

How IBM can help

For more than a century, IBM has been providing businesses with the expertise needed to help consumer products companies win in the marketplace. Our researchers and consultants create innovative solutions that help clients become more consumer centric to deliver compelling brand experiences, collaborate more effectively with channel partners, and align demand and supply.

For more information on our consumer product solutions, see ibm.com/consumerproducts. With a comprehensive portfolio of retail solutions for merchandising, supply chain management, omnichannel retailing, and advanced analytics, IBM helps deliver rapid time to value. With global capabilities that span 170 countries, we help retailers anticipate change and profit from new opportunities. For more information on our retail solutions, please visit: ibm.com/industries/retail.

By Sachin Gupta, Sashank Yaragudipati, Jane Cheung, and Chris Wong

Key takeaways

Consumers care

Consumers see environmental sustainability and social responsibility as two sides of the same coin and seek brands aligned with their values. Companies can seize this opportunity by guiding their own sustainability narrative with clear, transparent information about their plans and actions.

Build trust with metrics

Before choosing a brand when shopping, consumers do research, so brands need to communicate and report their progress to consumers—yet less than one third of have defined ways to measure progress.

Sustainability for growth

Purpose-driven brands can grow by building lasting brand relationships with their customers. Consumer willingness to support purposeful brands by paying a premium has, in fact, deepened.

Introduction

Despite debunked reports of swans and dolphins returning to the crystal-clear canals of Venice and other similar fictions, one thing is undeniably true: the pandemic lockdown initially had a very positive effect on the environment. Human-driven pollution fell precipitously, allowing air and water quality to rebound.

- Nitrous oxides fell by by 20–30% in China, Italy, France, and Spain, and by 77.3% in São Paulo, Brazil.¹
- The dissolved oxygen content in the Ganga River, India, increased by about 80%.
- China's coronavirus lockdown is estimated to have saved over 70,000 lives due to the reduction in air pollution from factories and vehicles.²

But as remarkable as these and other comparable results may seem, a far more important and long-lasting effect has emerged: the pandemic has intensified consumer demands for environmental sustainability and consumer resolve to back up those demands with their wallets.

Consumers, businesses, and governments have had to evaluate the paradoxical question of what's worth more in the era of climate change: the present or the future? As extreme environmental events become common, people and enterprises are carefully weighing short-term expectations, such as convenience and cost-efficiency, against the existential need to preserve the planet.

To better understand consumer opinions and perspectives on sustainability and how well-aligned consumer companies are with them, the IBM Institute for Business Value (IBV) surveyed more than 14,000 adults around the world. To examine developments in the sustainability agenda of the enterprise, we surveyed 1,900 executives globally about what they had planned for the next 12 months. Importantly, we wanted to understand if the enterprise view of sustainability is still focused on compliance and reputation, or are companies seeing sustainability as a viable path to operational improvement and business growth.



9 of 10

companies surveyed say they will be working on various sustainability initiatives across the enterprise by the end of 2021.



7 in 10

executives say their sustainability development goals can improve operational effectiveness, agility and drive business results.



Less 1/3

of companies have defined metrics to measure sustainability progress.

Consumer sentiment on sustainability

Consumers link demands for environmental sustainability to social responsibility

93% of consumers globally say COVID-19 affected their views, not only of environmental sustainability, but also social responsibility. More than 2 in 3 say environmental issues are significantly important to them personally. A similar percentage of people are focused on social responsibility issues, with roughly 3 in 4 consumers saying access to education and ensuring good health and well-being are significantly important to them. 72% say the same of ending poverty and hunger. In general, consumers seem to be viewing environmental sustainability and social responsibility as two sides of the same coin—a truly sustainable company cannot do one without also making progress in the other.

This alignment speaks to the reality of achieving social and environmental goals. Good health isn't possible without clean water. Efforts to protect nature are often ineffective if they don't also address poverty or the needs of people living in or near the natural environments. Our research infers that many consumers have also connected those dots.

Companies are catching on, too. IKEA's definition of and commitment to sustainability cites poverty and inequality as challenges to be confronted on an equal par with climate change, unsustainable consumption, and other environmental issues.³ And farmer connect, a software company using blockchain technology to help connect individual farmers to the supply chain, has released a mobile app that shows coffee consumers where their coffee comes from and reassures them that farmers growing the beans can earn a sufficient living.⁴

To consumers, environmental sustainability and social responsibility are two sides of the same coin.

In fact, people who prioritize both social responsibility and sustainability issues made up the largest segment of our survey population—we call them "People + Planet Guardians." And our research reveals that these are,

in fact, "average" people, part of every community. None of the factors in age, income, and employment status distinguish People + Planet Guardians from others (see Figure 1).

Figure 1Guardians of the Planet

People + Planet Guardians are more concerned about environmental and social issues than their counterparts.

