



PHARMA TACKLES ENVIRONMENTAL AND SOCIAL SUSTAINABILITY PRACTICES

Sound packaging practices are just one of the sustainability criteria for assessing industry performance

The push for sustainable environmental practices has executives worldwide discussing how to incorporate systems that respect the planet while remaining profitable. The pharmaceutical industry is no exception, but it – along with its suppliers – faces a somewhat unique challenge: how to achieve this and respect the regulations at the same time.

“Sustainability” is a malleable term that means different things in different contexts. To preservationists, it connotes business practices that keep environmental impact to a minimum, if not to have “zero impact” altogether. To public accounting firms, which speak of environmental impact as one of several business attributes that collectively represent the reporting of nonfinancial results, such as charitable activities, workplace safety, and other evidence of “corporate social responsibility” (CSR).

Sustainable environmental practices are the focus of national and international efforts such as the Dow Jones Sustainability Index, or the Green Suppliers Network, a collaboration between the US Environmental Protection Agency and private industry.

“Health, safety and environmental factors are where CSR started, but it has broadened to a more holistic view of nonfinancial activities that sustain stakeholder value in a community, a country or internationally,” says Andrew Jones, senior analyst at Ernst & Young’s London offices. “Improving overall performance, as measured by broadly accepted standards, and reporting these activities to the public are becoming critical to managing a business.”

E&Y has surveyed major pharma companies on their thoroughness in reporting sustainable business practices (see Fig. 1). The global pharma industry shows up well, but also gives evidence of widely variable management focus and reporting.

FIG. 1. SUMMARY OF PHARMACEUTICAL SUSTAINABILITY REPORTING METHODS

Percentage of companies	
71	Reporting for 3 or more years
67	Produce a stand-alone sustainability report
63	Include a separate sustainability section in annual report (one page or more)
83	Host a sustainability section on corporate Web site
71	Reference to use of Global Reporting Initiative (GRI)
46	Explicit publication of GRI table
38	Use of independent third-party verification (data/processing)
38	Provide summary of sustainability goals/targets
13	Targets/goals routinely defined by metrics
83	Use of case studies providing details of sustainability improvements/initiatives
33	Mention of specific brands in relation to sustainability difficulties

SOURCE: ERNST & YOUNG ANALYSIS OF 2004/05 CORPORATE SOCIAL RESPONSIBILITY/SUSTAINABILITY REPORTS AND ANNUAL REPORTS

The Pacific Sustainability Index, published by the Roberts Environmental Center at Claremont McKenna College (Claremont, CA—see Fig. 2) offer fairly rigorous assessments of CSR practices. Top company annual reports are analyzed for mentions of various CSR topics, and the qualitative performance of the companies is scored. According to this index, Bristol-Myers Squibb is the leading pharma company reporting its CSR activities.

The packaging problem

Many industries that produce goods that reach the consumer—including the pharma industry—have been paying attention to how their products are packaged; packaging represents a burden on the environment, and at the same time is a highly visible attribute of CSR. Wal-Mart, as part of an overall push into better sustainable practices, has been encouraging its suppliers to improve sustainable packaging practices.

Speaking from an over-the-counter drugs perspective, Lynn Dornblaster, director of the custom solutions group at market research firm Mintel International (Chicago), notes that factors outside of those related to the environment – such as packaging that ensures safety and the dispense of the correct

dosage – remain a higher priority on pharmaceutical manufacturer’s list. “We see very few products in pharma that address ecological issues,” she says, “and even fewer that speak specifically about their eco-friendly stance.” Some blood glucose monitors may use very little paper tape for operation, she points out, but this is mainly for convenience. “Safety and security are the dominant issues that influence packaging in pharma products, not ecological issues.”

Still, the matter is being reviewed, one of the biggest targets being packaging. Bio-based materials, such as polylactides (PLA) – made from bio-based feedstock and processed via chemical synthesis – offer an alternative to the conventionally fossil-fuel-based plastics. Sher Paul Singh, professor at Michigan State University’s School of Packaging (East Lansing, MI), notes that PLA is not quite ready for prime time (there are issues when it is exposed to higher temperatures), however demand at the consumer – and therefore, retail – level are driving progress. “It will probably be driven by over-the-counter packaging, and there is also more of a focus by retailers, such as Wal-Mart, with their sustainability agenda,” he says. “That will drive some of the changes for alternate materials.”

