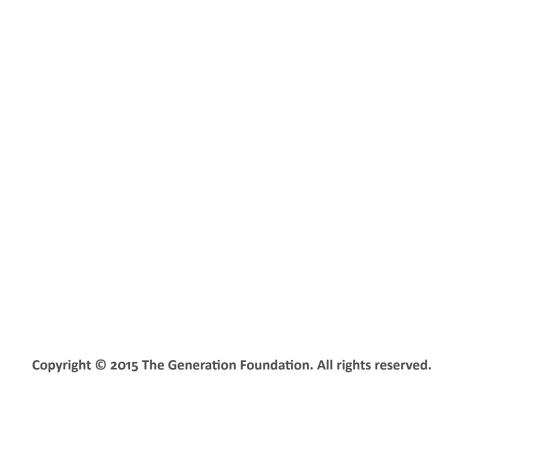


Allocating Capital for Long-Term Returns

THE STRENGTHENED CASE FOR SUSTAINABLE CAPITALISM





About us

The Generation Foundation ('The Foundation') is the advocacy initiative of **Generation Investment Management** ('Generation') and the author ('we' and 'our') of this white paper.

Founded in 2004, Generation is a boutique investment manager with three investment strategies: public equity, growth equity and global credit. Generation takes a long-term view, fully integrating sustainability research and insights into a rigorous framework of traditional financial analysis while aligning incentives with the interests of clients.

The Foundation was established alongside Generation in order to strengthen the case for *Sustainable Capitalism*. Our strategy in pursuit of this vision is to mobilise asset owners, asset managers, companies and other key participants in financial markets in support of the business case for Sustainable Capitalism and to persuade them to allocate capital accordingly.

In our effort to accelerate the transition to a more sustainable form of capitalism, we primarily use a partnership model to collaborate with individuals, organisations and institutions across sectors and geographies and provide catalytic capital when appropriate. In addition, The Foundation publishes in-house research such as this white paper, gives select grants related to the field of Sustainable Capitalism, engages with the local communities where we operate and supports a gift-matching programme for the employees of Generation.

All of the activities of The Foundation, a not-for-profit entity, are funded by a distribution of Generation's annual profitability. For more information about The Foundation, or to obtain additional copies of this report, please visit **www.genfound.org** or contact:

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Preface

Since we published our initial white paper entitled *Sustainable Capitalism*¹ in 2012, the new model of capitalism we proposed has gained significant momentum and support, albeit at times referred to by other names, such as: Long-Term Capitalism,² Inclusive Capitalism,³ Inclusive Prosperity⁴ and Shared Value.⁵ Over the last three years, our definition of Sustainable Capitalism has evolved to reflect new understandings of how it is currently impacting the global landscape of business and finance, and has been shaped by new insights into how it is likely to continue driving change. Our current definition of Sustainable Capitalism is as follows:

Sustainable Capitalism is an economic system within which business and capital seek to maximise long-term value creation, accounting for all material ESG (environmental, social and governance) metrics.

Integral to this framework is the consideration of all costs and benefits, regardless of whether they are currently attributed with an economic "price tag" by society.

While this framework is designed with a long-term horizon, it also has meaningful short-term implications, providing a process for identifying current risks and opportunities.

Sustainable Capitalism aims to address real needs in all economic, business and policy decisions.

It transcends borders, industries, forms of ownership, asset classes and stakeholders. Indeed, it exists at the intersection of business, science, politics and market forces. Consequently, it is necessary to coordinate across disciplines and sectors in order to inspire and catalyse the innovation and lasting change that we believe is urgently needed.

For examples of the ESG factors that collectively form the key pillars of a sustainability analysis, see Figure 1. Note that the terms "sustainability" and "ESG" are used interchangeably throughout this report.

¹ Al Gore and David Blood, "A Manifesto for Sustainable Capitalism," *The Wall Street Journal* (14 December 2011); The Generation Foundation, *Sustainable Capitalism* (2012).

² McKinsey & Company, Perspectives on the Long-Term: Building a Stronger Foundation for Tomorrow (March 2015).

³ Mark Carney, "Inclusive capitalism: creating a sense of the systemic," Speech at the Conference on Inclusive Capitalism: London (27 May 2014).

⁴ Lawrence Summers and Ed Balls, Report of the Commission on Inclusive Prosperity, (Washington, DC: Center for American Progress, 2015).

⁵ Shared Value. "What is Shared Value." (30 March 2015).



Figure 1 Key ESG factors defined

Environmental

- Air quality output
- Biodiversity impacts
- Carbon footprint
- Climate change resiliency
- Energy consumption
- Environmental policy
- Fresh water use
- Ground water depletion
- Impacts on the cryosphere
- Impacts on the food supply
- Land use
- Natural resource management
- Ocean productivity and acidification
- Regulatory & legal risks
- Supply chain management
- Vulnerability to extreme weather
- Waste & hazardous materials management

Social

- Access and affordability of product or service
- Consumer rights
- Corporate philanthropy
- Customer relations
- Data security and customer privacy
- Diversity issues
- Employee engagement
- Fair disclosure and labelling
- Health and safety of communities
- Human capital management
- Human rights
- Labour relations
- Product quality and safety
- Responsible R&D
- Stakeholder and community relations
- Supply chain management

Governance

- Accounting and audit process
- Board composition
- Business ethics
- Compliance
- Executive remuneration
- Lobbying and political contributions
- Ownership structure
- Reporting and disclosure
- Shareholder rights
- Succession planning
- Transparency
- Voting procedures

Additional considerations for funds...