Zioi f (b) =>	43% People + Planet Guardians	21% Single-issue focused	36% Concerned centrists*
Reducing pollution (water, air, and ground)	4.81	2.73	3.98
Securing fresh water supplies	4.77	2.82	3.97
Protecting rainforests and other ecosystems	4.76	2.69	3.86
Ending poverty and hunger	4.72	2.77	3.88
Ensuring good health and well-being	4.71	2.90	3.94
Providing access to quality education	4.71	2.77	3.89
	Low High	Low High	Low High

Q: How important is this issue to you personally today?

^{*} respondents concerned with multiple issues across different areas

Consumers are factoring in sustainability to their financial decisions.

Consumers are embracing sustainability across their lives

The pandemic hit many consumers hard, which makes this increased commitment to sustainability even more noteworthy. And the commitment is becoming integral to virtually all aspects of their lives. Consumers are not only considering sustainability when selecting a brand, but also when investing, choosing employment, or selecting a mode of transportation.

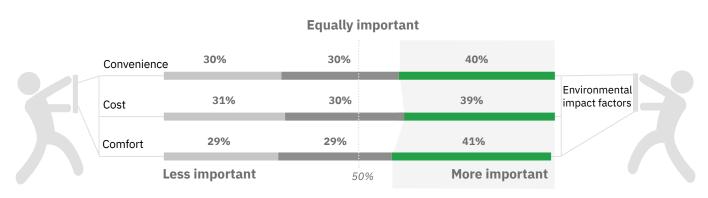
When compared to two years ago, 22% more consumers say environmental responsibility is very or extremely important when deciding on a brand. And there are signs that we can expect this commitment to grow—84% of consumers now indicate environmental sustainability is at least moderately important.

Consumers are factoring in sustainability to their financial decisions. Half believe a company's climate change exposure affects its financial risk—92% of this group expect to invest, divest, or lobby fund managers to change investment mixes based on environmental factors and/or social responsibility in the next 12 months. This group is nearly 1.5 times larger than than that of personal investors who do not see climate change risk as a financial risk.

In addition, sustainability is a major concern when it comes to personal mobility. Today, roughly 40% of consumers say environmental impact factors are more important than cost, comfort, and convenience—three criteria that used to define travel preferences (see Figure 2).

Figure 2 Prioritizing the planet

Roughly 40% of consumers said environmental impact factors were more important than cost, comfort, and convenience.



Source: Q: Most important factor to you when selecting how you will travel. n=14,705

Consumers trust brands—but still want to check for themselves before buying

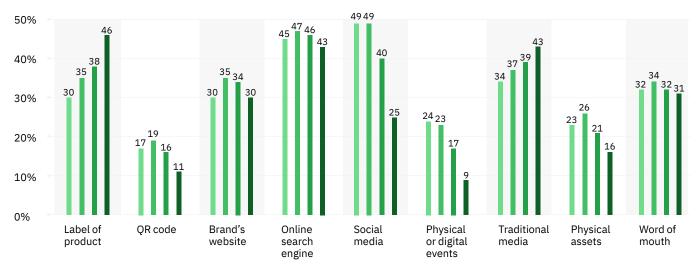
Consumers actively seek brands aligned with their values. 48% say they trust statements companies make about environmental sustainability, but more than three-quarters of this group say they also do their own research before deciding.

So, where do they look, and what information are they looking for? The most common approach: use an online search engine and social media platforms. Next is check directly on the product and brand website (see Figure 3). And while most consumers look for product information, personal health, and wellness benefits, many also investigate a company's environmental sustainability record: What do the metrics say? Is it making progress? What key initiatives has it launched?

This underscores a real opportunity for consumer companies. If the top places people look for information on a brand's sustainability are social media platforms that the brand may sponsor and the brand's own website, the brand can shape its own sustainability story—if it is transparent and has facts, metrics, and stories to back up its claim.

Transparency builds trust. While consumers are skeptical and keep a keen eye out for bogus claims and "greenwashing" campaigns, honesty builds trust-based relationships with principled customers for years to come. Brands should seize this opportunity to guide their own sustainability narrative. By offering clear, transparent information about their sustainability and social responsibility initiatives, companies can help consumers make informed choices.

Figure 3
In research we trust
Where consumers check before they buy



18 - 24 years old | 25 - 39 years old | 40 - 54 years old | 55 - 70+ years old

Source: Q: Where do you typically get information around environmental sustainability or social responsibility initiatives for a brand and/or products they make (select all that apply).

A fundamental belief of consumers: sustainable development objectives must include supporting healthy lives and promoting well-being.

Enterprises' sustainability agenda—A work in progress

For consumer industry brands, a sustainability plan is only a good start—they also have to show results

Nearly half of the companies in our executive research began sustainability initiatives prior to the pandemic—and they are staying the course. 22% launched sustainability initiatives during the pandemic; an equal number are planning to start this year. By the end of 2021, 9 out of 10 companies surveyed say they will be working on various sustainability initiatives across the enterprise.

Sustainability development goals developed by the United Nations can serve as a blueprint for companies to help achieve a more viable future. We asked respondents to rate the objectives that have the highest priority for their organization. "Zero Hunger," "Good Health and Well-being," "Life on Land," and "Climate Action" have ranked highest for companies in the consumer industry.

