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Sustainability versus The System: An Operator's Perspective

by Ken Pucker, Berkshire Partners and Boston University's Questrom School of Business

t is hard to conceive of a company and brand better positioned to demonstrate the compatibility of profit, people, and planet than Timberland. Publicly traded and privately controlled (with Class B shares with 10:1 voting rights), Timberland was founded and led by three generations of the Swartz family. The founder of the predecessor company to Timberland was Nathan Swartz, a Russian immigrant who ran a factory in Roxbury, Massachusetts that made private label women's shoes. His son Sidney created the brand Timberland, starting with the iconic Yellow Boot and expanding to apparel and global retail. Sidney's son Jeff, the third Swartz to lead the business, focused his passion on transforming Timberland from a brand to a paragon of sustainable enterprise. Jeff told the Timberland story generationally as one of Boot, Brand, and Belief.

An instinct for sustainability was built into Timberland's very nature. Products were designed and made to endure the elements and came with a lifetime guarantee. When I joined the company in 1992, all of Timberland's footwear was manufactured in "owned" factories. My first day was spent walking a factory floor in Isabella, Puerto Rico, trailing Sidney as he searched for big pieces of leather scrap in the trash buckets of leather cutters. Elimination of waste was practiced as a tenet of Yankee sensibility linked to survival, not a progressive element of environmental sustainability.

Inheriting his predecessor's commitment to quality and disposition to frugality, Jeff devoted his energies to elevating Timberland from its status as a premium brand to that of a values-based, sustainable brand. During Jeff's tenure as CEO, Timberland's revenue grew 70% and its market capitalization doubled. Over this same period, Timberland also showed its commitment to people by becoming the first company to grant employees 40 hours per year of paid community service time. In addition, the company developed and implemented an industry-leading code of conduct that governed its relationship with overseas partner factories. 2

Becoming a sustainable enterprise demanded that Jeff also focus attention on Timberland's environmental footprint. To that end, Timberland installed solar panels at its headquarters and distribution centers, and it built renewable energy capac-

ity at its factory in the Dominican Republic. The company made grants to employees who purchased hybrid vehicles, retrofit facilities with LED lighting, and built retail stores to be LEED-certified. While these steps were significant, Jeff recognized that the vast majority of the environmental impact caused by Timberland came from the production of its products.

To catalyze efforts to understand, manage, and minimize the negative impact of Timberland's environmental imprint, Jeff "borrowed" a tactic from the food industry. In early 2004, Jeff gathered a team around a bottle of Russian dressing and directed our focus to the USDA nutrition label on the back of the bottle. He asserted that the transparency mandated by the government should be available to consumers of footwear and apparel and asked that Timberland work to affix the equivalent of "nutrition labels" to all 20 million boxes of footwear within six months.

To accomplish this goal meant that Timberland had to understand the water usage, chemical composition, energy usage, and the greenhouse gas emissions associated with each product. With close to 1,000 footwear styles in the line, an average bill of materials of 30 parts, some commonality in parts and some countervailing dual sourcing of materials, understanding the environmental footprint of each style meant gathering thousands of data points every six months (as the line refreshed). No suppliers from which Timberland purchased inputs had these data, nor did standardized methodologies for calculating impacts exist. To compound the challenge, data on the environmental impact of the many transportation lines for the supply chain were also not established.

Notwithstanding these obstacles, in 2006 Timberland did produce the industry's first "nutrition labels" (called "the Green Index"). Instead of six months, the accomplishment took two years. At launch, the labels were featured on a small portion of the line, and provided information about only the energy used to produce the pair of shoes, percentage of renewable energy, community impact, and country of origin (see Figure 1).

This was but a first step. Now, almost ten years later, it is clear that Timberland has made consequential advances in its environmental disclosure and spurred collective action aimed

^{1.} Recognition flowed to Timberland during this period. *Business Ethics* magazine recognized Timberland as a top 100 Best Corporate Citizen for seven consecutive years. *Fortune* magazine cited Timberland repeatedly as a top 100 Best Company.

^{2.} As Timberland grew over the 1990s, additional factory capacity was added in Asia at sourced partners' factories to complement "owned" manufacturing.

Figure 1 Timberland Green Index Label

Our Footprint Notre Empreinte	
Environmental Impact Impact sur l'environnem	ent
Energy to Produce: (per pair)*	2kWh
Énergie utilisée (par paire)*	2kWh
Renewable energy (Timberland-owned facilities):	5%
L'énergie renouvelable (sites appartenant à Timberland) :	5%
Community Impact Impact sur la communauté	
Hours served in our communities:	119,776
Nombre total d'heures données :	119,776
% of factories assessed against code of conduct:*	100%
% d'usines évaluées pour leur conformité au code de conduite :*	100%
Child labor:*	0%
Main-d'oeuvre enfantine :*	0%
Manufactured Fabriqué à	
Shingtak, China Shingtak, Chine	
 metrics based on global footwear production for 2005 informations fondées sur production totale de chaussures en 2 	2005

FOR MORE INFORMATION VISIT WWW.TIMBERLAND.COM/CSRREPORT

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at reducing environmental damage.³ Timberland leveraged insights from the discovery process associated with the Green Index to create the Earthkeepers products line. Launched in 2007, the Earthkeepers line was designed and engineered to deliver products with the lightest possible environmental footprint. Earthkeeper products use materials such as recycled PET (polyethylene terephthalate) linings and recycled Green rubber outsoles, and such products continue to be a core and growing part of Timberland's footwear and apparel offering.

