

## Columns

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## Ask the Experts

by Steve Rice & Richard MacLean  
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## Leading EH&amp;S Performance Indicators

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## What are examples of leading EH&amp;S performance indicators for a company?

**Steve:** Company press releases and annual reports are full of EH&S key performance indicators. These alone, however, neither provide business value nor drive improved performance since most data a) indicate what has already happened, b) represent situations that may no longer exist and c) often become the end result, not a tool for further evaluation and decision-making.

Leading indicators, on the other hand, collect data that show where a company is headed and prepares it to take action ahead of a significant deterioration in performance -- or where new performance measurements might be needed. As noted by Kaplan and Norton in *The Balanced Scorecard*, "Leading indicators are the performance drivers that communicate how outcome measures are to be achieved." Superior leading indicators are a) based on the company's mission, vision and values and b) specifically aligned with critical business success factors.

Since not all leading indicators are suitable for all companies, here are some general examples of what 'next generation' leading performance indicators might include:

- *Measurements of performance trends, not merely performance.* In a way, it's like monitoring the derivative of the curve. This is not unlike many financial performance assessment models that send signals to stop buying, or even sell, a stock once it begins to increase by a decreasing percentage. Leading indicators can be derived from trends in wastewater discharge exceedances, spills, audit findings, reportable injury rates, near misses, or workman compensation claims for a particular condition, among others.
- *Frequent surveys of relevant opinion leaders.* Virtually every leading financial indicator is based on regular surveys of analysts ("based on a survey of analysts by First Call"), public opinion (consumer confidence) or purchasing managers (future industrial/manufacturing activity). Targeted, frequent surveys could provide insights into both short and long term EH&S trends.
- *Indices of other measures.* Measurements of trend-changing parameters such as physical conditions, employee behavior/attitudes and other factors can be rolled up into indices that track both underlying factors affecting performance and outcomes. It's the same concept used to develop the Index of Leading Economic Indicators.

The consistent message is that businesses and economists have been using such leading indicators for decades -- what can our profession borrow or adapt? Robert Kaplan's book, *The Strategy-Focused Organization*, offers suggestions on business measures that can serve as models for leading EH&S indicators.

The secret to developing effective leading indicators is the ability to create a process that provides results rapidly, so that appropriate corrective strategies and tactics can be implemented in a timely, effective manner. "Real-time" dashboards on worldwide intranet systems provide an ideal platform. A combination of both lagging and leading indicators provide companies with a balanced view -- where it's been and where's it's headed.

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### **Are voluntary environmental initiatives effective?**

**Richard:** Yes, but only if they have a clear and measurable positive impact on the bottom line. Boards of directors are charged with governance functions to ensure that shareholder assets are protected. This fact has been driven home by the passage of the Sarbanes-Oxley Act of 2002. If a company is spending assets, the expenditure must have a short or long-term positive yield to the owners of the corporations. This benefit can be in the form of brand or long-term liability protection -- both of which are often difficult to quantify. However, for a corporation to spend money on environmental protection, it must pass muster with some realistic evaluation of value, even if that value falls into the category of a philanthropic effort that is appropriate for the size and character of the corporation.

The proceeding is the fiduciary analysis of voluntary initiatives. Now, the reality. Voluntary initiatives are taken seriously by the companies who, more often than not, already take corporate social responsibility (including environmental protection) very seriously. In other words, the initiatives serve as information sources and motivation for companies already headed in the right direction. For the Neanderthals, forget it.

In spite of all the corporate spin, the environmental professionals in many companies are struggling just to maintain regulatory compliance. This comment extends not just to no-name, invisible companies but to some of the largest, brand-name corporations in the world. For the small to mid size companies -- the bulk of all corporations -- the challenge is even greater. Translation: there are many more Neanderthals than there are enlightened corporations.

The Bush administration (and therefore the EPA) may be in love with this concept, but it is largely incapable of driving major change. It is, however, great for public relations. For those of us that have stood in front of boards of directors and had to explain what was going on, the hurdles are unmistakable. Most of what I have read on voluntary initiatives was written by government bureaucrats, academicians, NGOs, or the spin doctors of enlightened corporations. For example, a [UNEP Industry and Environment Quarterly Review](#) publication stated that a "Lack of common language and understanding is one of the most important barriers to the appropriate use of voluntary initiatives." Get real!