"Zero Hunger" and "Good Health and Well-being"

Across the world, approximately 805 million people are undernourished, consuming well under the recommended number of calories per day. Many companies within the consumer industry have partnered with other leading organizations to take on challenges related to hunger, nutrition, and food waste.

For example:

- General Mills is one of the founding members of the Global Food Banking Network that captures surplus food and delivers it to people in need.⁷
- The Kraft Heinz Company Micronutrient Campaign developed a nutritional supplement sachet that can be mixed easily with readily available food to boost its nutritional impact.⁸
- The Inter-American Development Bank (IDB), Grupo Bimbo, and other major brands have joined to fight food waste across Latin America and the Caribbean.⁹ In addition to launching specific projects, the collaboration plans to influence policy, increase public awareness, and shape consumption habits to help reduce supply chain food waste.

The pandemic has intensified a fundamental belief of consumers and brands around the world: sustainable development objectives must include supporting healthy lives and promoting well-being. Good health and well-being are among the highest priorities for global consumers. Companies, therefore, are working toward this goal by developing healthier products and promoting healthier habits at every stage of life. Danone targets healthier nutrition from better products and better choices. P&G Pampers Mobile Clinic Program and Pampers UNICEF vaccine program work to promote child and maternal health and improve access to medicine and quality healthcare.¹⁰

"Life on Land" and "Climate Action"

Forests cover nearly 31% of our planet's land area and are critical to sustaining the air we breathe, the water we drink, and the food we eat. ¹¹ But almost 75% of the world's poor are affected directly by land degradation. Biodiversity and the ecosystem services it underpins can support climate change adaptation and disaster risk reduction strategies. In turn, these can increase people's resilience to climate change.

Within the consumer industry, Unilever's "regenerating nature" project is pioneering an approach to stop the decline of biodiversity, soil health, and water quality. 12 It aims to move beyond compliance with principles of sustainable agriculture to encourage regenerative practices. Ambitiously, it looks beyond Unilever's supply chain to protect and regenerate natural spaces.

L'Oréal aims to achieve carbon neutrality by improving its energy efficiency, replacing plastics used in packaging with recyclable or bio-based sources, and reducing greenhouse gas emissions.¹³

Sustainability transformation is taking shape across the value chain

For many companies, the bulk of their climate impact is now outside of their direct control. This is especially true for those that have already taken action to decarbonize their facilities, operations, and purchased energy—commonly described as "Scope 1 and 2." Scope 3 emissions are far more complex, sitting outside a company's direct control. Many organizations report that 80% of their emissions are Scope 3. For some, Scope 3 accounts for as much as 97% of their overall emissions (see "Definitions: Scoping the emissions challenge").¹⁴

Definitions: Scoping the emissions challenge

The often misattributed and misapplied maxim "you can't manage what you can't measure" aside, it's next to impossible to reduce greenhouse gas (GHG) emissions if you don't how much of them there are and where they're coming from. The Greenhouse Gas Protocol, an international accounting tool, helps companies consider the potential ramifications not just of their immediate business actions, but of the many indirect activities that are part of the products and services they purchase and supply while conducting business.

Scope 1 emissions are those a company is directly responsible for—direct emissions from its owned or controlled resources. Scope 2 emissions arise from the generation of purchased electricity, heating, and cooling that the company consumes. Scope 3 emissions cast the widest net—all other indirect emissions occurring in a company's value chain. While Scope 3 might seem impossibly comprehensive and complex, in fact, for many companies it provides the greatest opportunity for GHG emission reduction.¹⁵

Zalando: Making sustainability a value chain endeavor¹⁶

Online fashion retail platform Zalando says its commitment to carbon neutrality across its own operations is insufficient. It has committed to having 90% of its key suppliers also set their own science-based targets. It expects to be the first retailer signed up to the Sustainable Apparel Coalition (SAC) to use a new module that makes sustainability assessments mandatory for its own private labels and the partner brands sold on its platform.

As a result, the company's relationship with the brands it sells, including fashion heavyweights such as Nike, Burlington, and boohoo, could change.

For many companies, the bulk of their climate impact is now outside of their direct control.

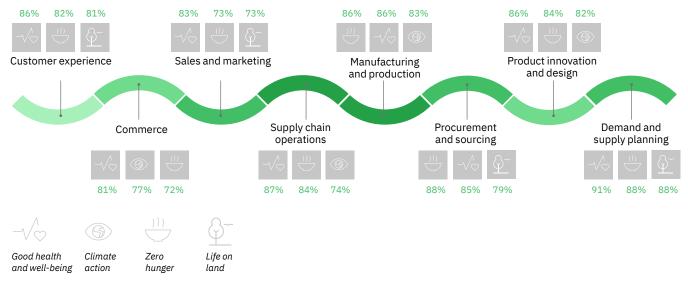
Companies are therefore factoring in their top sustainability goals across different functions in the value chain. From design to sourcing to manufacturing and across the rest of the supply chain, businesses are now engaging with

suppliers to create low-carbon, easily recyclable products and services to reduce value chain emissions (see Figure 4).

