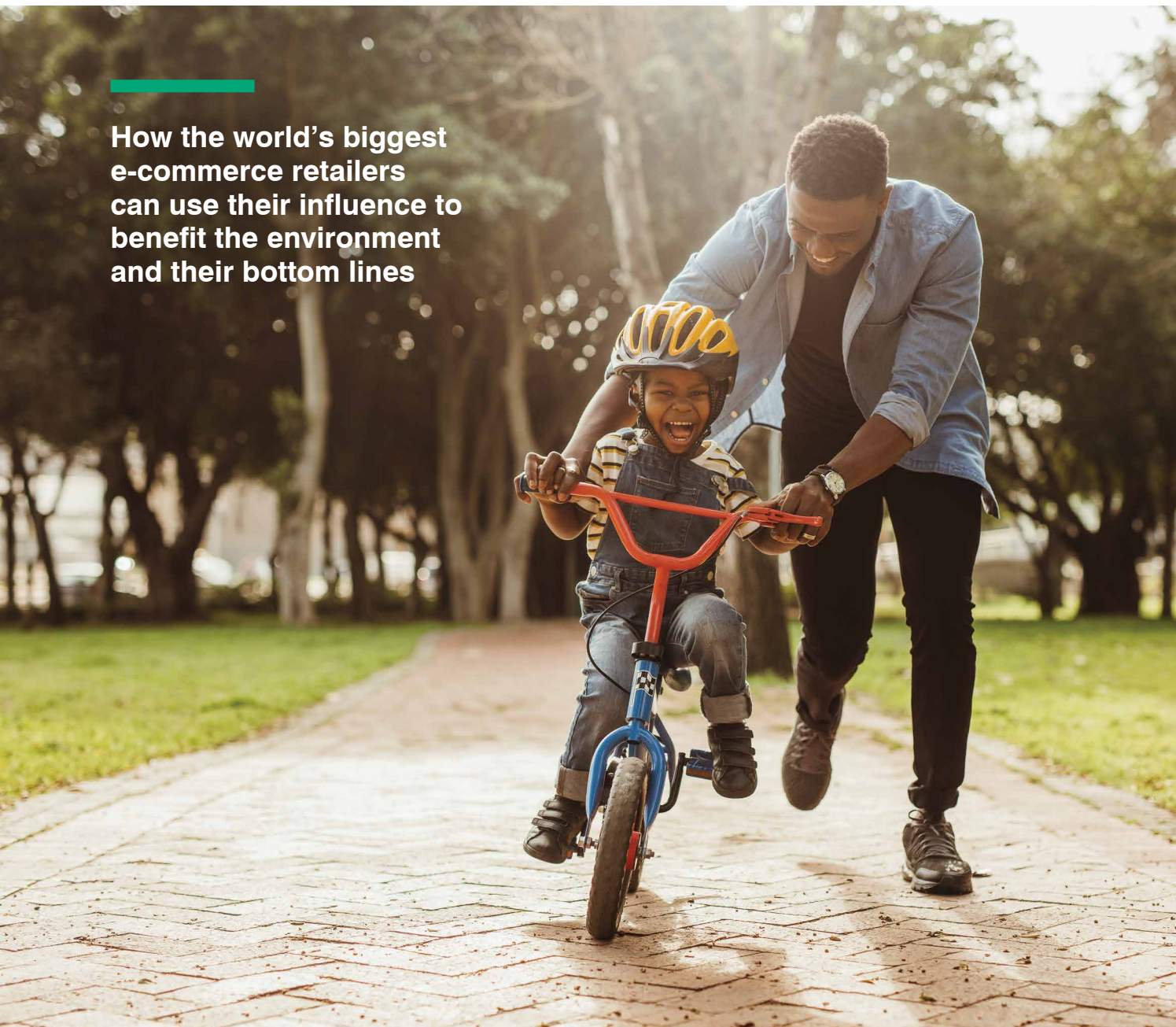


The Roadmap to Sustainable E-commerce

How the world's biggest
e-commerce retailers
can use their influence to
benefit the environment
and their bottom lines



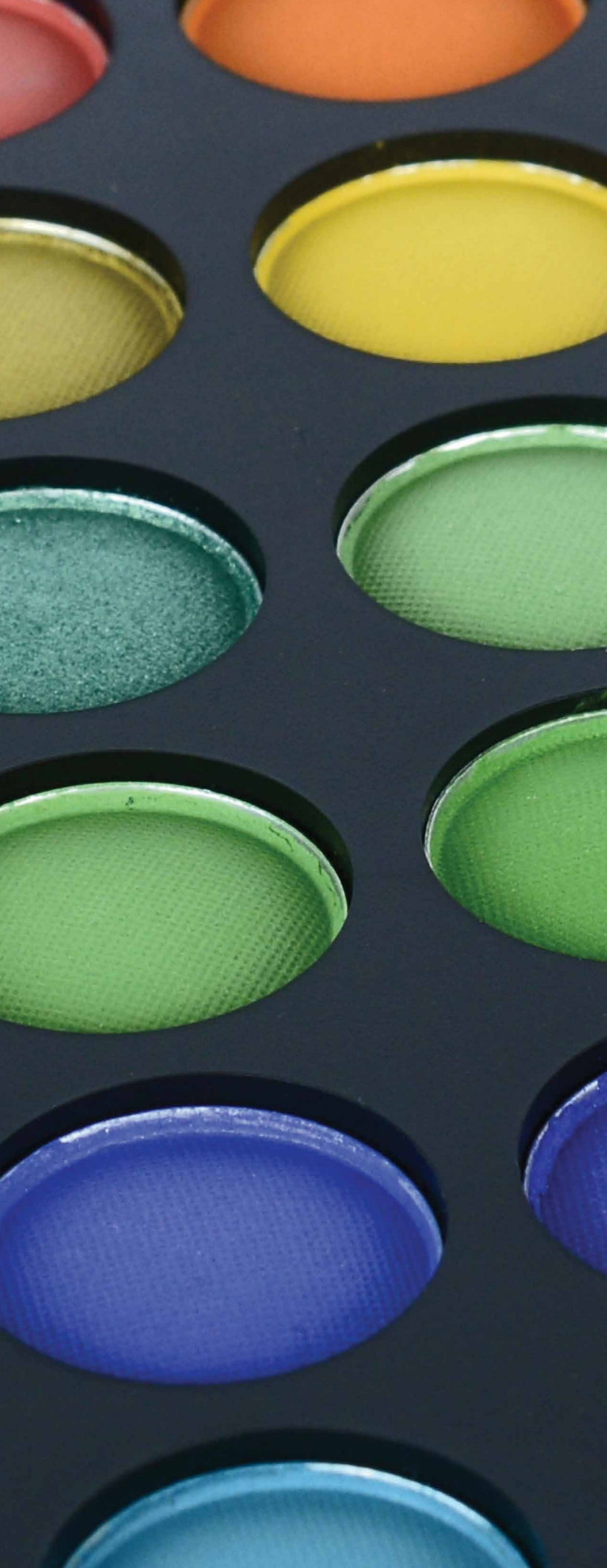


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FOREWORD

Tensie Whelan

Professor and Director of the NYU Stern Center for Sustainable Business

Our research at the NYU Stern Center for Sustainable Business has debunked the myth that consumers don't buy sustainable products. In fact, data on U.S. consumers' actual purchasing showed that 54.7% of the growth in consumer packaged goods came from sustainability-marketed products from 2015-2019. Now the latest headline is that sustainable products are not only surviving the pandemic – they are continuing to grow market share.

