

Sustain

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“*Doing*” Sustainable Development

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World Business Council for
Sustainable Development



About the WBCSD

The World Business Council for Sustainable Development (WBCSD) is a unique, CEO-led, global association of some 190 companies dealing exclusively with business and sustainable development. The council provides a platform for companies to explore sustainable development, share knowledge, experiences and best practices, and to advocate business positions on these issues in a variety of forums, working with governments and non-governmental and intergovernmental organizations.

We define sustainable development as progress that meets the needs of the present without compromising the ability of future generations to meet their needs. Given the scale of world poverty today, the challenge of meeting present needs is urgent. But we must look ahead and do our utmost to ensure that what we do today for our ever-growing population does not compromise the environmental, social and human needs of our descendants.

The WBCSD and its members believe that the pursuit of sustainable development helps companies prosper and maintain their long-term license to operate, innovate and grow by making them more competitive, more resilient to shocks, nimbler in a fast-changing world and more likely to attract and hold customers and the best employees. Business is seen as a key provider of solutions and is increasingly expected to contribute to sustainability

The council's objectives are to:

- Be a leading business advocate on sustainable development;
- Participate in policy development to create the right framework conditions for business to make an effective contribution to sustainable human progress;
- Develop and promote the business case for sustainable development;
- Demonstrate the business contribution to sustainable development solutions and share leading edge practices among members;
- Contribute to a sustainable future for developing nations and nations in transition.

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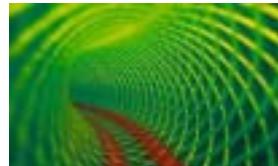
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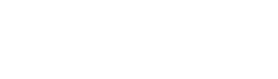
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Long-term? Willingness to commit?

Jim Press of Toyota Motor North America commanded the deep attention of the plenary session of the WBCSD's New York City Council meeting by reading aloud from a newspaper article entitled "Searching for Sex Appeal in a Hybrid".

He claimed he was doing it because it was a *New York Times* article and his session was being chaired by the *Times'* own Michael Golding. But the article was about Toyota's Prius, written by a journalist who thought he might like old-fashioned gas-guzzling muscle cars better because they attracted more female glances.

Jim Press had been talking about using technology to help solve future issues by giving customers what both they and the planet needed – and having faith in the long-term success of the approach. Toyota sold 17 Prius cars in 1999, 5,562 in 2000 and more than 110,000 in 2006.

He quoted the journalist citing a psychologist: "Men driving the prudent, fuel efficient cars... are signaling that they are not short-term mating strategies, but rather long-term mating strategies. They are signaling dependability, reliability, conscientiousness, long-term planning and willingness to commit."

"Ladies and gentlemen," Press concluded his remarks triumphantly, "that is what it is all about!"

He neatly summed up the theme of the meeting, "Valuing Sustainability, a US Perspective", which combined members and liaison delegates and project gatherings – 60 separate meetings in all over the course of a week – in New York's Waldorf Astoria Hotel. Valuing sustainable development requires conscientiousness, long-term planning and willingness to commit

GE's John Rice, sharing the session with Press, spoke of the company's commitment to *Ecomagination*. Some critics saw this collection of goods and services to help customers manage resource use and environmental impacts as green window dressing when it was first announced. But it was worth

US\$ 10 billion a year then and is expected to be worth US\$ 20 billion in 2010.

Commitment is required because sometimes even a company's most important stakeholders do not value sustainable development. At a breakfast dialogue across town the morning after the plenary, Julio Moura of GrupoNueva related how he came to New York earlier in 2006 to raise money on the markets and wanted to put a slide in his presentation about his corporate sustainability. He insisted on doing so over his bank's objections, and in over 40 meetings with analysts, only two asked him about that slide.

John Manzoni of BP described Wall Street as indifferent to such issues. Tom Powell of DuPont argued that "we have to respond to our owners but also educate them. They want profits and they want predictability. Corporate pursuit of sustainability can increase the predictability of investments."

Christian Thommessen of the UN Development Programme pointed out that the times were certainly changing when the Nobel Peace Prize could go to a *profitable* bank and its founder, Mohamed Yunus.

WBCSD President Bjorn Stigson found journalists almost as cynical as Wall Street when he talked before the meeting to those from publications such as *Fortune*, *Business Week*, *The Economist* and *The Christian Science Monitor*. They were not interested in sustainability per se, but they were interested in the hundreds of examples the Council can offer of companies saving money by cutting energy consumption, using sustainability concepts to develop new products and markets, and bringing in sector-wide improvements.

As Stigson told the plenary later, this experience steeled his reserve to have the Council focus on examples of "Implementing Sustainability" and helping members communicate their own experiences in this area. He was also encouraged by the many examples of action that members can offer.

Also during the plenary, Lewis Kaden of Citigroup explained how his company was integrating sustainability into its operations and the value that they are drawing from this. He described his company's seven-tier approach, ranging from the philanthropy – mainly community development and educational opportunities – of the Citigroup Foundation, to their pioneering of the Equator Principles, to their work on micro-finance, human rights and global equity.

Jim Clifton of Gallup offered some of the results of a 10-year polling project co-organized by Gallup and Saudi Arabia Council member ALJ Group on how the Islamic world and Western world view one another. He said that only 8% of the people in the Islamic world are extremists, and these are among the better off and better educated, and their position has little to nothing to do with religion. Some 35% are openly pro-American, higher than percentages in France and Italy.

One of his themes was that business – and governments – need to have a clear picture of reality when planning strategy. He called for the creation of a “new global institution of information” to help both business and governments avoid costly mistakes.

During breakout sessions, the Focus Area Core Teams (FACTS) and members met among themselves, and all celebrated and discussed varying forms of progress. Energy & Climate agreed on the basics of their policy document, the third report of a trilogy begun in 2004.

Their session was joined by the new head of the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, Yvo de Boer, who predicts that the debate around what is to follow the present Kyoto Protocol, which expires in 2012, will steadily heat up. It was de Boer who invited Stigson to address ministers at the next round of climate negotiations (COP12) in Nairobi in mid-November on the views of the global business community (see page 6).

The Development FACT reviewed the meetings held in the four Central American and four Andean countries in which the partnership between the Council and the Dutch development agency SNV is operating. The last of those meetings, to encourage local companies to be more active in improving framework conditions and doing business at the base of the pyramid, were held in late November.

The Focus Area selected Ghana as the main focus country in Africa. The detailed work program is yet

to be developed, but it is expected to center on the related themes of enterprise development (particularly the SME sector and access to finance) and institutional capacity building to improve stakeholder engagement between business and non-business stakeholders. The Council does not have an active regional network partner in Ghana. As such, the success of this venture depends on the active engagement of members in Ghana (see page 10).

The Business Role Focus Area further developed its various outreach and advocacy platforms. The flagships of the approach are a series of dialogues among business and other stakeholders; the first was held in Geneva in February, 2006, the second on the day after the Council meeting, and another in Argentina in December.

Other aspects of the meeting, and its main concerns, are covered throughout this issue of *Sustain*.

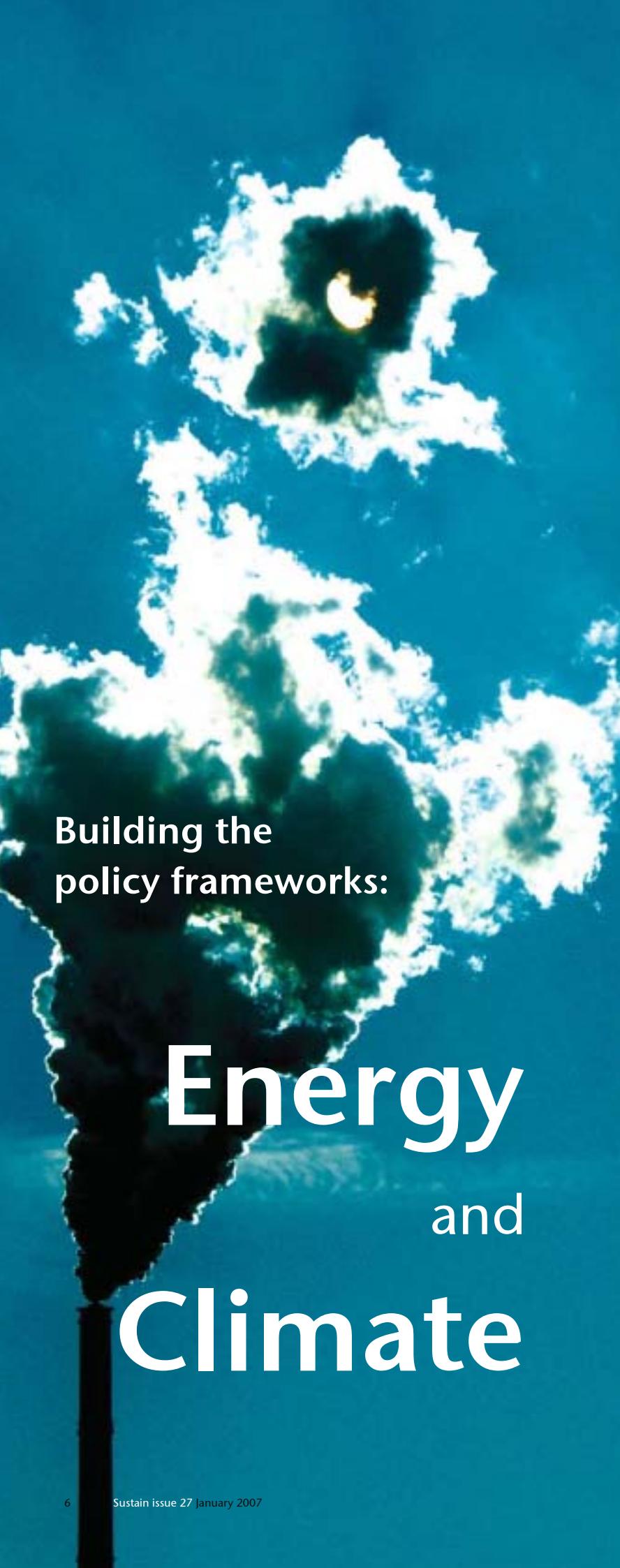
In his overview at the Council Meeting, Stigson painted a picture of a rapidly changing world. By 2040, China's GDP is expected to match that of the US; India will be the third biggest economy and Mexico the fifth, all well ahead of Germany, Britain and France.

