

NAVIGATING THE SUSTAINABLE INVESTMENT LANDSCAPE

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EXECUTIVE SUMMARY

Global natural resource scarcity, climate change, population growth, demographic shifts, and extreme poverty are impacting the way investors view the future. Many already recognize the materiality of such risks to long-term portfolio performance and are starting to incorporate relevant environmental, social, and governance (ESG) factors into decision making in building a portfolio. With thoughtful implementation, these sustainable investing strategies have a positive, or at least non-negative, association with financial performance over the long term (Friede et al. 2015; Trunow and Linder 2015; Mercer 2009; Morgan Stanley 2015a), while also generating co-benefits. But the landscape for sustainable investing is changing rapidly and is difficult to navigate. For most asset owners, it isn't easy to translate consideration of long-term sustainability into portfolio investments.

This paper informs asset owners about the current state of sustainable investing for US institutional investors. Drawing on the experiences of over 100 asset owners and investment professionals—as well as evidence from WRI's own endowment—the paper constructs a detailed outline of sustainable investing. It highlights the underlying motives and drivers, governance structures, relevant data and standards, investment vehicles, and key barriers that shape opportunities for implementation. It describes how some US-based asset owners are pursuing sustainable investing, and distills lessons for investment practitioners as they contemplate their own strategies. The paper concludes with initial recommendations for asset owners in overcoming preliminary market barriers and strategic

CONTENTS

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steps other market actors-including asset managers, advisory firms, data providers, and investor networkscan take to support sustainable investing.

Audience

The findings are targeted to the early adopters of sustainable investing in the United States: foundations and other endowed asset owners. These asset owners share a common dependence on endowments to support their mission over the long run. For them, sustainable investing can help secure financial stability far into the future, while also supporting their programmatic purpose through investment strategies broadly in line with their social and environmental values. But the appeal is not exclusive to this audience. While mission-driven investors have added reason to consider sustainable investing, the practice has relevance for all long-term investors, even those with a "finance first" orientation. Values aside, sustainable investing is simply a means of expanding the investment analysis to account for a broader set of material long-term risks and opportunities. This is a strategic advantage for any institutional investors with a long-term investment horizon. While this paper seeks to inform all investors that are contemplating sustainable investing, as the first movers it is mission-driven asset owners that come into greatest focus.

A dynamic landscape

We identify a number of forces driving asset owners' interest in sustainable investing. The leading driver is financial in nature: growing evidence of the material link between positive ESG performance and corporate financial performance. This link is only strengthening in a changing macroeconomic landscape. As businesses navigate the current and expected forces of population growth, demographic shifts, resource scarcity, climate change, and other related trends, the way in which they manage ESG risks and opportunities becomes increasingly relevant to their bottom lines.

At the regional, national, and global levels, meanwhile, the policy framework for sustainable investing is increasingly supportive. Evolving environmental, social and governance regulations are making certain externalities more immediately material to companies and, therefore, investors. The policy driver most commonly cited by investment professionals is the UNFCCC Paris Agreement (supported by President Obama's National Climate Action Plan on mitigating carbon pollution). Other regulations pertain directly to investors and their ability to incor-

porate ESG into investment decisions. This includes the 2015 Department of Labor ruling that clarifies ESG as an appropriate component of fiduciary duty for retirement pension plans.

At the same time, social norms are creating pressure for institutions to align their investments with their mission and values. In some cases, these norms are reinforced through legal codification—as with recent guidance by the Internal Revenue Service and the Department of Labor. The norms—policy-supported and otherwise—are particularly relevant to mission-driven institutions like foundations and endowments, since these institutions have clear social missions and values. Growing social movements, like the fossil fuel divestment campaign, both reflect and reinforce these broad norms for mission alignment. These campaigns are driving increased scrutiny regarding the social, political, or economic implications of investment holdings—even those beyond the narrow focus of a given campaign.