The global pandemic has accelerated the already fast-moving transition to online shopping, pushing more consumers to turn to e-commerce platforms for their everyday shopping needs. At the same time, it has changed the expectations of business leadership, causing customers, investors and even employees to scrutinize brands for their response to COVID-19. And while we can't predict all of the permanent changes the pandemic has caused, we can say for certain that businesses will be held accountable for doing more than maximizing profits – from tackling racial justice to climate change.

As e-commerce companies race to meet changing consumer demands, they'll be judged on whether they rethink their own conduct – how are they treating their suppliers and employees? How diverse are their employees and suppliers? Are they primarily extracting value from suppliers or creating value?

E-commerce retailers that understand consumers' values and take responsibility for the environmental and health impacts of their products and operations will benefit in the long-term.

By turning their attention to how sustainable a product is, and the climate footprint from manufacturing and transport, companies can reduce their impact on the environment while also generating financial value. They too can adopt more circular solutions, like Loop, a consortium of companies that own the multiple-use packaging and refill the products for you as needed.

We're seeing encouraging momentum from companies to address their climate impact. IKEA, for example, [committed to reduce their footprint](#) across all the products they sell, which means they will need to actively partner with suppliers to reduce their greenhouse gas emissions. Etsy [helps their sellers](#) access solar by providing them with a rebate. But it's not enough.

Beyond addressing the impacts of their products, e-commerce retailers can meet stakeholder demands and increase profits by being

transparent with their consumers. In a physical retail environment, products get extra scrutiny – retailers carefully curate what's on their shelves and shoppers can examine a product and its packaging for sustainability information. But this process doesn't apply to the e-commerce space, making it much more difficult to find and verify which products are sustainable.

As this report suggests, companies have a tremendous opportunity to win over the eco and socially conscious customer base as well as mainstream consumers concerned about the state of the world. E-commerce retailers can help shoppers make sustainable choices by using their online marketplace to provide deeper education about the environmental and health impacts of everyday products. This might look like including sustainability information of a product right on its product page or using certifications to highlight options. Companies can also engage their customer base by offering rewards or discounts when making sustainable choices, such as choosing low-emissions shipping.

Much like the coronavirus pandemic, e-commerce is a major disruptor, forcing businesses to close and leading to massive job losses. To maintain its social license to operate, e-commerce has a responsibility to address how it can provide good quality jobs, sustainable products and play a leadership role in tackling the broad environmental and social issues it impacts.

True leadership, though, is not a reactive, siloed corporate social responsibility play, in which a company does a few nice warm and fuzzy things to reduce the footprint of its operations, but maintains business as usual (yes, Amazon, I am talking about you) in the products it sells. Only when all aspects of sustainability - social, environmental, and governance - become core to the business strategy and culture will e-commerce retailers see improved customer loyalty, operational efficiencies, innovation, employee engagement and retention, and better returns to shareholders and society.

The Roadmap to Sustainable E-commerce raises the bar for leadership in the retail sector. The guide covers the many sustainability challenges and opportunities created from the proliferation of e-commerce and conveys meaningful, measurable solutions for retailers to get started. Retailers that take actionable steps to reduce the climate and chemical impacts of the items they sell online – for the sake of our health and our planet – will forge ahead.

Executive Summary

The environmental choices we make *today* have more urgency than ever before.

The science is clear: our planet simply cannot sustain our current rate of consumption, or our way of doing business. Consumer products are the single largest source of environmental impact in our modern world, contributing to climate change, causing widespread natural resource and ecosystems destruction, exposing humans to hazardous chemicals, and filling up the ocean and landfills across the globe.

An analysis published by Yale University puts this in laser focus: consumers are ultimately responsible for 60% of the world's greenhouse gas emissions (GHGs), and anywhere from 50-80% of total land, material and water use. The driving force - the production and use of household goods.¹ Increased deforestation, primarily to support high-demand commodities like beef, soy, and palm oil, is responsible for approximately 15% of total GHGs.² Over a billion tons of municipal waste is generated in the world every single year. The World Bank estimates that global waste will increase 70% by the year 2050.³

Meanwhile, the European Environmental Agency estimates that 62% of chemicals in consumer products are hazardous to humans and the environment. The latest global chemicals outlook from the UN states that large quantities of hazardous

chemicals and pollutants are contaminating food chains and accumulating in our bodies, where they do serious damage.⁴

Too often, concerns around the environmental impact of consumer products are narrowly focused on packaging waste and emissions from shipping. These factors are inadequate for fully seeing and understanding the environmental toll of consumer products. Where the greatest impact can be made is by reducing the environmental footprint of the products themselves. This report focuses on how companies, namely e-commerce retailers, can minimize the impact of the products they sell.

Millions of consumer products are channeled through e-commerce platforms every day. This number is only going to increase as retailers accelerate their digital strategies and adapt to modified shopping behaviors in a post-pandemic world.

At the same time, stakeholders are paying unprecedented levels of attention to corporate behavior right now. The global pandemic reinforced the critical role of bold corporate leadership in today's world – not just during a crisis, but in their ability to drive a more resilient and sustainable future in the long-term.



A short list of seven global companies dominate the e-commerce space: Alibaba, Amazon, JD.com, eBay, Shopify, Rakuten, and Walmart. These companies – and other retailers with online marketplaces – have the responsibility, influence and opportunity to make everyday products safer and more sustainable.

The business case is clear:

- The consumer market for [sustainable products is growing](#)⁵, delivering \$113.9 billion in sales in 2018 and expected to grow to \$140.5 billion by 2023. E-commerce retailers are especially well-positioned to capture and cultivate this market.
- More shoppers globally are [switching to online delivery](#) for household staples, including groceries, giving online players a chance to attract and retain a new customer base.
- E-commerce retailers are carrying liability for the hundreds of untraced and hazardous products sold on their platforms. Mitigating this risk is critical for reputational and liability purposes.
- Investors and shareholders are [sending clear signals](#) that sustainability is a major factor in their decision-making. Businesses that are addressing these concerns are poised for a competitive advantage.

There are two areas in particular where the world's biggest seven e-commerce retailers can make the most difference for the health of people and our planet: addressing climate impacts and minimizing the toxicity of products.

These are also the two areas where e-commerce retailers carry the most risk to their reputations and long-term operations.

In this guide, we define what e-commerce sustainability leadership looks like, and provide the steps for retailers to advance product sustainability, meet growing consumer demand and benefit the bottom line.

Introduction

The growth of e-commerce has been explosive. The global coronavirus pandemic has shown just how quickly consumer product preference, channel preference and shopping behavior can shift in a time of crisis.

