

Asia
Business
Council

CORPORATE SOCIAL RESPONSIBILITY

Corporate Social Responsibility: Business Solutions to Global Challenges

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ABOUT THE COUNCIL

The Asia Business Council is made up of senior executives with significant involvement in Asian business. Council members share an interest in the continued economic development of the region. The Council takes no institutional position on policy issues but it is committed to conducting research on issues that are important to Asia's future. The Council has no affiliation with, nor does it receive money from, any government. All statements in this report are the sole responsibility of the authors.

ABOUT BUSINESS FOR SOCIAL RESPONSIBILITY

Business for Social Responsibility (BSR) provides socially responsible business solutions to many of the world's leading corporations. Headquartered in San Francisco and with offices in Europe and China, BSR is a nonprofit business association that serves its 250 member companies and other Global 1000 enterprises. Through advisory services, convenings and research, BSR works with corporations and concerned stakeholders of all types to create a more just and sustainable global economy.

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Creating a Sustainable Future through CSR

The days when corporate social responsibility (CSR) was a concept and practice confined to North American and European companies are over.

Particularly in the past two years, Asian businesses have increasingly brought to bear their considerable energy and thought to matters of regional and global concern. From climate change and other sustainability questions to product safety and global labor standards, Asian business leaders have an opportunity to shape the international response to some of the broad issues facing global society. Not only will Asian business leaders who embrace corporate social responsibility offer their own distinctive approach, but their participation in sweeping worldwide matters can have far-reaching and beneficial impact for all.

This booklet addresses the fundamental question: “What is corporate social responsibility?” While the term is widely circulated, it is still poorly understood. Corporate social responsibility is the integration of environmental, social and governance factors into business strategies and operations. When utilized effectively, it can provide a framework for business to contribute to the creation of a truly sustainable economy, one that delivers value to both corporate shareholders and the broader public. It is important to note that corporate social responsibility is not philanthropy — fundamentally, it is not how a company spends its money that counts, but rather how it earns that money in the first place.

The first section of this booklet delves into a full discussion of what enhanced corporate social responsibility can mean for Asia. Subsequent sections provide information about

and insight into some of the most important social and environmental questions business faces today. Of all the many important questions, sustainability has taken on new urgency on the global agenda. While CSR and sustainability are not one and the same, it has become increasingly clear that businesses, governments and citizens all have an interconnected stake in the health and well-being of the planet as well as its people. Sustainability necessarily involves many interconnected issues, from the acquisition and use of energy to fuel productive economies, to the impact of economic growth on local and regional environments and living conditions, to access to clean and abundant water and other natural resources. These issues, together with questions about how best to build healthy economies that can equally support burgeoning populations in high-growth regions, as well as aging populations in others, are all part of the dialogue on sustainability. Thus, CSR and sustainability have become increasingly intertwined.

This booklet has been prepared in collaboration with the Asia Business Council. Its chief aim is to encourage the Council’s members to advance CSR in Asia in a way that will contribute to ongoing – and sustainable – economic growth, an issue that is at the heart of the Council’s charter.

CSR WITH ASIAN CHARACTERISTICS

While sustainability is essentially a global concept, CSR has developed differently in different parts of the world. This is not surprising, because CSR flows naturally from the social contract that defines the relationship between business and society. These social contracts,

moreover, derive from distinct cultural, economic and governance models. The rise of an indigenous version of CSR across Asia is therefore developing with both similarities and differences to that practiced in the rest of the world.

Unique Asian realities are critical in shaping regional approaches to a sustainable and responsible business model, particularly in comparison to the United States and Europe. Notably:

- Asia is more diverse — culturally, linguistically, and economically — than other regions of the world. It is a mistake to refer to one version of Asian CSR because it is defined differently across the region. Second, Asia taken as a whole, offers a fascinating testbed where various approaches and models can be tried out.
- Asia is experiencing the most rapid economic growth of any of the world's regions. The promise and reality of rising living standards remain foremost in the minds of policymakers and businesses. This outlook contrasts sharply with Western perspectives, where the focus is more on maintaining already high living standards.
- Asia, more so than other regions, includes a dynamic mix of developed and developing economies. Coupled with the rise of "South-South" trade, this mix positions Asia to influence other regions of the world on a range of issues.
- Asia's rising economic power coincides with increasing political power. China, India and Russia are poised to assert ever more political influence in the coming decades, meaning that Asian perspectives on CSR may alter or augment global definitions of the concept.
- Asian businesses and policymakers are substantially less inclined than Western companies to rely on established international principles and standards on social and environmental questions. This inclination may reflect the fact that the standards are not universal, but were developed primarily by and for Western interests. It may also result from the desire to prioritize economic growth over other factors, and Asia's affinity for consensus-building, in contrast with the more legalistic approaches favored in the West. These distinct features shape the way Asian companies and leaders define CSR, and also have impact on how "Made-in-Asia CSR" will influence global perspectives on sustainability.

ASIAN MODELS OF CORPORATE RESPONSIBILITY

CSR in Asia is evolving in different ways, each with its own priorities and mindsets.

The original CSR model emerged from Western multinational companies operating in Asia. Beginning in the early 1990s, American and then European companies began to apply a set of principles to the operations of their Asian suppliers and business partners. The rise of codes of conduct, focusing both on labor and environmental practices, can in retrospect be seen as an early effort to develop "soft law" principles for the globalizing economy. These efforts, while often well-intentioned, in many cases reflected Western perceptions—and misperceptions—of Asia. Tied to sometimes controversial Western origins, this first conception of CSR has masked the development of three different approaches to CSR more firmly tethered to Asian thinking.

The first approach — based on the notion of community benefit — involves the practices of Asian companies doing business inside their own countries. While the subject is too diverse to be treated completely here, the basic premise is that companies can work together at the intersection of local conditions, community expectations and, at times, the inclinations of powerful business leaders who may be looking to establish — and demonstrate — a legacy of community benefit. The most interesting examples of this approach are the ones where companies create new business models for "blended" benefit, such as ICICI Bank in India, which is aiming to bring new financing models to impoverished communities desperately in need of banking services.

The second arena of Asian-influenced CSR has developed where Asian multinational companies shape—or choose not to—the communities in which they operate outside Asia. This question plays out differently in developing and developed economies. For instance, there is growing debate about the role of new multinational companies who are actively engaged in emerging markets, such as Chinese companies operating in Africa. These companies are at once similar to and different from the Western companies who came before them.

Taking their cue from Chinese foreign policy, Chinese companies in Africa assume a principle of non-interference in local sovereignty. This approach derives from different cultural notions of community involvement as well as

the legacy of foreign interference in China's own affairs in the past. Sometimes this clash of values is apparent, as it was at last fall's World Economic Forum meeting in Dalian, China, where *New York Times* columnist Thomas Friedman and UN Undersecretary-General Sha Zukang of China traded barbs over whether and how Chinese and other companies can — or should — intervene to stop the killings in the Darfur region of Sudan.

China's hands-off approach, however, sometimes bumps up against messy local realities. Contractors for Chinese oil companies in Nigeria's strife-torn Niger River Delta, for example, have faced the same security threats that are commonplace for companies such as Shell and Chevron, which have operated in Nigeria for decades. The exigencies of safety and security may well propel Asian oil companies to join heretofore Western-based efforts such as the "Voluntary Principles on Security and Human Rights" in order to secure their operations.

Finally, as the number of Asian companies operating in the United States and Europe grows, there is new opportunity for Asian business leaders to demonstrate their will to be good corporate citizens in these developed markets. This reality may create a nexus for harmonizing Asian and Western views on corporate responsibility. Consumer concerns about the surge of Chinese, Indian and other Asian companies entering and even leading Western markets (as was the case for some Japanese companies in the 1970s and 1980s) could lead Asian companies to see an advantage in shaping their business practices and plans in ways that resonate with consumers who have different priorities than those in their home markets. Called upon to consider issues like human rights, transparency and governance in ways that may be unfamiliar, their response holds the potential to define "Brand China" or "Brand India" in the vast US and EU markets.

EMERGENCE OF DIFFERENT MODELS

It is no more possible to define a single model of "Asian CSR" than it is to define a single Asian language. The region's diversity of corporate practices rivals that of its natural environments. In India, philanthropy continues to loom large in the CSR landscape. At the same time, civil society also plays a significant role in India, suggesting that the until now Western "stakeholder" model with the views of multiple players taken into account, could develop. Any

such model, and indeed the overall approach to CSR in India, will also be defined by the tension between the country's energetic commercial development and its cultural and spiritual values, which sometimes run counter to a focus on simple material progress.

China's rise has coincided with growing interest in CSR in Asia. In just the past two years, Hu Jintao's drive for a "harmonious society" has focused increased government attention on the nation's mounting environmental worries, as well as growing economic disparity. Concerns about corporate governance, safety issues and frenzied stock speculation are bubbling under the surface, raising the possibility that pressure on the role of business in Chinese society could greatly increase. The issuance of a directive from the State-owned Assets and Administration Commission to state-owned enterprises to adopt CSR is but the latest sign of interest from the central government in Beijing.

In northeast Asia, while Japan and Korea have experienced historical conflict, they share relative prosperity, as well as concerns about the economic and political impact of their Chinese neighbor. Japanese and Korean multinationals are showing increased interest in the global CSR dialogue. For example, companies based in these countries have become more actively engaged in looking at supply chain practices. They are also seeking to reconcile their national business cultures with the governance, transparency and stakeholder-engagement models that their global peers and competitors employ.