He said that as the world changed the Council would continue to advocate business perspectives, demonstrate business contributions, dialogue with stakeholders, and seek partnerships and cooperation with key societal initiatives. The Council has ongoing discussions on new forms of cooperation with the World Economic Forum and the Global Compact.

“In so many sectors, sustainable development performance is becoming a competitive differentiator among companies. Thus it is part of the growing tensions inside the business community between countries of origin, sectors, and companies as it becomes ever clearer that the sustainability shake-out will produce winners and losers,” he said.

Stigson often notes that progress toward sustainable development will be divisive. He made clear where he thinks Council members will wind up when he spoke to government ministers in Nairobi a few weeks after New York:

“I believe that the transformation of our energy infrastructure to a sustainable one will not be easy. It will create winners and losers between countries, between industry sectors and between companies. We are as WBCSD committed to make sure that our members will be on the winning side of this transformation.” □



Building the policy frameworks: Energy and Climate

Governments must give business “an idea of where you are going long-term”, WBCSD President Bjorn Stigson told government ministers gathered in Nairobi for the Conference of the Parties (COP12) of the UN Framework Convention on Climate Change.

“Governments must start building the future policy frameworks, and it is necessary for us in business to begin to respond to those policies in time to meet the future emissions reduction targets,” Stigson added. “We cannot continue the ‘you first’ mentality that I sense here at this COP. We need leadership and action by both governments and business.”

Stigson, speaking during the High Level Segment of the mid-November conference, added:

“Governments need to send a clear signal that the carbon markets... will continue beyond 2012. Otherwise, carbon markets will not and cannot work to meet the climate protection goals.”

WBCSD participation in COP12 was the climax of a frantic and productive few months by the Energy and Climate (E&C) Focus Area. The members had been working on the third of their publications trilogy, which began with *Facts and Trends to 2050: Energy and climate change* in 2004, followed by *Pathways to 2050* in 2005. *Policy Directions to 2050* is to appear in early 2007. The question marks were serious because of the differing views among the Council members on the desirable solutions.

But unlike their governments, the members did not take “you first” stances. They discussed, negotiated and edited with good spirit, flexibility and creativity. During the New York Council meeting, they agreed on the wording of an eight-page document to be taken to Nairobi, the modestly but copiously titled *Energy & Climate: A contribution to the dialogue on long-term cooperative action*.

As word of the existence of the document spread, journalists began calling and e-mailing the WBCSD Secretariat to get copies. Council staff took 1,000 copies to Nairobi and they disappeared almost instantly, apparently offering the most interesting “way forward” at the meeting.

The *Contribution*, like the Council president, calls on governments to create the predictable long-term framework conditions required for business to invest in a sustainable energy future.

“Before business invests, it evaluates the future. It gauges long-term supply and demand for its products, assesses the prevailing economic conditions including tax structures and policy frameworks and decides on an investment strategy,” the report argues. Business cannot invest seriously in limiting greenhouse gas emissions unless governments “provide clear signals as to where we are headed long-term”.

The report outlines the options for action “within a flexible future international framework after 2012” (when the Kyoto Protocol expires), including the following key elements:

- Establishing by 2010 a quantifiable, long-term (50-year) goal for the management of global GHG emissions.
- Encouraging the development and deployment of leading-edge technologies through partnerships and incentives and an approach to mitigate long-term market risk and deliver secure benefits for large-scale, low-carbon, new technology projects.
- Including ideas and lessons learned from current approaches and in particular building on existing GHG reduction markets.
- Modifying the existing international framework so that it builds progressively (bottom up) from local, national, sector or regional programs that contribute to the quantifiable long-term international goal and catalyzing the implementation of such programs.
- Allowing industry sector participation across multiple facilities or technology platforms at the national level and across national boundaries, and enhancing GHG project mechanisms to allow them to cater for sector projects.
- Progressively including all countries – both developing and developed.

The *Contribution* notes that the existing international framework should be revised and expanded “to encourage technology development to introduce change into the energy system; to

further develop approaches to foster deployment of current best practice and existing technology; and to offer a more rapid deployment for new energy technologies.” The importance of new technological development is featured in the report, especially with regards to the implementation of medium to large-scale demonstration projects.

“The global [emissions] goal would be revisited periodically, but certainly no later than 2020–25, as climate impact science continues to develop, to affirm or reset the rate of technology deployment that is required” to transition to a low carbon future, the report says.

During the second workshop in Nairobi on the dialogue on long-term cooperative action under the convention, which includes all major emitting countries like the United States and China, the Australian Co-Chair Howard Bamsey highlighted the WBCSD’s *Contribution* document, which he said helps move forward the debate on establishing a future long-term framework that is acceptable to all major emitters.

In his speech to ministers, Stigson highlighted the need to connect the ambitions for different technologies with policies that are appropriate for each specific technology. These might include policies such as product standards for appliances, building codes, subsidies for fast market penetration of renewable energy, and sharing of R&D costs between governments and business for new technologies like carbon capture and storage or next generation of nuclear. ■



Energy & Climate: A contribution to the dialogue on long-term cooperative action.



Powering a sustainable future

Electricity is at the heart of the global energy challenge. It is a necessity of modern life and a basic requirement for development.



Powering a Sustainable Future

Driven by population and economic growth, demand for electricity is growing more strongly than ever. That is good news if you are the head of a power company, but it raises fundamental questions in regards to security, reliability, affordability, environmental impacts and basic access. With growth in demand and no major changes in the way we generate electricity, the power sector's CO₂ emissions are projected to nearly double by 2030. How can the electricity sector meet growing demand without playing a big role in changing the world's climate?

This question guided eight leading power companies from around the world over the two years it took them to produce the report *Powering a Sustainable Future*. The eight – ABB, CLP, Electricité de France (EDF), Entergy Corporation, Eskom, the Kansai Electric Power Company, SUEZ, and the Tokyo Electric Power Company (TEPCO) – represent 10% of the world's electricity-generating capacity.

Agenda for concerted action: Key actions identified by *Powering a Sustainable Future*

- Secure investments in infrastructure
- Get more power to more people
- Use the resource of end-use efficiency
- Diversify and decarbonize the fuel mix
- Accelerate R&D
- Reinforce and smarten grids

Their report, launched at a press luncheon during the WBCSD's Council Meeting in New York in October, identifies six key, urgent areas of action. It warns that unless there is a marked shift in the way electricity is generated, transmitted, regulated and consumed worldwide, then the utilities sector is simply unsustainable.

It argues that work in the six areas will require the collective efforts of business, governments and society at large.

"The CEOs who have signed this new report are getting very concerned about the role power generation plays in warming the earth's atmosphere," WBCSD President Björn Stigson told the luncheon, attended by more than 30 journalists. "The power sector generates 40% of all carbon dioxide emissions, and these emissions are rising quickly," he added.

Today's global fuel mix for electricity consists of coal (40%), gas, nuclear and large hydro (15-20% each), oil (7%) and other renewables (2%), according to the report. The generating capacity expected to be built over the next three decades will be about 130% of today's installed capacity. This projected growth provides an opportunity to move away from high-carbon fuels, the companies contend.

"Electricity utilities could make a substantial contribution to mitigating climate change," said EDF's Bruno LeScoeur. "However, ...governments need to agree on the long-term emission goal and an international framework that recognizes both marketable devices and technology push initiatives."

Without such guidance, "the investments that we are going to make for the next 30 or 40 years are going

to be wrong decisions. They're not going to be the optimal decisions," said Gary Serio of Entergy.

The report highlights the huge potential for end-use energy efficiency, which can provide more energy, more securely and sustainably, and at a lower price. "Affordable energy in ample quantities is the lifeblood of industrialized societies and a crucial driver for development," stressed TEPCO's Teruaki Masumoto. He added that "energy efficiency is regarded as valuable as the discovery of a new gas or oil field."

Speaking of decarbonizing power generation, Lescoeur pointed out: "The good news is that we do have all the technologies to start doing it right now."

Large investments are being made in China and India, said Gail Kendall of China-based CLP.

"Annually, China builds 65,000 megawatts of new capacity. That's like building the whole capacity of the United Kingdom in a year, every year." Given that in China and some other fast-growing developing countries coal is inexpensive, abundant and has indisputable benefits for energy security, clean coal development is critically important.

The report stresses the links between electricity and development and the need to "get more power to more people." More than a quarter of the planet's population (1.64 billion people) had no residential electricity in the year 2000. Over 99% live in the developing world and 80% live in rural areas. The International Energy Agency projects that 1.4 billion will be without electricity in 2030.

Electrification can create income-generating activities and jobs; longer access to lighting, allowing increased education, study and evening work; long-term refrigerated storage of healthcare products and food. Access to electricity is thus a necessary, but not sufficient, condition for poverty alleviation.

Stigson believes that "stronger incentives that recognize the value of emission reductions and that make sure that these technologies are developed and deployed are urgently needed."

During the WBCSD's Electricity Utilities project, begun in January 2000, the members have taken a critical look at their operations. Their earlier report, *Sustainability in the Electricity Sector* (2002), detailed sustainability principles and strategies for the sector as well as a collection of best practices.

Powering a Sustainable Future concluded the second phase, and the companies are now considering future activities. □

Doing SD I Solar Flair

EDF's solar energy program in rural Morocco provides clean energy, new jobs and improved economic opportunities in areas untouched by electricity grids.

The France-based energy group describes the program, begun soon after a 2001 Moroccan government decision to allow privatization of parts of the energy sector, as the world's largest electrification program.



Temasol (a joint subsidiary of EDF and Total, specializing in solar electrification) and the Moroccan National Electricity Office (ONE) run the program. It is partially financed by the German bank KfW and the French Development Agency with the support of the French Funds for World Environment.



"This innovative program ensures not only the supply of solar equipment but also a real local service in the long term," said an EDF spokesman. "This is especially important because a simple aid program would not include maintenance after installation."

Under a 10-year contract, Temasol aims to install almost 60,000 photovoltaic systems, which will provide power to more than 400,000 people.



Photovoltaic (PV) energy, a power technology that uses solar cells to produce direct current, can be used to power equipment or to charge a battery.

