



managing sustainable global supply chains

Framework and Best Practices



Network for
Business Sustainability

Business. Thinking. Ahead.

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Supply chain
disruptions can
be devastating
for operations
and share price.

How can
companies manage
their global supply
chains to leverage
opportunities and
mitigate risk?

the need for responsible and responsive supply chains

Globalization has profoundly affected how companies are managed strategically and operationally.

One key outcome: the production of many goods has shifted to developing and transitional economies, resulting in lower cost of production. China has become the 'workshop of the world,' offering a large workforce and low overhead costs that enable companies to produce high volumes of products.

At the same time, new risks and challenges have emerged from these new, global supply chains. The risks range from inconsistent or poor quality to supply disruptions. Add to these risks the layer of cultural, legal, administrative, linguistic and political issues arising from cross-boundary networks.

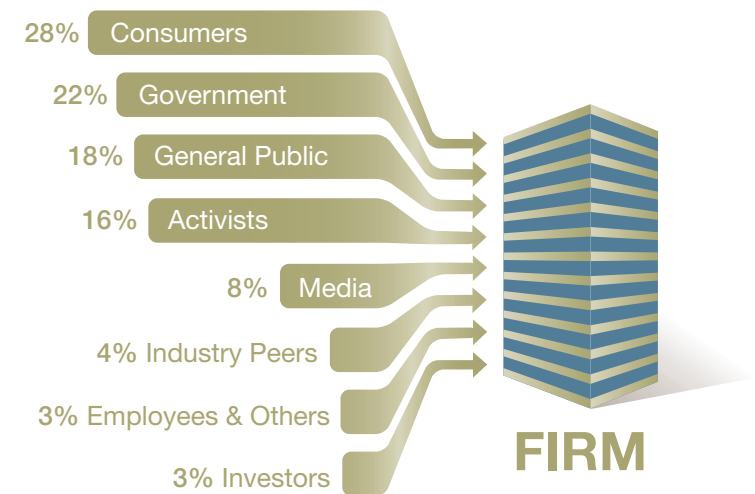
Finally, consider the environmental issues such as waste and emissions reduction, recycling, product design, and recovery and the social issues such as child labour, working conditions, bribery and corruption. There is seemingly no end to the complexity.

Globalization + public concern about social and environmental issues
= increased complexity in managing supply chains

While at one time addressing these social and environmental issues might have just been 'nice to do,' that is no longer the case. Companies that fail to manage such issues expose themselves to both operational and reputational risk. For example:

- Nike was publicly accused of using child labour in offshore factories in 1996. This criticism endured until 1998 when Nike's CEO announced significant, long-term measures to improve working conditions at supplier factories.
- Mattel was forced to recall US\$100 million worth of product when one supplier used lead-contaminated paint on the company's toys in 2007. The company watched its stock price fall 18% in the months that followed and has since been the target of litigation.
- Apple faced renewed criticism in 2011 for both possible environmental indiscretions and a lack of transparency in its supply chain. Apple had previously admitted that in 2008 half of its suppliers' factories for key products including iPhones and iPads weren't paying valid overtime, one quarter weren't paying workers minimum wage, and one quarter failed to meet environmental standards. Time will tell if such issues will permanently tarnish Apple's 'clean' image.

STAKEHOLDERS WANT SUSTAINABLE SUPPLY CHAINS



This figure shows the sources of pressure on firms to address social and environmental issues in their global supply chains. The percentages indicate the frequency with which each pressure was cited in the research.

Designed for executives and senior supply chain, purchasing and sustainability managers, this report presents frameworks for developing competitive and sustainable global supply chains

How can your company build a global supply chain that is competitive while sustainable? Responsive while responsible? By applying this research to your supply chain, you can equip your company to respond to consumer demands, survive global shocks, be more flexible, avoid supply disruptions, mitigate reputational risk, avoid regulatory barriers, and fend off global competition.

WHAT ARE THE KEY ISSUES IN INTERNATIONAL SUPPLY CHAIN SUSTAINABILITY?



This figure shows the key sustainability issues in supply chains. The frequency represents the number of sources (of 194) that dealt with each issue.

The Network for Business Sustainability commissioned a systematic review of the body of research on sustainable global supply chains. Synthesizing data from 194 studies spanning 25 years of research, this review presents the most comprehensive and credible evidence to date on developing sustainable supply chains. The frameworks presented in the report were developed inductively from the existing anecdotal and empirical evidence. The full-length systematic review is available at nbs.net/knowledge/supply-chains.

