Sustainability Practices That Work
Results from the Sustainable Value Chain Survey
Introduction
Deloitte Consulting, the Corporate Responsibility Officer Association (CROA), the Institute for Supply Management™ (ISM), and the American Society for Quality (ASQ) jointly conducted a research project into management practices that create success in sustainable value chain efforts. We strove to conduct research that was unique for two reasons: Its focus on success and its extension beyond the supply chain to the value chain (both are further explained below). Given that a large and growing number of organizations are interested in making their value chains more sustainable, we strove to provide actionable information that would help them succeed. We did not want to duplicate existing work, but rather to build on it and ask new and different questions. As a result, we examined sustainable supply chain studies from the last five years (there were no sustainable value chain ones) and did not ask any questions that these previous efforts had answered. This prevented the research from repeating the (valuable) work others had already done, and freed it up to address new areas, such as the many aspects of success and the expansion to the full value chain.

In comparison to previous research, this effort:

1. Focuses on the value chain versus the supply chain. While existing studies focused on an organization’s suppliers, the focus of this research is broader: it asks about suppliers, distributors, and partners as well.

2. Focuses on identifying what works — that is, determining what are the most effective practices an organization can adopt. While other research has done a good job looking into the overall level of interest in sustainability and companies’ plans for the future, less has been done to offer organizations guidance about which actions have demonstrated results and which practices were most effective at increasing value chain sustainability and improving financial performance as well. For example, are organizations that actively partner with their suppliers, rather than just giving them directions or requirements, more successful than those that don’t? If so, how much? The answer to these types of questions will allow organizations to put their time, energy, and resources into the practices that can actually provide the greatest benefits.

To construct the survey instrument used in this research, we began by developing hypotheses through interviews, case studies, and secondary research (the hypotheses and development process are described in more detail in the next section), and then creating questions based on those hypotheses. Nearly 1,000 value chain leaders put in the time and effort necessary to answer those questions, giving us insight into their practices and performance and enabling us to identify those practices that stood out for their effectiveness.
Survey demographics

- Almost 1,000 organizations responded, including for-profit companies, nonprofit organizations, institutions of higher education, and governmental/quasi-governmental agencies;
- Over three-fourths of the respondents were for-profit companies, with the majority headquartered in North America;
- Over 300 of the organizations exceeded $1 billion in size.

Methodology

The research was designed to tie specific sustainability practices organizations employed to those organizations’ level of success with value chain sustainability. To accomplish this, the portion dealing with success needed detailed information, which meant the research had to ask about a dozen questions just on goals and success — such as questions about areas in which the organizations had set goals (e.g., waste, water, energy, labor), when those goals were set (e.g., set five years ago but updated two years ago), how much of the goals they had accomplished, and more. These in-depth questions were designed to measure the extent that sustainability initiatives had been implemented and achieved success, touched on subjects such as:

- Areas in which organizations have goals (e.g. energy or water or toxins);
- Magnitude of the goals (e.g. 5% improvement or 50% improvement);
- Timing of the goals;
- Progress against the goals;
- Importance of the goals.

A second set of questions focused on the demographic characteristics of the respondents, to permit an understanding of, for example, the size, location, industry, and type of organization for each respondent.

A third set of questions revolved around sustainable value chain management practices. These serve as the counterpart to the demographic and goal-related questions, enabling the research to connect what organizations do with what results they achieve. These leading practices questions were hypotheses-driven and developed after extensive research and refinement. To create this list of top survey hypotheses and characteristics, the team researched the last five years’ worth of articles and surveys describing research in sustainable supply chains, and, as mentioned earlier, avoided asking any questions that had been addressed by others.
Hypotheses were developed with the intention that they would be:

- Interesting and insightful;
- Novel and not already addressed by existing research;
- Able to drive actionable recommendations.

Each hypothesis was effectively a combination of a characteristic (action and/or demographic) and an outcome. For example:

**Hypothesis:** Companies that engage with their suppliers and other value chain partners are more successful.

**Question (targeting a characteristic/action on the company’s part):** How does your organization engage directly with your suppliers and others in your value chain? (Note: Respondents were able to select more than one answer choice.)

