

SESSION VI: MOBILIZING FOR ACTION
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CORPORATE ACTION ON CLIMATE ADAPTATION AND DEVELOPMENT: MOBILIZING NEW BUSINESS PARTNERSHIPS TO BUILD CLIMATE CHANGE RESILIENCE IN DEVELOPING COUNTRIES AND COMMUNITIES

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EXECUTIVE SUMMARY:

With a few notable exceptions, the climate adaptation challenge, and the links between climate change, economic growth, human rights, and poverty alleviation, has not been high on the corporate agenda. As climate change advances, the environmental risks it poses will begin to affect the quality of governance, political stability, economic diversification, and the overall well-being of the economy. Unless the corporate community takes action to address climate change adaptation in the developing world, the adverse impacts of climate change are likely to impact and destabilize businesses, markets, and economies all across the world. Prompt and timely action in areas with a high potential for leadership and mobilization in the business arena may greatly facilitate adaptation efforts in the developing world. Businesses may be able to do this in a number of ways. Businesses should harness core corporate competencies and individual value chains to increase climate change resilience in developing country enterprises and communities. Increasing investment in public-private and hybrid financing mechanisms and partnering strategically with civil society actors will help build a network of support for adaptation. Additionally, creating industry-wide sector initiatives to create and maintain competitive and environmentally sound practices have the potential to significantly curb emissions while continuing to promote growth. Finally, the

corporate community must continue to engage itself in public dialogue and advocacy as their participation bolsters international efforts.

In the fifteen years since the Rio Earth Summit the private sector's response to sustainable development, and to climate change more specifically, has become increasingly strategic and constructive at the level of both individual companies and collective initiatives. Denial and obstruction still occur, but many major corporations and business associations have started to address the complex, interrelated challenges of sustaining growth and wealth creation in the face of a changing climate, growing water stress, and emerging threats to ecosystems, biodiversity, human health, food security, and the resilience of economic and social systems.

The business community has played an active role at agenda-setting global conferences, for example, led by organizations such as the World Business Council for Sustainable Development (WBCSD), the World Economic Forum (WEF), and the International Chamber of Commerce (ICC). These have included the 2002 World Summit on Sustainable Development, the annual G8 Summits and Commission for Sustainable Development dialogues, and the meetings of the UNFCCC process from Kyoto to Bali. At the national level, business coalitions and multi-stakeholder initiatives such as the Pew Center's Business Environmental Leadership Council, the US Climate Action Partnership, the UK's Corporate Leaders Group on Climate Change, Brazil's Climate Action Defense Compact, and South Africa's National Business Initiative have become vocal advocates for more progressive public policy and government leadership.

As insurers and institutional investors have grown to appreciate the strategic business risks associated with climate change, they too have engaged actively in the debate and started to propel the companies in their portfolios toward greater analysis and public disclosure of these risks and of their carbon emissions. Collective efforts such as UNEP's Finance Initiative, the Investor Network on Climate Risk (INCR), and the Carbon Disclosure Project (CDP) have played an important catalytic role in this process. INCR, for example, has grown from a coalition of 10 investors managing \$600 billion in assets when it was launched in November 2003, to over 60 investors managing \$5 trillion of assets by June 2008.¹ Likewise, the CDP, which acts as a coordinating secretariat for institutional investors with a combined US\$57 trillion in assets under management, catalyzed public disclosures on carbon emissions from some 3,000 major corporations in 2008, compared to less than 200 in its first year of operation in 2002.²

At the level of individual firms, thousands of corporations around the world have now implemented policies, management systems, and public reporting procedures to manage and account for their own environmental performance. In a small but growing number of cases they are also reporting on their overall 'carbon footprint' and their impact on sustainable development, human rights, and the Millennium Development Goals (MDGs) more broadly. These corporations still represent a tiny percentage of total multinationals in the world, especially when one takes into consideration emerging market companies from countries such as China, India, Russia and Brazil, but they are building a well-tested body of

management frameworks and implementation tools for other companies to learn from and adopt.

While the risk management aspects of the climate challenge remain paramount to most major corporations and financial institutions, the venture capital community and a vanguard of innovative companies have more recently started to focus on the new markets and business opportunities that will emerge in a carbon constrained economy. To date, the vast majority of this private sector attention has been focused on mitigation efforts in the industrialized economies. The emphasis has been on improving energy end-use and supply chain efficiency, development and adoption of low carbon technologies, consumer awareness campaigns, experimentation with corporate and public emissions trading schemes, and the development of common metrics, indicators and reporting protocols. With a few notable exceptions, the climate adaptation challenge, and the links between climate change, economic growth, human rights, and poverty alleviation, has not been high on the corporate agenda. This is especially the case in developing countries where the adaptation challenge is the greatest.

The situation is starting to change, although much still needs to be done to more actively engage the private sector in the adaptation and development agenda. As the WBCSD and WEF stated in their July 2008 *'CEO Climate Policy Recommendations to G8 Leaders'*, which was signed by over 80 chief executives of leading global companies: "Adaptation to climate change is a critical challenge for all countries, particularly for poor countries that will be hit hardest and earliest, and for all business sectors. Even if GHG concentrations are stabilized in the coming years, some impacts from climate change are unavoidable. These include increasing water stress, more extreme weather events, the potential for high levels of migration and the disruption of international markets. These challenges cannot be separated from the challenges of sustainable development. ...The international business community is starting to develop products and services that can help with adaptation. The new [climate policy] framework can help us do more."³

This paper explores some of the links between climate adaptation, human rights and poverty alleviation in developing countries from the perspective of the corporate community. It briefly outlines what the challenges are and why they matter to business. The paper then looks at different ways that business can respond to these challenges, illustrating with examples from individual companies and their supply chains, as well as collective action through industry sector coalitions and public-private partnerships.

The paper focuses on the following areas of business action where there are some early leadership models and initiatives already underway, and where there is great potential for mobilizing increased business resources and engagement in future:

1. **Harnessing core corporate competencies and individual value chains** – for example, developing and disseminating commercially viable products, services and technologies, and sharing risk management, scenario planning and disaster preparedness tools along corporate value chains, to increase climate change resilience in developing country enterprises and communities.

2. **Investing in innovative public-private and hybrid financing mechanisms** – ranging from multi-million dollar donor-led global funds and project co-investments to climate adaptation insurance products for the poor, voluntary corporate carbon offset projects, investments in social entrepreneurs, and corporate philanthropy contributions.
3. **Partnering strategically with civil society** – strategic alliances between business, NGOs, research institutes, and community organizations.
4. **Creating industry-wide sector initiatives** – working with competitors to establish common standards and spread technology and good practices.
5. **Engaging in public policy advocacy and dialogue** – corporate efforts to strengthen public governance and institutions for adaptation at global, national and city levels.

THE CASE FOR BUSINESS ENGAGEMENT IN CLIMATE ADAPTATION IN DEVELOPING COUNTRIES

There is now widespread consensus on the broad challenges of climate adaptation if not their specific impacts and implications, which will vary based not only on environmental conditions and geography, but also on factors such as the quality of governance, political stability, economic diversification, and community-level resilience and social capital. At the risk of over-simplification, these challenges can be summarized under the following seven inter-related threats to ecological, economic, political and human security. They are outlined in more detail in Diagram 1:

- Decreased agricultural production and food security
- Threats to ecosystems and biodiversity
- Increased water stress and water insecurity
- Threats to human health
- Greater exposure to natural disasters
- Increased humanitarian crises, migration and environmental refugees
- Potential conflicts and instability.

In almost every case it will be the poorest countries, communities and households that are most vulnerable to these threats - the least able to assess and prepare for them or to cope with and recover from them. Likewise within the private sector, it will be small and micro-enterprises and farmers that are most vulnerable, especially those operating in the informal economy, rather than large domestic companies and multinational corporations. And yet larger companies will also face increased risks, higher costs and potentially serious systemic shocks as a result of these threats. Those with extensive supply chains, operations, investments, workforces or markets in developing countries will be particularly vulnerable. They will also have a potentially vital role to play in leveraging the capital, technologies, product, process and service innovations, networks, and management systems that will be essential for helping developing country governments and their citizens to adapt to climate change.

All seven of the adaptation challenges listed above are both impacted by and have an impact on the activities of the private sector – some on a sectoral basis, such as agriculture, biodiversity, water, and health, others more generally. Clearly the specific business risks and opportunities associated with these challenges will vary depending on the industry sector and value chain characteristics of the company in question, but increasingly large corporations cannot ignore them. Yet most companies still view climate change and the inter-related challenges of mitigation and adaptation as a technical environmental management issue, rather than a more strategic and systemic business risk or opportunity that is of high significance to the board of directors and top executives.