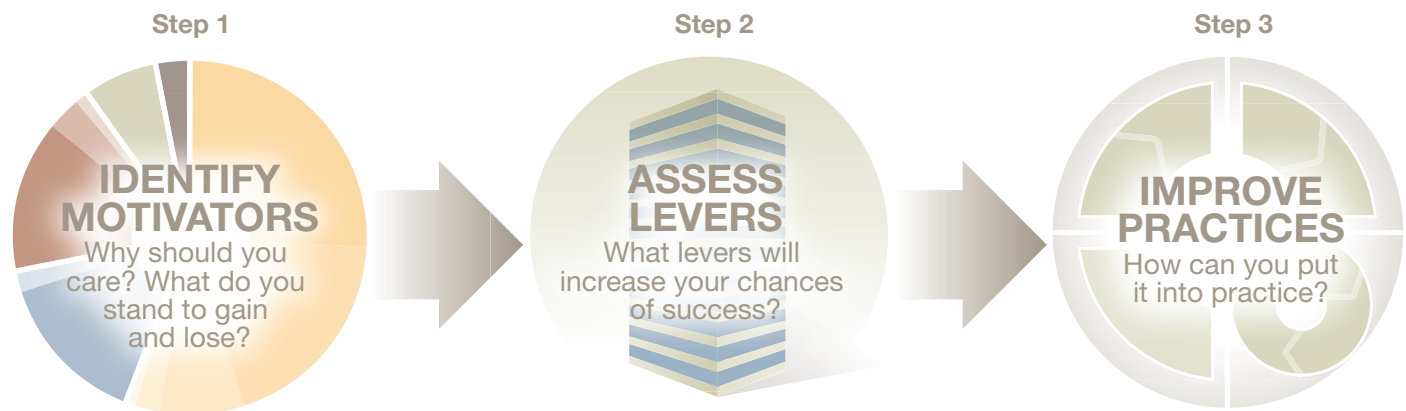
WHAT IS ‘MANAGING FOR SUPPLY CHAIN SUSTAINABILITY’?

We adapt an existing definition describing ‘managing for supply chain sustainability’ as incorporating a company’s social, environmental and economic goals into the coordination of inter-business processes to improve the long-term economic performance of the individual company and its supply chains.¹

¹ Adapted from Carter, C. R., and Rogers, D. S. 2008. A framework of sustainable supply chain management: Moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 38(5): 360–387.

developing sustainable global supply chains: three steps

To develop new supply chains or improve existing ones, executives must think at a number of levels. First, consider the big picture: what is motivating change in your business? What are the opportunities and risks? Once your motivations are clear, identify the levers that will increase your odds of success. Finally, put in place practices that will help you realize your desired outcomes.

