

## Sustainability Rulers: Measuring Corporate Environmental & Social Performance

BY JANET RANGANATHAN

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*Dear Friends: Our series of informal "Perspectives" from WRI's Sustainable Enterprise Initiative (SEI), designed to provide our corporate audience with provocative ideas emerging from our work with partner companies, continues with this issue on corporate metrics. In this Perspectives, Janet Ranganathan provides a basic framework for thinking about the various categories of sustainability indicators, and provides a preliminary list of ongoing efforts in the field. We hope this quick take is valuable for your efforts, but we also hope that you will be able to provide us with feedback and additional information, as this Perspectives is but a prelude to a broader effort currently being planned at WRI.*

### Introduction

#### Articulating a Vision

We are beginning to witness the emergence of a new era in corporate reporting and accountability. In the not too distant future, a new global framework will govern the measurement and reporting of corporate social, environmental, and economic performance — the three dimensions of business sustainability. Companies will routinely report on key aspects of their social and environmental performance, just as they currently report their financial performance. Standardized metrics will emerge and be adopted by both business and others outside firms. Public disclosure of key aspects of a firm's social and environmental performance will foster greater competition towards

sustainability, and enable regulators to focus attention on laggards. New information and monitoring technologies will provide the necessary infrastructure and tools to collect, analyze, and disseminate information worldwide.

Is this vision, which builds on WRI's earlier work on corporate environmental performance indicators, realistic? In the short-term, maybe not, but recall the emergence of the current financial accounting system. At the turn of this century, few would have imagined that information on a firm's financial accounts would be made public. A firm's financial health was considered purely a private matter. Yet the collapse of the stock market in 1929 rapidly changed this mind set. Systematic disclosure of comparable, complete, and credible information became the hallmarks of our modern financial reporting system. This note argues that the emergence of a new sustainability measurement framework is not only realistic, but that its foundations are already being laid.

How close are we to realizing this vision for corporate social and environmental performance? To answer this question, the World Resources Institute (WRI) reviewed over fifty initiatives that are developing measures of business sustainability. This included efforts to devise indicators of corporate environmental or social performance, as well as a handful of recent attempts

to produce integrated measures of sustainability that incorporate social and environmental performance. A summary of these initiatives is included at the end of this note. Readers interested in a more detailed description of the initiatives are referred to the WRI website, <http://www.wri.org/wri/mebl/>.

In view of its more mature status, this note only examines economic perfor-

### Key Measurement & Reporting Drivers

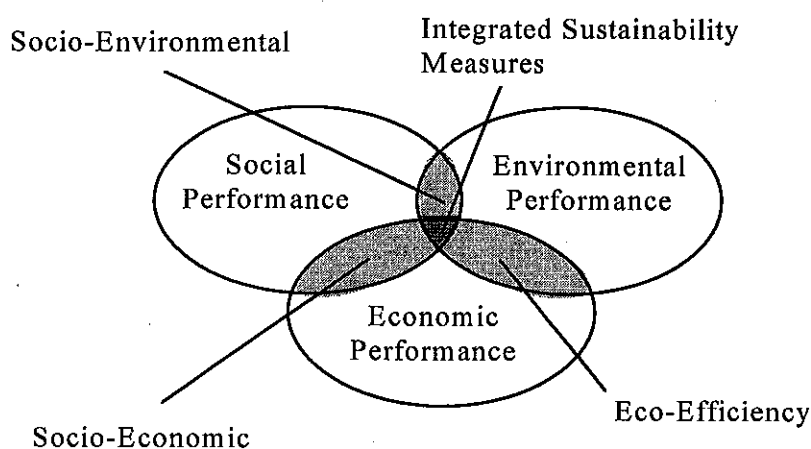
- Competitive advantage
- Environmental management systems
- Supply chain pressures
- Credit & investment conditionality
- Stakeholder concerns
- International standards
- Regulatory reinvention efforts
- Peer pressure
- Voluntary reporting

**Box 1**

mance measurement in regard to how it can be linked to social and environmental performance. But financial measurement and reporting is still evolving and there is no universally accepted measurement framework — only generally accepted accounting practices. Some argue that because not all the costs of doing business are borne by firms, current financial accounting practices are flawed and partially responsible for creating the unsustainable businesses of today. Clearly, business financial performance does not always equate to economic performance.



## Sustainability Measurement Schematic



**Box 2**

However, if successful, business sustainability reporting should aid efforts to change the current rules of the game for measuring financial performance.

### Articulating the Needs

While much has been written about why current business practices are unsustainable, little has been offered on what corporate sustainability means in practice. This is in part because there is no example of a sustainable business on which to model our efforts. We tend to focus on what is unsustainable about current practices, instead of defining what a sustainable set of activities might actually be. The very process of constructing sustainability indicators forces an examination of specifically what sustainability means for a business.

A handful of businesses at the forefront of the sustainability movement are now at the stage of moving from general policy statements to developing specific goals and measures. Customers, governments, communities, NGO's, and more recently the financial community,

are seeking to move from rhetoric to practice, and to hold business accountable for its progress toward sustainable practices (See Box 1).