Take the threat to ecosystems and biodiversity for example. As the WBCSD argues in its 2008 *Corporate Ecosystem Services Review*: “Ecosystem degradation is highly relevant to business because companies not only impact ecosystems and the services they provide, but also rely on them. ...Unfortunately, companies often fail to make the connection between the health of ecosystems and the business bottom line. Many companies are not fully aware of the extent of their dependence and impact on ecosystems and the possible ramifications. Likewise, environmental management systems and environmental due diligence tools are often not fully attuned to the risks and opportunities arising from the degradation and use of ecosystem services.”⁴

Most companies, with a few notable exceptions, are equally unprepared for growing water stress and insecurity. WBCSD makes the case that: “Virtually all businesses will be affected either directly or indirectly by water-related issues over the next few decades. ...Water constraints pose a potential multi-billion dollar risk for businesses worldwide. But the world water situation is not just about risks: some of the key challenges are related to know-how, technology and organizations, areas where business can contribute with sustainable solutions.”⁵

Likewise, in the case of improving preparedness for climate-related natural disasters, the World Economic Forum argues that: “The financial savings from increased resilience promise to be significant.” Citing the US National Institute of Building Sciences, WEF makes the point: “...after the consolidation of losses, approximately 90 percent of disaster-related expenditures currently go towards relief and reconstruction, whereas for each one dollar invested in prevention four dollars can be saved in disaster response costs. ...However, even with the growth in costs and opportunities associated with disasters, the private sector has remained engaged in resilience through specific projects rather than comprehensive, industry or cross industry-wide initiatives.”⁶

Similar arguments relating to business risks, opportunities and responsibilities can be made for the growth in certain infectious diseases, rising food costs and food insecurity, and the potential for climate-related conflicts and migration. Major investors are starting to take note. The past few years have seen a marked increase in investment research reports focused on quantifying what these challenges mean for the protection and creation of long-term shareholder value in different industry sectors.

In short, there is a growing business case to be made for more rigorous analysis and management of the potential physical, operational, financial, regulatory and litigation risks

associated with the seven climate adaptation challenges listed in this paper. Global corporations also need to increasingly consider and plan for more systemic shocks, such as serious disruptions to supply chains and international markets. And at a minimum, many companies are likely to face an increase in climate-related operating costs, ranging from higher commodity prices and raw material costs, to growing insurance and security costs.

For certain industries and for certain adaptation challenges, there are also new business opportunities and potential markets to be harnessed. These include the development and dissemination of commercially viable products, technologies and financing mechanisms that can support climate adaptation by:

- Enhancing information and data collection and analysis;
- Developing ecosystem services;
- Improving energy and water access and efficiency;
- Increasing agricultural productivity and resilience;
- Strengthening health systems;
- Adapting physical and institutional infrastructure;
- Protecting and empowering low-income producers and communities through the provision of risk management products, social protection services, and economic diversification opportunities.

Companies, especially those operating on a global basis, also need to face changing stakeholder expectations of their role in society. Consumers, employees, environmental and human rights activists, development experts, politicians and the general public are looking more and more to business to be a proactive 'part of the solution'. There are growing public campaigns against those companies deemed to be 'part of the problem'. In a connected, Internet-enabled world, corporations that are perceived to be directly causing climate adaptation threats or exacerbating the vulnerability of poor countries and communities in dealing with these threats are likely to face increasingly sophisticated activism and reputation risks. As growing momentum gathers behind the movement for climate justice the spotlight is likely to shine ever more rigorously on large companies, and on the relationship between their environmental and human rights impacts and their social 'license to operate'.

Finally, there is the moral and humanitarian case to be made for greater business engagement in climate adaptation efforts in developing countries. Global companies and their leaders are increasingly integral members of the international community. As key beneficiaries of globalization they have a leadership responsibility, in addition to long-term self-interest, to make its opportunities more accessible to more people, and to help manage and mitigate negative impacts on the environment, human security and quality of life. As Klaus Schwab, founder of the World Economic Forum has observed, "Global corporate citizenship ...entails focusing on the 'global space', which is increasingly shaped by forces beyond the control of nation-states. Global corporations have not only a license to operate in this arena but also a civic duty to contribute to sustaining the world's wellbeing in cooperation with governments and civil society. Global corporate citizenship means engagement at the macro level on issues of importance to the world: it contributes to enhancing the sustainability of the global marketplace."⁷ There are few, if any, issues of greater importance to the world today than mitigating and adapting to climate change and

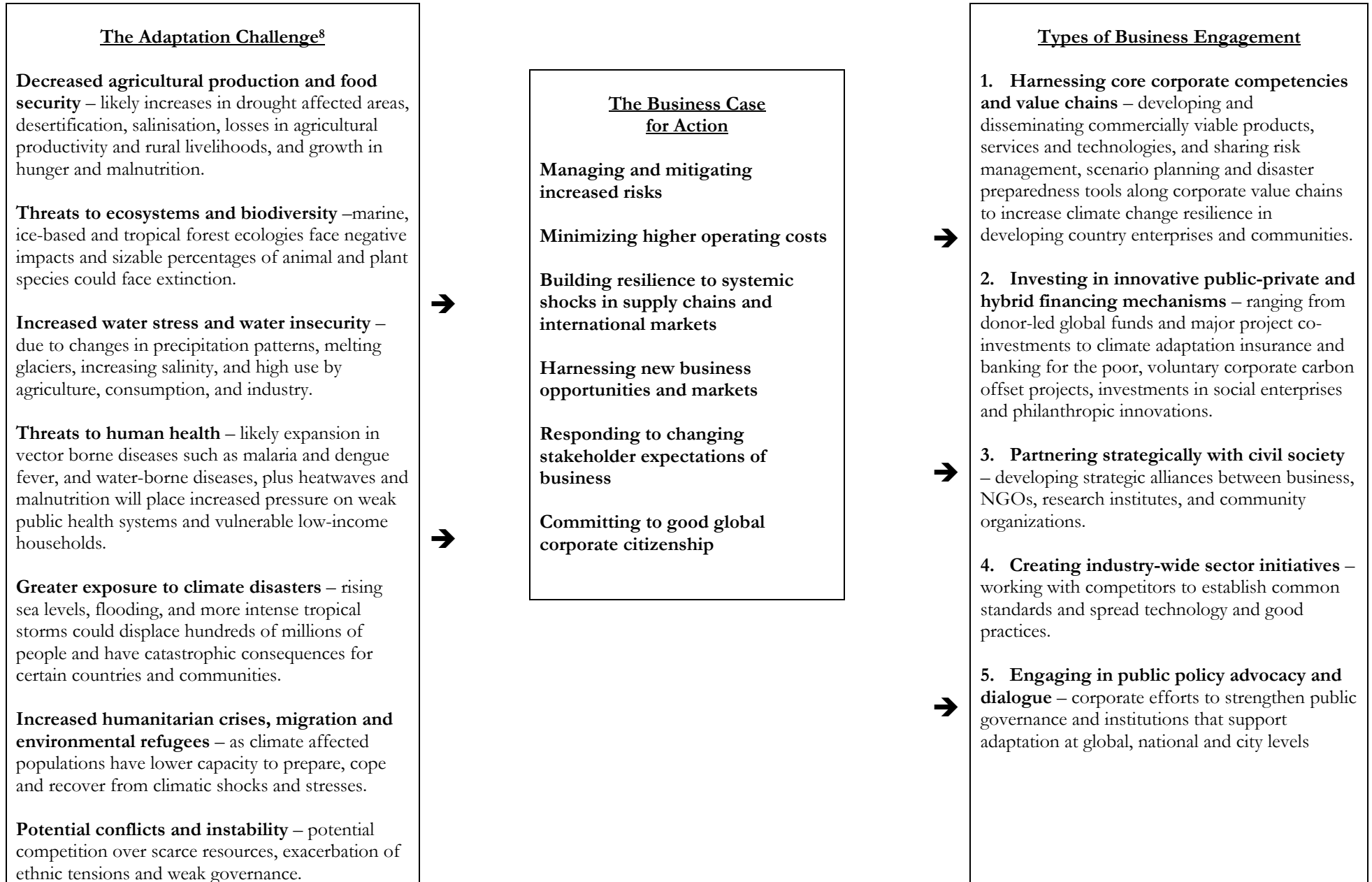
the related threats it poses to human wellbeing and security – and in ensuring that the world’s poorest countries and communities don’t get excluded or suffer the most.

In summary, there is an evolving case to be made for large companies to play a leadership role in working with others to help build more climate change resilient communities, supply chains and systems, and to do so in developing as well as industrialized economies. It is a humanitarian and moral imperative for the world’s top business leaders, as much as it is a strategic risk management challenge and an economic opportunity. The following section provides an overview of what this leadership role currently looks like in practice.