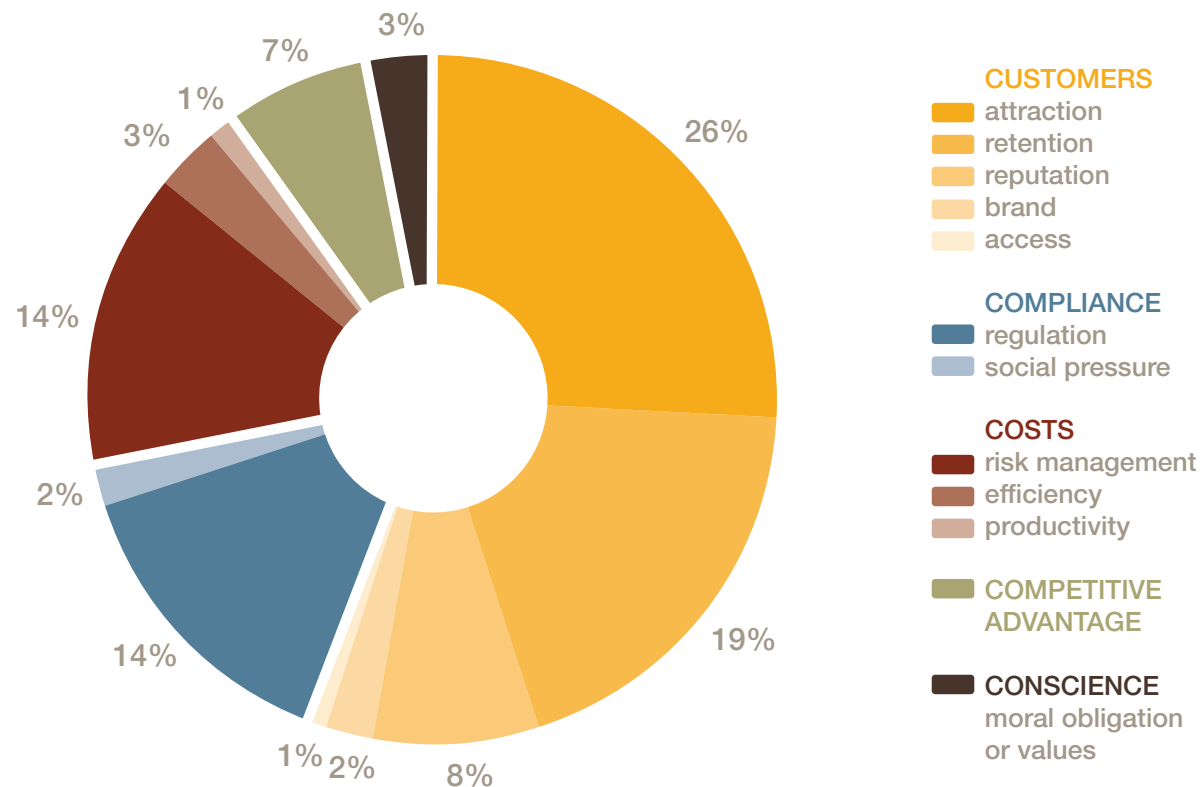


The frameworks presented in the following pages will help you think through each of these steps.

Identify Motivators: The 5C's Framework of Motivation

There are many reasons to address social and environmental issues in your supply chain. Understanding these issues will enable you to set goals and prioritize practices. The chart below lists the reasons cited by research, which align with five key areas:

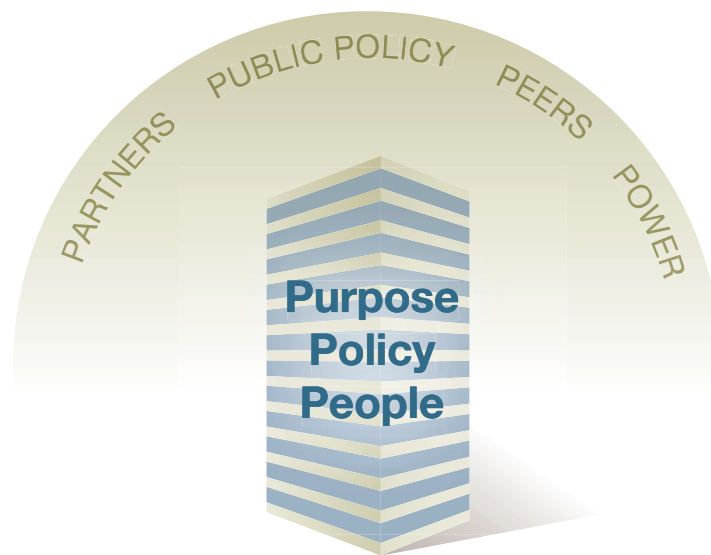
1. **Customers:** access, attraction, retention, reputation, brand
2. **Compliance:** regulation, social pressure
3. **Costs:** efficiency, productivity, risk management
4. **Competitive Advantage**
5. **Conscience:** moral obligation, values



Assess Levers: The 7P's Framework of Levers

Seven key levers can facilitate or inhibit your efforts to build a sustainable supply chain. Evaluate these levers to determine if you have influence over them and how to work with them.

Examples of each are given below (the italicized examples appear most often in the literature).



INTERNAL LEVERS

Purpose: *alignment of sustainability with organizational strategy, history of CSR in the organization*

Policy: *clear policy statements/codes of conduct, widely communicated policies, financial resources, training and workshops, incentives, transparent and measured outcomes*

People: *leadership/management support, supportive organizational culture, change agents, staff with strong personal commitments and capabilities*

EXTERNAL LEVERS

Peers: *industry collaboration*

Partners: *trust in supplier engagement, dialogue with suppliers, long-term relationships with suppliers, third-party certification, shared vision with suppliers, experience sharing with suppliers, investment in suppliers, incentives in supply relationships, collaboration with suppliers*

