The CFO Green Conference

CFO_2

Bottom-Line Impacts and Stakeholder Buy-in

March 26, 2008
New York, New York

Conference Conclusions Paper

CFO conferences

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CFO Executive Programs

For more than 10 years, CFO executive conferences and expositions have been the premier educational and networking events for senior finance executives at large and midsize companies in the United States. CFO Conferences is a unit of CFO Publishing, the publisher of *CFO* magazine. CFO Publishing is an Economist Group business.

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Introduction

Mary Driscoll
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"Green business" has reached an inflection point. It's no longer simply a brand-building or risk-management tool—it has become a new source of business innovation, operational improvement, and revenue. This was the core message delivered by all of the senior finance executives presenting at "CFO$_2$: Bottom-Line Impacts and Stakeholder Buy-in," *CFO* magazine's first-ever conference on sustainable and environmentally sound business practices for finance executives. The conference was produced by CFO Conferences, the executive-education arm of CFO Publishing, which produces *CFO* magazine.

More than 60 senior financial executives arrived in New York looking to learn more about how corporate sustainability affects customers, shareholders, and employees. "Sustainability has moved from risk mitigation to a business and revenue opportunity," noted Mark Newton of Dell Computer, during one of the panel discussions that highlighted the day. Mr. Newton and other executives from large U.S. companies—including Caterpillar, Coca-Cola, Office Depot, and Jones Lang LaSalle—argued for environmentally sustainable business practices as a source of business value. David Burritt, CFO of Caterpillar, said his company's focus on sustainability efforts has delivered measurable improvements in business operations for the company and its customers. And Michael Monahan, CFO of Pitney Bowes Inc., encapsulated the day's theme: "Our environmental stewardship is integral to the way we do business. It is not an aside, or an add-on; it is core to the way we behave."

Speakers also alerted attendees to the risks and opportunities in impending environmental legislation. A formal cap-and-trade system for carbon emissions in the U.S. is all but inevitable in the next two years, said Fred Krupp, president of the Environmental Defense Fund and author of *Earth: The Sequel—The Race to Reinvent Energy and Stop Global Warming*. Each of the three leading Presidential candidates endorses such a system, Mr. Krupp pointed out, and several carbon-trading exchanges have emerged in anticipation of new regulatory requirements. Forward-looking finance organizations in the U.S. are participating in voluntary carbon-trading markets in an effort to gain experience in this embryonic market, to influence the details of the regulatory regimen, and to bring market discipline to their own operations.

Mary Driscoll, president and editorial director emeritus of CFO Conferences and CFO Research Services, summed up the message from the finance office: "This conference has identified a watershed for both the green business movement and for the corporate finance function. Customers, investors, and regulators are calling for companies to strengthen their environmental stewardship and to do so openly, candidly, and transparently. Clearly the finance function is embracing this mandate and adding environmental oversight to its broader agenda of ensuring high performance and generating shareholder value. We're delighted to help lead this dialogue among finance executives, companies, and other stakeholders."

The Green Partnership with Business: Being Green Doesn't Mean a Bottom Line Awash in Red Ink

Fred Krupp
President
Environmental Defense Fund

Fred Krupp, president of the Environmental Defense Fund and author of *Earth: The Sequel—The Race to Reinvent Energy and Stop Global Warming*, opened the conference on a hopeful note. The Environmental Defense Fund concentrates on four goals: climate, oceans, human health, and the common issues affecting land, water, and wildlife. The Fund works closely with companies to develop eco-friendly policies. To kick off the conference, Mr. Krupp talked about innovation that aligns profit motives and environmental best interests.

With the environment at stake, resulting partnerships propel "a race to the top—the most important race of all time," stated Mr. Krupp. Corporate support for environmental initiatives today is unprecedented, in contrast to previous resistance to congressionally mandated clean-air and clean-water acts. Mr. Krupp described success stories ranging from a hotel built of ice in Alaska to producing electricity through harnessing ocean wave motion to eliminating wasteful practices at companies such as DuPont, McDonald's, and Federal Express, among many others.

A formal cap-and-trade system for carbon emissions in the U.S. is all but inevitable in the next two years, said Mr. Krupp. Forward-looking finance organizations in the U.S. are participating in voluntary carbon-trading markets in an effort to gain experience in this embryonic market, to influence the details of the regulatory regimen, and to bring market discipline to their own operations.