A few caveats are required. Space permits only a cursory overview of what are extremely complex and inter-related adaptation challenges and the business response to these. The examples are only a small sample of initiatives underway. They also represent a tiny percentage of global corporations. Much more can be done and needs to be done, even by the well-established Global Fortune 500 companies, let alone emerging market companies and small and medium enterprises that make up most economic activity in developing countries. Voluntary corporate action will be necessary but not sufficient. Clearer public policy frameworks and incentives will also be needed to mobilize greater private sector engagement. Furthermore, although the following section focuses on good practice, many private and state-owned corporations remain the cause of serious deforestation, environmental and human rights abuses, inadequate building standards, corruption, and other factors that increase the severity of climate change threats and exacerbate human vulnerability to these threats.

The role of government and good governance in preventing such negative business impacts and encouraging good practice remains absolutely paramount. Effective government is important not only from the perspective of creating a suitable enabling environment in terms of regulations and incentives for business engagement in climate mitigation and adaptation. It is also vital from the perspective of mobilizing sufficient financial resources to address the climate change challenge in developing countries and low-income households and communities. Even the largest and most influential global corporations taken collectively are not a panacea. Nor are they responsible for the overall problem. They can, however, play an important leadership role. As the following examples illustrate, they can also encourage other enterprises and stakeholders along their value chains and within their industry sectors to do likewise.

Diagram 1. Corporate Action on Climate Adaptation in Developing Countries



EXAMPLES OF BUSINESS ENGAGEMENT IN CLIMATE ADAPTATION AND DEVELOPMENT

What role can large companies play? Where can they be most effective in helping low-income countries, communities and small or micro-enterprises become more climate change resilient while also achieving economic growth and development? And how can their engagement be most strategically aligned to their core business interests and competencies? The answers to these questions will obviously vary for different industry sectors and countries, and different climate adaptation challenges and solutions.

One useful way of looking at practical solutions to adaptation in developing countries and identifying key ‘intervention points’ where private sector engagement can make a contribution, is to frame these solutions, as the World Resources Institute (WRI) has done, as, “...a continuum of responses to climate change from “pure” development activities on the one hand to very explicit adaptation measures on the other.”⁹

In their report ‘*Weathering the Storm*’, WRI propose a continuum roughly divided into four types of adaptation efforts that can be summarized as follows:

- **Addressing the drivers of vulnerability** – activities to reduce poverty and address other shortages of capability that make people vulnerable to harm, with very little attention paid to specific climate change impacts. For example, efforts to improve livelihoods, literacy, and women’s rights.
- **Building response capacity** – capacity building and technology transfer efforts that build systems and institutions for problem solving, with examples including the development of robust communications and planning processes, and the improvement of mapping, weather monitoring and natural resource management practices.
- **Managing climate risk** – incorporating climate information into decision-making to reduce negative effects on resources and livelihoods. Examples include disaster response planning activities, drought-resistant crops, and efforts to “climate proof” infrastructure.
- **Confronting climate change** – here WRI cites actions that focus almost exclusively on addressing impacts associated with climate change such as relocating communities in response to sea level rise and responses to glacial melting.¹⁰

The private sector can play a role in all of these areas, especially the first three. For example through expanding economic opportunity, job creation and economic diversification along business value chains, sharing corporate risk management, resource management and planning tools, and developing innovative and affordable technologies and services, ranging from information and communications technology (ICT) to new seed varieties, insurance products, and building materials.

The above framework looks at adaptation solutions from the perspective of the countries and communities needing to adapt. Another approach is to frame these solutions from the perspective of different types of corporate competencies and spheres of influence. These two approaches are essentially ‘two sides of the same coin’. The following examples illustrate the potential of mobilizing private sector engagement from the latter perspective.

They focus on a spectrum of business interventions that range from commercially viable core business activities at the level of individual firms, through to commercial, philanthropic and hybrid financing mechanisms, on to community engagement and NGO partnerships, collective business initiatives, and corporate engagement in shaping public policy and strengthening public institutions.

While companies usually have greatest control, and hence responsibility, at the level of their own individual operations and value chains, their ability to achieve impact at scale is often greater, if somewhat more challenging, through creating industry-wide coalitions, public-private partnerships, and influencing progressive public policy. Although the specific interventions will vary markedly between different industry sectors and situations, most large companies can play some role in the five broad areas of corporate action outlined in the following pages.

(i) *Harnessing core corporate competencies and individual value chains*

Through thinking more creatively about their core business activities, companies in relevant industry sectors can play an essential role in spreading existing technologies and market-driven solutions or developing new ones that support adaptation efforts. For example:

- They can ensure more climate resilient production of and access to food, water, energy, and health services, while also being commercially viable, as illustrated in Box 1.
- They can develop products and services that help governments and low-income communities to better identify and manage climate adaptation risks, through a range of insurance instruments and through sharing corporate skills and tools in risk management, scenario planning and disaster preparedness.
- They can support innovative ICT solutions for improving climate risk mapping, data collection and analysis, early warning systems, disease surveillance, and wider public dissemination of essential climate-related and disaster preparedness information.
- They can develop better physical building materials and construction codes, and more affordable and sustainable infrastructure for public transportation, electricity generation, and water and sanitation.

All of these are essential to building climate change resilience. Some of these solutions involve the development of what are now commonly referred to as ‘base of the pyramid’ or ‘inclusive business’ models that explicitly aim to include the poor as producers, suppliers, distributors, and consumers along corporate value chains.¹¹ Other business solutions, most notably in the area of infrastructure development, require multi-billion dollar commitments and usually some type of public-private partnership.

A growing number of companies are also starting to undertake programs to understand, measure and in a few cases publicly report on their carbon footprint along their entire value chain, including their operations in developing countries. This work is still at an early stage, but is likely to develop frameworks and tools that will be used by many more corporations. The Carbon Disclosure Project has created a ‘Supply Chain Leadership Collaboration’ with an initial 24 major corporate partners to help companies better

communicate with their suppliers on emissions, and over time measure and subsequently manage emissions along their supply chain. One of the partners, Wal-Mart, has over 60,000 suppliers in hundreds of sectors. This illustrates both the leverage potential, but also the technical and logistical challenge of such an undertaking, even with suppliers in the United States let alone on a global basis and in developing countries.

More indirectly, different industry sectors can facilitate greater economic diversification and decrease vulnerability through innovative business linkage programs that localize value creation in developing countries. They can support local job creation and small enterprise development by expanding their efforts to source from and supply to small, medium and micro-enterprises along their value chains, especially those drawn from vulnerable population groups.¹² Such efforts can help not only to increase income levels, but also to transfer technical skills, education and training, thereby decreasing at least some aspects of climate vulnerability among the poor.

At a minimum, every company can develop corporate policies and undertake due-diligence measures, such as environmental, human rights and conflict impact assessments, anti-corruption procedures, and rigorous monitoring of their ongoing operations to minimize negative impacts they may have on the climate-related vulnerability and adaptability of the countries and communities in which they operate. There are a number of initiatives that already support such efforts by business. These range from the work of the UN's Special Representative on Business and Human Rights, to tools and capacity building efforts by the IFC, the UN Global Compact, the World Bank Institute, the Business Leaders Initiative on Human Rights, the International Business Leaders Forum, and International Alert. Few of these initiatives currently make explicit the links between corporate codes of conduct in developing countries and the climate adaptation challenge in these countries, but they provide a sound platform on which to build a more integrated and comprehensive approach in the future.

Box 1. Mobilizing Core Business Competencies and Value Chains to Tackle Water Stress and Declining Agricultural Productivity

The following vignettes offer a few examples of strategic corporate initiatives that address some of the climate adaptation challenges related to water stress and food production in developing countries. They barely 'scratch the surface' of what would be possible with increased business commitment to innovation and new types of partnership.

Responding to increased water stress and insecurity: *It is estimated that by 2020 around two-thirds of the world's population will be living in water-stressed countries. There is a vital need for improved conservation and management of existing water systems and watersheds, expanded rainwater harvesting, desalination and water re-use, and more integrated national water policies, in addition to improving access to clean water and sanitation.*

Water utilities clearly have a central role to play. Many are actively engaged with governments and experimenting with community consultation models to develop more effective approaches to water pricing, delivery and maintenance. Almost all businesses, however, rely on water at some point in their value chains. Given this fact, there are

remarkably few major corporations that have established comprehensive water stewardship or water sustainability strategies. Unilever, Coca-Cola, Alcoa, Rio Tinto, Shell, BP, DuPont, and PepsiCo offer valuable models of such strategies, which aim not only to manage the ‘water footprint’ of the company’s own sourcing and manufacturing operations, but also to support community water initiatives and more systemic efforts to improve watershed protection and management. Dow Chemical is another company that has made water a strategic business priority and has established an internal ‘venture challenge fund’ to support innovation in new water technologies. Such venture funds could be emulated in almost any company.