From my perspective, the most effective "non-regulatory" environmental initiatives (as opposed to command and control) are those that require disclosure, especially where executive management is involved. The Sarbanes-Oxley Act, from Section 302 reads: The CEO and CFO of each issuer shall prepare a statement to accompany the audit report to certify the "appropriateness of the financial statements and disclosures contained in the periodic report." This requirement has had a major impact on governance, even trickling down to environmental governance. Similarly, the Toxics Release Inventory (TRI) had a major influence on pollution prevention programs after business management discovered, often for the first time, how much was actually being released -- and published in association with their company and facilities. Requiring executives and plant managers to sign off on their environmental reports has brought environmental issues to the forefront.

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### **What states and communities are demonstrating environmental performance leadership, and have any become EMS-certified and/or signatories to any of the major operating principles?**

**Steve:** First of all, as we've noted many times in this column, there is little or no linkage between environmental performance and either management systems certifications (ISO14001, EMAS, etc.) or the adoption of various operating principles (CERES, Sullivan, UN Compact, Natural Step, etc.). That in itself doesn't lessen the importance or usefulness of those systems or principles; it merely reemphasizes the importance of not relying on nonexistent causations between them.

Staying with the environmental performance issue central to the question, though, I checked in with several sources with ears 'close to the ground' on this topic.

Rona Fried, editor and founder of [SustainableBusiness.com](#), informs us she feels that 'stand-out' states include Maine (committed to reducing greenhouse gas emissions by 30%), Minnesota (integrating renewable energy, carpet recycling), Massachusetts (integrating renewable energy and lots of grants), and Vermont (has an energy efficiency utility - the only one in the country). In addition, she adds, Chicago (Chicago Solar Partnership) and Portland, Oregon (smart-growth model) are two of the cities that stand out. She also indicates that the New York City Comptroller is a CERES member.

Matt Polsky, formerly with a state agency, notes that in the past the leading states were generally thought to be Oregon, Minnesota, New Jersey, Pennsylvania. "Things change quickly, however. For instance, New Jersey has a Governor-issued Executive Order requiring sustainable policies, practices, operations, but the state's current administration has other priorities. Not too long ago it seemed that Oregon was most advanced, with Massachusetts the possible 'comer' due to their then-recent Executive Order." New Jersey also received high praise for its [sustainable community metrics and performance monitoring](#), though this effort has also languished due, in large part, to the state's budget difficulties and other priorities.

You may also want to check out the following reports on the topic:

- Green Index: A State-by-State Guide to the Nation's Environmental Health (1991), which ranked states in 8 key areas including toxic waste, air and water pollution, energy use, Congressional leadership, state initiatives, and workplace and community health.
- [Gold and Green 2000: State of the States](#), produced by the Institute for Southern Studies, ranks states according to 20 indicators on their economic/social (gold) health and 20 indicators on their environmental (green) quality.
- [State of the States - 2001](#), produced by the Resource Renewal Institute, provides an appraisal of individual state preparedness to implement sustainability as integral public policy.

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### What are the best places to publish articles on EH&S topics?

**Richard:** It depends on the nature of the articles and your objectives. For example, how technical is the information vs. how suitable is it for general readership? Are you trying to build a reputation for expanding your consulting practice or are you satisfying the requirements of an advanced degree? There is no single best journal or magazine.

Health and safety professionals have unique pre-eminent magazines and journals that most health and safety professionals receive. The [Synergist](#) and the [AIHA Journal](#) are the popular magazine and peer-reviewed journal, respectively, for industrial hygiene professionals. The equivalents on the safety side are [Occupational Safety and Health](#) and the [Professional Safety](#). Health and safety professionals may read several magazines, but in general they all subscribe to their primary professional information resource.

For environmental articles, the situation is much more ambiguous. There is no defining magazine or journal. The profession has more than thirty professional organizations and many produce newsletters, magazines or journals. For example, the largest professional organization, [Air and Waste Management Association](#), has [EM magazine](#) and the [Journal of the Air & Waste Management Association](#). Environmental lawyers may subscribe to the Environmental Law Institute's [Environmental Forum](#). Wastewater engineers may subscribe to [Water Environment & Technology](#), however the [Water Environment Federation](#) publishes eight other publications.