Mr. Krupp asserted that a cap-and-trade system for carbon offers an efficient solution to greenhouse gases, largely because it chooses a broad structure for limiting emissions without heavy-handed micromanagement of business processes. Such a system will unleash technological and commercial innovation of a broad market without "choosing the winners."

Mr. Krupp noted the accelerating change in the nation's energy infrastructure, spurred by incentives that bring out the best in American entrepreneurs. As a case in point, he cited the Chena Hot Springs ice hotel in Alaska. After the first hotel melted in the summer, *Forbes* magazine anointed it the "Dumbest Business Idea of the Year" in 2004. But fresh ideas, collaboration with United Technologies, and determination reversed the air-conditioning process and resurrected the project. Today, thermal energy keeps the ice hotel frozen in summer, and an adjacent greenhouse keeps it warm in the frigid winter—at a fraction of the original cost.

As indicators of innovation, Mr. Krupp also cited yeast used today to produce antibodies that cure malaria, and prospects of yeast tomorrow that will turn sugar into gasoline. Nanotechnology adds another dimension, one that poses opportunities along with risks for the environment.

People are too smart to let the planet go down the tubes, Mr. Krupp said. Success rests on partnerships inspired by the free market—with occasional prodding by environmentalists. Mr. Krupp cited several examples:

- DuPont pared carbon emissions by 70 percent and saved $3 billion.

- McDonald's stopped selling burgers in Styrofoam boxes, eliminating 400 million tons of packaging waste. The news helped push McDonald's from most-vilified to most-admired company on environmental issues.

- Wal-Mart and Procter & Gamble agreed to sell liquid laundry detergent only in its concentrated form. Besides saving shelf space, the move reduced water use by 400 million gallons and eliminated 45 million pounds of plastic waste.

- After redesigning its delivery trucks to extend their useful life, FedEx weighed a proposal by the Environmental Defense Fund to become more fuel efficient. Dismissed at first as "tree hugging, dirt-eating Druids" by FedEx engineers, according to Mr. Krupp, the Fund eventually convinced FedEx that the resulting lower fuel bills would furnish a competitive edge as energy costs skyrocket. The prototype that FedEx selected has spawned 19 models of hybrid delivery trucks, used now in 50 different fleets. In the process, engines dump less particulate pollution, less nitrogen, and less carbon into the atmosphere.

Mr. Krupp also emphasized the crucial role of the federal government. The Presidential election campaign augurs positive change. At a recent presentation by representatives of John McCain, Barack Obama, and Hillary Clinton, Mr. Krupp heard nearly identical environmental perspectives. He predicted within 24 months a national energy policy that calls for reduction in carbon emissions—ample evidence, he noted, that environmental defense is a trend, not a fad.

CFOs Speak Out on Green Business

Julia Homer, Editor-in-Chief, *CFO* magazine, moderator
Dave Burritt, VP and CFO, Caterpillar Inc.
Lauralee Martin, COO, CFO, and Director, Jones Lang LaSalle
Michael Monahan, EVP and CFO, Pitney Bowes Inc.

The morning's first panel discussion featured prominent CFOs who promote green business at their companies: Dave Burritt at Caterpillar, Lauralee Martin at Jones Lang LaSalle, and Michael Monahan at Pitney Bowes. All three speakers agreed that sustainability is more than a noble philosophy—it's good business.

Mr. Burritt said his company's focus on sustainability efforts—which include redesigning its product lines to become more energy efficient, expanding its remanufacturing business, and adopting new technology both in its internal processes and within its products—has delivered measurable improvements in business operations for the company and its customers.

Although Caterpillar has made a lot of progress since it joined the Dow Jones Sustainability Index seven years ago, Mr. Burritt said, it still has work to do. He described Caterpillar's three-pronged approach to sustainability:

- Understanding sustainable development as a business opportunity.
- Creating globally consistent metrics and goals.
- Finding the value and driving the action.

For finance chiefs who manage risk and the integrity of financial performance, sustainability has far-flung implications. Giant Caterpillar trucks that help build the world's infrastructure also emit carbon dioxide. Creative ways to monitor, measure, and correct that outflow rest as much with Mr. Burritt as with his counterparts within Caterpillar. "Show Me the Money," the title of his presentation, succinctly expressed opportunities that CFOs can foster.

Companies must move from making progress possible to making progress sustainable. But new challenges and obligations accompany growth. Caterpillar has doubled in size since 2003 by helping to build needed global infrastructure, a first step toward improving standards of living.