A. We engage with our suppliers and others by working directly with them
B. We engage with our suppliers and others by coordinating with them (e.g., coordinating purchasing of third party products, coordinating sustainability initiatives)
C. We do not engage directly but we do provide them with direction
D. We do not engage with suppliers and others, nor do we provide them with direction
E. Don’t know/not applicable

Later in the survey, organizations were asked, For the sustainable value chain goals that you have set, how successful have you been in achieving those goals?

Given the answers to the two questions above, a connection can be drawn between how organizations engage with their value chain partners and their achievement of their sustainability goals, thereby providing information about what works. In the above case, it became clear that those organizations that engaged with their value chain partners were noticeably more successful, providing support for the hypothesis that supplier engagement is important in determining success.
Categorization of results

<table>
<thead>
<tr>
<th>Result categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category #1: Supplier Engagement</td>
</tr>
<tr>
<td>Category #2: Goals and Standards</td>
</tr>
<tr>
<td>Category #3: External Resources</td>
</tr>
</tbody>
</table>

The formal analysis conducted after the survey examined associations between the sustainability practices and levels of achievement. Performance levels were compared between respondents whose companies had adopted a specific management practice and those that had not. The comparison was done using Logit regression — and controlling for key factors such as geography, organization size, and industry. The results revealed which sustainability practices have a statistically significant impact on:

- Overall success of the sustainable value chain initiative
- Cost savings
- Revenue impact

Based on the research results, the leading practices that were tied to greater reported achievement on goals could be separated into three broad categories: (1) Supplier Engagement, (2) Goals and Standards, and (3) External Resources. Within the categories are specific management practices that have demonstrably improved sustainability initiatives — for example, within Goals and Standards are practices related to what kind of goals organizations set and whether they use existing standards.

### Category #1: Supplier Engagement

In a modern value chain, external suppliers typically do the lion’s share of the work and they account for most of the resource usage, waste output, and materials cost. For example, a number of companies have found that their supply chains account for 80% or more of their total carbon footprint. Thus, suppliers are a prime target for sustainability improvements.

The research revealed that organizations that had engaged with their value chain members about sustainability had more successful initiatives than those that did not adopt the practice, strengthening the organizations’ sustainability performance. There was another benefit as well: significantly stronger relationships with associated value chain members including suppliers, distribution/channels, complementary businesses, and customers.

The top specific practices within the category of engagement that led to increased success on sustainability initiatives were:

- **Engage with suppliers** — while it is not surprising that this is valuable, there are a number of different ways to engage. Creating dialogs with suppliers, and going beyond just providing requirements to working together on solutions, are ways to create deeper engagement.

- **Provide suppliers with tools, policies and/or processes** — organizations can share not only their expectations and requirements with their suppliers, but also their means — such as specific tools, tested processes, and policies that have been refined over time — for satisfying them.

- **Reward suppliers for sharing information with each other** — organizations can promote sharing among their supplier base, which often share characteristics or challenges and can benefit from what others have done to address them.

**Engage with suppliers**

In the research, engaging with suppliers of any tier (the research asked separately about first, second, and third tier suppliers) was a practice that was found to be strongly correlated to increased success on sustainability efforts. In addition, there were areas where engaging with second and third tier suppliers created additional benefit, meaning that companies should not only listen and collaborate with immediate suppliers, but they should also seek to engage these additional supplier tiers (i.e. the suppliers of their suppliers).

---

1. [http://www.ceres.org/issues/supply-chain](http://www.ceres.org/issues/supply-chain). “[U]p to 60 percent of a manufacturing company’s carbon footprint is in its supply chain. For retailers, that figure is closer to 80 percent — with an equally high supply chain exposure to human rights and social issues.”
Real engagement entails significant interaction from all parties; through direct interaction, discussion, and working together the groundwork for trust and improvement can be established between all parties. One aspect that has proven important in other disciplines that have engaged suppliers (e.g., the quality movement) is to assuage any supplier concerns that they will be pressured inordinately to drive down their costs, rather than it being a joint effort to improve performance of the value chain as a whole.

When implementing the practice of engaging suppliers and value chain partners, some organizations strive to instill a culture of sustainability throughout their own organizations first. By doing so, they can effectively model the sense of importance around sustainability for others in their value chains.

