Deutsche Bank Research

Beyond Cancún

January 20, 2011

Market opportunities trump multilateral discourse

Special issue

Despite low expectations, the UN climate change negotiations in Cancún made important progress. In fact, the public discussion in Cancún confirmed several conclusions we emphasised after Copenhagen a year ago: national policies are the key drivers of action; emerging markets are becoming increasingly important contributors towards emissions reductions; and the private sector plays a critical role. In the lead-up to Cancún, a number of countries developed robust policy frameworks, including clearly defined national targets, strong incentives and integrated plans to achieving these targets. The private sector has responded, with investment having surged by 30% in 2010 to a record USD 243 bn.

With regard to the future viability of green investments, three aspects are very important:

- First, deep, liquid international carbon markets are critical to mitigating climate change at lowest cost.
- Second, the Green Climate Fund whose set-up was agreed in Cancún has the potential to scale up significantly the resources available for adaptation and mitigation in the developing world.
- Third, the UN High Level Advisory Group on Climate Change Financing identified a wide variety of sources that could generate USD 100 bn a year by 2020 for climate change mitigation and adaptation in the developing world. Now, it is up to national governments to implement the group's recommendations.





Author Caio Koch-Weser* Vice Chairman, Deutsche Bank Group +44 20 754 19862 caio.koch-weser@db.com

*The author would like to thank contributors to the paper: Lucy Cotter, Mark Dominik, Mark Fulton, Eric Heymann, Tim Jordan, Tobias Just and Sabine Miltner

Editor Tobias Just

Technical Assistant Angelika Greiner

Deutsche Bank Research Frankfurt am Main Germany Internet: www.dbresearch.com E-mail: marketing.dbr@db.com Fax: +49 69 910-31877

Managing Director Thomas Mayer

	Introduction
	Despite low expectations, the UN climate change negotiations in Cancún made important progress thanks to decisive Mexican diplomacy and a renewed conviction that reducing emissions can drive green growth. Reflecting on the outcome of Cancún, two results clearly stand out: first, the collaborative and inclusive – yet decisive – approach by the Mexicans that gave multilateralism another chance; and second, a new narrative of emissions reductions as an important driver for green growth.
National policies are the key drivers of action,	Indeed, there is a sense that a prosperous, low-carbon economy can become a reality. Countries are increasingly seeing energy conservation and efficiency as making economic sense. Similarly, shifting energy production to clean and renewable sources is increasingly viewed as enhancing energy security. Such moves are in countries' self-interest, and allow the focus to shift from burden sharing to opportunity creation.
but targets may not be ambitious enough to limit global warming to 2°C	In fact, the public discussion in Cancún confirmed several conclusions we emphasised after Copenhagen a year ago: national policies are the key drivers of action; emerging markets will become important contributors towards emissions reductions; and the private sector plays a critical role. The Cancún Agreements in fact legitimised the bottom-up approach developed in Copenhagen, whereby individual countries' pledges are the key building blocks for future reductions. This is a fundamental departure from the Kyoto Protocol that set a global reduction target and countries' contributions were the outcome of negotiations. The risk of such a bottom-up approach is, of course, that national targets are not ambitious enough to limit warming to 2°C. Based on the most recent UNEP analysis, the emissions gap from a 2°C pathway is estimated at at least 5 Gt in 2020 under the most aggressive emissions pledge scenario examined in the report.
Green Climate Fund should leverage private investment	After the UN climate conference of Copenhagen in late 2009, countries representing 80% of emissions made emission reduction pledges. They also agreed to meet certain transparency standards, the stringency of which for developing countries depends on whether or not the transaction receives international financial support. In this context, the agreement to create a Green Climate Fund as one mechanism to channel funding from developed to developing countries was an important milestone for continued trust building among nations. It will be crucial that the design of the fund will allow for maximum leverage of private finance in order to generate the large investment flows needed to support scale-up of renewables in developing countries.
	multiple paths to reducing emissions. International emissions trading remains an important avenue but – unlike under the Kyoto Protocol – is no longer the primary focus of international action. At the same time, although Cancún did not reach an agreement on a second commitment period under the Kyoto Protocol, it was agreed that the Clean Development Mechanism and Joint Implementation will continue to play a role in meeting Annex 1 countries' future targets. Against this background, it is noteworthy that domestic carbon markets have moved up on the agenda for policy discussion in a number of key emerging market economies, especially China and Brazil.

