

Project ROI:

Determining the Competitive and Financial Advantages
of Corporate Responsibility and Sustainability

2025



IMPACT ROI

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Project ROI:

Determining the Competitive and Financial
Advantages of Corporate Responsibility
and Sustainability

2025

by Steve Rochlin, IMPACT ROI

with Richard Bliss, Cheryl Yaffe Kiser,
Chris Lloyd, and Kristen Yngve

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“ Once again, this report delivers the data every C-suite team and board of directors needs. Sustainable and responsible business practices are directly linked and can improve—*when done well*—a company’s bottom line and value proposition to the world. The numbers are abundantly clear.”

- STEVE ROCHLIN, LEAD AUTHOR

About the Authors

Lead Author

Steve Rochlin is the founder and CEO of Impact ROI, helping organizations to design and implement high-impact strategies that drive superior financial, social, and environmental performance. For more than two decades, he has developed the pathway for companies, civil society organizations, and government agencies to deliver sustainable and collaborative impact.

A pioneer in sustainability, ESG, and corporate responsibility, Steve is the lead author of the acclaimed Project ROI research series—described by Forbes as “a Godsend.” He is also the co-author of two influential books, *Beyond Good Company: Next Generation Corporate Citizenship* and *Untapped: Creating Value in Underserved Markets*. Steve serves as a Governance and Sustainability Fellow at The Conference Board’s GS Center and as an Expert Contributor for Trellis (formerly GreenBiz). He earned his Master’s in Public Policy from the Harvard Kennedy School and his A.B. from Brown University. Globally recognized for shaping the dialogue on sustainability, Steve advises executives from the world’s leading companies, nonprofits, and foundations on how to integrate responsible business practices with long-term competitive success.

Co-Authors

Dr. Richard Bliss is a Professor of Finance at Babson College. He has been involved in corporate and entrepreneurial finance since 1987, with industry experience that includes consulting, startup, and corporate positions. He teaches at the undergraduate, MBA, and executive levels, specializing in the areas of Corporate Financial Strategy, Sustainability, Risk Management, and Entrepreneurial Finance. Richard is the National Academic Director for the Goldman Sachs 10,000 Small Businesses program, a \$750 million initiative designed to create jobs and spur economic activity through greater access to business education, mentors, networks, and access to capital. Richard holds a PhD in Finance and MA in Economics from Indiana University. He received his MBA in Finance/Real Estate from Indiana University and graduated with honors from Rutgers University, earning a BS degree in Engineering and a BA degree in Economics.

Cheryl Kiser is a pioneering force in the world of social innovation. With unparalleled expertise and energy, her approach to creating durable impact is rooted in an entrepreneurial mindset, a hyper-focus on relationships, and an unwavering clarity of purpose. Cheryl played a central role in shaping the corporate social responsibility (CSR) movement, first at the Boston College Center for Corporate Citizenship and later as the founding executive director of the Institute for Social Innovation at Babson College. She has co-designed transformative programs with innovative leaders at the Arthur M. Blank Family Foundation, Verizon Foundation, Toyota Foundation, and other notable organizations. She is the author of *Creating Social Value: A Guide for Leaders and Changemakers* and a co-author of the original Project ROI report. A sought-after speaker, consultant, and trainer, Cheryl continues to influence the strategies, operations, and mindsets of Fortune 500 companies, global NGOs, community organizations, academic institutions, and startups that seek to create economic and social value *simultaneously*.

For more than 25 years, **Christopher Lloyd** guided development of Verizon's corporate responsibility (CR) strategy. He helped the business identify ways to apply its communication technology solutions to create shared value opportunities that addressed community challenges. He assisted business units in implementing responsible business practices that focused on Verizon's most material environmental and social impacts. Chris served as executive editor of its first fifteen CR reports and integrated financial and CR performance reporting. He also oversaw the development of metrics and measurement systems to quantify the environmental and social impact of Verizon products and programs. Chris earned a B.A. from Middlebury College, a J.D. from Suffolk University Law School, an MBA from Northeastern University, and a Certificate in Environmental Management and Policy from the Yale University School of Forestry and Environmental Studies.

Kristen Yngve is a creative partner for leaders who exemplify deep integrity and impact. She helps consultants and innovators honor the true essence of who they are and why their work matters—bringing new clarity and resonance to their entire body of work. Combining communication strategy with a keen focus on relational design, Kristen helps experts articulate complex insights in ways that are clear, engaging, and actionable. While working with Cheryl Kiser at Babson College's Institute for Social Innovation, Kristen co-led initiatives for meaningful engagement and thought leadership to advance the practice of social innovation. Her logos have been featured in international design books, and her clients have won industry awards for marketing campaigns they co-created. Kristen earned a B.A. from Muhlenberg College, where she studied the power of words, images, and transdisciplinary thinking. She serves as an NC State Extension Master GardenerSM volunteer, helping people cultivate healthy plants, landscapes, ecosystems, and communities.

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Foreword

In 1953, noted economist, professor, and college president Howard Bowen published his book *Social Responsibilities of the Businessman*, what many contend to be a seminal work in the establishment and evolution of what we have come to know as Corporate Responsibility.

Prior to the 1940s, companies were largely prohibited from engaging in social matters or making charitable contributions to registered nonprofit organizations. Some companies, such as Cleveland Trust, and led by the efforts of prominent attorney and banker Frederic Goff, established charitable foundations from which to make donations to charities of choice. A shift would follow in the 1940s when companies were finally allowed to direct funds in a charitable manner. But it was Bowen's work that really thrust the notion of companies doing good in society on a large scale for the first time.

According to the Association of Corporate Citizenship Professionals (ACCP), it wasn't until the 1970s when the concept and practice of corporate responsibility truly took root, emanating from The Conference Board's Committee for Economic Development's declaration that American business can and should support society's wellbeing and advancement with more than simply artifacts

of commerce; and now some fifty years later, practices related to corporate social responsibility, sustainability, and related governance are very much part of the fabric of American business as well they should.

As practitioners, we believe this work is one of many attributes that our fellow employees, our customers, our prospects, and the public evaluate when sizing up our companies. The data which speaks to this has been percolating within the collective consciousness for several years now. The gargantuan transfer of wealth underway in our country—the largest in our history—is benefiting younger generations of emerging consumers for whom the intent, activation, and impact of a company's actions in society across wide-ranging dimensions of environmental and social performance increasingly matter.

These are but a few reasons why it's important to understand the value of good corporate citizenship and responsibility and sustainability practices to the bottom line. American companies accounted for more than \$21 billion in corporate social investments in 2021 (Giving USA, 2021), more than at any time in history, reflecting the continued and growing prominence of corporate responsibility in terms of stakeholder expectations and engagement (Libit, B. & Freier, T., 2013).

Close to 100% of the Fortune 500 publish annual sustainability reports. Nearly 60% have set climate and energy-related goals. 80% of global companies have policies and processes related to the environmental and social performance of their suppliers.

“None of this is to suggest that simply initiating a set of corporate responsibility practices is a guarantee of positive results. Quite the contrary, it is necessary for these endeavors to authentically reflect the values and culture of the organization from which they emanate in order to resonate most effectively with an increasingly diverse set of stakeholders.”

None of this is to suggest that simply initiating a set of corporate responsibility practices is a guarantee of positive results. Quite the contrary, it is necessary for these endeavors to authentically reflect the values and culture of the organization from which they emanate in order to resonate most effectively with an increasingly diverse set of stakeholders.

This report provides evidence, culled from hundreds of studies, that when performed well, corporate responsibility and sustainability practices can indeed contribute to a company's bottom line—positively impacting employee morale and retention, revenue growth, customer loyalty, and investor confidence.

MassMutual is proud to be a part of the team that is bringing this report forward for your review and analysis. Whether you are a Corporate Social Responsibility or Sustainability professional, a Human Resources executive, a business strategist, a member of the C-suite, or simply an interested party, this report will provide you with an abundance of material to consider and upon which to act.

Dennis P. Duquette

Head of Community Responsibility, MassMutual
President & CEO, MassMutual Foundation

A Note on Terminology

Since we published the original Project ROI ten years ago, we hoped a consensus term would emerge that labeled a company's environmental, social, economic, ethical, and governance-related commitments and activities. Unfortunately, the field has not unified behind a single term.

Therefore, this Report uses the term “**Sustainability/CR**,” which encompasses six terms interchangeably:

- Sustainability
- Corporate Responsibility (or CR)
- ESG (Environmental, Social, and Governance)
- Corporate Social Responsibility (or CSR)
- Impact
- Social Impact

The fact that no single term adequately explains the practice and that every term possesses multiple, overlapping, and sometimes conflicting definitions continues to create challenges for the fields of research and practice.

This report uses the following definition (on right).

Definition of Sustainability/CR

Sustainability/CR involves expectations for companies to:

- Reduce their negative social and environmental footprint.
- Make a positive impact by enhancing their positive social and environmental outcomes and viewing environmental/societal challenges as opportunities to innovate.
- Transparently report/disclose their sustainability performance.
- Identify key stakeholders and incorporate their voice into governance.
- Define business success as more than profit, and integrate environmental and social strategies, policies, and processes into business lines and staff functions.
- Operate profitably and ethically.¹
- Balance their rights with their responsibilities.



Sustainability/Corporate Responsibility (CR) helps drive financial and competitive value for companies, but **only if companies do it well.**

This was the major finding of the 2015 Project ROI Report.² It remains the major finding of this update.

In our investigation of 640 studies and reports* (predominantly from the last ten years) from academic journals, think tanks, and respected private sector organizations, we find that “doing sustainability/CR well” distills into four key steps:



Fit



Commit



Manage



Connect

* The ensuing sections of this Report provide extensive citations related to key findings and case examples.

What does doing sustainability/CR well entail?

Certain behaviors, strategies, and tactics enable sustainability/CR to help support and drive specific business key performance indicators. We have synthesized these to update the Project ROI Value and Impact Creating Framework. This Framework, detailed in Section II, captures the collective good practices that help enable a company to use sustainability/CR to generate financial and competitive value creation opportunities as well as impact for people and planet.

Project ROI Value and Impact Creating Framework



FIT

Determine the alignment and intersection of social and environmental considerations with key business priorities



COMMIT

Set the objective to support business outcomes; make positive impact; manage tensions; and allocate 80% of ESG resources to the ESG strategy



MANAGE

Embed ESG into core business operations; improve capabilities to manage ESG performance; measure impact; and apply an entrepreneurial mindset



CONNECT

Engage stakeholders, build awareness, and build allies

Key Findings

Our research finds that when companies do sustainability/CR well, the potential financial return on investment (ROI) from sustainability/CR includes the following:

Financial Performance

Sustainability/CR has the potential to boost:

- Firm Value by as much as **36%**
- Profitability by as much as **21%**
- Shareholder returns by as much as **6%**

Sales and Revenue

Sustainability/CR can increase:

- Business-to-Consumer (B2C) *and* Business-to-Business (B2B) sales by as much as **20%**
- Growth by **2x to 5x**

Responsible Sourcing

Responsible sourcing can:

- Boost a supplier's sales by as much as **20%**
- Increase share price by as much as **5.62%**
- Increase profitability by as much as **3%**

Risk and Financing Costs

Sustainability/CR can:

- Reduce Idiosyncratic Risk (i.e., the specific risk of investing in an asset) by **30%** or more
- Reduce Systemic Risk (i.e., a risk that affects an entire market or economy) by as much as **7%**
- Reduce the cost of equity by **14%**
- Lower the cost of debt by as much as **10%**
- Improve credit ratings by **4.5%** per unit of improvement on respected sustainability/CR ratings
- Reduce loan default rates by as much as **0.3%** for each unit increase in sustainability/CR performance

Human Resources

Sustainability has the potential to:

- Decrease employee turnover by as much as **57%**
- Boost employee productivity by as much as **21%**
- Reduce employee wage costs by as much as **12.4%**

In brief, the sustainability/CR practices that help support and drive these specific business key performance indicators include:

Financial Performance

When a company expressly designs a strategy to use sustainability/CR to:

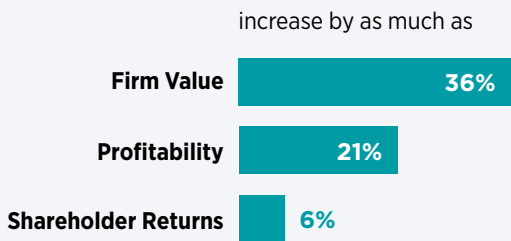
- Support business results and good management—including enterprise risk management (ERM)
- Build the awareness and favorability of key stakeholders
- Invest strategically in making progress and impact on material environmental, social, and governance topics

Sales and Revenue

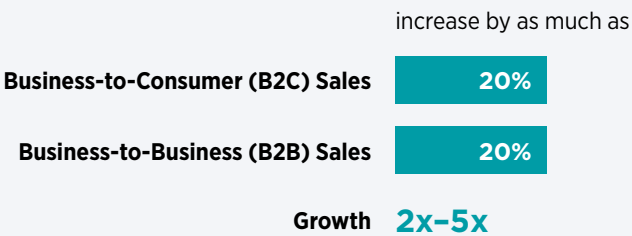
When a company effectively:

- Learns—and aligns to—the social and environmental expectations its customers have for the business
- Builds customer and key stakeholder awareness
- Uses social and environmental performance to help differentiate from competitors

The Potential ROI Opportunity



The Potential ROI Opportunity

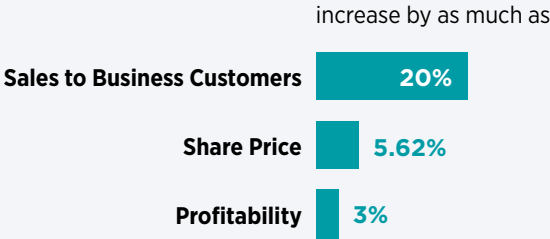


Responsible Sourcing

Responsible sourcing is a component of sustainability/CR. It involves a company’s commitment to ensure that its suppliers adhere to high standards of social, environmental, and governance performance. When a company effectively:

- Ensures that its suppliers adhere to high standards of social, environmental, and governance performance
- Ensures that business customers—particularly customers that need to engage in sustainability/CR practices—are aware of the supplier’s responsible sourcing practices
- Reports/discloses responsible sourcing practices effectively
- Designs a responsible sourcing and overall sustainability/CR strategy that fits with business customer, end consumer, and key stakeholder expectations
- Works to continuously improve environmental and social practices
- Engages key stakeholders regarding their expectations for responsible sourcing
- Determines the material level of supplier monitoring and sets their responsible sourcing programs to achieve that level

The Potential ROI Opportunity

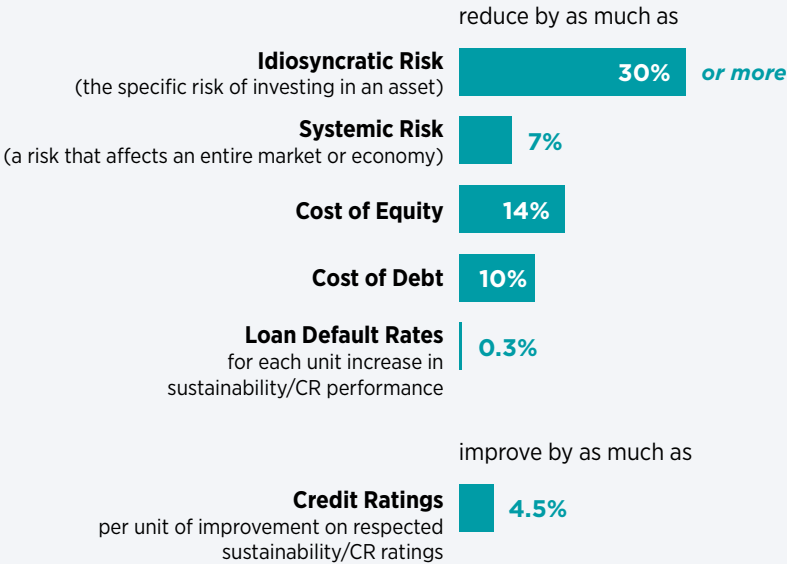


Risk and Financing Costs

When a company effectively:

- Adopts a strategy that aligns sustainability/CR with enterprise risk management, growth, and reputation enhancement
- Invests the right level of resources to support that strategy
- Improves sustainability/CR reporting/disclosure
- Uses sustainability to strengthen the brand—particularly with customers
- Communicates to, educates, and engages with key stakeholders
- Enhances sustainability/CR governance
- Matches the intensity of greenhouse gas (GHG) reduction commitments to the level of climate change’s materiality for the business

The Potential ROI Opportunity

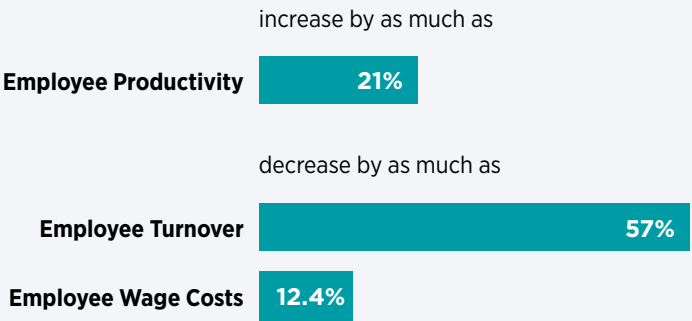


Human Resources

When a company effectively:

- Learns—and aligns to—the social and environmental priorities of employees and job seekers
- Builds the awareness of employees and job seekers
- Engages employees in sustainability/CR activities
- Integrates sustainability/CR into core business strategy, operations, and job roles
- Trains employees on sustainability/CR

The Potential ROI Opportunity





Companies use sustainability/CR to support value creation

Our updated research finds that financially high-performing companies have a sense of awareness for the value that good sustainability/CR practices can generate.

In fact, companies use sustainability/CR as a strategy to **generate earnings, protect earnings, and turn around poor financial performance.**

Research finds:

- When companies **experience a financial downturn**, high-performing companies will invest more in sustainability/CR to help turn financial performance around.
- Companies use sustainability/CR to **differentiate from competitors.**
- Companies will compete to **outpace their competitors** in sustainability/CR in order to increase sales and market share.
- B2B companies use sustainability/CR to **attract and retain customers.**

What characteristics enable sustainability/CR to support financial and competitive value?

What explains the ability of good sustainability/CR practices to support and drive financial and competitive value? Research finds that sustainability/CR

1 Enhances **firm performance** by:

- Increasing the discretionary effort and productivity of employees.
- Strengthening relationships with customers.
- Reducing costs.
- Increasing innovation.
- Improving the performance of managers.

2 Enhances **attractiveness and favorability** by:

- Building trust that attracts:
 - Employees.
 - Customers.
 - Institutional Investors and Long-term investors.
 - Other key stakeholders.
- This is especially important in a context where research finds that only 34% of consumers actually trust the brands they buy from.³
- Enhancing brand and reputation.

3 Reduces **risks** by:

- Building the perception among investors that the firm is more resilient to shocks and disruptions.
- Helping managers anticipate shocks and disruptions.
- Strengthening stakeholder relationships and allies—such as with customers/consumers—that help companies weather “storms.”

4 Strengthens **key assets** such as:

- The ability—often led by the sustainability/CR team—to manage tradeoffs among short and long-term objectives and economic, environmental, and social priorities in ways that find mutually reinforcing alignment, or “sweet spots.”
- Robust data on the environmental, social, and governance performance of the firm that can be used to enhance strategic management.
- A unique and authentic way to express the brand promise and purpose of the firm.
- Strong relationships with mission- and purpose-driven stakeholders (for example, NGOs, advocates, and community leaders) that possess high levels of credibility and influence.
- The ability to showcase the firm’s performance excellence as a well-managed and well-governed organization.⁴



The findings of this 2025 update, combined with the still valid findings from our original 2015 Report, show that it is time to put aside the debate of whether sustainability/CR supports business value creation.

The overwhelming evidence suggests that when companies adopt good practices, sustainability/CR supports financial ROI.

The challenge now is to turn this understanding into action—using sustainability/CR as levers to help businesses deliver on their commitments to profit, people, and planet at scale.

I.

Introduction

“ [W]e believe the evidence suggests that the free market has spoken—and chosen a sustainable future.”

– CBRE⁵

Ten years ago, we published “Project ROI: Defining the Competitive and Financial Advantages of Corporate Responsibility and Sustainability.”⁶ This landmark Report quantified the business case from social and environmental sustainability/corporate responsibility (CR).⁷ It also identified the essential practices companies should adopt to deliver a business case. The original Report has been downloaded thousands of times. The Report’s authors have developed and led countless numbers of presentations, training workshops, and advisory services projects to make and measure a strategic business case for sustainability/CR.

The original Project ROI Report received critical acclaim and positive coverage.⁸ It showed the incredible potential of sustainability/CR done well to drive positive benefits for people, planet, and profit.

Since the publication of the original Report, we’ve seen an explosion of sustainability activity. Thousands of companies have set ambitious targets to reduce their environmental and social footprints. Similar numbers have made bold, often innovative commitments to use their capabilities to improve the conditions of communities and ecosystems around the world. Sustainability reporting, in part supported by recent government regulations, has emerged as a standard practice. Sustainability professionals—increasingly led by a Chief Sustainability Officer, Chief Impact Officer, or equivalent—have status inside their organizations that they lacked ten years ago.⁹

Yet, the need to make the business case for sustainability/CR remains and has never been more urgent. As sustainability/CR considerations make progress in shaping the mainstream—increasingly influencing the decisions and behaviors of C-Suites, investors, customers, and employees—the field confronts a formidable backlash. Vocal critics claim that sustainability/CR harms corporate financial performance and, therefore, wider economic growth.

Sustainability/CR is infinitely complex. Its scope and scale perpetually grow and morph to respond to the unceasingly dynamic and changing world in which we live. We learned from the original Project ROI that the sustainability/CR business case is necessary not only to persuade skeptics. It is necessary to optimize the performance of social and environmental practices in profit-making businesses. It is through a business case that a company’s sustainability activities will gain

“ Making the sustainability/CR business case is still necessary. We suggest that it always will be, and not only to rebut critics.”

Before the backlash started gaining traction, we had begun to hear that the need for the sustainability business case was a relic of the past. Companies, starting with their Boards of Directors and C-Suites (i.e., senior executive leadership teams), had apparently bought in. Therefore, it was assumed that sustainability was good for the business and even when it wasn’t, it was still a business imperative.

The past few years suggest that such declarations were premature. Making the sustainability/CR business case is still necessary. We suggest that it always will be, and not only to rebut critics.

the kind of financial, staffing, and technological resources required to deliver impact at scale. It is through a business case that a company’s sustainability activities will access the talent, creativity, innovation, and entrepreneurial drive needed to truly integrate and align with everyday business operations.

Sustainability/CR Done Well

Project ROI's initial headline was that sustainability/CR drives financial and competitive business performance—*but only if it's done well.*

At an initial glance, this seems patently obvious. Of course one needs to do it well. However, this finding has been received as surprising, uncommon, and non-obvious. Project ROI found that companies need to approach sustainability/CR with the same discipline as any other essential business process. Through the adoption of key strategies and tactics, sustainability can form into a powerhouse for delivering business and societal value. This update underscores the original finding. To generate financial and societal impact, companies must do sustainability/CR well. When they do, they have the opportunity to improve:

- Overall financial performance.
- Sales, revenue, and growth.
- Cost controls.
- Risk reduction.
- Talent acquisition, retention, and performance.
- Supply chain performance.

Necessary, But Not Sufficient

Environmental, social, and governance programs may contribute to overall profitability and business success, but they are dependent on the overall business context. Sustainability/CR practices cannot replace the quality and attractiveness of products and services. Sound sustainability/CR practices cannot make up for strategic and managerial deficiencies in other business disciplines like strategy, finance, marketing, manufacturing, product development, sales, HR, or R&D (although they may mute the downside impact from errors in judgment and crises).

However, the findings suggest that well-designed and managed sustainability/CR practices, aligned with business strategy, help drive and support value in several ways. Given the outcomes that sustainability/CR potentially generates, companies should embrace sustainability/CR practices as a valuable contributor to competitive financial and business performance.

“By As Much As”

Studies show that the effect sustainability/CR can have on financial and competitive performance can range in size. This Report lists the likely ceiling for sustainability/CR's effect on financial and competitive performance. The Report uses the phrasing “by as much as” to indicate these ceilings. However, such top-end results are not promised. Among several variables, the quality of a firm's sustainability/CR performance is a key driver that helps determine the size of its effect.

About the Project ROI 2025 Update

Lead Sponsor MassMutual and Contributing Sponsors Loomis Sayles and Modis launched the 2025 Project ROI update to support their efforts to continuously improve their sustainability/CR performance and to tangibly measure the benefits to business of social, environmental, and governance programs. They supported the research of the Report's authors, who undertook the work under the condition that the research team would share findings, regardless of where the research led.

Project ROI's objective is to assess the business case for sustainability for the benefit of senior executives, boards of directors, sustainability professionals, and investors. The research has asked what, if any, potential ROI can sustainability deliver? We have then assessed:

- What are the strategies, tactics, and practices likely to create return on investment (ROI)?
- What lessons should executives and managers take regarding their approach to and measurement of CR practices?

Our approach relied on analyzing existing research from credible academics, analysts, and institutions. The vast majority of our sources have come from academic and peer-reviewed sources. For the update, we chose to concentrate on top academic journals that serve core business disciplines related to financial performance, financial risk, business strategy, marketing, human resources (HR), and supply chain management. With a small number of exceptions, we focused on research published in the previous 10 years.

In total, we have reviewed 640 studies and reports. We have supplemented our research with interviews of executives and sustainability practitioners, as well as our experience advising, studying, and training thousands of companies across industries.

The original 2015 Report found research focused mostly on large, publicly traded companies. This remains the case. However, there has been impressive growth in research examining small and medium enterprises as well.¹⁰ Research now comes from around the world. We've drawn from studies that focus on US businesses to be sure, but also businesses from Europe, Asia (including Southeast Asia and Southern Asia), the Middle East, Africa, and Southern and Latin America.

Our new research dataset considerably expands our understanding of the effect of sustainability/CR on business-to-business (B2B) firms, as well as business-to-consumer (B2C) firms across a vast array of industries.

While our research concentrates on the business case, it is important to underscore a key finding that remains as valid for this updated Report as for the original:

Companies that commit to sustainability/CR approaches that genuinely and authentically aim to optimize their impact and to generate positive benefits for society stand the best chance of delivering financial and business value.

How to Use this Report

- The **Executive Summary** provides an overview of quantified evidence that sustainability/CR done well has the potential to drive business value. It also summarizes what sustainability/CR done well means.
- **Section II** details the 2025 Project ROI Value and Impact Creating Framework and brings it to life with examples.
- **Section III** shares the findings of sustainability/CR's effect on financial performance.
- **Section IV** details the effect on sales and revenue.
- **Section V** documents how responsible sourcing supports financial and competitive value. This is a new section, not previously included in the 2015 Report.
- **Section VI** updates findings related to sustainability/CR's effect on risk and financing costs.
- **Section VII** updates findings related to HR.
- **Section VIII** shows that companies use sustainability/CR to create value and respond to down business cycles.
- **Section IX** shares our concluding thoughts.

One need not review the Report in order. We encourage the reader to review the sections they will find most useful.



A Call to Action

The original 2015 Report provided a call to action. Sustainability and corporate responsibility practitioners couldn't stay on the sidelines. They needed to engage internally, aligning and integrating their work into the core fabric of the business. They needed to adopt an entrepreneurial approach so that every function, role, and employee would understand the value and necessity of improving the wellbeing of people, communities, and planet.

In 2025, one could argue that the need for a strong business case has never been greater, in part because the need for active, committed, and impactful business engagement in social and environmental concerns has never been greater. The 2025 update to Project ROI comes replete with findings that validate, enhance, and add to the original. Sustainability and Corporate Responsibility, if done well, drive financial performance. Exciting research shows new, quantified benefits to the bottom line. And the research adds new depth to what good practice looks like. It also continues to make a call to action.

Investing in ethical, trustworthy, supportive, responsible, and accountable behaviors is not bad for business. To the contrary, they are a business imperative.

The call to action Project ROI makes in bringing these practices to the core of the business is even more urgent.

II.

Generating Financial and Competitive Value
from Sustainability/CR

Value and Impact Framework



**It's easier to
act your way into
a new way of thinking,
than think your way into
a new way of acting.”**

- JERRY STERNIN, *THE POWER OF POSITIVE DEVIANCE*

Generating Financial and Competitive Value from Sustainability/CR

If sustainability/CR creates financial and competitive value only when it's done well, then what does doing sustainability/CR well look like?

Project ROI Value and Impact Creating Framework



Fit

Determine the alignment and intersection of social and environmental considerations with key business priorities

- Align sustainability/CR to the organization's culture
- Determine the company's sustainability archetypes
- Identify and manage tensions among financial, social, environmental, and ethical priorities
- Determine Materiality



Commit

Set the objective to support business outcomes; make positive impact; manage tensions; and allocate 80% of ESG resources to the ESG strategy

- Define Value Proposition(s)
- Set a sustainability strategy that integrates into the business
- Set a target level of sustainability/CR performance



Manage

Embed ESG into core business operations; improve capabilities to manage ESG performance; measure impact; and apply an entrepreneurial mindset

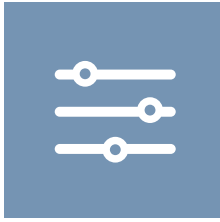
- Think and act entrepreneurially
- Assess which activities will deliver the greatest outcomes for the resources invested
- Measure outcomes for profit, people, and planet



Connect

Engage stakeholders, build awareness, and build allies

- Understand key stakeholder expectations
- Build awareness of the company's sustainability strategy, commitments, and outcomes
- Build allies for the company's sustainability/CR mission



Fit

Fit involves a thorough exercise to determine the alignment and intersection of social and environmental considerations with business operations, products/services, strategy, branding, workforce profile, R&D, and the value chain.

Key steps to determine Fit include the following.

1 Align sustainability/CR to the organization's culture

The lineage of sustainability/ESG comes from public policy, regulation, and environmental, labor, and human rights movements.¹¹ Therefore, the core premises, definitions, and guidelines for sustainability/CR often feel like regulatory and legislative square pegs looking to fit in the round holes of profit-making businesses.

Those who manage sustainability/CR can find themselves caught between two very different cultures. The sustainability/CR culture focuses on providing public goods, promoting justice, and reducing environmental footprints. The company's culture focuses on meeting fiduciary obligations to deliver profits, quality products/services, and productive operations. To be sure, these cultures can overlap. Some businesses emphasize core values and define a purpose to do well and do good. However, in many instances, sustainability/CR professionals and senior executives struggle to find common understanding.¹²

An anecdote illustrates the point. We helped a global brand design an enterprise sustainability strategy. The sustainability team wanted to exclude the CFO from the process. "She hates us!" they said. We persisted and arranged a time to speak. "Let me make one thing absolutely clear," the CFO began, "Sustainability is the most important driver of our business success now and in the future." We were stunned to hear this and told her so. "You must've been talking to the sustainability team," the CFO said, "I can't understand a word they say."