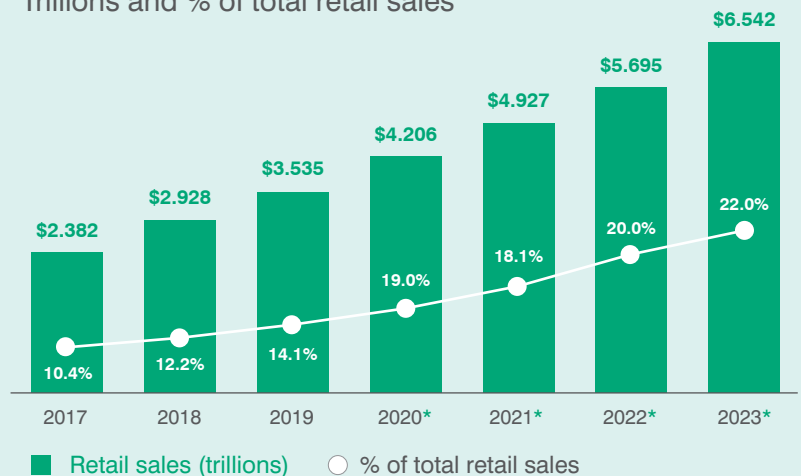
Online orders have become a more favorable option over traditional shopping environments, pushing companies to test the resiliency and nimbleness of their supply chains, and their ability to offer full omnichannel experiences – both in store and through online offerings.

Although this trend in digitalization has been accelerated by the global health crisis, it was already underway. In 2019, Cyber Monday sales reached \$9.4 billion in the U.S., an increase of almost 20% from 2018, and \$2 billion more than Black Friday sales.⁶

For retailers, navigating this growth while maintaining customer loyalty has become more complex, given that customers can shop more easily than ever and make informed purchasing decisions. Today's consumers can research, compare and purchase products day or night from sellers all over the world. The consumer's shopping journey has also become omnichannel, with retailers chasing customers from website to store to social media – and back again.⁷

RETAIL E-COMMERCE SALES WORLDWIDE, 2017 - 2023

Trillions and % of total retail sales

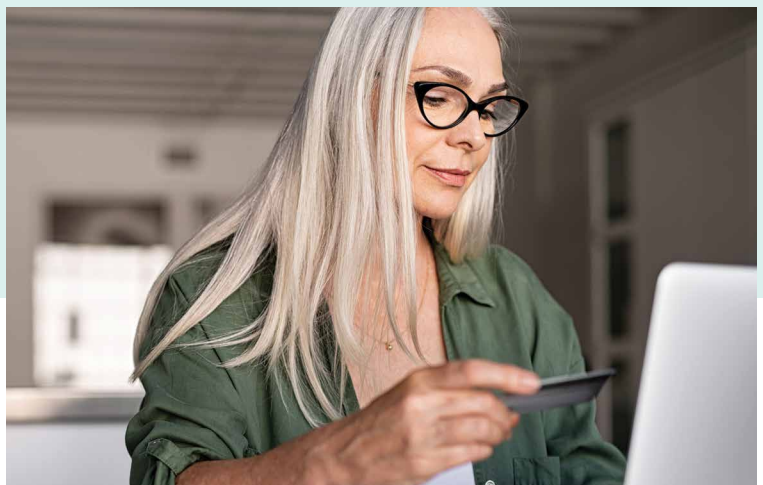


■ Retail sales (trillions) ○ % of total retail sales

Note: These figures include projected e-commerce sales prior to COVID-19. Industry experts predict the growth of e-commerce sales will accelerate post-pandemic.

* Projected figures.

Source: eMarketer



The world's largest e-commerce retailers can both embrace this new responsibility and achieve greater resilience by using their influence to lead the charge on safer, more sustainable products.

What does the explosive growth of e-commerce mean for the health of our environment?

Consumer products have a large and detrimental effect on the health of humans and the environment. Shipping millions of products around the world on a daily basis has led to increased emissions and packaging waste.⁸ Less well-known is that product sourcing, manufacturing, use and disposal also perpetuate deforestation, air and water pollution and toxic chemical proliferation. Despite some promising efforts from major brands and organizations, today's everyday products still have a steep environmental price.

A closer look at the e-commerce sector reveals that the leaderboard is dominated by fewer than 10 global companies: Alibaba, Amazon, JD.com, eBay, Shopify, Rakuten and Walmart. These companies are facing many of the same challenges as their competitors: capturing and keeping customers, minimizing liability for the products they sell and hustling to expand and operate nimbly on a global scale.

This concentration of market power also means a concentration of environmental impact. The world's e-commerce leaders are perpetuating negative environmental and health impacts for the millions of products they source, market and distribute.

And herein lies the opportunity: this same concentration of market power can be leveraged to drive a better marketplace and build a more resilient business by proactively addressing potential risks *today*.

E-COMMERCE LEADERBOARD

Company	Annual Sales	Types of E-commerce
Alibaba	>\$768 billion	B2B, C2C
Amazon	\$239 billion	B2C, C2C
JD.com	\$215 billion	C2C, B2C
eBay	\$93 billion	C2C, B2C
Shopify	\$33 billion	C2C
Rakuten	>\$31 billion	B2C
Walmart	>\$19 billion	B2C, C2C

B2B = business to business C2C = consumer to consumer
 B2C = business to consumer C2B = consumer to business

Source: [The Motley Fool](#)



62% of chemicals in consumer products

are hazardous to humans and the environment



15% of GHG emissions

results from deforestation

Product sourcing, manufacturing, use and disposal perpetuate deforestation, air and water pollution and toxic chemical proliferation. Despite some promising efforts from major brands and organizations, today's everyday products still have a steep environmental price.



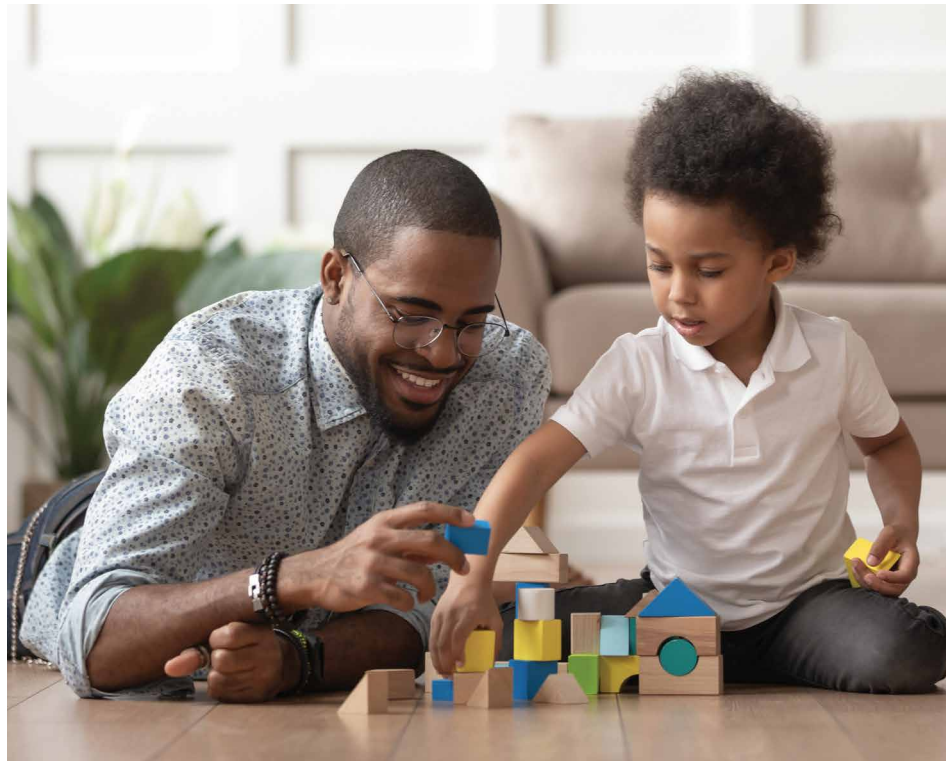
The Case for Sustainable Products

The market opportunity is expanding and the risk of inaction is too big to ignore.