To serve these multiple needs, sustainability indicators must be comparable, complete, and credible — the three "C's" of measurement. Comparability makes it possible to track performance over time and across firms. Complete in both the scope of the indicators and their application across firms, sectors, and countries. And credible so that business and others trust the indicators and make reliable decisions based on the information reported. The evolution of a standardized reporting structure, resembling today's financial reporting system, will address the comparability and credibility issues and simplify the task of measuring and reporting — especially for businesses operating globally.

### Definitions & Terminology

In this report "sustainability indicator" is defined as information used to measure and motivate progress toward sus-

tainable goals. It includes information on a firm's social, environmental, or economic performance. Box 2 proposes a simple schematic for conceptualizing the measurement of sustainability that emphasizes the three dimensions of sustainability, as well as their links.

Some may contest this separation of sustainability metrics into three elements. Corporate social performance, for example, is sometimes broadly interpreted to encompass both environmental and financial performance. However, this framework does help to focus on the critical elements of sustainability and their links (See Box 3), and to map the focus of current sustainability measurement efforts. In the future, as our understanding of measuring social performance develops, it is likely that the broad category of social performance in Box 2 will separate into several other circles — each representing different stakeholder groups, such as, employees, customers, communities, regulators, and suppliers.

### *Environmental Performance*

In the U.S. and Europe there are numerous initiatives by business and others to develop measures of corporate environmental performance. For some firms the issue is no longer whether to measure, but rather what to measure.

### **Comparability -- A Key Missing Ingredient**

After two decades of experimentation, particularly as part of voluntary environmental reporting efforts, there is a profusion of different indicators in use. Unfortunately, while advancing our understanding of measurement, the vital attribute of comparability has been



### Sustainability Linkages

*Socio-environmental, e.g. equity in access to natural resources, land tenure, and siting of high environmental impact industrial facilities;*

*Socio-economic, e.g. employment creation, equitable distribution of wealth, business markets serving social needs, investment in employee education, minority supplier access, and corporate donations;*

*Environmental-economic, (Eco-efficiency), e.g. materials efficiency, energy efficiency, and economic value-added per environmental footprint.*

**Box 3**

their business — as a complement to, not instead of a common set of indicators that enable business, and others, to draw meaningful comparisons across facilities, products, companies and countries. It will also allow leaders to more readily distinguish themselves from laggards in their industry. The resulting information will facilitate the introduction of regulatory reform efforts that seek to broker greater regulatory flexibility in exchange for superior environmental performance.

### The Standardization Movement

The good news is that several standardization efforts are beginning to emerge from the plethora of voluntary metrics efforts. The Coalition for Environmentally Responsible Economies (CERES), the World Business Council for Sustainable Development (WBCSD), and the Canadian National Round Table on Environment and the Economy, have independently undertaken to develop and bring about broad agreement on a core set of environmental performance metrics. However, unless these efforts are coordinated and ultimately converge on a single common set of metrics, businesses will find themselves having to report to several different stan-

dards, depending on their location, affiliations, and sector. Clearly the evolution of several different standards does not equate to standardization. The immediate challenge for these separate efforts is to find ways to unite and leverage their different constituencies and skills. Collectively these efforts could represent a powerful and positive force for change.

In addition to voluntary reporting initiatives, public disclosure, and comparability are being driven by regulations. The Organization for Economic Cooperation and Development initiative on Pollutant Release and Transfer Registers has built on experience in countries such as Canada, the Netherlands, the United Kingdom, and the United States to establish reporting requirements similar to the U.S. Toxic Release

lost. Without any agreement on the fundamentals of what to measure, by whom, and how, we will all be awash in a sea of confusing, contradictory, incomplete, and incomparable information.

With the exception of mandatory reporting requirements that typically focus on pollutant releases, spills, and other end-of-pipe measures, it is virtually impossible to make comparisons between firms on the basis of environmental performance. This is not in the interests of customers, the financial community, regulators, or anyone else who has a stake in corporate environmental performance — nor is it in the interests of those firms who have made genuine commitments to improvement.

The next critical step in environmental performance measurement is to forge agreement on the key elements of performance (see Box 4) and move toward greater comparability, completeness, and credibility. Of course, firms should continue to construct customized measures to capture the specific issues of

### Four Key Elements of Corporate Environmental Performance

- 1. Materials Use:** Quantities and types of materials used. This indicator tracks resource inputs, distinguishing their composition and source.
- 2. Energy Consumption:** Quantities and types of energy use or generated. This indicator, the energy analog to materials use, also differentiates between types.
- 3. Nonproduct Output:** Quantities and types of waste created before recycling, treatment or disposal. This indicator distinguishes production efficiency from end-of-pipe pollution control.
- 4. Pollutant Releases:** Quantities and types of pollutants released to air, water, and land. This indicator includes toxic chemicals, as well as greenhouse gases, solid wastes, and other pollutants.

*Source: Measuring Up: Toward a Common Framework for Tracking Corporate Environmental Performance, by Daryl Ditz and Janet Ranganathan, WRI, 1997*

**Box 4**



Inventory (TRI). Typically these inventories cover waste generation and pollutant releases at the facility level. The Netherlands has also included some non-point sources. Leaving aside the criticisms that have been levied on TRI, such as the two year lag in information disclosure, and its limited coverage from both the business and chemical perspective, it remains an

**The economic-environmental linkage is a key driver in mainstreaming environmental performance within the business community.**

unequivocal testament to the power of publicly disclosed standardized information in driving business improvement. It has also been instrumental in educating business and others about the quantities and sources of industrial waste — both economic and environmental.

