The Copenhagen Accord

A view of a work in progress

White Paper

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Foreword

The United Nations Climate Change Conference held in Copenhagen in December 2009 —known as Conference of the Parties 15 or COP 15 — marked a key turning point in the history of the climate change debate. The conference and climate change negotiations had been promoted as a critical and perhaps final opportunity to develop and implement a global response to climate change and a set of legally binding agreements that would reach beyond 2012, when the Kyoto Protocol's first commitment period expires. These negotiations were expected to be difficult and, indeed, proved to be. By the middle of the second week of the conference, it was essentially in deadlock. Twelve days of frustration culminated in two days of direct negotiations between high-level leaders who insisted on not leaving without some form of agreement in place. A compromise was finally reached at the 11th hour and the Copenhagen Accord was drafted. Although not legally binding, the Accord does reflect international political consensus that there must be a long-term, global response to climate change.

The Copenhagen Accord differs from the Kyoto Protocol in a number of important ways. Most significantly, it takes a more pragmatic and less democratic approach. Rather than attempting to get 192+ nations to agree on everything, the Accord recognizes that climate change will have to be solved by those nations and institutions with the greatest capacity to address both adaptation and mitigation. Why this approach? It has become clear in the political debate on climate change that nations that have historically been the greatest emitters of CO2 are the same nations with the greatest resources and capacity to reduce their emissions and drive innovative solutions to climate change. These economic and political realities may have shifted the approach to a more meritocratic one, but these concepts of 'differentiated responsibility' and respective capacities — key features of the Kyoto Protocol — remain.

The Copenhagen Accord, the outcome of a challenging negotiation process, is regarded by many as a realistic recognition of the global nature of climate change and the role international finance has to play in solving it. The process by which the Accord was created is significant because it marked an important shift in the power balance of global climate change negotiations. For the first time, the major developing nations of Brazil, China, India, and South Africa had equal input as developed nations. Another first was a timetable for action: the text of the Accord indicates that it is operational immediately, with nations required to submit their action plans by January 31 2010 and commence work on establishing the Copenhagen Green Fund.

Although a formal agreement was not finalized, the Copenhagen Accord represents a political sea change in the global effort to address climate change. It has formulated a clear long-term goal, sparked targets and action plans from countries that account for more than 80 percent of global energy-related CO_2 emissions, and offered the prospect of very significant support to developing countries. In all of these ways it represents a 'wake-up call' in terms of how the world does business. The challenge in moving forward will be to create an effective legal and institutional architecture that stimulates innovation and helps companies and governments achieve collective sustainability goals.

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Executive Summary

This document provides a high-level analysis of the Copenhagen Accord and the immediate impacts it could have on global business operations and trade. The Accord, however, should be viewed as a work in progress — a number of countries have not yet pledged to file reduction targets, the mechanisms for mitigation and adaptation funding still need to be developed, and there will be additional issues, such as a cap-and-trade on shipping, which will have effects down the road.

It is not KPMG's intent to provide an exhaustive analysis of the implications of the Accord for businesses in all jurisdictions. It is KPMG's view that the Accord needs to be understood within the contexts of domestic and international economic, political and public policy debates and thereby as a framework connecting responsibilities to act and capabilities to finance those actions. The Accord will impact business operations in different sectors and nations uniquely, and it will ultimately be the work of individual companies to assess both the likely impacts and the best responses. We hope this report will offer insights to businesses grappling with these challenges.

The report has been organized into four sections, each of which features different standpoints on the Accord ranging from a technical, line-by-line analysis to the viewpoint of a key stakeholder.

First, it examines the text of the Copenhagen Accord as issued by the United Nations Framework Convention on Climate Change (UNFCCC). The Accord is not lengthy — only 12 statements covering no more than a few pages — but it contains important concepts about equity between generations, human rights, and the science of climate change.

Second, it examines the potential implications of the Accord for business and assesses how it might influence new developments and trends taking shape in global policy, investment, and trade patterns.

Third, it examines the global response to climate change from four different economic perspectives: a manufacturing economy (United States), a resource extractive economy (Brazil), a service economy (UK), and an African economy (South Africa).

Finally, the report concludes with a commentary on the outcome of the Copenhagen conference from the International Emissions Trading Association (IETA)[1].

1 International Emissions Trading Association (IETA): http://www.ieta.org.

The Copenhagen Accord[2]:

A Statement-by-Statement Analysis

The question most often asked about the Copenhagen Accord is: What is it? Perhaps the best way to answer this question is in the same straightforward manner that U.S. President John F. Kennedy announced another momentous and complicated undertaking — the start of the Moon missions in 1961:

Do what? Put a man on the Moon.
By when? The end of the decade.

Do what? Limit global temperature rise to below 2° Celsius.
By when? As soon as possible.

Statement 1: Differentiated responsibility and respective capacities, limit rise to 2°C

1. We underline that climate change is one of the greatest challenges of our time. We emphasise our strong political will to urgently combat climate change in accordance with the principle of common but differentiated responsibilities and respective capabilities. To achieve the ultimate objective of the Convention to stabilize greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, we shall, recognizing the scientific view that the increase in global temperature should be below 2 degrees Celsius, on the basis of equity and in the context of sustainable development, enhance our long-term cooperative action to combat climate change. We recognize the critical impacts of climate change and the potential impacts of response measures on countries particularly vulnerable to its adverse effects and stress the need to establish a comprehensive adaptation programme including international support.

2 United Nations Framework Convention on Climate Change (UNFCCC), Copenhagen Accord of 18 December 2009, advance unedited version, Decision -/CP.15, http://unfccc.int/files/meetings/cop_15/application/pdf/ cop15_cph_ auv.pdf.

Differentiated responsibility

Statement 1 addresses the issue of equity by reaffirming the position established in Kyoto: developed nations shoulder the greatest responsibility for taking action against climate change because historically they have contributed the most carbon emissions to the atmosphere ('legacy carbon') and continue to contribute to rising levels of greenhouse gases through high per capita emissions.

Much of the debate on differentiated responsibility centers on striking a balance between the three different metrics used to quantify emissions: 1) historical emissions or legacy carbon, 2) current emissions expressed on an annual per capita basis, and 3) current emissions expressed on a gross annual nation-by-nation basis.

Historical emissions (legacy carbon)

There are a number of different ways historical emissions can be accounted for, such as total released since a certain year (e.g. 1850) or atmospheric lifetime (a fraction of older emissions are removed by natural processes). Whatever metric is used, the outcome is similar for most developed nations — their total emissions to date outweigh those of developing nations.

Per capita emissions

The per capita metric may be relevant from a future emissions perspective, but it says nothing about a country's historical emissions. The EU, for example, may have lower emissions per capita than it did historically (a result of its energy policy and recent action on climate change), but it has contributed heavily to the level of legacy emissions and, at the same time, enjoyed the benefits of carbon-intensive economic activities.

Current gross emissions

Taken on its own, the current gross emissions metric is misleading as a basis for reduction targets because it ignores the size of the nation concerned. For example, China, as a rapidly developing country, has recently overtaken the U.S. as the nation with the highest current gross emissions. However, U.S. per capita emissions are currently four times that of China and are projected to double China's by 2030.[3]

The attempt to find a balance between these metrics is at the core of the differentiated responsibility argument. This argument will evolve over time — in a few years the historical contributions of developing countries will be significant and their respective capacities will have advanced. Given that the global atmosphere is probably the ultimate expression of a common good, it is difficult to think of any moral framework in which to consider this argument other than equity.

3 World Resources Institute, Per Capita CO2 Emissions for Select Major Emitters, 2007 and 2030 (Projected), http://www.wri.org/ chart/ capita-co2-emissions-select-major-emitters-2007-and-2030-projected.