Collective action is also increasingly important and the examples of the Global Water Challenge and the CEO Water Mandate are illustrated later in this paper. In the past year, WBCSD has worked with a task force of global companies to launch a ‘Global Water Tool’ aimed at helping companies better manage water risks and usage along their supply chains.¹³ And in 2008, JPMorgan launched a framework, developed with support from WRI, to enable investors to better evaluate the impact of water scarcity and pollution on individual sectors and companies.¹⁴

Promoting sustainable agriculture to improve long-term productivity and food security: *Interventions needed include research and dissemination of improved crop varieties that are tolerant to increased drought, salt, and pests and/or achieve higher yields, protection of gene banks, micronutrient fortification in food production and manufacturing, changes in planting and harvesting times, diversification of food crops, improved biodiversity and soil protection, better irrigation, water and land management, the use of low-tillage or no tillage methods, more effective extension and education services to farmers, crop and weather insurance, community grain storage and food distribution schemes, development of early warning systems, land tenure reforms, and rigorous debate and ongoing evaluation of the pros and cons of both biotechnology and biofuels.*

Unilever, Syngenta, DuPont, Monsanto, Nestlé, Groupe Danone, McDonalds, and Starbucks have been among the agribusiness leaders to develop comprehensive sustainable agriculture strategies along their different commodity value chains, including efforts to support farmers in developing countries in terms of livelihoods and increasingly, climate change adaptation. Most systemic have been industry-wide initiatives such as various commodity roundtables, the Sustainable Agriculture Initiative Platform, and the Business Alliance for Improved Nutrition.

Improving food productivity and security is not only an issue for agribusiness companies. Banks and insurers, logistics and transportation services, ICT companies, packaging firms and retailers can all play a role in strengthening food value chains and in decreasing the food vulnerability

of low-income communities. WEF’s Business Alliance Against Chronic Hunger has developed a framework outlining how different industry sectors can help play a role from improving agricultural production methods through to storage and transport, selling and trading, processing and packaging, and retail distribution.¹⁵

The Alliance for a Green Revolution in Africa (AGRA) is also likely to play to crucial role in helping countries and communities to build climate change resilience along the food

value chain, working not only with leading multinational corporations, but also building the capacity of indigenous agro-dealers, processors, distributors and other local companies, all of which will be essential for tackling the challenge in most rural communities.

(ii) Investing in innovative public-private and hybrid financing mechanisms

There is a serious funding gap in addressing the adaptation challenge in developing countries. Public funds will be essential to fill this gap, but they will not be sufficient. In their *CEO Climate Policy Recommendations to G8 Leaders*, the WBCSD and World Economic Forum summarized the overall finance and investment challenge as follows: “Even under the most optimistic scenario of donor commitments, public funds will be nowhere near sufficient to meet the investment requirements of a successful international climate change strategy. The new framework must create mechanisms that catalyse much greater volumes of portfolio and direct private sector investment in climate change-related activities.”¹⁶

There is a wide variety of adaptation and development financing options that warrant greater attention and engagement from the private sector. These range from multi-million dollar private sector contributions to donor-led funds and major project co-investment commitments by private and public funders, to much smaller but still innovative private financing mechanisms such as the development of weather-related insurance and banking products for the poor, corporate voluntary carbon offset programs, social investments in energy entrepreneurs in developing countries, and venture corporate philanthropy. Company ‘take-up’ in all of these approaches is still low, but they offer great potential for increased private sector engagement in the future.

Private Contributions to Donor-Led Global Funds

Over the past decade the World Bank Group has launched ten different donor-led Carbon Funds, with a capitalization of over US\$2 billion as of June 2008. Multinational corporations, especially from Japan and Europe, have contributed directly to the capitalization of these funds, although examples are currently few both in number and size of financial commitment. In total, some 66 private sector companies have made contributions to the existing carbon funds, alongside 16 countries.¹⁷

Several of the more recent Carbon Funds have had an explicit focus on supporting climate adaptation, poverty alleviation, biodiversity protection, and community development, as well as emissions reduction in developing countries. The Biocarbon Fund, for example, supports projects that sequester or conserve carbon in forest or agro-ecosystems, while promoting biodiversity conservation and poverty alleviation. Of the \$53.8 million contributed for Tranche One of the fund, which closed in August 2005, 54 percent came from private companies. The Community Development Carbon Fund supports projects in poorer parts of the developing world that combine community development with investment in clean energy. It has been funded by US\$12.5 million from Norwegian energy company Statoil, alongside 15 other European and Japanese companies in the energy, oil, electricity, steel, chemical and financial sectors, and nine governments. The Forest Carbon Partnership Facility established in 2007 is also actively seeking private sector engagement.¹⁸

In June 2008, as part of its Clean Energy for Development Investment Framework, the World Bank announced the creation of two major new Climate Investment Funds (CIFs) with an initial target size of US\$5 billion – the Clean Technology Fund and the Strategic Climate Fund. Jointly established with the Regional Development Banks, these funds aim to provide experience in scaling-up clean energy investments and integrating climate resilience into development assistance. The private sector, through the engagement of the WBCSD, the World Economic Forum and some 40 of their member companies, has been actively involved in helping to shape the structure and goals of these new initiatives. The World Bank states that, “...the CIFs will, working through the private sector arms of the multilateral development banks, seek to provide incentives for the private sector to participate in achieving the objectives of the funds. Experience has shown that private sector initiatives can proceed and at times even be a trend setter for subsequent regulatory change.”¹⁹

Another international financing initiative directly related to the adaptation challenge is the Global Crop Diversity Trust, which aims to secure long-term funding for the support of gene banks and crop diversity collections in strategic locations around the world. As the Trust argues, genetic diversity of crops is essential not only in tackling hunger, poverty and food insecurity, but is also, “...on the front line in adapting agriculture to climate change. It is through the use of this diversity that we will be able to breed crops that are better able to withstand the effects of higher temperatures, more prolonged droughts, water-logging, stronger winds and other extreme events. ...It is arguable that our best long-term strategy to cope with climate change is to ensure that the maximum amount of genetic diversity of our crop plants is preserved, and remains available long into the future.”²⁰

Although a number of agribusiness companies are engaged in efforts to develop and disseminate new seed varieties in their own value chains, until recently there was no secure funding on a global basis to support most of the world’s 1,500 gene banks. Launched in 2004, the Trust aims to solve this problem by creating a \$260 million endowment, the interest of which will be used for this purpose. To date it has been financially supported by \$1 million grants from companies such as Syngenta and DuPont, in addition to official government donors and foundations such as the Bill & Melinda Gates, Gatsby, Rockefeller, Gordon and Betty Moore, and UN Foundations.

Co-Investments in Project Finance

A crucial existing area of private sector engagement – with potential for much greater public-private cooperation - is in the direct financing and implementation of infrastructure projects and technology transfer initiatives that explicitly combine investments in cleaner technologies with broader development and climate adaptation objectives in developing countries. Such investments currently face a number of obstacles. As the WBCSD notes, “Most low- and zero-GHG energy technologies will not be cost competitive at scale [in developing countries] without some combination of investment support mechanisms, technological advances or regulatory regime improvements. ...Some of the world’s poorest countries may be at a further disadvantage because of limited institutional and commercial capacity, not to mention high-risk ratings that affect the ability to attract, develop and manage substantial project-based investments.”²¹

The experience of the Clean Development Mechanism (CDM) illustrates both the potential and challenge. Established under the Kyoto Protocol, CDM allows signatory countries, which face limits on their GHG emissions, to invest in GHG reduction projects in developing countries, thereby enabling them to gain credits for offsetting their emissions at home. From the outset this was a trailblazing mechanism that envisaged a key role for the private sector in driving the process. It also aimed for an integrated approach to project selection combining carbon reduction targets with projects that increase employment opportunities, education, empowerment, accessibility for the poor, and technology transfer.