Figure 4

A broad agenda

Consumer companies factor top SDG goals to at least some extent across the value chain



Source: Q: To what extent are you applying your top three SDGs as part of any initiatives in the following areas?

The metrics challenge

Without crisply defined metrics, it's almost impossible for a company to tell if it is making tangible sustainability progress, or to tie progress to improved business results. It's also more difficult for a company to tell a compelling story to its customers about its sustainability efforts, something ever more essential to enhancing brand reputation and even viability.

So it's a cause for concern that on average, only 10% of companies in the consumer industry have defined unique metrics to measure sustainability progress. Just under 20% have aligned organizational performance metrics to measure progress. Most organizations are in the process of defining metrics or intend to do so soon.

This reflects the very real challenge faced by companies when defining metrics to measure sustainability results and progress. But the challenge goes beyond just defining them.

Gathering contextual and standardized data from variable sources is complex, as is the analysis needed to monitor progress. So is incorporating environmental insights from that analysis into economic decision making and day-to-day operations, not to mention communicating them in simple terms that a consumer could understand and act on (see "Perspective: Labeling eco impact").

Perspective: Labeling eco impact¹⁷

Which is better for the environment—buying liquid packaged in glass that can be cleanly recycled, but whose shipping weight is a concern? Or packaged in plastic—lighter, but not as recyclable?

It turns out consumers—and companies supplying them—face hundreds of similar conundrums. Finding a simple way to make a sound decision can be maddening, especially when it requires research from multiple sources of often conflicting information.

The food industry is trying to help by bringing simplicity and transparency to bear on the issue. In Europe, Nestle, Tyson Foods, the UK's M&S and Sainsbury's, as well as Spanish supermarket Eroski are joining forces to develop environmental labeling for food products. A pilot slated for late 2021 will explore using a color-coded system combining four key indicators—carbon footprint, water use, water pollution, and biodiversity—into a simple letter grade.

Such a system, if successful, would make it easier for consumers to make better decisions—and have the confidence they *are* better decisions—for the environment.

Given the wide variety of sources of environmental data—from sensors and satellite imaging to photos and reports from citizens and local communities—processes and standards have to be in place to integrate and verify the data's authenticity. Its provenance must also be considered before it is used in subsequent data analysis.

AI and analytics can help with data accuracy and veracity issues. If, for example, data is sufficiently massive, and if a dominant narrative emerges from such voluminous data, quality control for individual data points may become less important, as may the need for precise translation across data strands. AI can play an important role in teasing out these dominant data narratives that have force because of significant data agreement and alignment.

Turning data from disparate sources into analytical outcomes also requires interoperability and ease of moving data between organizations and systems, which in turn calls for open standards. In that context, cloud computing can help. It can provide the technology infrastructure to mitigate problems associated with having environmental data stored and modeled in many different ways. More specifically, a hybrid-cloud architecture based upon opensource software can ease the transfer of data and workloads across actors and organizations while making data accessible to many.

Perspective: AI in the cloud to preserve life in the water

Goal 14 of the UN's 17 Sustainable Development Goals is "Life Below Water: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development." Easier said than done.

While the world's appetite for seafood continues to increase, the oceans continue to acidify, fish stocks are depleted, and the apparent solution—aquaculture—has come under fire for contributing to environmental degradation.

But there are signs of promise, thanks to IoT, AI, and the cloud.

Aquaculture depends on a complex environment filled with challenges—build-up of fish waste that depletes the water of oxygen and contributes to harmful algal blooms; escaped fish disrupting delicate natural ecosystems; and fish disease and sea lice outbreaks. But the combination of IoT sensors collecting critical data and AI making sense of it can yield important insights on fish health and proper feeding levels.

Data about fish movement, oxygen levels, water content, and many other factors from environmental sensors, underwater video monitoring, hydroacoustic technology, and drone imagery can be combined with satellite data and other geospatial data sets. In turn, this can be sent to a cloud platform where AI can produce useful recommendations, correlations, and early warnings of potential risks.

AquaCloud is such a predictive analytics platform. It was built by The Seafood Innovation Cluster and IBM to collect, anonymize, and aggregate data from salmon farms across Norway. The platform analyzes sea lice counts and gives actionable data back to farmers daily, in essence predicting sea lice outbreaks to help the farmers prevent them.

Applying this approach on a larger scale is an EU-funded project, Green Aquaculture Intensification in Europe (GAIN), which is embedding sensors and machine learning technologies into fish farms across nine countries.¹⁹

Optimizing environmental impacts within operations is important, but its positive impact could be hindered if such measures don't pervade the entire supply chain.

Sustainability transformation as a growth agenda

Current state: Compliance and good will from investors

More than 80% of enterprises today say their sustainability development goals help them meet the requirements of government regulations and gain good will from investors. Governments globally are ramping up mandatory requirements related to environmental reporting and management. Many countries around the world have or are developing corporate disclosure requirements around environmental impact.