Public policy: *supportive regulation*

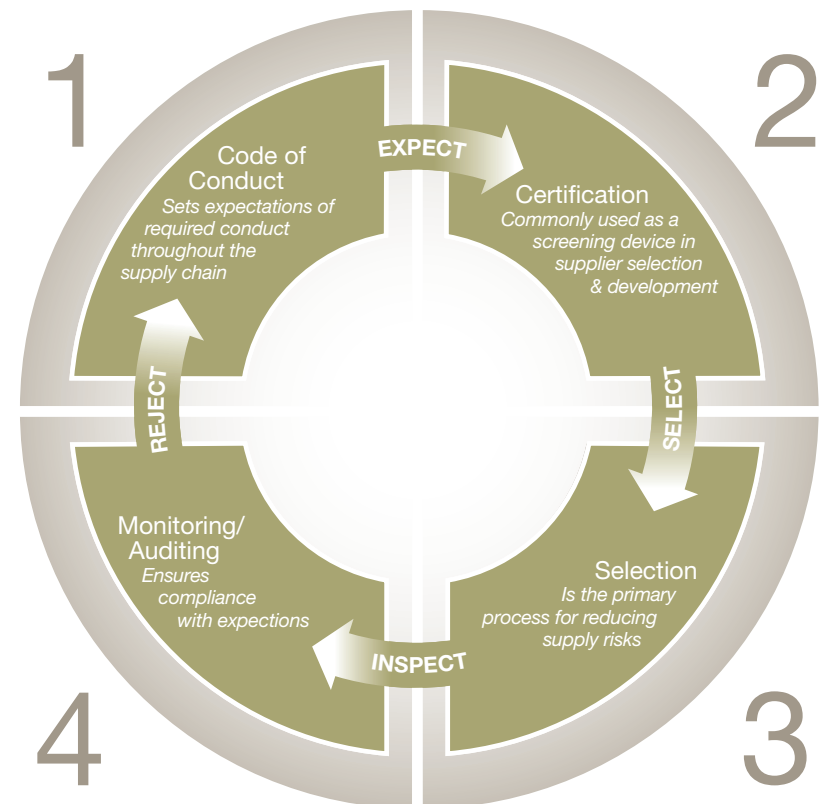
Power: *organizational size, power over suppliers*

Improve Practices: Baseline Practices Framework for Sustainable Supply Chains

The following figure shows the four most prevalent practices in the literature for building sustainable supply chains: 1) Establishing a Code of Conduct; 2) Obtaining Third-Party Certifications; 3) Selecting Suppliers; 4) Monitoring Suppliers*. We consider these the 'baseline' practices that all organizations should embrace. These practices reflect a 'command and control' approach to supply chain management, in which the lead buying company dictates most rules and processes.

GIVEN THE COMPLEXITIES OF THE GLOBAL BUSINESS ENVIRONMENT, THE 'BASELINE' MODEL EXHIBITS SOME SHORTCOMINGS:

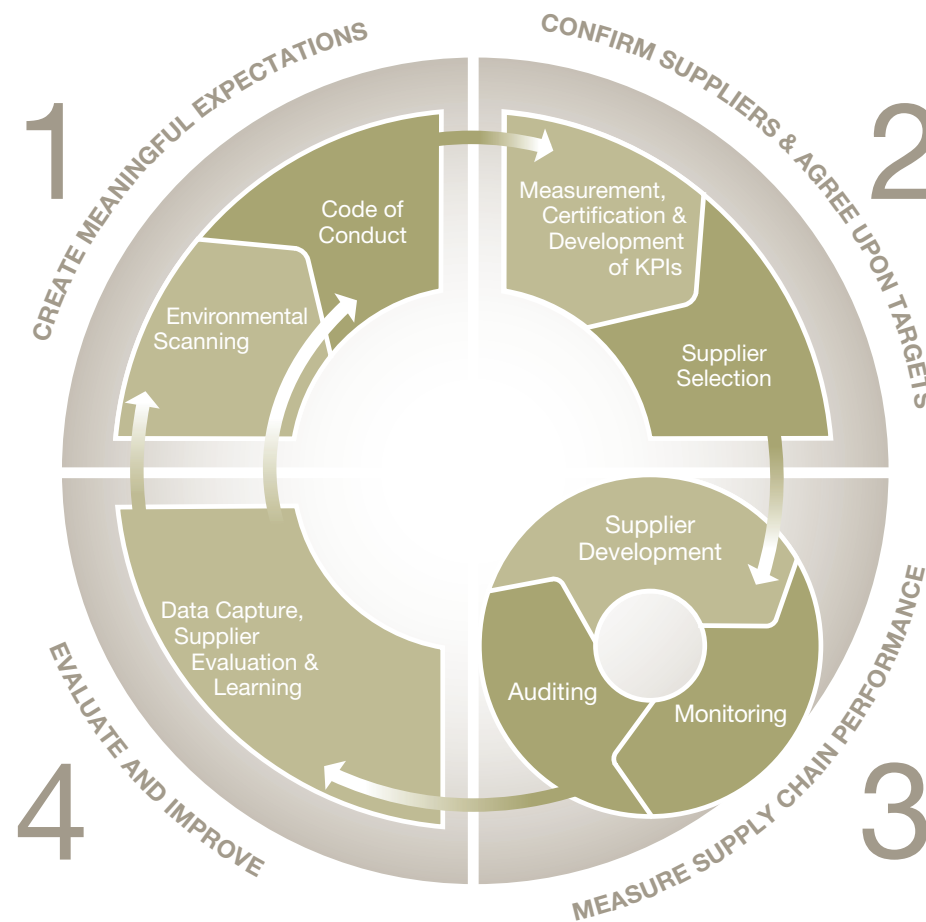
- Un-negotiated expectations lack legitimacy with local stakeholders
- Codes of conduct are relatively static and unresponsive to new issues or changes in stakeholder expectation
- Third-party certification (e.g. SA8000 or ISO14001) imposes substantial costs on suppliers
- Monitoring and auditing undermine trust and commitment in buyer-supplier relationships
- Intensive monitoring can promote unethical practices such as suppliers hiding issues from supply chain partners
- Lack of contract security undermines suppliers' willingness to invest in more sustainable practices
- Suppliers may lack resources to implement new approaches, and competing pressures (e.g. for timely deliveries) undermine the conditions needed for compliance