In addition to environmental magazines and journals that serve particular professional niches, there are a number of general, cross-cutting publications. Again, these are segmented by overall topic. For example, [Corporate Environmental Strategy and Environmental Quality Management](#) cover a broad spectrum of environmental management issues. Both have the look of peer-reviewed journals, but they are not. There are advantages: the cycle time to press is much shorter. The peer-review process can be tedious and time-consuming; writers and even publishers often feel that it is just not worth the hassle. Academicians publish in peer-reviewed journals to obtain points towards tenure, but for most writers there is no need. Peer-reviewed journals also tend to have very limited audiences and require that authors pay to have their material published.

Web publishing is becoming more popular because it all but eliminates the lead time. The indexing and search capabilities of electronic media make web publications very user friendly, also.

Finally, general magazines such as [Environmental Protection](#) and [Pollution Engineering](#) have very large circulations -- numbering in the tens of thousands -- and cover a broad range of subjects. For management consultants such as Steve and me, however, the penultimate is to publish in the *Wall Street Journal*, the business sections of the Sunday editions of the *New York Times* or the *Los Angeles Times*, the *Harvard Business Review* or the *MIT Sloan Management Review*.

The key is to determine who you want to reach, what the effective format is, and how quickly you want it published.

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### Who owns the triangular 'chasing arrows' recycling symbol?

**Steve:** Once again, our network of experts came through for you. Jacquie Ottman, of [J. Ottman Consulting](#), informs us, "The 'chasing arrows' recycling logo was created by the Recycled Paperboard Packaging Council (RPC) sometime in the 1970s. I'm not sure if it was coincidental, but when I worked for them as a TV spokesperson, they maintained that the three arrows signified the three steps of the recycling process: collecting, making product from the collected materials, and buying the recycled products again. As I understand it, the chasing arrows logo has become a generic. The RPC has since issued a new logo as an identifier just for recycled paperboard." The Federal Trade Commission has specific rules for how it can, and can not, be used for consumer products and packaging.

Of course, the plastics resin identification code is often mistaken for the recycling logo. While it, too, has a triangular 'chasing arrows' form, the number inside the triangle indicates the type of plastic resin used in the product part or package -- it has no specific relevance to the ability of the product or package to be recycled, nor its recycled content. This symbol was created in 1988 by the [Society of the Plastic Industry](#), now an adjunct organization of the American Chemistry Council.

While the U.S. government neither mandates nor regulates the use of this resin identification code, the Federal Trade Commission's *Guides for the Use of Environmental Marketing Claims* (May, 1998) states that "the placement of the SPI code in an inconspicuous part of a package or produce does not constitute a recyclability claim." Placement of the symbol in a conspicuous location, however, would be considered as making a claim of recyclability, which would be subject to certain requirements. FTC has kept a nice summary posted at its [Web site](#).

Many states require the use of the symbol to facilitate plastics recycling. There are other, similar, logos in use in both Europe and Australia.

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### Where are funding sources for recycling equipment to support a large community food bank in Philadelphia?

**Steve:** While this question is not of the type that we typically handle in this column, a quick check with a source close to Philadelphia's growing sustainability community yielded a very likely source. Try contacting [Merrian Fuller](#) at [The Sustainable Business Network of Greater Philadelphia](#). Chances are that she will have just the right contact, program and/or agency to help you with your situation.

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**Postscripts: Three Data Points.** Engineering, scientific and law training teaches us that one data point is an isolated incident, two data points suggest a possible relationship and three data points show a trend. After searching for a long while, issuing a public 'challenge' in 2002 and finally asking the right people the right questions, Richard and I have found what we think might be a trend -- three senior EH&S leaders who report to their companies' CEOs.

While certainly there are many senior EH&S leaders who are in close contact with their CEOs, and many in 'flat' organizations or small companies who are no more than one or two levels away, reporting directly to the CEO denotes a functional importance and facilitates both communication and understanding.

Just recently we have added two data points to the one that we previously had. The EH&S leaders at Consolidated Edison of N.Y., Ashland and Mannington all report directly to their respective CEOs. Since two of these are relatively recent developments, it suggests the potential for what might be a trend.

But even with three points we ponder whether this is the end of a trend, or merely the first segment of a longer one. Anyone have other data points?

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## Got A Question?

Send your question about environmental management issues to [Experts@GreenBiz.com](mailto:Experts@GreenBiz.com)  
We can't guarantee that we'll answer every question, but we'll try.

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