With fellow Korean Ban Ki-moon as Secretary-General of the UN, Korean business may be more inclined to align its energy-saving practices with those of the UN Global Compact. And Japanese business also is well-positioned to apply environmental prowess and leadership in an era of resource limitations.

Across Southeast Asia, smaller economies from Vietnam to Cambodia to Indonesia focus mainly on economic development and their role as suppliers to global manufacturers. Apart from Indonesia's recent effort to legislate CSR, these nations are not yet shaping distinct approaches to CSR.

Finally, the trading hubs of Hong Kong and Singapore have increasingly active CSR communities. These two cities might well become to Asia what London has become in Europe: centers of debate and innovation that can inform and invigorate practices around the region.

SHAPING 21ST CENTURY MARKETS AND SOCIETIES

What happens in Asia matters. This is not only because so much of the world's economic energy comes from the region, but also because the global challenges that CSR is designed to address are more vividly on display in Asia than elsewhere. Any look at global mega-trends will find countless examples of CSR at work today from Tokyo to Karachi. Asia leads in the number of mega-cities, which bring both economic opportunity and environmental nightmares. Asia is also home to both demographic "youthquakes," with explosions of growth in the younger population such as in Vietnam, and fast-aging populations such as those in China, Japan and South Korea. Asia has massive migration both within and across national borders. Many Asian societies, such as Korea, are champion early adopters of information technology. But Asia is experiencing rapidly changing social contracts, with questions about governance gaps and power shifts across the region.

The way Asia meets these challenges has the potential to establish the region as the world's CSR innovation laboratory. If Asia finds a way to leverage business solutions to its own sustainability challenges, the region will be better off, and the world will take notice.

The evolution of CSR in the West over four distinct periods offers some lessons in how Asian businesses might consider incorporating the concept into their business strategies. First, in the mid-1990s, companies' actions were characterized by reaction. In this phase, businesses responded, often with defensiveness, as new issues landed on their agendas. Soon after, companies began to look to innovation, focusing on the creation of best practices. All too often, however, such efforts developed only as demonstration projects that could not be scaled up. A third phase, begun earlier this decade, saw a welcome focus on integration. With this approach, companies began to integrate social and environmental questions into their core activities. More recently, businesses have begun to look at how CSR can generate value creation. This latest idea means the development of new markets, products and services that create top-line benefit, and build sustainability into the business, rather than just as a coat of "sustainability varnish" layered on top of an existing business model.

The focus on integration and value creation holds the greatest promise for Asian business

and the region as a whole. Business must find solutions to a range of problems, from migration and transport to water and energy needs, if it is to generate economic opportunity for a still-huge Asian underclass.

ALTERNATIVE SCENARIOS

In thinking about where Asia fits within the fast-developing global debate about sustainability, it is possible to envision three distinct scenarios. Whichever of these scenarios — or more likely, which hybrid — comes to pass, will play a very significant role in setting the "soft laws" that govern the global marketplace, and shape a shared economic, social and environmental future.

ASIA'S STEADY RISE

In this scenario, Asian businesses and governments will engage one another as full and equal partners, with welcoming arms from the West. There are signs that this scenario is taking hold, with increased Asian participation, for example, in the development of the ISO 26000 guidance on social responsibility, anticipated for 2009, as well as increased Asian participation in global CSR platforms such as the Global Reporting Initiative (GRI). At the 2007 UN Global Compact Leaders Summit, there were more Chinese in attendance than there were participants from Japan and the United States, the two largest economies in the world.

BACKLASH

Alternatively, it is possible to foresee trade, political and military tensions creating "CSR blocs" that seek to use CSR for tactical advantage. It is certainly possible to imagine rising protectionism in the West, which could be used to restrict market access for new global champions from Asia, sparking a similar reaction to Western companies operating in the region. In this dismal scenario, trade would diminish, with CSR as a flashpoint. Even worse, the CSR agenda would be subverted from an engine of sustainable development to one that results in unsustainable models that promote resource depletion and conflict.

CRISIS (OPPORTUNITY OR CONFLICT?)

Rapidly deteriorating environmental conditions could present a fundamental challenge to business as usual, including Asian economic growth. Business and governments will face clear choices. It is possible that global dialogue

would accelerate the development of shared solutions to manage resource scarcity, promote investment in new products and services, and avoid conflict. Crisis could lead to a grand bargain on climate, water, migration and corporate governance. But it is equally possible that the outcome would not be positive. For example, Asian and American governments could promote ongoing growth, with Europeans developing alternative approaches, or rich countries could sacrifice some growth while the largest emerging economies defer effective resource management in favor of economic growth in the short and medium term. Conflict would arise, and environmental problems would grow worse.

As in all cases, there are choices to make. Businesses and governments that focus on creating both economic and social value will shape the contours of the global economy at mid-century. This leadership can come from Asia in a way that will allow Asian businesses to build regional prosperity and stability, demonstrate a leading global role and, most importantly, shine the path towards a truly sustainable economy.¹

Sustainability Strategies: Business Integration to Meet Global Challenges

Recent comments by prominent business leaders reinforce the notion that the business agenda is increasingly linked to broad global challenges. There is growing recognition that business can meet global challenges through problem-solving and wealth creation. Without the innovation and connections fostered by individual enterprises and markets as a whole, human potential is severely limited; natural resources are not used wisely, and social connections are weakened.

Thus, corporate social responsibility (CSR) is moving front and center, and is being redefined. Where once CSR was viewed primarily as philanthropy or risk avoidance, it is now viewed as a way to use business objectives and markets to deliver social and environmental solutions.

HOW CSR DELIVERS BUSINESS VALUE

Whereas for many years, business leaders would ask BSR consultants to explain “Why is CSR important?”, today the questions have taken a new twist: “How can my company implement CSR?” and “How can it deliver value for my company and for society?”

The core elements of an approach that enables thorough integration of CSR into business strategy include: purpose and vision, core business and material issues, business processes and implementation.

PURPOSE AND VISION

The starting point is to define purpose and vision. Most companies have a guiding philosophy that grows from their founder, their history, or their values. Similarly, CSR strategies work best when they flow directly from the “DNA” of a company – its own sense of its purpose and personality. Establishing a vision provides a direction that can then enable:

- Prioritization of issues and opportunities
- Allocation of resources
- Communication - internal and external
- Action steps
- Performance measures

In thinking through purpose and vision, companies need to wrestle with the question of leadership and resources. Many companies, ranging from Hitachi to GE to Tata Steel, have aimed in recent years to establish leadership positions by making public commitments to achieve challenging performance goals. Other companies, usually more quietly, aim to be middle of the pack. Some companies – Walmart is a prominent example – have prioritized one set of issues (environment) over another (social), at least initially. The common theme, however, is that companies set a direction and develop their approach consistent with that direction.

Whatever the CSR strategy, it will be most successful where it is linked closely to overall business strategy. Companies that are ac-

tively pursuing new market entry will need to prioritize an engagement strategy. Those who are introducing new technologies will look to understand and maximize public acceptance. Companies in the business-to-business segment will have different communications needs than those in consumer markets.

DEFINING MATERIAL ISSUES

For some time, companies defined sustainability too widely. Very often, large companies would seek to address all manner of issues and questions, ignoring the fundamental business principles of focusing on what truly matters. Today, companies are applying more focus and depth to a smaller set of questions. Analyzing what is material—or essential—is a fundamental element of a wise approach to corporate responsibility, reflecting a welcome maturity in thinking about sustainability.

In assessing what is material, the real test is in deciding where the intersection of business interests and competencies coincides with key public issues. BSR leads companies through a process of deciding what issues are most material to them and their world.

This helps any business decide how to answer the essential question: “What impact do we want our business to have on society?” Companies in the transportation and energy sectors have a clear imperative to focus on climate change. Food and agriculture companies face the essential question of how to ensure a steady and affordable supply of freshwater. Companies operating in conflict zones wish to see rule of law and effective public governance be established or strengthened. Where approaches to CSR track closely to the issues that are most relevant to the company’s future, and

tied most closely to its competencies, success is more likely.

BUSINESS PROCESSES

Once purpose and vision have been set, the first step on this path is to integrate material social and environmental questions into core business practices. Companies can incorporate CSR into all of their business functions, from policies and procedures, to staff development and performance measures.

Early adopters of corporate responsibility raced to develop dedicated CSR or sustainability functions within their organizations. Such steps proved extremely useful in catalyzing action, coordinating efforts across different parts of the business, and obtaining expertise that may not have initially been present. Today, however, many companies are finding that relying too much on specialized CSR functions can prevent the rest of the business from embracing key sustainability goals. The table below illustrates some of the ways that traditional business activities are being reshaped by heightened attention to sustainability.

Sustainability strategies are designed to create business approaches to global challenges like economic development, natural resource stewardship, and good public governance. In some ways, therefore, sustainability can be considered new or different for business. It is striking, however, that emerging models for managing sustainability are very similar to the way companies manage traditional business questions. With a sense of purpose, clear priorities, effective implementation and performance measurement, CSR will deliver value for business and the wider world.

