



SUSTAINABILITY IN THE SUPPLY CHAIN

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CORPORATE SUSTAINABILITY:

There's work to be done

As the integrated supply chain specialists, Inspirage recently undertook a major research study to understand how organizations are looking at the future of the supply chain. In this study, we found that three key topics were keeping supply chain executives up at night and they were:

- 1) **Outdated Tools and Systems** coupled with a **lack of integration** are hampering company growth and preventing companies from being more responsive to market and customer demands.
- 2) **Sustainability** is a priority and strategic focus for companies, but companies are struggling to achieve their sustainability targets.
- 3) Likewise, **Digital Transformation** is a key imperative and the transformation has been started by vast majority of companies; however, few companies consider it to be a key company strength.

Today we'll dig deeper into the topic of sustainability. For a copy of the complete study - visit www.inspirage.com/iscstudy.



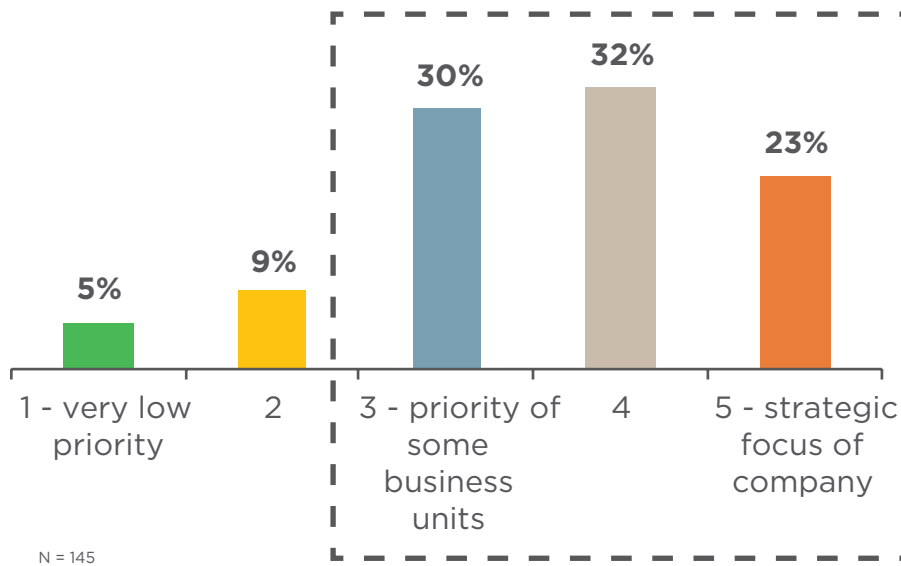


SUSTAINABILITY: WHY IT MATTERS

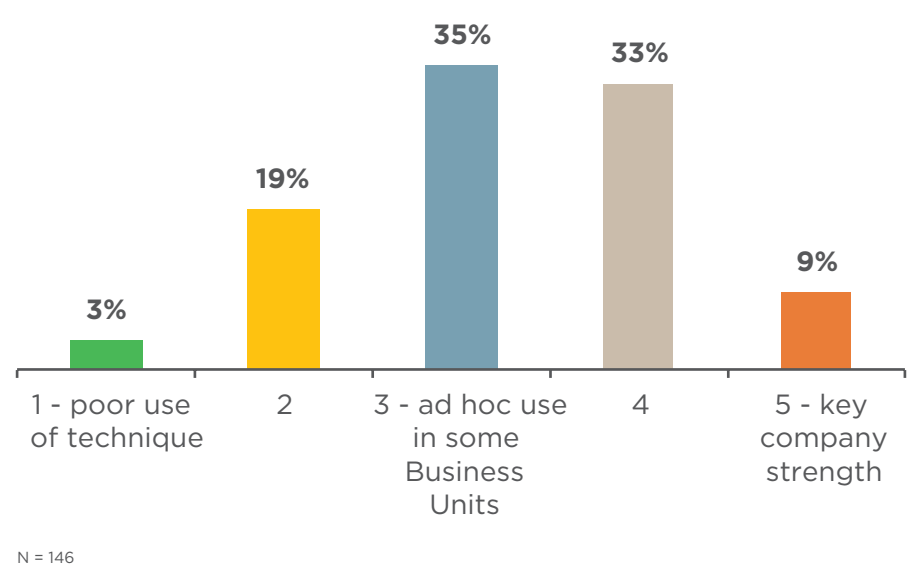
IMPORTANCE OF SUSTAINABILITY

Sustainability is a priority, even a strategic focus, for most companies

How important is sustainability in your company?



Rate from 1-5: Product sustainability



85% of companies see sustainability as a priority or higher

In our study, we found that sustainability is important to the vast majority of respondent companies, with 85% of companies seeing it as at least a priority of some business units, and 23% viewing it as a strategic focus of their company. Manufacturing, Logistics, and Oil & Gas companies are more likely to view sustainability as a strategic focus of their company (39%) than other segments.

Sustainability is not just about conserving environmental resources, but it also impacts the bottom line. Not only can one enjoy cost savings through reduced waste, but companies can also increase revenues through goodwill and recognition in the marketplace.

SUSTAINABLE PRACTICES ARE CRITICAL TO GLOBAL SUPPLY CHAINS

Global industries are beginning to focus more on fostering efficiency within their processes and making sure their practices are as sustainable as possible, leading to a worldwide effort to promote sustainable, transparent supply chains.

Some companies are trying to bridge the sustainability gap.

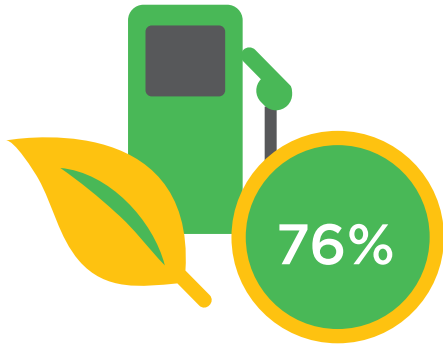