Engagement is not simply a case where companies submit their suppliers to regulations, audits, and other compliance measures. Engagement works as a leading practice because suppliers feel encouraged to follow the example of the company and motivated to change their practices to be more sustainable. It means frequent conversations and touch points with suppliers that emphasize that sustainability is an important goal.

This open dialogue should encourage sustainable ideas from suppliers in order to find innovation opportunities together, including ways to redesign or refine products and processes. In addition, supplier feedback can be incorporated into this practice in order to identify areas for improvement. The purpose of these working discussions is to build a relationship rather than to enact a series of transactions. Over time and with dedicated time and effort, these practices can lead to increased success in sustainability goals.

For example, Procter & Gamble prides itself on close collaboration with its entire supply chain, citing that this type of “engagement helps [P&G] bring the best thinking to the table,” thereby benefiting both their business and their brands. P&G maintains a Supplier Sustainability Board that draws members from over 20 leading global suppliers, and this team is responsible for overseeing the development of specific supplier-related sustainability initiatives. In this way, P&G has engaged its suppliers by allowing them to have a direct say in issues that affect them and they have created a forum for discussion and feedback.

**Provide suppliers with tools, policies and processes**

We believe providing suppliers with tools, policies, and processes they can use creates value for several reasons: First, it makes it easier for suppliers to meet an organization’s requirements when they are equipped with the tools and processes that the organization itself finds valuable for doing so. Second, the providing organization is, in some cases, farther along the sustainability maturity curve than its suppliers, which means its tools, processes, and policies are likely to be an improvement over those suppliers currently use. Third, it sets a tone of collaboration and engagement that is more likely to lead to joint sustainability efforts and improvement.

Suggestions for knowledge transfer include instituting a code of conduct suppliers can use and adapt for their own supply chain, assisting suppliers with tracking progress and reporting, and offering training and other forms of knowledge transfer (e.g., helping create action plans or recommending specific technologies). As one example of the results of these efforts, the research found that organizations that published supplier codes of conduct for use by all tiers of suppliers (not just direct, tier one suppliers) reported more success in their value chain sustainability initiatives.

---

Another area with potential for beneficial information sharing is organizational policies, such as designating a specific functional area or a point person to be responsible for value chain sustainability. The research shows that this organizational practice is beneficial (increasing the likelihood of accomplishing sustainability goals), and an organization that has already instituted its own sustainability point person can provide guidance to a supplier without a point person on how to identify a sustainability point person and the benefits of doing so.

One company that shares knowledge with its suppliers is Siemens. Siemens provides web-based training on sustainability for members of its value chain in order to encourage them to adopt sustainability. Siemens recognizes sustainability as a key factor in boosting the success of their company, stating that “Sustainability in the Supply Chain means for us, creating long-term value for all of our stakeholders by means of a network of excellent and innovative suppliers…”

Reward suppliers for sharing information with each other

The idea of rewarding suppliers for working with each other, not just with the customer’s organization, is often greeted with surprise. However, upon reflection, it is possible to see what may be behind the value it provides — suppliers often deal with each other, not just their shared customer, as part of the supply chain, and they may well have common issues that are amenable to knowledge sharing. By sharing information, suppliers can open up previously undiscovered opportunities to improve the sustainability and business performance of the entire value chain — for example, by finding the improvement opportunities that exist where one supplier interfaces with another.

These handoffs from one supplier to another often present untapped opportunities for improvement because organizations typically focus their improvement efforts on their own operations, stopping before getting to the places that they touch other organizations. For example, a component supplier may package the component in a way that is inefficient for the downstream supplier (more packaging than is needed, or an inconvenient packaging type), resulting in greater overall cost for the supply chain — and, if the packaging is excessive compared to the downstream supplier’s needs, decreased sustainability performance as well.

Some suppliers may also have information that others can use to improve their operations and sustainability. For example, one garment manufacturer found that some of its suppliers were producing the same garments using only half as much water. Sharing the techniques behind this performance with other suppliers could raise the performance of the supply chain overall, and the suppliers who provided the practices could be rewarded for doing so.

This practice of rewarding suppliers for sharing information reinforces the understanding that suppliers do not work in isolation or in a vacuum, but are instead connected in a larger system. Suppliers are on the front lines when it comes to knowledge regarding cost, quality, and delivery timing, and thus should be urged to share their information. Collaboration can help cut down areas where waste is occurring, where resources are improperly allocated, and can encourage practices that lead to better results.