In addition, and, more importantly, the original Green Index label inspired collaboration outside the four walls of the company. Work undertaken at Timberland helped motivate the Outdoor Industry Association (OIA) to form a collaborative effort aimed at elevating environmental stewardship within the industry. OIA's Eco Index was launched in 2010. Timberland was pleased to share all of its learning with the group and hoped that the invitation to include others would both improve the scope of environmental benefit and create a shared standard that would enable comparability. The Eco Index, in turn, helped spawn the Sustainable Apparel Coalition (SAC), a far bigger coalition comprising brands, retailers, manufacturers, governments, non-governmental organiza-

tions, and academic experts representing more than one third of the global apparel and footwear market. Members of the SAC include brands and retailers spanning from Wal-Mart to Burberry.⁶

Environmental Footprint

Notwithstanding these stories of success, Jeff's original aspirations for environmental sustainability remain largely unfulfilled.

Though Timberland is considered a sustainability leader with innovative, best-of-class focus on environmental and social practice and reporting,⁷ it is not clear if Timberland's environmental footprint is better or worse than when these initiatives were first conceived.

Examination of the Responsibility section of Timberland's website provides measures of progress for the company's environmental objectives.8 At first blush, examination of Timberland's greenhouse gas (GHG) reductions looks very impressive (see Figure 2). From 2006 to 2013, emissions declined by 50% (from 29,293 to 14,691 metric tons of carbon). However, the improvements in GHG emissions cited cover only Timberland's owned and operated facilities (headquarters, retail stores, owned factories and distribution centers) and air travel. Emissions associated with sourced factories (from which Timberland contracts the vast majority of its footwear and 100% of apparel) are excluded.9 So too are emissions associated with inbound and outbound freight and raw materials. In fact, 96% of Timberland's emissions footprint is considered "beyond" the scope of Timberland reported footprint (see Figure 3). In essence, Timberland's reduction of 50% of its emissions equates to a 2% reduction in overall GHG.10

Though the Green Index did motivate the Earthkeepers line and a broader industry dialogue, Green Index labels were removed from Timberland's product line this year. After thousands of hours of collaborative work by more than 100 members of the Outdoor industry, the guidelines, indicators, and metrics developed by the OIA morphed into the work of the Sustainable Apparel Coalition (SAC), but without ultimately enabling consumer facing ratings. Finally, thus far, although the SAC has launched modules of the HIGG index for brand and factory level diagnosis and reporting, its product module remains in testing. SAC's current plans call for the launch of a consumer-facing product level index in 2017.

^{3.} Jeffrey Ball, "Six Products, Six Carbon Footprints," *The Wall Street Journal*, October 6, 2008. Details Timberland's findings focused on the carbon footprint of footwear.

^{4.} The average carbon footprint of a pair of hiking boots is between 66 and 132 pounds of CO_2 and 2,113 gallons of water. "Six Products, Six Carbon Footprints" *Wall Street Journal*, October 6, 2008 and AMC Outdoors Online, http://www.outdoors.org/publications/outdoors/web/water-footprint.cfm

^{5.} http://www.apparelcoalition.org

^{6.} At the same time, Timberland served as a founding member of the Leather Working Group, another multi-stakeholder collaborative group including brands such as Nike, LVMH and Pentland as well as tanneries from around the globe. The purpose of this group is to develop a shared protocol to assess, audit and rate tanneries in an effort to improve environmental practice within the tanning industry.

^{7.} Timberland rated second out of 150 companies evaluated by the nonprofit group

Climate Counts in 2011.

^{8.} http://responsibility.timberland.com/climate/?story=1

^{9.} Though Timberland has made progress at reducing emissions at tanneries (via the Leather Working Group) and increased the number of GSCP (Global Social Compliance Program) certified factories to almost 60% of its base, measurement is not provided for the 96% of Timberland's GHG footbrint.

^{10.} Assuming that total emissions remained flat from 2006 to 2013.

^{11.} Yvon Chouinard, Jeb Ellison and Rick Ridgeway, "The Sustainable Economy," Harvard Business Review, October, 2001. The authors argue that the sum of "pricing" of externalities, capital flowing to sustainable businesses and indices of sustainable performance are converging to accelerate a different form of capitalism. More than ten years from Jeff's "nutrition label," the industry remains without a consumer facing standard enabling comparability.

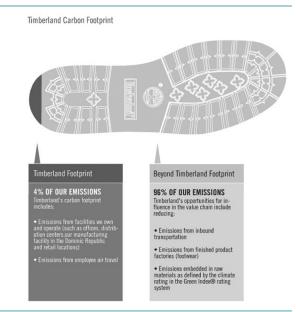
Though the "nutrition label" did jolt the industry to focus on its collective environmental footprint, ten years later much remains the same. The green house gas emissions footprint¹² of the footwear and apparel industry continues to grow,¹³ fueled by increasing consumption of a growing global middle class, planned obsolescence, fast fashion, and limited improvements in environmental performance.

One difference, however, is that Jeff no longer pushes Timberland to become a leadership sustainable enterprise. Timberland was sold in 2011 to VF Corporation for \$2 billion.

The Case for Sustainable Enterprise

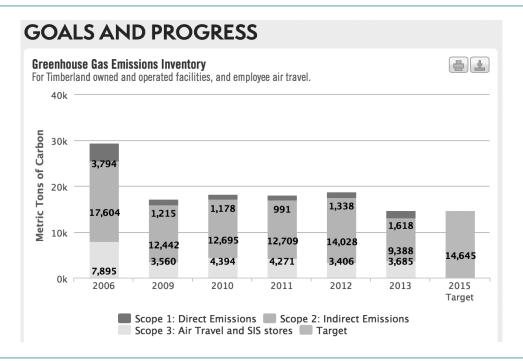
Though our current system of capitalism is leading to an increasing pace of ecosystem degradation, many advocates for sustainability point to the opportunity for a "triple-bottom-line" win. Books such as *Green to Gold*¹⁴ and concepts like the Circular Economy and Creating Shared Value focus on the the mutuality of interests and possibilities for convergence among economic, social, and environmental goals. Arguments for alignment are based on four primary pillars: risk minimization, operational efficiency, opportunity for innovation, and the power of employees and consumers.