CORE OPERATION	NEW DIMENSION
Strategy development	Forecasting sustainability mega-trends
Market entry	Environmental and social risk assessment
Product development	Lifecycle analysis
Procurement	Labor standards assessment
Public affairs	Stakeholder dialogue
Logistics and transport	Materials use
Human resources	Accountability for sustainability goals

Environmental Strategies: Capturing the Future

Climate change has drawn increasing attention from the business community worldwide. As the strong business presence at the 2007 UN Bali Conference demonstrated, businesses are now engaged in both mitigation and adaptation efforts to offset climate change. While the ultimate solution will almost certainly represent a mixture of public policy, technological innovation and reduced consumption, the ultimate shape of a decarbonized global economy is not yet clear. The Intergovernmental Panel on Climate Change (IPCC)'s most recent report reasserts, in the strongest terms yet, the need to pursue and achieve massive reductions in carbon dioxide and other harmful emissions while maintaining economic growth. The challenge this mandate will require is daunting.

In short order, no business will be able to avoid an effective climate strategy as part of its overall business planning. Whereas environmental strategies have moved from the margins to the mainstream, the particulars of these strategies necessarily vary across industry sectors. In the information technology (IT) sector, for example, Sony, Hitachi, SK Telecom and other leading companies have focused on their ability to leverage technology to reduce environmental impacts. Energy companies are beginning to make investments in renewable fuels and are decreasing the energy intensity of exploration and production; some new businesses, such as China's Suntech Power, are beginning to pioneer technologies for solar and wind power. Transportation companies, including Toyota, Honda and Nissan, are investing in a move away from the combustion engine as the sole means of private transportation.

Even as reducing greenhouse gas emissions increasingly monopolizes the attention of business, questions about other natural resources are growing more urgent. Water continues to grow scarcer and access to reliable, affordable supplies of the clean water needed for agriculture, industry and domestic use is becoming more challenging. Moreover, because water has direct local impact, with global implications, the problem has already grown acute for some companies.

While concerns grow about the availability of natural resources, new market models are emerging. One of the most exciting new mechanisms for managing the environment is environmental markets. By attributing a price to items such as wetlands and biodiversity, on which companies rely, market tools can be used to reward efficient users of such assets, ensuring the long-term availability of environmental services on which business depends.

The essays that follow cover some of the most important environmental issues and trends facing international business today. They aim to provide thought-provoking and practical guidance for companies seeking to get ahead of the curve in managing environmental questions effectively.

EFFICIENCY, OFFSETS AND RENEWABLES: A THREE-PRONGED APPROACH TO CORPORATE CLIMATE STRATEGY

Business leaders increasingly recognize that the time for isolated carbon and greenhouse gas initiatives is over. A focus on "end of the pipe" technologies is no longer sufficient. Business has an opportunity to consider the full ex-

panse of carbon and greenhouse gas emissions — across companies, operations and the life-cycle of products and services — and to chart a course toward carbon neutrality.

The spectrum of needed actions spans from increasing the efficiency of energy use to offsetting emissions to shifting to decarbonized energy and renewables. This range — of efficiency, offsets and renewables — applies to all aspects of business, from materials to product design, raw material sourcing, service delivery and disposal, or the “end of useful life,” of products. The span is broader than many companies consider, and it offers corporate managers a larger playing field in which to define ambitious, integrated and profitable climate change-focused strategies, goals and actions.

Climate change-focused corporate actions have potential upsides, in the form of new products and new markets, as well as risks, such as those associated with large-scale renewable energy investments.

CHARTING A NEW COURSE: CONSIDERING CLIMATE CHANGE IN BUSINESS TERMS

Companies face a wide array of options, underscoring the importance of thinking strategically. Responding to climate change with only small-scale initiatives, such as a travel offset program, will not result in the approximately 70-percent decreases in emissions that scientists estimate are needed to preempt irreversible and chaotic climatic cycles. Climate modeling highlights that action over the next few years will dictate the difference between a 2° and 4° F increase, which in turn determines the extent of sea level rise from polar melt.

Broader scale and audacious thinking is now needed. The corporate goal of zero emissions is the core of what should be considered, given scientific evidence, the emerging regulatory context and growing awareness. The need to decrease global emissions by about 70 percent becomes even more significant given the projected annual growth rates in carbon emissions from the United States (1.5 percent), China (3.4 percent) and India (3.0 percent) over the next 20 years.

Research has increasingly highlighted that “positive feedback loops” — in which one consequence of climate change (e.g. melting icecaps) accelerates other dynamics (e.g. ocean current changes due to differential amounts

of salinity) — are leading to a faster pace of climate change than anticipated.

Business represents the vast majority of greenhouse gas emissions, through industrial processes, transportation, facilities and commercial energy use. How can a company begin to think about the organizational change implications of setting zero emissions goals? The most durable corporate change programs have combined clear, bold goals with corporate culture and identity.

At Toyota, the spirit of the enterprise is infused with long-term thinking and maintenance of a learning-oriented culture. Toyota executives assess what the industry will look like in the future and ask “who do we want to be?” This process, and the answers to the overarching questions posed, guide both strategy and operating practices. A similar process — ideally supported by and led at the highest levels — is needed to guide climate change strategy in businesses.

While specific changes in corporate culture and identity will need to be tailored for each company, the actions pursued across all companies will include the full spectrum of:

- Increasing the efficiency of current operations
- Securing offsets of emissions
- Sourcing less carbon-intensive, renewable-based energy

These three elements offer a complementary set of tiered efforts — all of which are important. In order to mitigate the business risks associated with climate change, however, it is clear from climate modeling that each of these strategies in isolation is inadequate. Instead, real gains can be made through synergies across these three areas of work and by integrated strategic planning throughout all aspects of business.

TAKING ACTION

Businesses considering a move towards zero carbon have a range of options. The spectrum of efficiency, offsets and de-carbonized energy through a shift to renewables provides an expansive menu from which companies can devise the most effective mix for their business and operations.

These three elements interrelate: gains in one area can be amplified through work in the other areas. A company paying for offsets has greater incentive to decrease energy use: the less energy, the fewer emissions, and fewer emissions means

fewer offsets purchased. Similarly, the more renewable energy sourced, the fewer offsets, and less renewable energy is needed by a more energy-efficient company. These “knock-on” effects across the spectrum offer the potential to optimize costs through increasing efficiency, offsetting emissions and sourcing renewable energy, all with the goal of zero emissions.

The bold actions needed to move towards zero emissions are not without precedent. Both long-time vocal corporate advocates of action on climate and other environmental issues, such as Interface Inc., and relative newcomers, such as Wal-Mart, are taking action on

climate change. A growing range of businesses are exploring the steps of efficiency, offsets and renewables, as the examples below show.

According to Innovest, well-positioned companies could have revenues yielding US\$298 million, or 10.6 percent of 2005 earnings (EBITDA). The worst positioned companies could lose 25 percent of EBITDA due to regulatory compliance costs. Assuming abatement costs of US\$25 per ton, Innovest estimates that many companies could reduce their “business as usual” 2012 emissions to 10 percent below 2005 levels for less than 1 percent of their reported 2005 earnings.²³

ENERGY EFFICIENCY	EMISSIONS OFFSETS	RENEWABLE ENERGY	EMISSIONS REDUCTIONS	SAVINGS THUS FAR (US\$)
3M process and product improvements			50% over 15 years	\$200m
Alcan smelter improvements			65% over 10 years	Not Available
Bayer electrolysis and N2O incineration	Bayer transactions in EU and Chicago Climate Exchange (CCX) markets	Bayer organizational and energy supply changes	70% over 15 years	Not Available
BP internal efficiency goals	BP transactions in EU market	BP methane capture	18% over 3 years	\$650m
DuPont enhanced nylon production	DuPont transactions in CCX market	DuPont goal of 10% renewables by 2010	69% over 15 years	\$2.015b
IBM revised semiconductor manufacturing	IBM transactions in CCX markets		65% over 15 years	\$791m
Staples green building		Staples procurements and onsite generation	5% over 4 years	
STMicroelectronics energy efficiency measures	STMicroelectronics goal for net zero emissions by 2010	STMicroelectronics switch to fuel cells, co-generation	20% over 4 years	\$900m

ENVIRONMENTAL MARKETS: OPPORTUNITIES AND RISKS FOR BUSINESS

As companies across the globe experience a fundamental shift in how environmental issues and opportunities are understood, one of the growing areas of opportunity is the application of market-based incentives for environmental performance. This rise of “environmental markets” reflects a potential shift away from a binary choice between regulation and free markets, towards one where market forces and processes align resource use with their long-term economic value.

APPLYING MARKET MECHANISMS TO THE ENVIRONMENT

Market-based mechanisms are increasingly being applied to environmental issues as disparate as carbon emissions and wetland habitats. As with all markets, these environmental markets aim to:

- Capture the value of environmental services, either through a regulatory cap-and-trade or voluntary markets;
- Discover a price based upon supply and demand;
- Establish trading platforms on which these environmental services can be bought and sold.

Environmental markets are being spurred both by regulation, as exemplified by the European Union’s Emissions Trading System (EU ETS), as well as beyond-compliance behavior, as seen in the voluntary carbon markets in the United States.

Today, formal markets trade in: carbon sequestration, water-quality improvements, habitat conservation, and species protection. In addition, companies that rely on particular environmental services are engaging in focused business deals and payments for environmental services, which measure and value environmental services for one-off transactions.

These environmental markets are the next step in the evolution of thinking about valuing the environment. While rudimentary markets have been applied to environmental issues for years — such as trading in fishing licenses in Australia and New Zealand, acid rain-related air pollutants in the United States, and waste quotas in Europe — the underpinning ideas are maturing and their application is growing.