For example, in 2021 the EU banned single use plastic. The UK plans to invest \$2.4 billion to promote cycling and walking. South Korea plans to double solar incentives to promote rooftop systems in homes and commercial buildings. China plans to build more than 78,000 electric vehicle charging stations.²⁰

Governments are not the only ones requiring sustainability progress. Investors increasingly demand reporting and action on sustainability, punishing laggards with shareholder action and the threat of divestment. ExxonMobil serves as a recent example. Investors ousted three board members to proactively focus on climate change. BlackRock, the world's largest asset manager, disclosed that in the past year it voted 55 times against directors at 49 companies for failing to make progress tackling climate change. 22

The financial sector also understands that investments in sustainable business models pay off in the long term. A new trend has arisen: sustainable finance, where investors commit to only invest in green assets.²³

In this stage of the sustainability transformation, many companies are focused on reducing operational and compliance risks to maintain their license to operate. They view dealing with the impacts of climate change as essential to lessen the risk to their brands from potential violations of environmental law and regulations.

Beyond limiting harm and managing risk: Sustainability as a force to optimize business operations

7 in 10 executives say their sustainability development goals can improve operational effectiveness and agility. Beyond compliance, companies at this stage begin experimenting with sustainable methods to demonstrate value and feasibility. Manufacturing plants of consumer product companies are running initiatives to reduce electricity usage and expand renewable energy sources. They are also trying to meet the forecasted demand to reduce waste.

Retail e-commerce has become one of the biggest consumers of packaging material—plastic, paper, and the like—generating increased attention to reducing new packaging waste. Companies are adopting reusable delivery packs and techniques to use recycled packaging material.

At the same time, consumers are demanding seamless omnichannel and sustainable fulfillment options. Retailers are responding by expanding curbside pickups and locker deliveries, and advancing reverse logistics to reduce their carbon footprint.

Optimizing environmental impacts within operations is important, but its positive impact could be hindered if similar measures aren't taken throughout the entire supply chain. Reaching supply chain sustainability goals, therefore, requires a global, accurate, real-time view of inventory and the ability to share data across a supply chain ecosystem in a trusted way.

74% of executives expect sustainability goals to help them drive business results that last.

If organizations don't have accurate demand and supply plans, it creates a ripple effect, generating waste in other areas throughout the chain. And if companies lack transparency and data sharing with their suppliers, it becomes incredibly difficult to track product provenance—from point of origination to delivery—in a trusted and controlled way. Without this ability, it's extremely difficult for a company to identify supplier risk and protect its brand.

But there are technology approaches that can help companies optimize sustainability across their supply chains.

Companies can reduce waste and lower their cost-to-serve by applying AI, for example. AI can detect signals that anticipate future trends, then provide precise insights to improve supply and demand planning. Companies can also use advanced AI to lower logistics-related emissions by optimizing fulfillment and delivery.

Using a cloud platform can provide greater supply chain visibility with up-to-the minute inventory views and enhanced performance insights from advanced analytics. And if a company builds its multi-enterprise networks on blockchain, it can tackle complex Scope 3 emissions challenges by establishing product provenance, which in turn can engender trust and transparency across its supply chain and empower consumers.²⁴

Future state: Purpose-driven brands grow their business—sustainably

Beyond compliance, limiting risk, and optimizing operations, arguably the greatest opportunity for companies with an aggressive sustainability agenda is growth. Purpose-driven brands—those that align their core business strategy with consumers who value the societal and environmental impact of consumption highly enough to change buying behavior—can build lasting brand relationships and enjoy lower attrition rates for their customers and employees.

76% of executives indicated that sustainable development goals help them to align with their brand purpose, and 73% of them expect their sustainability goals to help them drive business results that last.

In the past 12 years, brands with perceived positive sustainability impact have grown in brand value at a faster rate compared to those with a low perceived impact.²⁵ Businesses that are doing good increase their connection with customers. They also differentiate their brand and increase the engagement of their team.

Unilever's growing stable of over 28 Sustainable Living Brands has consistently outperformed the average growth rate of the rest of the portfolio since the metric was introduced in 2014. ²⁶ Those brands are growing 69% faster than the rest of its business and delivering 75% of the company's growth. Other companies, such as Seventh Generation, have built their entire brand and company mission "to create a more healthy, sustainable, and equitable world for the generations to come." ²⁷

Our previous study indicated consumers are willing to pay a premium to support brands that align with their values. In this current study, we learned that consumer willingness to support purposeful brands has, in fact, deepened.

Two years ago, most consumers (63%) were willing to pay up to a 30% premium to support brands with a purpose, and only 8% were willing to pay over a 100% premium. Today, 43% of consumers are willing to pay over a 100% premium to support brands that are sustainable and environmentally responsible (see Figure 5).

As a company begins contributing to a positive environmental and societal impact, consumers can feel more deeply connected to the brand. They know their purchases and engagements with the brand contribute to a force for good to make a difference in the broader world.

