framework of the international climate regime makes building a credible case for investment into climate change projects very difficult.

We note that national commitments have been made by participating governments to the UN process. While domestic legislation is the critical determinant of the level of capital flows into areas such as renewable energy and energy efficiency, a rules-based international climate change regime is critically important. First, it would signal serious international resolve to tackle climate change. Second, it will promote confidence and a higher level of certainty that domestic commitments will be delivered. Third, it would provide a forum and an institutional basis for governments to assure that more ambitious national action will be taken in order to meet the agreed long term objective as to hold the increase in global average temperature below 2 degrees Celsius. Fourth, it would build on the institutions and institutional frameworks necessary to provide transparency and comparability of national actions on climate change in order to assess progress towards meeting the long-term objective.

At the national-level, uncertainty, lack of clarity, and changes around policy and regulation in both developed and developing countries that adversely affect projects' viability make allocating capital into low carbon projects difficult. The lack of established regulations that provide clarity on how particular policies will be implemented and how they will evolve over time adds to the political risk.

Technological risk can be in many instances managed. For individual projects the commercial viability of proven technologies will be assessed as they are in other types of investment. Risk will be specific to the technological application, sector, region, and so on. In many instances the risks around technologies relate to information on costs, performance and track record of the technology in question.

As to commercial risks, it is also difficult to generalise as they are dependent and specific to markets, management teams and counterparties. However, they can be mitigated and managed through appropriate assessment and structuring of the investment.

(b) Access: Is there a lack of long-term or other necessary financing for climate change projects in the markets where you operate? What are the reasons for this lack of access to finance?

With regard to renewable energy, the lack of access to finance is at the earlier stage of projects, when they are in development. There is a significant dearth of development capital in many countries, because development risks are high and often there is no certainty that key contracts will be achieved, even if the project can be shown to be viable. This is not easily solved, because a) there is a risk of losing the entire investment capital, and b) even 'development' financial institutions (e.g. ADB) cannot take these risks. Early stage development finance must therefore come from local entrepreneurs and corporations, but many other sectors will offer higher returns, with less risk and shorter paybacks.

Energy efficiency projects are hampered by many issues, such as location, asset ownership, access to real third party revenues, provable measurability of savings, size of the project, importance energy efficiency investments versus growth investments, importance of energy efficiency versus underlying asset (e.g. a change in product manufacture in the underlying facility, reducing energy usage and wiping out returns on investment for the energy efficiency investor). These combined risks often make energy efficiency projects very high risk in nature for third party financiers (banks and third party equity investors)

Bank finance is typically a problem for energy efficiency. It is not readily available on a project basis (limited recourse) because projects cannot be structured in such a way as to provide appropriate certainty and security to banks. Banks would like to finance energy efficiency projects, but are typically unable to do so (e.g. if the project involves a cost saving, a company guarantee would be required and then the lending would be about the credit rating of the asset owner, not the economics of the project). Third party equity faces similar issues, but likely without access to similar level guarantees.

As currently structured, the CDM is not a good driver of energy efficiency projects because many 'large scale' projects have higher returns than CDM financial additionality would allow, but proving investment barriers is a very high hurdle and adds substantially to development and implementation times. Further, 'large scale' for CDM may not be 'large scale' for asset owners, as the economics are minimal when compared to overall asset investment and production.

(c) Economics: Do many climate sectors/projects you deal with lack financial viability? How are adaptation and mitigation projects different from the financial perspective?

Many renewable energy projects require subsidy, or higher power tariffs, in most countries to be competitive (particularly wind and solar), with the exception of some opportunities (e.g. good quality resource small hydro projects).

Given appropriate guaranteed power prices and resource feasibility assessment, renewable power projects are some of the easiest types of assets to prove financially viable. Renewable energy have relatively limited scope to move over time, other than with the understood ranges of resource probability, all capital costs are upfront and operating costs are low.

For third party investors, energy efficiency and waste projects require very high returns to be considered viable, because i) paybacks must be short given the typically very high risks involved in seeing a return on investment and ii) the projects are not core to asset owners, substantially increasing the likelihood of failure in implementation, operation, or due to an impact or change of core business practice. An asset owner will not guarantee acting in the interests of an energy efficiency project if it could hamper a revenue generating arm of its business.

(d) Other: What other barriers prevent you from financing climate projects?

Inefficiency, short term structure and lack of pricing and demand predictability for emissions reductions credits generated in emerging markets. Failure of carbon market to deliver on early promise in emerging markets has led to scepticism and fatigue from many asset owners.

3. Responses

(a) Risks: In what ways could the GCF most effectively help the private sector overcome risks to climate investments? What risk sharing instruments could the GCF support (e.g., partial credit guarantees, local currency hedging, subordinated financing structures and other public-private instruments)? What design elements should be considered for the GCF to ensure the most effective implementation of such instruments?