As a result, an expanding set of incentives are emerging for businesses to limit not only

traditional air and water emissions, but also to mitigate and even restore the function of ecological systems in areas where environmental markets exist. These incentives are beginning to be linked with:

- Innovating pathways for businesses to create value, consider risk mitigation, differentiate among competitors, realize new revenue streams through environmental services protection, gain preferential access to capital, projects and new markets, and save on costs;⁴
- Shifting regulatory and stakeholder approaches to environmental issues, as exemplified by the growing view of environmental issues as part of complex systems that need to be managed as a whole rather than in terms of individual flows of energy, waste and water;
- Emerging market valuation techniques as trendsetters like Goldman Sachs incorporate environmental services into their research;
- Signaling that some environmental assets are priceless (beyond market valuation) such as the U.S. Overseas Private Investment Corporation and Goldman Sachs refusing to invest in extractive businesses in IUCN protected areas I-IV.

SEEING “A THOUSAND FLOWERS BLOOM”

No single geographic area is driving the application of market mechanisms but instead, it is evolving within multiple regions across the globe.

The scale of certain environmental markets is becoming significant. Most notably, global carbon markets in 2006 saw transactions of 1.6 billion tons of CO₂, worth €22.5 billion. Biodiversity related markets in the United States, in the form of regulatory conservation and mitigation banks, have estimated transactions of more than \$1 billion a year. In addition, potential market-antecedents, such as offsets that assess and measure biodiversity, are cropping up around the globe. The current and forecasted growth is impressive.

THE “WINDOW OF OPPORTUNITY”

While the trend towards environmental market mechanisms is now clear, the mechanisms themselves are still nascent. Corporate strategists have an opportunity to develop a point of view on environmental markets and craft a proactive strategy within the emerging policy and NGO landscape.

The potential today is for companies to develop processes that position themselves for winning new business, investors and regulatory goodwill within this shifting environmental context. Early corporate actions should include revisiting (social and) environmental impact assessments (SEIAs/EIAs) to assess their effectiveness in identifying environmental service-related issues. If the current EIA processes and tools are inadequate to address emerging issues, then new tools, processes and protocols will need to be developed. In addition, if current expertise is insufficient to assess environmental service-related issues, then companies will need to add the expertise required to assess ecological structure and function.

In the short term, these corporate efforts should ensure that evolving expectations of regulators, investors and reviewers of new project bids are met. In the medium to long term, the corporate focus should be on assessing emergent environmental service-related community and stakeholder concerns as well as ensuring that environmental service-related risks and opportunities — such as related to carbon/greenhouse gas emissions, water flows and soil productivity — are fully integrated into project planning.

Engagement in environmental markets may offer greater flexibility to least-cost pathways for meeting regulations within the context of environmental markets. At the same time, experience with these markets will increasingly enable companies to consider business impacts on environmental services and functions, both of which are likely to shape perceptions of corporate environmental strategy in the coming years.

A “PERFECT STORM”?

While the application of market mechanisms to environmental assets is not new, their global growth signals a broader sea-change. At the same time, urgent issues like climate change and water availability are spurring investors to reconsider risks and to ask whether their capital is realizing full potential value. Within this context, regulators and various actors with a stake in the issue are beginning to reframe their expectations of corporate environmental performance.

As with any emerging context, this one is difficult to distinguish from the broader demand for new approaches to address environmental challenges. However, if these environmental

market-based trends accelerate and truly transform environmental regulation and management, then it will have been well worth the corporate strategic attention to get out in front of this fast-growing trend.⁵

OFFSETTING EMISSIONS: A BUSINESS BRIEF ON THE VOLUNTARY CARBON MARKET

The voluntary carbon market, which represents volume of well over \$100 million, gives companies the tools to prepare for and demonstrate leadership beyond regulation on greenhouse gas (GHG) emissions.

Transactions in the global voluntary carbon markets increased 200 percent between 2005 and 2006, with hundreds of companies — including American Electric Power, Ford Motor Company, HSBC, Google and DuPont — utilizing the voluntary markets to offset their emissions. Motivation for companies to engage in the voluntary carbon markets ranges from fulfilling voluntary corporate GHG reduction targets to preparing for potential regulatory requirements to enhancing brands and/or differentiating products.

Despite growing interest in voluntary carbon markets, companies are finding the arena a challenging playing field: the market is fragmented with complex supply chains and numerous emerging standards, and transaction costs can be high. However, engagement in voluntary carbon markets may also offer rewards, including training for better understanding the intricacies of carbon markets. In addition, purchasing offsets can benefit public relations and employee pride. Additionally, offsets represent an immediate, potentially lower-cost step toward reaching corporate climate change strategy goals.

ENGAGING IN THE VOLUNTARY CARBON MARKET

The key issue in engaging the voluntary carbon market is deciding whether — and, if so, how — to purchase offsets. The general process can be broken down into the seven steps detailed below.

MEASURE EMISSIONS

The first step is calculating your company’s “carbon footprint” to identify which activities result in the most GHG emissions and areas where emissions could be reduced. Companies

planning to measure their GHG emissions may use consultant services, especially for determining emissions from industrial processes. For companies with smaller or less intensive emissions, there are many free online tools to consider: [Greenhouse Gas Protocol Initiative](#), [Terrapass](#), [the Carbon Trust](#), [The Climate Registry](#) and [Climate Leaders](#).

SET OFFSET GOALS WITHIN A CLIMATE CHANGE STRATEGY

As with any initiative, companies should clearly define goals for purchasing offsets. A few key questions to consider when setting offset goals include:

- What is your company's environmental strategy on climate change?
- What types and levels of risk does climate change represent for the industry in general and for your company in particular?
- What are the results of a greenhouse gas abatement cost analysis?
- What stakeholder and customer interest is there in offsetting GHG emitted and in engaging in the voluntary carbon market?

Inter-related with setting climate strategy goals is the process of determining the scope of activities to offset, including internal emissions, product emissions and project emissions.

CLARIFY EXPECTATIONS ABOUT THE BENEFITS OF OFFSETTING VERSUS MAKING REDUCTIONS INTERNALLY

Identify the most attractive opportunities for reductions, and how those efforts interplay and affect other corporate objectives. Traditionally, it is accepted that companies should buy carbon credits within an "offset mitigation hierarchy," whereby purchasers first reduce what they can and then offset the rest.

Companies, however, need to be clear about what benefits they expect from — and priorities they place on — direct internal reductions versus offset purchases, and what linkages there are between the two. Regardless of the approach, assess options for reducing internally because the less energy used, the fewer carbon offsets will be needed and the lower the long-term costs of your operations.

Consult employees, managers and other internal stakeholders, who may have surprisingly varying awareness and attitudes about the best role of offsets for the company. In doing so, realize that the two functions of reducing emissions internally and purchasing offsets

often fall under the purview of different kinds of managers.

Finally, companies must be aware that offsetting has critics who say that offsetting shouldn't let companies "off the hook" from reducing their emissions directly. They claim that offsetting is a form of greenwash, but a number of groups are working to develop guidance on claims.

PRIORITIZE OFFSETS' DESIRED ATTRIBUTES

Following the decision to move forward with voluntary offsets based on goals and due consideration of risks, the process of selecting a specific offset begins. Whereas the decision to purchase offsets is voluntary, companies should not consider performance optional. Bare minimum parameters for ensuring credibility include the following:

- **Additional:** Reductions are "surplus" offsets that would not have occurred under "business as usual" and should not cause leakage or additional emissions elsewhere
- **Real:** Offsets are sourced from tangible physical projects with evidence that they have or will imminently occur
- **Measurable:** Reductions are objectively quantifiable by peer-reviewed methodologies within acceptable standard margins of error
- **Permanent:** Reduction streams are unlikely to be reversed, with safeguards to ensure that reversals will be immediately replaced or compensated
- **Verifiable:** Performance is monitored by an independent third-party verifier with appropriate local and sector expertise
- **Enforceable:** Offsets are backed by legal instruments that define offsets' creation, provide for transparency and ensure exclusive ownership
- **Synchronous:** Offset flows are matched to emission flow time periods with rigorous and conservative accounting that designates boundaries and baseline calculations

Beyond these minimums, additional attributes exist, often at price premiums, including cascading benefits and stakeholder appeal.

EXPLORE THE RANGE OF OFFSET MARKET OFFERINGS

GHG emissions can be offset in a wide range of ways in a variety of project types. The following table provides a snapshot of those offerings.