Figure 3 Timberland Carbon Footprint



Source: Timberland: responsibility.timberland.com

Figure 2 Timberland Greenhouse Gas Emissions Inventory



Source: Timberland: responsibility.timberland.com

^{12.} Greenhouse gases are but one indication of environmental performance. Other impacts include waste, chemical discharge, water use and end of life disposal of products.

^{13.} In addition, social compliance with overseas factories remains a game of cat and mouse. Richard Locke has written extensively on the impact (or, lack thereof) of audits. In his paper "Does Monitoring Improve Labor Standards? Lessons from Nike," Cornell

University ILR School, 2007, Locke and his co-authors argue monitoring for compliance with corporate codes of conduct alone "appears to have produced limited results."

^{14.} Daniel Esty and Andrew Winston, *Green to Gold, How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage*, (New Jersey: John Wiley & Sons, 2006)

Risk Minimization:

The first argument reflects the increasing importance of intangible assets as a driver of value. For many companies, nothing is more valuable than their brand and, hence, their reputation. Dramatic changes in technology and growing numbers of NGOs are driving unprecedented transparency and elevated expectations for companies seeking license to operate. For this reason, enlightened leaders should invest proactively to ensure that their operations and practices are socially and environmentally sound, and that their brands are protected.

Operational Efficiency:

While reputation and brand are often hard to measure with any degree of precision, the second area of alignment between sustainable practice and triple-bottom-line goals is easier to justify using cost-benefit analysis. Leveraging sustainable thinking, opportunities abound for companies to eliminate waste, reduce water and electricity costs, and improve the efficiency of their operations, thereby serving both the planet and the bottom line.

Innovation and Growth:

The third area of alignment between profit and planet cited by sustainability strategists is the ability to innovate. Focus on the lifecycle impact of a product from the start of the design process to end of life can lead to innovation.¹⁷ Reconsideration of a business system to make better use of resident assets can also lead to the birth of entirely new companies based on sharing (consider Airbnb or Uber).

Power of Employees and Consumers:

The last area of natural alignment between sustainability and profitability is the power to attract employees and consumers. One of the key motivations for progressive companies to adopt sustainable thinking is the recognition that to remain an employer of choice with Millennials, enterprises must address the issues that are central to the next generation. Is I believe that Jeff Swartz' genius was elevating mission and sustainability to a central place at Timberland, thereby enabling the company to recruit and retain talent committed to shared values and passionate about working for goals that were purposeful and aligned with their personal lives. Brands such as TOMS and Warby Parker have succeeded in extending the ethos of sustainability beyond employ-

ees to consumers. In so doing, they have been able to grow exceptionally quickly without much spend devoted to traditional marketing.

Sustainability versus the System

With so much opportunity to transform "green to gold" and deliver a triple bottom line, why is the set of sustainable paragons so limited? Why is the progress of those same paragons insufficient? Why do we find so many illustrations of business behavior that conflict with sustainable practice, and why are our ecosystems being severely compromised at increasing speed?

The answers lie in the structure, rules, incentives, market failures, and paradigms that govern our economic model.

While there are a small number of enlightened visionaries such as Yvon Chouinard of Patagonia, Paul Polman of Unilever, and Mark Parker of Nike, as well as Jeff Swartz of Timberland, most companies are led by CEOs who are committed to delivering results against today's traditional, single bottom line scorecard. In addition, in-depth examination of the environmental records of even the "best of the best" corporations often fails to support the case proffered by advocates of sustainable practice. As a result, the output of the current system as practiced by "the best of the best" and traditional corporations is falling short of humanity's need to forestall the arriving age of ecosystem damage, resource scarcity, and climate change.

Our system is one of unprecedented interdependence and connectivity. That said, for simplicity, what follows is a high-level outline of the critical obstacles facing each of the leveraged actors in our system. If we are to create an enduring form of capitalism, a model that does actively consider all stakeholders (shareholders, employees, suppliers, consumers and the earth), we will have to reshape our system to account for these challenges.

Corporations

The sweeping victory of global capitalism increasingly places the corporation at the center of the discussion. ²⁰ Though there are cogent arguments for companies to behave more sustainably, there are even more powerful forces pulling leaders in the other direction. What follows is a partial list of the realities of our capitalist system that bias action toward the traditional bottom line vs. a triple bottom line.

^{15.} Whereas tangible assets made up 83 percent of a firm's value in 1975, as of 2009, 81 percent of a firm's value was made up of intangible assets. Ocean Tomo's Intangible Asset Market Value Study; http://www.oceantomo.com/media/newsreleases/Intangible-Asset-Market-Value-Study-Release.

^{16. &}quot;Introducing GS Sustain," Goldman Sachs, June 22, 2007, p.25. According to this report, the number of NGOs registered with the UN Economic and Social Council has doubled in the last decade.

^{17.} Nike's Flyknit is a superb illustration of innovation born of sustainable thinking. https://www.youtube.com/watch?v=Ev2sHur84sI

^{18.} Deloitte Millennial Survey, 2015, http://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html

^{19.} Patagonia is an environmental pioneer and always hailed as an illustration of the compatibility of green and gold. That said, even Patagonia does not presently report annual green house gas emissions or a time series of green house gas emissions publicly, thus making it impossible to evaluate their footprint over time.

^{20.} It is important to note that all of the illustrations of best practice referenced are based in either the United States or Europe, while the fastest growing economies are in Asia. Though there are select illustrations of sustainable thinking in Asia, the EU and US are considerably ahead of practice in Asia. Clearly, for progress to occur at scale, Asia will have to ramp up their commitment to sustainability going forward.