“With Wal-Mart saying that they want to move toward more sustainable packaging, it’s having an extreme effect that is rippling through the whole supply chain,” confirms Martha Leflar, project manager at Sustainable Packaging Commission, a Charlottesville, VA-based non-profit industry working group affiliated with GreenBlue, a non-profit organization focused on industrial design.

The group defines sustainable packaging as beneficial, safe and healthy for people and communities throughout its lifecycle, meeting market criteria for performance and cost; and is sourced, manufactured, transported and recycled using renewable energy, maximizing the use of renewable or recyclable source materials; is manufactured using clean technologies and best practices; is made from materials that remain healthy in all probable end-of-life scenarios; is physically designed to optimize materials and energy, and; is effectively recovered and utilized in biological and/or industrial cradle-to-cradle cycles.

This means that sustainability isn’t just a matter of incorporating one-off environmentally friendly solutions, the experts declare; it requires an overhaul of the entire manufacturing process down through the entire supply chain. “Right now, eco-efficiency and optimizing materials and resources is easy for companies, because that’s just good business sense,” Leflar says. “Strategies like source reduction, using recycled content and designing for transport – those kinds of things are pretty low-hanging fruit and easy.”

For packaging, Alcan is endeavoring to put big picture strategies in place with its Product Stewardship Program, a Web-enabled initiative that assesses products based on a comprehensive set of criteria that it has set out for each stage of the lifecycle. The main areas the program reviews are environmental, social and economic factors associated with products, taking everything from raw materials, distribution, and every stage throughout the cycle, right through to the end-of-life, into consideration.

“We look at product stewardship as being a combination of the sustainability assets combined with lifecycle thinking,” explains Nina Goodrich, director, innovation at Alcan Global Pharmaceutical in Montreal, Quebec.

Broken down, Alcan’s model examines environmental factors such as the depletion of energy resources, the impact the product has on the biosphere, emissions to air and water, its impact on waste treatment, the quality of environmental management, and risks associated with accidents. “Green is not just green,” Goodrich says, “and it’s not just renewable. You must look at the social elements.” It’s important, therefore, to assess the social impact of using renewable resources on communities.

Economically, the program analyzes the availability of raw materials, the technology used in the manufacturing process, the performance of the associated management systems and governance.

Alcan's stewardship program has been in the works over the last couple of years, and is in the process of being rolled out now. In order for it to succeed, the company must partner with its customers. "We believe in a partnership approach to development, and this type of tool is a critical element of that," Goodrich says.

Sustainability, Goodrich underlines, isn't just about the end product. "Where we can have significant leverage is if we look at those criteria, we might actually be able to change something at the input level that has a huge effect on a very large existing product, as opposed to just having a flagship eco-friendly product, which may have a very small niche market," she says. The power for really having sustainable pharmaceutical packaging, she adds, is reviewing the current products – as well as those that are new.

Green chemistry

Another aspect of green pharma is chemistry, and the U.S. Environmental Protection Agency's (EPA) Green Chemistry program, launched shortly after the passing of the Pollution Prevention Act in 1990, works to encourage the design, development and implementation of greener technologies in chemical product design. The initiative includes an awards program for companies taking measures in this area.

"What we have seen in the pharmaceutical industry since our launch is that they have been working rather actively in the manufacturing end of their products," says Tracy Williamson, chief of the Industrial Chemistry Branch at the EPA. "Many of the changes they make are incremental changes to the manufacture of these materials, and it turns out to quite a big savings in terms of waste not being generated and reduction in hazardous material usage. Often, the pharmaceutical doesn't have a lot of options for manufacture, whereas a lot of other industry sectors might."

Last year, the GCI (Green Chemistry Institute) Pharmaceutical Roundtable, affiliated with the American Chemical Society in Washington, D.C., began compiling data on a list of reactions commonly used in the pharmaceutical industry in an effort to discover greener alternatives. "If these alternatives are found – and therefore proven – they can be readily provided to the organization, and they could implement those reactions," explains Julie Manley, the roundtable's senior industrial coordinator. "It would be just another means to create the same molecule, but in a greener fashion."

Leflar declares that the movement toward sustainability is something that companies must recognize as something that not only saves the planet, but ensures the longevity of their own organizations. "You must think about global climate change, insurance risk, and whether or not your resources are going to be there tomorrow to make those materials that you are making now," she says. "You need to figure out a plan for all of this, and not just expect everything to be there for the rest of your company's existence. It's not going to be." PC