PROJECT TYPE	DESCRIPTION	CO-BENEFITS	POINTS TO CONSIDER
I. Fossil Fuel Reduction			
Energy efficiency	Fossil fuel use is decreased by utilizing it more efficiently	Cost savings; supports clean technology and reduces fossil fuel dependency and co-pollutants such as SOx, PM and VOCs	If savings are greater than costs, the need for carbon finance should be considered
Off-grid renewable energy & fuel switching	Fuel switching projects utilize fuels (such as many renewable energy sources) that provide energy with fewer emissions	Reduction of other pollutants & reduced dependence on fossil fuels	Supports clean technology
II. Bio-Carbon Sequestration			
Reforestation-afforestation of native tree species	Carbon is sequestered in tree biomass and soil	Range of potential social/environmental benefits (biodiversity conservation, water filtration, erosion protection, etc.)	Easy to communicate & tangible land restored; measuring and monitoring is relatively complex; permanency & leakage risks
Reforestation-afforestation monoculture forestry	Carbon is sequestered in tree biomass and soil	Range of potential social & environmental benefits, such as water filtration & erosion protection, etc.	Easy to communicate & tangible land restored; measuring and monitoring is relatively complex; permanency & leakage risks Potential concerns re: social/environmental trade-offs Potential extra income stream for sustainable timber harvesting
Avoided deforestation of native tree species	Conserving or changing forest management practices maintains carbon sequestration & avoids emissions released into the atmosphere	Range of potential social/environmental benefits (such as biodiversity conservation, water filtration, erosion protection, etc.)	Easy to communicate and tangible land conserved; measuring and monitoring is relatively complex; permanency and leakage risks Not currently obtaining carbon finance under Kyoto markets

PROJECT TYPE	DESCRIPTION	CO-BENEFITS	POINTS TO CONSIDER
III. Bio-Gas			
Methane capture & destruction from landfills	Decomposing waste is covered by anaerobic digesters that cap and flare methane, which can also be used as a fuel source	Somewhat reduced odors & risk of groundwater contamination	Easy to monitor and measure Often required by law in developed countries, hence additionality should be considered
Methane capture & destruction from livestock	Animal waste is covered by anaerobic digesters that cap and flare methane, which can also be used as a fuel source	Reduced odors & risk of groundwater contamination	Easy to monitor and measure
Methane capture & destruction from coal mines	Instead of releasing underground methane via air vents, the gas is trapped and flared	Potential safety benefits, especially in developing countries	Easy to monitor and measure Often required by law in developed countries, hence additionality should be considered
IV. Technological Sequestration			
Geological Sequestration	CO ₂ is injected into geologic formations, such as oil and gas reservoirs, coal seams, and deep saline reservoirs	Few or none	Precautionary principle uncertainties; does not create incentives for reducing fossil fuel use
Industrial gas destruction	High global warming GHG resulting from industrial processes are destroyed	Few or none	Very efficient means of reducing GHG; concerns about perverse incentives and synchronicity; project start date should be carefully considered
Industrial gas reduction	High global warming GHG resulting from industrial processes (e.g. aluminum production) are reduced via technology/ efficiency improvements	Few or none	Very efficient means of reducing GHG; concerns about perverse incentives and synchronicity; project start date should be carefully considered

In addition to choosing from a variety of project types, companies can also choose to purchase credits by becoming a member of the Chicago Climate Exchange (CCX); sourcing through a range of “over-the-counter” offset suppliers; and going to established regulated

markets, such as the Kyoto Protocol’s Clean Development Mechanism (CDM).

CHOOSE OFFSET PROVIDERS

Companies can consider the following characteristics of offset providers: objective traits,

such as experience, office and project locations, and offset project inventories and subjective “fit” traits like industry experience, assurance model, offset product offerings and price. The range of carbon prices on the voluntary market is significant. From the wholesale to the retail level, offsets range from less than \$0.45 to around \$45 (per metric ton of CO₂ equivalent). When investing, sellers should consider the risks and benefits relative to prices and offset quality.

COMMUNICATE YOUR ACTIONS

A company can both enhance its brand and address emerging concerns by embedding climate change goals and targets into communications with employees, customers and shareholders. Approaches to reporting carbon-related efforts can span the gamut and include sustainability or corporate citizenship reports, websites, press releases and annual reports.

Emissions markets are developing fast, and it is likely that the growth forecasted for 2008 will continue beyond this next year. Looking ahead, key issues to track include resolution on standards for making claims about emissions reductions and the relationship between voluntary and regulated carbon markets.⁶

AT THE CREST OF A WAVE: A PROACTIVE APPROACH TO CORPORATE WATER STRATEGY

As freshwater resources become scarcer or more polluted, a global crisis in access to clean water is emerging. While this is most acutely felt in Africa and West Asia, a lack of freshwater is already an economic constraint in major growth markets like China, India and Indonesia, as well as commercial centers in Australia and the western United States. According to the United Nations, if present consumption patterns continue, two-thirds of the world's population will live in water-stressed conditions by the year 2025. Meanwhile, too much water has recently led to severe flooding in low-lying areas of Great Britain, southern Europe, East Asia and the eastern United States. Further compounding — and politicizing — these challenges is the reality that fully one-third of the world's population lacks access to enough water to meet their most basic needs.

Thus, businesses will increasingly find themselves grappling with water constraints in various sourcing, production and retail sites

around the world. Water trends that are reshaping the business context include:

INCREASING AND INEQUITABLE DEMANDS

Demand is increasing competition for this fixed resource — the world's freshwater — raising new concerns about water quality and contaminants, and fostering greater levels of public participation and concern about local control and management.

ONGOING OVER-APPROPRIATION

As demand grows, current water use in many areas often exceeds sustainable supplies. The many causes of over-appropriation include inadequate attention to, or understanding of, ecological and hydrological systems and limits to appropriation, and inappropriate economic and market structures.

INTENSIFYING ENVIRONMENTAL IMPACTS

Aquatic species need not only water, but water at certain times in their lifecycles, within a particular temperature range, and of a particular quality in order to maintain healthy populations. These timing, quantity and quality issues mean that over-appropriation and growing demand for water have routinely led to unintended consequences for ecological systems.

DECLINING WATER QUALITY

Poor and declining water quality is an acute problem in many regions around the world. Already, for example, growing concerns about water quality in China have spurred government action toward more stringent environmental protection.

CLIMATE CHANGE AND ITS EFFECT ON WATER

As climate change will alter the world's hydrological cycles, scientists expect to see, among other things, changes in traditional precipitation and runoff patterns, and threats to coastal aquifers from rising sea levels, with potential implications for coastal populations reliant on groundwater resources.

EMERGING ROLE OF THE PUBLIC IN WATER POLICY

By the end of the 20th century, many countries had witnessed a movement toward more public participation in decision-making.

GROWING DEBATE OVER THE ROLE OF MARKETS IN DELIVERING WATER

An international debate is growing over whether (and how) water should be considered an “economic good,” subject to the rules and power of markets and international trade regimes. In places with increasing water scarcity, prices have been imposed on water that was previously provided for free.

In the next two to five years, companies will need to adapt to availability concerns such as water stress and flooding; quality concerns, including increasingly contaminated surface and groundwater; and access concerns, specifically competition (real or perceived) with other water users. As a result, a thoughtful water strategy will prove an essential mechanism for managing medium-term business risks and opportunities. In being proactive, corporate leaders will not only anticipate the future, but will shape it while gaining advantage in some of the key — and most water-constrained — markets worldwide.

Proactive corporate action that dramatically overhauls how companies use, innovate around and invest in water supplies will be crucial for gaining regulatory and community goodwill, improving reputation, and mitigating risks. Such anticipatory corporate water strategies will include: 1) innovating to significantly increase value chain and product eco-efficiency; 2) investing in the restoration of ecological systems that affect water flows; and 3) engaging in collaborative strategies for maintaining water resources over time.

Together, these three components — innovation, investment, and collaboration — construct a 21st century corporate water strategy that goes far beyond tracking inputs and outputs.

PHASE I : ESTABLISHING A CORPORATE WATER STRATEGY

Phase I involves a strategic assessment of current water-related business risks that also considers risk mitigation and adaptive management options. A series of three steps can establish a baseline for developing water management plans:

Conduct a Comprehensive “Water Footprint” Assessment

In order for companies to assess accurately the risks and opportunities associated with their water issues, a logical first step is to conduct

a “water footprint” investigation to fully understand current water use and wastewater discharges throughout the business. A thorough assessment of a company’s global water footprint will provide the basis for assessing relative risks, prioritizing management efforts, setting strategic goals and valuating progress.

A full water footprint would include water impacts associated with each of the following categories: sourcing materials/inputs, producing/manufacturing/service delivery, distribution/operation use, and end of life (reuse, recycle or disposal).

Considerations include:

- Does the production, transportation or storage of primary inputs require or affect water in any significant way?
- Does water used in production (or production of component parts) come from sustainable/renewable sources?
- Are there other local users that rely on these same sources?
- What are water-related impacts associated with various packaging materials?
- Does the potential for spills exist during product transportation or distribution (e.g., product or other spills from tankers, truck and rail)?

Assess Water-Related Risks

Done simultaneously with the water footprint exercise described above, risks associated with the following should be identified:

- Local hydrological conditions
- Socio-economic conditions in production regions or key consumer markets
- Business impacts on defined water resources

Prioritize Issues and Chart a Course for the Future

A corporate water policy is an essential instrument for guiding decisions throughout a business, and for communicating practices and expectations to suppliers, partners and other interested parties. The water policy can include a statement of the business’ high-level commitments related to water management, including:

- Why water is important for the business and to what degree
- How water is used
- How the business’ activities impact water resources
- What challenges the business faces in water management

PHASE II: IMPLEMENTATION AND INNOVATION

Once companies have designed water policies and goals based on their water footprint and associated risks, an action plan can be initiated to implement efficiency, reuse, innovations, partnerships and investments around water. Key areas for implementation and innovation include:

Identify Process and Product Innovations

Process and product innovations can be grouped into the following categories:

Decrease Water Use and Impacts

There are various ways to “slice” a company’s approach to increasing water efficiency and reuse. One useful categorization is the following:

- **Hardware Solutions** - Monitor all water use; replace high-flow fixtures with water efficient versions; replace water-intensive processes.
- **Operational Solutions** - Implement regular water audit programs; find alternatives to using water for operational tasks; institute a regular leak inspection and repair program; find ways to re-circulate and use water multiple times; set and report on targets.
- **Employee Solutions** - Educate and encourage employees to conserve water and report leaks.