Consumers, employees and investors are demanding sustainability leadership from companies.

- Over 70% of registered voters across party lines say corporations and industry should do more to address global warming, above citizens and the U.S. Congress.⁹
- BlackRock, the world's largest asset manager with around \$7 trillion under management, recently launched more funds for investors concerned about environmental and social issues.¹⁰

The opportunity for forward-thinking e-commerce retailers is clear. Companies that reduce the impact of their product portfolio and help consumers shop for products that promote a healthier lifestyle – and a more sustainable world – will be in position to forge ahead in the 21st century.



“

Our customers ... want to feel good about shopping at Walmart, and they expect us to do the right thing. [They want to] trust that the products we sell are good for their kids and the planet.”

– Doug McMillon, President and CEO, Walmart Inc.

WHY EMBRACE SUSTAINABILITY?

- 1 Capture a growing market
- 2 Manage the risk of product liability
- 3 Future-proof operations
- 4 Maintain shareholder confidence



1 Capture a growing market

Consumers expect that companies will do their part for the environment. In the most recent Nielsen global survey, 81% of global consumers said it's very important for companies to implement programs to improve the environment.¹¹

Consumer demand for safer and “greener” products has officially shifted from marginal to mainstream.

Appeal to the conscious consumer

The conscious consumer makes sure a purchase is safe, sustainable and responsible.

The typical online shopper is obsessed with research. Eighty-eight percent of consumers do research online before purchasing either online or in-store.¹² Consumers comb through product reviews, check in on social media platforms and use websites like Amazon and eBay for research.¹³

The e-commerce platform offers multiple ways to attract and engage the conscious consumer who wants to know more about a product's environmental and health impacts.

Whether through e-mail, social networks or other online promotions, e-commerce retailers have ample opportunities to empower and guide consumer research in a way that a brick-and-mortar experience simply cannot.



We're committed to taking the lead and working together – from raw material suppliers all the way to our customers and partners.”

– Torbjörn Lööf, CEO, Inter IKEA Group



\$150 billion by 2021

is what consumers are projected to spend on sustainable products



4x higher

compound average growth rate than conventional products



20% growth

in sustainable product sales since 2014



25% by 2021

is what the market share is projected to increase by

Source: [Nielsen](#)
*pre-pandemic projections

Target is using its e-commerce channel as the primary platform for its new “wellness icons” that help consumers easily understand a product’s environmental and health impacts.



Sustainability leads to loyalty

The conscious consumer is brand loyal, even willing to pay a premium for sustainable products.

Sixty-six percent of consumers (vs. 50% in 2014) say they’re willing to pay more for sustainable goods.¹⁴ And in e-commerce, where customer loyalty is hard to come by, a commitment to sustainability can lay the groundwork for a long-lasting customer relationship.¹⁵

Boundless marketing power

E-commerce channels provide opportunities to expound on the sustainability story for a product.

Unlimited by shelf space or inches of packaging, digital channels provide ample opportunity to cultivate a robust storyline about the provenance, values and ingredients of products.

New opportunities for circular consumption

The e-commerce channel provides opportunities for new business models that elongate the product lifecycle, such as rental, buy-back and resale.



Our new climate goals will reduce our carbon footprint from source to shelf, as we work alongside our partners within our supply chain to lower emissions and help create a better tomorrow.”

– Brian Cornell, Chairman and CEO, Target



Manage the risk of product liability

Today’s shoppers have no guarantee that the products distributed on e-commerce platforms are free of toxic chemicals. While suppliers are foremost responsible for their own products, the retailer has a shared responsibility for making sure its third-party products are as safe as possible. In addition to the risk of losing trust and damaging its reputation with consumers, the retailer is vulnerable to product liability.

In 2019, “A *Wall Street Journal* investigation found 4,152 items for sale on Amazon’s site that have been declared unsafe by federal agencies, are deceptively labeled or are banned by federal regulators – items that big-box retailers’ policies would bar from their shelves. Among those items, at least 2,000 listings for toys and medications lacked warnings about health risks to children.”¹⁶

In response, Amazon consumer chief Jeff Wilke said the company “might need to spend billions of dollars in the future to prevent the sale of counterfeit goods, expired food or dangerous products on its platforms to preserve the customer trust that is critical to the company’s future.”¹⁷

Manage the marketplace

Part of the appeal of e-commerce is the online marketplace, where third-party sellers can gain the same level of access to consumers as traditional brand sellers. Last year alone, third-party sellers

accounted for nearly 60% of Amazon’s total sales.¹⁸

The growth of online marketplaces comes with no small risk, as products with unclear provenance are bought and sold with little to no oversight. The proliferation of marketplaces might mean more products and profits, but it also means more liability.

One estimate put global corporate product compliance spend due to increasing chemicals regulations at \$1.3 billion by 2022.¹⁹ A recent investigation by the Washington State Attorney General made headlines when it was discovered that thousands of school supplies sold on Amazon’s marketplace contained toxic levels of lead. In some products, the instance of lead was 80 times more than the federal legal limit.²⁰ Amazon settled the suit and vowed to implement safety reforms for children’s products.



Some of the products we sell or manufacture may expose us to product liability or food safety claims relating to personal injury or illness, death or environmental or property damage. ”

– Amazon Annual Report

“

We are facing increasing levels of activist litigation in China by plaintiffs claiming damages based on consumer protection laws. We do not maintain product liability insurance for products and services transacted on our marketplaces.”

– Alibaba Annual Report

Digital start-ups like **ThredUp**, which has a collaboration with **Gap** and **The RealReal**, are activating new business models that take a step toward containing consumption. Mature brands are also using online channels to venture into rental and resell models with a clear revenue stream.

For example, **West Elm** recently partnered with **Rent the Runway** to rent furniture, and **Patagonia’s WornWear** business repairs used clothing for resale.



Unfortunately, the proliferation of unsafe products on e-commerce platforms is a longstanding issue. However, investigations like this serve as a wake-up call to e-commerce retailers that regulators and other stakeholders are paying closer attention to the toxic chemicals lurking in products sold on online marketplaces.

3 Future-proof operations

Sustainability is a fundamental consideration for future operations – not a nice-to-have, but a must-have.

Develop resilient supply chains

There is a multitude of external factors that can disrupt business-as-usual. The coronavirus pandemic exposed vulnerabilities across business operations and those of their suppliers, forcing companies to make strategic, longer-term changes to their supply chain.

Some companies like General Mills are forewarning investors: “Damage or disruption to raw material supplies or our manufacturing or distribution capabilities due to weather, including any potential effects of climate change... could impair our ability to manufacture or sell our products.”²¹

Environmental disruption has already impacted supply chain operations. Since 2012, disruptions to the production and delivery of goods and services due to environmental disasters are up by 29%.²² In 2011, severe flooding in Thailand caused an estimated \$15-20 billion in losses and disrupted supply chains for 14,500 companies, including HP and Western Digital.

E-commerce retailers that incorporate a changing climate and other potential risks into their business strategies can ensure product assortments without disruption.