State laws in New Jersey and Massachusetts already address the measurement of pollution prevention. The proposed national expansion of TRI, would broaden the current regulatory focus to include information on pollution prevention and resource efficiency. While business has become more comfortable reporting on outputs, such as waste and pollutant releases, the new focus on inputs, such as materials and energy consumption, has many business opponents. TRI, the prototype in standardization, has been a bittersweet experience for business. Those companies that once headed the top of the list will not easily forget the ensuing public wrath. Yet it is TRI that allows companies to take credit for dramatic

reductions in pollutant releases. The protection of confidential business information is another key business concern when moving beyond end-of-pipe measurement. But evidence from New Jersey and Massachusetts indicates that few companies ever claim chemical use data as a trade secret. Nonetheless, public disclosure remains a cultural barrier and legitimate business concerns must be addressed, while fulfilling the needs of stakeholders for information.

#### **Level of Focus & Linkages**

At what scale do firms typically measure and report corporate environmental performance? Until recently, the answer would have been at the facility or corporate level, with most efforts focusing on improvements in manufacturing processes. In the US this can be traced, in part, to the facility-based TRI reporting requirements. In addition, firms typically find it easier to manage those aspects of environmental performance that reside within their factory gates. However, the next wave of environmental performance improvements will likely come from efforts to reduce the environmental impacts of products during use and disposition. For example, in the case of energy consumption in electrical appliances, 80 to 90% of life cycle environmental impact can occur during product use. This translates into higher operating costs for consumers, and some firms now talk in terms of the “invisible” second price tag. The implication for future measurement development is clear. There will be greater attention paid to measures of product life cycle performance, particularly in re-

gard to creating competitive market advantage through improved product design.

Environmental performance measures are increasingly being linked with economic measures to create eco-efficiency metrics. The economic-environmental linkage is a key driver in mainstreaming environmental performance within the business community. The prefix “eco” stands for both ecological and economic. Eco-efficiency measures typically express environmental impact per unit of value added, for example, materials or energy use per dollar of economic value added. In addition to standardizing the numerator, agreement needs to be reached on the appropriate normalization method. At present a variety of approaches are used, including: unit of product, sales dollars, and economic value added. If standardized, economic value added has the advantage of permitting comparisons of environmental impact per dollar of economic value added across different industries.

#### ***Social Performance***

Despite the recent awakening of interest in corporate social responsibility, there still remains considerable confusion about definitions and terminology. Terms such as corporate citizenship, eco-justice, business ethics, and stakeholder relationships, abound. Simply stated, business social performance measures the relationship of business with its different stakeholder groups. This definition makes social performance more readily understandable, since most businesses already have measures and accountability mechanisms for certain key stakeholder groups, such as shareholders and customers. The new social performance



measurement challenge is to define business performance in relation to its impact on other stakeholders — communities, employees, developing countries, suppliers, etc. This will include issues of business ethics, such as participatory decision making, community commitment, bribery, honesty, and corruption.

### Growing Interest

After a brief surge of interest in the 1970's, corporate social performance all but disappeared from business radar screens. This may soon change. The recent spate of high profile corporate social crises (e.g., Shell and human rights issues in Nigeria, Nike and "sweat shops" in Asia, and charges of racism against Texaco), combined with growing interest in the social element of business sustainability, is resurrecting interest in corporate social performance. If Bhopal was the precursor for corporate environmental performance reporting, Shell's Brent Spar fiasco could well signal the reemergence of corporate social citizenship. Global businesses are finding that their overseas operations and upstream activities are increasingly coming under public scrutiny. As Cor Herkstroter, Managing Director of Shell International, recently stated, "Companies operate in an increasingly CNN world." This increasing transparency means that businesses will be expected to assume greater social responsibility than hitherto. With the human population set to reach nearly 10 billion by 2050 and persistent North-South economic disparities — how can social issues not be key business issues?

The number of initiatives by both business and others to measure corporate social performance, although few rela-

tive to environmental performance, is growing. While most activity still comes from firms like the Body Shop, Ben & Jerry's, and Patagonia which have an overriding corporate social culture, there are signs that corporate social reporting may soon make the leap to mainstream business. Shell, GrandMet, Denmark's SBN bank and General Motors have already published a corporate social or ethical report. Honeywell, Monsanto, Citizens Bank of Canada, and Nike have established Vice Presidents of Corporate Social Responsibility. Perhaps there is a growing recognition by these companies that social issues are fast becoming a business opportunity and source of competitive advantage.

### Towards Standardized Measures

The current state of development of corporate social performance indicators parallels that of environmental performance about 15 years ago. There are no signs of a consensus on what measures should be used. Indicators are generally developed on a company by company basis. Many of the organizations working on social performance are only just beginning to turn their attention to the development of measures. Is it realistic to think that a common set of corporate social performance indicators could be developed with universal application? Skeptics argue that evaluation of social performance depends on values, which differ from country to country, and even from person to

person. They also point out that the choice of measures depend both upon the stakeholders and specific issues of the firms. Similar arguments have been articulated for environmental performance measurement, yet the standardization vision is gaining support. Of course social issues and stakeholder groups differ from company to company, but there is likely to be a core set of social issues that have broad utility across stakeholders and firms. Some key social elements might be: employment practices, community relations, ethical sourcing, and the usefulness of products to society (See Box 5).