Caterpillar sees opportunity for sustainable development in four areas:

- **Energy:** Caterpillar converts harmful gases into clean energy.
- **Materials:** Caterpillar recycled more than 2.7 billion pounds of material in 2007.
- **Mobility:** Caterpillar's vehicles have cut their gas emissions by 98 percent since 1997.
- **Development:** Caterpillar supports free trade that helps emerging companies accelerate the development of infrastructure.

CFOs can set sustainability standards, according to Mr. Burritt, with broad implications:

- **Reputation:** Consumers demand responsibility.
- **Recruitment and retention:** The best employers display regard for the environment.
- **Risk reduction:** Lessen the damage that will come back to roost.

Ms. Martin, CFO of Jones Lang LaSalle, oversees a long list of global finance functions at the Chicago-based real estate services company. Her role encompasses accounting, tax, treasury, internal audit, and investor relations, with added responsibility for information technology and the firm's operational platform.

Ms. Martin noted how fast sustainability has reached and passed a crucial tipping point. No longer just a matter of good corporate behavior, now it's good business. To underscore the argument, she detailed Jones Lang LaSalle's sustainability strategy and its material benefits. In 2007, Jones Lang LaSalle helped its real estate clients avoid $37 million in energy costs, 210 million kilowatt-hours, and 133,000 metric tons of greenhouse gases. Related cost savings were substantial.

Ms. Martin shared good news from a recent survey co-sponsored by Jones Lang LaSalle and CFO Research Services, measuring stakeholder attention to environmental practices. In it, almost 80 percent of the finance executives surveyed said that environmental business practices are more or much more important to their customers now than five years ago. And more than 70 percent of respondents said that their senior management also gave more importance to environmental practices; 69 percent of respondents said this was true of employees at their companies.

But Ms. Martin also reported on the three main barriers finance executives saw to incorporating sustainability into their financial decision making. Almost half of the executives surveyed said that an inability to measure sustainability against shareholder value was an obstacle; between 35 and 40 percent of the respondents also cited an inability to document environmental impacts on financial performance, and the lack of standardized frameworks that take environmental factors into account. Given the widespread endorsement of environmental practices evident in responses to other questions, Ms. Martin noted that finance now has "a big opportunity—one we should not let slip by."

Like his counterparts, Mr. Monahan, CFO of Pitney Bowes, has a portfolio of responsibilities that includes a full roster of global finance functions, plus oversight of the company's corporate-development activities. His message: Sustainability aligns growth well with Pitney Bowes's business overall. "Our environmental stewardship is integral to the way we do business," he explained. "It is not an aside, or an add-on; it is core to the way we behave."

Mr. Monahan linked value creation to sustainability, a goal his company fosters in multiple ways. Driving efficiency in mailrooms around the globe takes a front seat among his priorities. The ongoing pressure for sustainability in this function has three components:

- Reducing energy to run operations.
- Reducing travel for postage and postal services.

- Making mail more relevant and actionable.

Environmental stewardship is integral to the way Pitney Bowes conducts business, according to Mr. Monahan. The board of directors routinely monitors progress, reporting through the Corporate Responsibility Committee. This attention at the top sets the tone for sustainability, with valuable benefits for the environment and earnings. Pitney Bowes was able to reduce toxic emissions by 98 percent for treated wastewater, by 86 percent for hazardous waste, and by 98 percent for air emissions. It has formalized a program called Design for Environmental Quality, and redesigned packaging to reuse up to 60 percent of returned packaging materials.

The bottom line at Pitney Bowes reflects tangible benefits. Sustainability improves cash flow, generates revenue, increases operating efficiency, and furnishes a starting point for connecting with existing and potential customers.

Sustainability in Action

Marie Leone, Senior Editor, CFO.com, moderator
Andrea Moffat, Director, Corporate Programs, Ceres
Mikael Hagström, EVP, SAS Europe, Middle East, Africa and Asia Pacific
Karen Flanders, Director, Sustainability, The Coca-Cola Co.
Mark Newton, Environmental Policy Director, Dell
Yalmaz Siddiqui, Director, Environmental Strategy, Office Depot

Speaking on behalf of investors, companies, and environmental organizations with a shared interest in lowering carbon emissions, Ceres director of corporate programs Andrea Moffat highlighted accomplishments and looming challenges on the road to corporate sustainability. Ceres is a national network of investors, environmental organizations, and other public-interest groups working to integrate sustainability into capital markets. The next step, said Ms. Moffat, will be integrating sustainability into corporate DNA. She built a strong case for linking sustainability to competitive advantages. Companies that grapple early with these issues will enjoy an edge as rivals play catch-up. Regulators—not least the Securities and Exchange Commission—seek guidelines on environmental risk, with a close eye to ways that companies make informed investment decisions. Transformational change now rests on action, not rhetoric, Ms. Moffat proclaimed.

