

Sustainability Strategy 2.0
Next-generation driver
of innovation

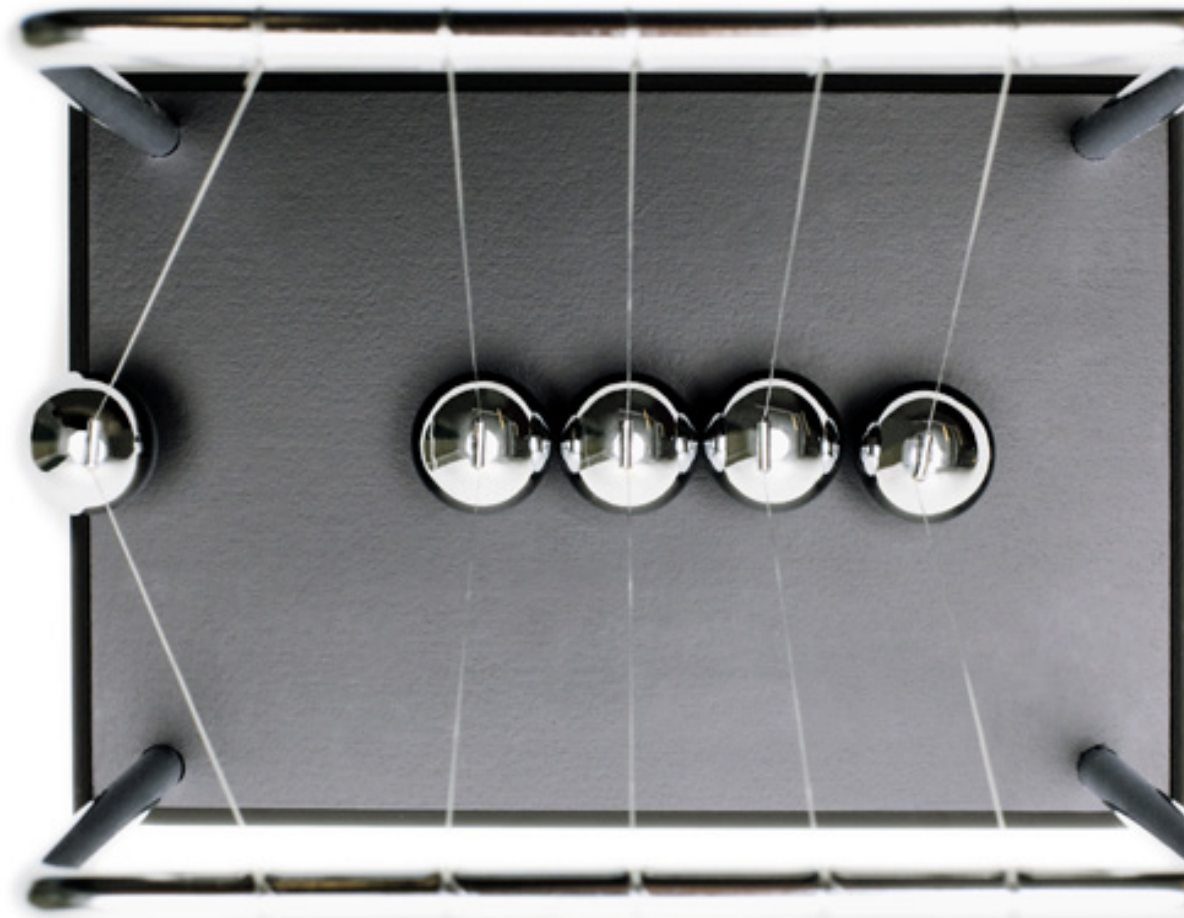


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Today's leading organizations recognize that sustainability is an essential aspect of their business strategies for growing and protecting enterprise value. In fact, a company's sustainability strategy can help it enhance revenue and brand value; engage with key stakeholders (such as employees and communities) to protect their license to operate; reduce costs; increase operational efficiencies and manage risk.

Sustainability Strategy 1.0 focused on embracing opportunities and managing risks from economic, environmental, and social developments. Sustainability Strategy 2.0 takes this further to help *create value* by proactively identifying how sustainability opportunities and risks flow through the extended value chain and then using that knowledge to drive innovation and develop long-term strategies. Companies can use a mapping tool designed specifically to provide a strategic assessment into the relationships within this extended value chain as a way to promote innovation and create long-term value.