The average cost of installing the complete solar system in one home is US\$ 800, which is divided three ways. ONE provides a grant covering around 66% of this cost; the customer provides around 10% in an initial connection and monthly service fees, and Temasol contributes the balance. Users are considered to be customers of the ONE, while Temasol operates and maintains the systems (including renewal). Temasol is paid for these services through a monthly fee.

The system for each house includes a solar panel, battery and controller. The panel sends electricity to a battery so that it is available night and day to run lamps, a television, etc. The electronic controller automatically manages the charging of the battery. The battery stores enough power to last up to five days, allowing the equipment to be used virtually year round, even when the weather is bad.

In 2005 EDF completed an external survey to see how electricity was benefiting rural areas. Besides the expected benefits of modern indoor lighting, refrigeration and communications, the farmers reported that they could now install outside lights to keep track of their herds and keep thieves away.

Who dares, wins



The Central American country of Honduras needs to build 600,000 houses to meet current demand and must construct 40,000 new houses a year to keep up with its growing population. Yet the country's per capita GDP is US\$ 2,900, and there is little credit available; so few Hondurans can afford to build or buy a home.

The Honduran firm INCONHSA recognized the challenge and turned it into a business opportunity by figuring out how to build affordable detached homes for about US\$ 9,500 per unit in a development that includes paved roads, electricity, water and sanitation.

INCONHSA worked out what people could afford to pay by surveying the occupants of rented low-income homes on the outskirts of San Pedro Sula. They then reverse engineered a house to a monthly mortgage outlay that matched what the occupants were paying for low-quality rented accommodation, using novel and highly efficient construction techniques that could deliver 200 homes per month. As usual, access to credit for potential purchasers was a significant bottleneck and resulted in an agreement between INCONHSA and the US-based Offshore Private Investment Corporation (OPIC) to act as credit guarantor. The first tranche of 800 homes has been built, and a further 1,400 are planned.

This is just one example of the business ideas being promoted through a series of Executive Dialogues in Latin America organized by the WBCSD and the Netherlands development organization SNV. Eight

events have taken place: in Ecuador, Peru, Bolivia, Colombia, Honduras, El Salvador, Nicaragua and Guatemala. They were conducted in collaboration with the WBCSD's Regional Network partners and benefited greatly from the well-established network and outreach of these organizations.

The meetings discussed the mutual opportunities for business and society in targeting the low-income segment as part of business models, with much of the time focused on identifying more such possibilities.

So far, the dialogues have brought together some 400 business leaders and generated over 50 business ideas that fulfill the criteria of being both good business and benefiting the low-income segment – termed *negocios inclusivos* in Spanish, or “inclusive business”. The SNV-WBCSD alliance and interested companies are pursuing seven ideas through feasibility studies: low-cost housing, low-cost irrigation systems, biofuels, industrial parks, agro-industrial parks, competitive alpaca wool and coffee. Business facilitators are in place in Honduras and Ecuador, and soon in Peru, to work at national levels. There have been initial discussions with potential funding partners such as the Inter-American Development Bank (IDB) and the Andean Development Corporation.

Julio Moura, chairman and CEO of the GrupoNueva holding company, is not only a co-chair of the Development Focus Area at the WBCSD but also a leader of the alliance's work in Latin America. As a company with a demonstrated commitment to inclusive business for many years, GrupoNueva sets an example for other companies in the region. It has pioneered the sale of gravity-fed, drip-irrigation systems to poor farmers in Guatemala, enabling them to double or triple harvests. The company attracted the help of the IDB to improve access to credit, and is helping farmers certify their crops for export to the US and elsewhere. The company is committed to generating 10% of its sales from the low-income segment by 2008.

“Doing such business is not an add-on or an afterthought,” Moura told the participants at the Executive Dialogue he chaired in Lima, Peru. “It must be part of the core business strategy of the company and be seen as such by all employees and all stakeholders.”

With the collaborative work in Latin America now well established, the WBCSD's Development Focus Area decided in New York to look more deeply at opportunities in Africa, with an initial

focus on the West African country of Ghana. With few Regional Network partners in Africa, the WBCSD needs to approach the work differently from that in Latin America. BP's John Manzoni, another Focus Area co-chair, explained that the work in Africa would depend much more on the collaborative efforts of individual WBCSD companies already operating there.

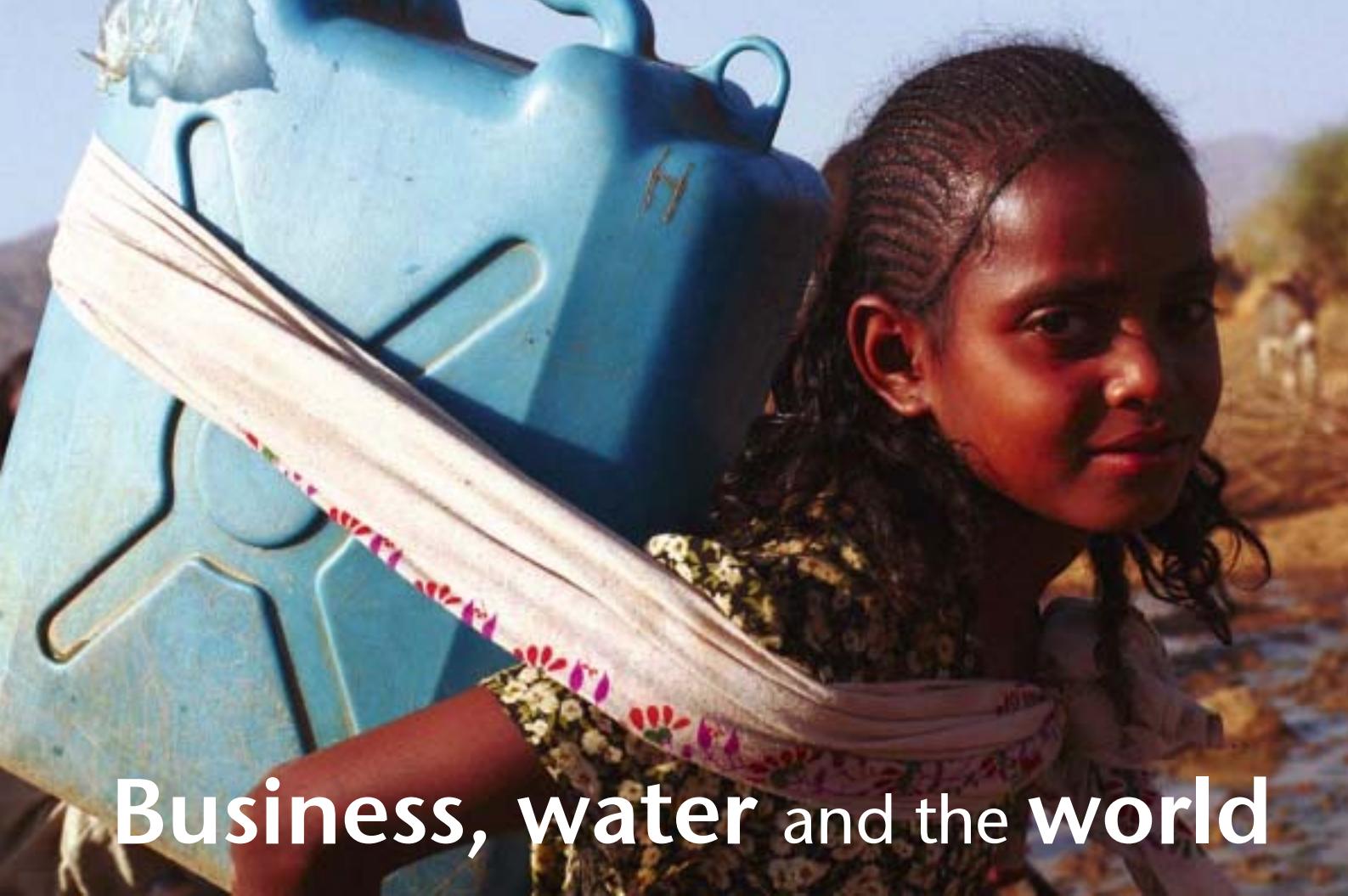
New York also saw the 13 Council members on the Development Focus Area Core Team commit to a “Statement of Intent for Doing Business with the World”. The statement underlines the executives' commitment “to play our part in building capacity and empowering people so they have the opportunity to move out of poverty and into the formal economy”. Intending to help create new businesses, new markets, new suppliers, new employees and new customers among the world's low-income segment, the Council members strongly believe that “if these efforts are to be substantial and sustainable, they must also be profitable. Our major contribution to society will therefore come through our core business activities.”

And it ends: “This statement is an invitation to government and civil society leaders to work with us to create an environment of mutual advantage where business success goes hand in hand with successful societies the world over.”

An ambitious objective, one the Focus Area and its Core Team members intend to achieve. □



Low-cost housing in Honduras



Business, water and the world

The issues associated with energy, climate change and development have long over-shadowed water in terms of government, business and media attention.



Business in the World of Water: WBCSD water scenarios to 2025

But it is precisely the growing importance of these three topics that has shed a new light on water. The inextricable links between water and energy, the water shortages associated with climate change, and the need for water in development have pushed water toward the top of the international agenda.

However, this attention has done little to sort out the water policy chaos. A few decades ago the delivery of safe water was widely seen as the responsibility of governments alone. More recently “privatization” was a unifying battle cry. Today water actors and activists have no common ideology, and seek new combinations of old approaches and new partnerships.

For 10 years WBCSD members have recognized water as a key factor in sustainable development. They first focused on how companies could better manage the water they used. Then they reported on ways to help communities manage water supplies

and delivery “beyond the factory fence”. Then they took on the bigger topic of water for the poor.

In 2005 the Water Project published *Water Facts and Trends* and *Collaborative Action for Sustainable Water Management*, the latter offering guidance on what companies can actually achieve by working with others. These publications contributed to the growing debate at the international level about the importance of engaging with business to find solutions to the problem of water.

All of these publications inform, but the project members felt that they were not sufficiently **engaging** their business peers in dealing with the economic and business implications of water. So the Water Project embarked on a scenario process to understand and anticipate the future. Two years of work ended in New York in October with the formal launch of *Business in the World of Water: WBCSD water scenarios to 2025*. The publication is also meant to help business understand that water is essential, and not just a maze of complex statistics.