Sustainability is no longer a concern just for large companies. A study conducted by Supply Chain Management Review of the magazine's readers found that supply chain operators at any level are jumping aboard the "green" bandwagon, as well - **70 percent of respondents** said that sustainability initiatives were very or extremely important within their organizations. In addition, 32 percent of them said they were feeling pressure from customers to maintain sustainable practices.

This is a clear indication that **consumers are starting to care more about where their products are from and how they travel**, which means that companies need to be - and are - focusing on these aspects as well. What's more, a sustainable, circular economy is intimately connected with logistics. According to a survey conducted by Greenbiz Group for UPS, **87 percent of sustainability executives** noted that logistics is a "very important factor in transitioning to a sustainable circular strategy."

Companies need to refocus on sustainable practices

Recent political dealings have brought supply chain sustainability into the limelight once again. According to Supply Chain Management Review, the Paris Climate Treaty, will **pave the way for businesses** to think about how their operations impact the environment on a global scale. Companies like Aeroscraft, which is attempting to use airships to **transform the global supply chain**, are trying to broaden network reach and service capabilities for businesses, while boasting a higher level of fuel efficiency and decreasing carbon emissions.

As sustainability continues to be a crucial topic for the future of supply chain and logistics management, operators need to have the right tools at their disposal to make sure their businesses are putting their best foot forward when it comes to the environment.



76 percent of consumers would **wait at least one extra day** if their orders were delivered using **climate-friendly transport**

3 KEY ARGUMENTS FOR A SUSTAINABLE SUPPLY CHAIN

In recent years, the issue of supply chain sustainability has steadily become an important topic. Now more than ever, organizations are paying attention to how their supply chain practices contribute to sustainability efforts. With an eye on the bottom line, companies are trying to reconcile increasing demand with environmental compliance factors. Why should supply chain operations managers strive to create a supply chain that's as sustainable as possible? What are the main driving factors behind this movement?