Understanding innovation

The innovation efforts of organizations generally have three dimensions: cost leadership, quality/performance, and speed to market. Innovation can be incremental — year-over-year improvements — or it can be “disruptive” or a “game changer.” An example of cost leadership incremental innovation in telecommunications is the introduction of calling cards, which helped lower the cost of international calls. In contrast, the introduction of low- or no-cost Internet telephony is a game-changing innovation that has redefined the cost equation for the entire industry. Regarding quality and performance, Compact Fluorescent Lights (CFL) offer an improvement over standard incandescents in terms of

product life, but, Light Emitting Diode (LED) bulbs (a performance “game changer”) are not only more energy efficient, they also extend the product life further, are cooler to the touch, contain no mercury, and may offer higher-quality light. Considering the speed-to-market dimension, DVDs mailed to homes coupled with an online queue allow consumers to preselect their viewing options. However, the introduction of instant viewing via video on demand has changed the game in this industry. In general, innovation sets a new standard for cost, quality/performance, and/or speed to market via incremental or game-changing improvements in products and services.



Sustainability-driven innovation

Sustainability helps drive innovation through *design constraints* – the need or desire to reduce or substitute resources used, such as energy, carbon, water, materials, and waste. This focus on reduction or substitution can create a powerful driver for developing innovative products and operating models. Examples of how Sustainability Strategy 2.0 thinking drives innovation include:

- **Commodity and raw material availability and use.** Can we procure all inputs for our production operations? How are environmental events affecting biological stocks? Is consumption depleting nonrenewable resources?
- **Energy consumption and cost.** Are significant fluctuations in the price of carbon-based fuels likely to continue? Can we reduce our energy intensity to maintain or increase production but use less energy?

- **Emissions and waste.** Will legislation cause us to account for the cost of greenhouse gas emission? How would the rollout of packaging or waste disposal taxes affect our business?
- **Water availability and quality.** Will increasing water scarcity affect our ability to use water in production and manufacturing? Will stricter regulations require us to rethink production?
- **Demand for sustainable products.** How much do consumers and our extended value chain care about the sustainability attributes of our products? Are they willing to pay more for “greener” offerings?

Each of these sets of risks and opportunities can act as constraints on a company—helping to drive improvements to products and operations.



Unexpected design constraints

Much of this might sound intuitive. Yet what some companies are beginning to realize is that in many cases their suppliers or customers in the value chain are making decisions -- or are being exposed to external issues -- that create new design constraints, as well as corresponding business opportunities.

Take the example of a big-box retailer committed to building a sustainability program. It developed a sustainable packaging scorecard for its suppliers that asked, among other things, questions about the weight and energy intensity of product packaging. Recognizing that it may soon face questions from consumer product companies, a glass manufacturer (a supplier to the retailer) worked with Deloitte to develop its strategic response. The company came to understand that it needed to reinvigorate its research and design efforts to design stronger, lighter-weight containers as part of its suite of sustainability priorities.

Or consider the example of a company that designs and manufactures equipment to clean and maintain indoor and outdoor surfaces that proactively eliminated the need for chemicals in one of its cleaning machines. The cleaning technology electrically converts water into a cleaning solution with the benefits of improved performance, reduced operating costs, improved safety, and reduced environmental impact. The technology reduces costs and generates productivity gains by eliminating training as well as the purchasing, storing, handling, and mixing of chemicals. This game-changing innovation improved performance and reduced environmental impact.

These types of innovation are occurring more frequently as businesses, governments, nongovernmental organizations, and consumers around the world increase their focus on the value-creation potential of sustainability thinking. Businesses can benefit by developing a strategic and coordinated approach to analyzing the sustainability opportunity and risk landscape and planning their response.

A tool for innovation—identifying opportunities and risks in the value chain

How can companies identify the sustainability design constraints created by their value chain partners and other external issues? At the glass manufacturer, for instance, could leaders have anticipated that sustainability would be thrust into the spotlight because of the action of a retailer two steps downstream? What imperative will this create for companies to develop innovative products, services, or operations? Is there any way to take a holistic view of an industry, company, suppliers, and customers to proactively identify potential risks and opportunities before they put the company in a reactive position?

Mapping both financial and sustainability considerations across industry sectors can reveal the interaction of sustainability opportunities and risks. Companies can map their value chain partners and internal supply chains -- i.e., design, source, make, deliver, use, and return/end of life. To develop this matrix view, companies should layer in the financial impact and sustainability priority of each supply chain component for each sector. By combining these two elements together visually in a “heat map” (Figure 1), companies can see where opportunities and risks may exist for themselves — as well as for their value chain partners — and use that information to drive and enhance their sustainability strategies.