Increase Water Recycling / Reuse

Businesses can also engage in proactive measures for managing water quality through providing adequate wastewater collection, treatment and disposal, and by monitoring activities that might create water quality problems.

Manage Priority Supply Chain Issues

Many companies’ direct water use typically pales in comparison with the water impacts embedded within their supply chains. “Embedded water,” also referred to as “virtual water” or “embodied water,” refers to the amount of water required to produce a good from start to finish.

Design of “Water-Savvy” Products

Sustainable design, and in this case the design of “water-savvy” products, is an emerging area of opportunity in a world facing water constraints. A design team can either start by assessing the primary water impacts of a given product life cycle, or design a product from

scratch with an eye towards optimizing water-related sustainability metrics.

Invest in Water-Related Environmental Services

The most far-reaching ecological study ever undertaken (by over 1,300 scientists around the world) – the Millennium Ecosystem Assessment – found that 60 percent to 70 percent of these resources are being degraded faster than they can recover. Given these findings, the question arises of how companies can assure the continuity of such functions for sustained business operations, particularly regarding ecological systems linked to water availability, quantity and quality. To address this, companies should assess the market potential, include ecological restoration as part of operations and identify investment opportunities in watershed services.

Align Corporate Goals with Policy Advocacy and Multi-Stakeholder Initiatives

Because water is a shared resource, water management practices can be a sensitive social, cultural and environmental issue, particularly in times of drought and water restrictions. Companies can rarely achieve the best water management outcomes on their own. Most solutions to water supply, quality and sanitation issues require an adaptive co-management approach. Companies can integrate their corporate water goals with public policy and initiatives of other interested parties, through collaborations with other businesses, communities and NGOs, and government agencies.

A strategic water plan will position a company over the longer term to more readily forecast change and respond to challenges. There are no simple solutions to water uncertainties, but there is tremendous potential for a multi-faceted approach that combines efficiency and conservation measures, innovation at the process and product level, and investments in natural systems that replenish and purify water long into the future.⁷

Sustainable Supply Chains: The Continuing Evolution

Modern business operates as part of a dynamic and shifting web of relationships. The rise of global supply chains has opened the door to new production and distribution models that have maximized a business' ability to locate operations where they can deliver the greatest value.

In the early 1990s, increasingly complex production chains in emerging economies brought efficiencies for manufacturers, enterprise development and employment. In the meantime, for many people, this new business model also became emblematic of how globalization delivered poor working and environmental conditions. In this context, companies, consumers and the public sector began asking questions about whether labor, environmental or product safety principles were being upheld in the workshops of the 21st century.

In response to these conditions, the business world adopted a remedy in the form of codes of conduct. Initiated by the private sector, codes of conduct have been enforced and monitored by business, and have become the dominant platform that multinational companies, their global suppliers, NGOs and other organizations have utilized to ensure decent working conditions.

While this global adoption of codes of conduct and monitoring has made a significant contribution in meeting the purpose for which they were adopted, tough challenges remain. To address these challenges, BSR has estab-

lished a program—Beyond Monitoring—a four-part model that addresses such supply chain matters as internal buyer alignment, supplier engagement, worker education, and supportive public policy. This comprehensive model, which aims to address root causes, rather than simply the symptoms of unacceptable conditions, is outlined below.

A critical success factor in managing sustainable supply chains is information management. The second essay in this section provides an overview of information management as a key element of sustainable supply chains. Tracking water and energy use and working conditions has become as important as tracking quality and delivery. Many companies and industry groups are pioneering new ways to build systems that support these CSR objectives.

Finally, the section includes an example of collaboration in action: an initiative in the electronics sector in Shenzhen, China. This partnership, involving international manufacturers, local suppliers, the Chinese government and the World Bank, demonstrates the power of public-private partnership and industry collaboration in achieving sustainable supply chains.

For purposes of these discussions, a sustainable supply chain is a system of aligned business activities throughout the lifecycle of products that creates value for all involved, ensures ongoing commercial success, and improves the well-being of people and the environment.

BEYOND MONITORING: NEXT-GENERATION SUPPLY CHAINS

In 2007, BSR officially launched “Beyond Monitoring” at the 2007 United Nations Global Compact Leaders’ Summit. The Beyond Monitoring initiative aims to provide a new framework for companies managing the social and environmental dimensions of their supply chains. Rather than an over-reliance on costly and duplicative policing of production facilities, Beyond Monitoring provides an efficient means of addressing the root causes of poor labor and environmental conditions. The basic elements of the initiative are described here.

FOUR PILLARS

The Beyond Monitoring framework calls for a four-part approach that focuses greater attention on the root causes of social and environmental shortcomings in global supply chains:

- **Buyer Internal Alignment** of purchasing practices with social and environmental objectives
- **Supplier Ownership** of good working and environmental conditions in their workplaces
- **Empowerment of Workers** to take a stronger role in asserting and protecting their own rights
- **Public Policy Frameworks** that ensure wider and more even application of relevant laws

BUYER INTERNAL ALIGNMENT

There is a fundamental tension between buyers’ commercial objectives and their desire to ensure fair working conditions, a tension often exacerbated by different objectives and rewards for CSR and purchasing staffs. Changing organizational structures and incentives, as well as information flows, can reduce this tension.

Levi Strauss & Co. has restructured for better internal alignment by creating a Code of Conduct team, which reports to a Sourcing team. Hewlett-Packard has fully integrated sourcing and social and environmental compliance groups into one supply chain team. In order to reduce production delays due to miscommunication and thereby reduce the need for overtime work, numerous retailers have restructured geographically by shifting decision making closer to production sites.

Integrated information flows also allow for better internal alignment and more comprehensive decision making. Improved information flows within buyers’ firms allow for better

decisions about the tradeoffs between production and compliance.

While many companies have taken steps to align their internal practices, there is a clear potential to take such efforts further. The Beyond Monitoring initiative includes a collaborative effort to map product life cycles, with the goal of establishing a “best practice” go-to-market process to enable better social, environmental and commercial performance.

SUPPLIER OWNERSHIP

Suppliers currently face pressure to respond to requests and processes that they had little or no role in shaping. Without more stable buying patterns and other outside incentives, the business case for suppliers to embrace CSR agendas is often unclear.

However, there are some good reasons for suppliers to implement their own social and environmental standards. First, there is a clear and growing trend towards transparent supply chains with attention to social and environmental performance due in part to international pressures. Second, creating individual social and environmental performance standards can improve company performance and profitability. In addition, the myriad of buyer requirements can be met more directly when suppliers develop homegrown solutions.

In China, BSR is piloting a process called “CSR on the Offense,” which helps suppliers increase transparency and improve performance by designing factory-based ownership of production and sustainability processes.

WORKER EMPOWERMENT

The Beyond Monitoring framework calls for a more robust inclusion of workers in their own empowerment initiatives. Strategic supply chain programs aimed at including worker voices and promoting an informed, participatory workplace should include secure communication channels, robust grievance systems, and worker education and skills development.

Of all the elements of Beyond Monitoring, worker empowerment depends the most on a multi-stakeholder approach that draws on the unique skills, networks and credibility of unions, NGOs and community groups. The buyer’s role is to seek out NGOs, unions and other organizations that workers trust, and to help these organizations implement worker-empowerment programs. Buyers can also sup-

port suppliers by passing on knowledge about the links between better human resources practices and higher profits, and efficiencies like those recently uncovered in a Tufts University study conducted for Gap Inc.⁸

Companies participating in Beyond Monitoring are exploring a capacity-building program focusing on providing factory-based training to workers and factory managers in Shenzhen and Suzhou. The training focuses on: migrant worker integration; worker committees and communication mechanisms; wellness, health and safety; and worker and management rights and responsibilities.

PUBLIC POLICY FRAMEWORK

Codes of conduct were originally established in response to the public sector's abdication of responsibility for enforcing social and environmental standards. After nearly two decades, the global CSR movement has gained a greater appreciation for the limits of voluntary action, as well as models that outsource legal enforcement to the private sector indefinitely. All parties involved now recognize that effective public policy initiatives both define and support the private sector's CSR agenda.

Companies can promote supportive policy frameworks by:

- Looking to create a level playing field by advocating for labor and environmental principles to be integrated into trade agreements
- Supporting efforts by their home country governments to promote sustainable supply chains through government procurement and aid efforts
- Working with suppliers to lobby local governments to strengthen their capacity and commitment to enforce legal standards

One valuable mode of engagement for buyers is collaboration. On numerous occasions groups of companies have come together to express their views to governments to promote a course of action, or to change a course of action viewed as unhelpful or inappropriate.

BSR's objective is to encourage companies to remake strategies, redeploy resources and consider new partnerships in pursuit of a model that has the potential to achieve more lasting change. The approach integrates labor and environmental considerations more fully into companies' procurement efforts. It also seeks to re-emphasize the roles of two often overlooked constituencies, workers and governments, who should be more involved at

the center of sustainable supply chain management.

The Beyond Monitoring framework takes a more holistic approach to realizing sustainable supply chains. It helps companies realize goals of the first generation of sustainable supply chain efforts using next-generation approaches.⁹

INFORMATION MANAGEMENT FOR SUSTAINABLE SUPPLY CHAINS

Today, supply chains for even "simple" products, such as T-shirts or stuffed animals, include business partners across diverse geographic locations. As manufacturing becomes further removed from a company's headquarters, so does the control and transparency of business processes related to supply chain information management.