Limit rise of 2°C

Specifying a limit rise of 2°C represents a major advance as it identifies a concrete target for global temperature rise and parameters for a global policy response. By comparison, the Kyoto Protocol contains no specific target for its overall objective.

The choice of a 2°C limit is interesting for a number of reasons. First, it commits to a degree of impact that in some cases will require significant adaptation (this is covered more fully in Statement 3). Second, the temperature target is easy to express. Most people would not know why a gas concentration of 550 ppm is worse than 450 ppm, but they would understand a real-life effect such as a change in air temperature.

However, although perhaps easier for the layperson to understand, these two types of metrics — temperature and concentration — are not the same. A temperature rise of 2°C is associated with an atmospheric concentration of approximately 450 ppm, but they cannot be regarded as equivalent or interchangeable.

Another problem with the temperature rise target is that it makes it difficult to construct and assess national emissions targets expressed in millions of metric tonnes of carbon dioxide equivalent (t CO2-e) that translates to a global atmospheric concentration. The lack of direct comparability and uncertainty may lead to protracted policy and technical negotiation issues.

Third, and perhaps most importantly, using a temperature target means that, in theory, the Accord does not have a deadline — the work will continue until the objective is achieved. However, given the long time lag between emissions entering the atmosphere and having a measureable impact, there needs to be deep cuts in emissions by 2050 to ensure that 2°C is not exceeded at some point in the future.

Statement 2: Peaking global and national emissions as soon as possible

2. We agree that deep cuts in global emissions are required according to science, and as documented by the IPCC Fourth Assessment Report with a view to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius, and take action to meet this objective consistent with science and on the basis of equity. We should cooperate in achieving the peaking of global and national emissions as soon as possible, recognizing that the time frame for peaking will be longer in developing countries and bearing in mind that social and economic development and poverty eradication are the first and overriding priorities of developing countries and that a low-emission development strategy is indispensable to sustainable development.

Statement 2 requires that emissions reductions in developed nations be made as soon as possible, whereas developing nations have more time because their immediate priorities are development and poverty eradication. The full meaning of this statement has until now been overlooked by many commentators, who have overemphasized the time frames for action. Studying it more closely, the statement requires developing nations to also implement absolute emissions reductions (not just efficiency gains). This requirement is significant: not only is it not part of the Kyoto Protocol, it also sets the scene for discussion on mitigation by acknowledging that low emissions levels are critical for sustainable development.

Statement 3: Adaptation and financial support to least developed nations

3. Adaptation to the adverse effects of climate change and the potential impacts of response measures is a challenge faced by all countries. Enhanced action and international cooperation on adaptation is urgently required to ensure the implementation of the Convention by enabling and supporting the implementation of adaptation actions aimed at reducing vulnerability and building resilience in developing countries, especially in those that are particularly vulnerable, especially least developed countries, small island developing States and Africa. We agree that developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries.

This statement is a logical extension of Statement 1. Assuming there will be impacts from climate change, the next question becomes: What will happen to the most vulnerable nations — those that lack the resources and capacity to adapt and that, in many cases, will be impacted most significantly by climate change? The Accord addresses this question by creating an additional class of parties: least developed countries, small island states, and African nations.

The Accord's requirement that these nations be provided substantial and sustainable financial resources presents a sizable challenge to current aid and humanitarian practices. The current mechanism through which adaptation

requirements can be identified and assessed is the National Adaptation Programmes of Action (NAPA) that have been prepared by many (if not all) of the least developed countries. Financial support is available through the Adaptation Fund and several channels of the Global Environment Facility (GEF).

It is worth considering how practical actions, such as strengthening port infrastructure against storms or protecting freshwater from seawater inundation, can be implemented at an appropriate scale. Current best practices are found in nation-building aid and in disaster relief responses, but neither of these have a great track record in efficient delivery or transparency. The full scale of the challenge posed by the Accord's requirement is likely not yet appreciated.

Statement 4: Emissions reductions by developed nations

4. Annex I Parties commit to implement individually or jointly the quantified economy-wide emissions targets for 2020, to be submitted in the format given in Appendix I by Annex I Parties to the secretariat by 31 January 2010 for compilation in an INF document. Annex I Parties that are Party to the Kyoto Protocol will thereby further strengthen the emissions reductions initiated by the Kyoto Protocol. Delivery of reductions and financing by developed countries will be measured, reported and verified in accordance with existing and any further guidelines adopted by the Conference of the Parties, and will ensure that accounting of such targets and finance is rigorous, robust and transparent.

This statement is framed in the original Kyoto language of the developed/developing nation divisions (Annex I and non-Annex I) from the 1990s, and it recognizes this two-track process. It is possible that in future negotiations the outcome will change to a single track and produce a treaty to replace the Kyoto Protocol. The statement clearly articulates that developed nations should implement (either individually or jointly) quantified economy-wide absolute emissions targets for 2020 and that these targets should be submitted to the UNFCCC by 31 January 2010.

As of 11 March 2010, 75 nations (43 developed and 32 developing) had submitted targets. Taken together, this accounts for more than 80 percent of global energy-related carbon dioxide emissions. It is important to note that although the Accord focuses on rather modest goals for 2020, many of the submissions point to far greater ambition for 2030 and beyond.

Statement 4 goes to the heart of domestic debates taking place in nations like the US and Australia, where there is opposition to any form of emissions constraints out of fear that a carbon tax on energy-intensive industries would create a competitive disadvantage. This debate will need to run its course, but it is clear there is a 'megatrend' underway in investment in renewable and resource-efficient technology. This trend should be understood in context — developed nations are seeking to reduce their dependence on fossil fuels not only to reduce their climate change impacts, but to address energy security through diversification.

Statement 4 also reinforces that actions taken to reduce emissions will be measured,

4 United Nations Framework Convention on Climate Change, http://unfccc.int/2860.php.

reported, and verified (MRV) based on international guidelines. This point may seem superfluous as this is already an established part of the UN process, but it was included in the Accord to differentiate the reporting requirements for developed nations from those for developing nations (see Statement 5). One issue that arises is how the evolution of the MRV, which is focused on greenhouse gases, will impact voluntary emissions reporting either through the carbon disclosure process or through sustainability reporting.

Statement 5: Mitigation actions by developing nations

5. Non-Annex I Parties to the Convention will implement mitigation actions, including those to be submitted to the secretariat by non-Annex I Parties in the format given in Appendix II by 31 January 2010, for compilation in an INF document, consistent with Article 4.1 and Article 4.7 and in the context of sustainable development. Least developed countries and small island developing States may undertake actions voluntarily and on the basis of support. Mitigation actions subsequently taken and envisaged by Non-Annex I Parties, including national inventory reports, shall be communicated through national communications consistent with Article 12.1(b) every two years on the basis of guidelines to be adopted by the Conference of the Parties. Those mitigation actions in national communications or otherwise communicated to the Secretariat will be added to the list in appendix II. Mitigation actions taken by Non-Annex I Parties will be subject to their domestic measurement, reporting and verification the result of which will be reported through their national communications every two years. Non-Annex I Parties will communicate information on the implementation of their actions through National Communications, with provisions for international consultations and analysis under clearly defined guidelines that will ensure that national sovereignty is respected. Nationally appropriate mitigation actions seeking international support will be recorded in a registry along with relevant technology, finance and capacity building support. Those actions supported will be added to the list in appendix II. These supported nationally appropriate mitigation actions will be subject to international measurement, reporting and verification in accordance with guidelines adopted by the Conference of the Parties.