Manage resources

Current consumption patterns indicate that by 2030 demand for food, water and energy will increase by 35%, 40%, and 50% respectively.²³ In addition, we are using three times the amount of raw materials that we were using 50 years ago,²⁴ which will only increase as the global population and thus demand for products increase. Virgin supply chains are not a long-term bet, so sustainable practices are necessary to future-proof supply chain operations. Putting the right incentives in place with suppliers will accelerate the transition to circular products that use resources efficiently and can be readily reused or recycled.

Leading omnichannel retailers like Walmart, Target and CVS are working with companies across their supply chains as part of their sustainability strategies. In 2017, Walmart announced Project Gigaton, an ambitious goal to reduce GHGs in its supply chain by one billion metric tons – an amount equivalent to the annual emissions of Germany. Since then, more than 1,000 suppliers have committed to share in this goal, and together have already reduced emissions by 93 million metric tons.²⁵

“**Damage or disruption to raw material supplies or our manufacturing or distribution capabilities due to weather, including any potential effects of climate change... could impair our ability to manufacture or sell our products.**”

– General Mills, Inc. Annual Report

Calibrate supply and demand

The retail industry is constantly battling overstock. A recent analysis indicates that U.S. retailers lost \$300 billion in 2018 because of stock markdowns.²⁶ Unsold inventory is estimated to cost retailers billions of dollars annually.

Calibrating inventory to demand is not only good for margins, it's better for the environment. Supply-and-demand innovation is emerging in the e-commerce sector. Here are a few examples:

- Amazon's [The Drop](#) offers curated fashion collections. The Drop's customers have 30 hours to buy, and products are made-to-order.
- The new [Snkrs](#) platform from Nike previews upcoming shoe releases, and in return, gets an early indicator of consumer demand.

Predictive analytics and online models of consumer engagement offer the opportunity to both reduce overstock and minimize the environmental impact of consumerism.

Protect your talent pool

A company's commitment to sustainability can help it attract and keep the best-and-brightest workers.

In 2019, thousands of Amazon workers signed a stunning open letter to Jeff Bezos and Amazon Board of Directors demanding action on climate change. Recently, Bezos announced a new corporate commitment to climate change, even as Amazon employees staged a walkout to join the global climate strike in September 2019. Leading companies like Seventh Generation and Patagonia took their support for employees to the next level and closed their offices for the global strike, encouraging everyone to participate.

Companies particularly need to take note of millennial workers' expectations when it comes to climate. Nearly 40% of millennials, who represent one in three workers, have chosen a job because of its approach to corporate sustainability. And, millennials are three times more likely to work at or apply to a company because of its environmental or social impact.²⁷





4 Maintain shareholder confidence

Investors are increasingly concerned about climate change and its impact on business. According to a Morgan Stanley poll, 85% of individual investors are interested in sustainable investing, up 10% from just two years ago.²⁸

Investors expect companies to provide strategic, aggressive and transparent sustainability goals.

The Governance & Accountability Institute reported only 20% of Fortune 500 companies engaged in sustainability reporting in 2011; in 2018, 86% companies reported.²⁹

Leading investment firms are urging companies and investors to re-evaluate their environmental risk in the context of climate change – in fact, climate change is emerging as a top priority for asset owners and asset managers.

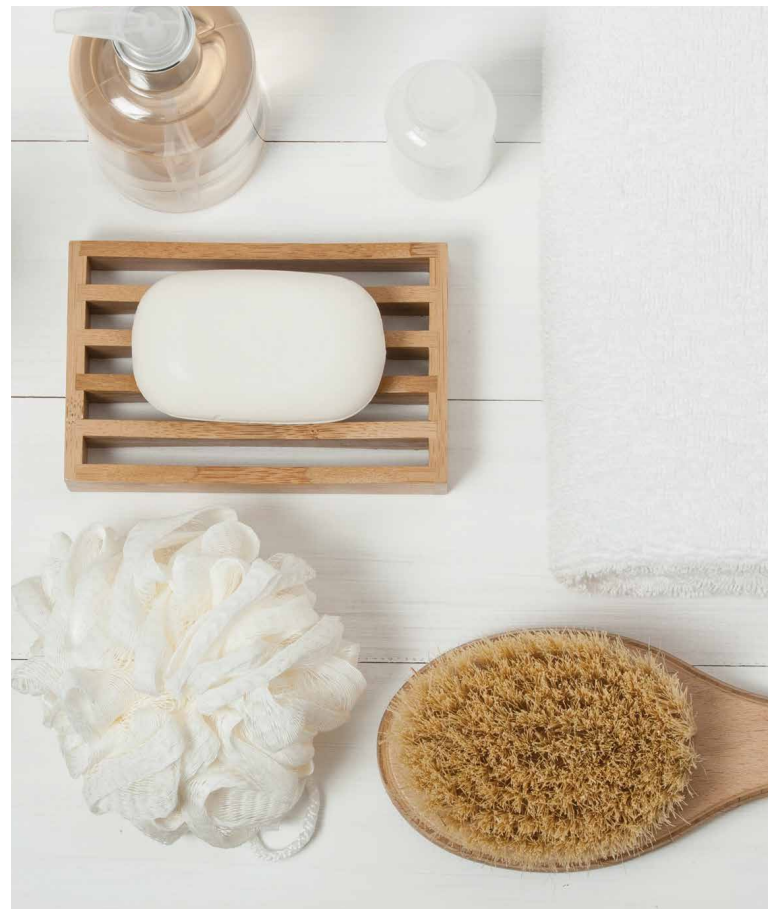
In early 2020, BlackRock announced a commitment and a plan for making climate change and sustainability central to the way that the company manages risk, designs products and portfolios, and engages with companies to improve disclosure and accelerate progress towards the goals of the Paris Agreement. This commitment was preceded by acts of leadership from [Goldman Sachs](#) and [Credit Suisse](#), both of which announced plans to stop financing new coal-fired power plants.

In addition, HSBC and The Sustainability Consortium recently announced financial rewards for Walmart suppliers with strong sustainability ratings. Suppliers that perform well against Walmart's supply chain sustainability goals and index program are now eligible for preferential financing rates from HSBC.³⁰

Investors care about chemical risk, too. Leading companies like Walmart, HP and Levi Strauss & Co. share their efforts to reduce their chemical risk with investors via the annual Chemical Footprint Project survey. Over the past four years, participants have eliminated 461 million pounds of toxic chemicals from their products.³¹

The Seven Steps to E-commerce Sustainability Leadership

Sustainability leadership means going beyond your direct operations to engage product supply chains and embracing strategic partnerships to drive scale.



- 1 Assess your chemical and carbon footprints**

- 2 Set ambitious goals to address your footprints**

- 3 Align business operations to your sustainability goals**

- 4 Engage product suppliers and sellers to meet your goals**

- 5 Help consumers make sustainable choices**

- 6 Measure your progress and share it publicly**

- 7 Lead your industry forward on sustainability**

1 Assess your chemical and carbon footprints

Develop a baseline understanding of the impact across your supply chain and marketplaces. This will indicate where you should focus time and resources. It's also important to have a first baseline that you can use to measure and evaluate progress over time.



Your chemical footprint

Get started

Understand the prevalence of toxic chemicals in your product assortment

Your [chemical footprint](#) is the total amount of toxic chemicals used in your business. For e-commerce retailers, this is primarily the chemicals of concern used in the products you sell. It's important to understand your chemical footprint in terms of the volume of toxic chemicals in products and ubiquity of these chemicals across your product assortment.