If the sustainability team had only understood the CFO better, imagine what they could have been accomplishing together for people, planet, and profit.

Assess how sustainability aligns with the company's organizational priorities

In our observation, sustainability/CR increases its potential to support value and impact when it understands the company's driving priorities and business model. For example:

- Companies like Coke and The Walt Disney Company famously prioritize the strength of their brands.
- ExxonMobil is known for prioritizing operational excellence.
- Apple and Google have strong reputations for innovation and design.
- Insurance companies concentrate on risk reduction.

Sustainability/CR professionals need to understand and align with the core priorities and business models of their company. The more they do so, the more business leaders will embrace sustainability/CR as a vehicle that supports business success instead of distracting from it. When this happens, sustainability/CR will have a better opportunity to receive the kinds of resources—such as capital and operating expenditures (i.e., capex and opex)—it needs to meet bold goals and deliver positive impact at scale.

2 Determine the company's sustainability archetypes¹³

Six core sustainability archetypes—akin to personality profiles—shape how leaders and employees define the purpose and role of sustainability/CR for their company (Figure 1).

Understanding the company's archetypes will help create alignment among the C-suite, board, and sustainability/CR team about the core purpose of sustainability/CR for the business. It will point towards the outcomes sustainability/CR can deliver for profit, people, and planet, and explain why some sustainability/CR efforts, no matter how successful, don't garner expected support from the C-suite.

FIGURE 1

Sustainability/CR Archetypes

BOX CHECKER

Does only what is required.

BRAND & REPUTATION DRIVEN

Uses sustainability/CR to differentiate the company and its brand with key audiences and stakeholders, such as investors, customers, and employees

IMMEDIATE RETURN DRIVEN

Uses sustainability/CR to improve financial performance and competitive advantage

RISK REDUCTION DRIVEN

Uses sustainability/CR to mitigate risk, e.g., reputational, brand, PR, social license to operate, activist pressure, crisis management, enhancing resilience, and support for overall enterprise risk management

IMPACT & PURPOSE FOCUSED

Uses sustainability/CR to express the company's purpose and values, and follows up with efforts to reduce footprint and expand positive impacts

INNOVATION DRIVEN

Uses sustainability/CR to innovate new business model(s), solutions, and processes to drive:

- Long-term competitive success
- Impact and footprint reduction

3 Identify and manage tensions among financial, social, environmental, and ethical priorities

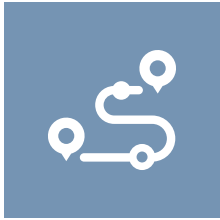
Sustainability/CR tension management involves identifying conflict among business financial, economic, environmental, ethical, and social considerations over the near, medium, and long term. To integrate sustainability/CR into the business in a way that helps benefit profit, people, and planet, companies must learn how to navigate tensions and tradeoffs. Executives should map tensions and develop plans to manage them, ideally by finding “sweet spot” strategies that resolve environmental or social-related concerns in ways that enhance financial performance.

However, when “sweet spots” can’t be found, executives need to make informed, tough, and confident choices about tradeoffs. Sometimes resolving tensions will involve prioritizing environmental and social concerns. Sometimes, financial performance considerations will prevail. Research finds that building the capability and discipline of sustainability/CR tension management helps improve financial and sustainability/CR performance.¹⁴

4 Determine materiality

Many companies use the environmental and social materiality assessment to identify “Fit.” The environmental and social materiality assessment used for reporting and disclosure is a useful step to determine “Fit.” However, for many companies, the materiality process has become fraught. Too often, companies create “everything is material matrices.”¹⁵

To support “Fit” materiality requires deeper reflection. Companies should use the materiality assessment to reveal the synergies and tensions between the organization and sustainability/CR. Framing the materiality assessment in the context of the organization’s culture, archetypes, and key tensions should have the added benefit of concentrating the list of material topics in ways that reveal sweet-spot opportunities and help justify tradeoff decisions that prioritize people and planet over short-term profits in some instances, and justifiably prioritize short-term profits in others.



Commit

To **Commit** means the company commits to align and integrate an approach to sustainability/CR that sets the objective to:

- Support business outcomes.
- Make positive impact for people and planet.
- Manage tensions.

And to do so by designing an enterprise sustainability/CR strategy that ideally receives at least 80% of approved resources, such as budget, staffing, and time.

Key steps to Commit include the following.

1 Define value proposition(s)

Companies typically define value propositions for customers. Sustainability/CR professionals and their executive champions should define “value propositions” for internal customers such as the Board, C-Suite, and business line leaders, as well as traditional customers.

Sustainability/CR can support three high-level value propositions.

VALUE PROPOSITION 1: Offer sustainability/CR as a feature

Offering sustainability/CR as a feature means expressing to key business stakeholders—investors, customers, and employees—that the company has intentionally designed and built sustainability/CR into its business model. In this way, sustainability/CR becomes part of the brand promise communicated to consumers or business customers.

CASE EXAMPLES: Offering Sustainability/CR as a Feature

- Dell has tracked that it has been able to generate \$1 billion in sales from featuring their sustainability/CR program work.¹⁶
- HPE (Hewlett-Packard Enterprise) states, “Our sustainability program has a demonstrably positive effect on our bottom line: we win business and attract investment by demonstrating the benefits of sustainability and of HPE’s leadership to our customers and investors. Our sustainability credentials strengthen customer relationships and provide an advantage in new business tenders. We also leverage our reputation to support talent acquisition and retention, and to ensure ongoing access to global markets.... We continue to invest in new ways to connect with our current and potential

customers on sustainability. Customers are often not fully aware of the synergy between optimizing their IT solutions and simultaneously achieving their business and sustainability goals. Our sustainability engagement technologists in Asia, Europe, and North America demonstrate how our IT efficiency and circularity capabilities benefit their operations, deliver cost savings, and overcome their business challenges.... [I]n 2019, our sustainability engagement included 102 one-to-one customer meetings and 67 multi-customer forums with customers representing \$3.2 billion in revenue. We estimate that these engagements helped drive approximately \$585 million in net revenue, an increase of 88% over the previous year.”¹⁷

Sustainability/CR as a feature relates especially well to the following business KPIs:

- Sales and revenue through consumer attraction and retention.
- Brand and reputation value enhancement.
- Investor attraction and retention.

It does so through activities that include:

- Building brand and reputation as a sustainable, purpose-driven enterprise.
- Helping B2B customers meet their own sustainability/CR commitments, disclosure requirements, and rating targets.
- Advertising sustainability/CR performance (backed by validated reporting and disclosure and robust initiatives) to key stakeholders such as B2C and B2B customers, investors, and employees.¹⁸

VALUE PROPOSITION 2: **Use sustainability/CR to drive down costs¹⁹**

Sustainability practices often align with efforts to use resources more efficiently, reduce waste, and optimize opex and capex. A review of 200 academic studies finds that good sustainability practices lead to:

- Lower cost of capital 90% of the time.
- Improved operational performance 88% of the time.
- Better stock price performance 80% of the time.²⁰

A World Economic Forum study done in collaboration with PwC found that up to \$2 trillion in annual savings (at current energy prices) is

CASE EXAMPLES: Using Sustainability/CR to Drive Down Costs

- Apollo Global Management found that its flagship portfolio companies that have adopted a goal to lower carbon intensity by 15% have identified over \$44 million in savings and \$52 million in risk reduction costs.²¹
- Carlyle Group has used a variety of sustainability/CR strategies to reduce operating costs for itself and its portfolio companies. For example:
 - Carlyle's Healthy Benefits Initiative helps its portfolio companies manage their healthcare benefits and represents approximately 200,000 employees across over \$1.1 billion in healthcare claims as of December 31, 2022. Carlyle estimates that this initiative helps its participating portfolio companies save over \$200 million annually. Employee satisfaction with the programs involved in Carlyle's Healthy Benefits Initiative is extremely high, ranging from 98–99%.²²
 - Carlyle calculates \$200 million in potential annual cost savings through decarbonization actions currently underway in traditional energy companies in the Carlyle portfolio, with projected emissions savings of 4.5 million tons of CO₂e by 2030.²³
- An automotive company reusing 2.5% of used car parts in Europe, recycling 10%, and paying to dispose of the rest, was netting \$100 million annually in reduced costs and increased revenues.²⁴
- Since 2008, Dell has taken back more than 1.76 billion pounds (nearly 800 million kg) of used electronics. Since mid-2014, when Dell launched the closed-loop plastic recycling program, it has created nearly 5,000 tonnes of plastics from recycled computer parts. Dell has saved more than USD \$1 million from this process, and the carbon footprint of circular plastics is 11% smaller as compared to the manufacture of virgin plastics. Dell now uses circular plastics in approximately 90 products across millions of units globally.²⁵
- Adopting circular production approaches could improve the profitability of automakers by 1.5 times along the value chain and tap revenues per vehicle 15–20 times its sales price.²⁶
- Walmart has saved hundreds of millions of dollars through environmental sustainability programs.²⁷
- The metal packaging industry finds that reducing the weight of aluminum cans reduces their carbon and environmental footprint, reduces the cost to produce cans, and reduces the cost of transportation.²⁸

possible using existing technology, if measures to reduce demand were to be taken by the end of this decade.²⁹

Examples of ways to use sustainability/CR to drive down costs include:

- Maximizing material and energy efficiency (such as through low-carbon manufacturing solutions, lean manufacturing, dematerialization, etc.).
- Reducing waste and/or converting waste into usable materials.
- Reducing and substituting conventional processes with renewable and natural processes (e.g., reducing energy use, using biomimicry to make production processes more efficient).
- Using sustainability/CR to reduce risks and their associated costs and liabilities. For example, reducing the costs of capital and equity; inoculating the company from systemic risk (i.e., wide-ranging risks that cause financial losses across an industry); and reducing the costs and liabilities from regulatory enforcement, stakeholder activism, non-compliant suppliers, negative media, social license to operate restrictions, lawsuits, negative campaigns, shareholder proxies, and PR crises.
- Using sustainability/CR to support talent acquisition, retention, productivity, and employee engagement. Supporting these HR KPIs translates into lower operating costs.

VALUE PROPOSITION 3: **Grow through sustainability offerings³⁰**

Companies can use sustainability/CR to grow sales and market share by offering sustainability as a feature. As noted earlier, they can boost

sales by as much as 20%. They can also grow by offering products and services that help solve environmental and social challenges. Research finds that in the U.S. alone, the transition to a sustainable economy represents a \$130 trillion opportunity between now and 2050.³¹

Examples of strategies to use sustainability for growth include:

- Deliver functionality, rather than ownership, by providing services that satisfy users' needs without having to own physical products. For example, flooring company Interface has a successful service to lease carpets that are taken back and refurbished, reused, and/or recycled.
- Adopt a stewardship role that protects all key stakeholders. Examples include adopting labels and certification for biodiversity protection and fair trade. Research finds that sales of products that had a visible sustainability claim grew 5.6 times faster than those that did not.³²
- Encourage sufficiency via solutions that actively seek to reduce consumption and production. For example, Patagonia's "Don't Buy" campaign led to a 40% increase in sales.³³
- Re-purpose the business for society/environment by prioritizing delivery of social and environmental benefits. For example, Unilever found that its Sustainable Living Brands products grew 69% faster than the rest of the business.³⁴ Since becoming the world's largest B Corp (i.e., a legal incorporation that places environmental and social impact obligations at the same level as fiduciary obligations), cosmetic maker Natura has doubled its revenues to \$3.32 billion while also preserving 1.8 million hectares of the Amazon rainforest.³⁵

- Develop scalable solutions to maximize benefits for society and the environment. For example, since 2011 DuPont has invested over \$879 million in offerings with quantifiable environmental benefits. This has generated over \$2 billion in annual revenue from products that reduce emissions and \$11 billion in revenue from non-depletable resources.³⁶

As discussed further below, when companies seek to grow by emphasizing sustainability as a feature, it's advantageous to showcase at least one product or service that seeks to address environmental or social concerns in some way.

Conversely, when a company seeks to market a solution to an environmental or social challenge, it's also useful to demonstrate that the enterprise embraces sustainability/CR.

PLUS: **Consider establishing multiple value propositions**

Ideally, companies should set value propositions for the enterprise as a whole, specific business lines, staff functions, and the sustainability/CR team function. Doing so will encourage each of these organizational units to incorporate environmental and social considerations into business strategy, and will help establish formal accountability to deliver positive results for profit, people, and planet.

CASE EXAMPLES: Growing through Sustainability/CR

- BASF generated sales of €24.1 billion from what it calls Accelerator products (i.e., products that make a substantial sustainability contribution in the value chain). The company is now focusing on setting new, more ambitious sustainability targets to continue its commitment to sustainable development.³⁷
- Back Market created a global marketplace for professionally refurbished electronics: everything from iPhones to laptops to appliances. The company is growing steadily, from 1.5 million customers in July 2019 to 6 million in 2022. As of this writing, Back Market is worth more than \$5.7 billion, which makes it France's most valuable startup.³⁸
- Ecolab calculates that its sustainability solutions have helped deliver \$9.1 billion in cumulative value to its customers from 2019–2024.³⁹
- In 2013, in collaboration with Wrigley East Africa, Mars launched the Maua business pilot to provide a new route to market for Wrigley products. The pilot aimed to engage consumers in informal settlements and rural areas that were difficult to reach through traditional channels. Maua aims to grow flourishing businesses that substantially impact participants' income and wellbeing, delivering measurable results across human, social, and shared financial capital. The Maua program has become a significant contributor to the Wrigley East Africa business, exceeding USD \$7 million in profits and representing nearly 15% of total sales in the region. Maua is run as an integrated part of the Wrigley's Kenya business.⁴⁰
- Nouryon is a global specialty chemicals leader. Markets and consumers worldwide rely on their solutions to manufacture everyday products, such as personal care, cleaning goods, paints and coatings, agriculture and food, pharmaceuticals, and building products. 34% of Nouryon's revenues come from Eco-Premium solutions, and 77% of Nouryon's R&D product pipeline focuses on sustainability benefits.⁴¹
- Nobian, a leading European producer of salt, essential chemicals, and energy solutions for many end industries, has a goal to have 40% of total sales volumes available with low carbon footprint products by 2025. In addition to developing their own portfolio of green products, the company seeks to support the creation of new value chains that drive sustainable use and reduce their global carbon footprint. Nobian entered a strategic partnership with Vulcan Energy to produce lithium hydroxide from a carbon-neutral geothermal lithium source and is working to reduce the carbon footprint of cement. Nobian is also working towards repurposing their own assets to unlock new business opportunities, including developing specially designed salt caverns to store renewable energy.⁴²

2 Set a sustainability strategy that integrates into the business

Set a sustainability strategy that integrates into the business. Research finds that key business stakeholders—investors, customers, and employees, better understand sustainability/CR when they see the company make a business case and integrate it into business strategy and performance targets.⁴³

The integrated sustainability strategy should:

- Find sweet spots that resolve key tensions and set plans to manage tradeoffs when sweet spots don't exist.
- Set clear, measurable goals and objectives to deliver impact and value for profit, people, and planet.
- Allocate the majority—80% or more—of resources to strategic objectives, discussed further below.

To design a strategy that meets these criteria, leaders should review and answer the Strategic Sustainability Tension Management Framework Questions (Figure 2, next page).

The sustainability/CR team should determine the materiality/credibility budget ratio based on a target of 70–80% towards material priorities and 20–30% of resources allocated to sustainability/CR hygiene topics. A hygiene topic refers to social, environmental, and governance topics that, while not material, are generally expected to receive attention for the industry or specific company.

FIGURE 2

Strategic Sustainability Tension Management Framework Questions⁴⁴

Purpose-related brand and reputation

Is it important for the company to be seen as a good sustainability actor by key stakeholders?

Compliance

How likely will the company be pushed into rigorous compliance?

Resource and supply

Are key inputs vulnerable to a changing world? Does transitioning to more sustainable solutions create opportunities? Does the company have a better cost advantage moving to sustainable options if it goes slowly or quickly?

Resilience

Identify likely environmental and social trends that will affect the company and its value chain. Under which scenarios will the company be at risk or thrive?

Relationships

Who are the allies the company needs to thrive and win in a transitioning world?

Unmet needs

Does the company have an opportunity to profitably meet unmet needs through new or existing solutions to social and/or environmental challenges?

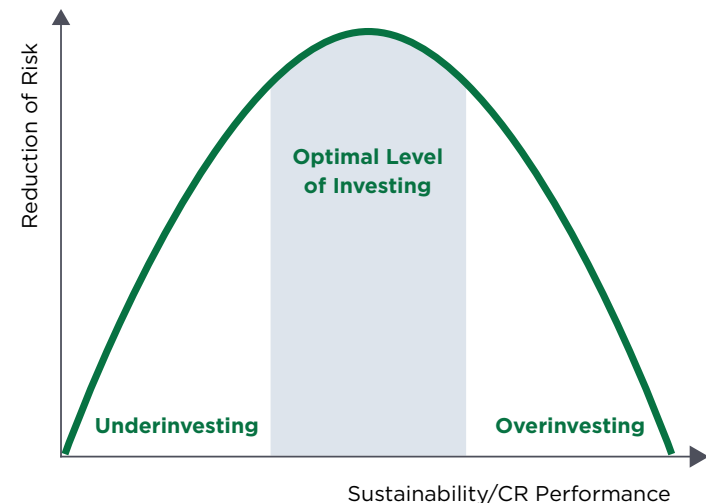
Examples of hygiene topics might include the need to produce a sustainability/CR report or a commitment to employee safety for industries that don't define safety as a material issue. The strategy should define a plan to reach the ratio over time.

3 Set a target level of sustainability/CR performance

Upcoming sections discuss that sustainability/CR often creates value along an inverted, U-shaped curve (Figure 3). In other words, underinvesting does not support financial ROI. As investment increases, the likelihood of financial returns grows.

FIGURE 3

Investing in Sustainability/CR Performance



However, at some point, investing too much in sustainability/CR shows diminishing financial returns. Unfortunately, one can't say precisely where on this upside-down U the optimal amount of sustainability/CR turns into too much. However, companies can take steps to determine where peak performance may lie.

Just-right investing

When we synthesize findings and key lessons learned, the following process may help companies find the sweet spot that identifies the optimal leadership and related investment in sustainability/CR. This will help companies determine where to:

- Invest extensively and lead.
- Invest moderately and check the box.
- Say no.

1. Identify where key stakeholders expect the company to lead in sustainability/CR performance

Set an objective to lead the industry in these areas. These are likely areas where competing and differentiating will pay off.

2. Define the company's material priorities in a rigorous manner

Set the objective to get to at least the second quartile of good performance, or the back end of the top quartile.

3. Identify borderline material environmental, social, and governance topics and other topics requiring some maintenance and hygiene

Set the objective to rate as an average performer and/or reach check-the-box level performance.

Just-right reporting

Companies can also use this process to find the just-right level of sustainability/CR reporting. For this we suggest:⁴⁵

1. Focus on material topics

A variety of third-party reporting standards and regulations encourage companies to build sustainability/CR reports around material topics.

2. Provide accessible information on the company's performance related to material topics

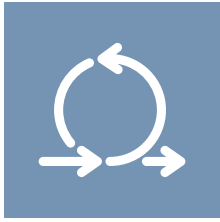
Use plain, easy-to-read language that is free—as much as possible—of jargon.

3. Balance a “just-the-facts” tone with storytelling

A direct, fact-based style tends to make readers feel more trust towards the company. However, storytelling can make a report easier to read.

4. Use the report as a credibility backbone for other kinds of sustainability/CR related communications

The report itself is often too long to serve as effective marketing collateral. Rather than promoting the report and expecting it to receive widespread attention, the company should instead use it as the key reference document that supports the public claims it makes. Disclosing a moderate amount of negative sustainability/CR performance appears to increase the trust of readers.⁴⁶



Manage

To Manage sustainability well involves crafting a rigorous, measurable approach that embeds sustainability/CR into core business operations, while building capabilities to manage social and environmental performance effectively. Doing so requires the application of a creative, entrepreneurial mindset.

Key steps to Manage include the following.

1 Think and act entrepreneurially⁴⁷

Entrepreneurial leadership is a relational practice.

In many companies, conventional managerial thinking rules. Figure 4 (below) shows that this kind of thinking involves getting data, planning, and then acting. Leaders who follow this conventional approach focus on what's known and set clear, well-defined end goals. They build specific plans with milestones and measure progress. If they achieve goals, they have succeeded. If they don't, they have failed. This typically leads to a sequential and linear approach to making societal impact. Profitable growth,

supported by a competitive strategy, provides the company with the flexibility to allow for some employee engagement and then some extra and discretionary efforts to contribute to society.

Companies with a more entrepreneurial mindset use a nonlinear approach. Leaders will act first, learn from mistakes and successes, and then build stronger and scalable approaches. They embrace the unknown. They don't proceed alone. They involve diverse networks and stakeholders that learn and solve problems together. They figure out the design of the plan over time using trial and error to develop progressively better solutions.

FIGURE 4

Managerial vs. Entrepreneurial Thinking

Managerial Thinking

- Focus on the knowable
- The end goal is quickly established and definable
- Plan first
- Get organized and set a strategy
- Optimize and execute
- Measure progress
- Achieve goal

Get Data → Plan → Act

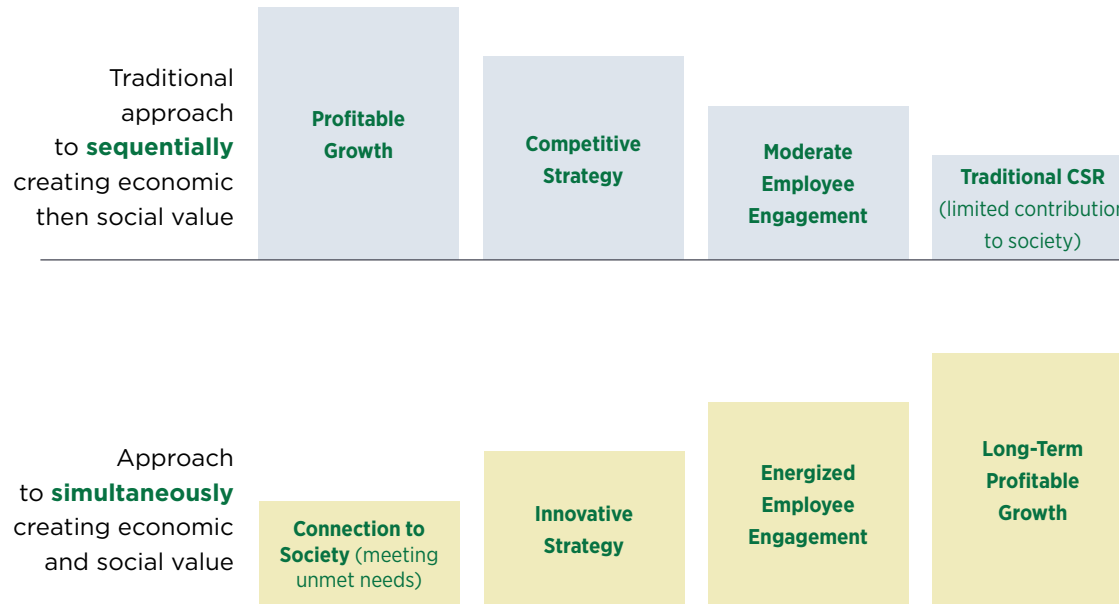
Entrepreneurial Thinking

- Embrace the unknowable
- Use the resources available
- Other people bring additional perspectives and resources
- Take small actions
- Let design emerge over time
- Intentionally iterate to expand possibilities
- More collaboratively oriented

Act → Learn → Build

FIGURE 5

Sequential vs. Simultaneous Value Creation



These individuals will embrace a different approach to societal impact (Figure 5). Making a strong connection to society upfront enhances the engagement of networks and stakeholders vital to innovation and entrepreneurial success. A collaborative, iterative approach energizes employee engagement. Collectively, this leads to long-term profitable growth.

The presence of each approach is often necessary in successful organizations. However, in many organizations, managerial thinking dominates.

In such instances, sustainability/CR can create tension and conflict because its complexity, ever-changing definitions, and ever-expanding boundaries often relate more comfortably to the entrepreneurial mindset.⁴⁸

The following framework (Figure 6) can help guide leaders and sustainability/CR professionals to ease tensions and balance and align managerial and entrepreneurial management approaches.

FIGURE 6

Think and Act Entrepreneurially⁴⁹

Start by asking: Why?

- What problem is sustainability/CR trying to solve?
- What impact and value creation does sustainability/CR want to make?

Start with what you have

Determine what the available means are to get started. What are sustainability/CR's and the company's capabilities? What do you know, and whom do you know? Don't let the perfect be the enemy of the good. Get started.

Assess your affordable loss

How much is the company willing to invest to learn and improve? What resources (e.g., time, money, and social capital) is the company willing to give up in order to take action?

Enroll stakeholders

Who can sustainability/CR enroll in the strategy? What resources do they bring? What relationships does sustainability/CR need to build?

FIGURE 7

Mapping to Sustainability/CR Archetypes

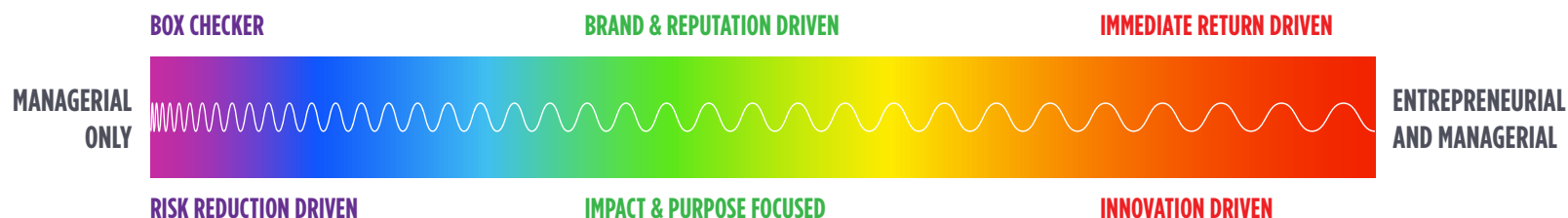


Figure 7 (above) shows how the entrepreneurially management frameworks map to the sustainability archetypes.

Companies that emphasize archetypes such as the Box Checker and the Risk Reduction Driven tend to have cultures that embrace the conventional managerial approach. Companies that emphasize archetypes such as Immediate Returns Driven and Innovation Driven tend to be more comfortable with entrepreneurial approaches.

2 Assess which activities will deliver the greatest outcomes for the resources invested

This step determines which sustainability/CR activities will deliver the greatest outcomes for people, planet, and profit for the opex/capex invested. It also involves setting a level of ambition for the scope and scale of the outcomes the company wants to generate.

Setting a level of ambition involves determining the goals and related timeline to generate business value and positive societal impact. Ambition levels may vary depending on the sustainability/CR strategy and the way a company prioritizes its material topics.

For example, one company might decide to be extremely ambitious in setting a “carbon negative” target but take a more incremental approach related to biodiversity. Another company might set ambitious goals related to responsible sourcing, but follow the pack in terms of community support.

One process that can help is to map the “value stack” for material social, environmental, and governance topics. A sustainability/CR value stack maps a set of activities, projects, commitments, and/or targets against their:

- Level of effort (e.g., capex and opex spending required, time, staff, expertise, and technology).
- Estimated financial returns and societal benefits.

Figure 8 (below) shares a generic example of a value stack related to climate and energy activities. For this hypothetical company, it will take relatively low levels of effort to change lighting from incandescent to low-energy and low-emission LEDs. There should be a resulting financial ROI that comes from lower utility bills. This relatively low-effort project will generate a modest financial ROI.

Low-carbon innovations sit at the other end of the spectrum. This will take substantially more time

and expenditures to bring products with low-carbon features and/or GHG reduction capabilities to market. There's also a risk that customers may not purchase the products offered. However, if they do, the potential financial windfall could be enormous.

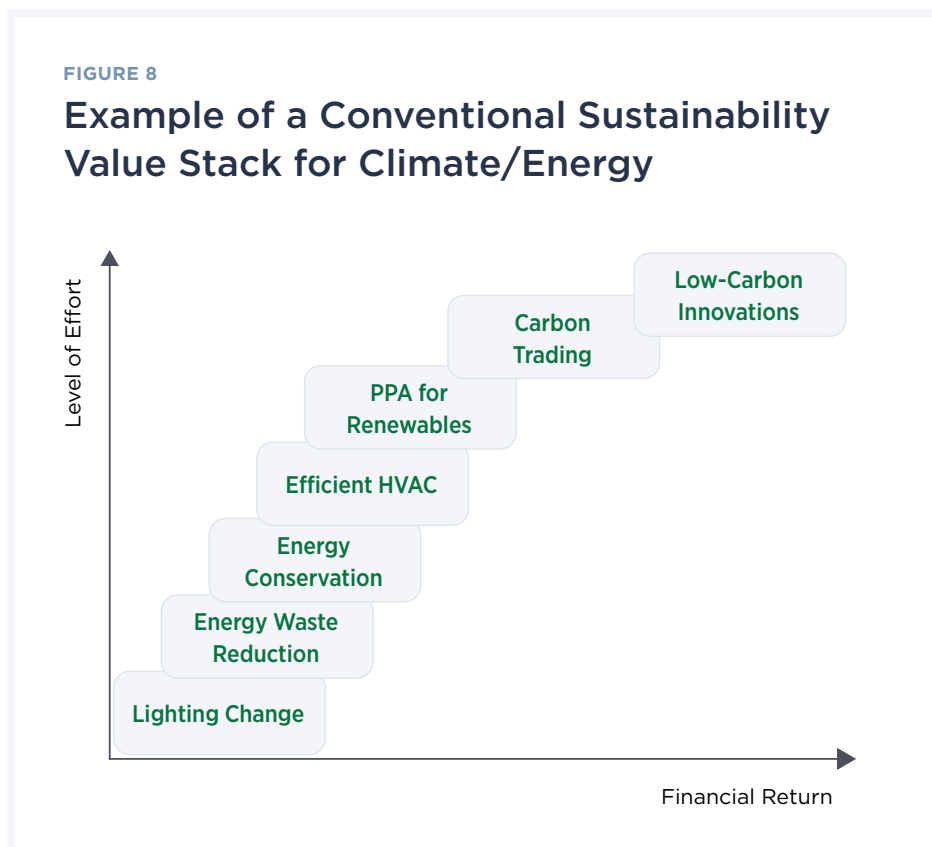
The activities in between require progressively greater levels of effort with potential ROIs that steadily increase.

Companies should develop value stacks at least for their highest priority, material environmental, social, and governance topics. Determining a sustainability/CR value stack involves determining the:

- Budget required.
- Expertise/technical capability required.
- Staff resources/cross-functional engagement required.
- Scope/scale of outcomes required.
- Speed/timing of delivery required.
- Estimated financial and/or competitive returns on investment.
- Estimated social and/or environmental benefits created.