Risk-sharing instruments such as partial credit guarantees, local currency hedging, subordinated financing structures and other public-private instruments are all very useful tools to help mitigate investment risks. The GCF should have the flexibility to use these types of structures to help private sector overcome risks. In the bigger picture, decision makers must ensure that the design of the GCF has economic incentives as one of its primary considerations.

Whilst credit guarantees are beneficial for securing commercial bank finance, the underlying project needs to be viable for there to be interest. If the underlying project is viable then credit guarantees are of lesser importance, though still attractive if at the right price and for projects where sponsors have less of a track record.

Local currency hedging of debt is readily available from banking partners. It will be of interest to some equity investors, though possibly such equity providers may not be likely to be substantial providers of capital for emerging markets. But credit guarantees and local currency hedging are useless if the power price is not high enough to build a renewable energy project.

However, guarantees might have more impact for energy efficiency projects, where the risks in implementation and operation are far higher than for renewables energy projects. Increasing the returns on projects (making them more economic as to compete with other alternative investments) is the key aspect that would drive investments. A guaranteed appropriate power price for renewable projects is the single most important financial support that a project investment can have. Beyond that, given an appropriate natural resource, equity and debt will follow well-structured, bankable projects.

Similarly, higher revenues for energy efficiency projects, for instance through certainty on emission reduction credit eligibility and a floor price for carbon, could increase investment into such projects. The risks of certain energy efficiency projects might be acceptable on a 2 year payback, but not for 5 years.

(b) Access: What options could the GCF consider to improve access to finance for climate actions, particularly for those most vulnerable to the adverse impacts of climate change, including the least-developed countries and small island states?

(c) Economics: What are the options for the GCF to improve project economics and which do you feel would be the most cost-effective? What are the options for lowering the cost of capital for projects and what impact could they have on project economics? How could the GCF enhance or otherwise improve revenue streams?

The cost of capital has been seen to drop naturally for renewable energy once sectors mature and the risks are understood in particular countries. Therefore, the biggest driver of lowering cost of capital would be to achieve more rapid roll-out of proven technologies in countries where they are not yet accepted as 'proven' technologies. The yield requirement for equity investors will drop as the sector moves from being the domain of entrepreneurs and an early stage niche, to being utility and financial investors understanding the level of predictability available from certain renewable projects.

Guaranteed revenues in hard currency would drop the cost of capital as bank debt would be cheaper. Feed-in-tariff support for renewables has proven very successful as a support mechanism. Energy savings, or emissions reductions credits support for energy efficiency is also a successful approach.

The GCF needs to have the flexibility to implement a mechanism that will provide a subsidy for action that is measured, reported and verified using CO2 equivalent metrics. This type of mechanism sends clear and real economy signals to private sector actors by enhancing the revenue stream of mitigation actions/projects – it creates a forward price curve for emission reduction actions.

(d) Other: What other actions could be undertaken by governments or supported by the GCF to improve the conditions for climate investment (e.g., project development support, institutional strengthening)?

To offer a pool of development capital to be accessed for early stage project investment to increase the breadth of projects being taken through feasibility to bankability. Such capital is high risk, but necessary to provide enough projects in many emerging markets countries to ensure growth in penetration.

4. Engagement

(a) How could the GCF engage effectively with the private sector in developing and implementing instruments to support private sector climate investments?

The GCF should have the mandate to consult directly with the private financial sector. The engagement should be transparent, objective and permanent.

Such consultation should be aimed at understanding the different levels of support that might be needed for different technologies in different countries and regions. Establishing benchmarks for energy efficiency opportunities in key industrial sectors, by country, that would enable a move towards guaranteed emission reduction credits, energy certificates/credits or action based subsidies.

(b) Would a dedicated GCF window for the private sector be useful?⁸ If so, how would this window operate differently from the rest of the fund?

Leveraging private financial flows is central to responding to the challenge of mobilising adequate financial flow for reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2 degrees Celsius. It is therefore important to integrate a private sector opening or space in all windows created by the GCF. As can be seen by the responses to this questionnaire, the mechanisms and support that will leverage private sector investment are multiple and varied, hence a strong need to integrate the flexibility to engage and support the development of private sector projects in all windows that the GCF may conceive of. Dedicating a specific window for private sector could be complementary but should not be seen as the main focus for private sector engagement or leverage.

(c) Of the current multilateral fund models (Climate Investment Funds, the Global Environment Facility, etc), which ones are working well for the private sector? What concrete improvements could be implemented to increase private sector engagement in climate change action through the GCF?

The Carbon Markets & Investors Association (CMIA) is an international trade association representing companies that finance, invest in, and provide enabling support to activities that reduce emissions. CMIA's membership accounts for an estimated 75 per cent of the global carbon market, valued at USD 120 billion in 2010. Solely representing organisations that provide services to and invest in the environmental sector, membership does not include any entities with compliance obligations under cap-and-trade schemes. This results in a unique advocacy platform with emphasis on the environmental integrity of market mechanisms and climate change policies.

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⁸ A private sector window could include a dedicated governance structure and special approval, contracting and reporting procedures.