- Advisory committee powers and composition
- Client alignment & fee structure
- Fund governance

Source: Analysis by The Generation Foundation

The progressive transformation of the incentives and behaviours that will ultimately reshape the global economy in accord with the paradigm of Sustainable Capitalism will require a broadly shared commitment to making businesses sustainable and to allocating capital in a manner consistent with the principles outlined in this framework. We propose the following definitions as building blocks for the transition towards Sustainable Capitalism:

A **Sustainable Business** does not borrow its current earnings from its future earnings and provides goods and services in a manner that is consistent with the transition to a low-carbon, prosperous, equitable, healthy and safe society.

Sustainable Investing is an investment philosophy and approach which allocates capital to companies aligned with these principles, using an analysis which integrates both financial and ESG metrics to rigorously evaluate the business quality and management quality of a company. Sustainable Investing seeks competitive, market-rate returns. It does not compromise financial returns for sustainability outcomes, or the reverse. It applies to the entire investment value chain from entrepreneurial ventures to publicly traded large-cap companies, from institutional investors to high net worth individuals, from investors providing seed-capital to those focused on late-stage growth-oriented opportunities, from company employees to CEOs, from activists to policy-makers and standard-setters.



In addition to defining Sustainable Capitalism and outlining the economic rationale for its adoption, our 2012 white paper provided a series of recommendations for how the investment community could accelerate the transition to a more sustainable form of capitalism. The five key recommendations were to: identify and incorporate risks from stranded assets;⁷ mandate integrated reporting;⁷ end the default practice of issuing quarterly earnings guidance; align compensation structures with long-term sustainable performance; and encourage long-term investing with loyalty-driven securities.⁸

These five recommendations, taken together, represented what we believed were the first steps in the development of a strategy for facilitating change. We not only offered them for consideration, but also provided catalytic capital in the hope that further, more detailed work might be undertaken by subject matter experts in each of these five areas. And since 2012, there has been notable progress in the further development of these ideas—not only through research and discourse, but also, in some cases, as a result of compelling actions by market participants—though it comes as no surprise that not all of these ideas have advanced at the same pace.

For example, much work remains to be done to further our recommendation to align compensation structures with long-term sustainable performance. The investment community has yet to adopt the changes that are necessary to align compensation structures with long-term sustainable performance, though there are mounting pressures on the financial services industry to rethink its approach to remuneration. Not only does it make economic sense to anchor rewards in comprehensive long-term performance metrics, grassroots movements (like "Occupy Wall Street") and other global calls to address untenable levels of wealth inequality have highlighted the need to revise compensation structures. (While inequality is a necessary condition for capitalism, and is not undesirable in and of itself, *hyper*-inequality is corrosive to both capitalism and democracy and is simply not sustainable over time.) The investment community must urgently reconsider the need for this recommendation and the pace appropriate for its implementation. For our part, we will continue to seek ways in which we can catalyse sustained positive change on this topic.

Similarly, although our recommendation to consider loyalty-driven securities was met with enthusiasm by some who share our desire for new ways to provide incentives for engaged long-term ownership (including through the potential use of new financial instruments), we have since reconsidered the feasibility of loyalty-driven securities after detailed research we conducted with Mercer into this issue, ¹¹ which revealed concerns shared by many about the potential market distortions involved in any significant departure from the 'one share, one

⁶ A stranded asset is an asset that loses significant economic value well ahead of its anticipated useful life, as a result of changes in legislation, regulation, market forces, disruptive innovation, societal norms, or environmental shocks. The Generation Foundation, Stranded Carbon Assets (2013).

⁷ Integrated reporting is a framework whereby companies combine their most salient financial and sustainability performance metrics into one report. The Generation Foundation, Sustainable Capitalism (2012).

⁸ Loyalty-driven securities offer investors financial rewards for holding a company's shares for a certain number of years. The Generation Foundation, *Sustainable Capitalism* (2012).

⁹ IRRC Institute, The Alignment Gap Between Creating Value, Performance Measurement, and Long-Term Incentive Design (2014).

¹⁰ Wealth inequality has continued to rise in recent years. Credit Suisse, Global Wealth Report 2014 (2014).

¹¹ Mercer, Stikeman Elliott LLP, and The Generation Foundation, Building a Long-Term Shareholder Base (2013).



vote' model. Nevertheless, although the recommendation to consider loyalty-driven securities did not emerge as a viable solution to decrease short-termism in stock ownership, it did serve to raise the profile of the problem we set out to solve. It has inspired new ideas to provide incentives for long-term holding periods, along with a recently renewed proposal to reform the capital gains tax code to align better with long-term investing.¹²

With regard to our recommendation for integrated reporting (which others have also put forward), there have been significant advances over the last three years as the field of sustainability disclosure has matured. An increasing number of companies are practising integrated reporting or are in the process of making a transition to integrated reporting, suggesting that the market acknowledges the value of integrated reporting. This change has occurred as the range of benefits from integrated reporting have been shown to include a more holistic view of performance and better insight into risk, strategy, the business model, the operating context and governance. In particular, the focus on identifying and emphasising only the most material ESG issues, selected carefully on an industry-specific basis, is now changing companies and investors attitudes towards the relevance of sustainability data. Indeed, studies now find that firms practising integrated reporting are able to attract more long-term investors to their ownership base.

Our contribution to this development included providing seed funding to the Sustainability Accounting Standards Board ('SASB') as well as contributing to industry knowledge through various working groups and consultations. SASB, a not-for-profit organisation based in California, was founded in 2012 to establish a much clearer understanding of material sustainability risks and opportunities facing companies, and to create industry-based key performance indicators suitable for disclosure in standard filings with the SEC.16 To date, SASB has issued reviews on seven of its ten specified sectors and has launched both a corporate pilot programme and a software provider partnership programme to help companies integrate SASB standards into their disclosure processes. Likewise, The International Integrated Reporting Council ('IIRC') saw commitments from 140 businesses and 26 investors worldwide for its pilot programme, which concluded in September 2014 and sought to establish a framework for integrated reporting. 17 Indeed, a focus on the long term through integrated reporting is especially important in a modern market with shifting macroeconomic values, wherein an average of 84 percent of the market value of companies¹⁸ now lies in intangible assets but accounting practices and processes remain outdated, with a myopic focus on the short-term.¹⁹

¹² Laurence Fink, "Our Gambling Culture," Perspectives on the Long-Term: Building a Stronger Foundation for Tomorrow (March 2015), p. 10.