1. Efforts foster business transformation

Peter Senge, the founder of the Society for Organizational Learning and a faculty member at MIT Sloan School of Management, stressed in a 2010 interview that it's critical for operations managers to **start thinking of sustainability** as a matter of being able to shape a business's future.

"To confront [sustainability] issues practically, you need employees who are innovative – who have the skill and the vision to redesign products, processes, and business models – and who understand the business context," Senge said. "Most important, they need to be able to tell a story about why this is a meaningful journey."

Today, the story is no different. Environmental Leader contributor Jessica Lyons Hardcastle noted recently, for instance, that **companies are paying more attention** to the ways in which their supply chains conserve natural resources and curb carbon emissions. Basically, organizations are transforming their businesses by changing processes and improving sustainability – effectively changing the narratives by which they represent themselves to the rest of the global market.

Future-minded operations managers need to consider their sustainability efforts.

2. Risk management is one and the same

Not only does the environmentally friendly supply chain impact business growth and opportunity, but sustainability can also have a positive impact on risk management activities. In protecting against risk, companies have the opportunity to become more compliant with environmental standards, even within the IT department.

In a paper for the International Journal of Production Economics, researchers Mihalis Giannakis and Thanos Papadopoulos found that sustainability should be treated as a **part of the risk management process**. By accounting for sustainability risks (including environmental, economic and social factors), organizations can improve their management strategies and capabilities.

3. Reduce cost and increase revenue

Incorporating more environmentally sound practices can also have significant, positive financial outcomes, as well. For this reason, quite a few large companies are making the change to become more sustainable. For instance, according to Spend Matters contributor Elizabeth Ichniowski, Coca-Cola **invested \$5 billion** into a supply chain project in Africa that would secure more consistent and sustainable ingredients for the company's products. In addition, Hardcastle noted that Apple is pushing for higher environmental standards.

These arguments for a sustainable supply chain, all boil down to the fact that sustainability is becoming a key characteristic of the modern supply chain.



It's critical for operations managers to start thinking of sustainability as a matter of being able to **shape a business's future.**



FOUR CORNERSTONES OF A SUSTAINABLE SUPPLY CHAIN

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Integrated Supply Chain

At Inspirage, we often talk about the 4 cornerstones of the **Integrated Supply Chain**. These same elements can also be considered when thinking about a sustainable supply chain, not only as independent elements but also as they work together. From product ideation, to production to delivery and reverse logistics, companies need to consider the overall environmental impact of each step in the process.

PRODUCT LIFECYCLE MANAGEMENT

- Product Lifecycle Management
- Enterprise Data Management
- Product Ideation
- Compliance
- Commercialization



SUPPLY CHAIN MANAGEMENT

- Demand & Supply Planning
- Sales & Operations Planning
- Inventory & SC Optimization
- Procurement
- Manufacturing

LOGISTICS MANAGEMENT

- Order Management
- Warehouse Management
- Transportation Management
- Global Trade