To begin with, corporate leaders are overwhelmed and have limited attention spans. Issues of sustainability are relatively new, complex, pervasive, and often less urgent than important. Compounding matters, few leaders have either sustainability departments or internal experts to turn to. Nor do they have an established professional base (e.g. the equivalent of accountants to support financial reporting) to share standards and guide action. Solutions to many sustainability challenges require the "internalization" of external costs (such as those coming from pollution) that are not typically borne by competitors and so difficult for leaders to justify.

Other economic pressures also limit progress. Investments in sustainability must compete with "traditional" investments aimed at reducing cost or growing the business. Proposed investments in sustainability are often very hard to quantify with precision. For example, what is the benefit of not having a reputational failure within a global supply chain? What is the benefit of employee retention? And what will be the cost of carbon if regulated in the future?²¹ Though textbook corporate finance would have one believe that a rational CFO would accept all investments that exceed the corporate cost of capital, that is not what happens in practice. Instead, the constraints of a fixed capital budget, the priorities of strategy, and constraints on human capital almost always limit even net present value (NPV) positive investments. In the capital allocation process, investments in "green" process or innovation often get forestalled. 22

At the same time, many of the challenges of sustainability are often distant from corporate headquarters. With the globalization of companies and the increasingly distributed nature of supply chains, resource extraction and the multiple tiers of production are remote, literally and figuratively. Thanks in part to global trade compacts, advances in technology, and improvements in transportation infrastructure, we are experiencing an era of outsourcing and distributed supply chains. Notwithstanding the emergence of a supply-chain auditing business (over 50,000 factories were audited last year according to the *New York Times*),²³ abuses persist, including unauthorized contracting, use of restricted substances, unlaw-

ful chemical disposal, fraud, incomplete inspections, unpaid overtime, and forced overtime. These systemic problems are a function of competing pressures for low-cost, reliable delivery and corporate cash flow optimization, which often conflict with triple bottom line aspirations.

Last, but far from least, the leaders of public companies report to their investors every 90 days. This time horizon is not compatible with a cycle of marketing or product development. It also often leads to short termism, delaying investments with longer payback. With an increasing share of executive compensation tied to stock performance,²⁴ pressure often drives leaders to bias their decision-making toward investments that promise "close in" paybacks.²⁵

Consumers

Research reports and trends point to increasing interest from consumers in "green" products. ²⁶ Technology that enables more seamless sharing of information has engendered tools such as Good Guide, a mobile app that allows consumers to see thousands of products' environmental, health, and social ratings at point of sale. At the same time, brands such as Timberland and NGOs such as The Sustainability Consortium are devoting resources to making rating information more available; and certification standards groups (such as Fair Trade, the Marine Fisheries Council and the Better Cotton Initiative) are growing and providing shortcuts for consumers to act with their wallets.

Notwithstanding these advances, behavior does not appear to be changing much. Joel Makower, co-founder of the media company GreenBiz, is "skeptical about the power of green consumers"—a group he has been paying close attention to since 1991, when he was co-author of a book, *The Green Consumer*. "A small percentage of consumers, by changing their habits, can move markets," Makower says; "It's an incredibly compelling notion. I just haven't seen it in the market." ²⁷ Consumer pull has the potential to change corporate behavior. Were consumers more ardent in their pursuit of sustainable goods or more demanding of information, companies would quickly change to meet demand. But there are a number of major obstacles that

^{21.} In his book *Getting Green Done*, Auden Schendler, VP of Sustainability at Aspen Ski Company (a business whose very business is at risk due to climate change), gives an excellent account of the many practical obstacles that slow the pace of sustainable change. He notes "there are many barriers and obstacles in business to capturing those savings, even if they represent \$10,000 bills lying on the floor. There are, in fact, many good reasons for not picking that bill up, not the least of which is that you might be able to pick up a \$100,000 bill in the same movement by selling something you manufacture." Auden Schendler, *Getting Green Done*, (New York: Public Affairs, 2009), 114.

^{22.} Compounding the investment conundrum is the question of what discount or hurdle rate is used to determine the efficacy of investment decisions. According to Jeremy Grantham, "Capitalism doesn't think long-term very well because of high discount rate structure. If you're a typical corporation anything lying out 30 years literally doesn't matter. Or, as I like to say: QED, your grandchildren have no value. And they usually act as if that was true; even though I'm sure they are actually very kind to their grandchildren."

Use of an extra high discount rate will bias executives against investments with payouts longer into the future. http://www.theguardian.com/environment/blog/2013/apr/16/jeremy-grantham-food-oil-capitalism.

 $^{23. \} http://www.nytimes.com/2013/09/02/business/global/superficial-visits-and-trick-ery-undermine-foreign-factory-inspections.html?pagewanted=all.$

^{24.} Brian J. Hall and Jeffrey B. Liebman, "Are CEOs Really Paid Like Bureaucrats?" Quarterly Journal of Economics, Vol. 113, No. 3, August 1998, 653-691. For example, the percentage of pay tied to the stock market for the CEOs of U.S. companies was negligible in the early 1980s, rose to about one-quarter in the early 1990s, peaked at roughly one-half in the early 2000s, and remains near 40 percent today.

^{25.} According to a study by MFS, "stocks are being held for shorter periods than any time since the 1920s" with NYSE traded stocks now being held for only 1.67 years. MFS, Lengthening the Investment Time Horizon.

According to marketing agency Cone Roper, a record high 71 percent of Americans now consider the environment when they shop, up from 66 percent in 2008. http://www.conecomm.com/research.

^{27.} Purchases in the United States of hybrid vehicles peaked at three percent of vehicles sold in 2009 and green household cleaners make up less than five percent of the market. http://e360.yale.edu/feature/betting_on_technology_to_help_turn_consumers_green/2513/.

now stand in the way of the consumer leading the path to a sustainable future.