### Four Key Elements of Corporate Social Performance

- 1. Employment Practices:** the provision of a safe working environment; financial and job security; freedom from discrimination on race, gender, color or creed; and opportunity for professional development.
- 2. Community Relations:** the contribution of a firm to community development, including: job creation; taxes paid/ tax breaks received; philanthropy; and employee volunteerism.
- 3. Ethical Sourcing:** engage in fair trading practices with suppliers, distributors, and partners; ensure that suppliers do not use child or forced labor, provide safe working conditions, and fair wages.
- 4. Social Impact of Product:** the contribution of products and services to: social welfare; equity; and the meeting of basic human needs, such as food, shelter, water, and health care.

Box 5

One potential approach for measuring the key elements of social performance is the evolving social audit process. Simon Zadek of the UK based New Economics Foundation, defines social



auditing as “a means of assessing social impact and ethical behavior of an organization in relation to its aims and those of its stakeholders.” Both the Body Shop and Ben & Jerry’s have used social auditing as a framework for measuring and reporting their social performance. The 1997 Body Shop Values Report, for example, dedicates a chapter to each stakeholder group, including: employees, franchises, suppliers, communities, shareholders, and customers. For each stakeholder group two types of indicators are used. The first involves “quantitative” indicators and benchmarks that compare performance across similar companies (e.g. staff turnover). However, the Body Shop’s efforts to benchmark externally were for the most part thwarted because of the dearth of external information on corporate social performance. The second type of indicator involves the use of “qualitative” indicators, derived from stakeholder opinion surveys (e.g. staff perception on job security). Although helpful, stakeholder attitudes

dard on workplace conditions championed by the Council on Economic Priorities Accreditation Agency, will likely train measurement focus on supply chain activities, particularly in relation to the use of child and slave labor. But the actual process of social reporting will probably continue at the corporate level for the foreseeable future. Exceptions might include the preparation of reports for particularly socially sensitive projects, such as mineral extraction and dam constructions that entail human resettlement issues.

Robust linkages between a firm’s social performance and economic and environmental performance have not yet been established. The link between corporate social and economic performance is especially ripe for further work. There have been efforts in the world of social and ethical investment funds to link social and financial performance. But much of this work is based on exclusions of socially objectionable businesses, such as tobacco, alcohol, and weapons, rather than focusing on firms with superior social performance. While certain aspects of corporate environmental performance, such as pollution prevention

and resource efficiency, can be more readily linked to the economic bottom line, social performance appears to be more top line sensitive. As firms such as Shell, Nestles, and Nike can attest — the perception of a poor social record can translate into customer boycotts and reduced sales and revenues. Although attention has mostly focused on these top line effects of negative performance, it is possible that the real business opportunities will be found in

the benefits of positive social performance.

### *Integrated Measures of Business Sustainability*

In the state-of-play summary presented at the end of this note, the six initiatives that include measurement of both social and environmental performance are listed under the integrated sustainability measures category. In most of the integrated initiatives the primary focus is the environmental dimension of sustainability. Social performance is typically assessed using more qualitative metrics. To date, none of these efforts have succeeded in developing measures of business sustainability that are a true merger of social, environmental, and economic performance. The current fragmented approach can partly be attributed to the fact that both measurement students and practitioners have traditionally maintained a single sustainability element focus.

One approach to sustainability measurement is the use of indices that calculate a single sustainability score, based on a number of weighted individual parameters. This approach trades off metric complexity for the simplicity of a single overall score. The key design issues are the numbers and types of parameters included and how they are weighted. Such indices have limited value beyond the company in which they are developed, unless the disaggregated data is made available to permit comparisons. However, they can be a useful internal tool and the very process of assigning weights helps improve awareness of the relative importance of individual parameters.

An alternative method is a “balanced scorecard” approach, whereby companies measure and report on their per-

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are typically difficult to gauge and need to be supplemented by external benchmarks.

#### **Level of Focus & Linkages**

What about the level of focus for social performance metrics? For the most part, measurement and reporting has been at the level of a firm. The advent of Social Accountability 8000, a new international and inter-industry stan-

and resource efficiency, can be more readily linked to the economic bottom line, social performance appears to be more top line sensitive. As firms such as Shell, Nestles, and Nike can attest — the perception of a poor social record can translate into customer boycotts and reduced sales and revenues. Although attention has mostly focused on these top line effects of negative performance, it is possible that the real business opportunities will be found in



formance using a range of financial and non-financial measures. This reduces the risk of becoming too focused on a few measures, at the expense of the broader picture of overall performance. Dow Chemical, for example, is combining this approach with the use of key performance indicators to develop a sustainability measurement system that covers four broad categories of performance: economic, environment, social, and health. The advantage of a balanced scorecard approach is that it trains business attention on a range of different performance measures. The challenge is in the choice and number of metrics to include, and the resulting difficulties in comprehending a broad range of indicators.