Significant progress in identifying sources for USD 100 bn of financing by 2020

Green Climate Fund to channel funding from developed to developing countries is an important milestone, ...

... but it must be set up to allow maximum leverage of private finance

Increased transparency for national mitigation measures

Key developments

In the year between Copenhagen and Cancún, significant work took place under the ægis of the UN High Level Advisory Group on Climate Change Financing (AGF) towards identifying new and existing sources of funding to achieve the goal of jointly mobilising USD 100 bn per year by 2020 for climate change mitigation and adaptation in developing countries. The AGF found that it was "challenging but feasible" to meet the goal, and that "funding will need to come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance, the scaling up of existing sources and increased private flows."

In Cancún, the Ad Hoc Working Group on long-term Cooperative Action under the Convention agreed to establish a Green Climate Fund that would be designated as an operating entity of the financial mechanism of the Convention. The Green Climate Fund is likely to become one of several key delivery channels for the USD 100 bn of annual financial flows from developed to developing countries that are expected by 2020. The fund will be governed by a board of 24 members, with equal representation from developing and developed country parties. Perhaps due to its long-standing experiece, the World Bank has been appointed as interim trustee of the Green Climate Fund, and will be responsible for administering the assets of the Green Climate Fund in accordance with the decisions of the fund's board. The interim trustee will be subject to a review three years after the fund becomes operational.

The Executive Secretary of the UNFCCC secretariat has been invited to appoint a transitional committee with 40 members to oversee the fund design and development.

Enhancing transparency

The Cancún Agreements include a set of decisions that aim to increase the transparency of national mitigation measures. According to the agreements, reporting on mitigation actions, on their effects and on the support they received should be enhanced. Developing countries will submit biennial reports that include updates of national greenhouse gas (GHG) inventories. The Cancún Agreements distinguish between those mitigation actions that are supported internationally and such mitigation actions that are supported nationally only. Whereas both kind of mitigation actions will be measured, reported and verified domestically, only the former are additionally "subject to international measurement, reporting and verification" (MRV).

The Cancún Agreements also include a decision to conduct a "process for international consultations and analysis" (ICA). Biennial reports in the Subsidiary Board on Implementation (a board of the IPCC) are planned to increase transparency of mitigation actions. These reports should be formulated in a manner that is "non-intrusive, non-punitive and respectful of national sovereignty". One can interpret the ICA process as a weaker form of international MRV, even though it is not yet clear how the ICA process will work in practice.

The decision to work towards peer review of each country's mitigation efforts is a major breakthrough in the negotiations and will help build confidence between developed and developing countries.

Key countries taking the lead nationally and regionally, generating attractive investment opportunities	Greater transparency will also support private investment. Investors demand transparent, long-term and certain regulations governing carbon emissions, renewable energy and energy efficiency. In short, investors look for policy regimes that exhibit "TLC".
	Advances in selected countries
	In the lead-up to Cancún, a number of countries developed robust policy frameworks, including clearly defined national targets, strong incentives and integrated plans to achieving these targets.
Germany's ambitious targets	In Europe, Germany is among the leaders regarding the ambition of its targets on emissions reductions (40% from 1990 levels by 2020) and renewable energy (potentially achieving 100% by mid-century) and is noted as an early adopter of key supporting climate policy mechanisms such as emissions trading and advanced feed-in tariffs (FiTs). There have been tangible benefits from Germany's FiT and other climate legislation. The country saw a dramatic increase in solar PV installations from 2008 to 2009, and is expected to have installed a record annual capacity in 2010, while costs per watt fell dramatically. As a result, FiT for solar photovoltaic will be reduced over the next few years as this energy source is coming closer to grid parity.
UK going greener	The UK government has reaffirmed its commitment to climate and renewable energy policy by upholding the country's ambitious emission-reduction target of 34% from 1990 levels by 2020 and renewable energy target of 15% in UK energy consumption by 2020. In addition, key incentive policies such as the introduction of a FiT scheme and a new renewable heat incentive (RHI) scheduled to come into effect in June 2011 have the potential to position the UK as a leader in the renewable energy market and contribute to achieving its emission targets.
A dragon turning green(er)	China has been a rapid adopter of climate policies at every level. China has three important relevant national targets: 15% renewables in primary energy consumption by 2020; 20% energy- intensity reduction by 2010 from 2005 levels ¹ (with another 15-20% reduction to this being considered for the next Five-Year Plan); and 40-45% carbon-intensity reduction by 2020 from 2005 levels. In July 2010, government officials announced a potentially staggering plan for the Chinese clean energy industry. Officials stated that they are proposing a plan that would allocate USD 738 bn over the next decade to low-carbon energy sources as a means to develop cleaner sources of energy. China has also been studying a potential cap-and-trade and carbon tax system.
A new green evolution in India	India's target to reduce emission intensity by 20-25% from 2005 levels by 2020 is supported by national renewable targets such as its Solar Mission, targeting 20 GW of solar capacity by 2022. Some states have put in place particularly credible plans for achieving their own solar targets. The country is making progress on solar and wind energy under its national action plan on climate change and may exceed its target of drawing on renewable energy for 10% of its power needs by 2012. The government announced in December 2010 that it plans to quadruple its power generating capacity from renewable sources to 72.4 GW (16% of power generating capacity) by 2022.
	¹ According to the latest available data from the EIA, China was on track to achieve this target as of 2008, with energy intensity falling by 12% between 2005 and