*Note that different organizations may implement the practices in a different order. For instance, third-party certification may be requested/sought concurrently with selection, prior to selection, or after selection, in response to different needs.

Improve Practices: Best Practices Framework for Sustainable Supply Chains

This framework addresses the shortcomings of the baseline model on the previous page by incorporating consultation, development and learning. Depending on your company's power, relationships, resources and needs, you may be in a position to pursue the 'next level' of practices. The following page explains each step and provides anecdotes of how companies have exemplified these practices.



Building a Sustainable Supply Chain Involves Four Steps:

1. Create Meaningful Expectations

Enhance your capacity to anticipate new challenges and issues as they arise in the context of international supply chains through robust **environmental scanning**.

Put it into practice:

- Organize expert workshops on key issues with academics, NGOs, etc.
- Scan media reports on various industries and geographical contexts to understand emerging issues
- Communicate with on-site managers to raise issues

Engage with widely drawn stakeholder groups to encourage their participation in the development of a code of conduct or other documents to enhance the applicability, legitimacy and efficacy of policies. For efficiency and to avoid audit fatigue, it may be possible to find a pre-existing standard the company can join.

Put it into practice:

- Interact frequently with suppliers, involving on-site dialogue or inviting suppliers to buyers' headquarters/plants
- Explicitly acknowledge cultural issues and challenges within supplier dialogue
- Use multiple communication channels, e.g. websites, printed documents and training

Mountain Equipment Co-Op (MEC), an outdoor gear retailer, uses their Supplier Code as the standard all vendors must adhere to. All suppliers are briefed on the standards and their obligation to meet them. Afterward, they must sign a Vendor Agreement formalizing their commitment. In return for their dedication, MEC works with factories to improve practices instead of walking away. Factories in turn must be willing to improve, and demonstrate positive results.

Source: Mountain Equipment Co-Op website.
http://www.mec.ca/Main/content_text.jsp?FOLDER%3C%3Efolder_id=2534374302883571

2. Select Suppliers and Agree to Targets

Rely less on immutable ‘tick box’ criteria and focus more on **supplier consultation** and development. Consider accepting suppliers with poor current sustainability performance if they are committed to embarking on systematic, collaborative improvement processes.

Put it into practice:

- Hold awareness seminars with suppliers to explore and raise issues and to open a space for supplier-led solutions
- Develop detailed sets of key performance indicators (KPIs) with suppliers
- Benchmark KPIs across suppliers and industry peers to ensure criteria stand up to external scrutiny
- Define clear systems and processes through which reliable performance data are to be obtained

The Coca-Cola Company invited top global suppliers to discuss the need to embed sustainability in their operations. Rather than set top-down directives, the company sought suppliers’ input to ensure long-term mutual success. Following the summit, Coca-Cola received nearly 200 proposals from suppliers, including ideas and strategies related to sustainable packaging, logistics, sustainable agriculture, water stewardship and portfolio innovation.