¹³ Various initiatives promoting integrated reporting continue to gain traction. Chris Bryant, "A corporate balance sheet with a little added love," Financial Times (19 November 2014).

¹⁴ Grant Thornton, "How integrated reporting helps mid-sized businesses," FDIntelligence (2 April 2014).

¹⁵ George Serafeim, Integrated Reporting and Investor Clientele (14 January 2014). Journal of Applied Corporate Finance (forthcoming).

¹⁶ Jeffrey Ball, "The Environment and the Bottom Line: Jean Rogers of the SASB says investors need better information," Wall Street Journal (30 March 2015).

¹⁷ The IIRC framework offered a set of guidelines to more deeply integrate sustainability into corporate objectives. IIRC, The International Framework (2013).

¹⁸ Kristi Stathis, "Ocean Tomo Releases 2015 Annual Study of Intangible Asset Market Value," Ocean Tomo Insights Blog (5 March 2015).

¹⁹ Charles Tilley, "Perspectives on the long term," Book Excerpt from McKinsey Quarterly, Dominic Barton and Mark Wiseman (March 2015).



On the theme of improving disclosure and communication, our recommendation to reconsider the usefulness of issuing quarterly earnings guidance has been well received, as the many problems and distortions associated with short-term guidance has come under review in recent years. ²⁰ In order to catalyse a thoughtful discussion on ending the default practice of issuing quarterly earnings guidance, we partnered with the Aspen Institute and subsequently KKS Advisors, with whom we published a robust report that firmly established the economic case for companies to adopt communication practices oriented towards the long term. ²¹ That report clearly articulated the costs associated with issuing regular earnings guidance; proposed an alternative to providing regular earnings guidance; and created a framework for action by companies wishing to change their behaviour. With more companies moving away from regular earnings guidance while adopting alternative forms of communication that allow market participants to analyse and understand the value of a business, we see significant progress being made on this front too.

Lastly, given the increasing importance and urgency for the financial community to "identify and incorporate risks from stranded assets" (see Figure 2), this recommendation received prioritised focus after publication of the 2012 report; since then, happily, there have been great strides in financial markets generally towards broad recognition of why this change is necessary and urgent. In October 2013, we released a paper entitled *Stranded Carbon Assets — Why and How Carbon Risks Should Be Incorporated in Investment Analysis*, ²² which outlined the business case for addressing stranded carbon risks and provided a guideline on how investment frameworks can be adjusted accordingly. We also collaborated with other groups that share our concern about this topic, including the Carbon Tracker Initiative, the Smith School of Enterprise and the Environment at the University of Oxford, ShareAction and Resources for the Future.

Encouragingly, as mounting scientific evidence underscores the urgent need to enforce a carbon budget (see Figure 2), the grave risks associated with *stranded carbon assets* have now become a mainstream issue in financial markets. This welcome development has further catalysed actions by organisations and individuals around the world who are now advocating steps to protect against the damage that is widely anticipated as a result of the forthcoming stranding of carbon-intensive assets.

²⁰ See, e.g. Francois Brochet, Maria Loumioti and George Serafeim, "Speaking of the Short-Term: Disclosure Horizon and Managerial Myopia," Harvard Business School Accounting & Management Unit Working Paper No. 12–072 (12 March 2015).

²¹ The Generation Foundation & KKS Advisors, Earnings Guidance – Part of the Future of the Past (2014).

²² The Generation Foundation, Stranded Carbon Assets (2013); Al Gore and David Blood, "The Coming Carbon Asset Bubble," The Wall Street Journal (30 October 2013); Al Gore and David Blood, "Strong Economic Case for Coal Divestment," Financial Times (6 August 2014).

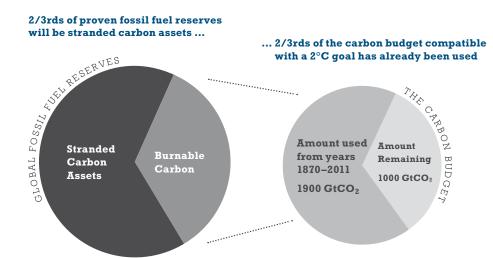


Figure 2 Enforcing a 2° carbon budget 23

Source: International Energy Agency, World Energy Outlook (2012); IPCC, "IPCC Fifth Assessment Report," Lima Climate Action High Level Session (2014); analysis by The Generation Foundation.

Ongoing research by academic institutions and other organisations on the risks posed by carbon-intensive assets to the global financial system, grave warnings voiced by central bankers about these risks, ²⁴ highly publicised fossil-fuel divestment campaigns and growing calls by shareholders for companies to disclose their carbon risk, ²⁵ have all combined to catapult this topic onto the global stage. Concurrently, the cost-down curves for low-carbon alternatives have plummeted steeply due to technological advances and the economies of scale being reached as companies expand production to meet exploding demand. As a result, the economic case for investing in low-carbon assets has dramatically improved.

Although their exact contribution to mainstreaming Sustainable Capitalism cannot be known, the collective impact of the progress achieved on these topics to date is meaningful. There are significant indicators of this change. A 2014 Nielsen study showed that a majority of consumers surveyed globally demonstrate a preference for products and services from companies committed to positive social and environmental impact a dramatic reversal of opinion compared to the same survey conducted just three years earlier. This shift in the expectations of businesses is also especially observable in the Millennial demographic, defined as those born in or after 1983. According to the 2015 Deloitte Millennial survey, which questions almost 8,000 people across 29 countries in full-time employment, this cohort is much more inclined to work for businesses that focus on purpose, not just profit. The first profit. The surge in demand for sustainability education does not come

²³ Carbon Tracker Initiative, Unburnable Carbon – Are the world's financial markets carrying a carbon bubble? (2014).