The three “H2O” scenario stories each point to a different water challenge for business. The story of “H” (Hydro) is about the challenge of increasing water use efficiency as water becomes scarcer and

more expensive, which provokes the business response of innovation.

The story of “2” (Rivers) relates to the challenge of water security and the business need to earn and maintain its social license to access the water it needs. The story of “O” concerns the challenges of interconnectivity and the multifaceted influences and impacts of water, which encourage a business role in water governance.

There is alternative energy, but no “alternative water”. As the growing populations make heavier demands on water supplies, and as climate change upsets the world’s water resources, water availability and security of supply will become ever-greater issues for everyone, including business. In that context the WBCSD water scenarios provide the business community with a tool to think about its water practices and strategies, as well as a platform for structured dialogue with its stakeholders.

The challenge now is corporate action. The water project is encouraging such action by developing a water metrics tool to link external data with a company’s water inventory, a complement to the water scenarios tool.

Armed with these new insights, the Water Project also intends to play a leading role in the growing topic of water governance. Whether through its own events or external ones such as the World Water Week in Stockholm, the goal of the project is to ensure that the key role of business is recognized and that governments and civil society meaningfully engage with business.

Topics including breaking out of past policy impasses, fair water allocation and privatization all need to be discussed thoroughly and constructively. A governance structure for more holistic water management has yet to be devised. Members of the WBCSD Water Project will lead discussions on this topic and continue to advocate the role of business with key stakeholders in the coming years.

In the meantime it is pleasing to see individual initiatives by WBCSD member companies popping up, such as a recent project by four members to improve water quality and availability through sanitation and other measures in developing nations. These initiatives recognize that water issues are not just a huge problem but also a huge opportunity for individual companies. This is precisely where engaging in sustainable development, including water, can add value in the world of business. ■

Doing SD | Fishing for the future

Unilever is convinced that its decade-long effort to make fisheries more sustainable still has potential to save money and decrease environment impacts. Thus it will continue to support the Marine Stewardship Council (MSC), an independent certification program for sustainable fisheries, even after selling off more than half of its global fish business.

Fish stocks worldwide are in serious decline, as 48% are fully exploited, 16% over-fished, and 9% depleted; every year fishing practices kill up to 20 million metric tons of unwanted fish, seabirds, sea turtles, marine mammals, and other ocean life, according to the UN Food and Agriculture Organization (FAO). The over-exploitation of the oceans was identified by the Millennium Ecosystem Assessment as one of the most serious of the declines in ecosystem services.

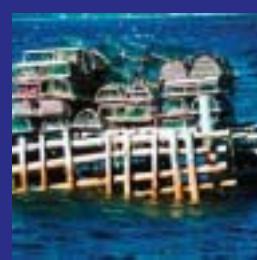
To combat this trend and to keep its fish business healthy, Unilever partnered in 1996 with the World Wide Fund For Nature (WWF) to establish the MSC certification program. Fisheries in the program are audited every year and win the right to use the MSC logo on their products. This same year, Unilever set a 10-year goal to buy 100% of its fish from MSC-certified fisheries.

It has proved a challenging target. At the end of 2002, 5% of Unilever’s fish were sourced from fisheries compliant with the MSC standard. By 2005, Unilever said it bought almost half of its fish from such sources. It cited laggard government policies, still emerging understanding of the effects of fishing on ecosystems and the longer-than-expected MSC certification process as some of the reasons for falling short of its target.

To speed the adoption of the MSC by all stakeholders, the company has set up a program to help bring fisheries up to speed on the disciplines of sustainable production.

Although the company sold part of its frozen fish business in Europe, it kept operations in the US, India, Italy, and Vietnam, and has announced that it remains fully committed to sustainable fisheries. Unilever will continue to actively work with the MSC, and with governments and government agencies worldwide to make all fisheries sustainable.

The company also continues to engage with fisheries that have not yet fully adopted the disciplines of sustainable production and will continue to work with them on improvement programs.



Since its very beginnings, the Council has worked with a collection of national and regional partners throughout the world. The Council and each partner are connected by a memorandum of understanding that gives the partner a great deal of latitude in choosing focus issues.

Today, as the WBCSD moves from awareness creation to advocacy and action, the interaction between the Council and the network is intensifying. This closer harmony between the Council and its partners also creates a closer harmony between advocacy and action. Below we offer a few examples from Latin America of the sort of actions in which the 60 national BCSDs and other partners of the Regional Network (RN) are involved.

BCSD Mexico joined the Mexican Ministry for the Environment, the World Resources Institute (WRI) and the WBCSD to implement a voluntary greenhouse gas (GHG) reduction program, the first of its kind in an emerging economy.

Recognizing that the first step in creating market-based solutions to climate protection is accounting for GHG emissions, this pioneering public-private partnership aims to strengthen the capacity of business and other organizations in Mexico to develop publicly-available GHG emissions inventories. Such inventories must precede the identification of cost-effective GHG reduction opportunities.

The inventories are being produced on the basis of the accounting and reporting principles of the WRI/WBCSD Greenhouse Gas Protocol developed to provide internationally accepted standards. Many companies and GHG trading programs use the protocol, but Mexico is the first country to adopt and implement the tool at a national level.

Since its launch in August 2004, BCSD Mexico has mobilized some 50 companies and organizations, responsible for about one-third of GHG emissions by Mexican industry, to participate in the program, including those from the most energy-intensive sectors. The entire cement and petroleum sectors are engaged, as well as major iron and steel companies. To date, 15 participating companies have produced public GHG inventories (available on the program's website at www.geimexico.org).



At the Montreal International Conference on Climate Change (COP 11) in late 2005 the Mexican Ministry for the Environment stressed the importance of the program for the creation of national climate change policies. Representatives from CEMEX (a cement company) and Altos Hornos (a steel company) highlighted the significant business opportunities that can be realized through the strategic management of GHG emissions, once you have measured them.

The program is still in its early stages, but signs are promising: strong political support (the program is headquartered at the Mexican environment ministry); voluntary commitment of business champions and peer engagement (allocation of staff and resources); common use tool (GHG Protocol) and technical assistance; the creation of an advisory committee including NGOs, industry associations and governmental environmental agencies; and financial support through the Global Opportunities Fund (UK).

This partnership is scaling up, as BCSD Executive Director Alejandro Lorea explains: "The aim now is to move from a pilot to a regular program embracing 80% of Mexican industry GHG emissions." It will also start focusing on GHG mitigation projects. Based on the newly released



GHG reduction



eco-tourism



fair trade

Tighter partnerships: The Regional Network

WRI/WBCSD GHG Protocol for Project Accounting, the program will prepare Mexican business to participate in carbon trading markets and reduced GHG emissions.

The momentum of the Mexican GHG Program has caused other parts of the RN to consider replicating the initiative. Philippine Business for the Environment started a similar program with the Department of Environment, WRI and the Manila Observatory. Discussions are also advancing in China, India, South Africa and Brazil.

In another program, the Dutch development agency SNV, the WBCSD, and its RN partners in Central America and the Andean region have formed an unusual alliance to help companies identify new business opportunities with positive social impacts. The initiative aims to create awareness of these opportunities, promote an environment for success and broker concrete projects on the ground.

Leadership forums in Ecuador, Peru, Honduras, El Salvador, Colombia, Bolivia, Guatemala and Nicaragua brought together CEOs, the public sector and civil society to explore new models for profitable, sustainable business growth that significantly contributes to alleviating poverty.

In Honduras the focus was on growing organic foods and selling them through fair trade, an increasingly popular scheme among European consumers. The meeting also looked at developing the country's eco-tourism sector, as the world's second largest coral reef is located off the country's shore. Taking advantage of this potential market could benefit local communities by providing water treatment facilities, renewable energy technologies, and promoting the production of artisanal products and services.

RN partners are also participating in a WBCSD survey aimed at defining the role of business in society. The survey is being conducted through a series of dialogues and debates engaging companies, policy-makers, NGOs and the media to examine their respective roles and responsibilities in creating a functioning society.

Following dialogues in Geneva and New York, the WBCSD is collaborating with the regional partners in Argentina, Chile, South Africa, Hungary and India to capture local perspectives on the role of business and its stakeholders in different cultural settings. □

The Business Role: Back to basics



The Business Role Focus Area represents one of the longest continuous intellectual efforts of the WBCSD.

“Business will play a vital role in the future health of this planet. As business leaders, we are committed to sustainable development, to meeting the needs of the present without compromising the welfare of future generations.” These words about the business role begin the “Declaration of the Business Council for Sustainable Development” from the 1992 book *Changing Course*.

“This controversy (over corporate social responsibility, or CSR) suggests that the time is ripe for a focused look at the role of business in today’s, and tomorrow’s, society,” says the last chapter of *Catalyzing Change*, the 2006 history of the WBCSD.

Also in 2006 the Council published *From Challenge to Opportunity: The role of business in tomorrow’s society*, the result of the work of the eight corporate leaders who met over the course of a year on the title’s subject. This Tomorrow’s Leaders

group signed a “Manifesto for tomorrow’s global business” in the beginning of their report.

“Our major contribution to society will... come through our core business rather than through our philanthropic programs,” the manifesto says, offering a traditional view of business that would comfort most CEOs.

However, the report’s other main conclusion was much more challenging: “We believe that the leading global companies of 2020 will be those that provide goods and services and reach new customers in ways that address the world’s major challenges – including poverty, climate change, resource depletion globalization and demographic shifts.” Though the rest of the report offers examples of how some companies are trying to do this – and of some of the dilemmas they face in doing so – few companies have tried to align their core businesses with societal challenges.

The report itself notes that “while many businesses can point to specific activities as evidence that they are already applying such a model, we believe that to apply it at scale, and at the heart of business strategy, is extremely demanding.”



The Business Role FA is responding to the report and its manifesto by going back to basics and taking time to listen to what stakeholders around the world are saying about business and its interactions with society. Such organized, careful listening also has a long history in the Council. When it was working hardest on CSR, it held stakeholder dialogues around the world and learned that different cultures have very different views on how companies should relate to society.

In 2006, The Business Role held a dialogue in Geneva in February, another in New York City in October to coincide with the Council Meeting, and a third in Buenos Aires in November.