Lenders have tuned in, according to Ms. Moffat. More and more credit policies are taking environmental factors into account, favoring clean energy and a brake on greenhouse-gas emissions. Citibank and JPMorgan Chase, to name two leading money center institutions, have begun to formulate "carbon principles" that govern loans to the utility sector.

Sustainability is vital to Coke's growth, said Karen Flanders, director of sustainability at the beverage company. Coke's journey on this path began 10 years ago with a more holistic view of the 120-year-old soft-drink company. Coke's threefold plan for sustainability is rooted in finance:

- Manage and minimize risks to sustainability.
- Drive revenues in a manner that supports sustainability.
- Demonstrate leadership with cohesive action across the company.

Coke's "manifesto for growth," unveiled three years ago, declared its attention to sustainability. At Coke, firm commitment to sustainability means being "caught in the act of being good."

As Dell's environmental policy manager, Mark Newton mans the trenches in the computer maker's sustainability strategy. In a fresh way, Mr. Newton reiterated the day's overarching theme: Smart companies are looking to flip from risk mitigation to business opportunity.

Mr. Newton described four stages in Dell's sustainability journey. Stage one is simply survival—the focus is on protecting the company's reputation while dealing with a crisis. In stage two, the company uses that crisis as a vehicle for innovation, even moving toward competitive advantage. The third stage involves a more structured approach to anticipating, avoiding, and managing risk, while in the final stage, a company feels "duty bound" to assume climate leadership, leading by example, providing resources, and promoting incentives. It is at this stage that a company can achieve vision-based breakthroughs in sustainability.

Successful journeys foster unexpected, even unlikely partnerships. "We've found great alliances with groups critical of Dell practices," Mr. Newton said. Free recycling of products, for example, reinforced relationships with Dell's customer base. Configurability of computer platforms also dovetails with marketing and sustainability goals.

Dell is currently working toward producing computers free of halogen, a goal sought by environmentalists. Dell is also reviewing the carbon footprint of its physical plants with an eye toward carbon neutrality.

Mr. Newton advocated for strategic approaches to sustainability. Knee-jerk reactions are counterproductive, he pointed out, while a holistic approach to sustainability that encompasses vendors may take time, but pays dividends. The job isn't easy, admitted Mr. Newton, but a clear commitment to sustainability is like saving for retirement "until it hurts," ensuring a better future.

Yalmaz Siddiqui, Office Depot's director of environmental strategy, is responsible for advising the company on the development and integration of a wide range of environmental programs throughout its global operations. The theme at Office Depot is "sustainability in action."

Mr. Siddiqui illustrated Office Depot's evolving commitment to green business practices, starting simply with a focus on brand-risk mitigation, moving to a proactive strategy today to increase sales and profits while affirming "green" as an Office Depot value, and looking to the future to own the "green space" and integrate green thinking into strategy.

Mr. Siddiqui described Office Depot's five-part "mantra" for conveying the business case for sustainability:

- **Why Green:** Prepare for emerging needs and risks.
- **Buy Green:** Ensure a customer-focused assortment and "walk the talk."
- **Be Green:** Reduce long-term operating costs.
- **Sell Green:** Grow sales in all channels.
- **Tell Green:** Promote and protect the Office Depot brand.

A raft of metrics govern every component of sustainability at Office Depot, from the percent of papers certified as "well-managed forests" and "percent of materials recycled" to "metric tons of CO_2 emissions from logistics and customer delivery" to "green sales in retail channel." Taken together, these metrics show the progress the company is making toward sustainability goals.

No excuse permits not marching faster, said SAS executive vice president Mikael Hagström, whose global purview includes Europe, the Middle East, Africa, and Asia Pacific. He conveyed his enthusiasm for a culture where innovation can foster market leadership for a company and its customers.

Mr. Hagström showed a chart from *CFO* magazine with separate rankings of CFOs' top concerns in the U.S., Europe, and Asia. Directly or indirectly, they assign great importance to sustainability. For example, in all three regions, the cost of labor and the shortage of skilled labor sit near the top of all the lists. The link: More desirable companies attract the workers they need, and sustainable companies boost workplace desirability.