Once a company has formed its own value stack map, it can make decisions on which value stack activity or activities to pursue. To make this decision, it's useful to revisit the steps above. For example, if the company has an innovative culture that loves taking big risks, then it's likely best to go big and pursue an activity like generating low-carbon innovative products and solutions as listed in Figure 8.

If the company has a risk-averse culture that moves incrementally and needs to see proof of concept, then starting with a safer, lower ROI activity like changing lighting is a good place to start. The key lesson is to align the selection of a value-creating activity to suit the entrepreneurial culture and the kinds of tensions that the company faces.



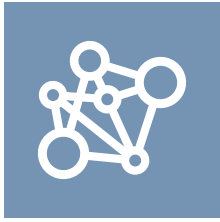
Companies that follow the steps in the Project ROI Framework will likely increase their opportunities to generate financial and competitive value from sustainability/CR while enhancing the positive benefits they provide for people and planet.

The ensuing sections of this Report provide a deeper look into the potential for sustainability/CR to drive financial and competitive value tied to a company's key performance indicators.

3 Measure outcomes for profit, people, and planet

A key finding of the original Project ROI research was the importance of setting sustainability metrics that align profit, people, and planet. Illustrative examples include:

- Reducing the weight of materials used in manufacturing processes (this reduces the company's environmental footprint and saves costs)
- Increasing consumer awareness and favorability of the sustainability features embedded in key products
- Exceeding B2B expectations for Ecovadis responsible sourcing scores
- Improve levels of community support and trust
- Increasing efficiency and productivity through reduced waste and circularity



Connect

Connect involves engaging stakeholders, building awareness, and building allies.

Key steps to Connect include the following.

1 Understand key stakeholder expectations

A fundamental good, conventional business practice is to assess the expectations and attitudes that key stakeholders, such as customers/consumers, investors, and employees, have for the company. Leading companies take a rigorous approach, understanding that such stakeholders will not have uniform views and will often fall into discrete segments that differ in their priorities and modes of communication.

Companies will benefit from conducting similar research related to stakeholder expectations and attitudes for sustainability/CR. Companies should expand their aperture to conduct this assessment for priority, “nonfinancial” stakeholders as well—e.g., community representatives, environmental representatives, workers in the value chain, elected officials, media, and experts.

This process supports the materiality assessment. However, when a company deeply understands key stakeholder expectations, it can build strategies and communication plans to deepen trust, affinity, and favorability. It can also help a company understand where its sustainability/CR performance needs to lead, align with, or follow the pack.

2 Build awareness of the company’s sustainability strategy, commitments, and outcomes

Leading companies build awareness of their commitment to sustainability/CR, their performance, and their results, particularly as it relates to key stakeholder expectations and needs.

This typically involves:

- Actively dialoguing with key stakeholders to assess their level of trust for the company, how they are receiving and reacting to sustainability/CR information, and how their expectations and needs may evolve.
- Integrating sustainability into brand and reputation positioning and differentiation.
- Building key stakeholder awareness and building allies.
- Integrating sustainability into marketing communications and advertising.

The original Project ROI found it vital for companies to communicate about sustainability/CR in a humble, authentic, and conscientious manner. This guidance remains useful.⁵⁰ However, current findings provide more nuance. It’s important to fit sustainability/CR communications into the style and culture of the company. For example, newer, bolder companies may want to be more assertive. Companies that have an impact and purpose-driven mission, such as Allbirds, MODO, Patagonia, Rivian, and Tom’s, can lead with sustainability/CR topics in their advertising.

Other companies should take a subtler approach that does not overpromise, suggest the company has all the answers, or allude to being perfect. This kind of approach emphasizes that the company cares, it's on a journey to improve, it's working to help, and it's relying on great partners. Ultimately, sustainability/CR communication is beneficial only when the firm's marketing aligns with sustainability/CR principles that stakeholders view as relevant for the company's industry, culture, and position in the marketplace.⁵¹

Selling Products and Services: Advertise Sustainability/CR or Performance?

The original Project ROI found that companies make a mistake when they promote the environmental and sustainability features of their products and services too literally. When customers see a new coffee that “treats farmers well” or a new tire “made from post-consumer recycled materials,” they will often react with skepticism. If the company is promoting features other than core characteristics like the coffee's taste and the tire's traction, are they actually signaling between the lines that the products' quality is subpar?

The original Project ROI—confirmed by this 2025 update—guides companies to emphasize sustainability/CR as a feature that adds value to core performance elements. For example, happy, well-treated farmers nurture robust beans that create better-tasting coffee. Building tires from recycled components makes for an even stronger, tougher, higher-performing tire. Research finds that:

“Effective pitches are centered on a core attribute: the chocolate bar tastes rich and delicious; the soap leaves you smelling clean. Layering one or (even better) two sustainability messages onto the core attribute strengthens the brand positioning and performs better than communicating two core claims. On average, a core attribute claim with two effective sustainability claims drives increased appeal by 30 percentage points and elevates the overall appeal of the product. It's a combination that works across all customer groups.”⁵²

CASE EXAMPLES: Using Sustainability/CR to Augment Core Performance Features

- Interface Carpeting: “Inspired by the geometry of nature, Come and Go™ blends contrast and texture to reach a new level of modularity where floorscapes are unique every time.”⁵³
- The Lucid Air: “Compromise Nothing. The perfect balance of having it all. Discover the award-winning Lucid Air.”⁵⁴

Our current findings reinforce this guidance, but with a bit more nuance. Customers are becoming more sophisticated about sustainability/CR. When a company knows their customers want sustainability/CR, it can make sense to promote those features.⁵⁵

CASE EXAMPLES: Promoting Sustainability/CR Directly to Receptive Customers

- Tory Burch's “Ella Bio...has the same style and versatility as the original tote but is crafted with a plant-based leather alternative. Soft to the touch, and luxurious and durable as leather, the outer shell is crafted in Italy with BioFabbrica Bio-Tex™, a non-GMO plant protein. The fabric was developed in partnership with Modern Meadow, an American biotech company and leader of sustainable material innovation.”⁵⁶
- Wrangler's Accelerating Circularity Jean: “We joined the Accelerating Circularity Project to collaborate and show that used textiles can be recycled into new materials. As part of the textile-to-textile recycling project in the US, Accelerating Circularity recycled 23 tons each of post-consumer and post-industrial cotton.”⁵⁷

For either approach, customers want to perceive that the company's commitment to the sustainability/CR topics it prioritizes is sincere, and that there is a strong fit between the brand and the topics prioritized.⁵⁸

3 Build allies for the company's sustainability/CR mission

In our experience, the most effective leaders in integrating Sustainability/CR into their organizations demonstrate strong relational competencies. Essentially, they are skillful relational designers who garner internal and external support for sustainability/CR, authentically aligning both business and societal outcomes *simultaneously*.

Our research finds that enrolling institutional investors, customers, and employees in the company's sustainability/CR mission builds trust and favorability, which in turn supports financial value creation. Companies should therefore strive to make these stakeholders allies in the company's efforts to meet its sustainability/CR mission.

The original Project ROI found evidence that companies that make environmental and social advocates (e.g., key NGOs, respected subject matter experts, leading social entrepreneurs, prominent impact investors, influential activists, community leaders, and policymakers) into allies invested in the responsibly competitive success of the firm will increase the likelihood of generating financial rewards. First, external stakeholders such as NGOs are often trusted voices. If they trust the company and believe in its sustainability/CR, others will likely follow. Second, these stakeholders bring unique knowledge and perspective. Forming relationships will help companies identify trends, risks, and opportunities they may have otherwise overlooked. Third, these stakeholders possess deep expertise on social and environmental topics and can help the company improve its positive impact on people and planet.



Companies that successfully apply the **Fit**, **Commit**, **Manage**, and **Connect** framework stand a greater chance of delivering positive outcomes for profit, people, and planet



The Potential Effect of
Sustainability/CR on

Financial Performance

CORE FINDINGS

as much as

21%

increase in

Profitability

as much as

6%

boost in

**Shareholder
Returns**

as much as

36%

increase in

Firm Value

Findings: FINANCIAL PERFORMANCE

Sustainability/CR continues to have positive effects on financial performance.

Profitability⁵⁹

- Sustainability/CR can increase a company's profitability by as much as **21%**.⁶⁰

Shareholder Returns

- Sustainability/CR can boost shareholder returns by as much as **6%**.⁶¹
- A variety of studies find that companies and brands with meaning and/or purpose (i.e., brands that incorporate commitment to improve the wellbeing of people and/or planet) outperformed the stock market over a ten-year period by **206% to 1,681%**.⁶²

Firm Value⁶³

- Sustainability/CR can increase firm value by as much as **36%**.⁶⁴
- One study has found that increasing sustainability/CR performance ratings can boost firm value (as measured by the ratio of enterprise value to EBITDA or EV/EBITDA) by as much as **180%**.⁶⁵

CASE EXAMPLES: Profitability

- VARO is a leading European energy company that manufactures, stores, and distributes conventional fuels and sustainable energies. VARO aims to be the energy transition partner of choice for reliable, accessible, and sustainable energy solutions, and is distinctly positioned to empower customers to pursue their own decarbonization efforts. VARO is playing its own part in this effort, with a goal to achieve net zero emissions by 2040. VARO plans to increase CAPEX investments to USD \$3.5 billion between 2022 and 2026—with at least two-thirds invested in biofuels, biomethane and bio-liquefied natural gas (bio-LNG), hydrogen, e-mobility, and carbon removals.

It has set a target to have 50% of group EBITDA come from the Sustainable Energies business by 2026.⁶⁶

- In a study of the Brazilian beef industry, cattle ranchers who adopted more environmentally and socially sustainable practices saw profitability increase by 6.8x.⁶⁷
- In 2001, European energy utility Iberdrola boldly changed its strategy to focus on supporting the sustainable energy transition. It has invested more than €100 billion in cleaner energy, smarter networks, and storage around the world. Its 2019 net profit of €3.4 billion represents a fivefold increase since 2001.⁶⁸

CASE EXAMPLES: Shareholder Returns

- After PepsiCo's Performance with Purpose strategy was implemented, net revenue grew by 80% and PepsiCo's stock outperformed both the Consumer Staples Select Sector Index by 109% and the S&P 500 by 20.88% (total shareholder returns, or TSR, over a five-year period).⁶⁹

- Since Iberdrola changed its strategy to focus on the sustainable energy transition in 2001, its total return for shareholders through 2020 has been about 715%.⁷⁰

A Note on Meta-Analyses

The relationship of sustainability/CR to financial performance has drawn so much attention that researchers can conduct “meta-analyses,” in which independent studies examining similar topics are statistically compared and overarching conclusions drawn.

We reviewed three recent meta-analyses on the relationship of sustainability/CR to financial performance. Collectively, these three studies looked at thousands of studies (including one study that reviews several meta-analyses). The outcomes:

- **58%-86%** of academic studies find a positive relationship between corporate sustainability and financial performance.
- Less than **10%** find a negative relationship.
- The remaining tend to find that sustainability/CR will have at least a partially positive effect on financial performance, depending on certain conditions.⁷¹
- For comparison, of the 173 studies our research team reviewed comparing the relationship of sustainability/CR to financial performance, only **7.5%** found a negative relationship. The majority found a positive relationship or a positive relationship under certain conditions.

“ We believe that sustainability makes sense from an investment perspective. We also believe that sustainability is about mitigating risk and creating economic value and can be a factor in **creating long-term, risk-adjusted returns.**”

—CBRE⁷²

How does sustainability/CR drive financial performance?

Sustainability/CR drives financial performance in three ways by:

1 Improving **firm performance**

Sustainability/CR achieves this by:

Creating a virtuous cycle with good management

- Good managers tend to invest more in sustainability/CR, and companies that are good at sustainability/CR tend to find their managers improve in quality. The reinforcing interaction helps improve financial performance.⁷³
- Good managers improve sustainability/CR, which in turn improves firm value. The value-creating effect of sustainability/CR is more pronounced when management quality is high:
 - High-quality managers use sustainability/CR as a competitive differentiator in the marketplace.
 - Sustainability/CR engagement is higher in firms with high customer awareness and attention towards the firm
 - High-quality managers capitalize on customer awareness to enhance sustainability/CR's value.
 - High-quality managers prioritize sustainability/CR when closely monitored by investors.⁷⁴

Generating revenue

- This occurs through sustainability/CR product and service innovations, increased customer loyalty, and improved corporate brand and reputation. Each help support higher growth.⁷⁵

Minimizing costs

- For example, companies can use sustainability/CR to increase resource efficiency; shift to vertical integration (i.e., tightening

supply chains) that reduces exposure to volatile commodity prices; reduce regulatory risks; and promote overall efficiency. The effect appears strongest when companies explicitly tie sustainability/CR to efficiency, such as:

- Attracting and retaining better talent willing to work for a virtuous employer at reduced wages.
- Using environmental activities to reduce waste and the related amount of resources and inputs purchased.
- Promoting inclusivity to support better team performance and productivity.⁷⁶

Mitigating risks

- Sustainability/CR can reduce a wide range of financial risks.⁷⁷ This is discussed further in Section VI.

Sparking innovation

- Sustainability/CR helps catalyze innovation, which in turn improves financial performance.⁷⁸
- Companies that combine high levels of innovation with sustainability/CR outperform their industry peers, with 3.1% higher operating profits and greater returns to shareholders.⁷⁹

One study shows how these features align to improve financial performance. A one-unit increase in sustainability/CR is associated with a 2.7% increase in return on sales (a measure of efficiency and profitability). Increasing sustainability/CR performance from the 25th to the 75th percentile is associated with a 5.49% increase in return on sales. This is due to the combination of improving brand/reputation leading to sales growth, reduction of risks that lead to reduced costs and greater efficiency, and sparking innovation.⁸⁰

2 Enhancing the **awareness and favorability** of key stakeholders

Sustainability/CR builds awareness and favorability through:

Improved brand and reputation

- Customers, employees, and investors aware of a company's strong sustainability/CR practices rate the firm's brand and reputation higher. This leads to greater trust and loyalty.⁸¹

Improved marketing and market perception of products and services

- Visible sustainability/CR initiatives enhance firm value by improving products' market perception, particularly for standardized goods and in competitive industries.⁸²
- Marketing capability helps enable sustainability/CR to drive firm value and helps address the inverted-U-shaped curve that shows financial returns from sustainability as increasing up to an optimal point—beyond which returns begin to diminish.⁸³ Sections II, V, and VI further discuss this curve and how to manage it.

Improved media coverage

- Positive sustainability/CR media coverage generates a 0.3–0.4 percentage point increase in profitability (via return on assets, or RoA).⁸⁴

Reporting and transparency

- Firms judged to be more transparent and to have higher quality reporting and disclosures are more trusted.⁸⁵
- Companies that embrace corporate purpose and communicate it effectively to investors, can lead to a 1.6% increase in stock valuation.⁸⁶
- Reports judged easier to read with optimistic and positive tones increase firm value⁸⁷
- Carbon disclosure positively influences organizational performance and mitigates negative perceptions of carbon emissions.⁸⁸

3 Showing how sustainability/CR aligns with and **improves business strategy**

Companies that align and integrate a strategic approach to sustainability/CR into the business model, business strategy, organizational and entrepreneurial culture, and operational processes increase their financial value. Misalignment decreases value.

- A strong strategic focus on material sustainability/CR topics increases returns by up to 5%. Companies with immaterial ESG investments saw returns decrease by as much as 2.8%.⁸⁹
- More mature and sustainability/CR transformation-focused companies that engage in sustainability/CR innovation, integration, strategy, and impact drive shareholder value. Such companies increased returns by an average of 2.67%, or 40.58% cumulative excess returns over the 13-year observation period.⁹⁰

What matters more: environmental, social, or governance performance?

Evidence suggests that environmental, social, and governance performance can each support financial performance.

E Environmental performance's effect on financial performance

Studies find:

- Good environmental performance and/or improvement support consistently positive returns.⁹¹ For example, a **10%** improvement in:
 - Pollution prevention leads to a **0.88%** increase in profitability Return on Equity (RoE).
 - Green supply chain management leads to a **0.49%** increase in profitability (RoE).
 - Green product development leads to a **0.43%** increase in profitability (RoE).⁹²
- Environmental innovators average **2.68%** higher profitability (via Return on Assets (RoA) than conventional firms.⁹³
- S&P 500 industry leaders on climate change generated **18%** higher return on investment, **50%** lower volatility of earnings over the past decade and **21%** stronger dividend growth to shareholders than their low-scoring peers.⁹⁴
- When compared to high greenhouse gas (GHG) emitting firms, companies with low GHG emissions show higher profitability, lower operating costs, lower energy costs (by **16.6%** vs. high GHG emitting firms), higher sales (**10.9%** greater than high GHG emitters); better resilience to shocks, and a **4.3%** lower cost of equity.⁹⁵
- Green acquisition announcements (i.e., when a firm purchases a firm or asset providing green-based innovation capability and/or green product portfolio) increase stock market value. The three-day cumulative abnormal return (CAR), **+1.07%**, is significantly positive.⁹⁶
- Companies engaging in sustainable resource use will positively affect financial performance.⁹⁷

S Social performance's effect on financial performance

Studies find:

- Human Rights can improve returns by up to **0.49%** per month, or **6.04%** (with compounding).⁹⁸
- Improvement in employee relations increases Shareholder Value. Companies with high employee satisfaction outperformed their counterparts by up to **2%** annually.⁹⁹
- The community scores from ESG Ratings will positively affect shareholder value depending on the relevance of community engagement to each industry.¹⁰⁰
- Social narratives tend to impact returns significantly.¹⁰¹

G Governance performance's effect on financial performance

Studies find:

- Strong performance and disclosure on sustainability/CR governance topics improve financial performance.¹⁰²

Case Example: The MassMutual Foundation at Ten Years: Harnessing Purpose at Scale

Incorporated in the Summer of 2015, the MassMutual Foundation's evolution over the last ten years is emblematic of a change underway in how some companies are choosing to present themselves in support of the communities around them and society at large.

Shortly after the incorporation of the MassMutual Foundation, MassMutual—the corporate entity—embarked on a major rebranding effort designed to elevate the company's image nationally and authentically, leaning heavily on the lessons of the company's founding itself as well as its standing as a mutual life insurance company. At that time and like so many other companies, MassMutual's corporate philanthropy was rooted in a highly localized, transactional footing; however, the goal of the nascent Foundation was also to pursue a more national profile and a more targeted approach to its philanthropy.

The Foundation team got to work and, after several months of stakeholder analysis and research, identified its mission and vision, aligned with and informed by MassMutual's brand promise and derivative of the company's pledge to help Americans “secure their future and protect the ones they love.” The MassMutual Foundation's mission would be to extend that pledge and focus on building financial capability and resilience in communities that had become financial deserts bereft of economic investment and consequently were leaving their residents struggling to make ends meet.

The Foundation engaged a hyper-local, community-based outreach approach to better understand the underlying challenges facing the residents, speaking directly with them, community leaders, and local nonprofits. The Foundation team learned early on that without the involvement of these critical community members, finding and supporting effective and lasting solutions to their financial challenges—and those of similar communities throughout the region and the country—would continue to be elusive.

Ten years later, the Foundation has taken what it continues to learn through its local community-based grantmaking and aligned with a national partner—Opportunity Finance Network (OFN)—to lead a national initiative to advance innovation in community funding, lending, and investment through Community Development Financial Institutions (CDFIs), which act as specialized lenders in low-income communities across the United States.

Evolving from a more traditional, solely localized, and transactional approach to a more transformative model of engagement has delivered the opportunity to scale the lessons learned in the MassMutual Foundation's backyard to the benefit of communities everywhere.¹⁰³

IV.

The Potential Effect of
Sustainability/CR on

Sales and Revenue

CORE FINDINGS

as much as

20%

increase in

B2C Sales

as much as

20%

increase in

B2B Sales

as much as

9%

higher boost in

**Annual
Revenue**

more than peers

as much as

2-5x

higher boost in

Growth

compared to laggards

nearly

6x

faster

**Market
Growth**

for sustainable/CR
marketed products
than conventionally
marketed products

as much as

-10%

loss in

**Revenue
and Sales**

driven by poor
sustainability/CR

Findings: SALES AND REVENUE

Sustainability/CR continues to have positive effects on sales, revenue, and growth.

Sales

Sustainability/CR helps:

- Increase B2C sales by as much as **20%**.¹⁰⁴
- Increase B2B sales by as much as **20%**.¹⁰⁵

Revenue

Sustainability/CR can increase revenue by USD billions:

- Good sustainability/CR practices attract customers by making the brand more appealing to customers. This helps companies use sustainability/CR to get customers to switch brands. One study finds the annual potential growth in market share across 12 industries totals **\$44 billion**.

- Specific industries can take advantage of sustainability/CR messaging to drive customers to switch brand loyalty at a volume of revenue that can total:

- **\$9.4 billion** for the food and grocery industry
- **\$8.4 billion** for the general insurance industry
- **\$6.2 billion** for the pension fund industry
- **\$3.9 billion** for grocery retailers
- **\$3.6 billion** for energy providers
- **\$2.6 billion** for banks
- **\$2.6 billion** for car and automotive
- **\$2.5 billion** for telecoms
- **\$1.9 billion** for fashion and retailer brands
- **\$1.9 billion** for quick service restaurants
- **\$1 billion** for liquor products
- **\$0.5 billion** for airlines¹⁰⁶

Growth

- Sustainability/CR leaders outgrow laggards by **2x to 5x**.¹⁰⁷
- Poor sustainability/CR performance drives a loss in revenue and sales by as much as **-10%**.¹⁰⁸

Market

The market for products that promote sustainability/CR attributes—i.e., that emphasize that product design, sourcing, production, and performance features support one or more environmental or social attributes—is growing:

- CPG (consumer packaged goods) products marketed as sustainable now hold a **23.8%** market share of branded players, up **9.2** percentage points since 2013 and up **2.6** percentage points from the prior year despite continued inflation.¹⁰⁹
- Across 18 CPG categories* sustainability-marketed products accounted for more than **20%** of sales.¹¹⁰
- Products marketed as sustainable grew nearly **6x** faster than conventionally marketed products, and **3.3x** faster than the CPG market.¹¹¹
- Other studies find sustainability-marketed products outgrowing conventional products by **40–56%**.¹¹²
- Sustainability labels like “Climate Pledge Friendly” increase consumer demand by **13–14%** for up to eight weeks after adoption. This sales boost is not driven by consumers’ engaging in passive search—opting for labeled products when given the choice, even if they’re not actively looking for sustainable options. Labels that highlight specific features, such as carbon neutrality or reduced harmful ingredients, are especially effective.¹¹³

* CPG categories include coffee, cookies, cups and plates, deodorant, facial tissue, floor cleaner, fresh bread, milk, natural cheese, paper napkins, paper towels, sanitary napkins, skincare, soap, soup, toilet tissue, vitamins, and yogurt.

While consumers say they are willing to pay **10%** more for a sustainable product, in practice companies have been able to charge substantially more.

- Most consumers claim they're willing to pay up to **10%** more for a sustainable product and research has validated these claims.¹¹⁴
- In practice, companies have often been able to command a premium price for sustainable products that can range from **10% to 150%** above conventional.¹¹⁵
- Markups for sustainable products tend not to relate to higher production costs. Premiums could be lowered while maintaining profitability. In many cases, **70–80%** of markups come at the end of the value chain and involve adding markups for the producer, middlemen, and sellers.¹¹⁶

CASE EXAMPLES: Sales and Growth

- Private equity giant Carlyle Group links over \$14 billion in revenues from its portfolio companies to sustainability/CR related requests. For example, Duravant and its operating company Mespack generated 8% of its revenue from its 6R Circular Sustainable Products offering. The 6R approach enables customers to serve their sustainable packaging and carbon reduction goals, limit regulatory fees, and create additional value from existing machines.¹¹⁷
- Unilever's own research finds that from 2016–2023 the brands in its portfolio that fully adopted the company's Sustainability Living Plan grew 50% faster than their brands that did not, and accounted for 60% of the company's growth. The company forecasts the global sustainable Fast-Moving Consumer Goods market could be worth over \$2.5 trillion.¹¹⁸
- In Paris, CBRE IM undertook a two-year refurbishment to modernize Marengo, an iconic 19th-century building—e.g., installation of a ventilation system, LED lighting, district heating, and natural light optimization—and increased rental income by 54% from acquisition. Post-refurbishment pre-lets were secured at rents 8% above projected targets.¹¹⁹
- PepsiCo's portfolio of more healthful options grew from about 38% of revenue in 2006 to roughly 50% in 2017. After PepsiCo implemented its Performance with Purpose strategy, net revenue grew by 80%.¹²⁰
- EcoLab's subsidiary Nalco Water was once a fairly traditional water management company serving utilities. But leaders observed the explosive growth of cloud computing data centers, which require massive amounts of water to cool, and saw an opportunity to expand to new customers by focusing on their sustainability needs. The company partnered with data center operators to apply Ecolab water management techniques to the server water use problem. Ecolab ultimately helped Digital Realty reduce water use by 30 million gallons, electricity use by 17 megawatts, and CO₂ by 12,000 metric tons. This has saved the data center operators \$8 million, and the partnership has a 60% ROI. Even better, Ecolab discovered a new, profitable market that will be a major source of future growth.¹²¹
- Indigo Agricultural, a company that leverages microbial and digital technologies to improve agricultural productivity, increased revenues 90% between 2022–23.¹²²

How does sustainability/CR drive sales, revenue, and growth?

Companies can take three steps to use sustainability/CR to drive sales, revenue, and growth:

1 Learn—and align to—the social and environmental **priorities of the customer**

Know the customer's environmental and social performance expectations and ensure the sustainability strategy addresses them

- Companies that invest the time to know their customers' expectations and incorporate them into their sustainability/CR strategies will increase the potential of sustainability/CR to drive sales, revenue, and growth.¹²³

Know how the company's environmental and social performance resonates with the customer's sense of values and moral character

- Customers desire to have their moral character, norms, and values reflected, appreciated, and enhanced. Companies will likely benefit when they tie and communicate sustainability/CR in ways that customers find resonant.¹²⁴ Tell stories that engage customers, capture their imaginations, and allow them to feel as if their own values are supported through their purchasing.¹²⁵
- Engage customers in a shared mission. Communications and advertising that make customers feel they are on a mission with the company to advance sustainability/CR sparks purchase intent. For example, when store advertising featured the original life of a product in a simple, compelling way (e.g., labeling a wallet with its material original story: "I used to be a bike tire"), it boosted sales of the sustainable item by four times.¹²⁶

Segment customers based on their expectations, attitudes, and likely purchasing behaviors related to sustainability/CR

- Project ROI 2015 found that customers are not monolithic. They will fall into segments regarding their preferences for sustainability/CR and how it affects their purchasing behavior. The Project ROI update continues to find evidence for this phenomenon. Companies have the potential to unlock growth through actions and messaging targeted to specific consumer segments.¹²⁷

2 Build **customer awareness**

Ensure the customer is aware of the company's commitment to sustainability/CR. Help them see sustainability/CR as a differentiator, and show the customer how sustainability/CR relates to the brand and products.

The Conference Board finds that consumers are generally unaware of company sustainability/CR commitments and activities, and only about 50% of U.S. consumers trust companies' sustainability/CR communications and feel informed by them about their environmental impact efforts.¹²⁸

Build customer awareness

- Building customer awareness of sustainability/CR is essential.¹²⁹

Use sustainability/CR as a differentiator

- Sustainability/CR helps differentiate a company from its competitors.¹³⁰ However, studies show that as sustainability/CR

becomes more expected and commonplace, it takes more effort to differentiate. Studies suggest companies need to adopt holistic approaches to sustainability/CR that cover social, environmental, and governance performance (rather than focusing on a signature community grant program) and to clearly align sustainability/CR to the business.¹³¹

Tie brand attributes to sustainability/CR messaging and incorporate sustainability/CR features into brand communications

- The company's brand qualities should shape sustainability/CR communications. For example, newer, upstart brands should use assertive, bold sustainability/CR messaging. Incumbent brands should use more dignified messaging.¹³² Sustainability brand attributes affect consumer willingness to trust and pay for sustainability attributes.¹³³

Show customers the company's commitment to enterprise sustainability/CR and bring it to life through the presence of product(s) or services with sustainability/CR features

- The combination of enterprise sustainability/CR commitments and sustainable products/services positively reinforce each other. Customers trust sustainability/CR claims more when they see the company is selling products with sustainability/CR features, and vice versa.¹³⁴ In addition, relating sustainability/CR factors to the core performance of the firm, such as financial performance, competitive performance, the quality of products and services, and/or the intent of the company to make money, builds customer trust in the company's legitimate commitment to behave responsibly towards people and planet.¹³⁵

Tie sustainability performance to features that customers are attracted to

- Emphasizing sustainability features alone can turn off customers. Create stories that link sustainability features to core product attributes customers care about. E.g., quality, high performance, and durability. This includes emphasizing sustainability features that customers care most about. Companies should conduct market research to find this out.¹³⁶

3 Shape the market for sustainability/CR-related features

Solve customer sustainability needs

- When customers have specific sustainability needs, B2B and B2C customers will pay a premium to the company that helps solve them.¹³⁷

Don't overdo the pricing markup

- Understand what customers are willing to pay (often no more than 10% above conventional—but it will differ by product category) and set prices accordingly. In most instances, the production costs of sustainability do not require price increases more than that.¹³⁸

Influence public policy to help create a market for sustainability/CR

- Open new markets via policy and get out in front of regulations.¹³⁹

V.

The Potential Effect of
Sustainability/CR and

Responsible Sourcing

CORE FINDINGS

as much as

20%

boost in

**Supplier's
Sales**

as much as

5.6%

increase in

Share Price

as much as

3%

increase in

Profitability

Findings: FINANCIAL PERFORMANCE AND SUPPLY CHAIN MANAGEMENT

Responsible sourcing is a component of sustainability/CR. It involves a company's commitment to ensure that its suppliers adhere to high standards of social, environmental, and governance performance.

Responsible sourcing benefits financial performance and supply chain management in several ways.