Figure 1: Illustrative heat map for a food industry company

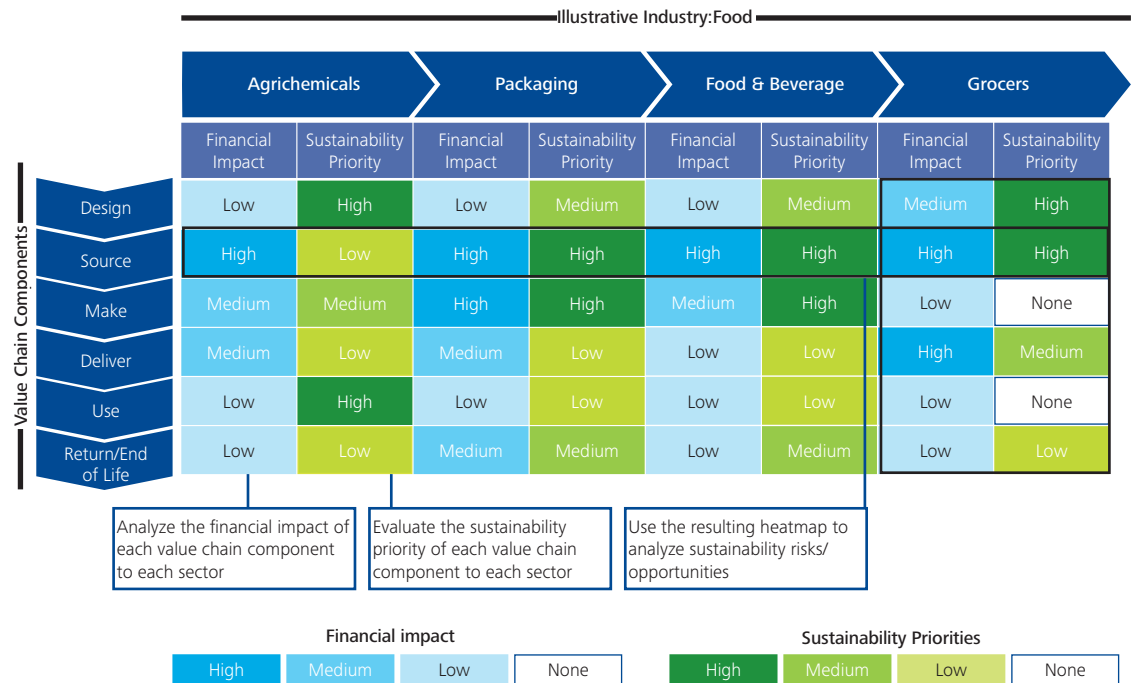
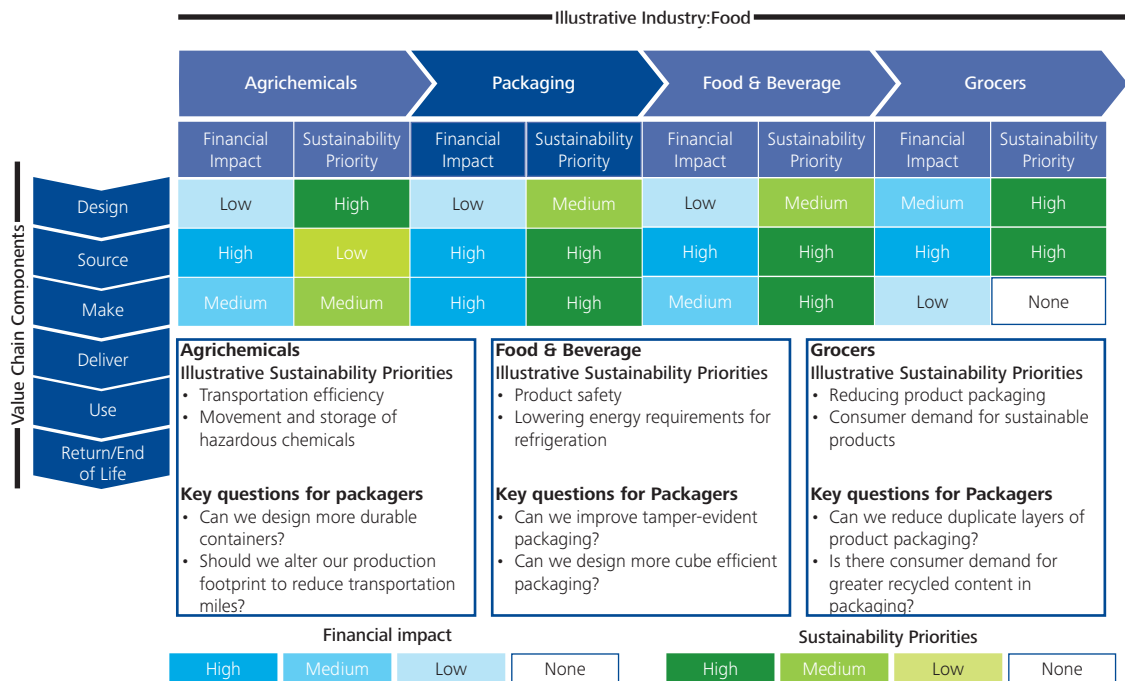


Figure 2 shows how a packaging company in the food industry might use the heat map to uncover strategically important opportunities and risks, some of which may operate as design constraints within the innovation process. For example, looking downstream, the packager sees that food and beverage companies have made public statements regarding product safety and lowering energy costs for refrigeration. These should provoke questions for the

packager, such as *Can we design or improve tamper-evident packaging? Can we produce more cube-efficient packaging to reduce transportation requirements for frozen goods?* Extending this exercise from source materials upstream to consumers downstream paints a highly detailed portrait of the sustainability opportunities and challenges that packaging companies may soon face.