SAS rests sustainability on a triple bottom-line impact of people (geopolitical and social factors), planet (conservation and environment), and profit (balance-sheet economics). Winning strategies harness all three. But the company faces a variety of hurdles: sluggish supply chains, regulation, market uncertainty, competition, and, perhaps most deadly, "business as usual."

While Mr. Hagström emphasized THE POWER TO KNOW®, using software analytics to measure and improve sustainability, he also noted that technology alone can't guarantee sustainability. Companies must imbue information technology with the pivotal importance of carbon neutrality at every worksite. The agenda has accelerated, but if companies don't achieve transparency when enthusiasm is strong, it could fade. Now is the time to push goals forward, he urged.

Going Green—The Role of Innovation

Mary Driscoll, President and Editorial Director Emeritus, CFO Enterprises, moderator
Erhardt Werth, EVP, ARCADIS
Paul Hilton, Director, Advanced Equities Research, Calvert
Chris Walker, U.S. Director, The Climate Group

The next panel highlighted perspectives familiar to CFOs: return on investment.

Sometimes the opportunity to go green is embedded in brown, said Erhardt Werth, executive vice president of Guaranteed Business Solutions for ARCADIS, a network of professional services providers developing sustainable solutions to business, financial, and environmental issues. Mr. Werth often works with federal and state governments, the Department of Defense, and *Fortune* 500 clients to resolve environmental liabilities. "Finding green in brown" means developing sustainable strategies that unlock value in impaired real estate ("brownfield" sites).

Innovative solutions and efficient management are pivotal to success, according to Mr. Werth. Owners of troubled property can face a raft of thorny issues, including costs of cleanup, legal fees, management oversight, and regulatory compliance. They also have to be concerned with financial-reporting obligations and third-party impacts (for example, on water resources or on neighbors). Worse, liabilities are hard to assess before a project begins.

Remediation frees the healthy value of the property. The process of remediation starts with two questions:

- What is the value at the best and highest use of the impaired property?
- What is the value of a guarantee to achieve that value?

According to The Climate Control Group's Chris Walker, the time to act is now. Seconded for 18 months from Swiss Re to act as the environmental group's U.S. head, Mr. Walker was blunt: "We are on the precipice of a transformational moment in time."

Climate change is the preeminent issue of our time, one that will affect every subsequent generation, he said. Not only is the insurance industry making it a high priority, increasingly, so are investors and corporations worldwide. Signatories to the Carbon Disclosure Project represent $20 trillion in assets under management. The CDP has raised the bar for the world's 1,800 largest corporations by seeking carbon-emissions information, and more than 300 companies are now reporting.

Mr. Walker pointed out that pressure is building for companies to deal with environmental issues. He shared research showing that 8 in 10 global 500 CEOs acknowledge climate change as a significant risk to their companies—but only 4 in 10 are actively dealing with the issue. That's a step forward, said Mr. Walker, but not far enough.

Mr. Walker urged corporations to get in front of the issue and set the agenda. By doing so, they can define a safer and cleaner energy future that will boost bottom lines. Mr. Walker drew a stark choice between the cost of inaction and the cost of action. If we do nothing, Mr. Walker foresees a decrease of 5 to 20 percent in consumption income over the next 50 years. But the cost of action—the cost to reduce carbon dioxide levels to 550 parts per million—would amount to only 1 percent of annual global GDP for the next 50 years.

Naysayers take note, said Mr. Walker, a former Superfund attorney. A new Presidential administration appears to promise similar restraints on emissions, and the 4 in 10 corporations slow to address environmental issues may find catching up the most expensive and disruptive route. Proactive companies have boiled down this issue, fraught with social and moral dimensions, to one of risk management. They see that, when carbon goes down, profits can go up. And despite widespread alarm, Mr. Walker noted that he has yet to find any company that has suffered any economic harm from cutting its emissions.

Paul Hilton, director of advanced equities research at Calvert Funds, then furnished an enlightened equity manager's perspective on sustainability. Calvert Funds, launched in 1982, adheres to criteria that foster "sustainable and responsible investment" (SRI). Each investment must satisfy rigorous criteria addressing corporate integrity, the environment, and labor (for example, sweatshop labor).