Revenue, Sales, and Growth

Studies find that responsible sourcing and sustainability/CR causally improve supplier-customer relationships.¹⁴⁰ Responsible sourcing and sustainability/CR:

- Can help increase B2B sales by as much as **20%**.¹⁴¹ One study finds procurement spend increases by **47%** for suppliers with one standard deviation above the mean environmental expertise.¹⁴²
- Sustainability/CR reduces customer termination likelihood by **0.8%**.¹⁴³
- Procurement manager respondents surveyed were willing to pay, on average, a **15%** price premium for sustainable products or services.¹⁴⁴
- High supply chain visibility/transparency increases sales by as much as **8.5%** more than transparency laggards. It increases B2C purchase likelihood by over **2.2x**.¹⁴⁵
- A meta-analysis of 31 studies of responsible environmental sourcing finds positive effects on customer loyalty, brand equity, and competitive advantage.¹⁴⁶

- Suppliers with strong environmental performance increase sales with high environmental performing buyers. But sales decrease with low environmental performing buyers.¹⁴⁷

Cost Reduction

Responsible sourcing:

- When focused on reducing resource use, reduces operating costs by as much as **45%**.¹⁴⁸
- Reduces the costs of Supply Chain Management by as much as **16%**.¹⁴⁹
- Lowers the enterprise's cost of goods sold (COGS) by as much as a **2.6** percentage point reduction in the ratio of COGS/Sales.¹⁵⁰
- Lowers the enterprise's selling, general, and administrative expenses (SG&A).¹⁵¹
- A meta-analysis of 31 studies of responsible environmental sourcing finds positive effect on efficiency improvements, cost reductions, and quality enhancements.¹⁵²

Financial Performance

Responsible sourcing supports financial performance in the following ways:

- **Share Price:** Responsible sourcing initiatives helped generate a cumulative abnormal return (CAR) share price increase of **5.62%** (over a 120-day period).¹⁵³

- **Profitability:**

- Responsible sourcing leaders have **3%** higher profitability than laggards (as measured by EBITDA).¹⁵⁴
- Supply chain visibility/transparency leaders are **5.1** percentage points more profitable than laggards (as measured by Return on Assets, or RoA).¹⁵⁵
- **Firm Value:** Supply chain visibility/transparency increases firm value (as measured by Tobin's Q) by as much as **0.29%**.¹⁵⁶

Supply Chain Management Performance

Responsible sourcing and sustainability/CR help improve supply chain management performance:

- **Trade Credit:** Trade credit is short-term financing at zero interest. Credit terms extended by a supplier to a customer generally range from 30 days to 90 days. High sustainability/CR firms get as much as a **17.6%** boost in trade credit from their suppliers. For the average firm in the study with \$3.024 billion in annual purchases, assuming a 10% interest rate, the financing benefit of this trade credit amounts to **\$4.26** million annually.¹⁵⁷
- **Operational Performance:** Companies with integrated sustainability/CR mechanisms and/or advanced responsible sourcing practices demonstrated an increase in supply chain resilience and operational performance.¹⁵⁸

Risk

Responsible sourcing helps reduce risk:

- **Customer Retention/Loss Risk:**

- B2B customer financial instability (e.g., high bankruptcy risk measured via Altman Z-scores) increases a supplier's sustainability/CR activities, suggesting strategic sustainability/CR is used to attract diverse clients.¹⁵⁹
- Suppliers increase their sustainability/CR activities when major customers face lower switching costs, indicating sustainability/CR's role in maintaining competitiveness.¹⁶⁰
- Sustainability/CR performance mitigates suppliers' dependence on major customers through strengthened competitive advantages across supply, demand, and scale economies. At the same time, it increases the dependence of customers on suppliers who are high performing related to sustainability/CR.¹⁶¹

- **Share Price Risk:**

- When buyers face customer activism, sustainability/CR helps mitigate supplier losses. Suppliers with low sustainability/CR performance face an average market reaction of **-1.16%**. Suppliers with high sustainability/CR performance experience an insignificant market reaction in the face of customer activism (**-0.10%**), reducing risk by **10.6x**.¹⁶²
- Supplier sustainability/CR-related transgressions lead to a **-0.57%** to **-0.91%** average decline in stock prices over a three-day window.¹⁶³

- **Shocks and Crises Related to Sustainability:**

Firms with suppliers that generate sustainability/CR shocks and risks experience a **-12.32%** decrease in profitability (RoA) and a **-5.49%** decrease in operating cash flow.¹⁶⁴

CASE EXAMPLES: Responsible Sourcing

- Wind energy company Flender generated approximately Euro €200 million in savings, of which at least Euro €12 million are linked to switching to 'greener' suppliers.¹⁶⁵
- In the 1990s, Nike came under major fire for abusive labor practices after outsourcing labor overseas. The perception that Nike abused its workers lasted for more than seven years. By 1998, Nike had to lay off staff amid declining sales. That's when then-CEO Phil Knight started to aggressively and publicly make changes within the company. The key to Nike's turnaround was being honest and transparent about the labor issues it faced. Nike also raised the minimum wage it paid workers, improved oversight of labor practices, and made sure factories had clean air. These admissions and changes helped public sentiment toward Nike turn more positive. Nike admitted it wasn't perfect and that it was flawed. This gave it

more credibility with consumers. By 2016, Nike had become more transparent than its competitors about its labor practices, publishing a 108-page report revealing conditions and pay in its factories and acknowledging widespread issues, as well as a complete list of factories it contracted with. After years of effort, the athletic shoe brand finally shook the perception that it abused workers.¹⁶⁶

- When Brazilian beef suppliers adopted better environmental and social sustainability practices, their sales increased. Cattle ranchers saw an increase between \$18 million and \$34 million (12% and 23% of revenues) net present value over 10 years. Slaughterhouses JBS and Marfrig saw revenues grow between \$20 million and \$120 million (0.01% and 0.1% of revenues) in expected net present value over 10 years.¹⁶⁷

How does responsible sourcing support financial performance and supply chain management?

Key tactics that will help companies use responsible sourcing and sustainability/CR to support financial performance and supply chain management include the following:

1 **Build awareness**, particularly with customers

Firms with good sustainability/CR reputations—particularly related to environmental performance—increase the level of trust among their B2B customers. Suppliers should integrate environmental strategies into branding to enhance market position. In addition, ethical behavior supports B2B brand differentiation.¹⁶⁸

2 **Report and disclose** responsible sourcing activities¹⁶⁹

Supply chain transparency:

- Improves supply chain efficiency and establishes a relationship of mutual trust.
- Serves as a positive integrity signal, providing investors and other external stakeholders with a more comprehensive view of the firm.
- Can expand market potential.
- Facilitates consumers' deeper understanding of products, thereby influencing their purchasing decisions, which in turn influences the company's business customers.
- Hedges against operational failure risks.
- Helps improve a firm's negative image.
- Aids in uncovering potential earnings fraud by suppliers.

- Increases perceived product and service quality by approximately 65% compared to low supply chain transparency.
- Reduces operating costs.
- Mitigates reputation damage from sustainability/CR-related supplier indiscretions.

3 **Improve environmental** practices

Suppliers with good environmental practices tend to remain competitive even during economic downturns. Firms should tailor their environmental practices to meet the expectations of their customers and their industry. Failing to meet those expectations and/or straying beyond those expectations may decrease the benefits from good environmental practices.¹⁷⁰

4 **Improve social** practices

Managing the social aspects of responsible sourcing well leads to:

- Improved operational performance, leading to:
 - Better product designs.
 - Process innovations.
 - Improved supply chain transparency.
- Increased overall efficiency and competitive advantage.¹⁷¹

5 Engage stakeholders

Engaging key stakeholders regarding their expectations for responsible sourcing amplifies financial and competitive benefits and improves sustainability/CR performance.¹⁷²

It's especially important to align with customer expectations. Research finds that customers who exhibit strong environmental performance seek suppliers that will match or exceed their level. However, customers with low environmental performance may reject suppliers that demonstrate strong environmental performance. Note that these customers will not gravitate to commensurately low environmental performers. Instead, evidence suggests that suppliers with strong environmental performance can still do business with low performers if they temper or modify their communications.¹⁷³

When suppliers find the right balance between their own sustainability/CR investment and B2B customer expectations, customer loyalty and market leadership (a metric called "market performance") increases by 37%.

6 Find the Goldilocks level of investment for supplier monitoring

Research finds that initial investments in monitoring the sustainability/CR performance of suppliers improve financial performance, but excessive monitoring leads to diminishing returns. The key turning point tends to be at 0.60 standard deviations above the average when compared to peers. Companies that go beyond that level of monitoring found negative effects on financial performance.¹⁷⁴

7 Design a sustainability/CR strategy that fits customer and key stakeholder expectations

Overinvesting or underinvesting in sustainability/CR causes B2B customers and other key stakeholders to lose confidence in a supplier. Therefore, it's essential for a supplier to design a strategy that focuses on material sustainability/CR priorities that align with customer and other key stakeholder needs and expectations.¹⁷⁵

V.

The Potential Effect of
Sustainability/CR on

Risk and Financing Costs

CORE FINDINGS

as much as

30%

(or more) reduction in

**Idiosyncratic
Risk**

as much as

7%

reduction in

**Systemic
Risk**

as much as

14%

reduction in

**Cost of
Equity**

as much as

10%

decrease in

**Cost of
Debt**

as much as

4.5%

increase in

**Credit
Ratings**

per unit of
improvement

as much as

0.3%

reduction in

**Loan
Default Rates**

for each unit increase
in sustainability/CR
performance

Findings: RISK REDUCTION

Sustainability/CR helps mitigate a variety of financial risks (defined in glossary on right).

Financial Risk Reduction

Studies find that responsible sourcing and sustainability/CR causally improve supplier-customer relationships. Responsible sourcing and sustainability/CR reduce risk in the following ways:

- **Idiosyncratic Risk:** Improving sustainability/CR performance can reduce Idiosyncratic Risk by **30%** or more.¹⁷⁶
- **Loan Default and Loan Non-payment Risk:** Improving sustainability/CR performance helps reduce loan default and non-payment risk:
 - A one-unit increase in sustainability/CR score reduces non-performing loans ratios by **0.3%**. And the Expected Default Frequency (EDF) reduces for each unit increase in sustainability/CR performance.¹⁷⁷
- **Systematic Risk:** Sustainability/CR reduces Systematic Risk in the following scenarios.
 - Sustainability/CR can reduce Systematic Risk by as much as **71%** for brands that engage in advertising. Sustainability/CR helps differentiate and stabilize brand-oriented companies.
 - Overall, sustainability tends to reduce Systematic Risk by **1%** for each standard deviation improvement in a sustainability/CR rating system such as MSCI.
 - Sustainability/CR helps reduce Systematic Risk for industries that have a controversial profile—

i.e., industries that are intrinsically perceived to cause harm to people and/or planet from their operations and/or products/services.¹⁷⁸

- **Systemic Risk:** Firms judged to perform better at sustainability/CR can reduce their Systemic Risk by as much as **7%**.¹⁷⁹
- **Additional Forms of Risk:** Sustainability/CR also helps:
 - Mitigate Total Risk.¹⁸⁰
 - Act as a buffer against market volatility and stress, helping to reduce downward pressure during market declines, and helping to lower the likelihood of extreme losses.¹⁸¹
 - Mitigate stock price declines and crashes.¹⁸²
 - Reduce Business Risk by alleviating financing constraints and agency costs (i.e., the cost of ensuring that management acts in the best interest of shareholders when they may have different incentives).¹⁸³

Glossary of Financial Risks

Business Risk

Business risk is the possibility that a company will not be able to achieve its financial goals or will experience a loss.

Idiosyncratic Risk

The specific risk of investing in an asset. Idiosyncratic risk is isolated to a particular company, industry, or even a specific asset class.

Systematic Risk

Risk that affects an entire market or economy. Systematic risk can be triggered by macroeconomic factors like inflation, interest rate changes, global events, or even natural disasters.

Systemic Risk

The risk of a collapse or major disruption of an entire system, rather than just individual parts, due to interconnectedness and cascading effects. One entity's failure can trigger a chain reaction, impacting other, seemingly healthy entities, leading to a larger-scale collapse. For example, a bank failure might cause a major economic collapse.

CASE EXAMPLES: Financial Risk Reduction

- Newmont's Ahafo Mining operations in Africa engaged in a series of social impact programs designed to support community needs and mitigate risks related to the social license to operate, local political risk, reputational risk, and idiosyncratic risks tied to ensuring mining operations proceeded smoothly. Programs supported agricultural improvements, water and sanitation services, and malaria mitigation. The company calculated that the programs reduced risks and generated annual savings of nearly \$1.8 million. Savings came from receiving more favorable terms for land acquisition prices than the typical benchmark; reduced transportation costs; and increased employee productivity.¹⁸⁴
- Real estate giant CBRE finds sustainability/CR is a factor in value preservation of infrastructure assets. For example, approximately 19% of utilities' transmission lines face high (unmitigated) wildfire exposure by 2050 under either low-stress or high-stress scenarios. They estimated the impact on infrastructure net asset values in 2050 from climate change ranges between -0.3% to -26.9% with a mean of -4.4%. CBRE states, "When consistent with investment objectives, consideration of sustainability through adaptation strategies and preparedness is, therefore, key to soften the impact from physical climate risks."¹⁸⁵
- A study finds ENERGY STAR or LEED certified buildings are 34% less likely to default on their loans than their non-certified counterparts. Another study finds that building energy efficiency was associated with a lower probability of mortgage default. Energy efficiency is negatively correlated to a borrower's likelihood of defaulting. Banks can make superior lending decisions by incorporating energy efficiency ratings alongside borrowers' credit information, rather than solely relying on the latter. By implication, lower default risk for mortgages on energy-efficient residential buildings could imply differential loan pricing (i.e., lower interest rates). Commenting on these studies, real estate giant CBRE states, "adopting sustainability metrics in lending decisions helps lenders assess risks on loan repayment and potentially mitigate defaults," and "lending against non-sustainable assets can equate to increased default risk." CBRE is taking steps to incorporate sustainability criteria in some of its own real estate financing services.¹⁸⁶
- From 2005–15, sea level rise predictions started to be priced into Florida house transaction prices by up to \$3.71 year-on-year on each square foot of living area compared with properties not at risk. Another study found houses located in a predicted high sea-level rise area were discounted by up to 7%.¹⁸⁷

Nonfinancial Risk Reduction

Sustainability/CR helps mitigate a variety of nonfinancial risks (defined in glossary on right).

- **Corporate Misbehavior.** Sustainability/CR reduces a variety of corporate misbehavior risks.
 - **Accounting and Earnings Risks:**
 - **Earnings Management (EM):** Sustainability/CR can reduce earnings management by as much as **16%** per unit increase of sustainability performance.¹⁸⁸
 - **Real Earnings Management (REM):** A **10%** increase in sustainability/CR criteria reduces real earnings management by **1.84%**.¹⁸⁹
 - **Accrual-based Earnings Management (AEM):** A one-unit increase in a sustainability/CR rating is associated with a **12%** reduction in discretionary accruals (AEM).¹⁹⁰
 - **CEO Greed:** Sustainability/CR helps decrease the impact of CEO greed on the recovery rate (the percentage of outstanding debt or receivables that are successfully recovered after a default or payment failure) by as much as **16.7%**. This indicates that sustainability can partially offset the harmful effects of CEO greed, aiding in quicker recovery.¹⁹¹
 - **Corporate Fraud:** Sustainability/CR reduces corporate fraud.¹⁹²
 - **Managerial and Employee Misconduct:**
 - Sustainability/CR inhibits managerial myopia (focusing on short-term gains vs. long-term health), leading to an increase in return on equity (ROE) for each unit increase in sustainability rating.¹⁹³
 - Higher sustainability performance attracts analyst attention, creating external pressure that discourages managerial misconduct.¹⁹⁴

Glossary of Nonfinancial Risks

Corporate Misbehavior includes risks such as:

- **Accounting and Earnings Risks:**
 - **Earnings Management (EM)** is a company's management practice of manipulating financial statements to make a company appear more profitable than it actually is.
 - **Real Earnings Management (REM)** involves manipulative adjustments to real activities rather than accounting methods, making it harder to detect. It adversely impacts resource allocation and transparency.
 - **Accrual-based Earnings Management (AEM)** is a way to "massage" earnings using accounting techniques rather than real business operations.
- **CEO Greed:** CEO greed generally refers to the excessive focus on personal gain, wealth accumulation, and short-term profitability by a company's CEO, often at the expense of other stakeholders like employees, customers, and the environment.

Knowledge Spillover Risk

The potential consequences to an organization when its knowledge or innovations are shared or disseminated without permission to competitors or the broader public. This can lead to the erosion of competitive advantage, loss of intellectual property, and reduced innovation.

Litigation Risk

Litigation risk refers to the possibility that a business will face a lawsuit or legal action. This risk can arise from various sources, including alleged violations of laws, regulations, contracts, or rights due to products, services, actions, or other events.

Political Risk

Political risk refers to the potential for a business's operations or profitability to be negatively impacted by political instability, policy changes, or other politically driven events in a country or region.

Social License to Operate

A "social license to operate" (SLO) refers to the ongoing acceptance and approval of an organization's activities by its stakeholders and the general public. It's an informal approval, earned through responsible practices and engagement, that is distinct from legal or regulatory licenses.

- Project-based corporate philanthropy (i.e., tied to specific objectives and results) reduces employee risk behavior.¹⁹⁵
- When Unemployment Insurance (UI) benefits increase, firms use sustainability/CR as a tool to decrease the scope and scale of claims and unemployment insurance misbehavior by employees. When UI benefits increase, firms in a sample of nearly 30,000 observations over several years will increase investment in sustainability/CR by **32–37%**. The biggest increases happen in labor-intensive industries.¹⁹⁶
- **Knowledge Spillover Risk:** Sustainability/CR causes up to a **14%** reduction of knowledge spillover risk. It also causes employees to have stronger ethical commitment and alignment with their employer.¹⁹⁷
- **Litigation Risk:** Sustainability/CR helps reduce Litigation Risk, acting as a “reservoir of goodwill,” providing an insurance-like buffer against financial and reputational damages.¹⁹⁸
 - It can reduce litigation risk by as much as half of that experienced by a low-performing sustainability/CR firm. For example, the average sustainability/CR laggard loses **5.14%** of its market value from a class action lawsuit.
 - It can reduce share price loss by **55%** as measured by cumulative abnormal returns (CARs) during a 21-day event window.
 - Reducing sustainability/CR controversies reduces litigation risk by as much as **3.1%** for each standard deviation of improvement.
 - Portfolios of firms with low litigation risk and high sustainability performance yielded positive alphas (i.e., the excess return generated by an investment or fund compared to a benchmark index) of up to **0.73%** monthly.
- **Political Risk:** Sustainability/CR mitigates the substantially negative effect Political Risk has on shareholder value.¹⁹⁹
- **Social License to Operate:** A strong global sustainability reputation bolsters local acceptance. A focused study found that local community and sustainability activities improved the likelihood of a mining site gaining social license from local communities.²⁰⁰

“ We believe prioritizing resilient investment outcomes grounded in sustainable business models can produce more durable cashflows over the long term.”

–Harvey Schwartz, CEO, Carlyle Group²⁰¹

Findings: FINANCING AND ACCOUNTING COSTS

Good sustainability/CR performers reduce financing and accounting costs. Poor sustainability/CR performers see these costs increase.

Cost of Debt Financing

- **Cost of Debt:** Sustainability/CR helps reduce the cost of debt:
 - Sustainability/CR leaders have **10.42%** lower cost of debt than laggards.²⁰²
 - For each one standard deviation increase in the sustainability/CR score, the cost of debt decreases by approximately **10** basis points (0.10%).²⁰³
 - As competition within an industry grows more intense, firms use differences in sustainability/CR ratings to reduce their cost of debt vs. competitors. Firms that lag in their sustainability performance in highly competitive industries find their debt financing costs to be higher than peers with better sustainability/CR performance.²⁰⁴
 - Improving corporate carbon performance leads to a reduction of the cost of debt by **5 to 22** basis points (4% to 17% reduction) depending on whether the company is starting from poor performance vs. good performance. Climate change risk significantly affects corporate bond pricing. Investors value bonds that hedge against climate risk, benefiting environmentally responsible firms with lower financing costs.²⁰⁵

- Each one-unit increase in the sustainability/CR rating score is associated with a reduction in the annual interest rate.²⁰⁶
- **Credit Ratings:** Sustainability/CR helps improve credit ratings in the following ways:
 - A one-standard-deviation increase in sustainability/CR measures leads to a **4.5%** increase in credit ratings.²⁰⁷
 - A one-unit increase in sustainability/CR reduces credit default swap (CDS) spreads by **5.1%**.²⁰⁸
 - There is a credit spread reduction of up to **0.65** basis points for each 1-point increase in sustainability/CR score. A 1-point increase in score for a lowly-rated firm reduces credit spreads up to **3.25** basis points, vs. **0.17** basis points for highly-rated firms.²⁰⁹
- **Access to Debt Financing:** Sustainability/CR helps improve access to debt financing:
 - A one-standard-deviation increase in sustainability/CR scores corresponds to a **0.40%** increase in debt financing.²¹⁰
 - A higher Sustainability/CR score reduces the likelihood of a loan requiring collateral by a considerable margin.²¹¹
 - Sustainability/CR helps increase loan size. A one-unit increase in the sustainability/CR increases loan size relative to total assets.²¹²
- **Cost of Capital:** Sustainability/CR helps reduce the cost of capital:
 - Companies in the highest quintile of sustainability performance have, on average, a **13.92%** lower cost of capital than firms in the lowest quintile.²¹³

CASE EXAMPLE: Cost of Capital

- Capital Power, a Canadian-based utility, assessed the financial benefits of phasing out coal earlier than required by federal regulations. The analysis found that the company could realize cumulative net benefits of \$189 million over nine years, driven in part by a reduced cost of capital.²¹⁴

Cost of Equity

Sustainability/CR helps reduce the cost of equity:

- Companies with high sustainability/CR ratings experience a **14.29%** lower cost of equity than lower-rated peers.²¹⁵

Costs and Losses from Controversies and Negative Events

Companies that manage sustainability/CR controversies and negative events experience gains and reduced costs:

- Companies that manage sustainability/CR controversies well outperformed the global equity market by **11%** over a three-year period (2014–2017).²¹⁶
- Firms that decrease their rate by of sustainability/CR controversies see as much as **5%** increase in profitability (as measured by return on assets).²¹⁷

- Bond spreads for firms with high sustainability/CR controversies are, on average, 46 basis points higher than those for firms with low controversies. This equates to approximately **\$3.03 million** in additional annual interest expense for the average bond issue size.²¹⁸

Sustainability/CR controversies and negative events impose substantial costs and losses. In a seven-year period between 2012–2019, S&P 500 companies lost an estimated **\$600 billion** in market capitalization due to sustainability/CR controversies.²¹⁹

- On average, a large-cap firm (\$5–\$10 billion or more) that experiences negative sustainability/CR events or controversies:
 - Loses on average between **\$321–\$783 million** for domestic, US brands, and **\$321–\$963 million** for foreign brands operating in the US.
 - Experiences a negative stock market response, with a cumulative abnormal return (CAR) loss of around **-1.12%**.
 - The financial impact on a brand's stock only becomes significant when four or more major media outlets report on the negative sustainability/CR event.²²⁰
- Poor sustainability/CR reputations lead to lower share price.²²¹
 - On average, a company's stock price takes nearly a year to recover after a sustainability/CR controversy.²²²
- When a poor sustainability/CR performer experiences a sustainability/CR controversy, it loses on average **\$1.14 billion** more in market value than a good performer experiencing a sustainability/CR controversy.²²³

- A 1% increase in sustainability/CR reputational risk is associated with an **8.2% to 10.2%** decrease in firms' new investment activity. This indicates a significant negative effect on firms' willingness or ability to invest in new projects. And a 1% increase in sustainability reputational risk is associated with a **6.2% to 17.9%** decrease in investment efficiency.

- The reasons: managers exhibit a slow speed of adjustment and response to sustainability reputation risks, and companies have a difficult time getting access to finance after experiencing sustainability/CR reputation crises.²²⁴

CASE EXAMPLES: Financing and Accounting Costs

- Real estate giant CBRE has issued over \$2 billion in green bonds and private placements since 2020, in both Europe and the U.S. The secured discounts are provided with the acknowledgement that the proceeds are directed to finance sustainable projects. When issued, CBRE's Treasury Department believed that green bonds were 5–10 bps cheaper than regular bonds.²²⁵ LaSalle Investment Management (now part of real estate giant, JLL) conducted a meta-analysis of 41 studies and found that a lower cost of financing is reported for environmentally certified buildings, which command a lower spread for corporate debt as compared to conventional but otherwise comparable buildings. The difference in spread is as high as 36 bps.²²⁶
- NineDot Energy (NineDot) is an innovative energy solutions development company. With one of the largest active portfolios of

community clean energy projects in the New York City metro area, Ninedot concentrates on building community-scale battery storage sites. These sites can support the increasing amount of renewable energy coming onto electricity grids, accelerating the retirement of older, carbon-intensive “peaker” plants. Along the way, distributed battery storage sites can make the grid more resilient, less costly, and more equitable—all critical outcomes for the communities most impacted by GHG emissions from traditional energy sources. In 2022, Carlyle's Capital Markets team partnered with NineDot to secure an \$85 million construction-to-term loan for 11 new community-scale projects across the Bronx, Staten Island, and Queens from clean energy project lenders CIT, a division of First Citizens Bank, and SMBC.²²⁷

How does sustainability/CR reduce risks and financing and accounting costs?

Sustainability/CR reduces risks and financing and accounting costs in seven ways:

1 Improve **sustainability strategy**²²⁸

When a company designs a well-conceived sustainability/CR strategy it:

- Helps company leaders and managers improve the way they identify and manage risk.
- Impresses investors and other financiers—who pay close attention to the way that companies manage risks and related costs—that the company has foresight, insight, resilience, strong stakeholder relationships, and the ability to manage well.

Regarding its relationship with risks and financial and accounting costs, a strong sustainability/CR strategy will:

- Identify and mitigate major and material risks from environmental, social, and governance topics.
- Help ensure the company does not become distracted by lower-level and non-material sustainability/CR risks.
- View sustainability as an investment, not a cost.
- Link good management of material sustainability/CR topics to support enterprise risk management (ERM) and reputational risk mitigation.
- Identify how good sustainability practices help the firm compete and win.
- Use sustainability to reinforce brand and reputation value.
- Improve Sustainability Performance.

In doing so:

- Companies should improve their performance on sustainability/CR ratings that key stakeholders such as investors respect.
- Work to mitigate major sustainability/CR vulnerabilities and risks, such as climate change.
- Communicate improvements in performance to key stakeholders such as investors.
- Identify strengths in performance related to material sustainability/CR topics and communicate them to key stakeholders such as investors.

2 Improve **sustainability reporting and disclosure**²²⁹

Sustainability/CR reporting and disclosure help key stakeholders, such as investors, track a company's performance and ability to manage risks. To support risk and cost reductions, companies should improve their sustainability/CR reporting in the following ways.

Define the just-right “Goldilocks Reporting” for the firm

- Reports should focus on material topics. Companies should not overreport, as it may suggest wasteful overinvestment in sustainability/CR.

Feature the integration of sustainability into the business

- Demonstrate how the company uses sustainability to support risk management, cost reduction, and overall good management.

Report on the sustainability/CR strategy related to risk reduction and upside gains

- Share the company's sustainability/CR strategy and report on progress, particularly as it relates to support for risk reduction and business benefits.

Emphasize the quality of content over design

- Research finds that beautiful-looking sustainability/CR reports can create the perception among analysts and investors that the company is trying to mask subpar performance behind attractive graphics and layout. Simple reports that are content-rich and focused on strategy and materiality are likely to benefit companies and stakeholders more than those with elaborate designs.

3 Use sustainability/CR to **differentiate the brand and build customer loyalty**²³⁰

Building awareness and trust with B2B and B2C customers does more than create sales and growth opportunities. It also helps reduce financial and nonfinancial risks. When customers become aware of a company's sustainability/CR, their trust, loyalty, and brand favorability grow. When market downturns occur that create systematic risks, they remain loyal to companies they trust. Investors—particularly institutional investors—take note. Therefore, companies should:

- Feature and discuss their environmental and social commitments and performance with customers.
- Apply sustainability as a product differentiation strategy.

4 **Communicate, engage, and educate**²³¹

Building awareness with key stakeholders—particularly investors, financiers, analysts, and customers—supports risk and cost reduction. Companies should:

- Communicate about sustainability strategy, performance, and reporting disclosures.
- Help reduce “information asymmetry.” I.e., Identify key stakeholder concerns and gaps in knowledge and:
 - Directly address gaps in sustainability/CR knowledge.
 - Use sustainability to demonstrate how well-managed the firm is across the board.
- Advertise sustainability/CR:
 - Use sustainability to build customer loyalty, which helps mitigate downside risks.
 - Apply sustainability as a product differentiation strategy.

5 **Enhance sustainability/CR governance, including the voice of and engagement with stakeholders**²³²

Demonstrating strong sustainability/CR governance—including stakeholder engagement—shows investors and analysts that the company is well-managed and prepared to respond to a wide variety of risks. It also builds the trust and loyalty of key stakeholders whose loyalty will help the company weather stormy seas. Good governance also helps company executives and managers better use sustainability/CR to support enterprise risk management. Companies should:

- Integrate sustainability/CR management into governance frameworks.
- Establish dedicated committees that focus on the strategic alignment of sustainability/CR into the business.
- Strengthen stakeholder voice and engagement as it relates to governance.
- Include sustainability metrics in CEO compensation. Metrics should be specific and related to target results linked to material topics. Research finds that giving CEOs a lengthy list of sustainability/CR criteria and metrics may signal that the CEO will become distracted from focusing on conventional performance metrics. The objective should be to create a tight list that shows the alignment of sustainability/CR with business key performance indicators.

6 Find the Goldilocks investment for sustainability

Research finds that the way sustainability/CR reduces risks and related costs follows an inverted U-shape curve, as discussed in Section II. Eventually, continued sustainability/CR improvement generates financial returns from risk mitigation and cost reduction. However, underinvestment and overinvestment in ESG/sustainability create decreasing returns.

Companies should:

- Improve sustainability/CR performance up to a point. If a firm is seen as going overboard, financial risks and costs increase. Section II provides further guidance on how companies should find the right level of investment.
- Not try to do everything. A company should excel in relation to their highest priority material topics, including those most important to key stakeholders. For the rest, companies can keep up with the rest of the industry.

7 Improve carbon reduction and environmental performance (for high-intensity GHG firms)²³³

Investors and analysts have become highly attuned to the potential for climate change to create firm, industry, and market-level risks. Research finds that companies facing climate transition risks should emphasize their efforts to reduce GHG emissions along with their overall environmental commitments. However, companies that face lower climate risks should think twice before making and/or promoting extensive investments in carbon reduction. Investors, analysts and other key stakeholders will likely view low climate risk companies that make extensive GHG reduction investments skeptically.

Companies should:

- Reduce carbon emissions. High-emissions companies should do so assertively. Low emissions companies should follow the herd but not over-communicate efforts. Overdoing climate and environmental commitments—especially when they are not clearly material—may raise concerns among investors and analysts.
- Prioritize green initiatives—particularly carbon reduction. Doing so helps signal good risk management and enhances share price stability and access to finance (debt and equity).



The Potential Effect of
Sustainability/CR on

Human Resources

CORE FINDINGS

as much as

57%

decrease in

**Employee
Turnover**

as much as

21%

boost in

**Employee
Productivity**

as much as

12%

reduction in

**Employee
Wage Costs**

Findings: HUMAN RESOURCES

Sustainability/CR supports Human Resources (HR) priorities such as talent acquisition, retention, and performance in several ways.