2008.

January 20, 2011

South Africa has big plans	South Africa is pursuing an economy-wide approach to low-carbon development to achieve a 34% reduction in GHG emissions by 2020 compared to a "businness as usual" emissions growth path. It passed a draft national Climate Change Policy in November 2010 and expects a final policy by mid-2011.
Brazil trying to target deforestation	Brazil is demonstrating particular leadership in forest emissions reductions. Brazil committed to reducing deforestation in the Amazon region by 80% by 2020 at the Copenhagen conference in 2009, but the country's outgoing President Lula da Silva announced in October 2010 that Brazil would fulfil its deforestation-reduction commitment by 2016, four years earlier than expected.
Plans to introduce emissions trading in South Korea	South Korea announced to spend USD 36 bn in renewable energy by 2015 as part of efforts to reduce greenhouse gas emissions and is expected to present emissions trading laws to its parliament in 2011, and Taiwan is reportedly planning to spend roughly USD 1.5 bn on R&D and promoting renewable energy over the next 5 years.
Federal action is lagging in the US, while some states are moving	While many countries have moved decisively in the direction of bolstering their commitment to addressing climate change, Congress has been unable to pass federal legislation in the US. In the absence of new legislation, the Environmental Protection Agency has announced its intention to require Best Available Control Technology (BACT) analysis for greenhouse gases beginning this month. However, Congress may attempt to delay implementation of these measures for two years. At the state level, California, Texas and New Jersey continue to lead the US in policy development.
	Domestic carbon markets spread around the world
	During 2010 a number of developing countries mooted implementing domestic carbon markets as a way to strengthen their climate change policy framework. As part of its 12 th Five-Year Plan, China will aim to introduce a domestic carbon market. According to Xie Zhenhua, Vice Chairman of the National Development and Reform Commission, five cities and eight provinces are experimenting with low-carbon programmes, and over the next few years the country is likely to move faster to implement domestic carbon trading. Policymakers are embracing carbon trading not only as an efficient way to meet national climate policy objectives, but also to promote achievement of China's ambitious energy-efficiency targets.
Potential for new carbon markets	Brazil is also exploring implementing domestic carbon markets for key sectors, building on the country's success in international markets, but further development is required before the scheme can be implemented.
	Other countries that are moving towards domestic carbon markets include Australia, Japan, Indonesia, Mexico and Chile. It remains to be seen how ambitious the reduction targets will be. In the US, California is set to begin its cap-and-trade market in 2012.
	In support of these moves in developing countries, the World Bank launched the Partnership for Market Readiness in Cancún. It will provide a platform for sharing experience, fostering new and innovative market instruments, harnessing financial flows, and building market readiness capacity for countries to scale up their climate change mitigation efforts. The partnership aims for a total capitalisation of USD 100 m and is expected to become operational early this year.

cooperation

A renewed spirit of public-private

Public and private cooperation is key

Private investment is essential to reach the goal of mobilising USD 100 bn per year by 2020 for climate change mitigation and adaptation measures – and will be the *sine qua non* for shifting the many hundreds of billions of dollars of annual investment onto a low-carbon path.