ERP & FINANCIALS

- ERP
- Financials
- Analytics



PRODUCT DESIGN

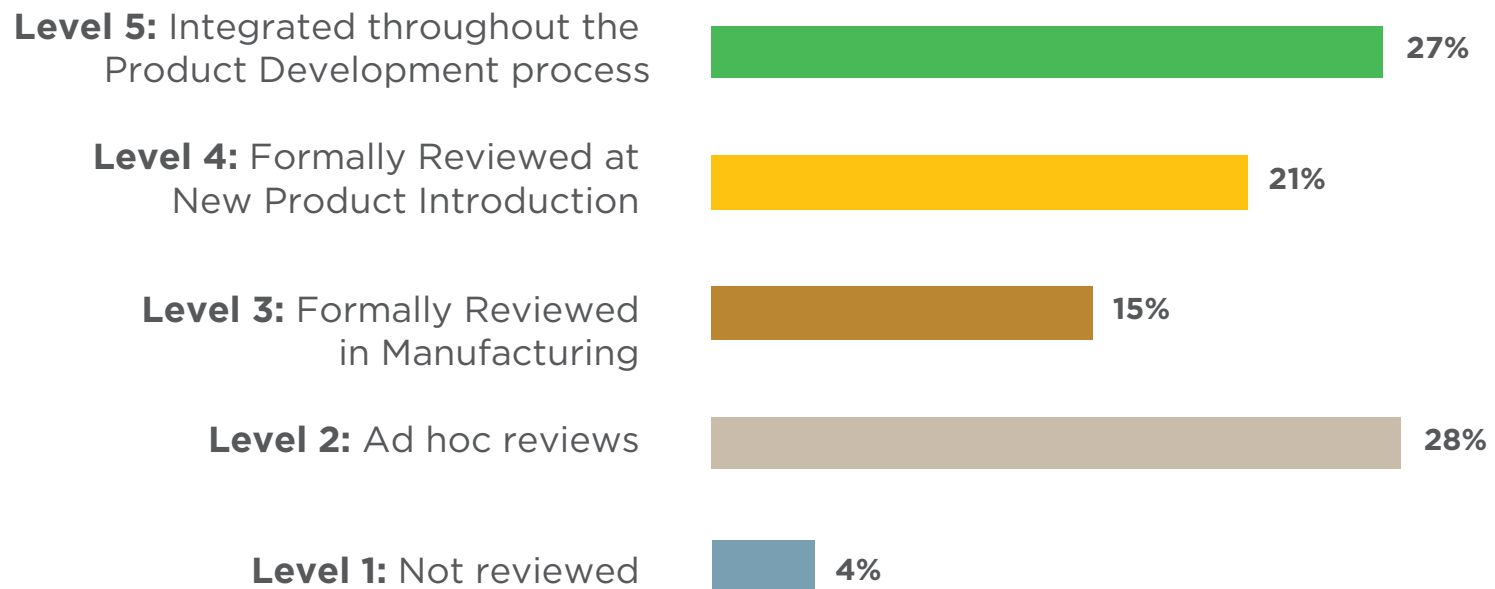
There's a generally-accepted metric in the marketplace that says that 80% of the environmental impact is determined during the design phase of a product. Materials, packaging, sourcing, manufacturing, shipping and disposal are all key factors that need to be **considered during design**.



REVIEWS FOR PRODUCT OPTIMIZATION

Companies are mixed in using reviews for product optimization

Do your product processes include reviews to ensure the product is optimized for manufacturing, shipping, service and disposal? (Select One)



N = 145

As many companies are operating at Level 5 as those operating at Level 2

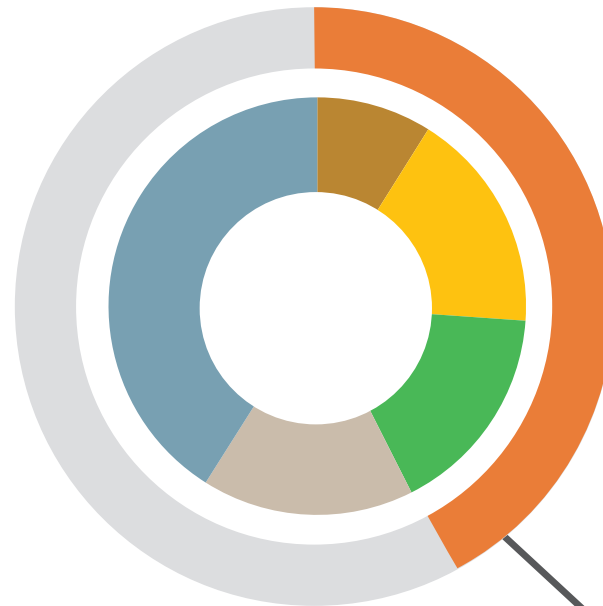
Although companies say sustainability is a priority, most are not factoring it into their product design process. In our study, we found that only 27% of companies include operational reviews throughout their product design process.