²⁴ Mark Carney, "Letter from Mark Carney on Stranded Assets," Bank of England, Supervisory Activities – Climate Change Adaptation Reporting (30 October 2014).

²⁵ See, e.g. BP Global, "Shareholder Resolution 25," Annual General Meeting (21 April 2015); Ceres, "Shareholders File Resolutions to Press Fossil Fuel Companies on Low-Carbon Strategies, Carbon Asset Risk," Press Release (12 February 2014).

²⁶ Nielsen Holdings N.V., "Doing Well by Doing Good," Global Corporate Social Responsibility Report (2014).

²⁷ Deloitte, "Mind the Gaps," The 2015 Deloitte Millennial Survey (2015).



as a surprise. Net Impact, a non-profit devoted to "empowering a new generation to drive social and environmental change," has a local chapter in 98 percent of the top 50 MBA programmes worldwide.²⁸ Deans of business schools report that students are flocking to courses that emphasise sustainability.²⁹ Not surprisingly, CEOs report that sustainability has become central to recruiting and retention strategies.³⁰ In addition, the rapid expansion of the "shared economy," promoting new business models that maximise resource efficiency and asset utilisation, is part of the rise of Sustainable Capitalism.

The implications of these developments for finance and policy are significant and are reflected in the increasing demand for sustainable investment products – including, for example, fossil-fuel free indices³¹ and green bonds.³² They are also reflected in the growing vanguard of leaders across the public and private sectors who are vocally promoting long-term sustainability goals.

²⁸ Net Impact, (30 March 2015).

²⁹ Caroline Holtum, "Expert views: sustainability and business education," *The Guardian* (13 May 2014).

³¹ Mike Scott, "Fossil Fuel-Free Index will help Investors Manage Climate Risks," Forbes (5 January 2014).

³² Climate Bonds Initiative, "Swedish bank SEB tops annual Green Bond Underwriters League Table," Media release (15 January 2015).



Executive Summary

This report expands on our previous work, specifically our 2012 Sustainable Capitalism white paper, building on the insights gained over the three years following its publication. It is intended for an audience of mainstream investors and corporate executives.

The recommendations for how to mainstream Sustainable Capitalism introduced in our 2012 paper still merit attention as their development and implementation are ongoing. This report is intended to reassert and update the ever-stronger business case for Sustainable Capitalism and outline an updated approach to allocating capital for long-term returns. We propose a series of interconnected ideas that we believe will help evolve investment frameworks in ways that will align with Sustainable Capitalism. Specifically, these ideas call on key actors in the global economy to:



The importance of sustainability to business and investing is intensifying as financial markets are increasingly forced to address challenges posed by the realities of natural resource scarcity, the effects of unabated carbon-emissions, rapid urbanisation and widening wealth inequality, to name just a few. As the context of business and investing shifts, understanding the economic benefits of a sustainable form of capitalism and the best ways to navigate the transition have become even more critical. This has significant implications for asset owners, asset managers, corporate executives and other market participants seeking to develop successful businesses and deploy capital today and in the future.

The inertia that has kept capital allocation decisions anchored in traditional investment frameworks must give way to a new paradigm of capitalism – one which has evolved in parallel with the emerging opportunities and challenges driving the modern global economy. This new paradigm is Sustainable Capitalism.



The current context of business

The time horizon relevant to sustainability-related risks and opportunities is neither uniformly long term nor short term. Some of these risks and opportunities are upon us right now, powerfully shaping the current business environment, and must be dealt with in the short term. Indeed, even though several of these trends seem new, they actually have the profound potential to disrupt financial markets in a non-linear progression. And investors who rely principally on historical data in analysing the relevance and time-urgency of these themes are at risk of being misled, even in the short term.

However, the most important implications of other risks and opportunities will emerge over the longer term. In order to understand better these risks and opportunities related to Sustainable Capitalism, we have invested considerable time and effort in researching and analysing what we believe are the key trends that are driving global change, their associated risks and investment opportunities and how they are likely to affect the adoption of Sustainable Capitalism.

Figure 3 Key drivers of global change in 2015 and beyond



Earth Inc. - deeply interdependent global economy

- Global financial integration to a much greater degree
- Labour market disruption due to simultaneous outsourcing of jobs from industrial economies and digitisation of jobs by automation combined with ever-more-sophisticated forms of artificial intelligence
- Untenable levels of intra-country wealth and income inequality, creating profound social instability and posing new challenges for self-governance
- Development of new materials and the impending spread of 3-D printing, which are beginning to revolutionise manufacturing and supply chain management



The Global Mind – the interconnection of billions of people to one another, to a rapidly growing global network of increasingly intelligent machines, devices and embedded sensors and to voluminous and exponentially growing databases

- The growing use of the "internet of things" and "big data" to improve resource utilisation
- The democratisation of information and the struggle by some governments to restrict access by their citizens
- Erosion of privacy (by governments and corporations) and the nearly ubiquitous risk of cyber-security



Power in the Balance – uncertainty over the continued primacy of US leadership in the world and the palpable rise of China's influence—and concurrently, growing private sector influence over decisions formerly made by governments—due to governance failures and the emergence of Earth Inc.