Like corporations, consumers are stressed for time and overwhelmed by the variety of choices they are presented with. Coping with the long list of typical "close to home" issues is challenging enough. But complex, slow-boil issues such as resource scarcity and climate change do not easily motivate a change in behavior.^{28, 29} In addition, industry has done a superb job of decoupling consumption from environmental impact. Resource extraction, smokestacks, and landfills are more often than not remote, and the impacts of climate change are hard to pinpoint. When these issues do get coverage, vested interests such as the fossil fuel industry ensure that obfuscation is the order of the day.

In addition, there often is a gap between how consumers want to act and how they do act. This is in part a function of complexity, the scope of the challenge, and the absence of standard modes of communication. Information to guide decision-making is scant (see the ten- year challenge to label footwear and apparel referenced earlier), often inaccurate, incomplete, and not standardized. Seemingly easy decisions, such as the choice between an electric Tesla Model S and a conventional SUV, can in fact be quite complicated. Determining which vehicle emits fewer green house gases depends on where one is powering and driving a Tesla, and on the sources of electricity in that state or region.³⁰

Investors

Investment in Socially Responsible Investment (SRI) has increased dramatically in the past ten years.³¹ So too has the number of signatories of the UN Principles for Responsible Investment (UNPRI).³² Recent research undertaken by Deutsche Bank reached the conclusion, after evaluating 56 studies, that "companies with high ratings for environmen-

tal, social and governance (ESG) factors have a lower cost of debt and equity." ³³

While the Deutsche Bank study indicates a strong link between sustainability and rates of return, the authors of the report are careful to note that "the statistical studies we have collected cannot or do not establish causality...with any degree of confidence."³⁴ In addition, as Robert Eccles and George Serafeim of Harvard Business School caution, "it is difficult to be precise about the real degree of integration of sustainability by both companies and investors. That is to say, the numbers do not tell us much about the extent to which sustainability considerations really influence the content and timing of their resource allocation decisions."³⁵

The inability to determine the extent to which investors integrate sustainability into their decision-making is a function of a number of systemic challenges. Most importantly, notwithstanding a tripling of the number of Corporate Social Responsibility (CSR) reports filed over the past three years, ³⁶ no standards govern these filings. There remain no single format for reports, no minimum standards for what must be included, no annual requirement for reporting, and no established audit procedures. A recent report examined the over 4,000 CSR reports, rankings and surveys and "found unsubstantiated claims, gaps in data and inaccurate figures." No surprise, then, that a recent report published by McKinsey concludes that "traditional corporate social responsibility (CSR) is failing to deliver both for companies and for society." ³⁸

Absent mandated, standardized, auditable reporting of non-financial data, it is challenging for investors to understand a company's commitment to sustainable practice and the related results. By way of illustration, consider the reported results for greenhouse gas emissions provided by Timberland. The data seem to tell a good non-financial story.

^{28.} In his quarterly letter to investors in April 2011, Jeremy Grantham hits on many of the obstacles in our human nature, which inhibit our collective ability to address climate change and the resource scarcity. Grantham notes that our challenges with long horizon issues are compounded by the fact that "we also became an optimistic and overconfident species." Jeremy Gratham, "Time to Wake Up: Days of Abundant Resources and Falling Prices are Over Forever," GMO Quarterly Letter, April 2011

^{29.} These tendencies are compounded by a phenomenon known as the availability heuristic. According to Cass Sunstein, Harvard Professor and former leader of the White House Office of Information and Regulatory Affairs, people tend to evaluate risks by way of the "availability heuristic," which leads them to assess the probability of harm by asking whether a readily available example comes to mind. An act of terrorism is likely to be both available and salient, and hence makes people fear that another such event will occur (whether it is likely to or not)..." By contrast, climate change is difficult to associate with any particular tragedy or disaster."

Sunstein continues, "For potentially catastrophic risks whose prevention requires long-term investment, there are built-in obstacles to serious regulatory efforts. If salient rosts, such as hurricane activity, can be associated with climate change, the likelihood of a response is increased. But for most people most of the time, these associations seem speculative. Cass Sunstein, "The Availability Heuristic, Intuitive Cost-Benefit Analysis, and Climate Change," Coase-Sander Institute for Law and Economics, 2005 https://chi-cagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1489&context=law_and_economics

^{30.} Nathan Weiss, "Is The Telsa Model S Green," Seeking Alpha, May 9, 2013. Similarly, when considering the environmental impact of a cotton piece of outerwear or a cotton/polyester blend, most concerned consumers would choose the cotton garment. However, a cotton/polyester blend is more likely to leave a lighter environmental footprint

due to the durability of the polyester blend, the recyclability of polyester and the fact that polyester takes less energy to dry.

^{31.} From 1995 to 2012, the US sustainable and responsible investment market has grown by 486% representing 11.3% of US total of \$33.3 trillion under investment. Report on Sustainable and Responsible Investing Trends in the United States http://www.ussif.org/files/Publications/12_Trends_Exec_Summary.pdf.

^{32.} The Principles for the UNPRI signatories are "voluntary and aspirational" and are "intended to offer a menu of possible actions for incorporating issues into investment practices"

^{33. 89} percent of the studies they reviewed showed that companies in high ESG ratings outperform the market in the medium (three to five years) and long term (five to ten years). Mark Fulton et al., Sustainable Investing: Establishing Long-Term Value and Performance DB Climate Change Advisors, Deutsche Bank Group, 2012, dbadvisors.com.

^{34.} Mark Fulton et al., Sustainable Investing: Establishing Long-Term Value and Performance DB Climate Change Advisors, Deutsche Bank Group, 2012, dbadvisors. com.