To respond to demands for responsible practices among their supply chain partners, companies must equip their organizations with tools to effectively manage information related to sustainability. Companies will need to re-evaluate their investment in and commitment to transparency, communication and collaboration, with the definition of a sustainable supply chain.

Information technology offers a foundation that enables companies to be accountable, to improve sustainable supply chain practices, and to respond more proactively to external pressures while balancing competitive realities within their industries.

COMPANIES ARE FACING MULTIPLE STANDARDS AND REGULATIONS

Aligning the supply chain with regulations, international standards and various internal and external initiatives is complex, but offers an opportunity to differentiate in the marketplace and build competitive advantage. As regulations and international standards proliferate, the best approach to supplier information management is for companies to implement proprietary supplier information repositories that integrate with internal systems and can also be linked to external collaborative information exchange platforms. As a strategic asset, supplier information allows procurement, sourcing, manufacturing and compliance staff to make better business decisions each day and drive competitiveness for the firm.

Supplier Information Management is the complete lifecycle of data required by enter-

prises to provide decision support to business users, improve supplier capacity and produce accurate transactions between a company and its global suppliers. Companies committed to comprehensive supplier information management gain greater value from their relationships, align more effectively with corporate goals and minimize risk to brands.

To ensure proper management of proprietary information on suppliers and products, many companies have established their own secure information repositories. To complement individual company efforts, participation in collaborative information platforms reduces the overhead burden on suppliers and offers efficiencies to the industry at large. Examples include the [Suppliers Ethical Data Exchange](#) (SEDEX) and the [Fair Factories Clearinghouse](#), which allow companies to share audit and remediation reports, thereby reducing the amount of duplicative audits.

In the end, companies are moving toward a blended model of exclusive repositories and industry initiatives. This approach allows them to maintain visibility over their end-to-end supply chains, managing most supplier information privately, while leveraging external players like consortiums or auditors to augment a subset of that information.

In addition to global standards and regulations that apply to all supply chain partners equally, companies also manage proprietary codes of conduct, often based on existing standards, that require additional monitoring and compliance by factories, including expectations on both social and environmental performance. The challenge to suppliers is to meet these multiple duplicative standards.

The task is also challenging for buyers' procurement, sourcing and compliance staff as they try to effectively manage supplier qualifications, as well as product information and communication flow along the supply chain. In response, initiatives such as the [Electronic Industry Code of Conduct](#) (EICC) and the [Pharmaceutical Supply Chain Initiative](#) (PSCI) are creating synergies and efficiencies through industry collaboration. These efforts help create consistent expectations for suppliers, manage information flows more efficiently and share best practices in CSR and supply chains. As these initiatives evolve, managing information and communication flows along the supply chain will become increasingly important.

CHALLENGES FACING COMPANIES: MANAGING SUPPLY CHAIN INFORMATION

Given the various pressures to manage supply chains more responsibly, companies face a new technical challenge in managing their activities and information.

- **Transparency of supplier information across functional and organizational boundaries is limited.** Today, information is often not "passed through" to other functions, operating units and supply chain partners for practical, political or competitive reasons. As a result, it is impossible to maintain accurate supplier data, which undermines decision-making as well as the ability to effectively mitigate risks. Few companies centralize and share social and environmental performance of their suppliers and factories in a systematic way. Most often, procurement and sourcing departments set up transactions with their suppliers and manage basic supply chain information. However, they lack a central compliance and CSR repository that integrates environmental and social data on suppliers.
- **Misalignment among companies, suppliers and third parties results in a communications gap.** There is a lack of effective communication and understanding between companies and their suppliers on the information they need to exchange. Suppliers often do not have the incentives to communicate performance information proactively — such as increased orders or preferential contract terms — and companies do not have the resources or internal IT infrastructure available to set up effective communication channels with their suppliers. Third parties providing support to the supply chain, such as audit services, data cleansing and consortium management services, are rarely well integrated into supplier communication plans. A comprehensive information infrastructure that would improve and facilitate communication is often not available.
- **Supply chain information management is fragmented.** Compliance and regulatory data are often no longer managed by a central function of the corporation. Rather, data is collected and managed by separate business units and external entities, including third-party monitoring firms, consultants and agents. As a consequence, information management becomes fragmented and

inconsistent. Examples include duplicate information, missing data and ineffective auditing. This leads to considerable delays in uncovering and reacting to serious compliance violations, making it difficult to analyze supply chain data to inform decision making, thereby increasing the risk to the company's operations, reputation and brand.

- **Monitoring, capability building and training programs are not aligned.** Today, companies do not have the information they need to effectively train and build the capabilities of suppliers. Supplier compliance data and continuous improvement targets are collected and analyzed separately, which prevent supplier needs from being accurately diagnosed. Likewise, training programs are managed by different departments or by external providers without sufficient feedback on progress and measurement of improvement.

THE SOLUTION

The next-generation approach to managing all data related to suppliers and their social and environmental performance is emerging.

- **Phase I: Gain Transparency** The first phase of a successful approach enables transparency, meaning that the right person has access to the right information at the right time.
- **Phase II: Communicate** The second phase supports communications so that sustainability considerations can be incorporated within traditional supply chain processes.
- **Phase III: Collaborate and Build Capability** The third phase builds the capabilities of supply chain partners to continuously improve their performance.

Sustainable supply chain management will increasingly become an important consideration for sourcing and procurement departments, as well as the CSR, quality and compliance functions. Although sustainability programs may vary by industry, the basic needs for transparency, communication and collaboration are similar.

Business has an opportunity to make a positive impact on sustainable development while achieving commercial success. Leaders who see this opportunity will create the right incentives to align and automate all supply chain related information. Leaders will:

- **Leverage technology** to enable supplier information transparency and sustainable supply chain management as a core strategic goal and asset.

- **Implement effective information management systems** to help facilitate comprehensive decision-making inside buyers' firms, and between buyers and their ecosystems.
- **Align internal corporate functions** to create an integrated approach externally to suppliers and other key players with a stake.
- **Move beyond assessing risk** in the global supply chain, to building capacity and training models that focus on continuous improvement in social and environmental issues.

As demand grows for greater transparency of buyer and supplier information, so does the need for technology to help facilitate and manage environmental and social compliance processes and information.¹⁰

CSR IN CHINA'S INFORMATION AND COMMUNICATION TECHNOLOGY SECTOR

Over the past decade, multinational companies, suppliers, workers, governments and civil society have focused increasing attention on CSR within global supply chains. In particular, companies within the information and communication technology (ICT) sector are increasingly requiring that their suppliers, many of whom are located in China, improve social and environmental standards. The Chinese ICT sector must therefore improve working conditions and environmental standards in order to meet CSR expectations and maintain overall competitiveness. Improved CSR standards among Chinese companies will also help the country achieve the government's goal of a harmonious society and the objectives of the 11th five-year plan. The economic benefits of such an achievement include increased business opportunities, reduced worker turnover and improved reputation of the region and sector.

While the ICT sector in China has made much progress, the public and private sectors must now collaborate and focus on long-term capability building in order to achieve sustainable, systemic change. In October 2006, a collaborative group of business and government leaders—including the Shenzhen government, the Foreign Investment Advisory Service (FIAS) of the World Bank Group, [BSR](#), the Shenzhen Electronics Industries Association (SEIA), the [Electronic Industry Code of Conduct Implementation Group \(EICC\)](#), and the [Global e-Sustainability Initiative \(GeSI\)](#)—launched a project to develop a capability-building

strategy for the ICT sector in Shenzhen. The project sought to help Shenzhen meet international social and environmental requirements and improve the soft competitiveness of the industry. Following are some key recommendations for the various players with a stake in the issue.

KEY RECOMMENDATIONS

Suppliers realize that they can reap tangible benefits from good social and environmental practices, but many are not yet convinced of the business case for CSR. The difference in perception is often related to the companies' management systems, as well as their ability to measure both the costs and benefits of CSR investments. Furthermore, many suppliers are new to CSR expectations and are merely reacting to customer audits rather than taking ownership of facility improvements. Based on these findings, the mission team recommended that suppliers:

- Conduct a cost-benefit analysis to understand the direct and indirect costs and benefits of CSR improvements. Such analysis will result in improved ability to prioritize CSR investments, better data points for negotiation with buyers and improved ability to manage the business and monitor progress.
- Implement management and performance measurement systems to manage social and environmental issues. Management systems establish processes, procedures and appropriate incentives that eliminate the root causes of non-compliance with standards, and therefore eliminate the need to correct problems after they arise. Suppliers are familiar with management systems used to manage quality; they can apply similar systems to labor, ethics, environment, health and safety as well.
- Improve worker-management communication by establishing safe and effective worker grievance channels and other mechanisms that support dialogue between workers and management. Suppliers should explore opportunities to improve workers' awareness of their rights and responsibilities so that efforts to improve working conditions can be effectively implemented. These activities often result in improved employee retention, increased worker productivity and a more proactive workforce.
- Take ownership of improvements and implement CSR with own suppliers. Suppliers should take responsibility for improving their own understanding of customer and regulatory CSR expectations, and develop a strategy that aligns with their strategic objectives. Furthermore, suppliers must require CSR performance of their own vendors and find ways to monitor their performance and raise their awareness of CSR expectations and practices.