Despite the implementation of some large-scale projects and many pilots, the success of corporate partnerships through CDM has been undermined by a combination of high transaction costs, lengthy approval processes, the lack of capacity in developing countries, and regulatory uncertainty. At the same time, CDM projects have focused on only a small number of the world's most rapidly emerging markets, such as China, India and Brazil, with less than 5 percent being located in Africa, and those mostly in South Africa. Although many suitable technologies already exist within the corporate sector and increasingly through social enterprises and energy NGOs, this situation is unlikely to change without a combination of increased public-private financing mechanisms, greater flexibility and speed in approval processes, capacity building in developing countries, and government policies in both host and donor countries that take a more integrated approach to energy, climate change, trade, aid, and development.²²

The Global Environment Facility (GEF) has faced a number of similar challenges in its efforts to engage the private sector. In recent years it has worked closely with the IFC to extend its reach to the business community. At Bali in December 2007, for example, GEF announced a new alliance with the IFC to establish the GEF-IFC Earth Fund. This is aimed at leveraging private sector venture capital and other sources of private funding to develop innovative and cost-effective solutions to climate change, biodiversity loss and land degradation in developing countries. In addition to grants, equity participation, and soft loans, the Earth Fund is also exploring the implementation of a prize in cooperation with Prize Capital LLC to encourage more venture capitalists and private companies to make early-stage investments in innovative new technologies.²³

This initiative is one of a growing number of facilities and programs supported by the IFC in its mission to enable its private sector clients in developing countries to better respond to the business risks and opportunities of climate change and sustainable development more generally. Through its Sustainability Innovation Program, for example, the IFC incubates and demonstrates the commercial viability of innovative business initiatives that deliver environmental and social benefits, and encourages their independent replication by the private sector in emerging markets. IFC's catalytic work with the commercial banking sector in developing the Equator Principles for more environmentally and socially sustainable project finance is profiled in Box 2.

Box 2. Developing Industry Standards for Responsible Project Finance

The Equator Principles (EP) were launched in June 2003 in Washington DC, with 10 banks as the founder signatories and with support from the IFC. Based on the

environmental and social standards of the IFC, the EP framework requires its signatories to voluntarily adhere to these standards when financing projects in developing countries with capital costs above US\$10 million. Revised in June 2006 to include a public reporting requirement, today, the EPs are supported by over 60 financial institutions including most of the world's major banks as well as insurance companies, bilateral development agencies, and export credit agencies. According to *Infrastructure Journal*, in 2007, of the US\$74.6 billion total debt tracked in emerging markets, US\$52.9 billion was subject to the EPs, representing about 71 per cent of total project finance debt in these markets. In order to actively engage the increasingly influential banks in China, Russia, and India and other key emerging markets, an outreach committee has been formed. And in February 2008, several US signatories announced their adoption of the **Carbon Principles**. Designed in cooperation with power companies and environmental NGOs, these principles are aimed at managing carbon risk in the financing and construction of electricity generation. Although currently limited to projects in the United States, they illustrate the potential of voluntary standards in one industry sector or issue spreading to others through collective action.

Although of relatively small scale, another interesting model of a donor-led and corporate supported initiative aimed at overcoming some of these project finance challenges in the poorest countries is UNDP's MDG Carbon Facility. This was established by UNDP in 2007 with support from the UN Foundation, and in cooperation with European financial company Fortis, which recently merged with ABN Amro. Operating within the framework of the CDM and Joint Implementation, the MDG Carbon Facility aims to identify and support emission reduction projects that explicitly contribute to achieving one or more of the MDGs, with a focus on countries that are currently under-represented in the carbon market. UNDP's role will be to provide technical assistance to selected projects with clear human development benefits, while Fortis will be responsible for purchasing and selling on carbon credits generated by these projects, using the proceeds to reinvest in further development projects. Although the Facility won't provide underlying finance to the projects, UNDP will assist approved projects in arranging financing from third parties.

Insurance products to reduce climate risk for the poor

One of the most important and rapidly growing areas of private sector engagement in climate adaptation and disaster preparedness is the development of insurance and other risk transfer financing solutions to help low-income countries, communities, and small businesses reduce their vulnerability to climate change. As the British Department for International Development points out, "Coping with risk is an intrinsic part of life, especially for the poor. Insurance is an important part of dealing with risk, and is a way of transferring it to other agencies and spreading the financial cost of recovery over time. ...Climate change will probably increase demand for insurance, while at the same time increasing its cost. The challenge will be to find ways to make insurance more affordable by reducing administrative costs."²⁴

Improving the access, affordability and commercial viability of formal insurance schemes is a challenge even in terms of supporting national governments in the countries most vulnerable to climate change, let alone delivering solutions to millions of vulnerable low-income communities, farmers and small enterprises. This is a complex and rapidly

evolving area, with products ranging from micro-insurance schemes and index-based agricultural insurance for poor farmers, to multi-million dollar calamity funds, and catastrophe bonds and pools at the level of national governments. Global insurance and reinsurance companies such as Swiss Re, Munich Re and AIG, as well as many developing country microfinance institutions, cooperatives, rural banks, and emerging market companies and joint ventures such as ICICI Lombard, BASIX and TATA-AIG in India, are playing a leadership role, often in partnership with multilateral development banks, the United Nations and bilateral agencies.

SwissRe, for example, identified climate change as an emerging risk some 20 years ago, and has been an important player in raising awareness, advancing knowledge, supporting risk mapping initiatives and trading schemes, and developing products and services to both mitigate and adapt to climate risk. While much of the focus to date have been in developed countries and with major corporations, the company has also partnered with others to address the challenge of risk financing for poorer countries and communities. For example:²⁵

- In 2004 it worked with a local Indian insurer and the World Bank to help launch one of India's first programs to use weather-index based insurance. Today, the company is structuring and pricing a number of such products and cooperating with direct insurers who then sell them on to farmers via their own agents or in partnership with NGOs, community self-help groups, microfinance institutions and rural banks. In part due to government subsidies, the number of weather-index based insurance policies covered by Swiss Re in India grew from 45,000 to 67,000 between 2006 and 2007 – a good example of innovative private sector approaches to serve the poor enabled by targeted government policy.
- In September 2007, SwissRe launched its Climate Adaptation Development Programme, which aims to leverage the lessons it has learned to develop a more comprehensive risk transfer market for the effects of adverse weather in developing countries. The program, launched as a commitment to the Clinton Global Initiative, will finance the opportunity costs associated with structuring and pricing pioneering schemes, support R&D to develop tools for scaling such schemes, and promote these solutions with other key public and private players through a combination of capacity building and policy discussions. One of its first partnerships has been with the Millennium Promise Alliance and the Earth Institute at Columbia University to develop innovative climate risk indices and weather derivative contracts for 12 Millennium Village clusters in Africa. To date, such protection has been delivered to three village clusters in Mali, Kenya and Ethiopia, providing up to US\$2 million of cover and protecting about 150,000 farmers and their families against drought-related food shortages.

These and a growing number of other examples illustrate how financial service companies are using a combination of their core business competencies and corporate citizenship strategies, usually working in partnership with either nonprofits or government entities, to explore new approaches to providing risk finance products to the poor. This field is still at a very early stage, but the potential for greater individual corporate leadership,

public-private partnerships, and increased cooperation within the private sector - for example between banks, insurers and companies in other industries such as agribusiness, food retailing and ICT - is immense.

Having said that, insurance and risk finance are only one component of a more integrated and comprehensive strategy for helping the poor to become more resilient to climate-related disasters. As DFID outlined in its 2007 guidance note on '*Characteristics of a Disaster-Resilient Community*', there are five inter-related areas that are essential to building resilience: governance; risk assessment; knowledge and education; risk management and vulnerability reduction; and disaster preparedness and response.²⁶ While government entities, including city municipalities, must usually take the lead on these areas, NGOs, community-based organizations and corporations are increasingly vital partners, and fundamentally new modalities of cooperation and partnership need to be explored. Initiatives that are exploring such integrated approaches include the World Economic Forum's framework for private sector engagement in building resilience to natural disasters.²⁷ Another example is the ProVention Consortium. Created by the World Bank in 2000 as a partnership with other donors, NGOs, universities, research institutes, and the private sector, it aims to achieve a more collaborative approach to addressing natural disaster vulnerability and reduction.

Corporate Carbon Offset Programs

The growth in corporate carbon offset schemes, both mandatory and voluntary, is another emerging area of carbon finance that offers large companies the opportunity to mitigate or offset their own carbon emissions while at the same time supporting sustainable development projects and climate adaptation and mitigation initiatives in low-income countries and communities.

The regulatory or compliance-driven market, where corporations and governments are purchasing carbon offsets in order to comply with mandatory caps on the greenhouse gases they are allowed to emit, is already worth billions of dollars – some US\$5.5 billion in 2006 according to the World Bank. It is facilitated by global mechanisms such as CDM, which approves Certified Emissions Reductions (CERs) that can then be traded.²⁸

There is also a burgeoning voluntary market in carbon offsets. A growing number of companies, airlines, major global events, NGOs, and individuals are making commitments to become 'carbon neutral' or 'climate neutral', and they are doing so through a combination of reducing their own energy use, shifting to cleaner sources of energy, and then off-setting what they cannot reduce, often in partnership with environmental and development NGOs and agencies. This process has been facilitated by the emergence of some 50 commercial and nonprofit intermediary organizations and mechanisms such as the CarbonNeutral Company, the Climate Neutral Network and its Climate Cool products, Climate Care, Global Cool, Climate Friendly, TerraPass, Conservation International's 'Conservation Carbon' initiative and the Environmental Defense Fund's Fight Global Warming initiative, to name just a few of the more established ones, as well as voluntary trading schemes such as the Chicago Climate Exchange.