^{35.} Robert Eccles and George Serafeim, "A Tale of Two Stories: Sustainability and the Quarterly Earnings Call," *Journal of Applied Corporate Finance*, Volume 25, Number 3

 $^{36. \} http://ga-institute.com/Sustainability-Update/2014/06/03/flash-report-72-of-sp-500-companies-now-publishing-sustainability-responsibility-reports/.$

 $^{37. \}quad http://community.cgma.org/cgma/b/blog/archive/2013/07/01/why-errors-in-csr-reports-are-a-problem-for-accountants.aspx.$

^{38.} John Browne and Robin Nuttall, "Beyond corporate social responsibility: Integrated external engagement," McKinsey & Company, March, 2013. http://www.mckinsey.com/insights/strategy/beyond_corporate_social_responsibility_integrated_external_engagement.

It is not until one reads the fine print that one realizes that 96 percent of Timberland's footprint is not considered in the chart. Also, it is not easy for investors to make sense of data stated in units (such as CO₂ emissions in metric tons, kilowatt hours of electricity, BTUs or gallons) that may not be easily translated into dollars.

Even for investors who do value sustainable practice and who are able to do effective due diligence on companies and make sense of their reporting, the timing of returns may present a challenge. Given that "investment decisions and compensation contracts tend to converge toward more short-term, observable metrics, corporate managers and professional money managers are encouraged to maximize short-term performance." Though there is increasing evidence that longer-term investors are attracted to companies that focus on longer horizons for investment and sustainability, 40 the vast majority of investors and money managers remain focused on less uncertain, shorter-term outcomes. 41

My experience at Timberland with the investment community is consistent with the behavior noted above. For 28 consecutive quarters I sat next to the Jeff Swartz as he delivered Timberland's results to investors. Without fail, Jeff focused the last portion of his remarks on the progress that Timberland had made in its quest to become a leading sustainable enterprise serving all of its stakeholders. Not once did an investor or analyst ask a question of Jeff about the sustainability portion of his address.

Government

Tax policy and regulation can also influence the behavior of companies, consumers, and investors and correct for market failures such as externalities. The particular challenges of ecosystem decline and resource scarcity, however, are cross-border and global in nature, and so they require a coordinated response. Though there are effective illustrations of coordinated action (a good example is the Montreal Protocol on Substances that Deplete the Ozone Layer), the agreements that govern this action are exceedingly complicated, as evidenced by the failure of several climate meetings in past years. The fact that much of the renewable resource stock of natural capital (in the forms of clean air, water, and fisheries) is shared, and that our present rate of consumption

of these resources exceeds the ability of the earth to regenerate them, is problematic and cause for great concern. Add to that challenge the fact that the benefit for each actor of consuming shared natural resources outweighs the cost, and the net result is a pernicious problem (that both economists and historians refer to as "the tragedy of the commons").⁴² Solving this problem requires either regulation (in the form of quotas, permits, taxes, incentives or outright bans) or privatization of the commons—both complicated options, given the inevitable winners and losers.

Putting aside international accords, governments around the world are being pushed to act locally to address issues such as air pollution, drinking water availability, and other quality of life issues. As is true of both corporations and consumers, mismatches between the election cycle (in democracies) and the timeline for addressing ecosystem decline have the effect of delaying necessary action. Politicians are not typically willing to bear costs (in the form of slower growth of increased investment) today in order to ensure prosperity for their grandchildren. In addition, vested interests will continue to spend with vigor to maintain the status quo. 44

Even when governments do act, there is no guarantee that the prescribed action will deliver the intended outcome. Consider the U.S. subsidies for the production of biofuels. Originally conceived and supported by a broad constituency of farmers, big agricultural producers, and environmentalists, biofuel subsidies were enacted to reduce dependence on Middle Eastern oil while limiting carbon emissions. But what legislators and policy makers failed to anticipate were the additional crops that would be planted in razed rain forests, as the demand for corn and biofuel sources soared. The net effect of the policy has been a transfer of wealth from taxpayers to big agriculture, an increase in carbon emissions, and an increased pace of global warming.⁴⁵

As if these many obstacles to sustainable practice are not enough, three other challenges are worthy of mention. These challenges are not specific to any key actor, but are endemic to the system as a whole.

First, our systems of higher and graduate education have not broadly figured out how to teach a new generation to deal with the challenge and opportunity of sustainability. According to a study by the World Environment Center called "Business Skills for a Changing World," "sustainability is

^{39.} Sean Silverstone, "The High Risks of Short-Term Management," Harvard Business School, Working Knowledge, April, 2012

^{40.} Ibid

^{41.} In the private equity space, where time horizons are often longer than that of investments in the public markets, firms are paying increasing attention to sustainability and environmental, social and governance (ESG) issues. This is principally a function of increasing attention from Limited Partners (LPs). Even so, according to a study conducted by PWC, within the private equity space "ESG management is still mainly geared towards risk," and less than 50 percent of the firms surveyed have even one full time employee working on ESG. At a meeting that I attended of the leading private equity firms conducted under Chatham House rules, it was clear that ESG staff were challenged to get an audience with the investment staff and had difficulty making a case for anything beyond risk management or selected cross portfolio cost savings initiatives.

[&]quot;Putting a Price on Value," PWC. www.pwc.com/sustainability

^{42.} Garrett Hardin, "The Tragedy of the Commons," Science 162, no. 3859 (December 13, 1968): 1243-48

^{43. &}quot;Environmental Protests in China: Volatile Atmosphere," *Economist*, April 2014. "China's Environmental Activists," *FT Magazine*, September 2013.

^{44.} For example, the Koch brothers, Charles and David, plan to spend \$889 million via a network of conservative advocacy groups in advance of the next election cycle. These funds will, no doubt, be used to advocate for Koch Industries interests in refining and distribution of petroleum, chemicals energy fertilizers and other commodities. Metea Gold, "Koch-backed Network Aims to Spend Nearly \$1 Billion on 2016 Election," Washington Post, January, 26 2015.