These drivers are leading increasing numbers of asset owners to employ various strategies for sustainable investing. While the definitions of relevant terminology are not yet standardized, for the purpose of this paper we use "sustainable investing" as an umbrella term for all investment practices that consider ESG factors to inform decision making. The commonly pursued sustainable investing strategies fall within five main categories: negative screens, positive screens, ESG integration, impact investing, and shareholder engagement. Asset owners are implementing these strategies—which can be overlapping—in a variety of ways according to their investment objectives. Often, they begin the sustainable investment journey by applying one strategy—generally negative screens or impact investments—in a designated portion of a portfolio or a single asset class. More advanced or experienced asset owners may integrate a holistic strategy across an entire portfolio.

As more asset owners consider sustainable investing as a means to drive outperformance in long-term returns and align endowment assets with institutional mission, the investment ecosystem is becoming increasingly supportive. We identify an improving selection of sustainable investment opportunities, as well as the information to evaluate them. These positive developments include a range of supportive products and services, including (a) the growing availability of ESG data and analytics to inform decision making; (b) new sustainability-themed market indices; (c) improving disclosure standards;

- (d) new investment frameworks; (e) more peer networks;
- (f) more managers offering sustainability strategies; and
- (g) more knowledgeable investment consultants.

Key barriers to sustainable investing

Despite these positive developments, there are a number of critical sticking points that can dissuade or impede asset owners from pursuing sustainable investing. First, asset owners often **struggle to get the ball rolling** to disrupt the entrenched beliefs, knowledge, and processes associated with traditional investment decision making. These initial hurdles include:

- False perceptions and cynicism about sustainable investing. Many investment professionals are convinced that sustainable investment leads to adverse investment consequences.
- Short-term biases. A focus on short-term performance frequently leads investors to overlook material ESG issues that can play out over time.
- Decision paralysis. Asset owners—even those committed to sustainable investing—are commonly paralyzed by philosophical discussions that inhibit action.
- Misconceptions about fiduciary duty. Many investment professionals believe that incorporating sustainability factors into decisions conflicts with fiduciary duty, despite regulations to the contrary and despite evidence that ESG integration can be a form of prudent investing.
- Absence of accountability in decision making. The governance of investment management decisions in endowments can be diffuse and unclear, resulting in an uncertain decision-making process.

Even when asset owners finally have a mandate to begin investing sustainably, they find it challenging to translate their goals into the investment portfolio. The act of **putting their vision into practice is made difficult by an absence of actionable frameworks**. Investors are responding to market signals from new policy initiatives like the Paris Agreement and the Sustainable Development Goals, but they still lack clear frameworks to fit their entire investment portfolios into the future world envisioned by these aspirations. An asset owner may have momentous goals, but the path is uncharted.

Further, **ESG data**, **disclosure standards**, **and performance metrics are inadequate**. While reams of ESG data exist, key limitations restrict their broader use in mainstream investment decision making. First, asset

owners face uncertainty in simply identifying which ESG factors are material to performance in a given portfolio. Beyond this hurdle is the challenge of securing reliable data to measure those factors. Global and comparable data sets for ESG indicators are both scattered and inconsistent. Many efforts are underway to develop standards for corporate disclosures on key ESG issues, but their overlapping and (mostly) voluntary nature lead to inconsistency and confusion in implementation. These gaps can make it difficult for asset managers to perform comprehensive due diligence that includes ESG.

Lastly, there are persistent **gaps and weak links in the investment chain**. Asset owners increasingly try to move beyond negative screening and seek to be more holistic and proactive, but there are limited high-quality funds that integrate ESG criteria. While investment consultants are becoming more educated about sustainable investment and managers are developing new products, structural disincentives often limit interest in considering new long-term factors or proactively offering sustainable investment products to clients.