Of all the statements in the Accord, this one is possibly the most far-reaching because many major developing countries will make a significant contribution to future emissions. The major developing countries announced their mitigation actions either immediately prior to the Copenhagen Conference or in the first week of the two-week meeting. This demonstrates that they recognize the imperative of action on climate change and are willing to contribute to a global deal. Mitigation actions of developing countries will initially focus on energy and emissions efficiency gains rather than the absolute emissions reductions required by developed nations. This is in keeping with Statement 2, which addresses economic growth as the first priority of developing nations.

The second part of the Statement specifies the way in which actions will be verified. The main point of disagreement between developed and developing nations in Copenhagen was that if developed nations were going to fund mitigation and adaptation actions, there had to be mechanisms in place to ensure these actions were being taken. The counterview from developing nations, China and India in particular,

was that if developed countries were unable to fulfil their own commitments, while at the same time being reluctant to be subjected to MRV requirements (the US in particular), then they have no right to scrutinize the governments of sovereign nations that have voluntarily announced substantial mitigation actions (as can be seen in submissions to the UNFCCC on 31 January 2010).

The issue of external scrutiny is a particularly sensitive one for the Chinese, who are always cautious about sharing details of domestic affairs. This could have remained a major sticking point between the developed and developing nations, but there was a key breakthrough at the end of the negotiations when developed nations agreed their actions would be subject to domestic MRV and that these would be reported in the UN communication process. One very important point to note is that all parties agreed that internationally-funded actions will be subject to the full international MRV process as specified in Statement 4.

Once again, it is interesting to consider what the evolution of the domestic MRV process in developing nations will mean for sustainability reporting by global companies. This is discussed in the following section.

Statement 6: Reducing emissions from deforestation and forest degradation

6. We recognize the crucial role of reducing emission from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries.

If one had to select a single climate change policy issue that causes the most disagreement, it would be forestry. Even before climate change emerged as a global issue, the destruction of rain forests, the preservation of ecosystems, and land clearing for economic development had been a political lightning rod for environmental organizations across the developed world. Forestry, therefore, is a critical issue to get right in climate change policy, especially in many developing countries.

A common concern about the debate on forestry and carbon offsets is that very few people actually understand it. Carbon cycles — the processes by which

carbon is cycled through the environment between air, land, biomass, seawater, and sediments — are both long-term and short-term processes, with important differences between them. Long-term carbon cycles refer to the release of carbon form fossil fuels that have been established over geological time, whereas short-term carbon cycles are the disturbance of the carbon equilibrium between the oceans, forests, soils, and atmosphere over the course of a human lifetime. These complicated processes lie at the heart of the debate about using forest growth as a carbon offset. The Accord neatly sidesteps this contentious issue by simply stating that there is a need to develop a mechanism to enhance the removal of greenhouse gases by forests. The negotiating text did make some major progress on REDD-plus (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries), however, and this will be taken forward in subsequent rounds of negotiations in the lead-up to COP 16 in Mexico.

Statement 7: Range of mitigation approaches

7. We decide to pursue various approaches, including opportunities to use markets, to enhance the cost-effectiveness of, and to promote mitigation actions. Developing countries, especially those with low emitting economies should be provided incentives to continue to develop on a low emission pathway.

This statement is brief and merely states that various approaches can be used to promote mitigation. The range of mitigation actions goes far beyond market mechanisms. For developing countries, National Mitigation Actions (NAMAs) will likely address the range of actions required within sectors, as well as those that are policy-, technology-, or finance-dependent.

The use of market mechanisms is an issue of high political importance for a number of nations. For example, in Australia, a government-proposed market-based scheme called the Carbon Polluting Reduction Scheme (CPRS) was defeated in a parliamentary vote in December 2009, immediately prior to the Copenhagen conference. Australia's opposition parties are promoting a nonmarket (and nontax) mechanism instead, which seems to contradict both economists who promote market mechanisms and voters who are apprehensive about cost increases. In the US, concern over high levels of unemployment has led the Obama Administration and some in Congress to consider separating the clean energy and energy security policy mechanisms from the cap-and-trade elements focused on emissions reductions.

Statement 8: Scaled up funding for mitigation and adaptation

8. Scaled up, new and additional, predictable and adequate funding as well as improved access shall be provided to developing countries, in accordance with the relevant provisions of the Convention, to enable and support enhanced action on mitigation, including substantial finance to reduce emissions from deforestation and forest degradation (REDD-plus), adaptation, technology development and transfer and capacity-building, for enhanced implementation of the Convention. The collective commitment by developed countries is to provide new and additional resources, including forestry and investments through international institutions, approaching USD 30 billion for the period 2010-2012 with balanced

allocation between adaptation and mitigation. Funding for adaptation will be prioritized for the most vulnerable developing countries, such as the least developed countries, small island developing States and Africa. In the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance. New multilateral funding for adaptation will be delivered through effective and efficient fund arrangements, with a governance structure providing for equal representation of developed and developing countries. A significant portion of such funding should flow through the Copenhagen Green Climate Fund.

Previous statements in the Accord have established the balance of responsibility between developed and developing nations. This statement specifies the amount of money that will actually be committed to provide developing countries with funds for both mitigation and adaptation — initially US$30 billion for 2010–2012 with a goal to mobilize US$100 billion a year for mitigation by 2020. Like other statements in the Accord, this is a significant advance on Kyoto in terms of both the amount and the inclusion of adaptation as a critical element of climate change management.

The challenge now facing the UN climate change process is to build mechanisms that make the financing happen. The Advisory Group on Climate Change Financing was launched at the UN on 15 February 2010. The advisory group will be co-chaired by British Prime Minister Gordon Brown and the Prime Minister of Ethiopia, Meles Zenawi. One of the main tasks of the Group will be to ensure that the funding pledged by governments to meet the $30 billion and $100 billion targets is actually delivered. The Group will also be examining innovative funding mechanisms, which may include a financial transaction tax and a redeployment of funds currently spent by large economies in subsidies for their fossil fuel industries (the G20 agreed in September 2009 to phase out these subsidies but no timetable has been set).

Perhaps one of the most disappointing outcomes of the Copenhagen process was that the existing Clean Development Mechanism (CDM) did not get the full attention it required. There has been a significant amount of effort spent on establishing the CDM process, and although it is not without its flaws, particularly when it comes to the administration of project applications and the reliability of the CDM executive board decisions, the CDM is currently the only mechanism that can leverage private finance for climate change mitigation. There is currently only limited activity in the CDM and, without some form of agreement, CDM projects will most likely come to an end after 2012.

Statements 9–12: The Copenhagen Green Fund, a technology mechanism and review

9. To this end, a High Level Panel will be established under the guidance of and accountable to the Conference of the Parties to study the contribution of the potential sources of revenue, including alternative sources of finance, towards meeting this goal.

10. We decide that the Copenhagen Green Climate Fund shall be established as an operating entity of the financial mechanism of the Convention to support projects, programme, policies and other activities in developing countries related to mitigation including REDD-plus, adaptation, capacity-building, technology development and transfer.

11. In order to enhance action on development and transfer of technology we decide to establish a Technology Mechanism to accelerate technology development and transfer in support of action on adaptation and mitigation that will be guided by a country-driven approach and be based on national circumstances and priorities.

12. We call for an assessment of the implementation of this Accord to be completed by 2015, including in light of the Conventions ultimate objective. This would include consideration of strengthening the long-term goal referencing various matters presented by the science, including in relation to temperature rises of 1.5 degrees Celsius.

The final four statements of the Accord are short, perhaps reflecting the level of effort that had been expended in getting the process that far. The key points are that a fund will be established as the operating entity for the financial mechanisms (Statement 10) and that there will be a study to determine what sources of revenue could be used (Statement 9). In addition, a 'Technology Mechanism' will be established to accelerate both technology development and transfer for mitigation and adaptation (Statement 11). The last statement (Statement 12) calls for the implementation of the Accord to be assessed by 2015.