^{45.} Michael Greenwald, "The Clean Energy Scam," TIME magazine, May 27, 2008.

not currently institutionalized within the required curricula of many business schools."46 Gaps in curricula perpetuated by mismatched educational incentives, an inertia-ridden system, and an absence of a natural career track for professionals create a chicken-and-egg problem that remains unsolved.

Additionally, mental models that favor immediate results and have a hard time looking beyond the next few quarters compound the challenge of climate change and resource scarcity. In his April 2011 Quarterly Letter, famed investor Jeremy Grantham notes, "We don't seem to deal well with long horizon issues and deferring gratification." He continues, "We are also innumerate. Our typical math skills seem quite undeveloped relative to our nuanced language skills." One such math skill, in particular that we have not mastered, is "our inability to understand and internalize the effects of compound growth.⁴⁷" These natural deficits make it hard to motivate action to address climate change, resource scarcity and the decline of ecosystems.

Finally, the oxygen of the capitalist system is growth. Companies pursue growth to increase their value, create career opportunities for their employees, and generate funding for investment, creating a positive feedback loop. Governments also measure economic success using Gross Domestic Product (GDP) as the principal marker. In the United States, consumption makes up almost 70% of GDP. For this reason, growing consumption is fundamental to growing GDP. In the developing world, growth is necessary to generate employment to lift people out of poverty. While this growth has noble outcomes associated with it-notably, a reduction in hunger and a more literate, healthy, and longer-lived population—it is also connected with more purchases of refrigerators, cars, and air conditioners. This is good news for companies seeking growth, but it is a challenge for a world already reaching the limits of its capacity. According to the Global Footprint Network, "humanity uses the equivalent of 1.5 planets to provide the resources we use and absorb our waste. This means it now takes the earth one year and six months to regenerate what we use in a year."48 This is the very definition of unsustainable.

Solution Space: A Partial Agenda for a More Complete Capitalism

Our economic system has engendered incredible progress. That said, population growth, increasing consumerism, and the consequences of burning fossil fuels have led humanity to bump up against natural limits. As Jeremy Grantham notes:

Capitalism does millions of things better than the alternatives. It balances supply and demand in an elegant way that central planning has never come close to. However, it is totally ill equipped to deal with a small handful of issues. Unfortunately, today they are the issues that are absolutely central to our long-term wellbeing and even survival.⁴⁹

Notwithstanding the progress and promise of sustainable strategy, I contend that our system is imbalanced and that the pressures to deliver a traditional bottom line continue to overwhelm the allure of the triple bottom line. Our challenge is to maintain the best of capitalism, while adjusting incentives, reimagining structure, and even rethinking paradigms to deliver progress. To do all of this will require the accelerated adoption of a number of leveraged tactics and reforms with the potential to bend our collective path toward a more sustainable future.

Chief among such reforms and developments are the following:

Shift to Integrated Reporting.

There is no shortage of reporting on non-financial metrics. According to UPS, the company responded to 180 requests for such data last year alone. An acronym soup of superb and well intended NGOs, including the IIRC (International Integrated Reporting Council), CDP (Carbon Disclosure Project), and GRI (the Global Reporting Initiative), offer guidance for reporting. Even so, according to a recent study, "97 percent of companies are failing to provide data on the full set of 'first generation' sustainability indicators."50 The challenge is to develop and reach agreement on a system of reporting that is mandated, standardized, auditable, timely and relevant to all stakeholders. Such reporting also must focus on issues that are material to the performance of the company and that provide important information about each of the six forms of capital that have been identified by the IIRC as critical to long-run corporate competitiveness and value—in addition to traditional investor or "financial" capital, the others are "natural," "human," "manufactured," "intellectual," and "social and relationship."

The good news is that this kind of expanded reporting is gaining momentum. Led by Michael Bloomberg and Mary Shapiro (the former Chairman of the SEC), the Sustain-

^{46. &}quot;Business Skills for a Changing World: As Assessment of What Global Companies Need from Business Schools," World Environment Center, 2011.

^{47.} In his paper "Sustaining Sustainability: Creating a Systems Science in a Fragmented Academy and Polarized World," MIT Professor John Sterman makes this very point. He cites research aimed at understanding "people's ability to understand exponential growth processes. They found people tend to extrapolate linearly instead of exponentially, assuming a quantity increases by the same absolute amount per time period, while exponential growth doubles the quantity in a fixed period of time. John Sterman: Sustaining Sustainability: Creating a "Systems Science in a Fragmented Academy and Polarized World."

^{48.} In addition, were the rest of the world to reach the level of consumption of the citizens of the United States, it would take four planets to support our collective lifestyle. http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/.

^{49.} Leo Hickman, "Jeremy Grantham on how to feed the world and why he invests in oil," *The Guardian*, April 2013.

^{50.} Jo Cofino, "97 percent of companies fail to provide data on key sustainability indicators," *The Guardian*, October, 2014.

able Accounting and Standards Board (SASB) is developing sector-specific materiality maps and reporting templates that reflect input from industry, accounting, and the NGO sector. This work feeds into the efforts of the IIRC to develop a framework and reporting standards for these data. One sign of the success of such efforts to date was the passage in 2014 of new EU legislation that, if and when it is affirmed by the EU States, will require over 6,000 listed companies to provide material environmental, social and governance data on an annual basis.