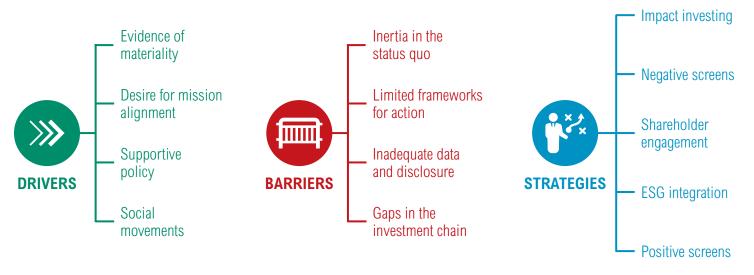
Initial actions for asset owners

US foundations and endowed asset owners can take a number of steps to navigate the barriers of the sustainable investing landscape. These include:

Knowledge and capacity building. The best place for asset owners to start is with internal education. It is important for decision makers within an organization to have a common understanding of several topics, including (a) the underlying premise of sustainable investing, (b) the materiality of ESG factors to financial performance, (c) the implications of sustainable investing for fiduciary duty, (d) how sustainable investing fits into the investment process, and (e) how to evaluate investment opportunities, among other topics. An internal champion equipped with this knowledge can provide coherency and leadership in an uncertain process.

Strategic delegation. In making initial decisions to pursue sustainable investing, asset owners may find it useful to establish a separate working group or special committee within the investment committee. This will allow time and resources to cultivate a shared understanding of the relevant issues and to devise a broad approach for the institution's strategy.

Figure ES 1 | Snapshot of the landscape: Key drivers, barriers, and strategies



Source: WRI.

External engagement. Discussing issues of sustainable investing with investment consultants, managers, and peer asset owners can be a crucial part of the learning process for asset owners. These conversations can help inform asset owners about the various debates on relevant topics, the range of sustainable investing strategies available, and potential opportunities or limitations. Asset owners can also use these conversations to encourage managers and consultants to improve their sustainable investment practices or offerings.

Portfolio experimentation. Before finalizing a grand strategy or making long-term commitments across a portfolio, asset owners can consider exploring the landscape by investing a portion of the listed equities allocation into sustainable investment funds. Listed equities are a good starting point both because of the liquidity of the asset class and the fact that sustainable listed equity funds are more readily available than those in (some) other asset classes. Asset owners can learn from this process while they reach agreement on an appropriate sustainable investment strategy for the broader portfolio.

In order to transition the entire market into one in which sustainability is a fundamental part of decision making for all institutional investors, asset owners will need support from other key stakeholders. The support needed to spur such a transition includes:

- Guidance for investment decision makers. Useful materials include a roadmap for integrating sustainability into endowment management, and detailed resources on common roadblocks within the process such as effective governance strategies and fiduciary duty.
- Improved ESG data and performance metrics. Improvements should focus on data quality, consistency, coverage, and accessibility.
- Actionable investment frameworks. New investment frameworks should be built around concrete sustainability goals and performance standards and supported by robust methodologies for achieving them.
- Greater supply of institutional-quality sustainable investment products. New products are needed to cover the full range of asset classes.

INTRODUCTION

Today's global challenges present unprecedented risk to economic development, human well-being, and natural ecosystems. For asset owners with a long-term investment horizon, these environmental, social, and governance (ESG) risks are coming into increasing focus and changing the context for investing. Many are starting to incorporate these factors into portfolio construction through sustainable investment practices—simply defined as investment strategies that take into account material ESG factors. When done right, sustainable investing can give investors an edge to mitigate risks and, in some cases, drive outstanding long-term returns (Friede et al. 2015; Morgan Stanley 2015a; Trunow and Linder 2015).

For US foundations and other endowed institutions, this emerging trend represents an opportunity to realize benefits on both the investment side and the mission side of operations. With their common dependence on endowment assets to carry out their missions into the future, it is critical that their capital can endure—and grow—over the long term. Sustainable investing strategies offer a means to facilitate this by identifying long-term risks and opportunities of a changing economy. Beyond securing financial stability far into the future, a sustainable investing approach that broadly reflects an organization's values can also enable the institution to enhance their program-related impact.

Despite the promise, only a small proportion of these investors' assets are managed under sustainable investing practices. For example, while US foundations hold nearly \$800 billion in collective assets (Foundation Center 2016), the 2014 US SIF report on sustainable investment trends found that only \$69 billion in foundation assets were managed with one or more ESG criteria (US SIF 2014). In a more recent study by the Council on Foundations and Commonfund (2016), less than 25 percent of 187 surveyed foundations reported implementing some type of sustainable investing practices. And among the 812 US colleges and universities in the 2015 NACUBO-Commonfund endowment study-which collectively represent \$529 billion in assets under management—only 15 percent consider ESG performance in investment decisions (and 25 percent apply negative screens) (NACUBO 2015).