Buyers play an important role in supporting suppliers' abilities to improve CSR practices, and have encouraged improved conditions by establishing standards for social and environmental performance. They must also ensure that they improve their own practices so that they can provide appropriate incentives and do not undermine suppliers' progress. Recommendations for buyers included:

- Provide clear incentives to suppliers. Strong, clear incentives are essential because they drive senior management attention to CSR. Incentives for suppliers can include continued business, longer contracts, increased price, increased orders/growth in business, public recognition and rewards. Buyers must also communicate and follow through on the risks and impacts associated with poor performance.
- Align internal procurement practices with CSR expectations. Companies must send consistent messages to suppliers and educate procurement staff about the impacts of CSR requirements. Procurement staff must understand the CSR implications of their sourcing demands so they do not inadvertently place suppliers in situations that would force them into non-compliance with the buyer's stated CSR expectations. To ensure consistency, procurement should incorporate CSR metrics into supplier evaluations and decisions.
- Develop standard industry codes and implement them. Suppliers, buyers and NGOs are supportive of a common industry standard, such as the [Electronic Industry Code of Conduct](#), as opposed to variable standards from different buyers. There is widespread support for a common standard and coordinated implementation in order to avoid duplicating efforts and inconsistent messaging.
- Adapt a monitoring model that focuses on improvement, not just compliance. Audits or monitoring should not be an "end," but rather a means to identify issues and areas for continuous improvement. Auditing is

PUBLIC SECTOR ROLES			
Mandating	Set standards through laws and regulations	Regulators and inspectorates	Legal and fiscal penalties and rewards
Facilitating	Non-binding guidance and support	Capability building through training	Creating incentives and market stimulation
Partnering	Combining public & private resources	Stakeholder engagement	Dialogue
Endorsing	Political support e.g., through CSR award	Highlighting best practices	Awareness raising

most effective when it is part of a larger relationship built on improving overall conditions. This partnership decreases incentives for corruption, enhances open dialogue about challenges, and enables opportunities for on-site guidance and knowledge sharing.

Governments, including the Shenzhen government, are increasingly supporting private-sector CSR practices, which often results in enhanced private sector compliance with national labor and environmental laws. However, achieving sustainable labor and environmental practices in global supply chains requires an enabling environment that is supported by the government. Experience from a number of countries suggests that governments can choose from a range of public sector roles to encourage business drivers that underpin CSR:

Based on this framework the mission team recommended that the Shenzhen government:

MANDATE IMPROVEMENTS PRIMARILY FOR MIGRANT WORKERS BY:

- Revising the principle of territoriality in the pension insurance plan to allow migrant workers to withdraw their pension insurance – the portions submitted by both the worker and the employer – when they leave Shenzhen. The administration can deduct a small administration fee, but migrant workers should be entitled to the full insurance.
- Updating the Synthesized Flexible Working-Hour Law to ensure that it meets the demand of working hours in export industries and is consistently followed. The report recommended that the government consult

with the representatives from the exporting industries and ACFTU prior to the review.

- Calculating the number of labor inspectors based on the number of workers (around 6 million), not the number of permanent residents (around 1.6 million), to ensure effective implementation and supervision of labor law.
- Assessing the dispute resolution mechanism and providing legal aid. The arbitration system is not effectively reducing the number of labor dispute cases entering the court system. It was recommended that the Shenzhen government evaluates the arbitration system and explores options to strengthen the role of the trade union and the employees within the arbitration process. Further, the government can consider improving migrant workers' access to financial legal aid.

FACILITATE CSR ENGAGEMENT

The government took an important step on May 9, 2007, by issuing a policy paper on "Suggestions for Promoting CSR." To ensure broad stakeholder support for the policy it is recommended that the government use this pilot project to consult with the private sector and civil society on the implementation of the policy paper. As part of the consultation, the government should explore options for capability building and training of both the private sector and civil servants.

PRIVATE/PUBLIC PARTNERSHIPS

Partner with the private sector, ILO and IFC to develop a *Better Work Program* to prevent labor violations and enhance capacity in the private sector.

The mission team recommended that the government invite a Better Work scoping mission to Shenzhen to discuss:

- The potential establishment of a Better Work Program in Shenzhen to enhance labor conditions in the ICT industry
- The potential public sector application of the ILO Information Management System (IMS), a software tool that can help make labor inspections more effective

ENDORSE COMPANY BEST PRACTICES THROUGH A CSR AWARD

The group recommended that the government increase awareness of the labor law by developing a simplified legal guide to be distributed to migrant workers. The legal guide can include issues on occupational health and safety, legal recourse, medical and injury and illness coverage. It is also recommended including information on which types of trade union models have been effective in foreign-invested companies.

Local NGOs play an essential on-the-ground watchdog role and are also in a unique position to provide credible worker education for migrant workers. The mission team recommended that NGOs increase their influence by identifying opportunities to collaborate with the private sector and ensuring that reports are accurate and balanced.

A fundamental lesson from the past decade of factory auditing is the importance of institutionalizing the effort into the supply chain, specifically by focusing on systems at the factory level. Companies have recognized that compliance is not an absolute state, but rather that factories operate in a dynamic environment with constantly changing variables. To this end, creating company management systems that are embedded into operations is increasingly seen as fundamental to ensuring that workplace conditions are maintained. Such efforts seek to help factories develop and maintain internal operational systems that institutionalize good performance. Such systems-based methodologies include:

- Recognize that responsibility for good labor practices and environmental management begins with company commitment from both factory owners and on-site management.
- Define roles and responsibilities for all interested players (e.g., factory owners and management, supervisors, workers, governmental organizations, trade unions, supply chain organizations, buyers and NGOs).

- Identify and document applicable laws and internal policies, assess related internal practices, communicate with and train employees on those laws and policies, and measure and internally report performance.
- Define specific goals for each focus area, based on legislation, customer expectations and internal commitment, to periodically measure and report factory performance against compliance goals – daily, weekly, monthly and annually.
- Validate factory performance by using a combination of regular internal assessments and external assessments (performed by outside monitoring resources) to verify the effectiveness of self-correcting factory systems.
- Identify root causes of (persistent) problem areas.
- Establish measures to ensure accountability at the supplier level and at the buyer level.
- Provide an opportunity for innovative and creative solutions for systemic issues (e.g., performance incentives, worker participation in designing systems, total compensation packages rather than hours and overtime).

Companies recognize that the challenges in the global supply chain are not ones that can be remedied by the private sector alone. The most successful scenarios are those in which government, suppliers, NGOs, buyers, multilateral organizations and others have collaborated and committed to their respective responsibilities in order to improve labor and environmental conditions and build a foundation for sustainable growth. The capability-building strategy for the ICT sector in Shenzhen depends, therefore, on each of these players with a stake in the process acknowledging responsibilities, making commitments, implementing changes and collaborating to maximize overall success.¹¹

Endnotes

¹ Parts of this opening section appeared as an article in *Global Asia*, Vol. 2, No. 3, and is available at http://globalasia.org/pdf/issue4/v2n3_cramer.pdf.

² Innovest, “*The \$31.5 Trillion Question: Is Your Company Prepared for Climate Change?*” September 18, 2006

³ This is adapted from BSR’s report, “A Three-Pronged Approach to Corporate Climate Strategy,” which is available online at http://www.bsr.org/reports/BSR_Climate-Change-Report.pdf.

⁴ See BSR’s “*Environmental Markets: Opportunities and Risks for Business*,” July 2006.

⁵ This is adapted from BSR’s report, “New Markets for Environmental Services: A Corporate Manager’s Guide to Trading in Air, Climate, Water and Biodiversity Assets,” which is available online at http://www.bsr.org/reports/BSR_environmental-services.pdf.

⁶ This is adapted from BSR’s report, “Offsetting Emissions: A Business Brief on the Voluntary Carbon Market, Second Edition,” which is available online at http://www.bsr.org/reports/BSR_Voluntary-Carbon-Offsets-2.pdf. Additional BSR reports on this subject include “Beyond Neutrality: Moving Your Company Toward Climate Leadership” (http://www.bsr.org/reports/BSR_Beyond-Neutrality.pdf), “Getting Carbon Offsets Right: A Business Brief on Engaging Offset Providers” (http://www.bsr.org/reports/BSR_Getting-Carbon-Offsets-Right.pdf), and “Who’s Going Carbon Neutral?” (http://www.bsr.org/reports/BSR_Carbon-Neutral-Chart.pdf).

⁷ This is adapted from the report, “At the Crest of a Wave: A Proactive Approach to Corporate Water Strategy,” written by BSR and the Pacific Institute. The full report is available online at http://www.bsr.org/reports/BSR_Water-Trends.pdf.

⁸ See (http://www.gapinc.com/public/documents/tufts_study.pdf).

⁹ This is adapted from BSR’s 2007 report, “Beyond Monitoring: A New Vision for Sustainable Supply Chains,” which is available at http://www.bsr.org/reports/BSR_Beyond-Monitoring-Report.pdf.

¹⁰ This is adapted from BSR’s 2007 report, “Perspectives on Information Management in Sustainable Supply Chains,” which is available online at http://www.bsr.org/reports/BSR_Info-Management-Supply-Chains.pdf.

¹¹ This is adapted from BSR and FIAS’ joint report, “Corporate Social Responsibility in China’s Information and Communications Technology (ICT) Sector.” The full report is available in English at http://www.bsr.org/reports/2007_China-ICT-Report_English.pdf and in Chinese at http://www.bsr.org/reports/2007_China-ICT-Report_Chinese.pdf.

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