It is hearing a great deal of controversy. Jeremy Hobbs of Oxfam International told the Geneva gathering: "We cannot solve poverty by turning the poor into customers. We need to understand structural reasons for poverty.... There is a crisis of global governance." Greenpeace's Bruno Rebelle argued that "markets are not enough; we need government and regulations. We need to make changes to push government in the right directions." In fact, a number of non-business commentators were suspicious of business but harder on the failures of governments.

In New York, Steve Rochlin of AccountAbility North America said that government "is essentially outsourcing the type of regulation that we're looking for to either the business sector or the NGO sector and saying: 'compete with each other'." Allen White of the Tellus Institute warned that with companies getting less capital from stock markets and investing more in hedge funds "we are seeing an epidemic growth in short-termism."

Speaking of the dialogue process, FA leader Brigitte Monsou said: "The exact nature and extent of the business contribution to societal success – and the role of business in society – are constantly changing, adjusting to needs and requirements beyond its control. Ultimately, the success of business in society will depend on its ability to understand and influence its evolving roles and to work more efficiently with partners."

The Business Role FA plans more dialogues in 2007. It also plans to report on trends and dilemmas around the business role, in part examining what business has accomplished in the 20 years since the Brundtland Report was published in 1987.

That document, published as *Our Common Future*, both defines and has popularized the concept of "sustainable development". It warns of the costs of pollution and "inappropriate industrialization", but is not anti-business or anti-growth. Its thoughts on business conclude that "many essential human needs can be met only through goods and services provided by industry, and the shift to sustainable development must be powered by a continuing flow of wealth from industry."

The report calls upon nations to make sustainability a concern of every branch of government, not just the environment ministry. While no government has done this, most of the companies publishing sustainability reports are at least trying to look at the totality of their economic, social and environmental impacts.

Much has happened over the past 20 years, and some of the best news comes from business. □



Cementing promises



A large segment of the world's cement industry is quietly figuring out how to report to society on whether the companies have kept their promises of five years ago.

The Council's Cement Sustainability Initiative (CSI) began in 1999 when three leading cement companies approached the WBCSD with a simple request: "Help us understand what sustainability means to the future of our industry."

The industry is not without its sustainability issues. Concrete (10% cement) is the second most consumed product on the planet after water, with nearly three tonnes produced for each man, woman and child on earth. More than 2 billion tonnes of cement were produced in 2005 in more than 150 countries.

Cement-making is an energy- and capital-intensive process. Once built, cement plants may be in operation for 50 years or more. The cement industry is a large source of greenhouse gases, accounting for about 5% of the global manmade carbon dioxide emissions annually. The industry is growing most rapidly in developing markets where demand for infrastructure and housing is rising quickly, with China, India and the Middle East leading the pack.

Seven additional companies quickly joined that 1999 beginning, and the group commissioned a two-year independent study of the industry by the Battelle Memorial Institute, a US-based not-for-profit research firm. The WBCSD released Battelle's results and recommendations, along with the lessons from a series of stakeholder dialogues in 2002.

That same year, the CSI published *Our Agenda for Action*, a set of individual and joint initiatives it

pledged to undertake in response to the Battelle report. The group published its interim *The Cement Sustainability Initiative: A progress report* in 2005 and a full report is promised for 2007.

The agenda focuses on six critical issues: energy use and CO₂ management, responsible use of fuels and materials, employee health and safety, emissions reduction, impacts on land and local communities, and communications. Since 2002, the CSI has prepared guidelines and good-practice summaries in each of these areas for use by all CSI members, as well as for distribution to the rest of the cement industry.

The 2005 interim report was a model of terse frankness: here is what we said we would do; here is what we did; these were our partners; here is what we shall do next. In most areas, the work was on target or ahead of goals.

Today's CSI comprises 18 leading companies from 14 countries, producing more than 40% of the world's cement. They are working with policy-makers on issues related to greenhouse gas emissions, fuel selection, waste and micro-pollutant management.

To make meaningful reductions in CO₂ emissions, the CSI first developed the WBCSD/WRI CO₂ protocol for accurate CO₂ accounting in the industry. Each company agreed to use the tools set out in the CO₂ protocol to define and make public their emissions by 2006. Each agreed to develop a climate change mitigation strategy and by 2006 publish targets and their progress. As a result of implementing the CO₂ protocol, each company will report annually on CO₂ emissions.

As a next step, the CSI is building the first database of CO₂ emissions, from more than 600 cement kilns, to help policy-makers worldwide better assess the influence of kiln technology, fuel

selection, plant location and age on plant performance and emissions management.

CSI companies are also leading an evaluation of a different policy methodology for greenhouse gas emissions control by developing a “sector-based” approach that may help speed up climate action by business. Under this concept, an industry sector, rather than a country or single facility, might be given a global emissions or efficiency performance target. Reaching these performance targets could be driven by intra-facility, and/or intra-company negotiations to identify the most efficient solution.

The companies in the initiative continue to strive to manage persistent organic pollutant emissions from kilns by working with the secretariat of the Stockholm Convention on Persistent Organic Pollutants and

other interested parties on dioxin, furan and other micro-pollutant emissions control strategies.

CSI companies continue to collect and analyze industry safety data, and to promote improved safety practices in company facilities. Since beginning this work in 2003, fatalities at company facilities have dropped by more than 25%.

In many countries cement kilns are used as an integral part of the waste management infrastructure, providing energy and materials recovery, and offering safe disposal options for many of society’s wastes. Some members of the CSI are working with governments and other organizations to provide practical guidance for using waste and other exotic fuels and materials in cement kilns. □

Doing SD | Building markets where few exist

Once a week, Hilario Amador makes the short journey to the city center of Zacatecas, Mexico, to deposit 120 pesos with Patrimonio Hoy, a self-help building scheme run by CEMEX, one of the world’s largest cement companies.

This disciplined habit has allowed the 38-year-old abattoir worker to receive regular supplies of building materials, with which he has tiled his floors, repaired the roof, and added two rooms to his modest, single-story home.

In the mid-1990s CEMEX, a WBCSD Cement Sustainability Initiative leader, was suffering along with most other Mexican companies from a devastating currency devaluation that eliminated more than 1 million Mexican jobs and cut the buying power of the Mexican peso roughly in half.

CEMEX issued a “Declaration of Ignorance” – something companies rarely if ever declare. The company basically said it had no idea how to reach the millions of poor Mexicans who spend as much as 10 years building the average four-room home on their own, in fits and starts dependent on irregular income and spikes in material prices.

It set out to study the do-it-yourself home building business that dominates Mexico, especially in the ad hoc neighborhoods that seem to pop up almost overnight on the fringes of Mexico’s cities.

The company radically changed its standard approach to market research, and sent a team of managers to live in these neighborhoods for a year, immersing themselves in the daily lives of their potential customers. The result was **Patrimonio Hoy**.

CEMEX makes available not only the credit and the materials, but expertise to help participants optimize

space and build safely and efficiently, with little waste. The program has allowed CEMEX both to expand its market and build a reputation for reliability among poor customers.

By organizing families into “buying clubs”, the scheme has helped more than 150,000 Mexican families build and/or improve their homes. In 2006, Patrimonio Hoy (literally: “inheritance today”) began to expand into Colombia, Venezuela, Nicaragua and Costa Rica, creating new markets on a continent where, according to the Inter-American Development Bank, 65% of the population is deprived of the use of formal markets.

The effects on the first 1,000 families involved were dramatic. Whereas an average homebuilder traditionally builds one room every four to seven years, members of CEMEX’s program took less than a third of the time. Not only was the speed of building (and therefore the sale of building materials) accelerated, but the program also encouraged 18% more families in the test region to begin building.

Families planned to build two to three more rooms than originally, and their constructions now contained 25% more cement per cubic meter. The families also used materials more efficiently, being able to get the right amount of materials due to the advice they received from architects.

“Our approach to doing business has proved valuable during challenging times, such as the adverse economic circumstances that prevailed in Mexico during the 1970s and 1980s,” said CEMEX’s Rodolfo Larrea. “CEMEX has learned to thrive in difficult environments, and today is one of the world’s top players in the cement industry, with production facilities in more than 50 countries and trade relations with more than 90 nations.”





Focusing on business and ecosystems

There is a long history, and a great deal of momentum, behind the decision to make ecosystems a fourth WBCSD focus area.

The Council has been more engaged with the topics of biodiversity, ecosystems and ecosystem services such as forest products and water than most other business organizations. We have developed a unique platform for dialogue, advocacy and action, including relations with NGOs, intergovernmental organizations and development agencies, involving a collaboration agreement with the World Conservation Union (IUCN), the world's largest conservation organization. A number of WBCSD reports cover these issues.

When the World Resources Institute (WRI) first had the idea for the project that became the Millennium Ecosystem Assessment (MA), it approached WBCSD founder Stephan Schmidheiny, who contributed US\$ 600,000 through his AVINA Foundation to get the effort started.

The WBCSD was represented on the MA board; its members participated throughout and even helped manage the funding for what became a project of over 1,000 scientists worldwide. We profiled the results at our 2005 Nagoya Council meeting and helped write and launch the MA's synthesis report targeting business and industry.

The MA findings – declines in about two-thirds of all major ecosystem services – are slowly sinking in and changing the way business, governments, pressure groups, the media and consumers think about ecosystems. The climate change debate and concerns for water availability have contributed strongly to this. It is increasingly understood that rather than expecting ecosystems to exist within human systems, including economic systems, our societal systems must be designed around ecosystem realities.

There is a mind shift in the NGO community. In the past the focus has been on nature conservation: "set aside – no go areas". Yet today:

- IUCN has launched a yearlong discussion of "The Future of Sustainability" seeking to recast SD with greater focus on the environment, ecosystems conservation, payments for ecosystem services and internalization of environment costs.
- The UN Environment Programme (UNEP) and IUCN are spearheading stakeholder thinking and debate on the concept of "Payments for Ecosystem Services", while WWF US is seeking to set up an NGO-Private Sector Forum to promote it.
- WWF-UK, on behalf of the global organization, is developing a new business engagement strategy called "One Planet Business" (OPB) based on the "limits to growth" concept and reducing consumption premises. A key component of OPB is discussions with major industrial sectors to create sustainability targets. WWF is seeking broader NGO support for OPB.



systems

A lead actor in this change has been IUCN and its former director, Achim Steiner. As he is now the head of UNEP, it is reasonable to assume that UNEP will be much involved.