- Dysfunctional national and global governance
- Shift of power from west to east and from "developed" nations to "emerging" nations
- Encroachment of big money into democratic processes
- Success by corporate interests in lobbying and in dominating political processes
- Fervour of market fundamentalism and quarterly capitalism

generation foundation



Outgrowth – collision of consumption patterns with apparent limits in the supply of some natural resources (like topsoil and ground water) and with limits to the capacity of the atmosphere and the oceans to absorb growing waste streams

- General population growth compounded by and combined with the growing resource-intensity of an expanding global middle class
- Rapid urbanisation
- Depletion of natural resources, environmental degradation and rising pollution



Life Sciences Revolution – unprecedented advances shaping civilisation

- Significant extensions of the average human life span
- Precision medicine targeting individuals' genes, proteins, microbiomes and pathogens
- Genetically engineered animals, plants and humans; crossing of lines separating species
- Artificial limbs, organs, skin and blood
- Modification of the blueprint of life itself; artificial life-forms
- Devices, sensors and connections to databases embedded in life forms, including humans



The Climate Crisis – CO_2 emissions and other greenhouse gases due to human activities worsen the climate

- Record high temperatures
- Disruptions to food and water supplies, water and spread of disease stress societal health and wellbeing
- Climate-related extreme weather events, including stronger and more destructive cyclones, hurricanes, typhoons, downpours, floods and droughts
- Melting of the Cryosphere, rising sea levels
- Potential loss of ocean productivity with ocean acidification and warming alongside unsustainable exploitation of the oceans
- Additional stress on natural resources already confronting unsustainable consumption
- Disruptions to food and water supplies, water, societal health and wellbeing and spread of disease and stress
- Radical loss of biodiversity; the "Sixth Great Extinction"
- Unprecedented availability and uptake of solutions, particularly cheaper renewable energy generation and storage
- Largest business opportunity in world history as global economy decarbonises and becomes hyper-efficient

Source: The Future - Six Drivers of Global Change by Al Gore & analysis by The Generation Foundation

These dynamics – the tailwinds behind the uptake of Sustainable Capitalism – highlight the need for a new type of capitalism that is long-term and holistic in nature in order to take full advantage of the emerging needs associated with these realities, including:

- The transition to a low carbon economy
- More business models leveraging technology that improves asset utilisation, therefore conserving resources, in the "sharing economy"
- Maturing field of sustainable finance: increasing demand, changing nature of consumption patterns, better tools for analysis in both accounting and reporting
- Calls to update the measurement of growth beyond GDP
- A shift in behaviours and attitude towards sustainability between generations with more enthusiasm and commitment from the Millennial generation and centennials



New Research

The business case for Sustainable Capitalism is being made more often and more rigorously by both academics and business leaders. And the sum total of both research and practical experience is proving that companies can improve their financial performance while improving performance on ESG dimensions.

New research continues to be published showing how sustainability can drive outperformance. These reports have come from academia, financial institutions, consultancies, think-tanks and non-profit organisations. What follows in this section of our study is by no means a complete picture of all the evidence relevant to this subject. We encourage readers to dive deeper into the reports referenced here (and in the footnotes and appendix) for more detail on the voluminous emerging evidence and the methodologies employed to reach these findings. Rather, our purpose here is to show that the case for action has been made by a great many credible experts, that it is growing stronger, and then to point to where some of the most compelling new research can be found.

Many studies have now examined the relation between financial and ESG performance. We direct the readers to a meta-study conducted by the University of Oxford and released in September 2014 in partnership with Arabesque Partners.³³ Their report investigates and collates the findings from over 190 of the premier academic papers, industry reports, newspaper articles and books.

The report reviews the business case for corporate sustainability (across risk, process and product innovation, operations, reputation and cost of capital) and its link to stock price performance. The study concludes that "it is in the best economic interest for corporate managers and investors to incorporate sustainability considerations into decision-making processes." Specifically, their findings suggest: 1) companies that lead in sustainability have better operational performance and are less risky (supported by 88 percent of reviewed sources); and 2) investment strategies that incorporate ESG issues outperform comparable non-ESG strategies (supported by 80 percent of reviewed sources).

The report also concludes that it is in the interest of asset owners to influence companies to produce goods and services in a responsible way because active ownership creates value for companies and investors. Again, readers are encouraged to review this study's bibliography as it provides an extensive reading list on the case for Sustainable Capitalism.

Other groups have also significantly contributed to the research in this field. By using concrete data from within the investment industry to explore the business case for Sustainable Capitalism, they have found that it is quite clear that integrating ESG factors alongside traditional financial analysis makes good economic sense when allocating capital. There are two pillars of sustainable investing: ESG integration and engagement.

³³ Gordan Clark, et al., From the Stockholder to the Stakeholder – How Sustainability Can Drive Financial Outperformance, (Oxford: Smith School of Enterprise and the Environment at the University of Oxford and Arabesque Asset Management, March 2015).



On ESG integration, Harvard Business School's recent investigation into corporate sustainability shows a tangible link between a firm's integration of material sustainability issues and enhanced shareholder-value.³⁴ The authors follow SASB's guidance industry-by-industry on materiality and find significant risk-adjusted returns for portfolios that include companies with superior ESG performance on material sustainability issues. These conclusions about the materiality to investing are further confirmed in Morgan Stanley's effort to map the effect of ESG factors on various value drivers across industries.³⁵ Similarly, AlphaNow's findings suggest that ESG integration is key to producing stable, long-term returns.³⁶ This claim is further evidenced in reports like that by Robeco's Quantitative Strategies Department, which demonstrates the alpha potential of integrating sustainability data into traditional financial analysis.³⁷

On engagement, another study finds that after successful efforts by investors to engage with companies, particularly on environmental and social issues, companies improve their accounting performance and corporate governance.³⁸ These results are consistent with industry efforts to empower active ownership that productively engages with corporate management.