One criticism of Statement 11 is that it does not attempt to deal with the difficult issue of intellectual property rights and how these can be protected in technology transfer arrangements. This is an issue of great concern to global companies operating in high-end technologies such as gas turbines, smart grid, and IT.

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Implications of the Accord

This part of the report examines the implications of the Copenhagen Accord for three key developments in global policy, trade, and investment: the growth of green investment, a cap-and-trade scheme for international shipping, and the evolution of sustainability reporting. This is followed by a summary of the Accord's major implications from the point of view of business.

Green Investment

When Deutsche Bank identified climate change as a megatrend, they saw the policy and innovation responses to climate change as a phenomenon that will change the structure of the global economy. This trend has been visible over the last decade and Copenhagen was only one step in its evolution. While the impact of Copenhagen may not be immediately apparent, developments from the process promise to deliver a boost to the green investment megatrend.

Up until the Global Financial Crisis (GFC), the green investment megatrend was gaining strength. The market value of the global renewable sector increased four-fold from 2003 to 2008 and outperformed the NASDAQ and S&P 500 by more than two to one.[5] New investment in the global renewable sector grew seven-fold from 2004 to 2008.[6] However, when the GFC came, the renewable sector was hit hard; companies lost 61 percent of their value in 2008.[7] The GFC clearly demonstrated that green investment requires a healthy financial sector. Large amounts of capital are needed for developing projects, building the necessary infrastructure, and proving new technologies.

To help lift economies out of the GFC, governments around the world created stimulus packages, many with large green components. The US spent 12 percent (US$117 billion)[8] of its stimulus on green initiatives, China spent 33 percent (US$216 billion), and South Korea spent 81 percent (US$31 billion). As the world recovered from the GFC during 2009, the renewables sector did as well — it is once again outperforming the market by two to one. These elements of the stimulus have been called a 'Green New Deal', after the US Depression-era New Deal.

The extent to which the green stimulus reflects a move by governments anticipating the negotiations in Copenhagen is open to debate. In the lead-up to Copenhagen, government policy announcements on incentives, emissions targets, and traditional regulation have increased by more than ten-fold around the world.[9] Interestingly, developing nations, led by China, are pursuing meaningful green initiatives driven primarily by the economic opportunity this trend presents.

In the wake of Copenhagen, investment markets are offering no clear indication of whether the green investment megatrend has been amplified. The market for Certified Emissions Reductions (CER) did not react at all, and the performance of the renewables sector has been driven by events of the GFC and its recovery. The rate of CDM projects being pursued is lower, but this reflects an overall downward trend over the past year.[10] It is simply too soon to see an impact on these markets, but there is consensus that no matter what the outcome, carbon trading is likely to continue and grow.

5 New Energy Finance, "Global Trends in Clean Energy Investment – Q4 2009 Fact Pack," 2010, http://www.newenergymatters. com/UserFiles/File/Presentations/NEF_Q4_Fact_Pack_06_01_2010(Short)(1).pdf.

6 New Energy Finance, "Global Trends in Sustainable Energy Investment 2009," 2009, http://sefi.unep.org/ fileadmin/media/sefi/ docs/publications/Global_Trends_2009__July_09__ISBN.pdf.

7 Ibid.

8 HSBC, "Building a Green Recovery," 2009, http://www.hsbc.com/1/PA_1_1_S5/content/assets/sustainability/090522_green_ recovery.pdf.

9 Deutsche Bank Group, "Investing in Climate Change 2010," 2010, http://www.dbcca.com/dbcca/EN/_media/ InvestingInClimateChange2010.pdf.

10 Institute for Global Environmental Strategies (IGES), "IGES CDM Project Database," 2009, http://enviroscope.iges.or.jp/ modules/envirolib/upload/968/attach/iges_cdm_db.zip.

The Copenhagen Accord and the two Ad Hoc Working Groups (AWGs) at the conference both show promise of amplifying the green investment trend by creating many more financial mechanisms to facilitate vital capital flows to green initiatives.

The key mechanisms of the Copenhagen Accord include Public Private Partnerships (PPPs) that will allow private investors in green initiatives to share financial risks with governments, a mechanism for funding reduced deforestation (REDD-plus), capacity building, technology transfer, and adaptation. The way in which these will be operationalized is to be decided in the future with the establishment of the Copenhagen Green Climate Fund.

The AWGs have outlined the potential for continuing the use of the CDM, with some amendments: additional voluntary participation by developing countries and mechanisms for the transfer and use of green intellectual property. However, decisions on these have been postponed to the next Conference of the Parties in Mexico (COP 16).

The impact of the GFC on the renewables market demonstrated that the green investment megatrend is dependent on the availability of capital. In determining the impact of the Copenhagen Accord, we must take a long-term view. In the year leading up to the conference, we saw a massive increase in government action around the world. Going forward, the Accord opens up many different possibilities for facilitating the flow of capital required to fund green opportunities. While these are not yet in operation, there is no denying that in combination with the global economic recovery and the Green New Deals of governments, the Accord will in the long run buoy the green investment trend.

International Shipping

One of the most interesting presentations at the Copenhagen Conference was from the International Maritime Organization (IMO) and representatives of the transport ministries of various governments on design options for an emissions trading scheme for shipping. The IMO is a UN body with a remit to provide coordination and governance for many aspects of the global shipping industry. Emissions from fuel for international transport (both shipping and aviation) were excluded from the Kyoto process as it was considered to be a difficult area in which to get agreement. However, regional climate change policy has since evolved — the air transport sector will be brought into the EU ETS in 2012, and the IMO, which regulates shipping, is considering options for a global cap-and-trade scheme for the sector. Failure at an international level to introduce an effective mechanism to control CO2 emissions will result in the EU bringing the shipping sector into the EU ETS,[11] just as it did with the aviation sector.

11 European Parliament, "Summary of the hearing of Connie Hedegaard - climate change," 13 January 2010, http://www.europarl. europa.eu/news/expert/infopress_page/008-67223-013-01-03-901-20100113IPR67222-13-01-2010-2010-false/default_en.htm.

With emissions of approximately 1 billion t CO2-e / year, shipping produces a significant source of CO2. If the sector were a nation, it would be the sixth largest carbon emitter in the world. On paper, implementing an emissions trading scheme for global shipping should be straightforward. Emissions consist almost entirely of CO2 from the combustion of fuel oil and, consequently, are easy to measure and report. A ship is also an easily defined point source with clear registration of ownership, and there is a robust governance and recording system in place across the majority of the world's ports and harbours.