The rethinking is not limited to NGOs and UN organizations. The government of Portugal is developing a business and biodiversity integration project as a flagship event during its EU Presidency in the second half of 2007. Based on the premise that a new business and biodiversity model is needed, it proposes that existing business accountability frameworks (e.g., sustainable development and corporate social responsibility reporting, certification) be adapted for the measurement and certification of the biodiversity used by industry.

Some governments are actively developing national-level market and business solutions for ecosystem services – such as biodiversity banking, water harvest rights, public procurement of certified timber products and mitigation offsets. Carbon, water and ecological “footprinting” are emerging as measurement and decision-making tools at the company level.

Last October, WBCSD member Shell International released a major scoping study it undertook with IUCN on market-based initiatives that can positively contribute to the business bottom line and biodiversity conservation on a significant scale. *Building Biodiversity Business* focuses on harnessing the enormous capacity of markets, companies and entrepreneurs to drive significant change in the

management of ecosystems and sustainable consumption of ecosystem services.

This shift in ecosystems thinking is in business' interest. Finding market solutions to sustainability issues has been a key Council message since its beginning. We produced a separate report on this in 2000: *Sustainability through the Market* by Chad Holliday, DuPont, and John Pepper, Procter & Gamble.

The Council's Sustainable Ecosystems Initiative (SEI) has been very active during its one year of existence and has a champions group of some 37 member companies (spanning 19 industrial sectors) and nine Regional Network partners. Its Leadership Group includes Shell, Rio Tinto, BC Hydro, DNV and Syngenta.

Originally, the idea was for the SEI to be a two-year WBCSD Initiative ending in 2007. However, given the pace with which the ecosystems issues are coming to the forefront, the WBCSD Executive Committee decided in New York to turn the SEI into an Ecosystems Focus Area, contingent on its producing a suitable action plan. Work is also being done to determine how the new Focus Area would relate to the working group on water.

Meanwhile, work continues. The SEI member companies and WRI are undertaking a project to pilot test an Ecosystem Services Review methodology allowing companies to better understand their ecosystems impacts, dependency, liabilities and assets – and to respond accordingly. Started in November 2006, the project team aims to report outcomes at the next WBCSD Council Meeting in Brussels in October 2007.

Business and Ecosystems: Ecosystem challenges and business implications, an issue brief published in December 2006, is the result of a collaboration bringing together Earthwatch Institute, IUCN, WBCSD, and WRI. The group plans other publications to make the business community aware of ecosystems and ecosystem services and promote ways that business can respond to these challenges. One future publication will focus upon how new business models, markets and entrepreneurs can profit from responding to ecosystems challenges.

These are just some of the challenges and opportunities ahead for ecosystems and business. □



Business and Ecosystems:
Ecosystem challenges and
business implications

Innovation in innovating The Eco-Patent Commons

Since the Italian Renaissance, societies have offered their innovators a deal. In return for publicly describing their invention, they are granted a period of exclusivity. This not only encourages innovators, it gets ideas more quickly out into the open, where others can build upon them.

It is an approach that has served society well over the centuries. Yet recently it has become more controversial. Should life-saving drugs be patented? Should life forms? Should a company get private rights for software without revealing the underlying source code? Does the morass of patents and licenses in the field of biotech actually limit progress?

Amid such arguments, IBM has quietly brought forth a new idea: an “eco-patent commons” (EPC), a process to share intellectual property (IP) related to environmental and ecological technology.

There is a need. The vast majority of patenting happens in the North, whereas the rapidly industrializing South requires all the help it can get in managing environmental impacts (see figure below). The goal is to have the EPC serve as the catalyst for collaboration and innovation in addressing urgent environmental challenges.

If it gets beyond the idea stage, the EPC could include a coalition of global business and academic

leaders who are willing to grant royalty-free access to relevant IP. The EPC could provide a collection of patents pledged by companies (and other IP rights holders) for unencumbered use by all, enabling these organizations to more quickly innovate and implement processes that improve and protect the environment.

Depending on participation by others, IBM would contribute a number of appropriate patents and leverage key client and partner relationships for additional contributions.

The WBCSD held an EPC information meeting at the beginning of its New York Council meeting and has been facilitating the discussion of the EPC with member companies. The Council is exploring hosting the EPC to stimulate technology cooperation in support of sustainable development. Participating members and the WBCSD could outline the operating principles and framework, host an EPC-dedicated website, and help manage the collaborations that may result.

The Council has worked over the years on the connections between innovation, technology, sustainability and society, work that has included a stakeholder dialogue on intellectual property rights. IBM has been exploring the same space through its Global Innovation Outlook project and series of meetings, and the company has also been working with “open source” software.

At several international meetings, WBCSD President Bjorn Stigson has found that governments are deeply concerned over the IP controversies, and are looking for new ways forward, hoping that business can help them find them.

IBM and the WBCSD are inviting companies to join a core group and attend a kickoff meeting in early 2007 to start discussing the framework of the Eco-patent Commons. ■



This world map has been “distorted” to show the countries issuing the most patents as large and those issuing the least as small. © Copyright 2006 SASI Group (University of Sheffield) and Mark Newman (University of Michigan).

Doing SD I The first step on the path to savings, waste not

The Dow Chemical Company, in an innovative public-private partnership, has found ways to save a lot of money and a lot of energy while cutting out a great deal of “waste”.

Six of Dow's US Gulf Coast manufacturing facilities participated in a study to find ways to reuse non-chlorinated wastes within Dow by crossing the boundaries between businesses, sites and plants.

This study, the first phase of a long-term, two-phase project, estimated the company could reuse 155 million pounds (70 million kilograms) per year of non-chlorinated waste by-products by implementing certain projects. The study also found that the group could save 264 GWh of energy per year.

Dow has been partnering with the US Business Council for Sustainable Development in this effort and also to determine ways to implement the second phase of the project, which will involve identifying opportunities for synergy among various diverse companies and industries. US BCSD Executive Director Andrew Mangan has been both a guru of and a cheerleader for by-product synergy (also called industrial ecology) since he founded the Gulf of Mexico BCSD in the 1990s.

The US Department of Energy (DOE) cosponsored the assessment as part of its promotion of improvements in industrial energy efficiency, productivity and global competitiveness, while reducing waste and environmental emissions. In this case, the DOE contributed US\$ 100,000 of the total US\$ 205,000 assessment cost.

Dow provides chemical, plastic, and agricultural products and services to a variety of consumer markets. The US BCSD develops projects that demonstrate the business value of sustainable development. To do this, the Council leverages industry resources with matching funds from government, foundations and partner organizations.

The study focused on four sites in Texas and two in Louisiana, looking at 40 manufacturing plants representing various businesses that are supported by 14 business technology centers. Each of the plants produces more than 1 million pounds (455,000 kilograms) of non-chlorinated waste each year.

The object was both to find ways to use the wastes and to gain experience in using the US BCSD's By-Product Synergy (BPS) process effectively.

The effort identified potential annual cost savings of US\$ 15 million, as well as the energy and wastes savings. Productivity, profitability, and community relations could all be improved, and CO₂ emissions reduced by 108 million pounds (50 million kilograms) per year.

Results like these have caught the attention of companies and federal, state and local governments across the United States. BPS projects are at various stages of development in

Chicago, Kansas City, Milwaukee, North Carolina and the Pacific Northwest, involving dozens of companies.

“By introducing environmentally friendly policies, the City of Chicago is leading by example and will be a model of industrial and environmental innovation,” said Chicago Mayor Richard M. Daley at the launch of the Chicago project in October.



The underlying concept behind BPS is that everything in the Earth's natural ecosystems is used by some member of it, so nothing is wasted. Therefore, the BPS philosophy is to create a diversified industrial ecosystem that relies on cooperation among the actors involved. Industrial plants use each other's waste material and energy as resources to minimize the amount of virgin material and energy they consume, as well as the waste and emissions they produce.



“With raw materials prices escalating rapidly, by-product synergy is a practical survival strategy for the years to come,” notes Mangan. “In the US, manufacturers devalue millions of dollars of inventory every year – even the leanest manufacturing process does not eliminate the problems of yield loss or the occasional off-specification product. Instead of total loss and disposal of these resources, by-product synergy solutions can identify new uses and can naturally lead to business savings.”



BPS brings neighboring industrial companies and organizations together to exchange basic information about their processes to identify synergies. These synergies can result in added revenues, new business opportunities, cost savings, and environmental and regulatory benefits to the industrial group, as well as to the group's geographic region.

The BPS methodology involves establishing a forum where engineers and experts in various processes explore reuse opportunities, collect information, and facilitate interaction among individuals, business units and companies.

For example, this work identified several hydrocarbon and spent solvent streams. The intermediate products are compounds that downstream customers could use in manufacturing other final products. The teams found seven projects in this area to implement.

The BPS project team also discovered that some plants produce by-product hydrogen of various qualities, including “ultra-pure”. They discovered that other industrial plants buy pure hydrogen to use as a feedstock. The opportunity to link plants that produce hydrogen as a by-product with those that can use it as feedstock became obvious – after the study.

Plant-wide assessments are one way US companies work with the Department of Energy's Industrial Technology Program. Most plants can expect to save 10% to 15% of their annual energy costs by implementing the recommendations from an assessment.



Membership Principles for Forestry Companies

After several months of extensive internal and external stakeholder consultations, members of the WBCSD's Sustainable Forest Products Industry (SFPI) project agreed at the New York Council Meeting on a set of "Membership Principles and Responsibilities".

The principles lay out the sustainability performance aspirations of SFPI members and confirm their commitment to sustainable development and to balancing their efforts in economic growth and social and ecological progress.

The companies involved in the project – Aracruz Celulose, Grupo Portucel Soporcel, International Paper, MeadWestvaco, Metsäliitto, Mondi Int'l, Nippon Paper, Norske Skog, Oji Paper, Sappi, Siam Pulp, Stora Enso, UPM and Weyerhaeuser – make up for nearly half of global annual sales of forest, paper and packaging products.

"These principles and responsibilities confirm the position of our members as the leading global forest companies," said James Griffiths, director of the SFPI project. "And these are not empty words; each company will use their sustainable development reports to periodically reflect progress against these principles."

He explained that stakeholder relations with the forestry sector have been historically fragile, and the WBCSD has been engaging in multi-stakeholder dialogues since 1994, when it started work on the forests products industry.