Various other reports have applied these findings to research how best to pursue a strategy of change management that accelerates the integration of sustainability analysis into the investment process. For example, a new white paper written by a coalition of institutional investors (led by the Canadian Pension Plan Investment Board) outlined steps investors can take towards this goal.³⁹ This work was inspired by an earlier analysis conducted by McKinsey that highlighted the economic benefits of sustainability.⁴⁰ The report suggests that in order to succeed, sustainability considerations need to be an organisational *priority*, while clear and strong support should also be received from the organisation's leadership. The emphasis on the key role of leadership in accomplishing the transition to sustainability integration is also conveyed in Deloitte's research, which focuses on the current potential for corporate management to capture the value derived from ESG to demonstrate to their investors how they are getting ahead of risks and building resilience to potential shocks.⁴¹

³⁴ Mozaffar Khan, George Serafeim and Aaron Yoon, "Corporate Sustainability: First Evidence on Materiality (Working Paper)," Harvard Business School (2015).

³⁵ Morgan Stanley, "Embedding Sustainability into Valuation," Morgan Stanley, (January 2015).

³⁶ Timothy Nixon, "Building a Great Return and a Better World with Your Savings," AlphaNow: Thomson Reuters (19 February 2015).

³⁷ RobecoSAM SI Research & Development and Robeco Quantitative Strategies, "Alpha from Sustainability," RobecoSAM White Paper (June 2014).

³⁸ Elroy Dimson, Oğuzhan Karakaş and Xi Li, Active Ownership (13 August 2014).

³⁹ Perspectives on the Long-Term: Building a Stronger Foundation for Tomorrow (March 2015).

⁴⁰ Sheila Bonini and Steven Swartz, "Profits with purpose: How organizing for sustainability can benefit the bottom line," McKinsey on Sustainability & Resource Productivity (July 2014).

⁴¹ Dinah Koehler and Eric Hespenheide, "Finding the Value in Environmental, Social, and Governance Performance," Deloitte Review, Issue 12 (2013).



Allocating capital for long-term returns

"The secret of getting ahead is getting started."

Mark Twain's observation, which can be misunderstood as a simplistic aphorism, in this case is actually a key insight for investors and business executives – because inertia and the gravitational pull of old cultures is perhaps the most important barrier that has prevented many business leaders from doing what research and common sense would otherwise lead them to do on a priority basis. The economic case for Sustainable Capitalism is compelling and the global economy is evolving accordingly. Although we must accelerate the rate of adoption, the principles of Sustainable Capitalism are taking root in financial markets and there is only one way to succeed in this new world order: to get started.

Allocating capital for long-term returns in the evolving global economy will require investors, asset owners, corporate executives and boards to adopt an integrated perspective on three core ideas (see Figure 4). Understanding the interdependent nature of these concepts is critical because they share a connection to the themes that form the bedrock of Sustainable Capitalism: decoupling prosperity from resource-intensive growth, revising investment time-horizons to target sustained value creation beyond quarterly profits, and integrating sustainability factors into strategic decisions and asset valuations. The three concepts presented here have been selected on the basis of their capacity to shift markets and transform the global economy towards a more sustainable economic model.

Figure 4 The path towards Sustainable Capitalism





Assess carbon risk and price carbon in all capital allocation decisions

The transition to a low-carbon future will revolutionise the global economy and present significant opportunities for superior investment returns. However, investors must also acknowledge that carbon risk is real and growing. Moreover, in spite of the impressive leadership emerging within the business community, it is neither realistic nor fair to expect that business can do policy work that only governments can do. As such, we strongly support a regulated carbon price through a global pact or series of regional agreements. Momentum towards this goal is mounting as governments representing over half of emissions now support carbon pricing.⁴² And by 2016, nearly 25 percent of all carbon emissions will be priced.⁴³ Notably, about half the world's emissions that will be priced will result from the national cap-and-trade programme China has announced that it will implement in 2016.⁴⁴

Furthermore, an increasing number of companies apply a shadow price on carbon when conducting asset valuations, a practice we encourage in the absence of widespread regulation. In 2014, 150 companies reported using an internal shadow price on carbon with prices ranging from \$8 to more than \$60 per metric ton of carbon. The reality, however, is that carbon largely remains an un-priced externality in financial markets today. Although it is impossible to know the exact timing of the prospective tipping point when financial markets will fully internalise carbon risk, it is critical for investors to prepare for its inevitable impact over the next five years.

To be clear, there are two reasons why investors should proactively include a meaningful carbon price when allocating capital: to manage risk and identify investment opportunities. Both of these reasons deserve elaboration.

Risk management

The ongoing transition to a low-carbon economy will continue to leave carbon-intensive assets stranded. Regulation targeting carbon, the rapid technological improvements of low-carbon alternatives, the continuing move towards more environmentally conscious and informed consumer choices and intensifying social campaigns for change are all combining to make it imperative for investors to apply a meaningful price on carbon in investment analysis across asset classes. Furthermore, the inclusion of a price on carbon emissions allows investors to transform what is currently treated as an *uncertainty* - an undesirable dynamic for any investor - into a quantifiable, and therefore *manageable* risk. Investors must understand the implications of the proactive decision to buy, hold, or sell carbon intensive assets, given their liabilities. The assessment of risk also requires understanding the risks to assets in alternative scenarios where collective action does not limit global

⁴² The World Bank, "73 Countries and Over 1,000 Businesses Speak Out in Support of a Price on Carbon," *News* (22 September 2014). 43 Kristin Eberhard, "All the World's Carbon Pricing Systems in One Animated Map," *Sightline Daily* (2014). 44 All the World's Carbon Pricing Systems in One Animated Map (2014).

⁴⁵ CDP, Global Corporate Use of Carbon Pricing (2014).



temperature rise to 2°C - where, in other words, we place too low a price on carbon—because the consequences in these scenarios would certainly influence asset valuations, for example, of coastal real estate, agriculture and many other real assets.