The types of carbon-offset projects vary widely and many are in industrialized countries, but a growing number are in developing economies. They include renewable

energy and energy efficiency projects, and what are termed land use, land use change and forestry (LULUCF) projects that focus on the protection of existing forests, reforestation, planting new forests, soil protection and improvement. While the purpose of carbon-offset projects is to decrease greenhouse gas emissions, depending on their nature they can also have valuable development benefits ranging from local job creation, income generation and economic diversification to the establishment of innovative projects in agriculture, forestry, water use, education and health, many of which can also support climate adaptation efforts. As such, these programs offer a variety of potential benefits to both the companies involved and climate-related development efforts in low-income countries and communities. They can be a source of development finance and in some cases technical assistance and technology transfer to the developing world, while at the same time they can help to raise awareness, improve environmental performance, manage reputation risks, and encourage behaviour change in large corporations.

As with most emerging areas of technical and societal innovation, there is growing debate on the credibility, integrity and impact of such schemes – and with this a need for rigorous measurements and certification systems. In addition to the protocols established by CDM, a number of voluntary initiatives are emerging, many led by the private sector. The Voluntary Carbon Standard is one example that was initiated as a pilot in 2005 as a partnership between the Climate Group, the World Economic Forum, the International Emissions Trading Association, and more recently the World Business Council for Sustainable Development, and supported by a number of corporate and private foundations, law firms, standards organizations and auditors, and the British Department for International Development. The Climate, Community and Biodiversity Standards developed by a consortium of NGOs and companies are another example profiled briefly in Box 3.

Investing in Social Enterprises and Energy Entrepreneurs

The past decade has seen the emergence of a new ‘asset class’ for investors variously described as ‘blended value’ investing, ‘hybrid’ investments or ‘triple-bottom line’ models, that explicitly look for a positive rate of return, but blend commercial, social and environmental measures of portfolio performance. Still in its relatively early stages, proponents and approaches range from the socially responsible investment (SRI) movement, that has evolved from a negative screening approach to a more proactive positive stock selection mindset, to mainstream investors such as cleantech venture capitalists and private equity firms, major banks establishing carbon finance units, and firms like JP Morgan and Goldman Sachs starting to use environmental, social and governance (ESG) screens on some of their investments.

The focus for most of these investors remains large companies and high-tech commercial start-ups in both developed and developing economies, but another small but growing investment option is developing through the emergence of social enterprises. These are usually small nonprofit or commercial enterprises that have an explicit goal of creating social and/or environmental value in addition to or in place of financial value, and are applying innovative, market-driven and performance-led approaches to deliver this value. In some cases they also provide a financial return to their funders. As such, they are looking to both the investment community, as well as the philanthropic and public donor community as a source of funding.

These social entrepreneurs are tackling a wide range of societal challenges from improving access to education, healthcare and clean water to developing innovative solutions to climate change and energy poverty. The latter group of ‘energy entrepreneurs’ are in turn supporting a variety of community-level, pro-poor renewable energy solutions and adaptation efforts, often accompanied by local enterprise development and income generation, in some of the world’s poorest countries. They are still few in number and limited in scope and reach, and will never reach the billion-dollar project finance levels of big infrastructure projects, but they offer another channel for large companies and investors interested in funding innovative new approaches to supporting sustainable development and tackling climate change in developing countries.

Examples of energy entrepreneurs include some of the carbon offset companies and intermediaries listed previously. Another is E&Co, which in 2008 received the Sustainable Investor of the Year Award from the Financial Times-IFC Sustainable Banking Awards. As the Judging Panel commented, “You hear talk about boutique investing, about small and medium enterprise investing, about technology investing; E&Co brings all three together.”²⁹

Established in 1994, E&Co employs what it describes as an enterprise-centered model to provide both investment capital and business development services to small and medium enterprises that supply clean and affordable energy to households, businesses and communities in 25 countries in Africa, Asia and Latin America. With over 150 clean energy enterprises in its portfolio, including solar, winds, biogas, LPG, hydro and energy efficient businesses, E&Co has mobilized some US\$170 million in co-financing to-date. In addition to playing a vital intermediation role in supporting enterprise development and local income generation in low-income communities, E&Co’s model has also delivered clean energy to over 4 million people and in recent years has starting offsetting over 3.3 millions tons of CO₂ per year. E&Co applies an equally innovative approach in its own funding model, raising capital through a combination of philanthropic and development agency grants, loans, and equity. In 2008, it reached agreement with Goldman Sachs to aggregate, monetize and purchase the carbon offsets from its current portfolio. The organization is now poised to scale-up. By 2012 aims to mobilize US\$210 million to make about 350 investments in local energy enterprises, to serve an additional 17 million people and offset 16 million tonnes of green house gases.³⁰

There is enormous untapped potential for large corporations to work with social enterprises and energy entrepreneurs to achieve both development and climate adaptation objectives in developing countries. Depending on the industry sector in question, corporations can work with such entrepreneurs as technical assistance and delivery partners along their own supply chains in these countries, support them through cause-related marketing campaigns, partner with them in carbon offset programs, invest in them through social venture funds, or provide them with philanthropic grants.

Innovative and Strategic Corporate Philanthropy

A related area of financing for development and climate adaptation projects in developing countries is corporate philanthropy. Although this represents only a tiny percentage of overall corporate revenues, the absolute amounts of money that large

corporations collectively mobilize through their philanthropy each year reaches billions of dollars. The 136 US companies that participated in the Committee to Encourage Corporate Philanthropy's 2007 online measurement and benchmarking study, for example, between them contributed some US\$38 billion in 2006. While international giving represents less than 15 percent of this amount, and money going to developing countries even less, global giving is on the rise.³¹ As with investing in social entrepreneurs there is great potential for large corporate foundations and corporate philanthropy initiatives to become much more strategic, entrepreneurial and market-driven in the area of climate and development, and to adopt hybrid or blended value investing models, rather than relying solely on making traditional grants.

A few pioneers are already leading the way. The Shell Foundation, Google.org, HSBC, and IBM offer four innovative venture or strategic philanthropy models that are making a direct and systemic contribution to the climate change and development agenda.

The Shell Foundation has pioneered a more market-driven approach to corporate giving by acting as an investor in developing and scaling-up enterprise-based solutions to challenges arising from the impact of energy and globalization on poverty and the environment. Its programs combine market-oriented ideas and partnerships with the company's own financial resources, in-kind resources such as brand, knowledge and infrastructure, and 'Business-DNA', for example business models and disciplines. Innovative ideas are incubated, with the ultimate aim of taking financially viable models to scale outside the foundation and ideally with some form of commercial financing from other parties. The Foundation estimates that by 2010, it will have used US\$75 million of its own money to leverage some US\$350 million from other organizations, much of which will be invested in enterprise-based efforts to alleviate poverty and tackle climate change in developing countries.³²

Google.org has committed to use not only money, but also the company's expertise in information and technology, and capacities such as its engineers and global reach, to focus on developing and scaling certain renewable energy technologies, supporting the flow of information associated with public service delivery in developing countries, fuelling small and medium enterprise in developing countries, and predicting and preventing emerging health and environmental threats such as disease and drought – all of which relate in different ways to supporting climate change mitigation and adaptation. Google.org has been legally structured in a manner that enables it to make both grants and investments in both nonprofit and for-profit enterprises. In 2007, it played a key role in the establishment of Innovative Support to Emergencies, Diseases and Disasters (Instedd). This nonprofit aims to use new technologies to enhance the sharing of information and collaboration between governments, emergency, health and relief workers, scientists and others to improve the early detection of, preparedness for, and response to global health threats and humanitarian crises, including those exacerbated by climate change. It is working closely with software engineers who have already built and field-tested several tools using technologies from Microsoft, Google and Facebook.

HSBC made a US\$100 million, five-year commitment in 2007 to launch the HSBC Climate Partnership in cooperation with the Climate Group, WWF, Earthwatch Institute, and Smithsonian Tropical Research Institute. The initiative will conduct the largest-ever field

experiment on the world's forests to measure carbon and the effects of carbon change. It will also help to protect major rivers including the Amazon, Ganges, and Yangtze, from the impacts of climate change, aiming also to benefit some of 450 million people who rely on these rivers, and work with some of the world's largest cities in developing and developed countries to develop more systemic city-level approaches to climate change mitigation and adaptation.