Source: UN Global Compact, The Coca-Cola Company: Supplier Sustainability Summit, <http://supply-chain.unglobalcompact.org/site/article/70>

3. Evaluate and Develop Suppliers

Inform suppliers as to whether expectations are being met. Practices related to this step focus on **evaluating progress** made by suppliers with respect to sustainability targets.

Put it into practice:

- Develop clear and structured action plans for non-compliant suppliers
- Use ‘probation periods’ in which suppliers can develop and implement plans of action to address issues
- Use local community evaluators to gather informal intelligence on conditions in suppliers’ plants
- Introduce supplier recognition and reward programs that highlight suppliers achieving sustainability excellence

Where performance goals are unmet, diagnose the underlying reasons for such failures such that a program of **supplier development activities** can take place to support improved future performance.

Put it into practice:

- Involve company staff in on-site training of suppliers
- Hold supplier conferences to facilitate cross-supplier learning and knowledge sharing
- Work with a reduced supplier base to concentrate resources and attention on developing a few key suppliers
- Foster and incent long-term relationships with suppliers through long-term contracting and price premiums
- Invest in suppliers via equipment, working practices or loans for new equipment and technology

IKEA employs a ‘Staircase Model’ which encourages continuous improvement from its suppliers by establishing four levels of progressive achievement. Also, IKEA audits are not just ‘box-ticking’ exercises. Each auditor must “check that procedures work in reality.” Auditors are required to “explain the IKEA philosophy and check that the supplier understands the key environmental impacts and has started to measure and follow up.”

Source: Unchaining Value: Innovative approaches to sustainable supply, 2008. UN Environment Programme, <http://www.unep.fr/scp/unchaining/publications/Unchaining-Value-Final-Report.pdf>

4. Learn and Improve

Develop an organizational **capacity to learn**, and develop transparency and accountability in achievements and performance. Evaluate company performance to 'close the loop', feeding into revised expectations and management practices. Continually improve practices through iterative communication and measurement.

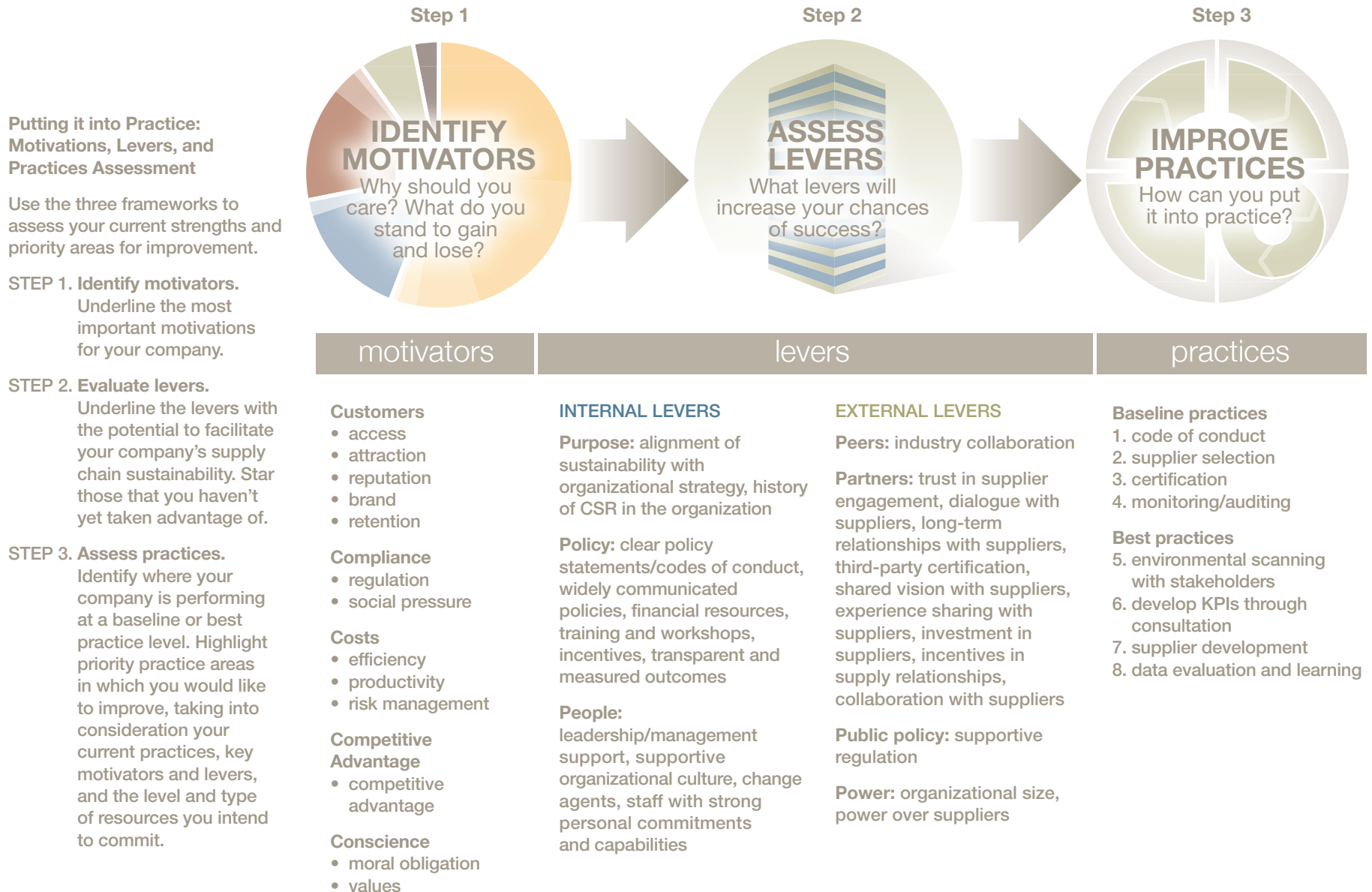
Put it into practice:

- Report supply chain compliance data, along with case studies of best practice and examples of non-compliance
- Establish an industry-leading position by hosting cross-industry problem-sharing workshops
- Establish a company task force composed of in-house professionals and external academic and NGO expertise to review performance evidence quarterly to identify patterns and explore possible solutions

Nestlé India's supplier development department cuts costs by overcoming quality and food safety issues and creating a wider, more flexible supply base. It trains suppliers, provides technical assistance on safety and quality issues, and supports suppliers' management systems and products. The company has saved over US\$5 million in five years by developing over 70 new Indian suppliers who meet standards. The initiative has been so successful the company replicated it in Bangladesh, Brazil, Indonesia, Iran, Malaysia, Russia and South Africa.

Source: UN Global Compact, Nestle: Creating Shared Value. <http://supply-chain.unglobalcompact.org/site/article/64>

sustainable supply chains roadmap



Case Study from a Global Supply Chain Leader



This case study uses the experience of international food and consumer products company Unilever to show how incorporating the above practices into your supply chain yields benefits for the firm and its stakeholders.

SEEING THE BIG PICTURE

Globally, Unilever earns annual revenues of over \$50 billion from more than 400 brands. It sources from 10,000 raw materials suppliers and up to 100,000 non-production suppliers. In fact, Unilever purchases 12% of the world's black teas, 6% of the world's tomatoes, and 3% of the world's palm oil. Securing supply is critical to sustaining Unilever's future business success and growth.

Unilever has discovered tangible business benefits through supply chain responsibility – championing working conditions, providing fair-wage incomes, and managing environmental issues such as waste and climate change.

“These benefits protect and enhance Unilever’s reputation, help secure supply for our business over the long-term, provide increased stability of operations, and create cost efficiencies. Ultimately, they generate competitive advantage,” notes John Coyne, Vice President, General Counsel, Unilever Canada Inc.

CREATING CONSISTENT EXPECTATIONS

To manage for sustainability in its supply chain, Unilever developed a Supplier Code which defines the company’s responsible sourcing requirements. This Code is based on both local laws and internally accepted norms and helps create consistent expectations across the supplier network. Unilever requires not only that its direct suppliers adhere to the Code, but that direct suppliers ensure that their suppliers also comply with the Code’s principles. Says Coyne: “We’ve also discovered that meeting code specifications today can be less important than the supplier’s drive to exceed code expectations in the future.”

ENGAGING, CONSULTING AND COLLABORATING WITH OTHERS

Unilever requests supplier self-assessments and conducts site audits to ensure suppliers are meeting the Code's requirements. It asks suppliers to use the Supplier Ethical Data Exchange (SEDEX) platform, which offers standardized evaluation methods and makes audit data widely available. This reduces duplication between buyers, freeing up resources for supplier development and other improvements. It also reduces suppliers' administrative burden and helps them build capabilities by learning directly from others' assessments.

When audits reveal non-compliance, Unilever consults with its suppliers. In one case, a major international sourcing partner was not meeting Unilever's pollution standards. "By respectfully addressing this challenge with the supplier, we identified – and publicly disclosed – corrective actions," says Coyne.