In 1999, it formed The Forest Dialogue (TFD) with the World Bank and the World Resources Institute (WRI) to build stakeholder alliances and, starting in 2002, jointly address critical sustainable forest management challenges such as independent forest management certification, the role of intensive plantations and combating illegal logging.

"These activities and other discussion processes have helped to improve industry and NGO relationships and understanding of each other's perspectives. The intention is that these Membership Principles and Responsibilities will further promote accountability and transparency of the sector in response to changing stakeholder expectations for the forest industry," Griffiths added.

The SFPI working group has recommended that formal endorsement of the principles at the CEO level should be a condition for membership for other companies wanting to join the project.

The SFPI is also moving forward with its Responsible Procurement Guide for Customers, due to be published in March 2007. The guide, being developed in partnership with the WRI, aims to increase demand for forest products that are harvested and manufactured on a legal and sustainable basis.

The guide will help procurement managers understand the supply chain for the forest products they purchase, identify available initiatives, resources and other tools. It will provide reliable, impartial and technically easy-to-understand advice on creating and implementing effective, responsible procurement policies.

It reviews 13 aspects of responsible procurement and examines 15 selected initiatives and tools such as The Green Building Initiative, the Tropical Forest Trust, and the Forest Stewardship Council's controlled wood standard.

Such procurement policies should encourage and reward responsible producers, reduce the environmental and social impact of their business, and still meet the needs of their consumers.

"By selecting sustainably and responsibly produced wood products, procurement managers are providing the needed incentives for landowners, manufacturers and communities to make long-term commitments to sustainable forestry," Griffiths said. □

Doing SD I Teaching an old fiber new tricks

DaimlerChrysler is expanding its program to use an “old-fashioned” fiber in its cars, an effort that is saving money, transferring technology North-to-South, and decreasing environmental impacts. It is even opening new paths of economic development in the tropics.

The company is using sisal grown in South Africa in the rear shelves of its locally produced C-Class Mercedes, and plans to expand its usage to other parts of these cars and to other models.

The seven-year effort to use the fiber is based on the work of the German-based automaker’s Global Sustainability Network, which is dedicated to figuring out ways to use renewable raw materials and biofuels in automobile production.

DaimlerChrysler’s Prof. Herbert Kohle said the technology transfer project in South Africa proves that profitability and environmental awareness in competitive markets are more compatible than skeptics believe.

The company reported that its progress has been hard-won: it was difficult to sign up agricultural partners; German car-makers and South African sisal farmers did not have a lot in common, and it took a long time to make the old sisal farms more commercial and efficient.

Sisal is an agave, the same plant family that provides tequila; it is named for the Yucatan port of Sisal, and seems to have originated in Mexico. Today it is grown commercially mainly in Brazil, China, Tanzania, Kenya and South Africa.

In the days of sails, sisal fibers provided much of the world’s rope and twine, and many of the vast sisal plantations of the tropics had their own private railroads to bring in the long, sword-shaped leaves for treatment in on-farm factories. Since artificial fibers took over from sisal and hemp, many of those farms have fallen into ruin.

DaimlerChrysler’s efforts are part of a global re-examination of uses for natural fibers.

Sisal scores well in most sustainable development metrics. Components made of sisal fiber are easier to recycle and to dispose of than those made with the usual glass fibers. Interior components made from sisal tend to be strong, impact-resistant and splinter-proof. Sisal fibers are safer for workers to handle than glass fibers, which can cause skin rashes. It is cheaper and lighter than glass.

The automaker kicked off research into natural fibers in 1991, and by 1993 had achieved some success with flax, hemp, coconut, cotton and sisal.

DaimlerChrysler credits the German firm Johann Borgers for sharing the fiber technology with Brits Textiles, one of the three South African organizations in the program. Borgers and Brits executives and engineers actively taught and learned from each other.

DaimlerChrysler contracted the South African Council for Scientific and Industrial Research (CSIR) to help with the privatization of sisal farms, assess supply chains and find other local applications for sisal. Only three of 23 available farms took up CSIR’s commercialization proposal, because the Northern Province government declined to privatize more farms until after comprehensive social plans, land claims and different commercial models have been developed.



Three is not a lot of farms. But the tropics are littered with disused and underused sisal plantations. Cotton is also an important crop in some of the poorest African countries, such as Burkina Faso, Mali and Niger. An increased use of cotton and new industrial uses for fibers such as sisal, hemp and coconut could help to generate new sources of income and new jobs throughout the agricultural parts of the developing world.



The C-Class rear shelf is only the beginning. According to Prof. Kohle: “We are creating a win-win situation combining economics and technology, ecology and society, and we are setting up exemplary projects in various regions. Our know-how on natural fiber technology and the optimization of biofuels will give rise to new applications and sales markets in the automotive industry.”





2050

The Downshifters

Reach for the M

Hyperopia

Seize the

The Young Managers

Project yourself into 2050 – as the WBCSD’s Young Managers Team has – and glimpse the future.

“Among my friends, buying something disposable is as socially unacceptable as indoor smoking was in your day,” says Rain Matthews, 21, speaking to a 50-year-old retail CEO.

“I think that for your generation it was like an addiction – you realized on an intellectual level that your patterns of consumption were destructive, but you could not break the habit,” Rain adds.

The team developed Rain’s character, in alignment with The Business Role Focus Area of the WBCSD, to understand how business might achieve consumer trust. Being young, they looked to the future – to 2050 – and created four scenarios. Contrary to expectations of youthful optimism, none of the four imagined futures is a utopia; each is full of complex interactions and difficult dilemmas.

Rain’s world, in a scenario entitled *The Downshifters*, is defined by triple bottom line thinking among companies and consumers, but also by national

protectionism. Economic growth is slower, but more environmentally benign. Countries without sound governments are in trouble, both economically and ecologically. And companies must “meet stringent regulatory rules, seek to adapt to local culture and demonstrate sustainable behavior.”

Hyperopia is the ophthalmologic condition in which the eye sees better at a distance than close up. It is also the name of another scenario, in which there is a farsighted framework for international cooperation and sustainable development thinking.

“If there is one thing we specialize in it is listening, hard,” says Vincent Torres, chief innovation officer of Hubble Global, a company that has been very successful by taking the long view. “Since the beginning we realized that if you are looking in the same place as everyone else, you are looking in the wrong place, and if you are looking in the place where you think the answer is you are probably looking in the wrong place.”

“Only by understanding what individual consumers might want and need in the future, what social and environmental issues are on the horizon and what scientific developments haven’t made it out of the lab yet, are we able to really manage and innovate for the long-term,” Torres continues, sounding a



Moon

e Day

Team

little like the report of the WBCSD Tomorrow's Leaders group. "Our aim has been to focus on long-term value creation."

The main downsides of Hyperopia are that countries that do not sign up for the international frameworks are marginalized, and there is a tendency toward one-size-fits all solutions that are, at times, blind to societies' shorter term needs.

The most challenging business environment is in *Seize the Day*. Beset by a combination of rampant materialism and regional protectionism, businesses are torn between meeting the demands of short-sighted consumers and a minefield of national regulation. The multinational company Safety Zone International, based in Zhengzhou, China, must "deal with conflicting standards on everything from human rights to the standard size for the piping in different countries." The company supplies secure, bubble-like habitats that protect people from crime and pollution. Due to resource constraints, eco-efficiency has been achieved but eco-justice is a long way off in this age of climatic and political insecurity.

Reach for the Moon is a spooky sort of *Brave New World* with manic consumption patterns fed by affordable electricity from rocks on the moon. Technological advancements have helped overcome

resource bottlenecks and solve environmental threats. International interaction has helped their application, driving economic growth and global affluence. Corporate strategy centers on competing "for the business of the growing global middle class (an increasingly single market)."

But even in this comparatively comfortable future, set on the day that India is celebrating international "Millennium Development Goals Achievement Day", there are demonstrations against the seizing of land for the new Helium-3 Fusion plant. The main question for business, governments and all of society remains unanswered: "What happens when new limits are reached and how great is the risk?"

The four scenarios contain haunting echoes of the three future business scenarios developed by the Council in 1997: *FROG* (First Raise Our Growth), *GEOpolity* (in which something like sustainability is achieved mainly by government actions), and *Jazz*, in which sustainability comes through all players improvising in the same helpful directions. But the Young Managers' scenarios are in no way derivative of these older managers' scenarios, and contain some significant business challenges and dilemmas.

The WBCSD has been organizing teams of 30 young professionals from the member companies that volunteer them since the 2002 World Summit for Sustainable Development. In previous years, teams chose various themes. In 2006, they divided themselves up along the three Council Focus Areas: Energy & Climate, Development and The Business Role.

Each looked at consumers. The Energy & Climate group focused on what consumers might do to reduce their carbon footprint. They contributed to the forthcoming WBCSD publication *Policy Directions to 2050* by creating four "personas" and describing how their behavior might evolve differently over the next 40+ years. The Development group also created scenarios, these having to do with how consumer choices drive development. Having combined the lessons from all three workstreams, these young managers are now developing communication tools and campaigns to target employees and their consumption choices.

As usual, the Council is looking for companies to "volunteer" young professionals for the 2007 team, which will start in March. □

Reporting: What? How much? To whom?

Ever since there have been corporations, both society and companies have squabbled over how much information those businesses ought to make public.

During the 1990s, as journalists accelerated their coverage of corporate environmental and social impacts, companies began offering their own reports on those impacts – often including information on philanthropy, health and safety, and stakeholder perspectives.

In 2003 the WBCSD published *Striking the Balance: Sustainable development reporting*, a guide to help companies explore key dilemmas in their reporting efforts. The working group behind this publication was led by Rabobank, STMicroelectronics and Deloitte Touche Tohmatsu, who concluded that “external reporting is here to stay.”

“The emergence of sustainable development reporting is not only a response to the increasing internal and external demands placed on companies to be transparent on their performance and achievement in this field. It is also setting the scene for the future of business management,” the report concluded.

But the debate continues, not so much over whether to report, but over how, which and why. In October, the Global Reporting Initiative (GRI), in which the Council has played an active role since its beginnings, issued its third generation (G3) of Guidelines for Sustainability Reporting, along with a full set of indicator protocols, a new technology platform and support services and guidance for its 2,000+ users. Developed by a global, multi-stakeholder group, the G3 guidelines are helping companies define report content and ensure the quality of information and comparability.