Product ingredient transparency is critical to really understanding your chemical footprint. Zero in on priority products where the use of toxic chemicals is high, widespread and/or exposure is especially

worrisome. Pay particular attention to formulated products (i.e. personal care, cosmetics, cleaning products), food and food packaging, clothing and jewelry. Also pay attention to priority consumer segments, such as infants, tweens and pregnant mothers, that are particularly vulnerable because of developmental concerns.

Keep going

Confirm data veracity

Audit supplier disclosures to gauge how much you know about the chemical ingredients in priority products. From this baseline, you can determine the gap between what you know and the level of transparency you need in order to gain a more accurate picture of your current chemical footprint.



TIP

Sometimes it's easier and faster for retailers to start by focusing on top private or white-label brands because of direct control and leverage.



RESOURCE

To understand where chemicals of concern exist in your business, check out [Prioritize your chemicals: a guide](#).



Your carbon footprint

Get started

Understand your contribution to global climate change

An e-commerce retailer's carbon footprint is dominated by its product assortment. Thus, retailers should go beyond Scope 1 (direct emissions) and Scope 2 (purchased energy) emissions and understand Scope 3 emissions (all indirect emissions not included in Scope 2 that occur in the value chain), in order to gain a more complete picture of their entire carbon footprint.

Concentrate on high-volume products that have high amounts of embodied energy and/or perpetuate the most carbon emissions along the supply chain. Because more consumers are buying groceries online, it's especially important for e-commerce retailers to understand what's in their food products and how those ingredients are grown. High carbon emissions result from products

containing row crops (i.e., wheat, corn and soy) and protein (i.e., beef, pork and chicken). Products containing commodity crops such as palm oil, cocoa or paper are also climate hotspots because they are the primary causes of deforestation.

Keep going

Tackle waste in your supply chain

Waste is generated during food production, processing and manufacturing of a product. It also includes packaging waste and post-consumer waste. The first step in minimizing waste is to understand where the most waste is generated (e.g., plastic packaging, food waste, electronics waste and apparel waste) along your supply chain and identify where reduction, recycling and reuse strategies can be deployed.



TIP

Understand where you have the leverage to advance agricultural goals. If you have relationships with the farmers who supply your food products, engage them as partners to achieve shared goals. If your supply chain is more complex, collaborate with willing brands and manufacturers who can amplify the message with their supply chains.



RESOURCE

Find solutions to your biggest waste challenges in this [guide to zero waste](#).



2 Set ambitious goals to address your footprint

Ambitious goals set a tone internally and externally that your organization is serious about sustainability. Base your commitments and activities on what science tells us is most critical for the health of humans and the environment.



Your chemical footprint

Get started

Make a commitment to advance safer chemicals

Establish a chemicals policy with specific, time-bound goals. An actionable chemicals policy includes commitments to:

- Reduce your chemical footprint by eliminating toxic chemicals from products.
- Incentivize suppliers to use safer chemical ingredients.
- Engage consumers in understanding and choosing safer products.
- Measure your activities and share progress publicly.



TIP

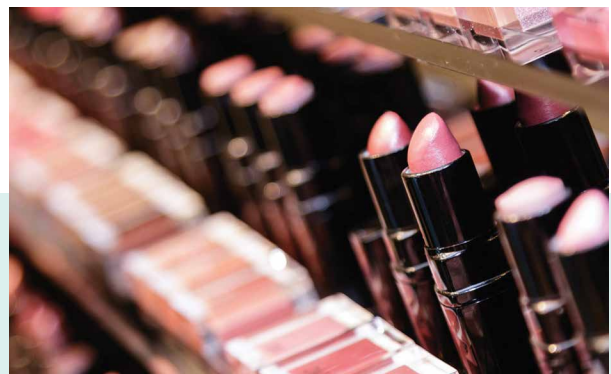
A chemicals policy can be deployed across all products or rolled out in stages. Scoping your initial chemicals policy to a priority product category can generate early momentum and demonstrate proof of concept.

Keep going

Strive to go further with your commitments

Hold your company accountable to achieving the commitments laid out in your chemicals policy by making the policy and chemicals targeted for removal public.

Ratchet up the ambition of your chemicals policy by expanding the chemical footprint reduction goal, either by increasing the percent reduction desired, the number of toxic chemicals being tackled or the extent of your total product assortment covered by the policy.



RESOURCE

EDF's [model chemicals policy](#) template can help you get started.



Your carbon footprint

Get started

Make a commitment to reduce climate impact

The UN has issued a clear warning: we need to curb global warming to less than 1.5°C by 2030 to avoid severe effects of climate change. Leading retailers, brands and manufacturers are doing their part by evaluating and aligning their carbon activities to science-based targets. Steps to determine a science-based target include:

- Research and identify where your carbon footprint is concentrated and the measures you can take to reduce it. This research could include a modeling exercise or analysis of internal data.
- Convene leadership and experts to determine a target for your company that is technologically and financially feasible.

Keep going

Set meaningful goals

Define specific, time-bound goals and activities to reduce your Scope 3 emissions. The activities you pursue will depend on your science-based target, but retailers are well-positioned to:

- Define a goal for suppliers to reduce energy consumption and emissions in the manufacturing and processing of their products.
- Set a goal to reduce deforestation in high-risk geographies for targeted commodities.
- Set a waste goal that prioritizes the elimination of single-use plastics, fosters the use of recyclable materials, encourages the growth of reuse and recycling infrastructures and/or minimizes the presence of toxic chemicals in the recycling stream.



TIP

The [Science Based Targets initiative \(SBTi\)](#) provides best practices, case studies and tailored assessments to guide companies on setting targets.



RESOURCE

Find [resources](#) to take action on energy, deforestation and waste.



3

Align business operations to your sustainability goals

The most effective corporate sustainability programs integrate with the business. Sustainability commitments have to be backed up with an investment in implementation. A dedicated team, incentives, training and technology are all required to achieve your goals.

Get started

Integrate sustainability goals into your organization

- Work with a C-suite executive to sponsor sustainability goals.
- Allocate staff and budget to match your sustainability ambitions and goals.
- Integrate sustainability goals into business units, such as merchandising, by adding sustainability-focused staff and/or empowering core staff to make decisions that favor sustainability goals.
- Educate your executives and employees on sustainability goals.

Keep going

Integrate sustainability goals into your operations

- Establish measurement infrastructure for efficient tracking and reporting of product sustainability and overall vendor performance.
- Expand existing product management and logistics technologies to facilitate sustainability reporting and tracking.
- Integrate data systems to ensure a product can be traced along the lifecycle.



TIP

Reward performance and celebrate progress on goals. Feature high-performing suppliers in public communications and product promotions.



RESOURCE

This [Business for Sustainability \(BSR\) report](#) lays out the business case and action steps to integrate sustainability into supply chain finance.



AUTOMATE PRODUCT TRANSPARENCY

Managing product data over multiple channels is a core function of any e-commerce business. This function could be applied to solve a fundamental sustainability challenge: effective and efficient product transparency. Imagine if a product page not only included key features, pictures and reviews, but also captured the product's carbon and chemical footprint.



Engage product suppliers and sellers to meet your goals

Sustainability requires a new level of engagement with all of your product suppliers, from name brands to third-party sellers. Ambitious goals will require a shift from business as usual.

Get started

Establish new expectations with your suppliers

- Communicate goals and reporting requirements.
- Make sustainability requirements part of your vendor agreement, supplier selection and third-party seller vetting process.
- Provide incentives for suppliers and third-party sellers to participate.