Talent Acquisition and Retention

Studies find that responsible sourcing and sustainability/CR causally improve supplier-customer relationships. Responsible sourcing and sustainability/CR:

- Sustainability/CR helps improve talent attraction by as much as **69%** (i.e., job seekers are 69% more likely to accept a job offer from a Responsible Business Practices leader vs. another firm).²³⁴
- Sustainability/CR helps decrease turnover by as much as **57%**.²³⁵
- Sustainability/CR can improve employee morale and engagement by as much as **55%**. Research finds that employee engagement supports employee retention, improved performance, and increased productivity.²³⁶

Productivity and Labor Costs

- Sustainability/CR helps boost employee productivity by as much as **21%**.²³⁷
- On average, an employee at a high sustainability/CR firm takes **-12.4%** lower wages than those in a low sustainability/CR firm. On top of the **-12.4%**, executives will take an additional reduction of up to **-1.6%** in lower pay in high sustainability/CR firms.²³⁸

CASE EXAMPLES: Talent Acquisition and Retention

- Patagonia receives an average of 9,000 applicants for every new job opening. 71% of their job seekers place a premium on a company's environmental track record when they're deciding on a potential employer.²³⁹
- A 2016 study found that 76% of Unilever's 170,000 employees feel their role at work

enables them to contribute to delivering to the company's sustainability/CR agenda, and about half of all new employees entering the company from college cited Unilever's ethical and sustainability policies as the primary reason for wanting to join.²⁴⁰

CASE EXAMPLES: Productivity

- Brazilian cattle ranchers who adopted environmental and social sustainability practices saw productivity increase by 2.3x.²⁴¹
- Cocoa farmers who adopted sustainability certifications in Cote d'Ivoire produced 1,270 pounds of cocoa per hectare, compared with 736 pounds per hectare on non-certified farms. Net income was also significantly higher on certified cocoa farms than noncertified: \$403 versus \$113 USD per hectare.²⁴²
- By making the switch from chemical cleaners to non-toxic, green products, the Ambrose Hotel in Santa Monica, CA saw a tangible improvement in their employees' physical health. This transition translated to fewer headaches, allergies, and sick days among their housekeeping staff. Research indicates that every dollar saved in healthcare costs

translates to a \$2.30 increase in performance and productivity for employers.²⁴³

- In a real-world study, researchers tried to encourage airline pilots to adopt more efficient practices. Pilots in the control group, which lacked any specific encouragement other than the request to take training to improve efficiency, tended to resist or avoid the training. Pilots who were offered pro-social incentives—i.e., a promise for the company to donate funds to charities for every pilot that took the training—not only participated in higher numbers but demonstrated better retention and application. The training improved the productivity of the pilots (shaving 90 seconds from taxi and flight time), reduced fuel use, and reduced emissions, saving millions of dollars.²⁴⁴

HR and Financial Performance

- Studies find that as sustainability/CR improves HR KPIs, it improves key financial performance indicators such as profitability and share price. For example, a **10%** improvement in employees' connection with the mission or purpose of their organization results in a **4.4%** increase in profitability.²⁴⁵

How does sustainability/CR support HR?

Research finds that sustainability/CR influences employees by:²⁴⁶

- Increasing the **commitment** employees have for their employer by increasing:
 - How deeply employees **identify** with their employer.
 - The perception that their employer supports social and environmental **justice**.
 - The **pride** employees have in their company.
 - The **trust** employees have for their employer.
 - These feelings also help improve an employee's job performance.
- Differentiating companies from other employers. Sustainability/CR helps firms stand out and makes them compare more favorably and distinctively than other potential employers. Job seekers will assess whether a potential employer appears to be consistent in commitments.
- Sustainability reduces employees' feelings of **cynicism**, reduces **distrust**, and promotes feelings of **trust**.
- Improving the quality of an employer's ethical behavior, working conditions, governance, environmental performance, and social performance, or "**Organizational Citizenship Behaviors**." Improving these behaviors promotes employee retention.
- Companies that adopt sustainability/CR practices find that employee-to-employee **interaction and contact** increase, which in turn improves productivity.

To enable sustainability/CR to support HR objectives, companies should:

1 Learn—and align to—the social and environmental **priorities of employees and job seekers**²⁴⁷

By making the effort to understand and align to the sustainability/CR expectations of their employees and job seekers, companies will help activate the sentiments and behaviors listed above that drive talent acquisition, retention, and productivity.

2 Build employee and job seeker **awareness**²⁴⁸

Internal communications and awareness-building activities should focus on:

- Building awareness of sustainability/CR, its purpose, its strategy, how and why the company has voluntarily chosen to adopt sustainability, and its connection to each employee.
- Communicating in a way that:
 - Is clear and authentic.
 - Ties to employee values and interests.
 - Frames sustainability/CR in the context of organizational justice and trust.
- Segments communications:
 - For materialistic job seekers focused on pay, benefits, and career advancement, relate the experience of the firm's sustainability/CR to other personal benefits they will gain and emphasize how sustainability/CR enhances the firm's reputation.
 - For less materialistic job seekers, emphasize values and purpose and communicate how they will live the company's purpose through their job role.

3 Engage employees in **sustainability/CR activities**²⁴⁹

Engaging employees directly in sustainability/CR builds their affinity, identification, and commitment to their employer. Even if the company cannot engage every employee, it still helps. Those who do become involved may become enthusiastic brand ambassadors for their employer.

4 Integrate sustainability/CR into **core business strategy, operations, and job roles**

Demonstrating that sustainability/CR is integral to the business shows employees that the firm's commitment is authentic. When employees perceive their employer making an authentic commitment to sustainability/CR they are more likely to feel they can express their true selves at work.

5 **Train employees** on sustainability/CR²⁵⁰

Training employees to adhere to sustainability expectations improves productivity, increases interdisciplinary networks, and improves employee engagement.

VIII.

Firms Use Sustainability/CR as a

Value-Creating Turnaround and Defense Strategy

“ Integrating ESG...can provide opportunities for our portfolio companies to drive revenues, reduce costs, secure more efficient financing, and strengthen their competitive positioning. We believe ESG can be a means to honing an investment edge in a rapidly changing world and **makes us better stewards of capital.**”

- HARVEY SCHWARTZ, CEO, CARLYLE GROUP²⁵¹



This Report provides extensive evidence that sustainability/CR creates financial and competitive value. However, a question remains.

If sustainability/CR is so beneficial, then wouldn't companies already be using it to support value creation?

A variety of studies suggest that companies do in fact already use sustainability/CR to support value creation. For example:

- When companies experience a financial downturn, financially successful companies will invest more in sustainability/CR, not less, as a tactic to help turn financial performance around.²⁵²
- Companies increase sustainability/CR as a tool to restore value and counteract negative press, risks, and controversies.²⁵³
- Companies exploit the sustainability/CR weaknesses of their competitors to get more favorable financing terms for themselves and worse terms for peers.²⁵⁴
- Managers worried about a hostile takeover will cut back on sustainability/CR as part of an effort to make the firm's financial performance look less attractive.²⁵⁵
- As noted above, sustainability/CR leaders receive, on average, 9% more in revenue than their lower-performing competitors. However, that's not the end of the story. The lower-performing competitors will compete to improve their sustainability/CR performance. As they do, the marketplace will reward the improved competitors, and the 9% revenue gap will erode. This can then lead the original leader to enhance their sustainability/CR performance to differentiate themselves and reclaim their revenue boost. Their competitors will then strive to catch up and close the revenue gap.²⁵⁶
- As discussed earlier, suppliers use sustainability/CR to reduce the risk of losing customers, and/or to help attract new customers. Suppliers increase sustainability/CR investments and activities when:
 - They see their buyers are financially unstable and they are worried about potentially losing key business. Increasing sustainability/CR helps them market to and attract new corporate buyers.²⁵⁷
 - Their buyers can easily substitute other Suppliers. This helps a Supplier attract new B2B customers.²⁵⁸
 - They are too reliant on a few buyers. This helps attract new B2B customers.²⁵⁹
- Companies—when facing the potential for employee misbehavior—will increase investment in sustainability/CR as a tactic to reduce the risk of employee misconduct.²⁶⁰

IX.

Conclusion

**“ It is time to put aside
the debate of whether
sustainability/CR
supports business
value creation.”**



The findings of the Project ROI Refresh have important implications. C-Suites and Sustainability/CR teams need to align and understand the purpose and role of environmental, social, and governance practices for the enterprise. What practices are core and non-negotiable that a company must do in any circumstance? What practices should only proceed if they possess a business case? What practices fall into each camp or in between?

In resolving these questions, the original Project ROI and this current Report make clear that little doubt remains. Companies that do sustainability/CR well—i.e., engage in strategic, focused, business-aligned, and integrated approaches that build awareness will likely receive attractive financial and competitive benefits. Companies that do not take these steps will find it much harder, if not impossible, to generate business value from sustainability/CR.

The business case is necessary, vitally so, for business engagement in sustainability/CR. Most firms have legal obligations to generate profits. Profit and loss considerations compose most of the incentives that drive the decision-making of leaders and their workforce. If sustainability/CR does not fit in a profit-making organizational model, it will always struggle to influence a company's behaviors at scale or scope.

However, while the business case for sustainability/CR is necessary, it is not sufficient. For some time, we have observed those in the field refer to the business case for sustainability/CR as a “Holy Grail.” In other words, if sustainability/CR

clearly drives financial returns, then companies will be moved to voluntarily reduce their negative footprint effects to nil, while enthusiastically participating in efforts to solve the major problems threatening the wellbeing of people and planet. We suggest that the business case is not a Holy Grail. Encouraging adoption and then driving effective practices takes more than a business case alone. It requires thought, action, belief, capabilities, relationships, resources, and a wider set of enabling conditions (such as social capital, regulation, laws, cultural mores, etc.) that reinforce behaviors and choices. The business case is an essential catalyst, but it is not a silver bullet.

It is time to put aside the debate of whether sustainability/CR supports business value creation. It is instead time to focus on how to use sustainability/CR to support the business in a way that will enable it to meet expectations and accountabilities to profit, people, and planet at scale.

Sources

- 1 Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>
- 2 Steve Rochlin, Richard Bliss, Stephen Jordan, Cheryl Yaffe Kiser. “Project ROI: Defining the Competitive and Financial Advantages of Corporate Responsibility and Sustainability.” IMPACT ROI, Babson College. 2015. <http://www.impactroiglobal.com/project-roi/>
- 3 Ron Carucci and Garry Ridge. “How Executive Teams Shape a Company’s Purpose.” *Harvard Business Review*. Nov 3, 2022 <https://hbr.org/2022/11/how-executive-teams-shape-a-companys-purpose>
- 4 See: Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>; Steve Rochlin, “The Business ROI of Social Investments.” IMPACT ROI, ACCP. 2018. <http://www.impactroiglobal.com/project-roi/>
- 5 Helen Gurfel, “The Economic Case for Sustainability.” CBRE. <https://www.cbreim.com/sustainability/the-economic-case-for-sustainability>
- 6 Steve Rochlin, Richard Bliss, Stephen Jordan, Cheryl Yaffe Kiser. “Project ROI: Defining the Competitive and Financial Advantages of Corporate Responsibility and Sustainability.” IMPACT ROI, Babson College. 2015. <http://www.impactroiglobal.com/project-roi/>
- 7 For shorthand, we use the term “sustainability” to cover responsible social, environmental, and governance practices.
- 8 Ryan Scott, “Doing Good is Good Business, But can You Prove It?” *Forbes*. Aug. 26, 2015. <https://www.forbes.com/sites/causeintegration/2015/08/26/doing-good-is-good-business-but-can-you-prove-it/?sh=3f4e17aa52d7>
- 9 See for example, The Weinreb Group, “2025 Chief Sustainability Officer Report: Staying the Course in an Era of Increased Regulation and Political Volatility.” 2025. <https://weinrebgroup.com/wp-content/uploads/2025/02/2025-CSO-Report.pdf>
- 10 An example of one study: Waheed, A., & Zhang, Q. (2022). Effect of CSR and Ethical Practices on Sustainable Competitive Performance: A Case of Emerging Markets from Stakeholder Theory Perspective. *Journal of Business Ethics*, 175(4), 837–855. <https://doi.org/10.1007/s10551-020-04679-y>
- 11 Steve Rochlin, Stephen Jordan, Cheryl Y. Kiser, “Driving Corporate Involvement in Community Health and Well-being.” IMPACT ROI and Babson College: 2018. <http://www.impactroiglobal.com/project-roi/>
- 12 Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>
- 13 This section draws from Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>
- 14 See: Jaakko Siltalooppi, Risto Rajala, Henri Hietala. “Integrating CSR with Business Strategy: A Tension Management Perspective.” *Journal of Business Ethics*. 2020. <https://link.springer.com/article/10.1007/s10551-020-04569-3> ; and Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>.
- 15 Jason Jay, Kate Isaacs and Hong Linh Nguyen, “Getting Strategic About Sustainability.” *Harvard Business Review*. Jan-Feb, 2025. <https://hbr.org/2025/01/getting-strategic-about-sustainability>
- 16 Karen Quintos, Executive Vice President and Chief Customer Officer @ Dell Technologies. From Virtual Fireside Discussion - The Impact of Coronavirus on Sustainability and the need for Ethical Leadership. Webinar, May 27, 2020 <https://www.smeal.psu.edu/sustainability>

17 HPE, Living Progress Report. 2019. https://www.responsibilityreports.com/HostedData/ResponsibilityReportArchive/h/NYSE_HPE_2019.pdf

18 Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>

19 As noted, this section was developed through the Project ROI refresh research. The findings related to this section were first published in Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>. This section of the Report draws from that report.

20 <https://www.bundl.com/articles/can-corporations-be-sustainable-and-profitable-at-the-same-time-yes-heres-how>

21 Michael Bowen, “View from the Sustainability Office: Apollo’s Dave Stangis on the Value of Reporting.” New Private Markets. August 18, 2025. <https://www.newprivatemarkets.com/view-from-the-sustainability-office-apollos-stangis-on-the-value-of-reporting/>

22 Carlyle Group, “The EBITDA of ESG: 2023 ESG Report.” <https://www.carlyle.com/sites/default/files/2023-06/Carlyle-ESG-Report-2023.pdf>

23 Carlyle Group, “Sustainable Pathways: 2024 ESG Report.” <https://www.carlyle.com/sites/default/files/2024-06/Carlyle-ESG-Report-2024.pdf>

24 Tensie Whelan, David Linch. How organizations can use decarbonization to capture financial value and gain competitive advantage. PwC. July 11, 2025. <https://www.pwc.com/us/en/services/esg/library/decarb-enterprise-value.html>

25 Louise Koch, Stephen Roberts, “Dell: The Business Case for a Sustainable Supply Chain.” Mars, Said Business School, University of Oxford. 2017. https://www.sbs.ox.ac.uk/sites/default/files/2018-06/dell_-_mutuality_case_study_27.10.17.pdf

26 Maya Ben Dror, Abhishek Gupta, Thomas Deloison, Axel Schmidt, Alexander Holst, and Wolfgang Machur. “Driving Ambitions: The Business Case for Circular Economy in the Car Industry.” 2022: World Economic Forum, Accenture. https://www3.weforum.org/docs/WEF_Driving_Ambitions-2022.pdf

27 “Small Changes By Walmart Lead to Hundreds of Millions in Savings.” McGraw Hill Education. March 11, 2020. <https://ominthenews.com/small-changes-by-walmart-lead-to-hundreds-of-millions-in-savings/>

28 “Aluminum’s Sustainability.” The Aluminum Association. <https://www.aluminum.org/sustainability>

29 Tensie Whelan, David Linch. How organizations can use decarbonization to capture financial value and gain competitive advantage. PwC. July 11, 2025. <https://www.pwc.com/us/en/services/esg/library/decarb-enterprise-value.html>

30 As noted, this section was developed through the Project ROI refresh research. The findings related to this section were first published in Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>. This section of the Report draws from that report.

31 Ellen Hughes-Cromwick, Ryan Fitzpatrick, “How America Can Lead: Unlocking Clean Tech Investments.” Third Way. April 14, 2023. <https://www.thirdway.org/blog/how-america-can-lead-unlocking-clean-tech-investments>

32 Randi Kronthal-Sacco, Tensie Whelan, Sustainable Market Share Index. NYU Stern Center for Sustainable Business. Updated April 2024.

33 <https://www.linkedin.com/pulse/patagonia-paradox-explained-how-tagline-dont-buy-led-increase-jxz2f/>

34 “Unilever’s purpose-led brands outperform.” Unilever. June 11, 2019. <https://www.unilever.com/news/press-and-media/press-releases/2019/unilevers-purpose-led-brands-outperform/>

35 “From green to gold, this is how companies make sustainability profitable.” Limelights. <https://www.limelights.com/blog-post/green-to-gold-how-businesses-can-make-sustainability-profitable>

36 <https://www.bundl.com/articles/can-corporations-be-sustainable-and-profitable-at-the-same-time-yes-heres-how>

37 <https://www.basf.com/global/en/media/news-releases/2022/02/p-22-138>

- 38 Marquis, C. (2024). How Regeneration Is Redefining Business. *Stanford Social Innovation Review*, 22(3), 58–66. <https://doi.org/10.48558/D7PY-Q475>
- 39 <https://www.linkedin.com/feed/update/urn:li:activity:7350532518577680384/>
- 40 Hannah Radvan, Jeanne Roche. “Mars Incorporated: Maua Programme.” Mars, Said Business School, University of Oxford. 2017. https://www.sbs.ox.ac.uk/sites/default/files/2018-06/mars_maua_-_mutuality_case_study_13.10.17.pdf
- 41 Carlyle Group, “The EBITDA of ESG: 2023 ESG Report.” <https://www.carlyle.com/sites/default/files/2023-06/Carlyle-ESG-Report-2023.pdf>
- 42 Carlyle Group, “The EBITDA of ESG: 2023 ESG Report.” <https://www.carlyle.com/sites/default/files/2023-06/Carlyle-ESG-Report-2023.pdf>
- 43 See: Hafenbrädl, S., & Waeger, D. (2021). The business case for CSR: A trump card against hypocrisy? *Journal of Business Research*, 129, 838–848. <https://doi.org/10.1016/j.jbusres.2019.08.043> ; Pete Engardio. “Stay Silent? Speak Up? How CEOs Can Navigate a Polarized World.” BCG. April 22, 2024. <https://www.bcg.com/publications/2024/how-leaders-can-navigate-a-polarized-world> ; Rob Bauer, Jeroen Derwall & Colin Tissen (2023) Private Shareholder Engagements on Material ESG Issues, *Financial Analysts Journal*, 79:4, 64-95, DOI: 10.1080/0015198X.2023.2220648 ; Burato, M., Pellegrino, F., Scalvini, L., & Zollo, M. (2024). *Corporate Sustainability and Shareholder Returns: The Role of Business Impact Maturity*. Imperial College Business School. <https://www.imperial.ac.uk/business-school/faculty-research/research-centres/leonardo-centre-business-society/publications-reports/corporate-sustainability-and-shareholder-returns/>
- 44 These Sustainability Tension Management strategic questions come from: Steve Rochlin, Jeff Senne, “How to Set Strategy in 2025: Thriving in an Era of Impact and Backlash.” Trellis, IMPACT ROI, and Sandbar Solutions: 2025. <https://trellis.net/report/how-to-set-sustainability-strategy-in-2025/>
- 45 See: Du, S., & Yu, K. (2021). Do Corporate Social Responsibility Reports Convey Value Relevant Information? Evidence from Report Readability and Tone. *Journal of Business Ethics*, 172(2), 253–274. <https://doi.org/10.1007/s10551-020-04496-3> ; Ademi, B., & Klungseth, N. J. (2022). Does it pay to deliver superior ESG performance? Evidence from US S&P 500 companies. *Journal of Global Responsibility*, 13(4), 421–449. <https://doi.org/10.1108/JGR-01-2022-0006> ; Pham, H. S. T., & Tran, H. T. (2020). CSR disclosure and firm performance: The mediating role of corporate reputation and moderating role of CEO integrity. *Journal of Business Research*, 120, 127–136. <https://doi.org/10.1016/j.jbusres.2020.08.002> ; Chen, S., Song, Y., & Gao, P. (2023). Environmental, social, and

governance (ESG) performance and financial outcomes: Analyzing the impact of ESG on financial performance. *Journal of Environmental Management*, 345, 118829–118829. <https://doi.org/10.1016/j.jenvman.2023.118829> ; Ignatov, K. (2023). When ESG talks: ESG tone of 10-K reports and its significance to stock markets. *International Review of Financial Analysis*, 89, 102745-. <https://doi.org/10.1016/j.irfa.2023.102745> ; Richard Howitt, “Sustainability is an Investment not a Cost.” ESG Investor. November 19, 2021. <https://www.esginvestor.net/sustainability-is-an-investment-not-a-cost/> ; Du, S., & Yu, K. (2021). Do Corporate Social Responsibility Reports Convey Value Relevant Information? Evidence from Report Readability and Tone. *Journal of Business Ethics*, 172(2), 253–274. <https://doi.org/10.1007/s10551-020-04496-3> ; Liu, Y. S., Zhou, X., Yang, J. H., Hoepner, A. G. F., & Kakabadse, N. (2023). Carbon emissions, carbon disclosure and organizational performance. *International Review of Financial Analysis*, 90, 102846-. <https://doi.org/10.1016/j.irfa.2023.102846> ; Ni, J., Jin, S., Hu, Y., & Zhang, L. (2023) ; He, F., Qin, S., Liu, Y., & Wu, J. (George). (2022). CSR and idiosyncratic risk: Evidence from ESG information disclosure. *Finance Research Letters*, 49, 102936-. <https://doi.org/10.1016/j.frl.2022.102936> ; Li, Q., Li, T., & Zhang, Y. (2024). ESG performance, heterogeneous creditors, and bond financing costs: Firm-level evidence. *Finance Research Letters*, 66, 105527-. <https://doi.org/10.1016/j.frl.2024.105527> ; Rouine, I., Ammari, A., & Bruna, M. G. (2022). Nonlinear impacts of CSR performance on firm risk: New evidence using a panel smooth threshold regression. *Finance Research Letters*, 47, 102721-. <https://doi.org/10.1016/j.frl.2022.102721> ; Zhang, X., Zhang, J., Zhu, Y., & Shen, J. (2023). Presentation of Social Responsibility Reports and the Stock Price Crash Risk. *Finance Research Letters*, 57, 104267-. <https://doi.org/10.1016/j.frl.2023.104267> ; He, L., & Ismail, K. (2024). ESG information disclosure, industrial policy support, debt financing costs. *Finance Research Letters*, 66, 105630-. <https://doi.org/10.1016/j.frl.2024.105630> ; Abdulaziz Alhumud, A., Leonidou, L. C., Alarfaj, W., & Ioannidis, A. (2025). The impact of digital CSR disclosure on customer trust and Engagement: The moderating role of consumer deontology and law obedience. *Journal of Business Research*, 186, 115035-. <https://doi.org/10.1016/j.jbusres.2024.115035>

46 Jahn, J., & Brühl, R. (2019). Can bad news be good? On the positive and negative effects of including moderately negative information in CSR disclosures. *Journal of Business Research*, 97, 117–128. <https://doi.org/10.1016/j.jbusres.2018.12.070>. However, the study finds that too much negative disclosure has a negative effect on a firm’s credibility.

47 This section draws from: Schlesinger, L., Kiefer, C. (2012). *Just Start: Take Action, Embrace Uncertainty, Create the Future*. Harvard Business Review Press ; Neck, H., Neck, C., Murray, E. (2017). *Entrepreneurship: The Practice and Mindset*. SAGE Publications, Inc. ; Greenberg, D., McKone-Sweet, K., Wilson H.J. (2011). *The New Entrepreneurial Leader: Developing Leaders Who Shape Social and Economic Opportunity*. Berrett-Koehler Publishers ; Kiser, C., Leipziger, D. (2014). *Creating Social Value: A Guide for Leaders and Change Makers*. Greenleaf Publishing. ; Taylor, S.N., Corbett, A., Greenberg, D. et al. A conceptual model of entrepreneurial leadership:

how entrepreneurial leaders enable entrepreneurial opportunity. *International Entrepreneurship and Management Journal* 21, 58 (2025). <https://doi.org/10.1007/s11365-025-01074-9>

48 For example, research finds that firms that tend to be more innovative also tend to more assertively engage in stakeholder communications related to sustainability/CR. See: Aronson, O., Hanson, S., & LaFont, M. (2025). Innovative organizations' CSR signaling: Consumer perceptions, expectations, and outcomes. *Journal of Business Research*, 186, 115041-. <https://doi.org/10.1016/j.jbusres.2024.115041>

49 See for example: Taylor, S.N., Corbett, A., Greenberg, D. et al. A conceptual model of entrepreneurial leadership: how entrepreneurial leaders enable entrepreneurial opportunity. *International Entrepreneurship and Management Journal* 21, 58 (2025). <https://doi.org/10.1007/s11365-025-01074-9>

50 See for example, Steenis, N. D., van Herpen, E., van der Lans, I. A., & van Trijp, H. C. M. (2023). Partially Green, Wholly Deceptive? How Consumers Respond to (In) Consistently Sustainable Packaged Products in the Presence of Sustainability Claims. *Journal of Advertising*, 52(2), 159-178. <https://doi.org/10.1080/00913367.2022.2047841>

51 Guo, S., Wang, C. L., Hwang, S., Jin, F., & Zhou, L. (2022). Doing bad by doing good? Corporate social responsibility fails when controversy arises. *Industrial Marketing Management*, 106, 1-13. <https://doi.org/10.1016/j.indmarman.2022.07.009>

52 Tensie Whelan and David Linich, "A better way to market sustainable products." *Strategy and Business*. May 21, 2025. <https://www.strategy-business.com/article/A-better-way-to-market-sustainable-products>

53 <https://www.interface.com/US/en-US/collections/open-road.html>

54 <https://lucidmotors.com/>

55 See for example Wei, W., Kim, G., Miao, L., Behnke, C., & Almanza, B. (2018). Consumer inferences of corporate social responsibility (CSR) claims on packaged foods. *Journal of Business Research*, 83, 186-201. <https://doi.org/10.1016/j.jbusres.2017.10.046> which finds that the purchasing intentions of CPG food consumers tend to increase when they see sustainability/CR related claims directly on packaging.

56 https://toryburch.co.id/introducing-the-ella-bio/?srsrlid=AfmBOor7SEGRhtB5ltS_roHY_Cn7VN1Y99O4fFqieueuHvpkSVsVCCnL

57 <https://www.walmart.com/ip/Wrangler-Men-s-Accelerating-Circularity-Straight-Fit-Jean/8060006064>

58 Saha, S., Ranjan, K. R., Pappu, R., & Akhlaghpour, S. (2023). Corporate giving and its impact on consumer evaluations: A meta-analysis. *Journal of Business Research*, 158, 113656-. <https://doi.org/10.1016/j.jbusres.2023.113656>

59 Researchers tend to use a variety of metrics to measure firm profitability such as operating profits, return on assets (RoA), return on equity (RoE), and economic value added among others.

60 See: Rachel Barton, "Using ESG to Boost Portfolio Company Value in Private Equity." Accenture: November 28, 2023. <https://www.accenture.com/us-en/blogs/business-functions-blog/private-equity-esg> ; Krueger, Philipp and Metzger, Daniel and Wu, Jiaxin, The Sustainability Wage Gap (November 3, 2023). Swedish House of Finance Research Paper No. 20-14, European Corporate Governance Institute - Finance Working Paper 718/2020, Swiss Finance Institute Research Paper No. 21-17, Available at SSRN: <https://ssrn.com/abstract=3672492> or <http://dx.doi.org/10.2139/ssrn.3672492> ; Veeravel, V., Murugesan, V. P., & Narayanamurthy, V. (2024). Does ESG disclosure really influence the firm performance? Evidence from India. *The Quarterly Review of Economics and Finance*, 95, 193-202. <https://doi.org/10.1016/j.qref.2024.03.008> ; Ademi, B., & Klungseth, N. J. (2022). Does it pay to deliver superior ESG performance? Evidence from US S&P 500 companies. *Journal of Global Responsibility*, 13(4), 421-449. <https://doi.org/10.1108/JGR-01-2022-0006> ; Gonçalves, T., Louro, D., & Barros, V. (2023). Can Corporate Sustainability Drive Economic Value Added? Evidence from Larger European Firms. *Journal of Risk and Financial Management*, 16(4), 215-. <https://doi.org/10.3390/jrfm16040215>; Perumalraja, R., Natarajan, P., Azhaguraja, N., & Thiyagarajan, S. (2020). The Implications of CSR Spending on Firm's Performance: A Study of Section 135 of the Indian Companies Act, 2013. *IUP Journal of Corporate Governance*, 19(4), 45-61. ; Tensie Whelan and Carly Fink October 21, 2016 *Harvard Business Review* <https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability>; Source: Ellyn Shook, "Seeking responsible leadership." *Accenture*. January 20, 2020. <https://www.accenture.com/us-en/insights/consulting/responsible-leadership>; Hernando Cortina, "Creating Shareholder Value from Just Business Behavior." <https://justcapital.com/news/just-companies-exhibit-lower-investment-risk/> June 6, 2018.

61 See: Tsai, H.-J., & Wu, Y. (2022). Changes in Corporate Social Responsibility and Stock Performance. *Journal of Business Ethics*, 178(3), 735-755. <https://doi.org/10.1007/s10551-021-04772-w> ; Nguyen, P.-A., Kecskés, A., & Mansi, S. (2020). Does corporate social responsibility create shareholder value? The importance of long-term investors. *Journal of Banking & Finance*, 112, 105217-. <https://doi.org/10.1016/j.jbankfin.2017.09.013> ; Lacy, P., Dess, J., Shannon, A., Gaud, V., Smith, A., Robinson, M., & Moussavi, B. (2022). Measuring sustainability. Creating value Time to rethink performance and

redefine success. In *Accenture*. https://insuranceblog.accenture.com/wp-content/uploads/2022/02/Measuring-Sustainability-Creating-Value_POV_Accenture.pdf ; Burato, M., Pellegrino, F., Scalvini, L., & Zollo, M. (2024). *Corporate Sustainability and Shareholder Returns: The Role of Business Impact Maturity*. Imperial College Business School. <https://www.imperial.ac.uk/business-school/faculty-research/research-centres/leonardo-centre-business-society/publications-reports/corporate-sustainability-and-shareholder-returns/> ; Tierens, I., Bingham, R., Tylanda, E., Corbett, B., Jones, E., Singer, B., Tyagi, A., Aggarwal, R., Venugopal, V., Jain, S., Meyer, M., Chen, G., Zhang, X. (2024). “GS SUSTAIN Links between Environmental & Social metrics and stock performance: Another factor in the investment toolkit”. Goldman Sachs Research. ; Rob Bauer, Jeroen Derwall & Colin Tissen (2023) Private Shareholder Engagements on Material ESG Issues, *Financial Analysts Journal*, 79:4, 64-95, DOI: 10.1080/0015198X.2023.2220648; Pete Engardio. “Stay Silent? Speak Up? How CEOs Can Navigate a Polarized World.” BCG. April 22, 2024. <https://www.bcg.com/publications/2024/how-leaders-can-navigate-a-polarized-world> ; Royal Bank of Canada. (2019). Does socially responsible investing hurt investment returns? In RBC. <https://www.rbcgam.com/documents/en/articles/does-socially-responsible-investing-hurt-investment-returns.pdf> ; Richard Howitt, “Sustainability is an Investment not a Cost.” ESG Investor. November 19, 2021. <https://www.esginvestor.net/sustainability-is-an-investment-not-a-cost/>

62 See: “The B2B Purpose Paradox: How Purpose Powers Business-to-Business Growth.” ANA, Carol Cone On Purpose, The Harris Poll. 2020. <https://www.ana.net/content/show/id/b2b-purpose-paradox> ; Ron Carucci and Garry Ridge. “How Executive Teams Shape a Company’s Purpose.” *Harvard Business Review*. Nov 3, 2022 <https://hbr.org/2022/11/how-executive-teams-shape-a-companys-purpose>

63 Studies tend to use the following metrics to measure firm value: Tobin’s Q; valuation multiples; market-to-book ratio; return on invested capital; metrics of market value; and others.