Calvert looks to invest in sustainable companies or companies actively committed to policies such as climate change. This shift in the field is attracting major institutional investors, and the conversation no longer sounds foreign to major investors.

Not every green investment is profitable, of course, but neither can the profitability of any type of investment be guaranteed with absolute certainty, noted Mr. Hilton. But the commitment to sustainability has made customers of many leading pension funds, including giant CALPERS (California Public Employee Retirement System), state pension funds, and international oil funds. Clients recognize more than virtue—they equate sustainability with sound, long-term business judgment. And academic studies increasingly show correlations between social performance and financial performance, Mr. Hilton said.

Mr. Hilton advised CFOs to tackle sustainability on four levels:

1. Look smart. Make sure Investor Relations is steeped in the company's commitment to sustainability.

2. Make sure the company, from top to bottom, has clear performance targets and policies. Smart governance is the best solution.

3. Isolate risk and opportunities embedded in specific companies and industries. Allocate resources based on top issues.

4. Learn to talk with investors and stakeholders proactively. Seek ideas from smart, informed sources, even critics.

Smart managers follow the issues and know what to do. At the end of the day, they make stakeholders happy.

Carbon Trading and Why CFOs Should Care

Avital Louria Hahn, Senior Editor, *CFO* Magazine, moderator
Rick Adcock, SVP, Origination and Investment, Climate Leaders Fund
Paula DiPerna, EVP, Corporate Recruitment and Public Policy, Chicago Climate Exchange
Josh Harris, Head, Voluntary Carbon Markets Program, The Climate Group; Acting Program Manager, Voluntary Carbon Standards Association

The discussion of carbon credits during the day posed some obvious questions: What are they worth? How do you trade them? The day's final panel addressed both of these questions.

These days, Josh Harris wears two hats, one as head of The Climate Group's voluntary Carbon Markets Program and the other as acting program manager for the Voluntary Carbon Standards Association. He depicted the growing "carbon landscape": $60 billion worth of carbon credits traded in 2007, up 80 percent from 2006, accounting for 2.7 billion tons in 2007. Mr. Harris anticipates a $100 billion market in 2008. Yet this robust activity accounts for only an estimated 10 percent of all emissions.

Currently, parallel markets exist, Mr. Harris explained. So-called cap-and-trade compliance is mandatory in Europe but voluntary in the U.S. Europe's mandate trims emission levels in 2010 to 20 percent of levels in 1990, bumped to 30 percent with an international accord on emission levels. A recent survey of carbon-market stakeholders found 70 percent who expect to see an international agreement, and resulting carbon credit price stability, by 2020. Prospects of a decision will have a more immediate market impact in two to five years.

In Europe, the next phase will be to provide market certainty and, with it, a stable carbon price. U.S. companies can sign on to carbon-trading networks, but regulations don't enforce comparable standards.

Until regulations are uniform, Mr. Harris warned, prices for carbon credits will remain unstable. Today, wider participation in Europe makes the price of carbon credits much higher than here. But with the three leading U.S. Presidential candidates in favor of similar emissions regulation, the markets will soon align themselves more closely. U.S. companies that bank voluntary credits ahead of regulation may save money in the long run, noted Mr. Harris.

Rick Adcock is the senior vice president for origination and investment at the Climate Leaders Fund. An initiative of the publicly traded CAMCO Group, CLF invests in projects that generate carbon credits.

Even experts struggle to get their arms around this fast-growing marketplace, said Mr. Adcock. It is fragmented at every level—international, national, and local. Prices for credits vary based on project type, delivery risks, and other factors.

Carbon credits are often sold forward—they are issued annually, after verification by an independent third party. Mr. Adcock noted the differences between two kinds of carbon credits. Government-issued allowances represent the right to emit a specific amount of CO_2, while project-based credits represent avoided emissions of CO_2.

CFOs should care about carbon trading for two reasons, said Mr. Adcock. First, they will need to manage emerging liabilities in regulatory regimes in conjunction with implementation of the Kyoto Protocol. And then, Mr. Adcock claimed, there is still a lot of value to capture. Discussions that start with a review of liabilities and cost of carbon footprints end up as a means to generate assets.

In 2009, Copenhagen will host a global conference to initiate the next phase of sustainability initiatives. That event will trigger an uptick in activity, according to Mr. Adcock, as companies position themselves to make the most use of carbon credits.

For investment managers, carbon credits add a new dimension to asset-allocation models. They form an asset class not correlated with other classes, an important distinction as globalization causes traditional asset classes to act more and more alike.