A number of issues arise when considering a cap-and-trade scheme for shipping:

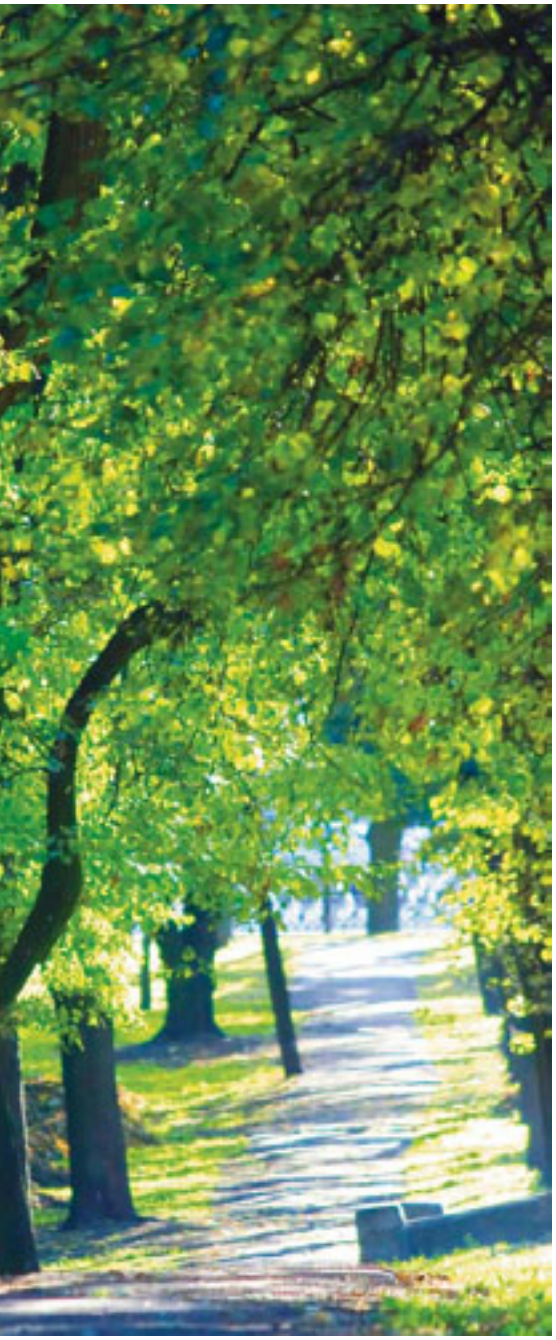
1. The projections for growth in global shipping volumes to 2050 indicate that emissions from shipping could rise to 2 to 3 billion t CO2-e / year in the absence of any carbon constraint. Putting this in context, if the Copenhagen 2°C limit was to be attained (approximately 80 percent reduction on current total levels) then shipping would account for roughly 20 percent of total global emissions. It is currently 3 percent of total emissions.

2. There is a wide range of potential abatement options available to the shipping industry — 25 percent to 75 percent, according to the IMO. A certain amount of cost savings could come from fleet management and optimizing the voyages of ships currently in operation, but the largest reductions are linked to new ship design. Initial research has been carried out on the overall marginal abatement cost curve for shipping. The current understanding is that reductions above 25 percent of total emissions could have costs in excess of US$200 / t CO2-e.[12]

3. When compared to many other modes of bulk transport, the shipping industry makes overall efficient use of its emissions and the cost of carbon is small when compared to the value of the cargo. In other words, shipping could bear a high carbon price whereas airlines could not.

Taken together, these issues create an interesting scenario: the projected growth in shipping could create a demand for 1 to 2 billion permits or offsets every year from a sector that is an emissions-efficient form of transport, but would incur high costs for large-scale abatement. Implementing an emissions trading scheme for shipping could have some very interesting consequences for both the price of carbon and global trade patterns.

12 International Maritime Organization (IMO), "Prevention of Air Pollution from Ships, Second IMO GHG Study 2009," 2009, http://www.imo.org/includes/blastDataOnly.asp/data_id%3D26046/4-7.pdf.



Sustainability Reporting

Sustainability reporting and the MRV required for regulated cap-and-trade schemes have evolved in parallel, but do not share a common approach or reconciliation process. As a result, organizations that issue a sustainability report run the risk of stating one value for the quantity of greenhouse gases released in a year and another for reporting under a regulated emissions trading scheme. These differences would then need to be explained in the sustainability report.

It is worth considering how developed nations have already established much of the framework for reporting their current Kyoto actions under international MRV requirements. The member states of the European Union, for example, have had a set of standardized MRV guidelines for all 12,000 power generation and process sites covered by the emissions trading scheme since 2005. Australia has introduced the National Greenhouse and Energy (NGER) reporting and the US has introduced the Mandatory Reporting of Greenhouse Gases Rule. These types of measurement standards underpin both market-based mechanisms for responding to climate change and other actions that are aimed at reducing emissions.

The Copenhagen Accord specifies that both developed and developing nations need to apply MRV in order to quantify reductions. This prompts the question of how businesses operating across different jurisdictions might align their sustainability reporting to ensure this requirement is anticipated and businesses are prepared.

Another force driving the evolution of sustainability reporting is a recent decision from the US Securities and Exchange Commission (SEC), which voted to provide public listed companies with interpretive guidance on disclosure requirements for climate change.[13] The SEC identified four specific areas in which climate change might trigger disclosure requirements:

- impact of climate change regulation and legislation (the SEC suggests companies include pending regulation and legislation)
- impacts of international accords and treaties that relate to climate change or govern GHG emissions
- actual and potential indirect consequences from climate change regulation or business trends
- actual and potential physical effects of climate change

The consequences of this requirement are not yet fully understood, but it can be taken as a sign that long-term investors seem concerned that business is not prepared on its own to understand and report on climate change risks.

13 US Securities and Exchange Commission, "SEC Issues Interpretive Guidance on Disclosure Related to Business or Legal Developments Regarding Climate Change," Press Release, 27 January 2010, http://www.sec.gov/news/press/2010/2010-15.htm.

Major Implications for Business

So, what does the Copenhagen Accord mean for business?
The answer is "An increased strategic approach to operating in a carbon constrained world"

This section outlines a few of the major implications for business that could arise from the Accord itself as well as the changes it could bring over time as it develops and is put into action.

Role and Ambition

The primary implication for business is that it now needs to strategically review its role in the whole climate change debate and to decide on its level of ambition with regard to a transition to a low carbon global economy. Should companies be leading the way in terms of carbon reductions with a focus on market opportunities or should they take a less ambition approach and wait for further regulation?

Capacities, Information, and Intelligence

There will be an increasing need for businesses that operate globally to develop better capacities for tracking the various aspects of the Accord, to analyze the specific implications of the Accord for its operations, and to identify new and innovative opportunities for revenue.

The developments that are likely to have the most significant impact on business are the emergence of mitigation mechanisms, changes in investment patterns in response to low-carbon opportunities, border protection adjustments, and carbon constraints. We have already addressed three other important implications that will require enhanced capacity and further analysis by business: renewable energy investment, shipping, and sustainability reporting.

Bilateral and Multilateral Trade in a Carbon Constrained World

It is likely that business will need to learn how to operate in a world with a multitude of climate change and emissions reduction policies. Some examples of the types of policies that business might have to deal with are:

- an import tariff on coal in India
- the over-allocation of free permits to competitors under a cap-and-trade scheme
- a ban on the construction of new coal fired generation plants in developing nations.

A number of global businesses are already building scenario-planning tools that allow them to understand and model the impacts of the combined effect of varying carbon prices, national policies, and levels of border protection.

Understanding and preparing for these scenarios could be a business imperative — it is anticipated that global finance will view the Copenhagen funds as a $100 billion opportunity to invest in low-carbon technology in carbon-constrained nations, where return on investment would be greatest. This is a race to the top, and businesses that fail to understand this will be left behind.

National governments are currently researching the emission intensity of many types of activities (steel production, cement manufacture, etc.) carried out by rival nations. These types of metrics are considered by some to be building blocks of protectionism in a partially carbon constrained world. It seems obvious that business should be in a position to understand and to influence the debate on carbon based trade barriers as it has significant implications for their investment and long-term growth.

Valuation of Mitigation Actions in Trade

The Accord states that developed nations need to provide mitigation funding and it acknowledges that the current scale of the CDM is insufficient. This opens up debate on how mitigation funding should be secured. An interesting finding from KPMG's research on resource-extractive economies is that certain types of trade could be valued as mitigation actions. The clearest examples that we found were in the trade of liquid natural gas (LNG) (a lower carbon fuel than coal and fuel oil) and a magnetite form of iron ore that delivers overall emissions reductions in steelmaking.