**Box 6: Sustainability Measurement: An Overview of Current Practice**

	<b>Economic Performance</b>	<b>Environmental Performance</b>	<b>Social Performance</b>	<b>Integrated Sustainability</b>
<b>Number of Initiatives</b>	accounting standards	many	few	handful
<b>Developmental Stage</b>	mature	moving toward standardization	infancy	embryonic
<b>Business Penetration</b>	mainstream	moving toward mainstream	limited (niche)	very limited
<b>Public Reporting</b>	mandatory	mandatory & voluntary	mostly voluntary	voluntary
<b>Linkages to other Sustainability dimensions</b>	none	eco-efficiency	none	multiple
<b>Utility of information outside firms</b>	universal	multiple	narrow	potentially large
<b>Current Focus</b>	company	company, facility, product	company, project	company, product

The predominant focus of integrated sustainability measurement efforts is at the product level. In terms of reducing a firm's environmental impact this makes sense, since most business impacts stem from the manufacture and use of products. But in terms of transforming the strategic course of business towards more sustainable practices, a product by product focus falls short. Businesses must also develop measures at the corporate and business unit levels. A firm must ask not only "how" it makes a product, but also ask more fundamentally, what business it is in, for example, manufacturing cars, or providing transportation services. This will help create an overarching sustainability framework to guide both new product development and the

evaluation of existing product portfolios.

### **Conclusions**

Developing indicators of corporate sustainability will not be easy. They must encompass and integrate the three dimensions of sustainability — economic, social, and environmental. The absence of such measures represents a major barrier to future efforts by business to implement sustainable business strategies. The state-of-play reveals that there are numerous initiatives to develop social and environmental performance metrics, but only a handful that attempt to adopt an integrated approach to the three elements of sustainability. For the most part, the players driving the development of social and

environmental measures are quite distinct and operate independently. Interestingly, a few efforts are beginning to emerge within the social groups to add an environmental measurement dimension (e.g., Social Venture Network, New Economics Foundation). At the same time, some traditionally environmentally focused organizations are seeking to add a social dimension to their metrics work (e.g., WBCSD, CERES, WRI).

In order to expedite progress on the development of sustainability measures, greater coordination and transfer of expertise is needed between the social, environmental, and financial measurement worlds. At present the corporate sustainability measurement "picture" is broken into several pieces,



each held separately by a variety of key players. It does not make sense for each initiative to independently develop their own sustainability metrics. Instead, there needs to be greater cooperation and sharing of ideas, skills, and experiences. Unfortunately, there is little evidence to suggest that the separate pieces will be brought together in the near term and assembled into a coherent picture of business sustainability.

Sustainability metrics, like any other business metrics, will be most effective in driving change if they are integrated into business management systems. One way to ensure this happens is to make business and sustainability goals compatible. Since a good business involves the pursuit of dynamic efficiency and profitability, sustainability must be linked to these business goals. Eco-efficiency metrics represent an attempt to make the environmental-financial link. More work is needed to develop links between a firm's social and economic performance. Environmental management systems represents another opportunity for firms to integrate performance information with other business management systems. Although focused on environmental performance, firms can use environmental management systems as a framework for thinking more broadly about social goals.

The increasing use of the internet and other information technologies is becoming a major force in driving the demand and supply of information on business performance. Businesses are becoming more accustomed to posting information on their activities on the

internet. At the same time, nongovernmental organizations, and others are becoming more adept at using the internet as a cost-effective method for collecting and disseminating information to users around the globe. The Environmental Defense Fund's website-based Chemical Scorecard, for example, provides users with over 30 ways to rank U.S. facilities based on publicly reported TRI information. A link allows users to send free faxes to both companies and the EPA if they find something they do not like, or can not understand. In its first week of operation the Chemical Scorecard website recorded over a million hits.

Some compare today's world of social and environmental performance mea-

ing performance. Without standardization, they will not be able to take credit for their achievements, nor will they be able to distinguish themselves from competitors.

A common framework governing the measurement and reporting of corporate sustainability will eventually emerge. It will be assembled from some of the pieces available today — financial reporting schemes, voluntary environmental reporting initiatives, and the emerging social performance measurement movement. In a world with nearly twice the current human population, there will be little room for businesses that fail to demonstrate progress toward sustainability. Hopefully, for all our sakes, the new measurement and

reporting era will be founded on the three "C's" principles — comparability, credibility, and completeness. And hopefully, this era won't take too long to dawn.

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*For more information on the sustainability indicators project and similar efforts, please contact the author at (202) 662-2581 or [janetr@wri.org](mailto:janetr@wri.org). Watch for future perspectives on partnerships, capital markets, organizational change, strategic planning, and other related topics. We welcome your comments and suggestions for improvement of the Perspectives series.*

surement to that of the financial world in the 1900s, just as the early seeds of modern financial systems were starting to take root. How quickly we move toward standardization on environmental, social, and ultimately sustainability measurement remains an open question. On the social front more business experimentation is clearly needed. Standardization of environmental performance measurement and reporting is a much better prospect for the next decade. But ultimately this depends on the level of buy-in from business. The real champions of standardization will ultimately be those firms that have made genuine commitments to improv-





## State-of-Play: Summary of Initiatives

Detailed descriptions of the initiatives are available at <http://www.wri.org/wri/meb/>

### Environmental Performance Measurement

#### American Institute of Chemical Engineers Sustainability Metrics Project

A collaborative project aimed at developing a group of core and optional metrics for each of the seven areas of eco-efficiency promulgated by the WBCSD. Contact Dana Ponciroli at 212-705-7462 or [danap@aiche.org](mailto:danap@aiche.org)