SHARING, LEARNING AND IMPROVING

Unilever actively works to share knowledge and best practices amongst suppliers, peers and partners. For example, through the Carbon Disclosure Project's 'Supply Chain Leadership Collaboration', Unilever and its peers share their experiences and best practices on how to engage suppliers in monitoring the causes of climate change in the supply chain. In addition, Unilever shares its expertise with suppliers in areas of expertise including irrigation management. As a result, water usage at farms in Brazil has dropped 30%, while increasing tomato yields 20%.

"Unilever's approach to supply chain sustainability has been recognized internationally by the FTSE, Dow Jones and the World Wildlife Fund," notes Coyne. "Reductions in energy, water and packaging consumption have generated cost savings on products, benefiting both our margins and consumers."

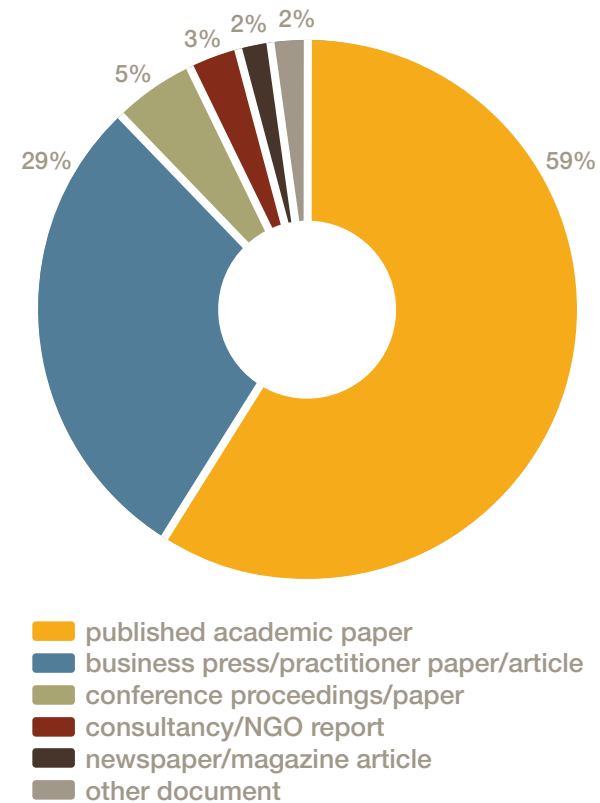
About the Research

This research was inspired by the NBS Leadership Council, which gathers annually to identify the Priorities for Business Sustainability. The research team, including Dr. Stephen Brammer (University of Warwick), Dr. Stefan Hoejmose (University of Bath), and Dr. Andrew Millington (University of Bath), reviewed 194 relevant sources (see figure) over 25 years. Using this set of sources, the researchers conducted extensive, detailed analysis and synthesis of the materials to extract the various practices that support sustainable supply chain management.

This review of previous research and practice reveals the following issues:

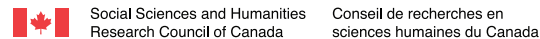
- Research has focused mostly on social/ethical issues (44%), followed by environmental issues (21%) and the combination of both social and environmental issues (35%).
- The research is dominated by case-based and anecdotal empirical analysis focusing on problems and issues: there is a relative lack of theoretical contributions, suggesting this literature is still in its early stages.

Sources of Knowledge Used in this Report



Read the full systematic review (www.nbs.net/knowledge/supply-chains) for a detailed discussion of practices, case studies, and implications for research and practice.

Funding for this research was provided by the Purchasing Management Association of Canada, Industry Canada, Suncor Energy, and the Social Sciences and Humanities Research Council of Canada.



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FEEDBACK

Please let us know what you thought of this report. Contact the Network at info@nbs.net.

about the network

A Canadian non-profit established in 2005, the Network for Business Sustainability produces authoritative resources on important sustainability issues – with the goal of changing management practice. We unite thousands of researchers and professionals worldwide who believe passionately in research-based practice and practice-based research.

The Network is funded by the Social Sciences and Humanities Research Council of Canada, the Richard Ivey School of Business (at The University of Western Ontario), the Université du Québec à Montréal, and our Leadership Council.

NBS Knowledge Centre

For additional resources visit the Network's Knowledge Centre at nbs.net/knowledge.

NBS Leadership Council

The Network's Leadership Council is a group of Canadian sustainability leaders from diverse sectors. At an annual meeting, these leaders identify their top priorities in business sustainability – the issues on which their organizations need authoritative answers and reliable insights. Their sustainability priorities inspired this research project.





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