64 See: Gao, L., & Zhang, J. H. (2015). Firms’ earnings smoothing, corporate social responsibility, and valuation. *Journal of Corporate Finance* (Amsterdam, Netherlands), 32, 108-127. <https://doi.org/10.1016/j.jcorpfin.2015.03.004> ; Miroshnychenko, I., Barontini, R., & Testa, F. (2017). Green practices and financial performance: A global outlook. *Journal of Cleaner Production*, 147, 340-351. <https://doi.org/10.1016/j.jclepro.2017.01.058> ; Al-Shaer, H., Uyar, A., Kuzey, C., & Karaman, A. S. (2023). Do shareholders punish or reward excessive CSR engagement? Moderating effect of cash flow and firm growth. *International Review of Financial Analysis*, 88, 102672-. <https://doi.org/10.1016/j.irfa.2023.102672> ; Ho, S. S. M., Li, A. Y., Tam, K., & Tong, J. Y. (2016). Ethical image, corporate social responsibility, and R&D valuation. *Pacific-Basin Finance Journal*, 40, 335-348. <https://doi.org/10.1016/j.pacfin.2016.02.002> ; Veeravel, V., Murugesan, V. P., & Narayanamurthy, V. (2024). Does ESG disclosure really influence the firm performance? Evidence from India. *The Quarterly Review of Economics and Finance*, 95, 193-202.

<https://doi.org/10.1016/j.qref.2024.03.008> ; Roy, P. P., Rao, S., & Zhu, M. (2022). Mandatory CSR expenditure and stock market liquidity. *Journal of Corporate Finance* (Amsterdam, Netherlands), 72, 102158-. <https://doi.org/10.1016/j.jcorpfin.2022.102158> ; Buchanan, B., Cao, C. X., & Chen, C. (2018). Corporate social responsibility, firm value, and influential institutional ownership. *Journal of Corporate Finance* (Amsterdam, Netherlands), 52, 73-95. <https://doi.org/10.1016/j.jcorpfin.2018.07.004> ; Ding, D. K., Ferreira, C., & Wongchoti, U. (2016). Does it pay to be different? Relative CSR and its impact on firm value. *International Review of Financial Analysis*, 47, 86-98. <https://doi.org/10.1016/j.irfa.2016.06.013> ; Ademi, B., & Klungseth, N. J. (2022). Does it pay to deliver superior ESG performance? Evidence from US S&P 500 companies. *Journal of Global Responsibility*, 13(4), 421-449. <https://doi.org/10.1108/JGR-01-2022-0006> ; Seretis, P., & Thwing Eastman, M. (2018). *Enhancing Economic Value with ESG*. MSCI. <https://www.msci.com/documents/10199/48e85d65-66d4-40e7-b316-c64a95b83a04> ; Dalal, K. K., & Thaker, N. (2019). ESG and Corporate Financial Performance: A Panel Study of Indian Companies. *IUP Journal of Corporate Governance*, 18(1), 44-59. ; Maggie Schear, Rich Hutchinson, Marjolein Cuellar. “From Compliance to Courage in ESG.” BCG. April 14, 2022. <https://www.bcg.com/publications/2022/compliance-to-courage-in->

65 Igor Helnzer, Andrea Mezzanzanica, “Does a Company’s ESG Score Have a Measurable Impact on its Market Value?” Deloitte: 2022. <https://www.deloitte.com/content/dam/assets-zone2/ch/en/docs/services/financial-advisory/2024/deloitte-ch-company-ESG-score-impact-on-market-value.pdf>

66 Carlyle Group, “The EBITDA of ESG: 2023 ESG Report.” <https://www.carlyle.com/sites/default/files/2023-06/Carlyle-ESG-Report-2023.pdf>

67 Tensie Whelan, Bruno Zappa, Rodrigo Zeidan, and Greg Fishbein, “How to Quantify Sustainability’s Impact on Your Bottom Line.” *Harvard Business Review*. September 13, 2017, Updated October 13, 2017. <https://hbr.org/2017/09/how-to-quantify-sustainabilities-impact-on-your-bottom-line>

68 Ignacio S. Galán, “The CEO of Iberdrola on Committing to Clean Energy.” *Harvard Business Review*. Nov-Dec, 2020. <https://hbr.org/2020/11/the-ceo-of-iberdrola-on-committing-to-clean-energy>

69 Indra K. Nooyi and Vijay Govindarajan, “Becoming a Better Corporate Citizen: How Pepsico Moved toward a Healthier Future.” *Harvard Business Review*. March-April, 2020.

70 Ignacio S. Galán, “The CEO of Iberdrola on Committing to Clean Energy.” *Harvard Business Review*. Nov-Dec, 2020. <https://hbr.org/2020/11/the-ceo-of-iberdrola-on-committing-to-clean-energy>

71 Igor Helnzer, Andrea Mezzanzanica, “Does a Company’s ESG Score Have a Measurable Impact on its Market Value?” Deloitte: 2022. <https://www.deloitte.com/content/dam/assets-zone2/ch/en/docs/services/financial-advisory/2024/deloitte-ch-company-ESG-score-impact-on-market-value.pdf>

72 Helen Gurfel, “The Economic Case for Sustainability.” CBRE. <https://www.cbcreim.com/sustainability/the-economic-case-for-sustainability>

73 See: Doukas, J. A., & Zhang, R. (2024). When does CSR payoff? European Financial Management : The Journal of the European Financial Management Association, 30(4), 2242–2304. <https://doi.org/10.1111/eufm.12475> ; Cho, S. Y., & Lee, C. (2019). Managerial Efficiency, Corporate Social Performance, and Corporate Financial Performance. *Journal of Business Ethics*, 158(2), 467–486. <https://doi.org/10.1007/s10551-017-3760-7>

74 An, H., Boasson, V., Lei, L., & Wu, Q. (2024). Corporate social performance: Does management quality matter? *Journal of Banking & Finance*, 162, 107130-. <https://doi.org/10.1016/j.jbankfin.2024.107130>

75 See: Corinne B Bendersky, Beth Burks, Michael T Ferguson, Michael Wilkins. The ESG Advantage: Exploring Links To Corporate Financial Performance. S&P Global. April 8, 2019. https://www.spglobal.com/_assets/documents/ratings/the-esg-advantage-exploring-links-to-corporate-financial-performance-april-8-2019.pdf

76 See: Krueger, Philipp and Metzger, Daniel and Wu, Jiaxin, The Sustainability Wage Gap (November 3, 2023). Swedish House of Finance Research Paper No. 20-14, European Corporate Governance Institute – Finance Working Paper 718/2020, Swiss Finance Institute Research Paper No. 21-17, Available at SSRN: <https://ssrn.com/abstract=3672492> or <http://dx.doi.org/10.2139/ssrn.3672492> ; Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment*, 28(2), 286–300. <https://doi.org/10.1002/bse.2224> ; Corinne B Bendersky, Beth Burks, Michael T Ferguson, Michael Wilkins. The ESG Advantage: Exploring Links To Corporate Financial Performance. S&P Global. April 8, 2019. https://www.spglobal.com/_assets/documents/ratings/the-esg-advantage-exploring-links-to-corporate-financial-performance-april-8-2019.pdf

77 See: Corinne B Bendersky, Beth Burks, Michael T Ferguson, Michael Wilkins. The ESG Advantage: Exploring Links To Corporate Financial Performance. S&P Global. April 8, 2019. https://www.spglobal.com/_assets/documents/ratings/the-esg-advantage-exploring-links-to-corporate-financial-performance-april-8-2019.pdf ; Chen, S., Song, Y., & Gao, P. (2023). Environmental, social, and governance (ESG) performance

and financial outcomes: Analyzing the impact of ESG on financial performance. *Journal of Environmental Management*, 345, 118829–118829. <https://doi.org/10.1016/j.jenvman.2023.118829>

78 See: David C. Broadstock, Roman Matousek, Martin Meyer, Nickolaos G. Tzeremes, Does corporate social responsibility impact firms’ innovation capacity? The indirect link between environmental & social governance implementation and innovation performance, *Journal of Business Research*, Volume 119, 2020, Pages 99–110, ISSN 0148-2963, <https://doi.org/10.1016/j.jbusres.2019.07.014>. ; Su, H., Fu, W., & Linderman, K. (2024). When does it pay to be green? The strategic benefits of adoption speed. *Journal of Operations Management*, 70(7), 1155–1177. <https://doi.org/10.1002/joom.1337>

79 Source: Ellyn Shook, “Seeking responsible leadership.” *Accenture*. January 20, 2020. <https://www.accenture.com/us-en/insights/consulting/responsible-leadership>

80 Bashir, Y., Zhao, Y., Qiu, H., Ahmed, Z., & Yau, J. T.-H. (2023). Environmental, Social, and Governance Performance and Value Creation in Product Market: Evidence from Emerging Economies. *Journal of Risk and Financial Management*, 16(12), 517-. <https://doi.org/10.3390/jrfm16120517>

81 Coelho, R., Jayantilal, S., & Ferreira, J. J. (2023). The impact of social responsibility on corporate financial performance: A systematic literature review. *Corporate Social-Responsibility and Environmental Management*, 30(4), 1535–1560. <https://doi.org/10.1002/csr.2446> ; Phan, T. T. H., Tran, H. X., Le, T. T., Nguyen, N., Pervan, S., & Tran, M. D. (2020). The Relationship between Sustainable Development Practices and Financial Performance: A Case Study of Textile Firms in Vietnam. *Sustainability*, 12(15), 5930-. <https://doi.org/10.3390/su12155930>

82 Bardos, K. S., Ertugrul, M., & Gao, L. S. (2020). Corporate social responsibility, product market perception, and firm value. *Journal of Corporate Finance* (Amsterdam, Netherlands), 62, 101588-. <https://doi.org/10.1016/j.jcorpfin.2020.101588>

83 Sun, W., Yao, S., & Govind, R. (2019). Reexamining Corporate Social Responsibility and Shareholder Value: The Inverted-U-Shaped Relationship and the Moderation of Marketing Capability. *Journal of Business Ethics*, 160(4), 1001–1017. <https://doi.org/10.1007/s10551-018-3854-x>

84 Byun, S. K., & Oh, J.-M. (2018). Local corporate social responsibility, media coverage, and shareholder value. *Journal of Banking & Finance*, 87, 68–86. <https://doi.org/10.1016/j.jbankfin.2017.09.010>

- 85 See: Ademi, B., & Klungseth, N. J. (2022). Does it pay to deliver superior ESG performance? Evidence from US S&P 500 companies. *Journal of Global Responsibility*, 13(4), 421-449. <https://doi.org/10.1108/JGR-01-2022-0006>; Pham, H. S. T., & Tran, H. T. (2020). CSR disclosure and firm performance: The mediating role of corporate reputation and moderating role of CEO integrity. *Journal of Business Research*, 120, 127-136. <https://doi.org/10.1016/j.jbusres.2020.08.002>; Chen, S., Song, Y., & Gao, P. (2023). Environmental, social, and governance (ESG) performance and financial outcomes: Analyzing the impact of ESG on financial performance. *Journal of Environmental Management*, 345, 118829-118829. <https://doi.org/10.1016/j.jenvman.2023.118829>; Ignatov, K. (2023). When ESG talks: ESG tone of 10-K reports and its significance to stock markets. *International Review of Financial Analysis*, 89, 102745-. <https://doi.org/10.1016/j.irfa.2023.102745>
- 86 Richard Howitt, "Sustainability is an Investment not a Cost." ESG Investor. November 19, 2021. <https://www.esginvestor.net/sustainability-is-an-investment-not-a-cost/>
- 87 Du, S., & Yu, K. (2021). Do Corporate Social Responsibility Reports Convey Value Relevant Information? Evidence from Report Readability and Tone. *Journal of Business Ethics*, 172(2), 253-274. <https://doi.org/10.1007/s10551-020-04496-3>
- 88 Liu, Y. S., Zhou, X., Yang, J. H., Hoepner, A. G. F., & Kakabadse, N. (2023). Carbon emissions, carbon disclosure and organizational performance. *International Review of Financial Analysis*, 90, 102846-. <https://doi.org/10.1016/j.irfa.2023.102846>
- 89 See: Pete Engardio. "Stay Silent? Speak Up? How CEOs Can Navigate a Polarized World." BCG. April 22, 2024. <https://www.bcg.com/publications/2024/how-leaders-can-navigate-a-polarized-world>; Rob Bauer, Jeroen Derwall & Colin Tissen (2023) Private Shareholder Engagements on Material ESG Issues, *Financial Analysts Journal*, 79:4, 64-95, DOI: 10.1080/0015198X.2023.2220648
- 90 Burato, M., Pellegrino, F., Scalvini, L., & Zollo, M. (2024). *Corporate Sustainability and Shareholder Returns: The Role of Business Impact Maturity*. Imperial College Business School. <https://www.imperial.ac.uk/business-school/faculty-research/research-centres/leonardo-centre-business-society/publications-reports/corporate-sustainability-and-shareholder-returns/>
- 91 Agliardi, E., Alexopoulos, T., & Karvelas, K. (2023). The environmental pillar of ESG and financial performance: A portfolio analysis. *Energy Economics*, 120, 106598-. <https://doi.org/10.1016/j.eneco.2023.106598>; Song, H., Zhao, C., & Zeng, J. (2017). Can environmental management improve financial performance: An empirical study of A-shares listed companies in China. *Journal of Cleaner Production*, 141, 1051-1056. <https://doi.org/10.1016/j.jclepro.2016.09.105>
- 92 Miroshnychenko, I., Barontini, R., & Testa, F. (2017). Green practices and financial performance: A global outlook. *Journal of Cleaner Production*, 147, 340-351. <https://doi.org/10.1016/j.jclepro.2017.01.058>
- 93 Przychodzen, J., & Przychodzen, W. (2015). Relationships between eco-innovation and financial performance – evidence from publicly traded companies in Poland and Hungary. *Journal of Cleaner Production*, 90, 253-263. <https://doi.org/10.1016/j.jclepro.2014.11.034>
- 94 <https://business.directenergy.com/blog/2020/august/business-case-for-renewables>
- 95 Homroy, S. (2023). GHG emissions and firm performance: The role of CEO gender socialization. *Journal of Banking & Finance*, 148, 106721-. <https://doi.org/10.1016/j.jbankfin.2022.106721>
- 96 Wei, Y., & Pujari, D. (2023). Does buying green pay off? Stock market reactions to green acquisitions. *Industrial Marketing Management*, 114, 137-151. <https://doi.org/10.1016/j.indmarman.2023.08.001>
- 97 Gonçalves, T., Louro, D., & Barros, V. (2023). Can Corporate Sustainability Drive Economic Value Added? Evidence from Larger European Firms. *Journal of Risk and Financial Management*, 16(4), 215-. <https://doi.org/10.3390/jrfm16040215>; Assael, J., Carlier, L., & Challet, D. (2023). Dissecting the Explanatory Power of ESG Features on Equity Returns by Sector, Capitalization, and Year with Interpretable Machine Learning. *Journal of Risk and Financial Management*, 16(3), 159-. <https://doi.org/10.3390/jrfm16030159>
- 98 Tsai, H.-J., & Wu, Y. (2022). Changes in Corporate Social Responsibility and Stock Performance. *Journal of Business Ethics*, 178(3), 735-755. <https://doi.org/10.1007/s10551-021-04772-w>
- 99 Royal Bank of Canada. (2019). Does socially responsible investing hurt investment returns? In RBC. <https://www.rbcgam.com/documents/en/articles/does-socially-responsible-investing-hurt-investment-returns.pdf>

100 Assael, J., Carlier, L., & Challet, D. (2023). Dissecting the Explanatory Power of ESG Features on Equity Returns by Sector, Capitalization, and Year with Interpretable Machine Learning. *Journal of Risk and Financial Management*, 16(3), 159-. <https://doi.org/10.3390/jrfm16030159>

101 Ignatov, K. (2023). When ESG talks: ESG tone of 10-K reports and its significance to stock markets. *International Review of Financial Analysis*, 89, 102745-. <https://doi.org/10.1016/j.irfa.2023.102745>

102 See: Ignatov, K. (2023). When ESG talks: ESG tone of 10-K reports and its significance to stock markets. *International Review of Financial Analysis*, 89, 102745-. <https://doi.org/10.1016/j.irfa.2023.102745> ; Ferrell, A., Liang, H., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics*, 122(3), 585-606. <https://doi.org/10.1016/j.jfineco.2015.12.003>

103 Provided by the MassMutual Foundation, September, 2025.

104 See: Rochlin, Steve et al, "Project ROI: Defining the Financial and Competitive Advantages of Corporate Responsibility and Sustainability." IMPACT ROI: 2015. ; Daniel Aronson, "Why It's Good for Business When Customers Share Your Values." *MIT Sloan Management Review*. February 15, 2024. <https://sloanreview.mit.edu/article/why-its-good-for-business-when-customers-share-your-values/> ; IBM Institute for Business Value, Research Insights, "Beyond checking the box: How to create business value with embedded sustainability" IBM. 2024. <https://www.ibm.com/downloads/documents/us-en/10a99803fbafdc95>; Oliver Eitelwein and Sean Paquet, Greenwashing won't wash – the new sustainability imperative. EY. <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/insights/strategy/documents/ey-parthenon-greenwashing-wont-wash-the-new-sustainability-imperative-v2.pdf> ; The \$4 Trillion ESG Dividend, Bottom line benefits of adopting ESG practices. https://www.moore-global.com/MediaLibsAndFiles/media/MooreStephens2020/Documents/Moore_ESG_White-Paper_FINAL.pdf ; Meier, Jean-Marie and Servaes, Henri and Wei, Jiaying and Xiao, Steven Chong, Do Consumers Care About ESG? Evidence from Barcode-Level Sales Data (July 31, 2022). European Corporate Governance Institute – Finance Working Paper No. 926/2023, Available at SSRN: <https://ssrn.com/abstract=4260716> or <http://dx.doi.org/10.2139/ssrn.4260716>

105 WEF USA. (2015, January 24). Beyond Supply Chains - Empowering Responsible Value Chains. World Economic Forum. <https://www.weforum.org/publications/beyond-supply-chains-empowering-responsible-value-chains/> ; Thornton, L. M., Autry, C. W., Gligor, D. M., & Brik, A. B. (2013). Does Socially Responsible Supplier Selection Pay Off for Customer Firms? A Cross-Cultural Comparison. *The Journal of Supply Chain Management*, 49(3), 66-89. <https://doi.org/10.1111/jscm.12014>

106 "The \$44 Billion Sustainability Opportunity for Brands." Glow, 3BL [Triple Pundit], Cint. 2024. <https://2395431.fs1.hubspotusercontent-na1.net/hubfs/2395431/SRS/Size%20of%20Prize%20Reports/Size%20of%20Prize%20Report.pdf>

107 See: Nunes, C., Harrington, J., Madden, K., Rodheim, Z., Lim, X., Aboulamer, A., Jennerman, M., & Latz, K. (2023, September 13). *ESG and Global Investor Returns Study*. Kroll. <https://www.kroll.com/en/insights/publications/cost-of-capital/esg-global-investor-returns-study>; Bain & Company, The Visionary CEO's Guide to Sustainability. 2023. <https://www.bain.com/insights/topics/ceo-sustainability-guide/> 51 ; Oliver Eitelwein and Sean Paquet, Greenwashing won't wash – the new sustainability imperative. EY. <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/insights/strategy/documents/ey-parthenon-greenwashing-wont-wash-the-new-sustainability-imperative-v2.pdf>

108 See: Houston, Joel F. and Lin, Chen and Shan, Hongyu and Shen, Mo, How Does ESG Shape Consumption? (October 1, 2022). Available at SSRN: <https://ssrn.com/abstract=4243071> or <http://dx.doi.org/10.2139/ssrn.4243071>; Meier, Jean-Marie and Servaes, Henri and Wei, Jiaying and Xiao, Steven Chong, Do Consumers Care About ESG? Evidence from Barcode-Level Sales Data (July 31, 2022). European Corporate Governance Institute – Finance Working Paper No. 926/2023, Available at SSRN: <https://ssrn.com/abstract=4260716> or <http://dx.doi.org/10.2139/ssrn.4260716>; Daniel Aronson, "Why It's Good for Business When Customers Share Your Values." *MIT Sloan Management Review*. February 15, 2024. <https://sloanreview.mit.edu/article/why-its-good-for-business-when-customers-share-your-values/>

109 See: Tensie Whelan, David Linch. How organizations can use decarbonization to capture financial value and gain competitive advantage. PwC. July 11, 2025. <https://www.pwc.com/us/en/services/esg/library/decarb-enterprise-value.html> ; Randi Kronthal-Sacco, Tensie Whelan, Sustainable Market Share Index. NYU Stern Center for Sustainable Business. Updated April 2024. P2, 3 9, 10, 22

110 Tensie Whelan and David Linich, "A better way to market sustainable products." *Strategy and Business*. May 21, 2025. <https://www.strategy-business.com/article/A-better-way-to-market-sustainable-products>

111 <https://sustainablebrands.com/read/business-case/sustainable-share-index-illustrates-roi-for-sustainably-marketed-products> & Oliver Eitelwein and Sean Paquet, Greenwashing won't wash – the new sustainability imperative. EY. <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/insights/strategy/documents/ey-parthenon-greenwashing-wont-wash-the-new-sustainability-imperative-v2.pdf>.

- 112 See: Randi Kronthal-Sacco, Tensie Whelan, Sustainable Market Share Index. NYU Stern Center for Sustainable Business. Updated April 2024. P2, 3 9, 10, 22 ; Sherry Frey, Jordan Bar Am, Vinit Doshi, Anandi Malik, and Steve Noble, “Consumers care about sustainability—and back it up with their wallets.” McKinsey & Company. February 6, 2023. <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets>; Randi Kronthal-Sacco, Tensie Whelan, Sustainable Market Share Index. NYU Stern Center for Sustainable Business. Updated April 2024. P2, 9, 10, 22; Lyat Avidor Peleg, “The Key Factors Driving and Hampering F&B Sustainability.” Precognize. October 31, 2021. <https://www.precog.co/blog/sustainability-food-and-beverage-manufacturing/>
- 113 Caroline Wang, Sherry He. “Research: Products Labeled as Sustainable Sell Better.” *Harvard Business Review*. June 23, 2025. <https://hbr.org/2025/06/research-products-labeled-as-sustainable-sell-better>
- 114 See: Carsten Gerhardt, Markus Plack, Natalia Drost, “Why today’s pricing is sabotaging sustainability.” AT Kearney. 2020. <https://www.kenarney.com/industry/consumer-retail/article/-/insights/why-todays-pricing-is-sabotaging-sustainability>. P3 ; PwC. “PwC’s Voice of the Consumer Survey 2024 Shrinking the consumer trust deficit.” PwC. May 15, 2024. <https://www.pwc.com/gx/en/issues/c-suite-insights/voice-of-the-consumer-survey.html> ; Lesley Simeon, “Sustainability premium: 53% of consumers willing to pay 10% extra for sustainable food and drink.” YouGov.com. April 12, 2024. <https://business.yougov.com/content/49155-sustainability-premium-53-of-consumers-willing-to-pay-10-extra-for-sustainable-food-and-drink> ; Patrick De Pelsmacker, Liesbeth Driesen, and Glenn Rayp, “Do Consumers Care about Ethics? Willingness to Pay for Fair-Trade Coffee.” *The Journal of Consumer Affairs*, Winter 2005 Volume 39, Number 2
- 115 See: Randi Kronthal-Sacco, Tensie Whelan, Sustainable Market Share Index. NYU Stern Center for Sustainable Business. Updated April 2024. P2, 3 9, 10, 22 ; Tensie Whelan, David Linch. How organizations can use decarbonization to capture financial value and gain competitive advantage. PwC. July 11, 2025. <https://www.pwc.com/us/en/services/esg/library/decarb-enterprise-value.html>
- 116 Carsten Gerhardt, Markus Plack, Natalia Drost, “Why today’s pricing is sabotaging sustainability.” AT Kearney. 2020. <https://www.kenarney.com/industry/consumer-retail/article/-/insights/why-todays-pricing-is-sabotaging-sustainability>.
- 117 Carlyle Group, “Sustainable Pathways: 2024 ESG Report.” <https://www.carlyle.com/sites/default/files/2024-06/Carlyle-ESG-Report-2024.pdf>
- 118 Aldwinckle, R. (2023). Making Purpose Pay Inspiring Sustainable Living. Unilever. <https://www.unilever.com/files/3a8d41a0-ffba-4899-8a0b-4986be51e0d0/making-purpose-pay-inspiring-sustainable-living.pdf>
- 119 Helen Gurfel, “The Economic Case for Sustainability.” CBRE. <https://www.cbcreim.com/sustainability/the-economic-case-for-sustainability>
- 120 Indra K. Nooyi and Vijay Govindarajan, “Becoming a Better Corporate Citizen: How Pepsico Moved toward a Healthier Future.” *Harvard Business Review*. March-April, 2020
- 121 Karel Cool, Atalay Atasu, and Nathan Furr, “Make a Stronger Business Case for Sustainability.” *MIT Sloan Management Review*. July 9, 2024.
- 122 Carlyle Group, “Sustainable Pathways: 2024 ESG Report.” <https://www.carlyle.com/sites/default/files/2024-06/Carlyle-ESG-Report-2024.pdf>
- 123 See: Kokkanen, H., Sun, W. Companies, Meet Ethical Consumers: Strategic CSR Management to Impact Consumer Choice. *Journal of Business Ethics* 166, 403–423 (2020). <https://doi.org/10.1007/s10551-019-04145-4>; Sherry Frey, Jordan Bar Am, Vinit Doshi, Anandi Malik, and Steve Noble, “Consumers care about sustainability—and back it up with their wallets.” McKinsey & Company. February 6, 2023. <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets>; Karl Haller, Mary Wallace, Jane Cheung, and Sachin Gupta ; Lee, S. Y., Kim, Y., & Kim, Y. (2021). Engaging consumers with corporate social responsibility campaigns: The roles of interactivity, psychological empowerment, and identification. *Journal of Business Research*, 134, 507–517. <https://doi.org/10.1016/j.jbusres.2021.05.062> “Consumers want it all: Hybrid shopping, sustainability, and purpose-driven brands,” IBM Research Insights from the IBM Institute for Business Value in collaboration with National Retail Federation ; Brunk, K.H., de Boer, C. How do Consumers Reconcile Positive and Negative CSR-Related Information to Form an Ethical Brand Perception? A Mixed Method Inquiry. *Journal of Business Ethics* 161, 443–458 (2020). <https://doi.org/10.1007/s10551-018-3973-4>
- 124 See: Hofenk, D., van Birgelen, M., Bloemer, J. et al. How and When Retailers’ Sustainability Efforts Translate into Positive Consumer Responses: The Interplay Between Personal and Social Factors. *Journal of Business Ethics* 156, 473–492 (2019). <https://doi.org/10.1007/s10551-017-3616-1>; Spielmann, N. Green is the New White: How Virtue Motivates Green Product Purchase. *Journal of Business Ethics* 173, 759–776 (2021). <https://doi.org/10.1007/s10551-020-04493-6> ; Hofenk, D., van Birgelen, M., Bloemer, J. et al. How and When Retailers’ Sustainability Efforts Translate into Positive Consumer Responses: The Interplay Between Personal and Social Factors. *Journal*

of *Business Ethics* 156, 473–492 (2019). <https://doi.org/10.1007/s10551-017-3616-1>; Kliamenakis, A., Bodur, H.O. Moral Self-Signaling Benefits of Effortful Cause Marketing Campaigns. *Journal of Business Ethics* 190, 371–398 (2024). <https://doi.org/10.1007/s10551-023-05443-8>; Daniel Aronson, “Why It’s Good for Business When Customers Share Your Values.” *MIT Sloan Management Review*. February 15, 2024. <https://sloanreview.mit.edu/article/why-its-good-for-business-when-customers-share-your-values/>

125 Bernadette Kamleitner, Carina Thurridl, and Brett A.S. Martin, “A Cinderella Story: How Past Identity Salience Boosts Demand for Repurposed Products.” *Journal of Marketing* 2019, Vol. 83(6) 76–92. DOI: 10.1177/0022242919872156

126 Sun, Z.Q.; Yoon, S.J. What Makes People Pay Premium Price for Eco-Friendly Products? The Effects of Ethical Consumption Consciousness, CSR, and Product Quality. *Sustainability* 2022, 14, 15513. <https://doi.org/10.3390/su142315513>; Bernadette Kamleitner, Carina Thurridl, and Brett A.S. Martin, “A Cinderella Story: How Past Identity Salience Boosts Demand for Repurposed Products.” *Journal of Marketing* 2019, Vol. 83(6) 76–92. DOI: 10.1177/0022242919872156

127 See: Ross, S.M., Milne, G.R. Price? Quality? Or Sustainability? Segmenting by Disposition Toward Self-other Tradeoffs Predicts Consumers’ Sustainable Decision-Making. *Journal of Business Ethics* 172, 361–378 (2021). <https://doi.org/10.1007/s10551-020-04478-5>; Bain & Company, The Visionary CEO’s Guide to Sustainability. 2023. <https://www.bain.com/insights/topics/ceo-sustainability-guide/> 51

128 Dahlhoff, D. (2023, November 13). Communicate Sustainability in Near-Term Goals, Economic Gains, and Simple Words. The Conference Board. <https://www.conference-board.org/publications/communicate-sustainability-in-near-term-goals-economic-gains-and-simple-words>

129 “The \$44 Billion Sustainability Opportunity for Brands.” Glow, 3BL [Triple Pundit], Cint. 2024. <https://2395431.fs1.hubspotusercontent-na1.net/hubfs/2395431/SRS/Size%20of%20Prize%20Reports/Size%20of%20Prize%20Report.pdf>

130 Bain & Company, The Visionary CEO’s Guide to Sustainability. 2023. <https://www.bain.com/insights/topics/ceo-sustainability-guide/> 51

131 Afonso Vieira, V., Wolter, J. S., Falcão Araujo, C., & Saraiva Frio, R. (2023). What makes the corporate social responsibility impact on Customer-Company identification stronger? A meta-analysis. *International Journal of Research in Marketing*, 40(2), 475–492. <https://doi.org/10.1016/j.ijresmar.2022.09.002>

132 Bain & Company, The Visionary CEO’s Guide to Sustainability. 2023. <https://www.bain.com/insights/topics/ceo-sustainability-guide/> 51

133 See Patrick De Pelsmacker, Liesbeth Driesen, and Glenn Rayp, “Do Consumers Care about Ethics? Willingness to Pay for Fair-Trade Coffee.” *The Journal of Consumer Affairs*, Winter 2005 Volume 39, Number 2; Tensie Whelan, Randi Kronthal-Sacco, “Research: Actually, Consumers Do Buy Sustainable Products.” *Harvard Business Review*. June 19, 2019. <https://hbr.org/2019/06/research-actually-consumers-do-buy-sustainable-products>

134 See: Sherry Frey, Jordan Bar Am, Vinit Doshi, Anandi Malik, and Steve Noble, “Consumers care about sustainability—and back it up with their wallets.” McKinsey & Company. February 6, 2023. <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets>; Tensie Whelan, Randi Kronthal-Sacco, “Research: Actually, Consumers Do Buy Sustainable Products.” *Harvard Business Review*. June 19, 2019. <https://hbr.org/2019/06/research-actually-consumers-do-buy-sustainable-products>; Rebecca Doherty, Claudia Kampel, Anna Koivuniemi, Lucy Pérez, and Werner Rehm, “The triple play: Growth, profit, and sustainability.” McKinsey. August 9, 2023. <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/the-triple-play-growth-profit-and-sustainability#/>

135 See: Alex Bitektine, Fei Song, On the Role of Institutional Logics in Legitimacy Evaluations: The Effects of Pricing and CSR Signals on Organizational Legitimacy. *Journal of Management* Vol. 49 No. 3, March 2023 1070–1105 DOI: 10.1177/01492063211070274; [9] see Sherry Frey, Jordan Bar Am, Vinit Doshi, Anandi Malik, and Steve Noble, “Consumers care about sustainability—and back it up with their wallets.” McKinsey & Company. February 6, 2023. <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets>; IBM Institute for Business Value, “Balancing sustainability and profitability: How businesses can protect people, planet, and the bottom line.” IBM Institute for Business Value | Research Brief [In February 2022; Sun, Z.Q.; Yoon, S.J. What Makes People Pay Premium Price for Eco-Friendly Products? The Effects of Ethical Consumption Consciousness, CSR, and Product Quality. *Sustainability* 2022, 14, 15513. <https://doi.org/10.3390/su142315513>

136 See: Sun, Z.Q.; Yoon, S.J. What Makes People Pay Premium Price for Eco-Friendly Products? The Effects of Ethical Consumption Consciousness, CSR, and Product Quality. *Sustainability* 2022, 14, 15513. <https://doi.org/10.3390/su142315513>; IBM Institute for Business Value, “Balancing sustainability and profitability: How businesses can protect people, planet, and the bottom line.” IBM Institute for Business Value | Research Brief [In February 2022; Carsten Gerhardt, Markus Plack, Natalia Drost, “Why

today's pricing is sabotaging sustainability." AT Kearney. 2020. <https://www.kenarney.com/industry/consumer-retail/article/-/insights/why-todays-pricing-is-sabotaging-sustainability P3>.