#### Association of Chartered Certified Accountants

A forthcoming report by Bennett and James reviews current practice and future trends in environmental performance measurement, together with the results of a practitioners survey. Contact Roger Adams at +44-171-396-5971, or [roger.adams@acca.co.uk](mailto:roger.adams@acca.co.uk)

#### Business in the Community

BitC has developed an index of environmental management. Contact Peter Davis at +44-171-224-1600, or [pdavies@bitc.org.uk](mailto:pdavies@bitc.org.uk)

#### Canadian National Round Table on the Environment and the Economy

NRTEE's Eco-efficiency Task Force is developing and testing three indicators: materials intensity, energy intensity, and pollutant dispersion. Contact Elizabeth Atkinson at 613-943-0394, [admin@nrtee-trnee.ca](mailto:admin@nrtee-trnee.ca), or visit <http://www.nrtee-trnee.ca>

#### Council for Economic Priorities

CEP publishes a quarterly SCREEN report on business environmental performance and conducts an annual Campaign for Cleaner Corporations. Contact CEP at 212-420-1133 or [CEP@echonyc.com](mailto:CEP@echonyc.com)

#### Dow Eco-Compass

A product assessment tool that measures life-cycle impact along six 'poles' — energy intensity; mass intensity; environmental and health risk; sustainability of resource usage; extent of revalorization; and service intensity. Contact Claude Fussler +41-172-82-403 or visit <http://www.dow.com/cgi-bin/frameup.cgi?environment/ehs.html>

#### ECO-Efficiency Assessment Per Unit of Service (ECOPUS)

The ECOPUS metric calculates the utility of a product in relation to the burden it imposes on the environment during its life cycle. Contact Ir. N. van Nes at Delft University of Technology +31-15-278-4521 or [N.vanNes@IO.TUdelft.nl](mailto:N.vanNes@IO.TUdelft.nl)

#### Electronics Sector Common Sense Initiative

An EPA initiated effort to create a Consolidated Uniform Report for the Environment (CURE) in order to simplify and clarify both the reporting and accessibility of environmental performance information in the electronics sector. Contact Daphne McMurrer at 512-239-5920.

#### Environmental Defense Fund Chemical Scorecard

EDF's Chemical Scorecard provides a free World Wide Web service that allows users to rank U.S. facilities by TRI data. Visit <http://www.scorecard.org>

#### The European Chemical Industry Council

The CEFIC guidelines on environmental reporting cover four areas of disclosure: corporate environmental reports, site environmental reports, standard emissions inventory, and a "do's and don'ts" of reporting. Contact J. Busson at +32-2-676-7302, [jbs@cefic.be](mailto:jbs@cefic.be), or visit <http://www.cefic.be/>

#### European Eco-Management and Audit Scheme

EMAS, the European alternative to ISO 14001, requires participants to publish an independently verified site-specific public environmental statement that includes

information on: raw material, water and energy use, pollutant emissions, waste generation, noise and any other significant environmental effects. Contact Cameron Clark at 0171-276-3377 or visit <http://www.environment.detr.gov.uk/greening/emas/emashome.htm>

#### Global Environmental Management Initiative

GEMI, a partnership of 21 leading US companies, published a primer that examines the design of an EMS through the use of performance indicators. Contact GEMI by phone at 202-296-7449 or [mgemi@worldweb.net](mailto:mgemi@worldweb.net)

#### International Standards Organization — ISO 14031

The draft ISO standard on environmental performance evaluation provides guidance on the selection, use and reporting of corporate environmental performance. Contact Steve Cornish at 212-642-4969, or visit <http://www.iso.ch>

#### Investor Responsibility Research Center

IRRC calculates three indices of business environmental performance: an emissions efficiency index, a spill index, and a compliance index. Contact Kristine Haldeman at 202-833-0700 or [Khaldemen@irrc.org](mailto:Khaldemen@irrc.org)

#### National Academy of Engineering — Industrial Environmental Performance Metrics

NAE is examining the current state-of-art in measuring environmental performance in four industrial sectors (automotive, chemical, electronics, and pulp and paper) to identify opportunities for further advancement in the US and transfer of expertise to nations of the Asia Pacific Economic Cooperation. Contact Deanna Richards at 202-334-1679, or [metrics@nae.edu](mailto:metrics@nae.edu)

#### NPI Global Warming Indicator

An index that calculates both an aggregate and normalized measure of a firm's carbon dioxide equivalent emissions, by summing emissions from transport use, energy use, and process related emissions



and normalizing by unit turnover. *Contact Toby Belsom at +44-171-665-3458.*

#### **OECD Pollutant Release and Transfer Registers**

Through a series of international workshops, the OECD has developed a guidance document to aid governments developing facility reporting on releases to air, land, water, and transfers to waste facilities. *Contact OECD by Email at [ehscont@oecd.org](mailto:ehscont@oecd.org), or visit <http://www.oecd.org/ehs/prtr/index.htm>*

#### **Storebrand Scudder Environmental Value Fund**

Storebrand Scudder uses a proprietary sustainability index to assess business environmental performance in regard to: global warming, ozone depletion, material efficiency, toxic release, energy intensity, water use, environmental liabilities, and environmental management quality. *Contact Uni Storebrand at +47-22-31-12-47*