When consumers connect with the brand and the good work it does, they tend to stick with it for a long time. According to one study, consumers are 4 to 6 times more likely to purchase from, advocate for, and champion purpose-driven companies.²⁸ By involving consumers in doing good, a business is no longer just a product peddler or service provider to them. Its role has evolved to an

enabler, helping consumers make a difference through a simple transaction or engagement. 79% of consumers said they're more loyal to purposeful brands.29

But consumers aren't the only ones positively affected. When a business has a compelling purpose, its employees experience pride—they are having a meaningful impact, doing something good in the world. This creates connection. It's also a huge motivator. Making the world a better place imbues a greater purposefulness to their everyday work.

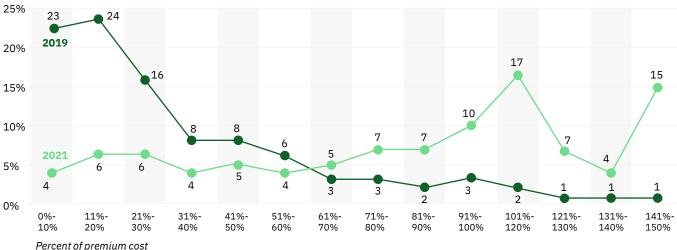
A company's commitment to environmental sustainability can also have a significant impact on employee retention. Nearly 70% say they are more likely to accept a job offer from an organization they consider to be environmentally and socially responsible. A near equal percentage say they're more likely to stay with an employer that has a good reputation for environmental sustainability. Meanwhile, nearly 3 in 4 say they expect their employers to act on social responsibility issues.

Figure 5 The sustainability premium

Consumers are willing to spend more



Percent of



Source: Q: Willingness to pay more for brands that are sustainable or environmentally responsible.

Action guide

The last call for sustainability: An urgent growth agenda for consumer products and retail

Successful businesses will fundamentally infuse sustainability into the core of their strategy, instead of seeing it as an ancillary function. It's not a tool to appease certain segments of people. Rather, sustainability can differentiate the brand and how its products can help create a better world and protect the planet. Leadership at the highest levels needs to establish this vision and the goals that will help make it reality—then drive those objectives throughout the enterprise.

Of course, different companies are at different points in their sustainability development. Here are concrete actions they can take depending on where they are. But each action needs to be clear, measurable, and bold if it is to be effective.

1. Getting started—create the vision and a plan

- Infuse sustainability into the core of the business by creating and committing to long-term sustainability goals while also identifying the use cases most likely to achieve those goals.
- Move beyond sustainability as a tool to appease certain demographics by exploring opportunities for improvement to business processes, supply chain operations, and new growth opportunities.
- Engage leadership at the highest level to create and own the vision. Formulate a core sustainability team across different organizational units with a common set of KPIs to measure and achieve success.

2. Following through—lower risk and optimize business operations through sustainability initiatives

- Consider platform-based solution models to limit disruption to the current tech estate and business functions, and to help identify and mitigate regulatory discrepancies with lower investment, faster access, and increased accuracy.
- Use technologies such as cloud, robotics, and AI for audit and compliance. AI in particular, if applied to large samples of structured and unstructured data, can surface better insights and provide recommendations for improved compliance. But also apply these insights to improve efficiency as you reduce your carbon footprint and reduce waste.
- Explore sustainable methods to optimize and enhance business operations, especially by using intelligent workflows to integrate decision making into your current workflows. This can help improve decisions in areas such as sourcing, purchasing, logistics, and the like. Intelligent workflows could make use of a variety of real-time data, correlate choices, and make consumable recommendations to business users.

3. Engage your ecosystem to accelerate your sustainability growth agenda

- Develop new partnerships and ecosystems to grow.
 Expand current businesses and IT systems into an ecosystem model using blockchain, IoT, and AI technology. This can help support expanded business partnerships among enterprises, governments, associations, and markets while providing a greater degree of trust and transparency to end consumers.
- Improve transparency to gain consumer trust by using product-level sustainability attributes—for example, a 5-star green label on a product.
- Accelerate innovations with new product design and development using renewable energy, recycled materials, and other sustainable options. Build sustainability with the entire product lifecycle usage and customer behavior in mind.

About the authors



Sachin Gupta
Global Agribusiness
Offering Leader
guptas@sg.ibm.com
linkedin.com/in/sachin-gupta-a9ab853

Sachin leads and integrates IBM products and services to help transform the Agri & Food industry worldwide. He expertise extends to systems, software, weather, blockchain, research, IoT, and AI applied to client transformation. He is based in Singapore.



Sashank Yaragudipati
Partner, Client Innovation Center
Industry Leader, Consumer Industry
ysashank@in.ibm.com
linkedin.com/in/sashankraoy

Sashank is responsible for providing solutions and services to Consumer clients covering Retail, Consumer Packaged Goods, Wholesale and Agriculture. He is passionate about disruption in the industry and helps clients identifying strategic and tactical models and use technology to accelerate their business goals.