IBM has a longstanding record in traditional philanthropy and in recent years has taken a more strategic and competence-led approach that harnesses the company's skills, technology and networks as well as money. One example is its World Community Grid. This was created in 2004 in partnership with a variety of other corporate and nonprofit organizations through the donation of IBM hardware, software, technical services and expertise. It aims to accelerate computer-based research into challenges such as climate modelling in Africa, new seed varieties and under-served diseases, many of which are related to climate adaptation, and which require years of computing time and often don't have commercially viable R&D models. The initiative provides a platform for enabling organizations and individuals to donate the unused processing power and time of their personal or business computers that can then be used by communities of scientists and researchers. In less than five years, the Grid has become the world's largest humanitarian computing grid, with more than 380,000 plus members from over 200 countries, linking to 1 million computers and accessing an average of 1,100 years of computing time per week.³³

(iii) Partnering strategically with civil society

Many of the most innovative examples of large corporations engaging in the climate change and development agenda, either through their core business competencies and value chains, or through a variety of carbon finance, hybrid investment, and venture philanthropy funding models, involve some type of partnership with civil society organizations. These range from environmental and development NGOs to universities and research institutes in both developed and developing countries. There are now thousands of examples of individual companies engaging in a strategic manner in such alliances. There is also growing evidence of the mutual benefits of such partnerships including their ability to leverage more diverse resources, raise public awareness, educate and build capacity, improve corporate performance, deliver base of the pyramid solutions, and help low-income communities better adapt to climate change and alleviate poverty.

A number of environmental and development NGOs have also created dedicated units and programs to work with the private sector. In some cases they have established business networks directly affiliated with the NGO, and engaged in joint learning, policy advocacy and on-the-ground projects, not only philanthropic funding. Notable examples include the Pew Center's Business Environmental Leadership Council, which was instrumental in establishing the US Climate Action Partnership, Conservation International's Center for Environmental Leadership in Business, WRI's Green Power Market Development Group, and Environmental Defense Fund's Corporate Partnerships network.

There are also interesting models emerging of more systemic multi-stakeholder initiatives that engage not one company or NGO, but many companies and civil society groups in a collaborative effort. Four examples directly related to the climate change

challenge in developing countries are illustrated in Box 3. In each case, they have been developed by a combination of NGO and business leadership.

Box 3. Strategic Corporate-NGO Alliances

The Climate, Community and Biodiversity Alliance (CCBA) is an international alliance founded by five companies – BP, Intel, SC Johnson, Weyerhaeuser and GFA, and five NGOs – Conservation International, the Hamburg Institute of International Economics, Pelangi Indonesia, the Nature Conservancy, and the Wildlife Conservation Society, since joined by other research institutes and NGO partners. It aims to leverage the carbon market to support forestry projects around the world that simultaneously confront climate change, conserve biodiversity, and support local community development – what are termed ‘multi-benefit forestry projects’. To achieve this goal the CCBA has developed a set of Climate, Community and Biodiversity Standards that will help investors, corporations, project developers and policymakers to identify and support projects that meet a required set of 15 criteria in these three areas of fighting climate change, conserving biodiversity, and improving local socio-economic conditions. After extensive consultation, peer review, and pilot-testing on four continents, the standards were released in 2005. They are now being used by a growing number of carbon and forestry projects and their investors, in addition to being endorsed by the Chinese government for guiding sustainable forestry initiatives in China.

The Greenhouse Gas Protocol Initiative was established in 1998 as an alliance between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) to develop an international standard for greenhouse gas (GHG) accounting and reporting. It was developed by a steering group consisting of NGOs such as WWF, the Pew Center and the Energy Research Institute, and companies such as Norsk Hydro, Tokyo Electric and Shell. The first edition of the Protocol was published in 2001. Today it is the most widely used international accounting tool used by both government and business leaders to understand, quantify, manage, and report on greenhouse gas emissions. Although the initial development of the tool was focused on developed countries and tested with well-established multinationals, today it is being used by a growing number of developing countries to help their businesses meet international standards and compete globally.

The Global Water Challenge is a coalition of the following corporations, NGOs, research institutes and foundations – Acumen Fund, Ashoka, Blue Planet Run Foundation, CARE, Cargill, the Case Foundation, Catholic Relief Services, the Coca-Cola Company, Dow, Emory University Center for Global Safe Water, Millennium Water Alliance, Population Services International, Proctor & Gamble, UNICEF, UN Foundation, US Centers for Disease Control and Prevention, Wallace Genetic Foundation, Water Advocates, Water for People, WaterAid (itself founded by a group of water and other companies), Water Partners International, and WASH (Water Supply and Sanitation Collaborative Council). The initiative aims to catalyze a global movement to support a transformational shift in the water and sanitation sector. Although it does not have an explicit focus on climate adaptation *per se*, it does address the challenges of water stress and insecurity through raising awareness, connecting potential partners to invest in replicable and scalable projects,

monitoring these projects to learn and share lessons on what works, and influencing public policy. Currently the Global Water Challenge is focusing its efforts on projects and policies in the areas of water, sanitation and hygiene in schools, thereby also aiming for education benefits, and on innovative financing models to support community-based entrepreneurs and small businesses that are delivering local water and sanitation solutions, which can also help to create local jobs, generate income, and build community resilience.

The Prince's Rainforest Initiative aims to seek solutions to deforestation by establishing and promoting a value for the global ecosystems services that are provided by the world's remaining rainforests and identifying ways to fund these services, thereby providing incentives to host nations, local communities and private enterprises to conserve rather than destroy them. It was launched in October 2007 by HRH The Prince of Wales, with support from the Cambridge University Programme for Industry and sixteen corporate partners - Barclays Bank, the Climate Exchange, Deutsche Bank, DLA Piper, Finsbury, Goldman Sachs, KPMG, McDonalds, ManGroup, Morgan Stanley, Nedbank, Rio Tinto, Shell, Sky Broadcasting, Sun Media Group and the Virgin Group. The initiative aims to work with the UNFCCC, the World Bank's new Forest Carbon Partnership Facility, mandatory and voluntary carbon markets that are supporting Reducing Emissions from Deforestation and Degradation (REDD) mechanisms, and both donor governments and rainforest nations such as Brazil, Indonesia, Guyana, DRC, Cameroon, Gabon, Liberia and Sierra Leone. In addition to encouraging innovative transfer mechanisms for forest-based projects, the initiative also aims to work with the media to raise public awareness.

(iv) Creating industry-wide sector initiatives

A common challenge in mobilizing business engagement in the climate and development agenda is how to move beyond the voluntary good practice of individual corporations and their value chains to have more systemic impacts across entire industry sectors or locations. As stated elsewhere in this paper, government regulations and incentives play a crucial role in scaling up corporate sector engagement. Strategic business-NGO alliances are also useful. There is also great potential, however, for business-led, industry-wide collective initiatives to both raise awareness and to scale climate change and poverty alleviation efforts in developing countries. Such collective business efforts can also be valuable for setting and spreading voluntary standards on an industry-wide basis, especially when the industry is consolidated or has a clearly defined number of key players.

Four broad types of business-led, collective corporate networks or alliances have relevance for tackling climate change and supporting development in a more integrated and comprehensive manner.

- ***Geographic focused:*** alliances that bring together companies from different industries in the same geography or location, such as the national Business Councils for Sustainable Development supported by the WBCSD in many developing countries, the National Business Initiative in South Africa, and the Confederation of Indian Industry, all of which have programs focused on addressing climate change within the development realities of their own country or region.

- **Issue focused:** collective efforts that bring together companies from different industries to address a specific challenge, such as the UN Global Compact's CEO Water Mandate or its Caring for Climate initiative, both launched in 2007.
- **Industry focused:** alliances that bring together companies from the same industry sector to tackle the challenges of climate and development as they relate specifically to that industry sector, such as the Equator Principles profiled in Box 2, the Industry Sector Groups led by the World Economic Forum, the sector initiatives established by the WBCSD, and stand-alone business-led initiatives such as the International Council on Mining and Metals and the International Petroleum Industry Environmental and Conservation Association. A small, but growing number of more traditional trade and industry associations are also starting to address the interrelated challenges of climate change and development, and the role of their industry in minimizing negative impacts and mobilizing constructive business engagement.
- **Multi-industry, geography and issue:** corporate networks operating on a global basis and addressing a range of climate change and development challenges. The most established and influential of these are the World Business Council for Sustainable Development (profiled in Box 4), the World Economic Forum, and the International Chamber of Commerce.

Box 4. The World Business Council for Sustainable Development

WBCSD is the one global CEO-led business organization that is governed exclusively by business leaders, and is dealing exclusively with the interrelated challenges of sustainable development and climate change. It is a global association of over 200 companies, from some 20 industrial sectors, with regional or national business-led partners in over 50 countries. Nearly half of WBCSD's members are in the Global Fortune 500 and two-thirds of its regional partners are in the developing world, including crucial emerging economies such as China, Brazil, India, Russia and South Africa.

