
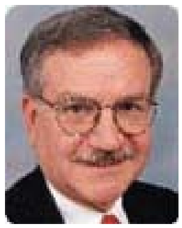

# Ask the Experts

**by Steve Rice & Richard MacLean**

October 2001

## Challenges to Inspire 'Buffaloes of Sustainability'

**Also this month:**

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- What is the difference between Full Cost Accounting and Total Cost Assessment?
- The Global Reporting Initiative tells companies what they can report -- but what must U.S. companies disclose?
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- Is photovoltaic solar energy cost-effective yet?
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**Q: What are the greatest obstacles facing advanced environmental management and sustainability?**

**Steve:** There are three essential challenges to advanced environmental management and sustainability, inherent in certainty, priority, and substance:

- **Certainty**. One of the basic tenets of risk management suggests that the greatest risks we face are those of which we are unaware -- the recent terrorist events demonstrate this. Richard touched on another very important facet last month regarding human values: if the environment isn't a core human value of the majority of the people, how can we expect the majority of the people to care about it?

- **Priority**. I recall a market survey that I helped design for a company to use in gauging which of 20 product attributes its custumers found most important -- just before the company introduced a new version of a product with significant environmental advantages over its traditional counterparts. Although the results varied from company to company and across industries, "environment" ranked an average 17 out of 20. Price, delivery and performance always ranked among the top five. Surprisingly, total cost of use hit 10th: respondents judged purchasing managers not by overall savings to the company, but rather what sort of discount they could get from suppliers.

- **Substance**. Faced with all the options and priorities people and companies face, are the results likely to be substantive enough for the resources and effort expended? Think of it this way: companies can choose from lots of possible capital projects; not all make the cut. I really like John Elkington's concept of "Butterflies of Sustainability": while light, agile and very productive, collectively these relatively small, niche companies really don't affect the overall industrial landscape.

To overcome these obstacles, and truly change the business landscape, sustainability needs several "Buffaloes of Sustainability" -- companies that utterly trample traditional business practices and convincingly demonstrate that advanced environmental management and sustainability provide outrageously significant AND lasting financial success. To date, these results are noteworthy by their absence. Daniel Esty, of the Yale School of Forestry and Environmental Studies, offers instructive opinions on this matter in a recent *Foreign Policy* essay.

It would be helpful if more publications, conferences, and Web sites would tackle these difficult issues. The "debate" is too one-sided, biased toward the positives of sustainability. If the media would offer competing points of view on these issues, a successful argument for sustainability would be more credible and effective. Yes, sustainability as an argument has weaknesses; lively debate in good will among reasonable parties would help us all get closer to the truth and effect change for the greater good.

I'd like to see sustainability hashed out in a "point-counterpoint" segment on "The O'Reilly Factor", "Hardball with Chris Matthews" or even National Public Radio's "All Things Considered". Then we will have the best chance to recognize what it takes to create the much-needed "Buffaloes of Sustainability."

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**Q: How might the September 11 terrorist attacks affect global environmental programs?**

**Richard:** If I were an incurable optimist, I would believe that multinational corporations would recognize that they must institute aggressive environmental programs to demonstrate their commitment to the communities in which they operate or sell their products or services. Yes, maybe a very few will take this enlightened approach for long term competitive gain. Overall, the "collateral damage" of this heinous act will be widespread and affect us in ways we do not yet understand.

The combination of the current economic recession and the world's fixation on the war against terrorism will draw corporate, government, and public attention away from environmental issues. In times of war, the nation often sacrifices the environment for the sake of security. For example, the Department of Defense cleanup bill for fighting the Cold War could exceed the cleanup bill for all of industry. Expediency always wins when lives are at stake.

The diminished priority of environmental issues was driven home to me in the contrast between two recent stories: the heroic efforts of the New York Fire Department to find survivors and a report about the loss of an injured whale off the coast of New England. Last spring, the Boston Globe ran front-page articles when this whale was found with a rope caught in and infecting its mouth. Imagine the importance of cell phones from the World Trade Center versus radio beacons strapped to a whale. The whale story seems trivial now.

Corporations and governments were becoming increasingly sensitive to environmental protests during recent global trade meetings. Now, one wonders if the police may overreact to any protest. The public may consider nonviolent protests unpatriotic; violent protesters could be branded as terrorists and dealt with harshly.