#### **SustainAbility/UNEP Environmental Reporting Framework**

A five-stage model for environmental performance reporting, covering: management policies and systems; inputs and outputs; finance; stakeholder relations; and sustainable development. *Contact SustainAbility at +44-171-937-9996 or [info@sustainability.co.uk](mailto:info@sustainability.co.uk)*

#### **Verein fuer Umweltmanagement in Banken, Sparkassen und Versicherungen (VfU)**

VfU, the German Association for Environmental Management in Banks, Savings Banks, and Insurance Companies, has published a guidance document for environmental reporting that defines eleven metrics: two for energy consumption, one for water consumption, three for paper consumption, three for waste generation, two for business traffic (measured in km/yr/employee) and one for carbon dioxide emissions. *Contact Gabriella Urban at +49-228-766-8494 or [101330.3112@compuserve.com](mailto:101330.3112@compuserve.com)*

#### **WBCSD Eco-efficiency Metrics Project**

The project intends to define a standardized set of eco-efficiency metrics. *Contact Marcus Lehni at +41-22-839-31-84 or [Lehni@wbcسد.ch](mailto:Lehni@wbcسد.ch)*

#### **World Resources Institute**

WRI has proposed four key categories of environmental performance (materials use, energy consumption, nonproduct output, and pollutant releases) as part of a universal framework for tracking corporate environmental performance. *Contact Janet Ranganathan at 202-662-2581, [Janetr@wri.org](mailto:Janetr@wri.org), or visit <http://www.wri.org/wri/meb/>*

#### **Wuppertal Materials Intensity Per unit of Service**

The German based Wuppertal Institute, has proposed a product life cycle based metric that quantifies environmental burden per unit of service in terms of all the direct and indirect material inputs associated with the manufacture and use of a product. *Contact F. Hinterberger by phone at +49-202-2492-0 or visit <http://www.wupperinst.org>*

#### **Social Performance Measurement**

##### **Ben & Jerry's**

Ben & Jerry's, a Vermont based ice cream company, publishes an annual independently audited social report constructed around key stakeholders. *Contact Ben & Jerry's at 802-651-9600, or visit <http://www.benjerry.com>*

##### **The Body Shop International**

Kirk Hanson, at Stanford Business School, conducted an independent evaluation of the social performance and impact of The Body Shop using 39 dimensions of social performance, organized primarily by stakeholder group. *Contact Kirk Hanson by phone at 650-723-2270 or [Hanson\\_kirk@GSB.stanford.edu](mailto:Hanson_kirk@GSB.stanford.edu)*

##### **Business in the Community**

BitC's principles of corporate community investment include a set of indicators to measure investment impact in a commu-

nity. *Contact Peter Davis at +44 171 224 1600 or [pdavies@bitc.org.uk](mailto:pdavies@bitc.org.uk)*

#### **Business for Social Responsibility**

BSR is launching a Global Business Responsibility Resource Center and programs in the areas of governance and accountability. *Contact Nik Haas-Dehejia at 415-537-0890, ext. 122 or [ndehejia@bsr.org](mailto:ndehejia@bsr.org)*

#### **Center for Economics Priorities Accreditation Agency—Social Accountability Standard**

CEPAA has published a draft social accountability standard, SA 8000, that focuses on ethical sourcing, including: child and forced labor, health and safety, union matters, discrimination, compensation, working hours, and management systems. *Contact Deborah Leipziger at +44 171 831 9420 or [leipzig123@aol.com](mailto:leipzig123@aol.com)*

#### **Conference Board**

In 1996 the Conference board undertook a survey to assess the extent to which companies measure and benchmark their contributions and community relations programs. *Contact Myra Alperson at 212-339-0435 or visit <http://www.conference-board.org>*

#### **Corporate Citizenship Company**

A UK-based research consultancy that has developed models to help companies assess their community involvement activities, social responsibility, and supply chain management. *Contact Michael Tuffrey at +44 171 287 6676 or [mtuffrey@cix.co.uk](mailto:mtuffrey@cix.co.uk)*

#### **Council for Economic Priorities**

CEP undertakes many activities on corporate social performance, including an annual Corporate Conscience Award and a new project to develop methods for assessing transnational corporate responsibility. *Contact CEP at 212-420-1133 or [CEP@echonyc.com](mailto:CEP@echonyc.com)*

#### **EthicScan Canada**

EthicScan reports on corporate metrics through publications such as: *Shopping With A Conscience*, *Lemon-Aid: The Consumer Guide* (1998), and a newsletter, *The*



*Corporate Ethics Monitor. Contact Paul Pellizzari by phone at 416-783-6776, ethic@concentric.net, or visit <http://www.ethicscan.on.ca>*

#### **Institute of Social & Ethical AccountAbility**

AccountAbility, a UK-based professional body, is developing standards for social and ethical accounting, auditing and reporting. Contact AccountAbility at <http://www.accountability.org.uk>

#### **Interfaith Center on Corporate Responsibility**

ICCR's Principles Project has generated "Principles for Global Corporate Responsibility: Bench Marks for Measuring Business Performance," to help forward the dialogue on corporate social responsibility and investing. Contact David Schilling at 212-870-2928 or [david@iccr.org](mailto:david@iccr.org)