137 Bain & Company, The Visionary CEO's Guide to Sustainability. 2023. <https://www.bain.com/insights/topics/ceo-sustainability-guide/ 51>

138 Carsten Gerhardt, Markus Plack, Natalia Drost, "Why today's pricing is sabotaging sustainability." AT Kearney. 2020. <https://www.kenarney.com/industry/consumer-retail/article/-/insights/why-todays-pricing-is-sabotaging-sustainability P3>; and Bain & Company, The Visionary CEO's Guide to Sustainability. 2023. <https://www.bain.com/insights/topics/ceo-sustainability-guide/ 51>

139 Bain & Company, The Visionary CEO's Guide to Sustainability. 2023. <https://www.bain.com/insights/topics/ceo-sustainability-guide/ 51>

140 Trinh, T., & Zhao, H. (2024). The effect of supplier CSR on customer-supplier relationship. *Journal of Business Research*, 185, 114909-. <https://doi.org/10.1016/j.jbusres.2024.114909>

141 Thornton, L. M., Autry, C. W., Gligor, D. M., & Brik, A. B. (2013). Does Socially Responsible Supplier Selection Pay Off for Customer Firms? A Cross-Cultural Comparison. *The Journal of Supply Chain Management*, 49(3), 66-89. <https://doi.org/10.1111/jscm.12014> & WEF USA. (2015, January 24). Beyond Supply Chains - Empowering Responsible Value Chains. World Economic Forum. <https://www.weforum.org/publications/beyond-supply-chains-empowering-responsible-value-chains/> ; and see Trinh, T., & Zhao, H. (2024). The effect of supplier CSR on customer-supplier relationship. *Journal of Business Research*, 185, 114909-. <https://doi.org/10.1016/j.jbusres.2024.114909> ; Khan, O., & Hinterhuber, A. (2024). Antecedents and consequences of procurement managers' willingness to pay for sustainability: a multi-level perspective. *International Journal of Operations & Production Management*, 44(13), 1-33. <https://doi.org/10.1108/IJOPM-02-2023-0135> ; Chen, C., & Ho, H. (2019). Who pays you to be green? How customers' environmental practices affect the sales benefits of suppliers' environmental practices. *Journal of Operations Management*, 65(4), 333-352. <https://doi.org/10.1002/joom.1018> ; Yang, Y., & Jiang, Y. (2023). Buyer-supplier CSR alignment and firm performance: A contingency theory perspective. *Journal of Business Research*, 154, 113340-. <https://doi.org/10.1016/j.jbusres.2022.113340>

142 Mukandwal, P. S., Cantor, D. E., Grimm, C. M., Elking, I., & Hofer, C. (2020). Do Firms Spend More on Suppliers That Have Environmental Expertise? An Empirical Study of U.S. Manufacturers' Procurement Spend. *Journal of Business Logistics*, 41(2), 129-148. <https://doi.org/10.1111/jbl.12248>

143 Trinh, T., & Zhao, H. (2024). The effect of supplier CSR on customer-supplier relationship. *Journal of Business Research*, 185, 114909-. <https://doi.org/10.1016/j.jbusres.2024.114909>

144 Khan, O., & Hinterhuber, A. (2024). Antecedents and consequences of procurement managers' willingness to pay for sustainability: a multi-level perspective. *International Journal of Operations & Production Management*, 44(13), 1-33. <https://doi.org/10.1108/IJOPM-02-2023-0135>

145 Swift, C., Guide, V. D. R., & Muthulingam, S. (2019). Does supply chain visibility affect operating performance? Evidence from conflict minerals disclosures. *Journal of Operations Management*, 65(5), 406-429. <https://doi.org/10.1002/joom.1021>

146 Golicic, S. L., & Smith, C. D. (2013). A Meta-Analysis of Environmentally Sustainable Supply Chain Management Practices and Firm Performance. *The Journal of Supply Chain Management*, 49(2), 78-95. <https://doi.org/10.1111/jscm.12006>

147 Chen, C., & Ho, H. (2019). Who pays you to be green? How customers' environmental practices affect the sales benefits of suppliers' environmental practices. *Journal of Operations Management*, 65(4), 333-352. <https://doi.org/10.1002/joom.1018>

148 PepsiCo, "PepsiCo Sustainability Initiatives Delivered More Than \$375 Million in Estimated Cost Savings Since 2010," September 24, 2015. Kurt Dassel, Xi Wang, "Social purpose and value creation: The business returns of social impact." Monitor Deloitte. 2016. <https://www2.deloitte.com/content/dam/Deloitte/uy/Documents/home/social-purpose-and-value-creation.pdf> P. 6.

149 WEF USA. (2015, January 24). Beyond Supply Chains - Empowering Responsible Value Chains. World Economic Forum. <https://www.weforum.org/publications/beyond-supply-chains-empowering-responsible-value-chains/>

150 Swift, C., Guide, V. D. R., & Muthulingam, S. (2019). Does supply chain visibility affect operating performance? Evidence from conflict minerals disclosures. *Journal of Operations Management*, 65(5), 406-429. <https://doi.org/10.1002/joom.1021> & Li, W., & Wang, Y. (2024). A Procurement Advantage in Disruptive Times: New Perspectives on ESG Strategy and Firm Performance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4817562>

151 Swift, C., Guide, V. D. R., & Muthulingam, S. (2019). Does supply chain visibility affect operating performance? Evidence from conflict minerals disclosures. *Journal of Operations Management*, 65(5), 406-429. <https://doi.org/10.1002/joom.1021> & Li, W., &

- Wang, Y. (2024). A Procurement Advantage in Disruptive Times: New Perspectives on ESG Strategy and Firm Performance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4817562>
- 152 Golcic, S. L., & Smith, C. D. (2013). A Meta-Analysis of Environmentally Sustainable Supply Chain Management Practices and Firm Performance. *The Journal of Supply Chain Management*, 49(2), 78–95. <https://doi.org/10.1111/jscm.12006>
- 153 Kim, S., & Chae, S. (2022). Shareholder Value Effects of Ethical Sourcing: Comparing Reactive and Proactive Initiatives. *Journal of Business Ethics*, 179(3), 887–906. <https://doi.org/10.1007/s10551-021-04841-0>
- 154 Axel Seemann, Sylvain Guyoton, Anna Bianchi, and Jacqueline Han, “Do ESG Efforts Create Value?” Bain & Company and EcoVadis. April 17, 2023. <https://www.bain.com/insights/do-esg-efforts-create-value/>
- 155 Swift, C., Guide, V. D. R., & Muthulingam, S. (2019). Does supply chain visibility affect operating performance? Evidence from conflict minerals disclosures. *Journal of Operations Management*, 65(5), 406–429. <https://doi.org/10.1002/joom.1021>
- 156 Swift, C., Guide, V. D. R., & Muthulingam, S. (2019). Does supply chain visibility affect operating performance? Evidence from conflict minerals disclosures. *Journal of Operations Management*, 65(5), 406–429. <https://doi.org/10.1002/joom.1021>
- 157 Zhang, Y., García Lara, J. M., & Tribó, J. A. (2020). Unpacking the black box of trade credit to socially responsible customers. *Journal of Banking & Finance*, 119, 105908-. <https://doi.org/10.1016/j.jbankfin.2020.105908> ; and see Yang, Y., Yao, S., He, H., & Ou, J. (2019). On corporate philanthropy of private firms and trade credit financing in China. *China Economic Review*, 57, 101316-. <https://doi.org/10.1016/j.chieco.2019.101316>
- 158 von Berlepsch, D., Lemke, F., & Gorton, M. (2024). The Importance of Corporate Reputation for Sustainable Supply Chains: A Systematic Literature Review, Bibliometric Mapping, and Research Agenda. *Journal of Business Ethics*, 189(1), 9–34. <https://doi.org/10.1007/s10551-022-05268-x> ; Croom, S., Vidal, N., Spetic, W., Marshall, D., & McCarthy, L. (2018). Impact of social sustainability orientation and supply chain practices on operational performance. *International Journal of Operations & Production Management*, 38(12), 2344–2366. <https://doi.org/10.1108/IJOPM-03-2017-0180>
- 159 Dong, Feng and Doukas, John A. and Zhang, Rongyao and Walton, Stephanie and Zhang, Yiyang, Do Major Customers Affect Suppliers' ESG Activities?. Available at SSRN: <https://ssrn.com/abstract=4577271> or <http://dx.doi.org/10.2139/ssrn.4577271>
- 160 Dong, Feng and Doukas, John A. and Zhang, Rongyao and Walton, Stephanie and Zhang, Yiyang, Do Major Customers Affect Suppliers' ESG Activities?. Available at SSRN: <https://ssrn.com/abstract=4577271> or <http://dx.doi.org/10.2139/ssrn.4577271>
- 161 Xu, Wenshuai and Yin, Yahua and Peng, Jianfei, Does ESG Performance Reduce the Company's Dependence on Major Customers? Evidence from China. Available at SSRN: <https://ssrn.com/abstract=4796443> or <http://dx.doi.org/10.2139/ssrn.4796443>
- 162 Trinh, T., & Zhao, H. (2024). The effect of supplier CSR on customer-supplier relationship. *Journal of Business Research*, 185, 114909-. <https://doi.org/10.1016/j.jbusres.2024.114909>
- 163 Mateska, I., Busse, C., Kach, A. P., & Wagner, S. M. (2023). Sustainability-related transgressions in global supply chains: When do legitimacy spillovers hurt buying firms the most? *The Journal of Supply Chain Management*, 59(4), 42–78. <https://doi.org/10.1111/jscm.12308>
- 164 Sun, Yicheng and Zhang, Wan and Liu, Yue (Lucy) and Tao, Qizhi, Do Suppliers' Adverse ESG Incidents Affect Corporate Customers?. Available at SSRN: <https://ssrn.com/abstract=4863232> or <http://dx.doi.org/10.2139/ssrn.4863232>
- 165 Carlyle Group, “Sustainable Pathways: 2024 ESG Report.” <https://www.carlyle.com/sites/default/files/2024-06/Carlyle-ESG-Report-2024.pdf>
- 166 Ashley Lutz, “How Nike shed its sweatshop image to dominate the shoe industry.” *Business Insider*. Jun 6, 2015. <https://www.businessinsider.com/how-nike-fixed-its-sweatshop-image-2015-6>
- 167 Tensie Whelan, Bruno Zappa, Rodrigo Zeidan, and Greg Fishbein, “How to Quantify Sustainability’s Impact on Your Bottom Line.” *Harvard Business Review*. September 13, 2017, Updated October 13, 2017. <https://hbr.org/2017/09/how-to-quantify-sustainabilitys-impact-on-your-bottom-line>
- 168 Opoku, R. A., Adomako, S., & Tran, M. D. (2023). Improving brand performance through environmental reputation: The roles of ethical behavior and brand satisfaction. *Industrial Marketing Management*, 108, 165–177. <https://doi.org/10.1016/j.indmarman.2022.11.011>
- 169 Jia, Fu, Seuring, Stefan, Chen, Lujie, Azadegan, Arash. Guest editorial: Supply chain transparency: opportunities, challenges and risks. *International Journal of Operations & Production Management*. Vol. 44 No. 9, 2024. pp. 1525-1538. DOI 10.1108/IJOPM-09-2024-992 ; Mollenkopf, D. A., Peinkofer, S. T., & Chu, Y. (J. (2022). Supply

chain transparency: Consumer reactions to incongruent signals. *Journal of Operations Management*, 68(4), 306–327. <https://doi.org/10.1002/joom.1180> ; Swift, C., Guide, V. D. R., & Muthulingam, S. (2019). Does supply chain visibility affect operating performance? Evidence from conflict minerals disclosures. *Journal of Operations Management*, 65(5), 406–429. <https://doi.org/10.1002/joom.1021> ; von Berlepsch, D., Lemke, F., & Gorton, M. (2024). The Importance of Corporate Reputation for Sustainable Supply Chains: A Systematic Literature Review, Bibliometric Mapping, and Research Agenda. *Journal of Business Ethics*, 189(1), 9–34. <https://doi.org/10.1007/s10551-022-05268-x> ; Kraft, T., Zheng, Y., O'Reilly for Higher Education, distributor, Safari, an O. M. C., O'Reilly for Higher Education, distributor, & Safari, an O. M. C. (2021). *How Supply Chain Transparency Boosts Business Value* (1st edition.). *MIT Sloan Management Review*.

170 Golicic, S. L., & Smith, C. D. (2013). A Meta-Analysis of Environmentally Sustainable Supply Chain Management Practices and Firm Performance. *The Journal of Supply Chain Management*, 49(2), 78–95. <https://doi.org/10.1111/jscm.12006> ; and see Yang, Y., & Jiang, Y. (2023). Buyer-supplier CSR alignment and firm performance: A contingency theory perspective. *Journal of Business Research*, 154, 113340–. <https://doi.org/10.1016/j.jbusres.2022.113340> ; El-Garaihy, W. H., Farag, T., Al Shehri, K., Centobelli, P., & Cerchione, R. (2024). Driving sustainability in supply chain management for a more inclusive and responsible future. *International Journal of Productivity and Performance Management*, 73(1), 43–84. <https://doi.org/10.1108/IJPPM-01-2022-0028> ; Mukandwal, P. S., Cantor, D. E., Grimm, C. M., Elking, I., & Hofer, C. (2020). Do Firms Spend More on Suppliers That Have Environmental Expertise? An Empirical Study of U.S. Manufacturers' Procurement Spend. *Journal of Business Logistics*, 41(2), 129–148. <https://doi.org/10.1111/jbl.12248>

171 See: Croom, S., Vidal, N., Spetic, W., Marshall, D., & McCarthy, L. (2018). Impact of social sustainability orientation and supply chain practices on operational performance. *International Journal of Operations & Production Management*, 38(12), 2344–2366. <https://doi.org/10.1108/IJOPM-03-2017-0180> ; Yang, Y., & Jiang, Y. (2023). Buyer-supplier CSR alignment and firm performance: A contingency theory perspective. *Journal of Business Research*, 154, 113340–. <https://doi.org/10.1016/j.jbusres.2022.113340>

172 See: von Berlepsch, D., Lemke, F., & Gorton, M. (2024). The Importance of Corporate Reputation for Sustainable Supply Chains: A Systematic Literature Review, Bibliometric Mapping, and Research Agenda. *Journal of Business Ethics*, 189(1), 9–34. <https://doi.org/10.1007/s10551-022-05268-x> ; Li, W., & Wang, Y. (2024). A Procurement Advantage in Disruptive Times: New Perspectives on ESG Strategy and Firm Performance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4817562>

173 Chen, C., & Ho, H. (2019). Who pays you to be green? How customers' environmental practices affect the sales benefits of suppliers' environmental practices. *Journal of Operations Management*, 65(4), 333–352. <https://doi.org/10.1002/joom.1018>

174 Shafiq, A., Johnson, P. F., & Klassen, R. D. (2022). Building synergies between operations culture, operational routines, and supplier monitoring: implications for buyer performance. *International Journal of Operations & Production Management*, 42(5), 687–712. <https://doi.org/10.1108/IJOPM-03-2021-0149>

175 Blome, C., Paulraj, A., Schuetz, K., & Helen Walker, P. S. S. (2014). Supply chain collaboration and sustainability: a profile deviation analysis. *International Journal of Operations & Production Management*, 34(5), 639–663. <https://doi.org/10.1108/IJOPM-11-2012-0515> and Golicic, S. L., & Smith, C. D. (2013). A Meta-Analysis of Environmentally Sustainable Supply Chain Management Practices and Firm Performance. *The Journal of Supply Chain Management*, 49(2), 78–95. <https://doi.org/10.1111/jscm.12006>

176 See: Ayton, J., Krasnikova, N., & Malki, I. (2022); Chollet, P., & Sandwidi, B. W. (2018); Malshe, A. V., Yin, Y., Colicev, A., Bart, Y., & Pauwels, K. (2023); Tzouvanas, P., Kizys, R., Chatziantoniou, I., & Sagitova, R. (2020); He, F., Liu, G., Hao, J., & Li, Y. (2023); Menla Ali, F., Wu, Y., & Zhang, X. (2024); Liu, D., Gu, K., & Hu, W. (2023)

177 Liu, S., Jin, J., & Nainar, K. (2023). Does ESG performance reduce banks' nonperforming loans? *Finance Research Letters*, 55, 103859–. <https://doi.org/10.1016/j.frl.2023.103859> ; Chen, H., Ho, K.-C., Zhang, M., & Zhang, Q. (2023). Effect of managerial ability toward corporate social responsibility on enterprise default risk. *Finance Research Letters*, 54, 103700–. <https://doi.org/10.1016/j.frl.2023.103700>

178 See: Albuquerque, R., Koskinen, Y., & Zhang, C. (2019). Corporate Social Responsibility and Firm Risk: Theory and Empirical Evidence. *Management Science*, 65(10), 4451–4469. <https://doi.org/10.1287/mnsc.2018.3043>; Jo, H., Kim, H., & Park, K. (n.d.). Seeking Legitimacy Through CSR: Evidence from Controversial Industries. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2591910>; Ernst, D., & Woithe, F. (2024). Impact of the Environmental, Social, and Governance Rating on the Cost of Capital: Evidence from the S&P 500. *Journal of Risk and Financial Management*, 17(3), 91–. <https://doi.org/10.3390/jrfm17030091>

179 See Eratalay, M. H., & Cortés Ángel, A. P. (2022). The impact of ESG ratings on the systemic risk of European blue-chip firms. *Journal of Risk and Financial Management*, 15(4), 1–41. <https://doi.org/10.3390/jrfm15040153>; Gidage, M., Bhide, S., Pahrkar, R., & Kolte, A. (2024). ESG Performance and Systemic Risk Nexus: Role of Firm-Specific Factors in Indian Companies. *Journal of Risk and Financial Management*, 17(9), 381–. <https://doi.org/10.3390/jrfm17090381>; Bax, K., Bonaccolto, G., & Paterlini, S. (2023). Do lower environmental, social, and governance (ESG) rated companies have higher systemic impact? Empirical evidence from Europe and the United States. *Corporate Social-Responsibility and Environmental Management*, 30(3), 1406–1420. <https://doi.org/10.1002/csr.2427>

- 180 Chollet, P., & Sandwidi, B. W. (2018); Tzouvanas, P., & Mamatzakis, E. C. (2021)
- 181 See Fung, J. K. W., Lam, F. Y. E., & Tse, Y. (2024); Fung, J. K. W., Lam, F. Y. E., & Tse, Y. (2024); Capelli, P., Ielasi, F., & Russo, A. (2023). Integrating ESG risks into value-at-risk. *Finance Research Letters*, 55, 103875-. <https://doi.org/10.1016/j.frl.2023.103875>; Zhang, J., & Zhang, Z. (2021). CSR, Media and Stock Illiquidity: Evidence from Chinese Listed Financial Firms. *Finance Research Letters*, 41, 101809-. <https://doi.org/10.1016/j.frl.2020.101809>; Li, Q., Shan, H., Tang, Y., Yao, V., & Goldstein, I. (2024). Corporate Climate Risk: Measurements and Responses. *The Review of Financial Studies*, 37(6), 1778-1830. <https://doi.org/10.1093/rfs/hhad094>
- 182 See: Wu, H., Zhang, K., & Li, R. (2024); Zhou, F., Zhu, J., Qi, Y., Yang, J., & An, Y. (2021); Huang, J., Li, Y., & Han, F. (2024)
- 183 Chen, F., Liu, Y., & Chen, X. (2024)
- 184 Witold (Vit) Henisz, Tim Gray. "Calculating the Net Present Value of Sustainability Initiatives at Newmont's Ahafo Mine in Ghana (B)." Wharton ESG Initiative. 2023. https://esg.wharton.upenn.edu/wp-content/uploads/2023/08/Ahafo-A_Wharton-ESG-Case-Study.pdf
- 185 Helen Gurfel, "The Economic Case for Sustainability." CBRE. <https://www.cbreim.com/sustainability/the-economic-case-for-sustainability>
- 186 Helen Gurfel, "The Economic Case for Sustainability." CBRE. <https://www.cbreim.com/sustainability/the-economic-case-for-sustainability>
- 187 Clayton, J.; Devaney, S.; Sayce, S. and van de Wetering, J. (2021) Climate Risk and Commercial Property Values: a review and analysis of the literature. <https://www.unepfi.org/industries/investment/climate-risk-and-commercial-property-values/>
- 188 Sun, W., Chen, S., Jiao, Y., & Feng, X. (2024). How does ESG constrain corporate earnings management
- 189 Khenissi, M., Jahmane, A., & Hofaidhlaoui, M. (2022). Does the introduction of CSR criteria into CEO incentive pay reduce their earnings management? The case of companies listed in the SBF 120. *Finance Research Letters*, 48, 102880-. <https://doi.org/10.1016/j.frl.2022.102880>
- 190 Sun, W., Chen, S., Jiao, Y., & Feng, X. (2024). How does ESG constrain corporate earnings management? Evidence from China. *Finance Research Letters*, 61, 104983-. <https://doi.org/10.1016/j.frl.2024.104983>
- 191 Sajko, M., Boone, C., & Buyl, T. (2021). CEO Greed, Corporate Social Responsibility, and Organizational Resilience to Systemic Shocks. *Journal of Management*, 47(4), 957-992. <https://doi.org/10.1177/0149206320902528>
- 192 See Li, D., Ma, C., Yang, J., & Li, H. (2024). ESG performance and corporate fraud. *Finance Research Letters*, 62, 105212-. <https://doi.org/10.1016/j.frl.2024.105212>; Wang, Y., Tai, P., & Pang, M. (2024). Corporate social responsibility and corporate fraud: The mediating effect of analyst attention. *Finance Research Letters*, 64, 105370-. <https://doi.org/10.1016/j.frl.2024.105370>
- 193 Zhang, J., Li, Y., Xu, H., & Ding, Y. (2023). Can ESG ratings mitigate managerial myopia? Evidence from Chinese listed companies. *International Review of Financial Analysis*, 90, 102878-. <https://doi.org/10.1016/j.irfa.2023.102878>
- 194 He, F., Du, H., & Yu, B. (2022). Corporate ESG performance and manager misconduct: Evidence from China. *International Review of Financial Analysis*, 82, 102201-. <https://doi.org/10.1016/j.irfa.2022.102201>
- 195 Boland, C. M., Ewelt-Knauer, C., & Schneider, J. (2022). The gift that keeps on giving: corporate giving and excessive risk-taking. *Zeitschrift Für Betriebswirtschaft*, 92(3), 355-396. <https://doi.org/10.1007/s11573-021-01063->
- 196 Flammer, C., & Luo, J. (2017). Corporate Social Responsibility As An Employee Governance Tool: Evidence From A Quasi-Experiment. *Strategic Management Journal*, 38(2), 163-183. <https://doi.org/10.1002/smj.2492>
- 197 Flammer, C., & Kacperczyk, A. (2019). Corporate social responsibility as a defense against knowledge spillovers: Evidence from the inevitable disclosure doctrine. *Strategic Management Journal*, 40(8), 1243-1267. <https://doi.org/10.1002/smj.3025>
- 198 These findings come from Fauser, D. V., & Utz, S. (2021). Risk Mitigation of Corporate Social Performance in US Class Action Lawsuits. *Financial Analysts Journal*, 77(2), 43-65. <https://doi.org/10.1080/0015198X.2020.1861896>
- 199 Chatjuthamard, P., Jiraporn, P., Sarajoti, P., & Singh, M. (2020). The effect of political risk on shareholder value and the mitigating role of corporate social responsibility (CSR). *Managerial Finance*, 46(10), 1217-1230. <https://doi.org/10.1108/MF-09-2019-0475>

- 200 Ho, S. S. H., Oh, C. H., & Shapiro, D. (2024). Can Corporate Social Responsibility Lead to Social License? A Sentiment and Emotion Analysis. *Journal of Management Studies*, 61(2), 445–476. <https://doi.org/10.1111/joms.12863>
- 201 Carlyle Group, “Sustainable Pathways: 2024 ESG Report.” <https://www.carlyle.com/sites/default/files/2024-06/Carlyle-ESG-Report-2024.pdf>
- 202 Ernst, D., & Woithe, F. (2024). Impact of the Environmental, Social, and Governance Rating on the Cost of Capital: Evidence from the S&P 500. *Journal of Risk and Financial Management*, 17(3), 91-. <https://doi.org/10.3390/jrfm17030091> ; Saeed, A., & Sroufe, R. P. (2021). Performance, risk, and cost of capital: Trends and opportunities for future CSR research. *Journal of Risk and Financial Management*, 14(12), 1–20. <https://doi.org/10.3390/jrfm14120586>
- 203 Alves, C. F., & Meneses, L. L. (2024). ESG scores and debt costs: Exploring indebtedness, agency costs, and financial system impact. *International Review of Financial Analysis*, 94, 103240-. <https://doi.org/10.1016/j.irfa.2024.103240>
- 204 Zhang, S., Xu, G., Shu, Y., & Zhu, J. (2024). Corporate ESG competitive disadvantage and cost of debt financing. *Finance Research Letters*, 69, 106102-. <https://doi.org/10.1016/j.frl.2024.106102>
- 205 Huynh, T. D., & Xia, Y. (2021). Climate Change News Risk and Corporate Bond Returns. *Journal of Financial and Quantitative Analysis*, 56(6), 1985–2009. <https://doi.org/10.1017/S0022109020000757>
- 206 Qian, K., Shi, B., Song, Y., & Wu, H. (2023). ESG performance and loan contracting in an emerging market. *Pacific-Basin Finance Journal*, 78, 101973-. <https://doi.org/10.1016/j.pacfin.2023.101973>
- 207 Saeed, A., & Sroufe, R. P. (2021). Performance, risk, and cost of capital: Trends and opportunities for future CSR research. *Journal of Risk and Financial Management*, 14(12), 1–20. <https://doi.org/10.3390/jrfm14120586>
- 208 Caiazza, S., Galloppo, G., & La Rosa, G. (2023). The mitigation role of corporate sustainability: Evidence from the CDS spread. *Finance Research Letters*, 52, 103561-. <https://doi.org/10.1016/j.frl.2022.103561>
- 209 Okimoto, T., & Takaoka, S. (2024). Sustainability and credit spreads in Japan. *International Review of Financial Analysis*, 91, 103052-. <https://doi.org/10.1016/j.irfa.2023.103052>
- 210 Srivastava, J., Sampath, A., & Gopalakrishnan, B. (2022). Is ESG the key to unlock debt financing during the COVID-19 pandemic? International evidence. *Finance Research Letters*, 49, 103125–103125. <https://doi.org/10.1016/j.frl.2022.103125>
- 211 Srivastava, J., Sampath, A., & Gopalakrishnan, B. (2022). Is ESG the key to unlock debt financing during the COVID-19 pandemic? *International evidence. Finance Research Letters*, 49, 103125–103125. <https://doi.org/10.1016/j.frl.2022.103125>
- 212 Qian, K., Shi, B., Song, Y., & Wu, H. (2023). ESG performance and loan contracting in an emerging market. *Pacific-Basin Finance Journal*, 78, 101973-. <https://doi.org/10.1016/j.pacfin.2023.101973>
- 213 Malich, J., Husi, A. (2024). MSCI ESG Ratings and Cost of Capital. MSCI Inc. <https://www.msci.com/www/research-report/msci-esg-ratings-and-cost-of/04811577649>
- 214 Tensie Whelan, David Linch. How organizations can use decarbonization to capture financial value and gain competitive advantage. PwC. July 11, 2025. <https://www.pwc.com/us/en/services/esg/library/decarb-enterprise-value.html>
- 215 Malich, J., Husi, A. (2024). MSCI ESG Ratings and Cost of Capital. MSCI Inc. <https://www.msci.com/www/research-report/msci-esg-ratings-and-cost-of/04811577649>
- 216 Morrow, Doug, Vezér, Martin, Apostol, Andrei, Vosburg, Kasey (2017/12/01). “Understanding ESG incidents: key lessons for investors”. DOI 10.13140/RG.2.2.34130.66247
- 217 Treepongkaruna, S., Kyaw, K., & Jiraporn, P. (2022). Shareholder litigation rights and ESG controversies: A quasi-natural experiment. *International Review of Financial Analysis*, 84, 102396-. <https://doi.org/10.1016/j.irfa.2022.102396>
- 218 Chichernea, Doina and Hughen, John Christopher and Petkevich, Alex, ESG News and Corporate Bond Pricing. (2024) Available at SSRN: <https://ssrn.com/abstract=4873301> or <http://dx.doi.org/10.2139/ssrn.4873301>
- 219 Subramanian, S. (2020). “ESG Viewpoint: BofA Securities”. RepRisk
- 220 Stäbler, S., & Fischer, M. (2020). When Does Corporate Social Irresponsibility Become News? Evidence from More Than 1,000 Brand Transgressions Across Five Countries. *Journal of Marketing*, 84(3), 46–67. <https://doi.org/10.1177/0022242920911907>