The deployment of capital into promising opportunities

Vast industries are being reworked in the transition to a low-carbon economy (see Figure 5), creating new investment opportunities in assets and strategies. Identifying advantaged assets in a decarbonised economy (those with a low-carbon profile) has already proven to create significant value through billion-dollar exits in private equity markets and success in public equity markets, and will only become increasingly attractive from a risk-return-profile as carbon emissions are widely priced. Investors applying a carbon price to valuations will be more likely to appropriately allocate resources and capital to this opportunity set.

Figure 5 The transformation of global industries as the economy decarbonises

Industry Low carbon & resource efficient innovations					
Energy	Solar	Wind	Geothermal	Storage	
Buildings	Insulating Materials	Lighting	Metering	Appliances	
Transport	Engines	Electric vehicles	Fleet logistics	Biofuels	
Water	Irrigation	Desalination	Wastewater	Distribution	
Materials	Biochemical	Biodegradable	Nanomaterials	Plastics	
Recycling	Reverse logistics	Material sorting	Sharing goods	Waste to energy	
Environmental Intelligence	Big Data	Data centre efficiency	Remote sensing	Local digital platforms	
Agriculture	Meat replacement	Forestry management	Urban farming	Precision agriculture	

Source: Analysis by The Generation Foundation

Use sustainability analysis to enhance investment frameworks

Frameworks are critical tools to develop robust investment processes. They help investors achieve consistency, distinguish between signal and noise and avoid biases. Generation's decision in 2004 to use sustainability analysis as the anchor to our investment process was and is based upon our conviction that long-term investing is best practice and that the long-term context of business is changing due to unprecedented global sustainability



challenges such as climate change, water, health and poverty. And at the company level, sustainability factors are drivers of business and management success.

Not surprisingly then, the Generation investment philosophy begins with an understanding of the long-term context of business. For company-specific factors, sustainability as a framework considers risk management and reputation; resource efficiency—particularly in light of limited natural resources—and delivering products and services to address global sustainability challenges in ways that drive revenues, profitability and competitive position. Critically, as illustrated in the previous sections of this paper, the academic and real-world evidence, including Generation's investment performance over the past decade, clearly demonstrate how the full inclusion of sustainability factors in economic decisions translates into better outcomes. In essence, sustainability is a lens to help the investor make better investment decisions.

Integration

Best practice sustainable investing starts with understanding the drivers of return for the portfolio, asset class or specific asset. Rather than bifurcating investment analysis into financial valuation and sustainability valuation, we encourage an approach that integrates sustainability within a rigorous investment process. At the highest level, this means forward-looking analyses of the long-term drivers of growth that will likely shape returns on financial and real assets. At a more micro level, we have found that this means integration of sustainability considerations into investment policy, asset allocation, portfolio management and securities analysis.

Comprehensive knowledge

Sustainable investing is not easy and there are no short cuts. One can never forget the fundamentals of finance and business including, importantly, valuation analysis. It is also critical to identify and focus on factors which are material and relevant within the appropriate investment time horizon.⁴⁶

This approach to investing – asking questions that integrate sustainability at their core – yields information for analysts to review that is both quantitative and qualitative in nature. For company research, an investment process that weaves sustainability considerations throughout its analysis reveals critical information about the quality of a company's business and management team, including: how sustainability can drive product innovation; whether executives are compensated for the company's long-term success; and the potential financial and reputational implications unrecognised or mismanaged ESG risks might create. Other lines of inquiry include culture, human capital management, governance,

⁴⁶ The definition of an appropriately long-term time horizon is determined by variables including the type of industry into which capital is being invested and the asset class. For example "long-term investing" will be different for publicly traded equity in a technology company compared to investment grade debt in a pharmaceuticals company, given the contrasts in product life cycle, industry dynamics and ownership structure.



supply chains, selling practices, product life cycles, carbon exposure and resource utilisation, health and safety, to identify but a few. In short, analysing the answers to these questions can provide insights into a company's long-term vision, its strategy for implementing that vision, and the probability of its success.

Engaged ownership

Responsible and engaged ownership is another critical step to sustainable investing. Asset managers have an unambiguous responsibility to vote shareholder ballots and make clear their expectations to management. Areas for particular focus should include governance, remuneration, risk and reputation, capital allocation and investor communication.

Uphold the full remit of fiduciary duty

Sustainability is an important factor in the long-term success of a business. Therefore, as with any other issue related to the prudent management of capital, investors and companies have a fiduciary duty to include sustainability in decisions.⁴⁷

The commonly held interpretation of fiduciary duty must be updated beyond the mistaken view that its scope is limited to a narrow definition of financial responsibility that excludes sustainability. Principally, there exists a robust business case for incorporating sustainability in investment decisions to maximise long-term financial performance. Moreover, new regulation and broader legal reform are also compelling reasons for doing so. In July 2014, the UK Law Commission's report found that "it is right that trustees should state their policy on how they evaluate risks to a company's long-term sustainability (including risks relating to governance or to the firm's environment or social impact)." The report concluded that trustees should expand their analysis to include ESG issues.

This marked shift in policy is further evidenced by the European Union's ('EU') directive on disclosure of non-financial and diversity information ('The Directive') that came into effect in December 2014. 49 Requiring sustainability disclosure by large companies (defined as those with more than 500 employees) based in the EU, The Directive signals the relevance of sustainability to prudent capital management and, therefore, fiduciary duty. This directive affects not only European companies but also many US and Asian companies with large operations or cross-listings in the EU. Moreover, similar directives exist in other jurisdictions, including important emerging markets such as China, Malaysia and South Africa. 50

⁴⁷ We advocated for reform in our 2012 white paper as well as in a report we published in 2005. Jed Emerson and Tim Little, "The Prudent Trustee – The Evolution of the Long-Term Investor" *The Generation Foundation* (2005).

⁴⁸ Law Commission, Fiduciary Duties of Investment Intermediaries (2014), p.8, §1:35.