TIP

Rally a coalition of enthusiastic suppliers. It makes sense to target your largest, high-volume suppliers on these goals, but it may take longer to gain traction. Start with willing suppliers and prove together that it can be done. The rest of your supply chain will follow this lead.



RESOURCE

For ideas and inspiration, check out [Target Clean](#), the retailer's curated online shop offering products that align with Target's corporate chemicals policy.

Keep going

Track and improve product performance

- Identify your most significant suppliers and sellers by sales, carbon footprint and/or chemical footprint, and focus your outreach there.
- Consistently engage suppliers and sellers to ensure sustainability attributes for products are being properly traced, reported and improved.
- Request reporting on chemical ingredients to the highest degree of disclosure possible.

Incentivize suppliers to lead

- Partner with suppliers to develop innovative solutions, such as improved product formulations or waste reduction.
- Encourage your suppliers and sellers to engage their supply chains.
- Offer best-in-class sustainable suppliers preferential marketing and placement.

5 Help consumers make sustainable choices

E-commerce retailers are adept at persuading and educating consumers through the shopping experience. Without the constraints of a store shelf, there is greater opportunity to educate and engage consumers. Use this influence to reinforce sustainable choices and cultivate a more conscious consumer base.

Get started

Translate product data into compelling consumer terms

- Convey the sustainability profile of a product on its product page in lay terms, using certifications, labels and/or product claims.

Keep going

Educate consumers about sustainable options

- Use your website and online marketplace to provide deeper education about the environmental and health impacts of everyday products.
- Share supplier success stories that showcase how leading brands have cascaded sustainability throughout their business to deliver safer and more sustainable products.

Incentivize consumers to choose sustainable products

- Reward consumers with discounts, reward points, etc. for making sustainable choices, such as choosing a safer, more sustainable product or opting for less packaging or low emissions shipping.
- Help consumers track the environmental impact of past purchases.



TIP

Product certifications provide a useful shortcut for consumers to understand a product's sustainability profile. But not all certifications are created equal. Make sure the certifications your suppliers are using on products align to the goals you've set.

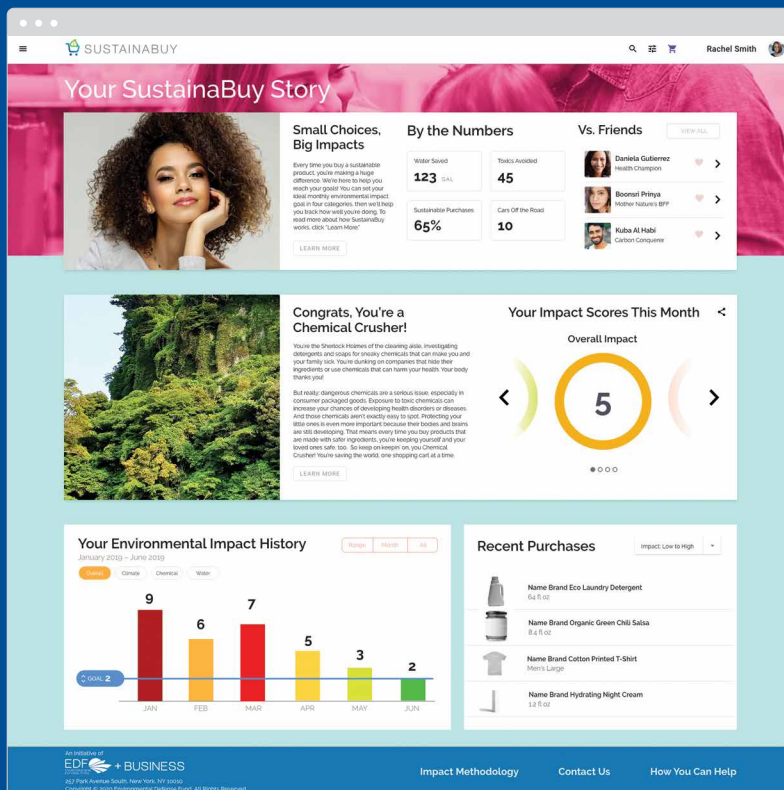


RESOURCE

EDF's [rules for online disclosure](#) provide immediate steps you can take to inform consumers about the ingredients in products.

Introducing SustainaBuy

Creating a transparent online marketplace that offers safe and sustainable products is especially critical today as more consumers move online for their everyday shopping needs.



Customers want to shop sustainably, but right now, it's just too difficult. Finding reliable environmental and health data on a product takes forever, and often, the information that's out there is complicated and hard to verify. Companies can help customers make safer and more sustainable purchases by ensuring that the information they share is legitimate and trustworthy.

SustainaBuy, an initiative of EDF + Business, demonstrates how easy it is to integrate expertly sourced sustainability data into the online shopping experience. It can be fast, easy and fun for people to make purchases better for them and the planet based on real, behind-the-scenes sustainability data about products. Helping people change their shopping habits for the good of their health and the planet can be done by leveraging data you already have.

The time is now for companies to use their influence to help customers shop sustainably, whether online or in the store, so that every dollar spent goes toward products that are safer for the environment and for the people who use them.

Focusing on transparency in the e-commerce space is increasingly important as millennials' and Gen Zers' spending power increases. Research shows that younger shoppers want to buy from brands and companies that are transparent and committed to making a positive social impact.³²

SUSTAINABUY

Home > Health & Beauty > Skin Care > Nature's Beauty

SUSTAINABLE

NATURE'S BEAUTY
Bright Boost Serum
 3.4 fl oz
ENV. IMPACT: 1
 Environmental Certifications

\$8.97 **BUY NOW**

Qty: **ADD TO CART**

RESPONSIBLE MANUFACTURING **SAFER INGREDIENTS** **SUSTAINABLE PACKAGING**

Advanced Antioxidant Serum – A replenishing formula that brightens the skin and decreases fine lines, wrinkles, and sun spots - without harmful chemicals. This silky smooth serum can be used day or night. Smooth, soft, hydrated skin. Your skin will thank you.

Nature's Beauty's promise: All the ingredients and their functions right at your fingertips to take the guesswork out of your skincare.

Environmental Impact ▼

Overall Score	Water Impact	Climate Impact	Chemical Impact
1	2	1	1
	PROS LESS WATER CONSUMED	PROS RECYCLED CONTENT - PACKAGING MADE WITH RENEWABLE ENERGY	PROS SAFER INGREDIENTS INGREDIENT TRANSPARENCY SAFER PACKAGING

Ingredients

Aqua (Solvent), Prunus Amygdalus Dulcis (Sweet Almond) Oil (Moisturizer), Lycium Barbarum Seed Oil (Skin Conditioner), Gluconolactone (Skin Conditioner), Squalane (Emollient), Hyaluronic Acid (Hydrating Agent), Phytic Acid (Chelant), Potassium Sorbate (Preservative), Xanthan Gum (Binder)

Product Details

Assembled Product Weight 3.4 fl oz.



USE CONSUMER DATA FOR GOOD

Consumer data can be analyzed to identify the next most likely consumers of sustainable products. For example, a consumer that prefers organic food is likely to expand next into “clean” personal care and cleaning products. Helping customers choose safer and more sustainable products will help increase trust, loyalty and your bottom line.