Some countries might consider the supply of these materials as mitigation actions for an entire sector, such as the steel industry. The question is: How would governments develop the accounting framework and test for additionality? The message to business is that they should begin to explore how carbon flows can be measured in terms of trade and what might constitute measurable action. This work could be done jointly between governments and industry/business organizations.

Partnerships

The Copenhagen Accord should be viewed as an opportunity to earn revenue from new products and services. The challenge of delivering low-carbon economic development and adaptation will ultimately be met by businesses that work in cross-sector partnerships. For example, a new energy-efficient production technology for aluminum could be developed through a partnership between a business in a carbon-constrained economy that develops the technology, a bank or finance institution that funds the implementation of the technology in developing nations, and a government department that provides start-up funding, negotiates trade arrangements, and values the mitigation actions as part of its commitment to the Copenhagen Accord.

The View of the Copenhagen Accord

from Different Economic Perspectives

It is evident that the Accord will have different impacts on different economies, not only through the implementation of the statements, but also through trade, sustainability strategies, and investment. We have chosen to examine the potential impacts on four types of economies — manufacturing, resource extractive, service, and African — which together provide a representative picture of the nations, both developing and developed, that contributed to the Copenhagen Accord.

A manufacturing economy: the U.S. perspective

Although the US officially signed on to the Copenhagen Accord in January 2010, there remains much uncertainty about the enactment of federal legislation to address climate change through the US legislative process. In its submission to the UNFCCC, the US offered a quantified, economy-wide emissions reduction target by 2020, "in the range of 17 percent, in conformity with anticipated US energy and climate legislation, recognizing that the final target will be reported to the Secretariat in light of enacted legislation"[14] from a 2005 base year.

While federal legislation remains an uncertainty, two other federal bodies have moved forward. In 2009, the US Environmental Protection Agency (EPA) issued its Final Rule on the mandatory reporting of GHG emissions. The rule requires approximately 10,000 facilities to begin collecting GHG data under a new reporting system on 1 January 2010, with the first annual report due on 31 March 2011. Collectively, these large emitters account for approximately 85 percent of total US GHG emissions and this reporting system will help to develop comprehensive US GHG emissions data.

Additionally, on 7 December 2009, the EPA Administrator signed the Endangerment Finding and the Cause and Contribute Finding under Section 202(a) of the Clean Air Act (CAA). These two findings state that six greenhouse gases "in combination endanger both the public health and the public welfare of current and future generations"[15] and that GHG emissions "from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare."[16] The Endangerment Finding is a significant first step toward the EPA assuming regulatory control of GHG emissions.

Through these findings, GHG emissions are now officially recognized by the US government as a threat to public health and the environment. While these findings themselves do not impose any immediate regulation, it will immediately change the direction and focus of US climate change regulation in the short and potentially long term. In the absence of comprehensive federal climate change legislation, this finding legally compels the federal government to establish GHG emissions standards for new motor vehicles and engines under the Clean Air Act — a process that will increase fuel economy standards. The finding enables the EPA to finalize its proposed GHG emission standards for light-duty vehicles, which the agency jointly proposed with the Department of Transportation's National Highway Safety

14 UNFCCC filing from the US Department of State, 28 January 2010. http://unfccc.int/files/meetings/application/ pdf/unitedstatescphaccord_app.1.pdf.

15 US Federal Register, Part V, Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule, p. 66496.

16 US Federal Register, Part V, Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule, p. 66496.

Administration on 15 September 2009. The EPA projects that this rule will be finalized in March 2010. Once automobile GHG emissions are regulated, all GHG emissions will automatically be classified as 'regulated pollutants' under the Clean Air Act. The proposed ruling will also likely trigger the process under the Clean Air Act for developing national ambient air quality standards for greenhouse gases and for establishing emissions standards for stationary and other mobile sources.

Controlling regulated pollutants under the Clean Air Act follows a permit-based mechanism rather than a market-based mechanism such as the cap-and-trade model proposed under H.R. 2454, American Clean Energy and Security Act of 2009. However, legal challenges and Congressional appropriations limitations could impact the EPA's ability to develop regulation on its projected timeframe. Nonetheless, in the US, an EPA-imposed GHG emissions regulatory regime under the Clean Air Act is more likely to progress in the near-term, than a market-based control system created through federal legislation, given the congressional debates of 2009 and the limited number of legislative days remaining in the 2010 congressional election year.

Likewise, in early 2010, the US Securities and Exchange Commission (SEC) released interpretive guidance for existing SEC disclosure obligations about the impact of climate change and climate-related risks that are material to public companies. The SEC staff specifically cited several areas where climate change may require disclosure under Regulation S-K, including the impact of legislation and regulation, the impact of international accords, the indirect consequences of regulation or business trends, and the physical impact of climate change.

At the regional and state level, several carbon emission programs have emerged, such as the Midwest Regional GHG Accord, the Regional Greenhouse Gas Initiative, and California's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions.

Meanwhile, many US companies are moving forward with implementing carbon management and emissions reporting systems, with a particular focus on energy efficiency initiatives that save costs and reduce emissions. In fact, nearly two-thirds of the US companies in the S&P 500 responded to the Carbon Disclosure Project in 2009. In addition, US companies are also adding their voices to the public policy debates on energy and climate policy through several business groups, such as the Business Roundtable, the US Chamber of Commerce, and the US Climate Action Partnership.

One of the most significant recent developments for the US Consumer Goods sector is the establishment of the Sustainability Consortium — a partnership of researchers from leading global universities, nongovernmental organizations (NGOs), governmental agencies, and corporations that are seeking to establish standards to measure the sustainability of consumer products. Eventually the group aims to create scientifically valid product indexes that will allow retailers to compare consumer products. The Consortium, which is being supported by several

large US companies, such as Cargill, Disney, HP, Kimberly-Clark, PepsiCo, Procter & Gamble, and Wal-Mart, has the potential to make a significant change within the US Consumer Goods sector. Given that most large corporations now have global supply chains, this impact will likely be witnessed across the globe.

A resource extractive economy: the Brazilian perspective

Regardless of the future outcome of the Copenhagen Accord, Brazil is committed to a voluntary GHG emissions reduction target of 36 percent to 39 percent by 2020. Those numbers were included in the Copenhagen Accord and in a federal law drafted in the last week of 2009.

Brazilian companies, many of which are becoming multinational organizations, have long been aware of the need to measure and monitor GHG emissions. In the middle of the last decade, the need to disclose information on emissions, especially to the Carbon Disclosure Project, started to gain traction. This trend is continuing — in 2010, the Brazilian Stock Exchange (BM&F Bovespa) will have a Carbon Index of the 50 top publicly traded companies, which will provide an additional indicator and decision-making tool for government and pension funds. In Brazil, carbon efficiency is becoming a business imperative.

Brazil's largest companies are in the resource extraction business — mainly oil, gas, mining, and energy. These are the businesses most affected by a carbon-constrained environment, but they are not the only ones. The agricultural sector, which produces sugar cane to make ethanol, has started to account for its emissions as international traders have demanded the disclosure of carbon emissions within their supply chain.

Recently discovered oil and gas reserves offshore will strengthen extractive economic activities in addition to provoking fierce discussions, not only about the distribution of royalties, but how to achieve the reductions stated in the Accord and how 'dirty' the Brazilian energy sector will be in years to come (today it is more than 80 percent renewable).