Jane Cheung
Global Research Leader
for the Consumer Industry,
IBM Institute for Business Value
jane.cheung@us.ibm.com
linkedin.com/in/janescheung
@JaneSCheung

Jane has over 20 years of working experience across retail and consumer product industries. Jane has worked at Macy's, Disney, Nike, and as a trusted advisor for clients in a consulting capacity at IBM, SAP and Accenture.



Chris Wong
Vice President of Strategy and Alliance
for the IBM Global Consumer Industry
cwong@us.ibm.com
linkedin.com/in/christopherkwong1

Chris is responsible for setting the direction for IBM clients in the retail and consumer packaged goods industries.

IBM Institute for Business Value

The IBM Institute for Business Value, part of IBM Services, develops fact-based, strategic insights for senior business executives on critical public and private sector issues.

For more information

To learn more about this study or the IBM Institute for Business Value, please contact us at iibv@us.ibm.com. Follow @IBMIBV on Twitter, and, for a full catalog of our research or to subscribe to our monthly newsletter, visit: ibm.com/ibv.

Methodology

We conducted an executive survey over 1,900 business leaders in the Consumer Products and Retail industries from 24 countries to understand their sustainability agenda.

Related reports

Haller, Karl, Jim Lee, and Jane Cheung. "Resetting the rules for consumer companies." IBM Institute for Business Value. May 2021. https://www.ibm.com/thought-leadership/institute-business-value/report/consumer-products-covid-19

Balta, Wayne S., Jacob Dencik, Daniel C. Esty, and Scott Fulton. "The Rise of the Sustainable Enterprise." IBM Institute for Business Value. August 2020. https://www.ibm.com/thought-leadership/institute-business-value/report/sustainable-enterprise

"Sustainability at a turning point." IBM Institute for Business Value. May 2021. https://www.ibm.com/thought-leadership/institute-business-value/report/sustainability-consumer-research

Notes

- Mousazadeh, M., Paital, B., Naghdali, Z. et al. "Positive environmental effects of the coronavirus 2020 episode: a review." Environ Dev Sustain (2021). https://doi.org/10.1007/s10668-021-01240-3
- 2 McMahon, Jeff. "Coronavirus Lockdown Likely Saved 77,000 Lives In China Just By Reducing Pollution." Forbes. March 16, 2020. https://www.forbes.com/ sites/jeffmcmahon/2020/03/16/coronaviruslockdown-may-have-saved-77000-lives-in-chinajust-from-pollution-reduction/?sh=62047a7d34fe
- 3 "People and Planet Positive." IKEA Sustainability Strategy. June 2018. Updated August 2020. https://gbl-sc9u2-prd-cdn.azureedge.net/-/media/ aboutikea/pdfs/people-and-planet-sustainabilitystrategy/people-and-planet-positive-ikeasustainability-strategy-august-2020.pdf?rev= 3a3e9a12744b4705b9d1aa8be3b36197&hash= 099EADD58A6B850BD522866B8E01F518
- 4 "Farmer Connect Uses IBM Blockchain to Bridge the Gap Between Consumers and Smallholder Coffee Farmers." IBM Newsroom. January 6, 2020. https://newsroom.ibm.com/2020-01-06-Farmer-Connect-Uses-IBM-Blockchain-to-Bridge-the-Gap-Between-Consumers-and-Smallholder-Coffee-Farmers
- 5 "The 17 Goals." United Nations Department of Economic and Social Affairs, Sustainable Development. https://sdgs.un.org/goals
- 6 Pagels, Ciarra. "5 Businesses that Support Ending World Hunger." The Borgen Project. August 17, 2020. https://borgenproject.org/businesses-that-support-ending-world-hunger
- 7 "Partnering with New Food Banks." The Global Food Banking Network. 2021. https://www.foodbanking. org/what-we-do/partnering-with-new-food-banks/
- 8 The Kraft Heinz Company 2020 Environmental Social Governance Report. https://www.kraftheinzcompany.com/esg/index.html

- 9 Daniells, Stephen. "Grupo Bimbo, Coca-Cola, Nestlé, and others partner to fight food waste in LATAM." Food Navigator-latam.com. October 20, 2018. https://www.foodnavigator-latam.com/Article/ 2018/10/20/Grupo-Bimbo-Coca-Cola-Nestleand-others-partner-to-fight-food-waste-in-LATAM
- 10 "Goal 3: Ensure Healthy Lives." Business for 2030. http://www.businessfor2030.org/goal-3-ensure-healthy-lives
- "Life on Land: Why It Matters." https://www.un.org/sustainabledevelopment/wp-content/uploads/2016/08/15_Why-it-Matters_Goal15__Life-on-Land_3p.pdf
- 12 "Regenerating Nature." Unilever website. 2021. https://www.unilever.com/planet-and-society/ protect-and-regenerate-nature/regenerating-nature
- 13 "L'Oréal unveils its next generation of bold sustainability targets for 2030." L'Oréal. June 2020. https://www.loreal-finance.com/eng/news-event/ loreal-unveils-its-next-generation-bold-sustainabilitytargets-2030
- 14 "Scope 3 and the supply chain: How businesses are taking sustainability leadership to a new frontier." edie. August 5, 2020. https://www.edie.net/library/ Supply-chain-emissions--The-next-frontier-of-sustainable-business-leadership/6982
- 15 "Briefing: What are Scope 3 emissions?" Carbon Trust. 2021. https://www.carbontrust.com/resources/briefing-what-are-scope-3-emissions; "Scope 3 Inventory Guidance." United States Environmental Protection Agency. July 6, 2021. https://www.epa.gov/climateleadership/scope-3-inventory-guidance
- 16 "Zalando Goes Carbon Neutral Starting Today."
 Zalando. October 30, 2019. https://corporate.zalando.
 com/en/newsroom/en/news-stories/zalando-goescarbon-neutral-starting-today; "Zalando's
 Sustainability Evolution." Do.More Magazine.
 https://corporate.zalando.com/en/magazine/
 zalandos-sustainability-evolution