6 Measure your progress and share it publicly

You can't improve what you don't measure. Regular reporting provides accountability to your goals. It also gives suppliers and sellers a picture of their performance and encourages healthy competition.

Get started

Leverage data to engage stakeholders

- Regularly report on sustainability goals to employees, consumers and investors, sharing not only successes but also lessons learned.
- Engage suppliers and third-party sellers regularly on their progress and performance against goals.



TIP

Be honest about your progress by sharing successes and setbacks. Being open and honest lends credibility, especially with savvy, conscious consumers who are tuned in to greenwashing.

Keep going

Build valuable relationships

- Share best practices with peers.
- Participate – and encourage your suppliers to engage in – leading industry indexes, like CDP (formerly the Carbon Disclosure Project), the THESIS Index, the Higg Index and the Chemical Footprint Project.
- Go beyond self-reporting and internal auditing to invest in third-party verification of progress against sustainability goals.



RESOURCE

[CDP](#) enables companies to disclose their environmental impacts in a standardized way, track performance against peers and receive global recognition for leadership.

For chemicals specifically, the [Chemical Footprint Project](#) is a valuable platform to help companies understand, measure and share their progress against their chemical reduction goals.

7 Lead your industry forward on sustainability

These complex challenges cannot be solved alone – collaboration is essential to drive efficiencies, scale and results. Leaders seize the opportunity to catalyze system change. As you make progress on your goals, use your voice and influence to lead your industry.

Get started

Lead on sustainability advocacy

- Integrate sustainability goals into corporate policy and lobbying activities and advocate for public policy that maximizes benefit for the environment and your sustainability strategy.
- Partner with nonprofit organizations and academic experts to extend and bolster efforts.

Keep going

Champion industry adoption

- Participate in value chain, pre-competitive and open-source collaborations to accelerate system transformation. Aligning on a harmonized set of disclosure requirements for suppliers and sellers with your value chain can be especially impactful. It amplifies that sustainability is an industry imperative, simplifies suppliers' workload and reduces cost of compliance for suppliers.
- Recruit other companies to participate in relevant industry groups, commitments and coalitions.



TIP

You'll go further faster if you collaborate with others (suppliers, nonprofit groups, peers) to achieve your company's goals.



RESOURCE

Leading examples include the [Higg and THESIS Indexes](#) and the [Beauty and Personal Care Product Sustainability Rating System](#).





SECTION 4

Conclusion

It's time for e-commerce to lead.

It's a critical moment for the health of people and the future of our planet.

This is the challenge of our time, and we need e-commerce retailers to lead us into a new era of safer, more sustainable products. Below are resources to help you get started in this journey.

The [Supply Chain Solutions Center](#) is an innovative, open-source platform that provides resources from over 10

environmental and sustainable business nonprofits. The Supply Chain Solutions Center puts resources and expert advice at the fingertips of sustainability professionals.

EDF+Business also offers resources on [greening last mile delivery](#) and accelerating the transition to zero-emissions shipping, on best practices for [product design and use](#) and on the [pillars of leadership](#) for safer chemicals in the marketplace.

This report is brought to you by [EDF+Business](#), part of Environmental Defense Fund (EDF).

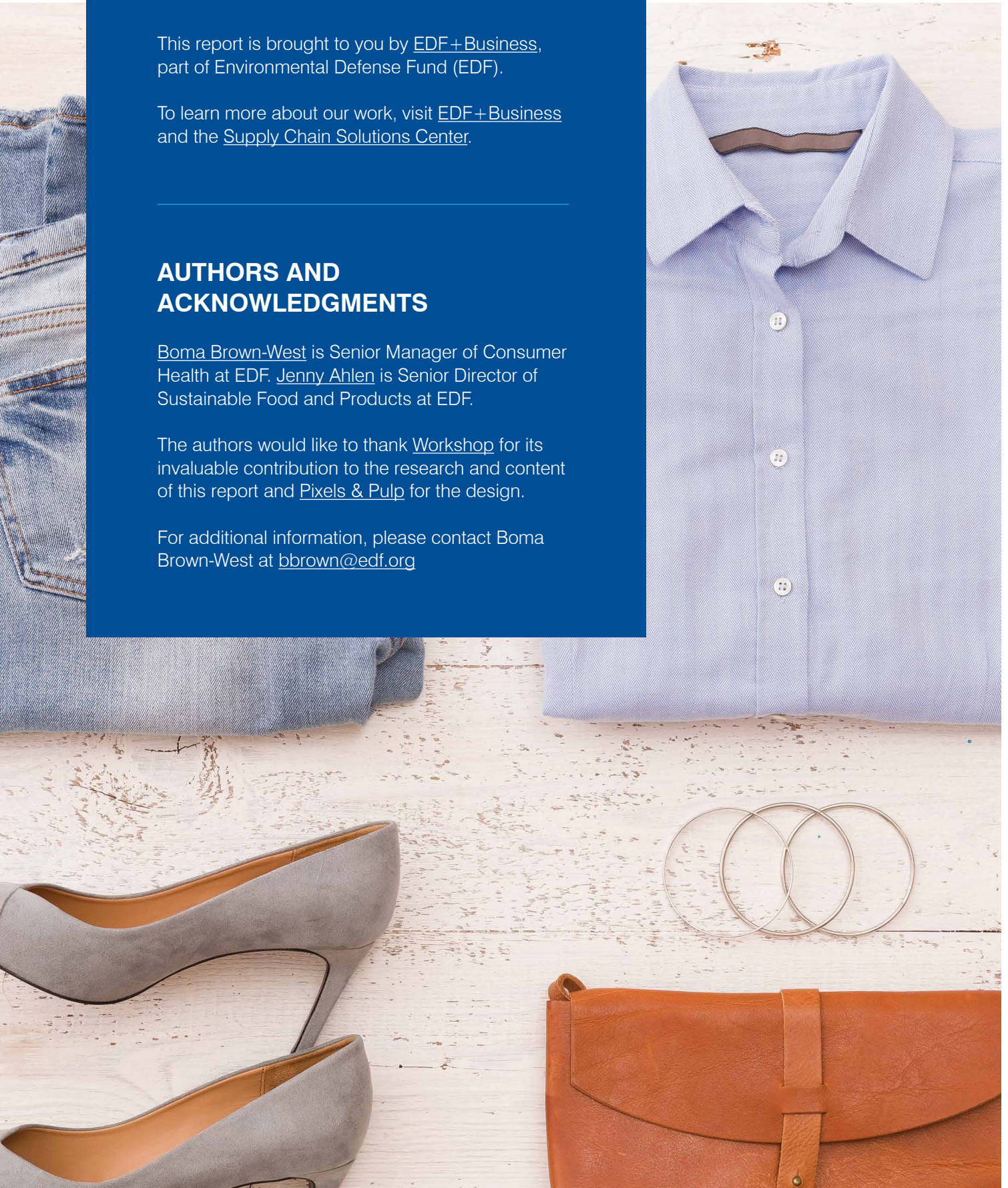
To learn more about our work, visit [EDF+Business](#) and the [Supply Chain Solutions Center](#).

AUTHORS AND ACKNOWLEDGMENTS

[Boma Brown-West](#) is Senior Manager of Consumer Health at EDF. [Jenny Ahlen](#) is Senior Director of Sustainable Food and Products at EDF.

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For additional information, please contact Boma Brown-West at bbrown@edf.org



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Environmental Defense Fund
257 Park Avenue South
New York, New York 10010

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