Perhaps the answer lies in deforestation — Brazil's most significant source of carbon emissions. Wood extraction followed by forest burns and extensive cattle breeding has been Brazil's development pattern for the last 50 years. Recently, deforestation rates have declined as a result of more rigid government enforcement and the use of aircraft and satellites, but the future of the remaining tropical forest is still uncertain. The key question facing decision-makers is: Is it possible to explore vast natural resources without compromising environmental integrity and meeting emissions reduction targets? That is a question that Brazil and all resource extractive economies will have to answer, and time is quickly running out.

A service economy: the UK perspective

The UK Government response to the outcome of COP 15 was one of disappointment, particularly about the lack of a clear timetable for developing a legally binding treaty. However, the UK recognizes that the Copenhagen Accord does represent significant progress on which further actions and agreements can be based. Of particular interest is the agreement for 'fast start funding', originally proposed by the UK's Prime Minister, Gordon Brown. This agreement will see a fund of US$30 billion raised between 2010 and 2012 (US$10 billion annually) to assist developing countries immediately tackle and adapt to climate change, building up to an annual fund of US$100 billion dollars by 2020.

As an active Member State of the EU, the UK is fully committed to supporting the EU's 20 percent (and 30 percent) reduction targets. In doing so, the UK has passed into law the target of reducing its own emissions by 80 percent by 2050 against 1990 levels.

The UK has a long track record in controlling air pollution. The current regulations covering the major emitters of air pollution are driven by the EU Directive on Integrated Pollution Prevention and Control (IPPC), which closely follows an earlier UK regulation on Integrated Pollution Control. The UK was also in the vanguard of developing the concept of CO2 emissions trading, and introduced the world's first domestic CO2 trading scheme in 2002 — the UK Emissions Trading Scheme (UK ETS). Companies (and regulators) that participated in the UK ETS gained significant experience in using market-based mechanisms, and the UK ETS has stimulated the creation of carbon finance and trading markets in London, giving the City of London a head start as a global center for emissions trading. The implementation of an EU-wide trading scheme in 2005 saw an increase in the number of installations participating in a trading mechanism. By definition, participating entities within the EU ETS must be above a set emissions threshold, which excluded many organizations and activities from participating in it — most significantly, the service sector.

The service sector comprises approximately three-quarters of the UK's economy and includes food and goods retail as well as services in the areas of health and education, leisure, transportation, electronic communications and networks, and business and professional services. The UK Government's long-term energy projections showed that on a business-as-usual basis, there is likely to be a steady

increase in carbon emissions from the service sector (emissions by end use from this sector are projected to increase by approximately 11 percent in 2030 over 2010 levels). If this were to occur, it would place a greater financial burden on the UK's EU ETS participants, who are required meet the government's national emissions reduction targets. In order to encourage this sector to reduce its emissions, the government has introduced a new set of regulations — the CRC Energy Efficiency Scheme (formerly known as the Carbon Reduction Commitment).

The CRC is a mandatory cap-and-trade scheme for emissions and is targeted at large organizations outside energy-intensive sectors. The scheme aims to give incentives to improve energy efficiency in the service sector by directly rewarding energy savings. Mandatory energy record keeping will also highlight savings opportunities. The scheme, which is due to start in 2010, is expected to achieve an annual saving of 4.4 million tonnes of CO2 by 2020. It is anticipated that 5,000 organizations, such as supermarkets, banks, hotel and leisure operators, and local authorities, will be required to participate in the scheme and another 20,000 will need to register.

The CRC scheme is currently the only of its kind in the world. As countries and regions develop their own carbon trading mechanisms, the focus will initially (and inevitably) be on the biggest CO2 emitters. As these schemes mature, however, as they have in the UK, focus will likely shift to less carbon-intensive sectors like the service industry.

An African economy: The South African perspective

In 2009, South African businesses came under increasing pressure to treat sustainability as a business imperative. This was prompted by a mix of fiscal interventions, tighter pollution laws and inspections, higher energy prices, a new corporate governance code, and a global focus on climate change.

In the last budget delivered in February 2009, environmental taxes were either introduced or increased. The measures were expected to bring additional green revenue of about R7.8 billion per year. Most of it would come from higher taxes on fuel via the general fuel levy and a surcharge on nonrenewable forms of electricity, which was implemented in July 2009. This was regarded as the country's first tax designed to incentivize the switch away from coal and diesel for power generation. Smaller amounts would be generated from increasing international air departure taxes, a new tax on incandescent light bulbs, and higher taxes on plastic bags. It was also announced that import duties on vehicles would take carbon emissions into account in 2010.

Toward the end of 2009, there was a focus on environmental efficiencies even for those firms deemed to be low emitters and polluters. This was highlighted by rising energy costs and the prospect of paying still higher prices for power as Eskom (the national utility) proposed raising tariffs 45 percent a year for three years (the final decision was 35 percent). Energy efficiency is likely to be a top priority this year and may result in users being obliged to cut power usage by at least 10 percent.

First among them will be the top 150 industrial users that use about 40 percent of the nation's electricity.

Some firms are starting to come under pressure to integrate sustainability into their business models from other sources, namely, codes of corporate governance and peer pressure from directors. The King III Code of Corporate Governance, which comes into effect at the end of March 2010, gives much more attention to sustainability in boardrooms than its predecessors. In particular, it encourages firms to integrate sustainability issues into business operations and reporting. The Code applies to all South African companies and remains a condition for Johannesburg Stock Exchange (JSE)-listed firms. In October, the Institute of Directors, the lead agency involved in drafting the codes, launched a set of guidelines for directors integrating sustainable development into their business strategies and urged firms to start by redefining the composition of their boards. They advise businesses to, among other things, appoint a dedicated director responsible for sustainable development as well as an external advisory expert; to put sustainable development components in the performance agreements of all directors and senior managers; and to educate shareholders about the value of viewing returns over the longer term.

Climate change would naturally be a key issue within this framework. The bulk of the JSE's top 100 companies are already starting to grapple with the risks and opportunities of climate change as they participate in the Carbon Disclosure Project. There is a growing realization that businesses ignore global warming at their peril.

South Africa's commitment, announced at the start of the Copenhagen conference, shifted away from the business-as-usual trajectory, reducing emissions by 34 percent by 2020 and 42 percent by 2025 (conditional upon receiving funding, technology transfer, and capacity building). Organized business has already met several times with government to formulate a plan for unpacking the sector responsibilities and discuss the actions that will be defined under the NAMAs, as the business sector will play a major role in achieving this target.

As early as 2006, South Africa embarked upon a study called the Long Term Mitigation Scenarios (LTMS), which was released in 2008. A draft green paper on climate change is due to be published by the end of April/May 2010, and a white paper is expected by the end of the year. A full legislative, regulatory, and fiscal package is expected in 2012. The South African targets were derived largely from the long-term mitigation scenario document, as well as the latest version of the Department of Energy's integrated resources plan with its various renewable energy and energy efficiency commitments and the clean technology investment fund portfolio commitments.

The LTMS, the commitments to the Copenhagen Accord, and many other processes at the interdepartmental, local, and provincial government level will inform the climate policy process.

In addition to a climate change policy, mandatory GHG reporting will be required from 2011. Energy efficiency targets are on the table (due to be released in March 2010) followed by regulations on measuring energy efficiency.

Business has acknowledged that, regardless of the outcome of the Copenhagen Accord, much work needs to be done in the following areas:

- Finalizing the South African emission inventory
- Input into GHG reporting regulations
- Identifying national actions requiring financial assistance
- Considering (and developing) an internal measurement and verification system
- Opportunities to develop, use, or participate in carbon markets
- Developing a business view on technology transfer
- Exploring ways of accelerating CDM implementation
- Compiling sectoral mitigation options and sector plans

The seventeenth COP will be hosted in South Africa in 2011. One of the fundamental lessons that came out of Copenhagen was: if you don't get your processes right, you can't produce a legally binding outcome. We need to be clear that in the lead-up to COP 16 in Mexico and into 2011 when we host COP 17, we are going to have to build trust and confidence in the process. South Africa would like to run a 2011 COP as the 'People's COP', where everyone can see themselves in the process and engage with it.