- 17 Morrison, Oliver. "Europe-wide eco-label scheme set for launch in 2022 as industry joins forces to launch pilot." Food Navigator.com. June 28, 2021. https://www.foodnavigator.com/Article/2021/06/28/Europe-wide-eco-label-scheme-set-for-launch-in-2022-as-industry-joins-forces-to-launch-pilot
- 18 United Nations Department of Economic and Social Affairs, Sustainable Development. https://sdgs.un.org/ goals/goal14
- 19 O'Donncha, Fearghal. "Sustainable Fish Farming? Prove It." World Economic Forum. October 15, 2020. https://www.weforum.org/agenda/2020/10/ this-is-how-data-and-ai-will-save-the-fish-supper
- 20 Lombrana, Laura Millan and Akshat Rathi. "Green Technology Key To Pandemic Recovery Plans." Financial Advisor. May 26, 2020. https://www.fa-mag. com/news/green-technology-key-to-pandemicrecovery-plans-55953.html
- 21 Rich, Gillian. "Is Exxon Stock A Buy As Climate Change Activists To Join Board?" Investor's Business Daily. July 12, 2021.https://www.investors.com/research/ exxon-stock-buy-now
- 22 Partridge, Joanna. "BlackRock votes against 49 companies for lack of climate crisis progress." The Guardian. September 17, 2020. https://www.theguardian.com/business/2020/sep/17/blackrock-votes-against-49-companies-for-lack-of-climate-crisis-progress
- 23 Solomon, David. "Goldman Sachs Update on Our 2030 Sustainable Finance Commitment." Goldman Sachs website. March 4, 2021. https://www.goldmansachs.com/media-relations/press-releases/2021/announcement-04-mar-2021.html

- 24 Palmer, Catherine. "Indoor Produce Grower Bright Farms Uses IBM Food Trust." IBM website. 2020. https://www.ibm.com/case-studies/brightfarms/
- 25 "Finding your sweet spot for sustainable brand growth." Kantar. March 17, 2021 https://www.kantar.com/inspiration/brands/ finding-your-sweet-spot-for-sustainable-brandgrowth
- 26 "Unilever Marks Sustainable Living Plan's 10th Year; New 'Compass' to Guide Further Progress." Sustainable Brands. May 7, 2020. https:// sustainablebrands.com/read/leadership/ unilever-marks-sustainable-living-plan-s-10th-yearnew-compass-to-guide-further-progress
- 27 Seventh Generation website. 2021. https://www.seventhgeneration.com/home
- 28 Aziz, Afdehl. "Global Study Reveals Consumers Are Four To Six Times More Likely To Purchase, Protect And Champion Purpose-Driven Companies." Forbes. June 17, 2020. https://www.forbes.com/sites/ afdhelaziz/2020/06/17/global-study-revealsconsumers-are-four-to-six-times-more-likely-topurchase-protect-and-champion-purpose-drivencompanies/?sh=3fca8c81435f
- 29 Czarnecki, Sean. "Eight in 10 consumers say they're more loyal to purpose-driven brands: Cone." PRWeek. May 30, 2018. https://www.prweek.com/ article/1466208/eight-10-consumers-say-theyreloyal-purpose-driven-brands-cone

About Research Insights

Research Insights are fact-based strategic insights for business executives on critical public and private sector issues. They are based on findings from analysis of our own primary research studies. For more information, contact the IBM Institute for Business Value at iibv@us.ibm.com.

© Copyright IBM Corporation 2021

IBM Corporation New Orchard Road Armonk, NY 10504 Produced in the United States of America August 2021

IBM, the IBM logo, ibm.com are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at: ibm.com/legal/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

This report is intended for general guidance only. It is not intended to be a substitute for detailed research or the exercise of professional judgment. IBM shall not be responsible for any loss whatsoever sustained by any organization or person who relies on this publication.

The data used in this report may be derived from third-party sources and IBM does not independently verify, validate or audit such data. The results from the use of such data are provided on an "as is" basis and IBM makes no representations or warranties, express or implied.