Dedicated to sustainable development from the outset, the BCSO was established in 1990 by Swiss industrialist Stephan Schmidheiny, at the invitation of Maurice Strong, Secretary-General of the UN Conference on Environment and Development (the Rio Earth Summit). Since then it has joined forces with the World Industry Council for the Environment, to become WBCSD. It has played a catalytic field-building and advocacy role in numerous global and national leadership efforts relating to climate and development, as well as working with its member companies to implement and learn from on-the-ground projects.

In addition to its ground-breaking role at the Rio Earth Summit, which established a model for voluntary corporate engagement in other major UN Conferences, WBCSD also coined the term eco-efficiency, helped establish the International Emissions Trading Association in partnership with UNCTAD, led the Business Action for Sustainable Development consultation process leading up to the Johannesburg World Summit on Sustainable Development in 2002, and has been an active participant in the UNFCCC's

Conference of Parties (COP) process. WBCSD currently focuses on four key thematic areas: energy and climate; development; ecosystems; and the business role in society. In addition, it manages working groups on water, sustainable value chains and capacity building, and has coordinated agenda-setting work with the Cement, Electricity, Mining and Minerals, Forest Products, Mobility (energy and auto companies), and Tire industries.

(v) *Engaging in public policy advocacy and dialogue*

No amount of collective action on the part of business, even the world's largest and most influential companies, will be sufficient in addressing the interrelated challenges of climate change, economic development, and poverty alleviation in the absence of good governance on the part of both donor nations and developing countries. Strong and effective government is absolutely essential - from more coordinated official aid, trade reforms, and targeted climate change assistance on the part of developed countries, to greater capacity, transparency and accountability to citizens in developing countries. Where governments are open and willing to actively engage with civil society organizations and business groups on a more systematic and structured basis, there is great potential for cooperation, both in shaping public policies, and in building capacity and strengthening public institutions.

At a global level, relevant examples of such cooperation include business engagement in the stakeholder consultation process being undertaken by the World Bank Group towards a Strategic Framework on Climate Change and Development, which will be formally presented at the World Bank Annual Meetings in October 2008. The Gleneagles Dialogue on Climate Change, Clean Energy and Sustainable Development offers another model for global policy engagement.

In 2005, at the invitation of former Prime Minister Tony Blair, a group of some 24 global business leaders associated with the World Economic Forum and WBCSD were asked to develop a set of private sector recommendations for the UK-hosted Gleneagles G8 Summit. After the Summit a three-year dialogue process was initiated with G8 members and 12 additional countries to discuss options for achieving a low carbon energy future. WEF and the WBCSD worked with over 40 global corporations and others, with the Pew Center on Global Climate Change serving as a resource partner, to debate and propose a coordinated set of policy recommendations from the private sector. Their '*CEO Climate Policy Recommendations to G8 Leaders*' were presented to Prime Minister Fukuda before the Japanese-hosted G8 Summit in July 2008. Signed by some 80 CEOs from each of the G8 +5 countries, as well as a number of other developed and developing nations, and spanning most major industrial sectors, the recommendations focus on a set of key principles and elements for a post-2012 Global Policy Framework. They cover proposals on mitigation, adaptation, technology, finance and investment, consumers, and common metrics.

At a national level, trade and industry associations, chambers of commerce and dedicated climate change and development business networks, sometimes in cooperation with environmental groups, are engaged in policy advocacy and consultation, as well as capacity building efforts.

- ***In South Africa***, for example, the National Business Initiative facilitated a consultation process with government to mutually agree a process for setting sector-specific targets, accelerating action, and monitoring progress on the country's energy efficiency strategy. In 2005, the Minister for Energy and Minerals, together with CEOs from 24 major energy users and seven industry associations jointly signed an Energy Efficiency Accord, which NBI and experts from major South Africa companies are now taking forward. The initiative won the country's national award for Greening the Future in 2007.
- ***In Brazil***, which is the world's 4th largest emitter of greenhouse gases due mainly to land use and deforestation of the Amazon, a group of leading companies associated with the Brazilian Business Council for Sustainable Development, led by Alcoa, Aracruz, Petrobras, Shell, and Votorantim, have joined forces with WWF Brazil, The Nature Conservancy and Greenpeace, to form a Climate Defense Action Compact. They have collectively put forward a set of 10 policy proposals to government calling for a more integrated national climate change and economic development policy.
- ***In the United States***, the US Climate Action Partnership is supported by over 30 major corporations and NGOs and has issued a set of principles and recommendations calling on the government to enact strong legislation requiring significant reductions in greenhouse gas emissions and supporting a market-driven approach to climate protection. Although its focus is mostly on recommendations for government action within the United States, it calls for greater international leadership and capacity building by the US government in shaping the post-2012 international arrangements, establishing international GHG markets, assisting vulnerable populations in adapting to climate change, and boosting support for climate-friendly technology in developing countries.³⁴

These national policy initiatives, and similar efforts in Canada and Australia, offer useful models for emulation by business associations and NGOs elsewhere.

CONCLUSION

The challenges of achieving a more integrated, efficient and equitable approach to tackling climate change and alleviating poverty in developing countries are immense. They are growing more serious and more urgent in the face of a slowing global economy, rising food and oil prices, increased protectionist pressures, and greater inequality. Large corporations are both 'part of the problem' and 'part of the solution' - but only one part. Citizens, consumers, civil society organizations, and most importantly governments all have to do more, both individually and collectively. Yet the private sector has a vital leadership role to play. As WBCSD's President Bjorn Stigson, commented in an April 2008 speech entitled *Looking Ahead to 2050*: "The private sector is the major source of capital, innovation and technology that can transform the global energy system. According to the UNFCCC, private sector investments comprise 85% of global financial flows. But going forward will require innovative thinking about the respective roles of governments and business. ... These are the seven areas where innovation is needed – technology; public policies and regulations;

public-private partnerships; physical infrastructure; mindsets; global equity and responsibilities; and financing.”³⁵

This paper has reviewed some of the areas where large companies are making a positive contribution. They are doing so both through their own operations and value chains, and by working in partnership with other companies, NGOs, and governments. They are investing both through their commercial, mainstream business interventions, and through making blended value social investments and more strategic corporate philanthropy. They are engaging in both on-the-ground projects and in public policy dialogue. They are not doing enough. And there are not enough of them taking a lead. But it is a start. A start to a new way of doing business for many of the world’s multinational corporations and a start to more companies from more countries getting engaged.

The following lessons and conclusions can be drawn from the corporate first-movers and the business-NGO-government partnerships undertaken to-date:

- 1) Greater integration between climate change, sustainable development, human rights and corporate social responsibility policies and practices is needed at the level of individual companies. And all of these need to be looked at strategically, as long-term business risks, opportunities and responsibilities that are relevant to the board of directors and senior executive teams at both corporate-level and country operations.
- 2) It is likely that there will be growing pressure on companies to be able to measure, manage and report on their overall ‘carbon footprint’ along their entire value chain, if not their broader sustainable development footprint, and their contribution to both mitigation and adaptation strategies. Developing the metrics, methods and skills for doing this is an investment worth making.
- 3) Industry-wide sector initiatives offer great potential for sharing and spreading good practices, benchmarking performance, and establishing and implementing effective standards. Effective models and useful lessons exist for scaling up and increasing the membership of existing collective business initiatives, especially bringing in emerging market companies from countries such as China, India, Russia, and Brazil. There is also potential to establish new sector leadership groups to address climate change and development in industries that currently don’t have them.
- 4) Companies should review a full range of financing strategies for their engagement in the climate change and development agenda. These include investing in mainstream, commercially viable business development and project finance, co-investing through public-private partnerships, contributing funds to global carbon financing mechanisms, engaging in carbon trading and offset schemes, making blended value or hybrid investments in social entrepreneurs and energy entrepreneurs, and thinking more creatively and strategically about corporate philanthropy.
- 5) Partnerships with NGOs and public sector entities such as the UN, bilateral development agencies, multilateral development banks, national governments, and city administrators, are often time-consuming, resource intensive and painstaking to build and sustain. But they have an essential role to play in leveraging the necessary

resources, knowledge and systems to address the multi-disciplinary and interrelated challenges of climate change and development, and to achieve scale in tackling these challenges.

Since the Rio Earth Summit in 1992 the private sector has come a long way in terms of taking its seat at the table at both international negotiations and national policy dialogues, working constructively with others, including critics, and monitoring and reporting on individual performance along corporate value chains. The challenge going forward is to keep momentum among the leaders and to employ voluntary and mandatory approaches to engage the laggards. Above all, the private sector must keep working with governments and civil society organizations to develop both technical and institutional solutions that tackle climate change without undermining economic progress, and that can be scaled-up in a manner that is affordable and accessible to the poor.

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