Paula DiPerna, vice president for public policy for the Chicago Climate Exchange, described the carbon-trading market (CCX) in the U.S. (The Chicago Climate Exchange is a global marketplace that, despite its name, is based in New York City.)

Despite fragmentation and widespread quality issues in the carbon-trading market, said Ms. DiPerna, it is a hybrid market that adheres to tight standards. Participants on CCX sign legally binding, contractual agreements for compliance. A roster of blue-chip companies in the U.S. has joined, including 17 percent of the Dow Jones Industrials and 10 percent of the *Fortune* 500.

The nature of the agreement calls for companies to cap and trade emissions and reduce target emission levels. By 2010, companies must be at least 6 percent below emissions levels in 2000 for all operations in the U.S. That's stricter than the likeliest current legislation, the Lieberman-Warner bill, would mandate. Thus, Ms. DiPerna said, CCX companies will be compliant with any U.S. regulation in the foreseeable future.

When the CCX was launched in 2003, carbon fetched 80 cents a ton. Currently, the price is $5 a ton. In Europe, the price is almost 40 euros a ton—a huge disparity—for no other reason than regulatory structure—in Europe, the Kyoto Protocol is mandatory. Any regression to the mean implies that carbon credits purchased at today's U.S. prices look like shrewd arbitrage for carbon-producing companies when compliance is required.

CCX has scope and scale, and it furnishes one-stop shopping for companies that need carbon credits. Credits are issued and traded in CCX scrip that may serve as a model for scrip issued under regulation. Now is the time to enter and get a grasp on the market, urged Ms. DiPerna. CCX volume this year has already reached 18 million metric tons, 70 percent of the level in 2007. Ms. DiPerna emphasized that the price is real, the market is real, and traders in major banks and on Wall Street make markets for these assets and furnish ample liquidity.

Building Value by Paring Environmental Risk

C. Gregory Rogers
President
Advanced Environmental Dimensions

Representing Advanced Environmental Dimensions, Gregory Rogers shared his combined accounting and legal experience in the day's final session. A widely respected expert on financial reporting on environmental liabilities and risks in the wake of Sarbanes-Oxley legislation, Mr. Rogers is an attorney and a CPA who chairs the American Bar Association's Committee on Environmental Liabilities. He was one of 30 national experts tapped by the Government Accountabiity Office to participate in an accountability report to Congress.

Mr. Rogers works in the area where environmental law meets reporting requirements. He began his presentation with a warning to CFOs to "come clean before going green." With that, he turned his attention to environmental liabilities of sufficient magnitude to reach balance sheets and income statements.

For companies with such challenges, he said, mark-to-market is coming to environmental liabilities. But Mr. Rogers emphasized the opportunity to turn environmental liabilities into assets. Toward that end, he offered a thesis:

Financially strong corporations with significant environmental liabilities can generate positive return on investment by controlling the potential for upward volatility of these obligations. By investing in mechanisms to extinguish or otherwise cap their environmental liabilities, companies decrease risk to lenders and investors and thereby increase their market capitalization and decrease their weighted average cost of capital.

That thesis rests, in turn, on four premises:

- Investors discount the value of a company's future cash flows and stock price for estimation risk—risk arising from uncertainty surrounding the valuation and future cash flows associated with the company's environmental liabilities (both recognized and unrecognized).

- Investors and lenders will reward companies for perceptible reductions in estimation risk.

- Corporations can take steps, other than protracted cleanup, to reduce or eliminate perceived estimation risk to lenders and investors.

- Incremental investments to extinguish or cap environmental liabilities will result in positive net present values for financially strong companies.

Since 1970, Financial Accounting Standard No. 5 (FAS 5) has governed treatment of accounting for contingencies. Losses related to the environment reach the balance sheet subject to dual criteria: probability that a liability has occurred and the amount of the loss is reasonably estimable. Contingent losses that arise outside a business combination are not recognized unless there is a high likelihood of a future outflow of resources (FAS 141R ¶ B226).

Accounting for a reasonably estimable environmental liability raises the thorny question of its valuation. Mr. Rogers shared some guidelines for valuation with the audience. Companies should value at "best estimate"—the one amount within a range that's better than any other. The use of statistics should be avoided, in favor of "getting the right number." It's better to use a lower number that is certain, advised Mr. Rogers. And discounts should be applied only if the timing and the amount of payments are "fixed and determinable."