#### **International Labor Organization Human Development Enterprise Index**

ILO has developed an index to measure the orientation of enterprises toward human development that is an amalgam of three individual indexes, covering: enterprise skill formation; work security and social equity (non discriminatory labour practices); and economic equity or earning differentials between employees. Contact Guy Standing at ILO, or visit <http://www.ilo.org>

#### **Investor Responsibility Research Center**

IRRC's Social Issues Service publishes an independent newsletter, *Corporate Social Issues Reporter*, that provides data on corporate social responsibility. Contact IRRC at 202-833-0700

#### **New Economics Foundation**

The UK-based New Economics Foundation, an independent research charity, has an indicators programme that focuses on developing indicators of quality of life and sustainable development. Contact Peter Raynard at +44-171-377-5696 or [neweconomics@gn.apc.org](mailto:neweconomics@gn.apc.org)

#### **Social Equity Funds**

There are numerous social investment or equity funds that screen firms on the basis of social performance, for example, the Domini Social Equity Fund assesses performance in four areas: safe and useful products, employee relations, corporate citizenship, and the environment. Contact Steve Lydenburg at 1-800-762-6814

#### **Social Venture Network**

SVN's Social Performance Project is using their ten global principles for corporate social responsibility to develop a business implementation model of corporate social responsibility. Contact Edward Goodell at 973-744-6464 or [Goodell@Concentric.net](mailto:Goodell@Concentric.net)

#### **The Stakeholder Alliance**

The Stakeholder Alliance has created and published *The Sunshine Standards for Corporate Reporting to Stakeholders* as an alternative to general accepted accounting standards. Contact Ralph Estes by phone at 202-797-0600, [stakeholder@essential.org](mailto:stakeholder@essential.org), or visit <http://www.essential.org/capp/sa.html>

#### **WBCSD Corporate Social Responsibility Project**

This project is examining corporate social responsibility on three tiers: scoping/mapping the boundaries; practice; and, measuring, assessing, and reporting. Contact Margaret Flaherty at +41-22-839-3100, [Flaherty@WBCSD.ch](mailto:Flaherty@WBCSD.ch), or visit <http://www.wbcd.ch/>

#### **Integrated Measures of Business Sustainability**

#### **The Coalition for Environmentally Responsible Economies — Global Reporting Initiative**

GRI seeks to standardize corporate environmental and social performance reporting worldwide. Contact Judith Kuszewski at 617-247-0700 or [Kuszewski@ceres.org](mailto:Kuszewski@ceres.org)

#### **The Columbian Business Council for Sustainable Development**

CECODES, a regional arm of the WBCSD, publishes an annual report that includes indicators of economic performance, eco-efficiency, and social responsibility. Contact Maria Emilia Correa at [cecodes@colomsat.net.co](mailto:cecodes@colomsat.net.co)

#### **McDonough Braungart Design Chemistry - Product Sustainability Index**

MBDC, a Virginia based product development and design firm, is developing a proprietary product based Index of Sustainability based on three interdependent performance categories (ecology, social equity and economy). Contact Joe Rinkevich at 804-295-1111, or visit <http://www.mbdc.com>

#### **Oko-Institut Product Sustainability Assessment Tool**

In a study produced for Hoechst chemical company, the German nonprofit Oko-Institut developed a product sustainability assessment tool (PROSA) for rating the sustainability of new product design and business development efforts. Contact Christian Hochfeld at +49-61-518-19133, [hochfeld@oeko.de](mailto:hochfeld@oeko.de), or visit <http://www.oeko.de>

#### **The Sustainability Product Wheel**

Building on Dow's Eco-Compass, Peter James of the UK based Ashridge Management Centre, has developed a framework for assessing the sustainability of products. Contact Peter James by phone at +44-1442-821173 or by Email at [100760.1270@compuserve.com](mailto:100760.1270@compuserve.com)

#### **Wuppertel Sustainability Indicators**

Joachim Spangenberg and Odile Bonniot from the German based Wuppertel Institute have published a draft set of business sustainability indicators in a February 1998 paper from Wuppertel's Sustainable Societies Program. Contact Joachim Spangenberg by Email at [Spangenberg@wupperinst.org](mailto:Spangenberg@wupperinst.org)



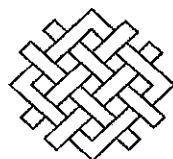
World Resources Institute  
1709 New York Ave., NW  
Washington, DC 20006  
U.S.A.

## About WRI...

The World Resources Institute (WRI) is an independent center for policy research and technical assistance on global environmental and development issues. WRI's mission is to move human society to live in ways that protect Earth's environment and its capacity to provide for the needs and aspirations of current and future generations.

Because people are inspired by ideas, empowered by knowledge, and moved to change by greater understanding, the Institute provides—and helps other institutions provide—objective information and practical proposals for policy and institutional change that will foster environmentally sound, socially equitable development. WRI's particular concerns are with globally significant environmental problems and their interaction with economic development and social equity at all levels.

In all of its policy research and work with institutions, WRI tries to build bridges between ideas and action, meshing the insights of scientific research, economic and institutional analyses, and practical experience with the need for open and participatory decision-making.



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1709 New York Avenue, NW

Washington, DC 20006

<http://www.wri.org/wri>