Due to their success in achieving outsized returns in recent decades, large endowments are often viewed as the most sophisticated institutional investors (Vanguard 2012; NACUBO 2015). Other investors often follow their

innovative approaches, giving them widespread market influence. Accordingly, a broad shift toward sustainable investing by this segment could catalyze the demand for—and the supply of—sustainable investment products in the market. Such a force could help mainstream sustainable investing and thereby facilitate the transition toward a low-carbon, sustainable, and just economy fitted to the future world.

The purpose of this paper is to inform US-based foundations, endowments, and other mission-driven institutions on the current state of play of sustainable investment. The scope is restricted to US-based institutional asset owners and the unique opportunities and constraints they face in the market. While mission-driven institutional asset owners represent the likely first large-scale movers in sustainable investing, the value of the research is not exclusive to this audience.

Expanding the investment lens to account for a broader set of long-term material risks and opportunities represents a strategic shift for all long-term investors. A wider set of investors, including those with an exclusive focus on financial performance, stand to benefit from understanding the landscape of opportunities for sustainable investing. While this paper tilts toward the perspective of foundations and endowments, it ultimately seeks to inform all long-term investors that are contemplating sustainable investing.

The intention is to present information in a way that asset owners and the broader institutional investment community can practically discuss, examine, and learn from. The appraisal does not lead to prescriptive recommendations, but rather serves as a descriptive resource to inform conversations and guide planning.

- Section I sets the context for the paper by highlighting trends in sustainable investing.
- Section II draws on the experience of leading asset owners, asset managers, and investment consultants to explain the main drivers and trends, governance structures, and investment products that shape the opportunities for implementation. It includes a snapshot of how a selection of US-based asset owners currently engage with sustainable investment, including lessons from WRI's own sustainable investment experience with its endowment. In addition, it highlights key insights from the early adopters.

- Section III outlines some of the common issues that participants identified as barriers to implementing and mainstreaming sustainable investing practices. These barriers extend to various parts of the market ecosystem-from internal governance structures and actors' perceptions to availability of data, frameworks, and investment vehicles.
- The conclusion points to possible ways forward for endowment owners and other market actors.

A glossary of key terms is included for reference following the conclusion.

Research Approach

This qualitative study is based on the perspective of investment professionals within US-based foundations and other endowed institutions. The research approach combined a literature review with semi-structured interviews with asset owners, asset managers, financial consultants, outsourced chief investment officers (OCIOs), and other key players in the institutional investment ecosystem. (See Appendix C for the interview guide.) The study also draws on WRI's experience in implementing a sustainable investment strategy with its endowment holdings (see Box 4 in Section II).

The initial participant sample was comprised of key players identified in the course of the literature review. We expanded the sample by asking the initial shortlist for additional suggestions. Of the 121 organizations contacted for interviews, 115 agreed to participate. The distribution of the final 115 participants is displayed in Table 1.

The selection method and the likely response bias make this a non-random sample. All data was considered anonymous, due to the potentially sensitive nature of the information disclosed.

Table 1 | List of completed interviews for each group

Asset owners	38
Investment consultants and OCIOs	21
Asset managers	35
Service/data providers	21
TOTAL	115

Source: WRI

The asset owners represented a diverse sample. They included 38 foundations, NGOs, think tanks, universities, family offices, and public pension funds.² For the bulk of participants, assets under management ranged from \$25 million to \$40 billion, though the pension funds in the sample significantly exceeded that range. Collectively, the sampled asset owners represent over \$1.2 trillion in assets under management (inclusive of the pension funds). Of the mission-driven organizations, programmatic focal areas spanned the gamut, from scientific research and advocacy, to education, community and economic development, health advocacy, environmental policy, and international development.