The practical outcome of current Financial Accounting Standards Board standards, said Mr. Rogers, is to delay recognition of any contingent liabilities. Mr. Rogers also spelled out liabilities not covered by FAS 5—for example, when the amount of loss is highly uncertain, or when there is not a high likelihood of future outflow of resources.

Liabilities can stem from multiple sources: legacy pollution conditions predating the Superfund law; companies acquiring liabilities through mergers and acquisitions; new pollution conditions arising from ongoing operations that have improper safety procedures or environmental policies; or new pollution conditions from normal operations. Rogers proposed a simple method of calculating a suitable level of liability reserves, based on the difference between one year's remediation expenditures and the previous year's liabilities, plus the current year's accrued liabilities.

Logically, an analyst or investor would expect legacy liabilities to go down over time, as they are remediated and settled. But Mr. Rogers noted that liabilities are actually going up over time in oil and gas, mining, heavy manufacturing, and utilities.

To normalize uncertain long-term impact—a frustrating task even for securities analysts—Mr. Rogers uses a novel ratio, analogous to an inventory turnover ratio, to compute these environmental obligations. Essentially, this involves dividing the existing reserves by the amount of money spent addressing liabilities in the previous year, as reported on financial statements, to determine the environmental liability turnover ratio. Lower ratios indicate that companies are spending sufficient amounts to retire their liabilities.

Mr. Rogers advised companies to measure fair value on a pro forma basis to get a handle on what the numbers will look like later, so that they can implement appropriate plans. In an M&A context, the need is urgent—a buyer of a company or subsidiary will calculate a fair-value measurement before closing a transaction. Even absent merger activity, Mr. Rogers said, fair management can be a good metric for use by internal staff that copes with liabilities every day. Instead of simply making budget, they can focus on shrinking the whole liability in the most cost-effective manner.

Advancing the Sustainability Agenda

Going green is unquestionably a good idea, but how do you get there responsibly?

Most executives would agree: Green is good. Being eco-friendly is no longer perceived as martyrdom for goodwill's sake. In addition to the obvious environmental benefits, green strategies can bring tangible rewards through lower costs, higher market acceptance, and valuable carbon credits.

However, even the most well-intentioned companies face daunting obstacles as they embrace more environmentally responsible business practices. How do you value and prioritize initiatives? In the past, it was difficult to gauge the impact of sustainability initiatives on financial performance—and even more difficult to find standardized frameworks that account for environmental factors.

In fact, it was a challenge just knowing where to start. Greenhouse-gas emissions, restricted resource consumption, ethical sourcing and regulatory compliance—these are complex and interdependent issues that span a company's operations and beyond. Organizations seek better intelligence about which initiatives will have the most impact on the triple bottom line—a balance of environmental, social, and economic indicators.

To answer such questions, organizations need a combination of descriptive and predictive insight—the ability to track meaningful green indicators, validate strategies and costs before investing, identify causal relationships, and forecast outcomes. Those may sound like unrealistic objectives, but analytic science has made them attainable. An analytics-driven information framework designed for sustainability enables an organization to:

- Measure sustainability activities using industry-accepted methodologies and protocols.
- Accurately report on environmental performance to shareholders and regulators.
- Improve sustainability metrics via optimization, forecasting, and data-mining analysis.
- Forecast the resources needed to reach desired outcomes, for a department or the entire enterprise.

Imagine the possibilities. Organizations can measure emissions and resource consumption throughout a value chain or product life cycle, ensure regulatory compliance, and build green strategies with proven return on investment. They can determine which resource conservation efforts or greenhouse-gas reduction strategies will have the most impact—physically and financially. And they can identify ways to promote (and profit from) more environmentally respectful goods and services.

By understanding and managing environmental, social, and economic factors—and forecasting future performance under alternative business scenarios—companies can advance both the aspiration for sustainability and the imperative for shareholder value.

In April 2008, SAS introduced SAS® for Sustainability Management—the first decision-support software platform of its kind—to measure, manage, and report on all facets of the triple bottom line.

SAS software—used at 44,000 customer sites worldwide—is built on a unified platform that integrates all the necessary elements: quality data from across the enterprise, advanced analytics to create actionable insight and predictive foresight, and the means to share this information with decision makers at all levels.

Since 1976, SAS has been giving customers around the world THE POWER TO KNOW®.
Find out more at www.sas.com.

For more about SAS® for Sustainability Management visit:

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