Also in October, we held a Learning by Sharing (LbS) session on sustainability reporting at our New York Council meeting. It revealed that our members remain of several minds on the whole exercise.

“There is too much marketing, and not enough hard metrics,” said one participant. Another added: “Is there value? No! We have to have hard metrics to improve performance. And it’s all good stories; there is no bad news in reports.”

Another felt that “there is a new life for such reporting. It’s much more than a press release value.”

But there is no going back. A Google search of “sustainability reporting” draws nearly 2.5 million hits; more than 2,000 companies have published something, and all 190 WBCSD members report in one way or another on their social and environmental performance. There are a growing number of reports from non-OECD countries such as Brazil, South Africa and China.

One of the many quandaries around such reporting is whether the civil society organizations involved in the GRI process are demanding data that not enough stakeholders want to read.

And to what extent do even the GRI-based reports reflect a company’s real impacts and strategic objectives? The Ethical Corporation complains that “many contain platitudes in lieu of strategy, vague aspirational statements where goals and targets should be, and vast catalogues of programs and indicators without regard to strategic orientation, stakeholder input or business objectives. They have little more value, to either stakeholders or the organization itself, than scrap paper.”

How does a company decide what to report on, what is material? GRI recognizes this as a key issue, and offers a great deal of guidance on “materiality”.

Vodafone tells us it assesses the “list of issues for significance in three areas: the level of concern and interest among stakeholders most affected by operations, the impact on society and the environment, and the financial and reputational impact to the business.”

Should GRI guidelines be followed slavishly in a fill-in-the-blanks approach? Doing so can produce a report dull to write and dull to read, but more easily comparable to others, one goal of the exercise. The reports that produce the most buzz are those that focus most profoundly on issues of deep and serious corporate concern.

SustainAbility offered an interesting view of this dilemma in an earlier report on reporting when it described the GRI guidelines as the “wallpaper” against which companies report. It is a given. Companies can choose to use mainly the wallpaper or dress it in their own pictures.

Another issue discussed in New York was whether the financial community would ever pay attention to “non-financial” reports? SustainAbility’s 2006 report claims that “investors and financial analysts are becoming

more interested in a range of risk and opportunity drivers – particularly in areas such as climate change. But only rarely do they find what they are looking for in today's reports."

Some companies see more value in the exercise than the product, the benefits being mainly internal, encouraging employees to understand and work toward sustainability goals.

It may be a combination of a focus on the exercise and the increasing length of reports that is encouraging companies to put more data online and less on paper, as BP and others have chosen to do. This allows more interaction and two-way communications.

Where will the non-financial reporting debate go next? The LbS session heard companies wondering aloud about:

- Focusing on specific issues, such as climate change, and how they might affect your business;
- Alternative communication devices besides the sustainable development reports;
- Stakeholder-based assurance vs. the rigor provided by financial auditors, and whether a mix of both would work;
- Whether there will be more regulation, with more disclosure requirements.

Meanwhile, the WBCSD is partnering with the communications company Eldeman and an educational institute to study the many ways that companies get their sustainability messages out and consumers and stakeholders take them in.

Doing SD I The power of supply chains

Mondi Recycling, the biggest paper recycler in South Africa and a subsidiary of **Anglo American**, is creating small businesses and keeping the country cleaner at the same time.

Founded in 1975, Mondi Recycling collects nearly 40% of all paper and board recovered for recycling in South Africa. Since 2001, it has been helping employees become small business operators, reducing its employees from 300 to 100 and sharply cutting overhead costs.

The program offers employees the opportunity to become entrepreneurs and earn higher incomes. These owner-drivers of paper collection trucks are former employees who run their own business picking up paper. To get the companies up and running some three years ago, Mondi offered a 30% discount on pickup vehicles.

Owner-drivers are paid on a per ton basis. Outsourcing gives individuals performance-based incentives to increase income by offering more than a fixed salary. These individuals work harder to bring in more paper because they are paid by quantity.

Mondi creates more sustainable livelihoods in two ways.

The first way is through post-consumer paper pick-up programs. These include Kerbside Paper Pick-Up (400,000 homes are offered this service), where the owner-drivers pick up paper that residents have placed in special bags, leaving a new bag to be filled for the next pick up. Mondi also supplies offices with the necessary equipment to recycle and sort paper and owner-drivers pick it up.

There are also specific programs for businesses, schools and charities that are paid for the paper they collect for recycling. Hospice (care for the terminally ill) and SPCA

(Society for the Prevention of Cruelty to Animals) promote recycling through awareness programs and receive donations from Mondi based on the amount of paper collected from its Kerbside and Office Paper Pick-Up programs. Mondi also runs national competitions for schools and individual companies, and these help educate on recycling practices.

The second sustainable livelihood program involves Mondi's small business program that picks up more than 60,000 tons (20% of all recovered paper) of paper available for recycling. The company identifies small business entrepreneurs and possible locations for Buy-Back Centers, where paper is available for pick-up and convenient for hawkers – people who pick up paper on the streets and sell it to the Centers. Mondi has supplied 700 free paper barrows to these hawkers to assist them in transporting wastepaper.

The Centers, which pay cash for recovered paper collected by local hawkers, are joint ventures between Mondi Recycling, small business entrepreneurs, and local councils. The company has invested the equivalent of US\$ 570,000 worth of equipment into these Centers to provide training and mentoring and to fix up the facilities.

The centers employ people to sort paper, as different grades get different prices. There are now 117 Centers, each costing US\$ 8,000 to open, and they employ some 3,000 people (including hawkers and sorters).

The company's vision is national and all-inclusive. If all the country's households recycled all their paper, South Africans would save over one million cubic meters of valuable landfill space and every household would save four pine trees per year. And many more lives would be improved through collecting, sorting and recycling.



Doing SD I Financial services for the unbanked



Following a successful pilot program in Kenya, Vodafone is rolling out a service that allows customers to access cash via their mobile phones. Called M-PESA, the service allows customers to borrow, transfer and make payments using a mobile phone, transforming financial services by making transactions cheaper, faster and more secure.

Vodafone CEO Arun Sarin said his company sees significant growth potential in emerging markets like Kenya partly because research shows that mobile technology can revolutionize social and economic growth in these countries.

"This is not for altruistic purposes," he said. "We have no desire to undertake the role of governments or NGOs or embrace an exclusively philanthropic approach to 'do good'. Rather we recognize that around 20% of the world's mobile phone users are from low to middle income countries and can see that the next billion mobile phone users are likely to live in markets which have very different needs from those we are used to."

Around 500 Kenyans were involved in the initial pilot of M-PESA through the Vodafone affiliate Safaricom. It was done in partnership with the UK Department for International Development (DfID) which provided matching funds, the Commercial Bank of Africa, and Faulu, a local microfinance organization. Through the pilot, existing microfinance clients received a cell phone with which they could make electronic payments on their loans. Each phone is equipped with a special subscriber identity module (SIM) card that allows the transactions to take place.

Besides loan payments, users are also able to deposit or withdraw cash from authorized M-PESA agents, typically a small storeowner that has enough ready cash on hand to complete the transactions. Clients are also able to make person-to-person money transfers, purchase airtime for re-sale or personal use, and receive account statements.

According to Vodafone, the pilot project confirmed several important benefits to users. Clients found M-PESA safe and convenient to use as it meant that they did not have to carry large amounts of cash with them and they could also enjoy longer "banking hours" which had the benefit of leading to a reduction in default rates. This benefits Faulu, and means that the regular Faulu lending meetings move away from discussions of repayment problems to address more strategic issues.

With the pilot project successfully completed, Vodafone is now rolling out the system more widely in Kenya, targeting the person-to-person payment pace initially, but building into the broader microfinance services sector with relevant partners over the coming years. Expansion is not without challenges, for example M-PESA customers were initially slow to adopt the other services available beyond loan repayment, indicating a lack of familiarity and trust of the new technology. Other issues revealed by the pilot program include a limit to transaction amounts so that clients must seek out multiple agents to get large transactions done.

With regard to the impact of mobile phones on a country's development, Sarin pointed to a Vodafone report on the impact of mobile phones in Africa. The findings are striking: between 1996 and 2003, a country with an extra 10 mobile phones per 100 people would have enjoyed a 0.6% higher per capita GDP growth than an otherwise identical country without the extra phones. This is double the impact of mobile phones in developed countries.

Put simply," he said, "I believe that mobile technology has enabled people whose views and needs were previously unheard to be active participants in the market place."

More information: read Vodafone's study on economic empowerment through mobile communications at http://www.vodafone.com/assets/files/en/VF_CR_Dialogue_3_Economic_Empowerment.pdf



Calendar

Promoting sustainable development worldwide

January

- 21 CEO Forum 2007, TERI–BCSD India – WBCSD, New Delhi, India
- 22 Delhi Sustainable Development Summit, TERI–BCSD India, New Delhi, India
- 24-29 World Economic Forum Annual Meeting 2007, Davos, Switzerland

- 25-27 7th Asia Pacific Roundtable for Sustainable Consumption and Production, Hanoi, Vietnam

- 30 Apr- 15th session of the United Nations Commission
11 May on Sustainable Development, United Nations Department of Economic and Social Affairs, New York, USA

March

- 2 WBCSD Executive Committee Meeting, Hong Kong
- 20 WBCSD Liaison Delegates Meeting, Montreux, Switzerland
- 28 Partnerships for Sustainable Development, Norwegian Ministry of Foreign Affairs, Oslo, Norway

May

- 2 Carbon Expo 2007, IETA –World Bank, Cologne, Germany
- 10 PWC 20th annual global forest and paper industry conference, Vancouver, Canada
- 21-24 Southern African Senior Executives' Seminar, The Prince of Wales's Business & the Environment Programme, Cape Town, South Africa

- 31 May- Conference Board, WBCSD, Washington,
01 June D.C., USA

April

- 2 Glion Dialogues, WBCSD – Dutch Ministry of Environment, Glion, Switzerland
- 2-4 US West Coast Senior Executives' Seminar, The Prince of Wales's Business & the Environment Programme, Monterey Bay, California, USA
- 17-20 Senior Executives' Seminar, The Prince of Wales's Business & the Environment Programme 2007, Cambridge, UK

June

- 15 WBCSD Executive Committee Meeting, Washington, D.C., USA

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