- 221 Wong, J. B., & Zhang, Q. (2024). ESG reputation risks, cash holdings, and payout policies. *Finance Research Letters*, 59, 104695-. <https://doi.org/10.1016/j.frl.2023.104695>
- 222 Subramanian, S. (2020). "ESG Viewpoint: BofA Securities". RepRisk
- 223 Fauser, D. V., & Utz, S. (2021). Risk Mitigation of Corporate Social Performance in US Class Action Lawsuits. *Financial Analysts Journal*, 77(2), 43–65. <https://doi.org/10.1080/0015198X.2020.1861896>
- 224 Chasiotis, I., Gounopoulos, D., Konstantios, D., Naoum, V., & Patsika, V. (2024). Does ESG reputational risk affect the efficiency and speed of adjustment of corporate investment? European Financial Management : *The Journal of the European Financial Management Association*, 30(2), 839–878. <https://doi.org/10.1111/eufm.12470>
- 225 Helen Gurfel, "The Economic Case for Sustainability." CBRE. <https://www.cbrem.com/sustainability/the-economic-case-for-sustainability>
- 226 Julie Manning, Brian Klinksiek, Elena Alschuler, Tobias Lindqvist, Heidi Hannah, Kamya Miglani, Frederik Burmester, Amanda Chiang. "What is the Value of Green?" LaSalle. 2023. <https://www.lasalle.com/wp-content/uploads/2023/09/lasalle-value-of-green-sept-11-2023.pdf>
- 227 Carlyle Group, "The EBITDA of ESG: 2023 ESG Report." <https://www.carlyle.com/sites/default/files/2023-06/Carlyle-ESG-Report-2023.pdf>
- 228 See: He, G., Liu, Y., & Chen, F. (2023). Research on the impact of environment, society, and governance (ESG) on firm risk: An explanation from a financing constraints perspective. *Finance Research Letters*, 58, 104038-. <https://doi.org/10.1016/j.frl.2023.104038> ; Albuquerque, R., Koskinen, Y., & Zhang, C. (2019) ; Li, Q., Shan, H., Tang, Y., Yao, V., & Goldstein, I. (2024). Corporate Climate Risk: Measurements and Responses. *The Review of Financial Studies*, 37(6), 1778–1830. <https://doi.org/10.1093/rfs/hhad094> ; Zhao, W., Liang, Y., & Li, P. (2023) ; DesJardine, M., Bansal, P., & Yang, Y. (2019) ; Ding, X., Ren, Y., Tan, W., & Wu, H. (2023) ; Zhao, X., & Zhang, H. (2024) ; Becchetti, L., Cucinelli, D., Ielasi, F., & Rossolini, M. (2023) ; Gao, L., He, J. (Jack), & Wu, J. (Julie). (2024) ; DasGupta, R. (2022). Financial performance shortfall, ESG controversies, and ESG performance: Evidence from firms around the world. *Finance Research Letters*, 46, 102487-. <https://doi.org/10.1016/j.frl.2021.102487> ; Flammer, C., & Kacperczyk, A. (2019). Corporate social responsibility as a defense against knowledge spillovers: Evidence from the inevitable disclosure doctrine. *Strategic Management Journal*, 40(8), 1243–1267. <https://doi.org/10.1002/smj.3025> ; Chatjuthamard, P., Jiraporn, P., Sarajoti, P., & Singh, M. (2020). The effect of political risk on shareholder value and the mitigating role of corporate social responsibility (CSR). *Managerial Finance*, 46(10), 1217–1230. <https://doi.org/10.1108/MF-09-2019-0475>
- 229 See: Ni, J., Jin, S., Hu, Y., & Zhang, L. (2023) ; He, F., Qin, S., Liu, Y., & Wu, J. (George). (2022). CSR and idiosyncratic risk: Evidence from ESG information disclosure. *Finance Research Letters*, 49, 102936-. <https://doi.org/10.1016/j.frl.2022.102936> ; Li, Q., Li, T., & Zhang, Y. (2024). ESG performance, heterogeneous creditors, and bond financing costs: Firm-level evidence. *Finance Research Letters*, 66, 105527-. <https://doi.org/10.1016/j.frl.2024.105527> ; Rouine, I., Ammari, A., & Bruna, M. G. (2022). Nonlinear impacts of CSR performance on firm risk: New evidence using a panel smooth threshold regression. *Finance Research Letters*, 47, 102721-. <https://doi.org/10.1016/j.frl.2022.102721> ; Zhang, X., Zhang, J., Zhu, Y., & Shen, J. (2023). Presentation of Social Responsibility Reports and the Stock Price Crash Risk. *Finance Research Letters*, 57, 104267-. <https://doi.org/10.1016/j.frl.2023.104267> ; He, L., & Ismail, K. (2024). ESG information disclosure, industrial policy support, debt financing costs. *Finance Research Letters*, 66, 105630-. <https://doi.org/10.1016/j.frl.2024.105630>
- 230 Malshe, A. V., Yin, Y., Colicev, A., Bart, Y., & Pauwels, K. (2023) ; Albuquerque, R., Koskinen, Y., & Zhang, C. (2019)
- 231 See: Wang, T., & Yang, B. (2023). Corporate social responsibility, stakeholders' governance and idiosyncratic risk. *Finance Research Letters*, 57, 104215-. <https://doi.org/10.1016/j.frl.2023.104215> ; Rouine, I., Ammari, A., & Bruna, M. G. (2022). Nonlinear impacts of CSR performance on firm risk: New evidence using a panel smooth threshold regression. *Finance Research Letters*, 47, 102721-. <https://doi.org/10.1016/j.frl.2022.102721> ; Pathak, R., & Gupta, R. D. (2022). Environmental, social and governance performance and earnings management – The moderating role of law code and creditor's rights. *Finance Research Letters*, 47, 102849-. <https://doi.org/10.1016/j.frl.2022.102849> ; Feng, J., Goodell, J. W., & Shen, D. (2022). ESG rating and stock price crash risk: Evidence from China. *Finance Research Letters*, 46, 102476-. <https://doi.org/10.1016/j.frl.2021.102476> ; Zhang, S., Xu, G., Shu, Y., & Zhu, J. (2024). Corporate ESG competitive disadvantage and cost of debt financing. *Finance Research Letters*, 69, 106102-. <https://doi.org/10.1016/j.frl.2024.106102> ; Li, D., Ma, C., Yang, J., & Li, H. (2024). ESG performance and corporate fraud. *Finance Research Letters*, 62, 105212-. <https://doi.org/10.1016/j.frl.2024.105212>
- 232 See: Li, D., Ma, C., Yang, J., & Li, H. (2024). ESG performance and corporate fraud. *Finance Research Letters*, 62, 105212-. <https://doi.org/10.1016/j.frl.2024.105212> ; Menla Ali, F., Wu, Y., & Zhang, X. (2024). ESG disclosure, CEO power and incentives and corporate risk-taking. *European Financial Management : The Journal of the European Financial Management Association*, 30(2), 961–1011. <https://doi.org/10.1111/eufm.12447> ; Rouine, I., Ammari, A., & Bruna, M. G. (2022). Nonlinear impacts of CSR performance on firm risk: New evidence using a panel smooth threshold regression. *Finance Research*

Letters, 47, 102721-. <https://doi.org/10.1016/j.frl.2022.102721> ; Pathak, R., & Gupta, R. D. (2022). Environmental, social and governance performance and earnings management – The moderating role of law code and creditor’s rights. *Finance Research Letters*, 47, 102849-. <https://doi.org/10.1016/j.frl.2022.102849> ; Wang, T., & Yang, B. (2023). Corporate social responsibility, stakeholders’ governance and idiosyncratic risk. *Finance Research Letters*, 57, 104215-. <https://doi.org/10.1016/j.frl.2023.104215> ; Feng, J., Goodell, J. W., & Shen, D. (2022). ESG rating and stock price crash risk: Evidence from China. *Finance Research Letters*, 46, 102476-. <https://doi.org/10.1016/j.frl.2021.102476> ; Zhang, S., Xu, G., Shu, Y., & Zhu, J. (2024). Corporate ESG competitive disadvantage and cost of debt financing. *Finance Research Letters*, 69, 106102-. <https://doi.org/10.1016/j.frl.2024.106102> ; Li, D., Ma, C., Yang, J., & Li, H. (2024). ESG performance and corporate fraud. *Finance Research Letters*, 62, 105212-. <https://doi.org/10.1016/j.frl.2024.105212>

233 See: Ben Hmiden, O., Rjiba, H., & Saadi, S. (2022). Competition through environmental CSR engagement and cost of equity capital. *Finance Research Letters*, 47, 102773-. <https://doi.org/10.1016/j.frl.2022.102773> ; Li, Q., Shan, H., Tang, Y., Yao, V., & Goldstein, I. (2024). Corporate Climate Risk: Measurements and Responses. *The Review of Financial Studies*, 37(6), 1778–1830. <https://doi.org/10.1093/rfs/hhad094> ; Ding, X., Ren, Y., Tan, W., & Wu, H. (2023) ; Nguyen, D. T., Tran, V. T., & Phan, D. H. B. (2023). Does green activity impact stock price crash risk? The role of climate risk. *Finance Research Letters*, 55, 103879-. <https://doi.org/10.1016/j.frl.2023.103879> ; Nguyen, D. T., Tran, V. T., & Phan, D. H. B. (2023). Does green activity impact stock price crash risk? The role of climate risk. *Finance Research Letters*, 55, 103879-. <https://doi.org/10.1016/j.frl.2023.103879> ; Li, Q., Shan, H., Tang, Y., Yao, V., & Goldstein, I. (2024). Corporate Climate Risk: Measurements and Responses. *The Review of Financial Studies*, 37(6), 1778–1830. <https://doi.org/10.1093/rfs/hhad094>

234 Bich Ngoc Le & Dirk Morschett (2024) How EMNEs and DMNEs can attract applicants in emerging and developed countries – a cross-national conjoint analysis on the role of country-of-origin and CSR, *The International Journal of Human Resource Management*, 35:8, 1449-1485, DOI: 10.1080/09585192.2023.2297053 ; see also Yassin, Y., Beckmann, M. CSR and employee outcomes: a systematic literature review. *Management Review Quarterly* (2024). <https://doi.org/10.1007/s11301-023-00389-7> ; Joseph, Nnamdi, The Impact of Corporate Social Responsibility on Employee Engagement and Organizational Performance: A Systematic Review. (May 5, 2023). Available at SSRN: <https://ssrn.com/abstract=4805695> or <http://dx.doi.org/10.2139/ssrn.4805695>

235 Benevity Labs Report. Goodness Engagement Study. 2023. <https://benevity.com/giving-volunteering-link-to-employee-retention> ; and see Tensie Whelan and Carly Fink. *Harvard Business Review*. October 21, 2016. <https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability> ; Nate Dvorak, “Three Ways Mission-Driven Workplaces Perform Better.” Gallup. May 4, 2017. <https://news.gallup.com/opinion/gallup/209849/ways-mission-driven-workplaces-perform-better.aspx> ; Sides, R.

R., & Skelly, L. (2022). Why making good on green promises can be a win for retailers : retailers that take the lead on engaging employees on environmental sustainability can strengthen culture, talent retention, and employee satisfaction ([First edition].). *MIT Sloan Management Review* ; Yassin, Y., Beckmann, M. CSR and employee outcomes: a systematic literature review. *Management Review Quarterly* (2024). <https://doi.org/10.1007/s11301-023-00389-7> ; Joseph, Nnamdi, The Impact of Corporate Social Responsibility on Employee Engagement and Organizational Performance: A Systematic Review. (May 5, 2023). Available at SSRN: <https://ssrn.com/abstract=4805695> or <http://dx.doi.org/10.2139/ssrn.4805695>

236 See: Tensie Whelan and Carly Fink. *Harvard Business Review*. October 21, 2016. <https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability> ; Sides, R., & Skelly, L. (2022). Why making good on green promises can be a win for retailers : retailers that take the lead on engaging employees on environmental sustainability can strengthen culture, talent retention, and employee satisfaction ([First edition].). *MIT Sloan Management Review* ; Greer Gosnell & John List & Robert Metcalfe, 2017. "A new approach to an age-old problem: solving externalities by incenting workers directly," GRI Working Papers 262, Grantham Research Institute on Climate Change and the Environment

237 Delmas, M.A. and Pekovic, S. (2013), Environmental standards and labor productivity: Understanding the mechanisms that sustain sustainability. *Journal of Organizational Behavior*, 34: 230-252. <https://doi.org/10.1002/job.1827> ; and see Gubler, T., Larkin, I., & Pierce, L. (2018). Doing Well by Making Well: The Impact of Corporate Wellness Programs on Employee Productivity. *Management Science*, 64(11), 4967–4987. <https://doi.org/10.1287/mnsc.2017.2883> ; Carol Newman, John Rand, Finn Tarp & Neda Trifkovic (2020) Corporate Social Responsibility in a Competitive Business Environment, *The Journal of Development Studies*, 56:8, 1455-1472, DOI: 10.1080/00220388.2019.1694144

238 Krueger, Philipp and Metzger, Daniel and Wu, Jiaxin, The Sustainability Wage Gap (November 3, 2023). Swedish House of Finance Research Paper No. 20-14, European Corporate Governance Institute – Finance Working Paper 718/2020, Swiss Finance Institute Research Paper No. 21-17, Available at SSRN: <https://ssrn.com/abstract=3672492> or <http://dx.doi.org/10.2139/ssrn.3672492> ; see also Bich Ngoc Le & Dirk Morschett (2024) How EMNEs and DMNEs can attract applicants in emerging and developed countries – a cross-national conjoint analysis on the role of country-of-origin and CSR, *The International Journal of Human Resource Management*, 35:8, 1449-1485, DOI: 10.1080/09585192.2023.2297053 ; Burbano, V. C. (2016). Social Responsibility Messages and Worker Wage Requirements: Field Experimental Evidence from Online Labor Marketplaces. *Organization Science* (Providence, R.I.), 27(4), 1010–1028. <https://doi.org/10.1287/orsc.2016.1066>

239 Christian Ehl, Tina Mavraki, "The Triple Bottom Line: How Sustainability Transforms Employee Behavior." Stanton Chase. November, 2023. <https://www.stantonchase.com/insights/blog/the-triple-bottom-line-how-sustainability-transforms-employee-behavior>

240 Polman, P., & Bhattacharya, C. B. (2016). Engaging Employees to Create a Sustainable Business. *Stanford Social Innovation Review*, 14(4), 34–39. <https://doi.org/10.48558/30F3-S174> accessed via https://ssir.org/articles/entry/engaging_employees_to_create_a_sustainable_business#

241 Tensie Whelan, Bruno Zappa, Rodrigo Zeidan, and Greg Fishbein, "How to Quantify Sustainability's Impact on Your Bottom Line." *Harvard Business Review*. September 13, 2017, Updated October 13, 2017. <https://hbr.org/2017/09/how-to-quantify-sustainability-impact-on-your-bottom-line>

242 Tensie Whelan and Carly Fink October 21, 2016 *Harvard Business Review* <https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability>

243 Christian Ehl, Tina Mavraki, "The Triple Bottom Line: How Sustainability Transforms Employee Behavior." Stanton Chase. November, 2023. <https://www.stantonchase.com/insights/blog/the-triple-bottom-line-how-sustainability-transforms-employee-behavior>

244 Greer Gosnell & John List & Robert Metcalfe, 2017. "A new approach to an age-old problem: solving externalities by incenting workers directly," GRI Working Papers 262, Grantham Research Institute on Climate Change and the Environment

245 Nate Dvorak, "Three Ways Mission-Driven Workplaces Perform Better." Gallup. May 4, 2017. <https://news.gallup.com/opinion/gallup/209849/ways-mission-driven-workplaces-perform-better.aspx> ; and see Kim, J.Y., Keane, A. Corporate social responsibility and performance in the workplace: a meta-analysis. *Int J Educ Vocat Guidance* (2023). <https://doi.org/10.1007/s10775-023-09581-3> ; Krueger, Philipp and Metzger, Daniel and Wu, Jiaxin, The Sustainability Wage Gap (November 3, 2023). Swedish House of Finance Research Paper No. 20-14, European Corporate Governance Institute – Finance Working Paper 718/2020, Swiss Finance Institute Research Paper No. 21-17, Available at SSRN: <https://ssrn.com/abstract=3672492> or <http://dx.doi.org/10.2139/ssrn.3672492>

246 These findings are drawn from: Zhao, X., Wu, C., Chen, C. C., & Zhou, Z. (2022). The Influence of Corporate Social Responsibility on Incumbent Employees: A Meta-Analytic Investigation of the Mediating and Moderating Mechanisms. *Journal of Management*, 48(1), 114–146. <https://doi.org/10.1177/0149206320946108> ; Noh, S. N. S.

(2021). CSR and Employee Performance: A Systematic Literature Review Approach. *International Journal of Academic Research in Business and Social Sciences*, 11(9), 863–872. ; Yassin, Y., Beckmann, M. CSR and employee outcomes: a systematic literature review. *Management Review Quarterly* (2024). <https://doi.org/10.1007/s11301-023-00389-7> ; Yassin, Y., Beckmann, M. CSR and employee outcomes: a systematic literature review. *Management Review Quarterly* (2024). <https://doi.org/10.1007/s11301-023-00389-7> ; Hong-yan, W., & Zhi-Xia, C. (2022). Corporate social responsibility and job applicant attraction: A moderated-mediation model. *PLOS One*, 17(3) doi:<https://doi.org/10.1371/journal.pone.0260125> ; Joseph, Nnamdi, The Impact of Corporate Social Responsibility on Employee Engagement and Organizational Performance: A Systematic Review. (May 5, 2023). Available at SSRN: <https://ssrn.com/abstract=4805695> or <http://dx.doi.org/10.2139/ssrn.4805695> ; Soni, Deepali, and Pooja Mehta. "Manifestation of Internal CSR on Employee Engagement: Mediating Role of Organizational Trust." *Indian Journal of Industrial Relations* 55, no. 3 (2020): 441–59. <https://www.jstor.org/stable/27199276>. ; Bachrach, D. G., Vlachos, P. A., Irwin, K., & Morgeson, F. P. (2022). Does "how" firms invest in corporate social responsibility matter? An attributional model of job seekers' reactions to configurational variation in corporate social responsibility. *Human Relations*, 75(3), 532–559. <https://doi.org/10.1177/0018726720971036> ; Casher D. Belinda, James W. Westerman, Shawn M. Bergman, Recruiting with ethics in an online era: Integrating corporate social responsibility with social media to predict organizational attractiveness, *Journal of Vocational Behavior*, Volume 109, 2018, Pages 101–117, ISSN 0001-8791, <https://doi.org/10.1016/j.jvb.2018.10.001> ; Panagiota, M., Andreas, K., Georgios, T., & Dimitrios, F. (2023). The Effect of Corporate Social Responsibility Culture on Greek Internal Auditors' Organizational Commitment. *Theoretical Economics Letters*, 13, 1224–1240. <https://doi.org/10.4236/tel.2023.135067> ; Rzaev, Rafiq, Impact of Organizational Identification on the Relationship between CSR and Employee Outcomes. Available at SSRN: <https://ssrn.com/abstract=4824310> or <http://dx.doi.org/10.2139/ssrn.4824310> ; Chatzopoulou, E., Manolopoulos, D., & Agapitou, V. (2022). Corporate social responsibility and employee outcomes: Interrelations of external and internal orientations with job satisfaction and organizational commitment: JBE. *Journal of Business Ethics*, 179(3), 795–817. doi:<https://doi.org/10.1007/s10551-021-04872-7> ; Lechuga Sancho, M. P., Martínez-Martínez, D., Larran Jorge, M., & Herrera Madueño, J. (2018). Understanding the link between socially responsible human resource management and competitive performance in SMEs. *Personnel Review*, 47(6), 1211–1243. <https://doi.org/10.1108/PR-05-2017-0165> ; Noh, S. N. S. (2021). CSR and Employee Performance: A Systematic Literature Review Approach. *International Journal of Academic Research in Business and Social Sciences*, 11(9), 863–872.; Kim, J.Y., Keane, A. Corporate social responsibility and performance in the workplace: a meta-analysis. *Int J Educ Vocat Guidance* (2023). <https://doi.org/10.1007/s10775-023-09581-3> ; Gubler, T., Larkin, I., & Pierce, L. (2018). Doing Well by Making Well: The Impact of Corporate Wellness Programs on Employee Productivity. *Management Science*, 64(11), 4967–4987. <https://doi.org/10.1287/mnsc.2017.2883> ; Cheng, Y.; Wang, Y.; Pan, F. The Impact of CSR Perceptions on Employees' Turnover Intention during the COVID-19 Crisis in China. *International Journal of Environmental Research and Public Health* 2022, 19,8297. <https://doi.org/10.3390/ijerph19148297> ; Ouakouak, M. L., Arya,

B., & Zaitouni, M. (2020). Corporate social responsibility and intention to quit: Mediating role of organizational citizenship behavior. *International Journal of Productivity and Performance Management*, 69(3), 447-465. <https://doi.org/10.1108/IJPPM-02-2019-0087> ; Bachrach, D. G., Vlachos, P. A., Irwin, K., & Morgeson, F. P. (2022). Does “how” firms invest in corporate social responsibility matter? An attributional model of job seekers’ reactions to configurational variation in corporate social responsibility. *Human Relations*, 75(3), 532-559. <https://doi.org/10.1177/0018726720971036>

247 See: Yassin, Y., Beckmann, M. CSR and employee outcomes: a systematic literature review. *Management Review Quarterly* (2024). <https://doi.org/10.1007/s11301-023-00389-7>; Sides, R. R., & Skelly, L. (2022). Why making good on green promises can be a win for retailers : retailers that take the lead on engaging employees on environmental sustainability can strengthen culture, talent retention, and employee satisfaction ([First edition].). *MIT Sloan Management Review*. ; Elizabeth Payes. Deloitte Insights. In a competitive labor market for retail workers, sustainability programs could give employers an edge. 06 April 2023 ; Cheng, Y.; Wang, Y.; Pan, F. The Impact of CSR Perceptions on Employees’ Turnover Intention during the COVID-19 Crisis in China. *International Journal of Environmental Research and Public Health* 2022, 19,8297. <https://doi.org/10.3390/ijerph19148297> ; Joseph, Nnamdi, The Impact of Corporate Social Responsibility on Employee Engagement and Organizational Performance: A Systematic Review. (May 5, 2023). Available at SSRN: <https://ssrn.com/abstract=4805695> or <http://dx.doi.org/10.2139/ssrn.4805695> ; Stephan Meier and Lea Cassar, Stop Talking About How CSR Helps Your Bottom Line. *Harvard Business Review*. January 31, 2018. <https://hbr.org/2018/01/stop-talking-about-how-csr-helps-your-bottom-line> ; Glavas A (2016) Corporate Social Responsibility and Employee Engagement: Enabling Employees to Employ More of Their Whole Selves at Work. *Front. Psychol.* 7:796. doi: 10.3389/fpsyg.2016.00796

248 See: Hong-yan, W., & Zhi-Xia, C. (2022). Corporate social responsibility and job applicant attraction: A moderated-mediation model. *PLoS One*, 17(3) doi:<https://doi.org/10.1371/journal.pone.0260125> ; Chatzopoulou, E., Manolopoulos, D., & Agapitou, V. (2022). Corporate social responsibility and employee outcomes: Interrelations of external and internal orientations with job satisfaction and organizational commitment: *Journal of Business Ethics*, 179(3), 795-817. doi:<https://doi.org/10.1007/s10551-021-04872-7> ; Cheng, Y.; Wang, Y.; Pan, F. The Impact of CSR Perceptions on Employees’ Turnover Intention during the COVID-19 Crisis in China. *International Journal of Environmental Research and Public Health* 2022, 19,8297. <https://doi.org/10.3390/ijerph19148297> ; Yassin, Y., Beckmann, M. CSR and employee outcomes: a systematic literature review. *Management Review Quarterly* (2024). <https://doi.org/10.1007/s11301-023-00389-7> ; Stephan Meier and Lea Cassar, Stop Talking About How CSR Helps Your Bottom Line. *Harvard Business Review*. January 31, 2018. <https://hbr.org/2018/01/stop-talking-about-how-csr-helps-your-bottom-line> ; Glavas A (2016) Corporate Social Responsibility and Employee Engagement: Enabling Employees to Employ More of Their Whole Selves at Work. *Front. Psychol.* 7:796. doi: 10.3389/fpsyg.2016.00796 ; Hong-yan, W., & Zhi-Xia,

C. (2022). Corporate social responsibility and job applicant attraction: A moderated-mediation model. *PLoS One*, 17(3) doi:<https://doi.org/10.1371/journal.pone.0260125> ; Delmas, M.A. and Pekovic, S. (2013), Environmental standards and labor productivity: Understanding the mechanisms that sustain sustainability. *Journal of Organizational Behavior*, 34: 230-252. <https://doi.org/10.1002/job.1827>

249 See: Vinerean, S., Cetina, I. and Dumitrescu, L., 2013. Modeling Employee Satisfaction in Relation to CSR Practices and Attraction and Retention of Top Talent. *Expert Journal of Business and Management*, 1(1), pp.4-14 ; Bode, C., Singh, J., & Rogan, M. (2015). Corporate Social Initiatives and Employee Retention. *Organization Science* (Providence, R.I.), 26(6), 1702-1720. <https://doi.org/10.1287/orsc.2015.1006> ; Vinerean, S., Cetina, I. and Dumitrescu, L., 2013. Modeling Employee Satisfaction in Relation to CSR Practices and Attraction and Retention of Top Talent. *Expert Journal of Business and Management*, 1(1), pp.4-14 ; Lin, C.-P., & Liu, M.-L. (2017). Examining the effects of corporate social responsibility and ethical leadership on turnover intention. *Personnel Review*, 46(3), 526-550. <https://doi.org/10.1108/PR-11-2015-0293> ; Joseph, Nnamdi, The Impact of Corporate Social Responsibility on Employee Engagement and Organizational Performance: A Systematic Review. (May 5, 2023). Available at SSRN: <https://ssrn.com/abstract=4805695> or <http://dx.doi.org/10.2139/ssrn.4805695>

250 See: Delmas, M.A. and Pekovic, S. (2013), Environmental standards and labor productivity: Understanding the mechanisms that sustain sustainability. *Journal of Organizational Behavior*, 34: 230-252. <https://doi.org/10.1002/job.1827> ; Sides, R. R., & Skelly, L. (2022). Why making good on green promises can be a win for retailers : retailers that take the lead on engaging employees on environmental sustainability can strengthen culture, talent retention, and employee satisfaction ([First edition].). *MIT Sloan Management Review*. Elizabeth Payes. Deloitte Insights. In a competitive labor market for retail workers, sustainability programs could give employers an edge. 06 April 2023

251 Harvey Schwartz, Carlyle Group, “The EBITDA of ESG: 2023 ESG Report.” <https://www.carlyle.com/sites/default/files/2023-06/Carlyle-ESG-Report-2023.pdf>

252 DasGupta, R. (2022). Financial performance shortfall, ESG controversies, and ESG performance: Evidence from firms around the world. *Finance Research Letters*, 46, 102487-. <https://doi.org/10.1016/j.frl.2021.102487>

253 See: DasGupta, R. (2022). Financial performance shortfall, ESG controversies, and ESG performance: Evidence from firms around the world. *Finance Research Letters*, 46, 102487-. <https://doi.org/10.1016/j.frl.2021.102487> ; Diez Esteban, Jose Maria and Blanco, David and Diez-Hernández, Julieta And Sierra-Calvo, Cristina, The Influence of Audit and CSR Committees in ESG Controversies: Evidence from European Top

Multinational Firms. 2024. Available at SSRN: <https://ssrn.com/abstract=4881389> or <http://dx.doi.org/10.2139/ssrn.4881389> ; Treepongkaruna, S., Kyaw, K., & Jiraporn, P. (2022) ; Stäbler, S., & Fischer, M. (2020)

254 Zhang, S., Xu, G., Shu, Y., & Zhu, J. (2024). Corporate ESG competitive disadvantage and cost of debt financing. *Finance Research Letters*, 69, 106102-. <https://doi.org/10.1016/j.frl.2024.106102>

255 Sheikh, S. (2018). Is corporate social responsibility a value-increasing investment? Evidence from antitakeover provisions. *Global Finance Journal*, 38, 1-12. <https://doi.org/10.1016/j.gfj.2017.08.002>

256 Meier, Jean-Marie and Servaes, Henri and Wei, Jiaying and Xiao, Steven Chong, Do Consumers Care About ESG? Evidence from Barcode-Level Sales Data (July 31, 2022). European Corporate Governance Institute – Finance Working Paper No. 926/2023, Available at SSRN: <https://ssrn.com/abstract=4260716> or <http://dx.doi.org/10.2139/ssrn.4260716>

257 Dong, Feng and Doukas, John A. and Zhang, Rongyao and Walton, Stephanie and Zhang, Yiyang, Do Major Customers Affect Suppliers' ESG Activities?. Available at SSRN: <https://ssrn.com/abstract=4577271> or <http://dx.doi.org/10.2139/ssrn.4577271>

258 Dong, Feng and Doukas, John A. and Zhang, Rongyao and Walton, Stephanie and Zhang, Yiyang, Do Major Customers Affect Suppliers' ESG Activities?. Available at SSRN: <https://ssrn.com/abstract=4577271> or <http://dx.doi.org/10.2139/ssrn.4577271>

259 Xu, Wenshuai and Yin, Yahua and Peng, Jianfei, Does ESG Performance Reduce the Company's Dependence on Major Customers? Evidence from China. Available at SSRN: <https://ssrn.com/abstract=4796443> or <http://dx.doi.org/10.2139/ssrn.4796443>

260 Flammer, C., & Luo, J. (2017). Corporate Social Responsibility As An Employee Governance Tool: Evidence From A Quasi-Experiment. *Strategic Management Journal*, 38(2), 163-183. <https://doi.org/10.1002/smj.2492>