Adoption of a standardized format for these data is essential. Armed with such data, investors will have time series information that will enable comparability. Equally important, these data will also allow management teams, boards of directors and investors to link sustainability performance more directly to financial performance. To the extent it succeeds in creating this linkage, such standardized and integrated reporting will encourage both companies and their investors to push for progress on the sustainability agenda—with the expectation that more sustainable companies will end up with lower betas, lower costs of capital, and higher stock returns.⁵¹

Internalize Externalities:

Many have argued that it is good management for companies to internalize externalities—that is, to invest in initiatives designed to remedy social problems associated, at least in part, with their own products and services.⁵² The Carbon Disclosure Project (CDP) is an NGO that works with companies that voluntarily report their ecosystem impacts. The rationale for disclosure is that knowing one's footprint is a necessary precursor to benchmarking, prioritization, and action, all of which will better position companies for the inevitable regulation.

In that spirit, and with that intent, some companies are now incorporating a fee for carbon emissions (ranging from \$6/ton at Microsoft to \$80/ton at Exxon) in their investment process. Companies such as Microsoft are charging the cost (per ton) of carbon to their operating divisions. These fees are collected by Microsoft at the corporate level and reallocated toward "green" projects aimed at supporting the company's commitment to become carbon neutral. Such illustrations

are rare, however. According to the CDP, less than 100 U.S. companies now include the cost of carbon emissions in their P&L.⁵³

Though cap and trade and other mechanisms in various states and countries regulate carbon emissions, the practice is not uniform. Notwithstanding progressive arguments for incorporating the cost of externalities, the data suggest that pressures of the system push in a different direction. The majority of leaders working toward a traditional bottom line are not interested in adding burdens to their P&L, especially when competitors are not following suit. That is why I believe that governments must regulate emissions and set proper prices for water to change incentives and corporate behavior.

Address Time and Incentives.

The actions of Paul Polman, CEO of Unilever, are instructive on this front. The first day that Polman was announced as CEO, he let investors know that Unilever would no longer provide earnings guidance and that the company would report bi-annually instead of quarterly. He subsequently set goals to double the company's revenue while halving its environmental footprint by 2020 and devised very concrete incentives tied to stakeholder objectives. Polman also advised short-term investors that they should not invest in Unilever.

Polman (or "Captain Planet," as he has been dubbed by the *Harvard Business Review*) took these steps to "address the problems of short term capitalism." Extending time horizons for financial reporting to better align with investment, marketing, and product cycles is a helpful first step. In addition, Polman aligned incentives with objectives and investor communication—a managerial necessity, but one that is rarely accomplished in practice. Lacking these concrete linkages, managers tend to default to the metrics measured by the traditional scorecard.

These are but a few of the adjustments to our current form of capitalism that would shift corporate focus from shareholders to stakeholders, but in ways that arguably end up serving the long-run interests of shareholders. Other important transformations that will be helpful include a reallocation of U.S. government subsidies from fossil fuel providers to renewable energy innovators; advances in consumer-focused sustainability communications (along

^{51.} http://www.pwc.com/gx/en/audit-services/corporate-reporting/sustainability-reporting/pumas-reporting-highlights-global-business-challenges.jhtml.

In an effort to address these concerns, PUMA worked with PWC and TruCost to deliver the industry's first Environmental Profit & Loss (EP&L) statement in 2011. The report detailed the cost of environmental capital that PUMA consumed in 2010. Using a cost of €66 per ton of CO₂, PUMA estimated the sum total of its use of natural capital (to include green house gas emissions, water, land use, and waste) consumed to be Euro 145M (only €8M were associated with PUMA's direct operations). This compares to traditional income statement earnings of €301.5M in that same year. Said differently, were PUMA to pay the actual cost of the natural capital that it consumed in 2010, earnings would have been less than one half of those reported.

Since issuing this breakthrough report, PUMA's business has weakened and has yet to issue subsequent updates to the EP&L (no correlation implied). The absence of time

series reporting makes it hard to assess what PUMA has done with the findings of their work. That said, KERING (PUMA's parent) has committed to issue a group EP&L and individual EP&Ls for all of their brands (including Gucci, Bottega Vaneta, Stella McCartny, Volcom...) in 2015.

^{52.} Christopher Mayer and Julia Kirby, "The Big Idea in an Age of Transparency," Harvard Business Review, April, 2010.

^{53.} Wendy Koch, "At least 150 companies prep for carbon prices," $\textit{USA Today}\xspace$ tember 2015.

^{54.} Paul Polman, "Paul Polman: The remedies for capitalism," McKinsey & Company, http://www.mckinsey.com/features/capitalism/paul polman.

^{55.} Shiela Bonini and Steven Swartz, "Bridging discipline to your sustainability initiatives," McKinsey & Company, August 2014.

the lines of the calorie sharing transparency for chain food retailers or the USDA nutrition label); and a reformation of management education systems to make sustainability part of the core curriculum and clear guidelines for board ownership of non financial metrics.

Notwithstanding the rhetoric and hopes of Sustainability Inc., the speed of current ecosystem degradation is outstripping adoption of sustainable practice. There are those who accept this premise, but point to the unprecedented rate of technological innovation as the source of salvation.⁵⁶ My view is different.

Having worked at Timberland for 15 years for a visionary, committed CEO who made only limited progress on the environmental front, I believe that the current form of capitalism needs reshaping in important ways. While innovation in power generation (e.g. distributed solar), product

creation (e.g. lab grown leather) and transparency (e.g. crowd sourced factory conditions rating software) have great potential for good, the scope of our systems challenges is such that traditional single bottom line companies will have to become a part of the solution.

Gaylord Nelson, a former Senator and Governor from Wisconsin and the founder of Earth Day said it best, "the economy is a wholly owned subsidiary of the environment, not the other way around." The sooner that we integrate that insight, the quicker that we can shape policy and practice and create a more lasting form of our economic system.

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^{56.} See the book *Abundance: The Future is Better Than You Think*, by Peter Diamandis and Steven Cutler as a well researched argument of this case.

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