High Tech companies (39%) are more likely to use reviews for product optimization while CPG/Retail companies (12%) are least likely.

REGULATIONS FOR TARGET MARKETS

Most product teams do not fully understand regulations for target markets before development

At the beginning of product development, do your product teams know which regulations will be required to sell the product into target markets? (Select One)



- 1 **8%** - Not tracked
- 2 **16%** - Regulations checked when sales process starts
- 3 **15%** - Limited markets verified during development
- 4 **15%** - All markets verified during development
- 5 **38%** - Product teams know target markets before development

Less than 40% of companies know regulations to sell into target markets

N = 147

Regardless of whether your customers are calling for more sustainable products, many industries and markets face a changing regulatory environment, so it's important for companies to take regulations into account before product development. However, we found that only 38% actually take regulations into account prior to development. A larger percentage don't look at regulations until it's too late, with 15% starting after design has started, 16% when it's time to start the sales cycle, and 8% not at all.

By segment, Manufacturing, Logistics and Oil and Gas companies are significantly more likely to know the regulations (57%), while CPG/Retail companies are least likely (26%).



SUPPLY CHAIN MANAGEMENT

While product design is critical in product sustainability, when you get into the manufacturing and supply chain management process is where the rubber meets the road.





43 percent of those surveyed said that making their supply chain practices more sustainable led to cost reductions

HOW DOES EFFICIENCY IMPACT SUSTAINABILITY IN THE SUPPLY CHAIN?

The companies of today are more focused on energy efficiency and sustainability than ever before. In creating a strategy to become more efficient, it's crucial that companies take all parts of their operations into account. One of the most important parts of enhancing sustainability practices is taking a step back and looking at how the supply chain impacts overall efficiency efforts. How can an efficient supply chain contribute to sustainability efforts? Let's take a look:

The benefits of implementing sustainable initiatives within the supply chain are tangible. A recent report from PwC showed that when companies undertake sustainable supply chain initiatives, there **can be significantly positive results**. 43 percent of those surveyed reported that making their supply chain practices more sustainable led to cost reductions, and 35 percent said their companies' environmental impact was improved. U.S. telecommunications company Sprint was able to save more than \$1 billion when it implemented a cellphone buyback and recycling program.

“For operations leaders and managers, sustainability is evolving to mean something far more strategic and commercial than what we've known in the past,” the report's authors noted. “The relative focus is changing from compliance-based and branding activities to a set of reinforcing capabilities that have the potential to generate value to the business.”

In order to glean these benefits from their sustainable practices, companies have to make sure their operations are as efficient as possible. This starts with supply chain planning strategies. GreenBiz noted that the first step to fostering a more sustainable supply chain is to **take inventory of suppliers** and identify the important environmental challenges they may have. The PwC report highlighted Heinz's issues with poor soil in China's Zinjiang region. The company identified this problem and was able to implement sustainable practices and saw an improvement of 58 percent as far as farm yields in the entire region. This, therefore, translated to real-time advantages for the company.



LOGISTICS

Last, but definitely not least, incorporating efficiency into the logistics side of the supply chain is a surefire path to sustainability. Case in point: Logistics Viewpoints contributor Steve Banker noted that Wal-Mart has **one of the world's most sustainable supply chains**. This is due to the high level of efficiency exhibited by the company within its truck fleet - by investing in fuel-efficient tires and changing some routing and truck loading practices, Wal-Mart was able to achieve an 84.2 percent improvement in fuel efficiency from 2005 to 2014.