The spirit of cooperation between the public and private sectors was strengthened in Cancún, in part due to the Government of Mexico's leadership. The public-private dialogue they organised alongside the UN negotiations represented an important step forward in informing the climate change negotiations of private-sector views.

In Cancún, the US pledged USD 300 m through OPIC (Overseas Private Investment Cooperation) to support private equity investments in the developing world. OPIC will issue a global renewable-resources call for proposals to private fund managers, with OPIC money targeted to accelerate investment in renewable energy, agriculture, land, water, sustainable forestry and efficient use of natural resources. The total amount invested on the back of the OPIC funds may reach USD 1 bn.

The UK also discussed the Climate Public-Private Partnership (CP3) fund that it has been developing in cooperation with the Asian Development Bank. The fund will provide private equity for low-carbon and resource-efficient infrastructure in Asia through private-sector fund managers who will be selected on the basis of their track record and expertise.

And Germany discussed its Global Climate Partnership Fund, which aims to mobilise about USD 500 m in investment off the back of about USD 100 m of first-loss equity capital from the German Environment Ministry and mezzanine debt from KfW. Deutsche Bank is the private-sector fund manager of the Global Climate Partnership Fund.

Areas for further work on the road to Durban

While there was significant progress on the climate change agenda in the run-up to Cancún, there is still considerable work to do. We look for further progress in a number of key areas between now and the UN negotiations in Durban in December 2011. There are three particularly important aspects:

First, deep, liquid international carbon markets are critical to mitigating climate change at lowest cost. While the Clean Development Mechanism and Joint Implementation have allowed for international trade of carbon offset credits under the Kyoto Protocol, there are a number of shortcomings to the current offsetting mechanisms that should be addressed. An important reform is the professionalisation and proper resourcing of the CDM Executive Board, which should include practitioners familiar with experience in carbon and energy markets. The lengthy wait times for issuance of credits need to be reduced, and approaches for crediting project clusters, programmes, or sectoral strategies should be adopted. Environmental efficacy of projects should of course be assured, in line with proper market functioning.

Leveraging public fund money with private capital in the US, UK and Germany

Reform of offset markets will be important for scale

Green Climate Fund is opportunity to streamline international climate finance system

Second, the Green Climate Fund has the potential to substantially improve the design of the international climate finance system and scale up the financial resources available to combat climate change in the developing world. We look for the speedy appointment of the 40-member transitional committee that is meant to design the fund. Since public funds can go much further if they leverage multiples of private funds, the committee should closely consult with private investors to optimise design of the fund.

On long-term finance, getting to the USD 100 bn mark is critical

Third, the AGF identified a wide variety of sources that could generate USD 100 bn a year by 2020 for climate change mitigation and adaptation in the developing world. Now, it is up to national governments to implement the group's recommendations. A Green Fund without real money behind it would serve only to reinforce mistrust and breed cynicism – we look for real progress on longterm finance between now and Durban.

Caio Koch-Weser (+44 20 754 19862, caio.koch-weser@db.com)

ISSN Print: 1612-314X / ISSN Internet and e-mail: 1612-3158

[©] Copyright 2011. Deutsche Bank AG, DB Research, D-60262 Frankfurt am Main, Germany. All rights reserved. When quoting please cite "Deutsche Bank Research".

The above information does not constitute the provision of investment, legal or tax advice. Any views expressed reflect the current views of the author, which do not necessarily correspond to the opinions of Deutsche Bank AG or its affiliates. Opinions expressed may change without notice. Opinions expressed may differ from views set out in other documents, including research, published by Deutsche Bank. The above information is provided for informational purposes only and without any obligation, whether contractual or otherwise. No warranty or representation is made as to the correctness, completeness and accuracy of the information given or the assessments made.

In Germany this information is approved and/or communicated by Deutsche Bank AG Frankfurt, authorised by Bundesanstalt für Finanzdienstleistungsaufsicht. In the United Kingdom this information is approved and/or communicated by Deutsche Bank AG London, a member of the London Stock Exchange regulated by the Financial Services Authority for the conduct of investment business in the UK. This information is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. and in Singapore by Deutsche Bank AG, Singapore Branch. In Japan this information is approved and/or distributed by Deutsche Securities Limited, Tokyo Branch. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product. Printed by: HST Offsetdruck Schadt & Tetzlaff GbR, Dieburg