I am not suggesting that basic compliance will suffer dramatically. What will happen is that discretionary spending will get even tighter, and it will be exceedingly difficult to justify any longer term activities that go beyond compliance. The pressure on environmental departments to "do more with less" will dramatically increase. Staff cuts and consolidations could grow. The world has changed. I am telling my clients to dust off their strategic plans.

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**Q: What is the difference between Full Cost Accounting (FCA) and Total Cost Assessment (TCA)?**

**Steve:** Although both are elements of an overall approach that most people call Environmental Cost Accounting (ECA), they differ mainly in how they are used. Basically, FCA is strictly an accounting tool. It lists all applicable expenses and incomes for a particular project, program or activity -- sort of like a flow diagram showing inputs and outputs. Deborah Savage of the Tellus Institute tells me that another form of FCA is also being used in the solid waste community as municipal governments try to improve the planning, pricing and implementing of the solid waste management services they provide.

On the other hand, TCA takes the type of complete financial data that FCA provides and combines it with a business decision-making process, usually for investments. This permits businesses to evaluate the information, assess options and make fully informed decisions.

As with many decisions, however, there is a trade-off between speed and accuracy. The more complete and accurate the data, the more informed hence more accurate business decision. Too much effort for completeness and accuracy, however, may result in never completing the assessment and making the necessary decisions.

I have three personal favorites for those readers wishing to explore these differences:

1. The 1995 report from the USEPA Environmental Accounting Project, "An Introduction to Environmental Accounting As A Business Tool: Key Concepts And Terms", available at http://www.greenbiz.com/frame/1.cfm?targetsite=http://www.epa.gov/opptintr/acctg/earesources.htm.

2. The Global Environmental Management Initiative's report, "Finding Cost-Effective Pollution Prevention Initiatives: Incorporating Environmental Costs Into Business Decision-Making" [PDF], 1994.

3. Total Cost Assessment For Environmental Engineers and Managers; Mitchell Kennedy; 1998; J. Wiley & Sons.

These are essential resources for anyone working in environmental cost accounting.

Just be careful: Although most people in the EH&S and sustainable development fields consider these and other related tools as specific to their fields, these tools are much more ubiquitous. They were not developed for, and are not limited for use in, environmental management activities. They are used extensively in traditional capital management, logistics and product development efforts.

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**Q: The Global Reporting Initiative tells companies what they can report -- but what must U.S. companies disclose?**

**Richard:** Surprisingly, there is very little that a company must report. Toxic Release Inventory numbers are readily available on the Internet, but much of the routine data such as regulatory required monitoring is uninteresting and too difficult to consolidate. The "interesting stuff" is mostly related to Securities and Exchange Commission (SEC) requirements:

**Regulation S-K:**

- **Item 101 -** Requires disclosure of compliance cost with environmental laws if these costs are material.

- **Item 103 -** Requires disclosure of any administrative or judicial proceedings that: (1) are material; (2) involve a claim of 10% of a company's assets; or (3) involve a government party and a claim in excess of $100,000.

- **Item 303 -** Requires discussion of current trends and uncertainties and the voluntary disclosure of forward-looking information.

**Financial Reporting Codification 500:**

- Discusses disclosures in the Management Discussion and Analysis section. For example, section 501.02 relates to prospective information such as Potentially Responsible Parties (PRP's) at Superfund sites.

**Staff Accounting Bulletin 92:**

- Provides interpretations and recommended practices when accounting for loss contingencies. It addresses the issue of joint and several liability, uncertainties in the estimation process, and accounting for time value of money.

The SEC requires financial statements be prepared in accordance with generally accepted accounting principles (GAAP), which are prepared by the Financial Accounting Standards Board (FASB) and the American Institute of Certified Public Accountants (AICPA). These not-for-profit organizations write the standards for accounting models in the U.S. Thus, the GAAP arrangement is a unique partnership in that a government agency is enforcing private guidelines. There is a similar arrangement between the EPA and the American Society for Testing Materials (ASTM). The most relevant document is the AICPA Statement of Position 96 -1, Environmental Remediation Liabilities. Contact me for a complete listing.