Guest Commentary from Henry Derwent

President & CEO of the International Emissions Trading Association

A Market and Private Finance View

KPMG Introduction

One objective of this document is to provide a range of viewpoints on the Copenhagen Accord and the overall outcome of the negotiating process. KPMG welcomes the views of other parties on the achievements of the Copenhagen meeting. What follows is a commentary on the Accord from Henry Derwent, President & CEO of the International Emissions Trading Association.

Commentary

From the perspective of an international business organization, Copenhagen was a serious disappointment, though not a disaster and not unexpected. Fortunately, few business stakeholders believed that the conclusion of a new binding agreement was really on the table. The disappointment was instead the net result of a number of different aspects of the Conference.

First, in terms of progress toward a global climate change agreement, Copenhagen had mixed results, though we believe the good outweighs the bad. For the first time, Heads of State were engaged — a necessary requirement for progress on an issue that will affect virtually all parts of the economies of every country on Earth. For the first time, developed and key developing countries signed up to a document specifying actions they were taking to reduce emissions and agreed that a process of external monitoring and verification had to apply to all. Also for the first time, promises of cash payments were made at a level that starts to match the size of the problem, though a lot more needs to come.

On the other hand, in the Copenhagen Accord text (unlike recent G8 statements), governments have backed away from commitments in a currency that means something to the market — emissions reductions. Commitments seem to be moving in the direction of individual pledges (in different forms and without a common binding legal framework), from which it is going to be difficult to build the global market that economists have long been calling for.

Second, in terms of the development of the carbon market, most of the signs were negative. There were useful steps forward in the never-ending task of improving the performance and predictability of the Clean Development Mechanism, but some of the most promising improvements were pulled back or diverted into further delays by politics. The process of developing new mechanisms for attracting private sector investment, whether the EU's sectoral crediting ideas or other approaches, went backward, though fortunately a few phrases survive in the negotiating texts.

Most worryingly, everyone witnessing the negotiations could see there was sustained hostility among much of the developing world to the idea that assistance could come in the form of investment and involvement from the private sector, despite the improbability of all developed country contributions coming from taxpayers. No negotiating text referring to potential benefits from the use of markets was left unbracketed.[17]

Third, when the UNFCCC process is viewed from the perspective of business interests, Copenhagen was little short of a disaster. The failure of the system to cope with the levels of participants and observers was extremely irritating, but is not a matter of substance. The inability of business to find a way to make their opinion known in a process that is designed to operate only between governments was nothing new, though even more frustrating than ever. More importantly, the process was unable to build momentum until far too late in the day; the separation of issues into overlapping and apparently unlinkable work streams created confusion and negotiating impasse. When progress and agreement was eventually achieved, it was outside the UNFCCC process, which then had grave difficulty in finding a means of accepting it.

To be optimistic, this could have a galvanizing effect on the UNFCCC, which remains the ultimate source of legitimacy for most parties, or it could catapult the signatories of the Copenhagen Accord into a new, more manageable and more effective inner circle of negotiation — even if the first reaction of some of them has been to deny such a possibility.

But, in terms of strengthening government determination to take early action across the world on projects and activities with high carbon footprints, either through a carbon price, game-changing regulation, taxation, or direct support, businesses can be excused for quietly feeling that we are not there yet.

17 Editor's note: The term 'unbracketed' refers to the practice in negotiations of placing brackets around words and phrases to which parties have not yet reached agreement.

31 The Copenhagen Accord: A view of a work in progress

Concluding Remarks

The Copenhagen Accord is a document that is difficult to judge from the present — it can really only be judged on the basis of its future impact. There has been some criticism that action to tackle climate change should be secondary to dealing with the global financial crisis. However, it is precisely economic development that history may judge to be the Accord's greatest legacy.

The fact that it was conceived under such trying conditions may have given it a stronger economic alignment than it would have otherwise. Arguably, it is better because of this.

Statement-by-statement analysis of the Accord provides insights into the concepts upon which it is based — safeguarding Earth's carrying capacity for future generations, driving low-carbon economic development, and poverty alleviation. Climate change, both adaptation and mitigation, should now at last be on the action list of every business leader, investor, and stakeholder.

It is KPMG's view that the Copenhagen Accord will have major implications for business operations in all jurisdictions and that companies around the world will need to analyze the unique impact the Accord will have on their operations and national economies. Once these assessments are complete, business can get to work on forging partnerships to meet national commitments and driving innovation toward a more energy-efficient future.

KPMG Services

KPMG has a full suite of services and products to assist member firm clients in responding to the challenges of climate change, helping to enable them to grasp the competitive advantage that comes with fuller and earlier understanding. A full description of these can be found on the Global Sustainability Services page of KPMG's web site:

http://www.kpmg.com/Global/en/WhatWeDo/Advisory/Risk-Compliance/Internal-Audit/ Global-Sustainability-Services/Pages/default.aspx

Appendices

Appendix I
List of Acronyms

Acronym	Description
Accord, The	Copenhagen Accord
Annex I [18]	Industrialized countries & economies in transition
Annex II [19]	Developed countries with Kyoto Protocol emissions cap commitments
AWG	Ad-hoc Working Group
BM&F Bovespa	Brazilian Stock Exchange
CAA	Clean Air Act (US Legislation)
CDM	Clean Development Mechanism
CER	Certified Emissions Reductions
CO2	Carbon Dioxide
CO2-e	Greenhouse gases measured in Carbon Dioxide Equivalents
COP 15 / CP 15	15th Conference Of Parties held in Copenhagen, Denmark
COP 16 / CP 16	16th Conference Of Parties held in Cancun, Mexico
COP 17 / CP 17	16th Conference Of Parties held in South Africa
CPRS	Carbon Pollution Reduction Scheme
CRC	Carbon Reduction Commitment
EPA	Environmental Protection Agency (United States)
ETS	Emissions Trading Scheme
EU	European Union
EU ETS	European Union Emissions Trading Scheme
G20	Group of Twenty Major Economies
GFC	Global Financial Crisis
GHG	Greenhouse Gas
IMO	International Maritime Organization
IPCC	Intergovernmental Panel on Climate Change
JSE	Johannesburg Stock Exchange
LTMS	Long Term Mitigation Scenarios
MRV	Measurement, Reporting & Verification
MWh	Megawatt Hour
NAMA	Nationally Appropriate Mitigation Action
NGER	National Greenhouse & Energy Reporting (Australian Legislation)
NGO	Non-Governmental Organization
non-Annex I [20]	Developing Countries
PPP	Public Private Partnership
REDD	Reducing Emissions from Deforestation & forest Degradation
REDD-Plus	REDD plus action on conservation and forest management
S&P500	Standard & Poor's share price index (United States listed shares)
SEC	Securities Exchange Commission
t CO2-e	Tonne of greenhouse gas measured in Carbon Dioxide Equivalents
UK	United Kingdom
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
US / USA	United States of America
USD	United States Dollars

18 Annex I: To view complete list of industrialized countries & economies in transition go to http://unfccc.int/parties_and_observers/parties/annex_i/items/2774.php.

19 Annex II: To view complete list of developed countries with Kyoto Protocol emissions cap commitments http://unfccc.int/essential_background/convention/background/items/1348.php.

20 Non- Annex I: To view complete list of developing countries go to http://unfccc.int/parties_and_observers/parties/non_annex_i/items/2833.php.

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