Rewards an organization gives its suppliers can be monetary or non-monetary. One approach would be to rate the collaboration of suppliers and to have that rating affect the ability to do more business with the company. More open suppliers could be given preference in competitive situations, more overall volume, or longer average contracts. As a supplier is demonstrated reliable and collaborative, it makes sense for a company to reinforce that behavior and to strengthen relationships with that supplier. Direct financial rewards can include sharing cost savings with suppliers that have assisted in bringing them about.

---

An example of encouraging information sharing is MillerCoors, which sees it as a major opportunity to “create a more robust and standardized environment for companies to share information about their sustainability practices.” MillerCoors asks a select number of their top suppliers to join the Supplier Ethical Data Exchange (Sedex), which enables the company to collect data and understand the impact of their procurement processes on sustainability. The Sedex furthermore helps MillerCoors select suppliers that are “aligned with [their] values” and that the suppliers’ “sustainability efforts [are rewarded] with [MillerCoors’] purchasing power.”

Category #2: Goals and Standards

There’s an old saying that anything worth doing is worth measuring. That can be especially true for sustainability initiatives, as it can be a big boost to integration with the rest of the organization for others to see stronger measurement and greater rigor in the management of sustainability efforts. Separate from effects such as this, however, do better measures and standards improve the success of sustainable value chain initiatives themselves? The research shows that they do.

Broadly, the research showed benefits when organizations:

- **Establish quantitative goals, not just qualitative ones** — while it is not surprising that quantitative goals are valuable, they were nonetheless a minority of the goals among respondents.

- **Use international management standards** — the use of management standards addresses the reinventing-the-wheel pattern that often accompanies moving into a new area. This means it reduces both wasted effort and the omission of important information that have been built into existing standards.

**Establish quantitative goals, not just qualitative ones**

Quantitative goals differ from qualitative ones in several ways that could explain the benefit they provide: For example, their benefits for focus, improvement potential, and for credibility. In the area of focus, having to set quantitative goals can provide the impetus to focus more specifically and to get deeper into how and why efforts work, increasing organizations’ depth of knowledge and their ability to predict and communicate anticipated results.

In addition, quantitative goals are a foundational aspect of being able to measure and demonstrate the results of sustainability efforts. This ability to measure, and to use those measures to enable the organization to know if it is on schedule to reach its goals — or even if what it is doing is working at all — are fundamental to being able to hold the organization accountable for meeting its goals.

With quantitative measures, it is possible to monitor how well the sustainability initiatives are doing and to receive early warning when results are not aligning with expectations, enabling the organization to take note and take action to get back on track. For example, one well-known organization estimated that its likelihood of reaching sustainability goals will improve 10% due to better, more timely, quantitative information — an improvement that is only possible when goals are sufficiently rigorous and measurable.

A third way in which quantitative goals can provide value is by enabling organizations to engage their process-improvement capabilities. For example, organizations can see how different locations do at meeting their goals and then identify the practices and personnel that are behind the success of those that perform at the highest level. Quantitative information also allows the use of lean, Six Sigma, and other improvement techniques organizations may have available internally — increasing results, efficiency, and ROI over time. For all of these reasons, it makes sense that multiple research projects have shown that those organizations with quantitative goals and measures are more satisfied with their responsibility and sustainability progress than those without.
Use international management standards
The value of international management standards may result from two key advantages it provides: the embedded knowledge they provide as the result of input from numerous different stakeholders and the opportunity to use common information set used by many other organizations. Both embedded knowledge and a common information set facilitate comparisons, improve cross-organization learning, and provide the opportunity to bring in and benefit from external perspectives (something that is consistent with other practices tied to success, such as the use of external experts and organizations).

International standards provide an opportunity to learn from what others have done (and, from an organizational perspective, to avoid the temptation to reinvent the wheel). During the process of creation and refinement — in some cases, stretching over many years — standards have become populated with many different stakeholders’ input, growing more comprehensive as a result. For example, the ISO standard for responsibility, ISO 26000, has seven core subjects and addresses 36 specific issues within them. It also provides guidance, examples, and other resources from which organizations can learn.