The SEC requires only *material disclosures*, and companies can exercise considerable judgment when a particular liability is considered to be unlikely or not quantifiable. Companies can also avoid probing too wide or deep, thereby reducing the chance that all outstanding liabilities will be discovered. Not surprisingly, there is growing pressure by organizations such as the Corporate Sunshine Working Group to force the SEC to close the loopholes.

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**Q: How can I promote sustainability in business practices beyond the traditional argument of environmental and social necessity?**

**Steve:** Certainly the most important additional argument is economic. Can a business be more profitable and attract increased investor attention by implementing sustainable business practices? Are the benefits resulting from such an overall initiative greater than the costs to conduct them? Is it a part of a long-term strategy for organizational survival?

As I've said in this space previously, the data on the first question show correlation, but not causation. The data I've seen on the second one suggests not, except for very targeted, "sharpshooter" cost reduction projects. That leaves the third question -- one that is driven more by the leadership and vision of a business than by short-term economic profitability.

Unfortunately, in these days of nanosecond strategic planning, few companies have either the leadership or investor patience to pursue such thinking. I believe that some companies, like BP perhaps, have a survival-based strategy for pursuing sustainability -- although oil isn't going to run out very soon, it will become more scarce and expensive. They are hedging their corporate energy bet to be positioned for the future when it arrives.

Another solid argument one might advance is that of public/media relations opportunities. Companies strive to disseminate as much good news about itself, its activities and products as possible. What better news can there be than their efforts to promote and implement sustainable business practices? Tastes great AND less filling! Perhaps this is why environmental and sustainability reporting has become markedly popular in recent years.

Recent studies and reports I've read, however, suggest that most reports are weak, incomplete and fail to show an understanding of the subtleties of sustainability at best -- or even the basics of sustainability at worst.

The use of media/public relations as an argument for the promotion of sustainable business practices is basically an issues management matter. If it is handled as a strategic effort with the appropriate priority, seriousness and resources it will succeed. Anything less is probably not an effective use of company resources.

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**Q: Is photovoltaic solar energy a cost-effective alternative yet?**

**Steve:** The answer will vary for each location and installation, plus the area's electricity rate structure. Generally, photovoltaic systems are not yet cost-effective, though the economics have become closer when installed in conjunction with new facility construction.

For example, we are working to develop a pilot solar system for an existing interfaith community member's facility in New Jersey. Despite a significant "buy down" state rebate, an ideal load factor and a near perfect use pattern for "net metering" electricity back into the grid during mid-summer days, an initial project investment of almost $37,000 produces economic savings of only about $700 annually. That is a LONG payback period by anyone's measure. This calculation even includes anticipated increases in local electricity rates!

There are, however, practical reasons for adding a solar unit to your electricity supply chain:

- **Flexibility**. Depending on your facility's electrical generation, use and market, you might also be able to sell excess electricity back INTO the grid during the middle of hot summer days, exactly when external demand, hence wholesale electricity rates, are highest. Alternately, you can reduce your purchases of electricity from the grid when costs are highest.
- **Reliability**. During brownouts and loss of grid electricity, your facility can keep essential equipment and operations running. This will take some careful matching of electricity load requirements and system generation capability -- but it can be done.
- **Operating cost reductions**. After the initial investment, operating costs are almost zero. One business strategy would be to invest in a system during a year of high sales and net operating profits, reducing tax exposure. This provides reduced operating costs in future years and shields you from sharp increases in electricity costs. A rapid depreciation schedule could probably be justified, further reducing short-term tax liabilities.

Fuel cells are receiving most of the research emphasis, as they are able to provide on-demand electricity, whereas solar systems provide as-available electricity. Solar systems are becoming the preferred route in remote areas where there is no natural gas or hydrogen supply infrastructure.

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## Got A Question?

Send your question about environmental management issues to Experts@GreenBiz.com

We can't guarantee that we'll answer every question, but we'll try.

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*Steve Rice is the founder and president of Environmental Opportunities, Inc., a strategic environmental management advisory firm and has worked for both Exxon and BASF in a variety of environmental management positions. Richard MacLean is president of Competitive Environment Inc., a management consulting firm in Scottsdale, Arizona. He also serves as the Director of the Center for Environmental Innovation, Inc. and has held executive level health, safety and environmental positions in several Fortune 500 companies.*

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