3 WAYS LOGISTICS SUSTAINABILITY IMPACTS BUSINESS

Sustainability is becoming an increasingly important concept in all areas of business. Within the manufacturing and distribution industry in particular, the efficiency and sustainability of the supply chain is often one of the most time-consuming and difficult hurdles to face. Making sure your logistics processes – including transportation, distribution channels and other aspects of moving products from one place to another – are as efficient as possible can positively improve relations with customers and significantly impact the bottom line.

Let's take a look at a few important ways sustainability measures can affect the supply chain and business itself from a logistics standpoint:

1. Improve customer relations

Now more than ever, consumers care about where their products are from and how they get from point A to point B. A recent study found that consumers are, in fact, **willing to pay around 5 percent more** for items delivered sustainably, and about 76 percent said they would wait an extra day for delivery, according to Logistics Management. However, the same study discovered that despite clear indications they should implement sustainable practices, companies across the board are not doing so as quickly as the majority of consumers would want.

By proving to customers that you are focused on making the supply chain as sustainable as possible, your company's reputation can get a boost. By being one of the 36 percent of companies that, according to the study, intend to incorporate sustainability practices in transportation and distribution, your business can position itself better in customers' eyes.

2. Reduce supply chain complexity

Taking a look at what points in the supply chain offer the most sustainability challenges is one of the first steps to improving efficiency and reducing the amount of complexity. According to GreenBiz, by taking a thorough inventory of suppliers, New Balance Athletic Shoe Inc. cut back the **number of suppliers in its supply chain** by approximately 65 percent. The company rated each of its suppliers based on sustainability criteria, and the ones that didn't make the grade were cut.

A less complex supply chain translates to better bottom lines. Reducing suppliers based on sustainability criteria has the potential to minimize complexities, but it's also important to note that sustainability itself comes with cost-cutting benefits.

3. Shape the future of the business

Efficiency in logistics does not just impact the way companies are perceived or reduce complexities in the supply chain. As environmental factors become more of a consideration, companies will want to be on the winning side of history.

The future of your organization and the industry itself depends on how well you adapt to changing business climates. According to Peter Senge from MIT's Sloan School of Management, this future **will be shaped by employees themselves**. "To confront these issues practically, you need employees who are innovative – who have the skill and the vision to redesign products, processes, and business models – and who understand the business context."



By being one of the **36 percent** of companies that intend to incorporate sustainability practices in distribution, your business can **position itself better in the customer's eyes.**



FINANCIALS

Building a sustainable supply chain absolutely impacts the bottom line from both a top-level revenue standpoint, as well as reducing costs. Companies that demonstrate their commitment to the environment can use this as a competitive advantage against their competitors and often times charge a premium.



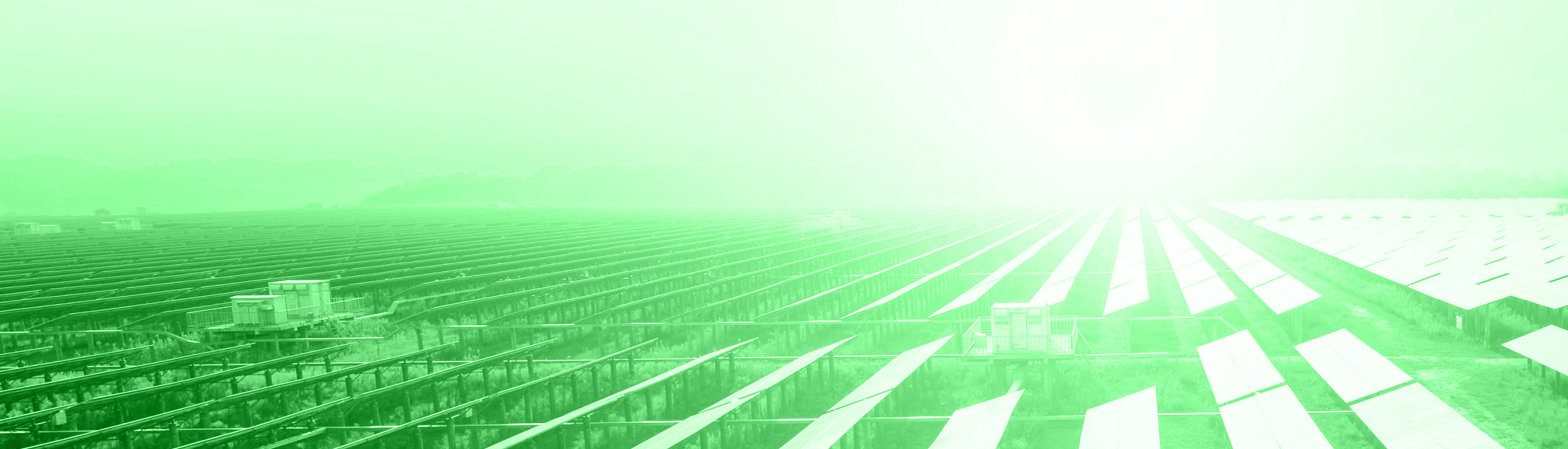
COMPETITIVE ADVANTAGE AND SUSTAINABILITY