As two examples of what is meant by international standards, consider ISO 26000 and the Reporting Framework of the Global Reporting Initiative (GRI):

• ISO 26000 — provides guidance on how businesses and organizations can operate in a socially responsible way, which means acting in an ethical and transparent way that contributes to the health and welfare of society.

• The Global Reporting Initiative — The Reporting Framework is intended to serve as a generally accepted framework for reporting on an organization’s economic, environmental, and social performance. The GRI Reporting Framework contains general and sector-specific content that has been agreed by a wide range of stakeholders around the world to be generally applicable for reporting an organization’s sustainability performance.

Use of international standards also enables benchmarking across the competitive landscape. Using the same categories, frameworks, or definitions that many other organizations use makes it possible to compare sustainability and value chain results with others in the same industry, geography, or industry. In turn, this enables organizations to determine how they are progressing and which external organizations they might learn from or emulate in certain areas.

International management standards work in collaboration with numerous organizations including consulting firms, industry trade organizations, governments, auditing firms, and non-governmental organizations, and the research found that engagement with 3rd party groups improved the likelihood of reaching sustainable supply chain goals as well as reducing costs. Using international management standards can help identify which 3rd parties to consider working with and can create a common foundation for working together.

One example of standards use is a multibillion-dollar materials and construction company that participated in our research. This organization uses international management standards and has improved efficiencies to a great extent, improved revenues by 30%-40% and reduced supply chain costs in the areas affected by sustainable value chain efforts by 30%-40%.

Category #3: External Resources
Sustainability is an area with a lot of breadth and, compared to most business and organizational topics, a relatively new field. As a result, it can be very difficult for an organization to have all of the knowledge and skills needed to succeed available internally. However, organizations seeking to make their value chains more sustainable can engage with external resources to help address areas where they are not as strong, and the research shows that doing so substantially increases their odds of success, the likelihood that they will improve their relationships with suppliers, and the extent of the cost reductions they achieve.
External resources practices that led to greater success with value chain sustainability initiatives were:

- **Engage with complementary businesses** — working with organizations that are neither suppliers nor customers nor competitors, but whose products or services complement those of the respondents’ organizations.

  A complementary business is one that is not a supplier, customer, or competitor, but rather whose products or services combine with those of the respondents’ organizations to create value for customers. In this way, the better the complementary product or service, or the better the integration of the complementary product or service, the better the respondents’ organizations look to customers.

- **Join sustainability and supply chain organizations** — participation in sustainability and supply chain organizations can help a company stay abreast of the latest trends and developments and learn from what others are doing.

  **Engage with complementary businesses**
  
  The research shows that organizations that collaborate with complementary ones reap benefits related to both their likelihood of reaching their goals and the extent of their revenue gains. When you consider that engaging with complementary businesses both brings in an outside perspective and can lead to better integration and increased value from the customers’ perspective, it makes sense that it would yield these benefits.

For example, a computer hardware company and a software company are not competitors and they may not be suppliers or customers — for instance, consider a hardware company that does not purchase video editing software from a company that makes it, nor does it sell them computers. However, if the hardware company’s customers use the computers for video editing, then the better the software performs the better the hardware looks to those customers as a video editing platform. The relationship goes the other way too — the better the hardware performs, the more satisfying it is to use the software for video editing. In this case, the software company is a complementary business for the hardware company (and vice versa).

- **Engage outside specialists in value chain sustainability if needed** — working with organizations that have specific expertise in this area is another option.
One software company that is a leader in sustainability has discussed with consulting organizations how their respective strengths can be combined to help organizations that are customers of both of them to improve their sustainability performance. For example, the software might provide the ability to more quickly identify waste in a customer’s operations, while the consulting firm might help the organization make the business case for fixing the problems and then manage a project to do that. In this way, the collaboration between the software and consulting firms improves their ability to jointly provide value to the customer, and thus the attractiveness of a solution based on their software and services.

Join sustainability and supply chain organizations
To formalize sustainability efforts and learn from others pursuing similar goals, companies can seek membership in sustainability and supply chain organizations. Examples of such organizations include those involved in this research and others like them. Institutions such as these can provide forums for information exchange among members, tools, advice on service providers, and the support of peers working on similar efforts.