Figure 2: How a packaging company might read the heat map



Reality check on Sustainability Strategy 2.0—Value delivered?

In Deloitte's work, financial and sustainability analysis has revealed surprising and productive results. Some of the most important insights gained include:

Lesson 1: Use all the tools in your box

The methodology described above and its output — the heat map — are designed to evaluate a company's sustainability opportunities and risks throughout its extended value chain. The tool can help uncover issues posed by a company's partners. It also can be used to drive innovation efforts. Most importantly, though, the heat map can be used as a tool in the development of a holistic sustainability strategy. Additional tools companies might use to improve their sustainability strategies include:

- **Operational input/output analysis:** Examines critical inputs (e.g., materials, energy) and outputs (e.g., finished products, greenhouse gas emissions, water pollutants), giving leaders a picture of the impact sustainability efforts have across the company
- **Profit and loss sensitivity analysis:** Helps identify the bottom-line impact that sustainability issues (e.g., energy price fluctuations) have on a business
- **Regulatory risk analysis:** Helps leaders anticipate both the current and likely future laws and regulations that might affect a company's operations
- **Customer and competitor analyses:** Helps uncover sustainability priorities of the company's key customers and competitors
- **Brand positioning analysis:** Helps assess customer sustainability priorities against product attributes and brand positioning

Lesson 2: Collaborate where it makes sense

When creating a heat map for their company's market, leaders should be especially attuned to places where there are consistently high sustainability priorities across neighboring sectors. For example, if areas of potential collaboration occur in the product design phase, a company may have opportunities to jointly focus on innovation to design products that are sustainable from end to end. The result of this type of collaboration may go beyond more sustainable products to include cost savings and improved compliance with regulatory mandates.

Lesson 3: Follow the money and value creation

Investigate issues where high financial impact aligns with high sustainability priority. Companies in the consumer packaged goods industry, for example, might reap relatively larger financial benefits by improving sustainability performance in both sourcing and manufacturing. For example, in the case of the previously mentioned glass manufacturer, its "make" component of the value chain carried large financial and sustainability impacts. For instance, it runs glass melters at 2,400 Fahrenheit around the clock, consuming significant fuel loads.

Lesson 4: Mind the gap(s)

Discrepancies between financial impact and sustainability priority may indicate that companies are giving too little or too much attention to one sustainability priority over another. For example, one manufacturer Deloitte worked with was initially quite focused on the presumed large impact that proposed carbon legislation would have on its business. Further analysis revealed that carbon legislation posed virtually no financial risk. Instead, the analysis showed the company should focus on its global sourcing approach. Although it sourced from a number of low-cost countries, the company did not have robust practices in place to monitor working conditions and product safety associated with these goods. The investigation helped align priorities with financial impact.

Lesson 5: The present may not be a good proxy for the future

Sustainability strategies should address current issues but leave room for projections of future opportunities and risks as well. Although the heat map tool provides a current-state snapshot of an industry and company, leaders should keep in mind that the future landscape could look quite different. For example, companies may not consider water as a sustainability or even a financial risk now. However, population growth and pollution could create a situation where this critical resource may become significantly limited.

Conclusion: A broader view of sustainability leads to value creation

Sustainability Strategy 2.0 means looking to sustainability as a driver of innovation — looking beyond the company's walls to the ecosystem of opportunities and risks posed by a dynamic set of industry partners. By considering how changes to links in the value chain affect their own operations, leaders can achieve a new perspective on sustainability. How can their company collaborate with value chain participants on innovation? What are ways to anticipate market dynamics that could affect their business? How well will leaders be able to identify trends that contain clues about the future of their company's value chain?

Once leaders answer these questions, they can begin formulating or refining an enterprise sustainability strategy in a way that encompasses a future-oriented vision statement, aspirational goals, prioritized initiatives to achieve those goals, and metrics to measure progress. Companies that achieve this progression from vision, to goals, to strategies, to metrics have the opportunity to enhance revenue and brand value, engage effectively with key stakeholders, reduce costs, and manage risk.

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