Many companies are finding compelling reasons for sustainability-related investments. According to a study published by the Massachusetts Institute of Technology Sloan Management Review, the **brand premium enjoyed by sustainable companies leads to increased market share** through improved customer loyalty and easier entry into new markets. Both of these, in turn, lead to revenue growth. Nike, for instance, has turned **sustainability-related design changes into material savings and positioning gains**. Nike's Flyknit line of shoes, which precisely manufactures each shoe, produces 60% less waste than traditional cut-and-sew shoe production methods. Since 2012, the technology has saved nearly 3.5 million pounds of materials.

In addition, many sustainable companies also enjoy higher margins through pricing premiums, while reducing costs through increased operational efficiencies, more efficient use of resources, and lower costs and taxes. Moreover, sustainable companies are able to attract, retain and motivate employees who are proud to work for a company that is committed to corporate social responsible practices. These three – pricing power, cost savings and employee recruitment and engagement – all lead to increased margin improvement.

All of this leads to increased shareholder value. Results from Barron's 100 Most Sustainable Companies showed that companies on the list had **"a remarkable share-price performance as a whole for 2017"** – returning 29%, compared with 22% for the Standard & Poor's 500 index." To get to Number 9 on the list, Clorox has published goals on greenhouse gas emissions and energy use, phased out controversial substances, and added lines of natural products. Clorox has made sustainability mission critical and saw shares jump 27% last year.





WHERE TO START?

The short answer is sustainability needs to start in the boardroom. The good news is: 85% of organizations consider sustainability a strategic focus for the company. The bad news is, top leadership does not seem to be backing up these strategies with actual investment and many companies are making little progress towards the stated goals. Supply chain professionals can take a leadership position in helping companies achieve their sustainability goals, and there are a number of ways technology can help you make forward progress.

Cloud Computing

Moving your infrastructure to cloud minimizes environmental impact. Inspirage can help you move to Oracle Cloud quickly with our Rapid Value program.

Baseline Measurements

By understanding the environmental impact of your current operations, you can make good decisions as to where to focus your sustainability efforts. Inspirage offers a Carbon Footprint Calculator to help you understand the impact of your logistics operations.

Digitize Your Supply Chain

Investments in digital technology such as IoT and blockchain will help you achieve sustainability goals through Connected Fleet and Traceability solutions.

Strategic Sourcing

Companies now must consider environmental impacts in addition to traditional price, time and quality in choosing suppliers. Inspirage has a number of solutions available to help you track suppliers and ensure they are meeting your internal as well as governmental sustainability requirements, such as REACH, RoHS, Conflict Minerals and more.

For more information on these and other sustainability initiatives, [contact us to learn more.](#)

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