Additional specific benefits of joining sustainability and supply chain organizations can include access to members-only resources, discounts on events and product and services, newsletters, publicity, professional development, and networking opportunities. These organizations also often have extensive collections of materials, case studies, and reports regarding sustainability, as well as tools that can assist with measuring and tracking progress on sustainability and supply chain initiatives. Furthermore, membership in such an organization can greatly enhance a company’s credibility and public image in committing to a sustainable path. This enriched environment may be why the research shows that belonging to such associations makes an organization more likely to achieve its sustainability goals.

One example of a sector-specific sustainability organization is the Sustainable Apparel Coalition, which was created in 2010 and currently consists of 49 members that represent almost one-third of the clothing and footwear sold in the world. While the companies involved are normally competitors, this was a collaborative effort to turn the apparel industry into one “that produces no unnecessary environmental harm and has a positive impact on the people and communities associated with its activities.” The association encourages product and process innovation and also provides universal standards and tools that help stakeholders measure performance against environmental and social metrics.

Engage outside specialists in value chain sustainability
The research found that organizations engaging outside specialists saw greater likelihood of meeting their sustainable value chain goals and also reducing costs. It makes sense that this may result from three primary aspects in which outside specialists can provide benefit: knowledge, capacity, and emphasis.

From a knowledge perspective, few organizations can manage to have all the expertise they need in all of the areas in which they need it. While some organizations may have all of the sustainable value chain expertise they need, for those that do not, engaging outside organizations with specialists in this area could be of value.

Specialist organizations can also bring not only expertise but capacity, making it possible to do more around value chain sustainability (or do it faster) than would otherwise be possible. They also may emphasize different aspects of the effort, such as creating and testing a business case for sustainable value chain initiatives; as long as the areas of emphasis selected are appropriate, this can help organizations broaden the internal support for their efforts and sharpen their thinking in additional areas.
The United States Postal Service (USPS) is an example of an organization that utilized the resources and experience of external experts. It engaged external resources that had a deep understanding of sustainability and that also knew the postal industry to help plan and implement sustainability strategies faster than they could do alone. The consultants assisted USPS in identifying key environmental metrics and key performance indicators, as well as assisting with USPS’s energy consumption reporting and analysis. Thus, USPS’s path to becoming a sustainability leader was jumpstarted with outside assistance.

**Next Steps**
Before this research, it was a challenge for organizations to know the most effective way to structure, manage, and execute sustainability initiatives. The typical progression for the development of a sustainable business model includes establishing goals and designing initiatives; however, the goal of the research was to identify which specific practices can help companies achieve their sustainability goals. The research results reveal that by aligning sustainability goals with specific, effective management practices, an organization can significantly increase the likelihood of achieving goals, lowering costs or growing revenues.

How you can use the results of the research:

- **Does your organization have goals, but is still designing initiatives?** Make use of the tested leading practices in this research to enhance your initiative development process.

- **Already have goals and initiatives?** Utilize this research to determine which tested management practices you may be able to put to use and to find the ones that most directly align with your goals.

- **Wondering where to go next?** Look at what works for areas in which you want to improve — for example, cost reduction — and implement those practices.

**Conclusion**
In recent years, many studies have examined supply chain sustainability efforts. However, we strove to make this research different in two ways: Focusing on success and considering the entire value chain.

Other research has shown that organizations are spending significant amounts of time and money pursuing sustainability in their value chains. This research contributes to the value created by those efforts by identifying the kinds of sustainability practices that give value chains a measurable boost in both business and sustainability performance. Applying the tested practices highlighted in this research can help make your business more sustainable — and more profitable.

Are you missing leading practices that could grow business value or improve the chances of meeting your sustainability goals? If so, look over the practices in this research to see what you don’t use. Then get to work — bringing greater value to your organization and greater sustainability to the world.

**Acknowledgements**
This project benefitted from the involvement of many people. We would like to extend special thanks to:
- Professor Michael W. Toffel, Associate Professor of Business Administration, Harvard Business School.
- Ben Cornell, Arjita Shrimali, Alex Dunn, Alec Kasuya, Katy Shaw, Diana Lee, Jared Sheehan, and Jacob Shirmer, Deloitte Consulting, LLP.
- Richard Crespin and Elizabeth Boudrie, Corporate Responsibility Officers Association.
- Michelle Mason and Dave Celata, American Society for Quality.
- Scott Sturzl, Institute for Supply Management™
- Daniel Aronson, Research Lead.