⁴⁹ European Union, Directive of The European Parliament and of the Council amending Directive 2013/34/eu as regards disclosure of non-financial and diversity information by certain large undertakings and groups (Brussels, 2014).

⁵⁰ Ioannis Ioannou, George Serafeim, "The Consequences of Mandatory Corporate Sustainability Reporting: Evidence from Four Countries," Harvard Business School Research Working Paper No. 11–100 (20 August 2014).



Notable developments are taking place in the United States as well. In 2013, Delaware, the legal home of 64 percent of Fortune 500 companies,⁵¹ became the nineteenth state to enact legislation establishing the public benefit corporation known as B Corporations or B Corps. B Corps require fiduciaries to balance the interests of shareholders with employees, society and the environment. To date, 27 states have passed Benefit Corporation legislation,⁵² and there are already over 1,550 known registered Benefit Corporations.⁵³ Outside of the United States, B Corps are also gaining traction globally with registered B Corps in 38 countries.⁵⁴

Addressing the myths

Fiduciaries are tasked with the decision to buy, sell, or hold assets. There is no passive behaviour as a fiduciary; there is no "do nothing" task. Those who defend the traditionally held interpretation of fiduciary duty justify the active omission of sustainability considerations by asserting that sustainability dynamics do not impact financial assets.

However, this reasoning is deeply flawed for three reasons: first, fiduciaries have a number of distinct duties, not a single duty to maximise profits, and within the reach of these duties, fiduciaries are by no means barred from considering factors other than financial return. ⁵⁵ Second, if fiduciary duty is indeed understood as an obligation to optimize financial performance, the failure to integrate sustainability considerations into investment strategies would also conflict with the performance of that duty, by neglecting to factor in the risk-adjusted performance of these assets over the medium to long term. ⁵⁶ The definition of fiduciary duty in terms of a narrow financial metric is truly based on an absurdly narrow understanding of *return* – one that focuses primarily on short-term prices and dividends while ignoring relevant externalities that remain mispriced. Finally, this reasoning suggests that the consideration of ESG issues only means applying exclusionary screening to the investment process, when in reality, sustainable investing strategies can be sophisticated and nuanced in range and scope.

Breach of fiduciary duty

Incorporating sustainability considerations into the capital allocation process is not only permissible for fiduciaries; we would argue that the active decision to ignore sustainability factors may in fact be a *breach* of fiduciary duty. This is especially true when assessing the impact of ESG considerations on the financial performance of investments.

⁵¹ State of Delaware, "About Agency," Division of Corporations (30 March 2015).

⁵² Benefit Corp, "State by State Status," *Information Center* (30 March 2015).

⁵³ Benefit Corp. "Search." Information Center (30 March 2015).

⁵⁴ B Lab, Launch Event of B Corp in Europe (21 April 2015).

⁵⁵ Freshfields Bruckhaus Deringer, "A legal framework for the integration of environmental, social and governance issues into institutional investment," Asset Management Working Group of the UNEP Finance Initiative (October 2005); FairPensions, The Enlightened Shareholder: Clarifying investors' fiduciary duties (2012); William Ransome and Charles Sampford, Ethics and Socially Responsible Investment: A Philosophical Approach (Australia: Ashgate, 2011), 125-129.

⁵⁶ United Nations Environment Programme Finance Initiative, *Fiduciary Responsibility* (2009); From the Stockholder to the Stakeholder – How Sustainability Can Drive Financial Outperformance (2015).



The University of Oxford and Arabesque Partners meta-study referred to earlier in this paper asserts that it is possible to generate better returns by incorporating sustainability factors into investment decisions. In addition to enhanced operational performance, companies with "solid ESG practices" also exhibited a lower cost of capital, while good sustainability practices positively influenced stock price performance.⁵⁷

Furthermore, other studies showed above-market average return for companies with strong sustainability policies and practices.⁵⁸ Failure to consider ESG factors in asset holdings may constitute a breach in fiduciary duty by intentionally overlooking the possibility of maximising long-term risk-adjusted returns. This was the conclusion of the Freshfields report in 2005,⁵⁹ and we strongly believe that this interpretation of fiduciary duty holds even truer today.⁶⁰

⁵⁷ Keith Johnson, "Introduction to Institutional Investor Fiduciary Duties," International Institute for Sustainable Development Report (February 2014), p. 44.

⁵⁸ Peter Ellsworth and Kirsten Snow Spalding, "The 21st Century Investor: CERES Blueprint for Sustainable Investing," Summary Report (June 2013).

⁵⁹ A legal framework for the integration of environmental, social and governance issues into institutional investment (2005). 60 Fiduciary Responsibility (2009).



Conclusion

If we redefine societal wealth to mean "the range of human problems it has solved and how available it has made those solutions to its people" then we must not only continue the journey towards a more sustainable form of capitalism, but we must also quicken our pace. Implementing the recommendations outlined in this report could radically transform the global economy by 2020. Financial markets would incorporate the price of externalities like unabated carbon emissions that are currently treated as nearly free resources and allocate capital accordingly.

Furthermore, asset owners, asset managers and companies would, in the process, adopt a more holistic definition of fiduciary duty - one which incorporates sustainability and shapes investment frameworks as a result. In so doing, investors would help mobilise action towards successfully addressing urgent sustainability issues like enforcing the carbon budget while simultaneously building profitable investment positions for long-term gain.

Thoughtful questions that ignite a dialogue around change will be powerful tools for reform. How can I mobilise capital in order to price carbon? How does my fund manager integrate sustainability analysis into the investment process? Does my pension plan incorporate sustainability as a key consideration? Will my company's operational viability be challenged by natural resource scarcity? How do I help more consumers to become aware of the global effects of their purchasing decisions? Investors and business executives alike are now equipped with the economic case for action. However, as Goethe observed, "Knowing is not enough; we must apply. Willing is not enough; we must do."

We have the knowledge; now we must do.



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