The sampled asset managers varied from small boutique firms to those with trillions of dollars in managed assets. Among these firms were those offering traditional investment products as well as those with an exclusive focus on sustainable investment products. A similar breadth was displayed by the sample of investment consultants and OCIOs. They included mainstream traditional advisors both those with extensive sustainable investing expertise and those with none at all—as well as specialized advisors catering to sustainable investing clients. Among the interviewed were 21 consultant/OCIO firms and 35 asset management firms (see Table 1).

SECTION I. SUSTAINABLE INVESTMENT TRENDS AND CONCEPTS

Sustainable investing on the rise

While once considered a fringe approach, sustainable investing is advancing to the mainstream. This expansion is evident in investors' growing awareness and favorable attitudes,3 as well as an expanding flow of capital in the US and in other major economic regions, as shown in Figures 1, 2, and 3.

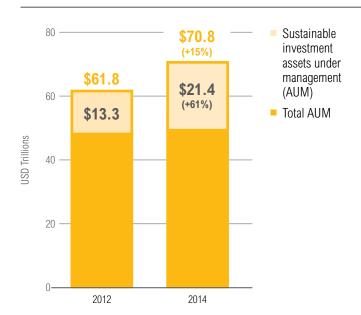
Globally, over \$21 trillion of professionally managed assets are held in sustainable investments (as of 2014, see Figure 1) (GSIA 2015).4 What's more, the growth in these investments-60 percent between 2012 and 2014-is outpacing that of traditional investment, which only increased by about 15 percent in the same time frame. While Europe has the largest market, the fastest growing region for sustainable investing is in the US (shown in Figure 2).

Box 1 | What is Sustainable Investing?

ized by the explicit incorporation of environmental, social, or governance (ESG) factors in the investment process. The inclusion of non-financial performance data in the

can include negative screening, positive screening, ESG integration, impact investing, and shareholder engagement (Table 2 and Figure 4 provide greater detail on these concepts). These strategies lead to varying outcomes on ESG issues, but fall under the heading of sustainable investing so long as they incorporate ESG factors. To wit, sustainable investing is defined by process rather than by achievement of specified outcomes. As discussed in this section, a strict definition of the term has yet to solidify, and terms continued.

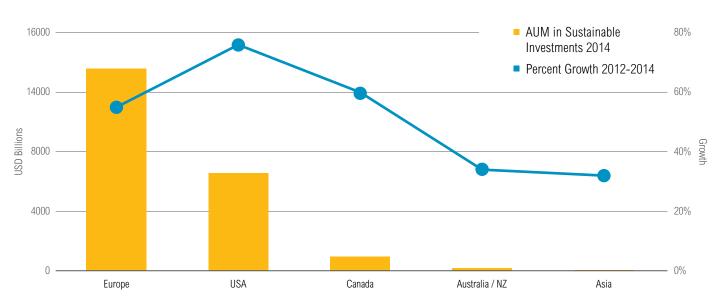
Figure 1 | Global growth in sustainable investing outstrips growth in total professionally managed assets



Source: Data from Global Sustainable Investment Alliance (GSIA) (2015), re-designed by WRI.

Note: This figure accounts for all capital invested through negative screening, positive/best-in-class screening, norms-based screening, sustainability-themed investing, impact/commmunity investing, and corporate engagement and shareholder action.

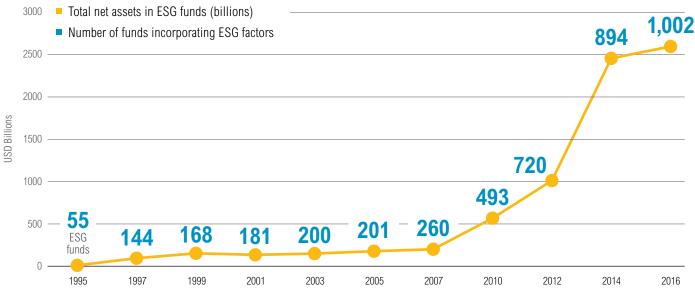
Figure 2 | Regional comparison of sustainable investing: Europe has the largest market, but the US market is growing faster



Source: Data from Global Sustainable Investment Alliance (GSIA) (2015), re-designed by WRI.

Note: This figure accounts for all capital invested through negative screening, positive/best-in-class screening, norms-based screening, sustainability-themed investing, impact/ commmunity investing, and corporate engagement and shareholder action.

Figure 3 | US funds incorporating ESG criteria have increased dramatically in the last decade



Source: Data from US SIF Foundation (2016a), re-designed by WRI.

Note: Includes funds that incorporate various ESG criteria. The data set is restricted to mutual funds, variable annuity funds, alternative investment funds, exchangetraded funds, closed-end funds, and other pooled products. It excludes community investing institutions and assets not associated with a dedicated fund or manager. Separate accounts were excluded beginning in 2014 to maintain exclusive focus on commingled products.

Over \$6.5 trillion in professionally managed assets—or about 18 percent of all US assets under professional management—were guided by some form of sustainable investment practices in 2014 (GSIA 2015; US SIF 2014). That is a 76 percent increase from only two years earlier. During that same period, total assets under traditional management in the country grew by only 10 percent (GSIA 2015). By 2016, total assets managed with sustainable investment criteria reached \$8.72 trillion in US markets (US SIF, 2016a).

On top of these indications of market growth, several factors suggest that sustainable investment is not a passing fad, particularly in US markets. These include persistent pressure from social movements like the fossil fuel divestment campaign; interest from increasingly sustainability minded investment decision makers like millennials and women; a growing body of evidence on materiality; new enabling policies; the global recognition of the challenge of addressing climate change as evidenced by the Paris Agreement; and the fast rate of new sustainability products entering the market.⁵ If we keep on this path, sustainable investing will continue to grow in relevance and reach.6

Key terms and concepts

Sustainable investing is an umbrella term capturing the many investment approaches that consider relevant environmental, social, and/or governance (ESG) factors—to varying extents—in investment decisions. As this practice becomes increasingly mainstream, the strategies it comprises evolve to meet changing demands, emerging opportunities, and improving data availability.

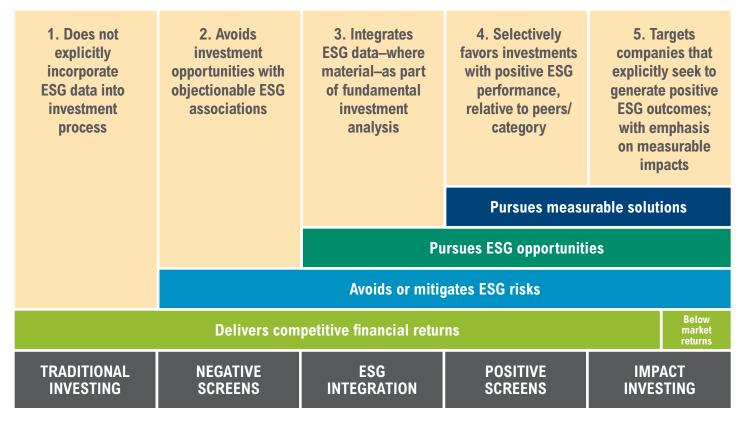
The terminology of sustainable investing remains in flux. Practitioners have yet to coalesce around common definitions for the distinct practical strategies within the broader approach (Commonfund 2015). For the purpose of this paper, we divide market-rate sustainable investing strategies into five subcategories: negative screens, positive screens, ESG integration, impact investing, and shareholder engagement (Table 2 and Figure 4). These approaches are not mutually exclusive; multiple strategies may be implemented within a single fund or portfolio.

Table 2 | Sustainable investment strategies: Defining a common terminology

APPROACH	DEFINITION	IMPLEMENTATION	ASSET CLASSES
Sustainable investment	An umbrella term for all strategies that incorporate ESG factors into investment decisions alongside financial analysis. Other catch-all terms that are used in similar ways but are distinct in meaning include responsible investing, values-based investing, mission-aligned investing.	Introducing ESG data and analysis into existing investment approaches. This category is inclusive of all other strategies and examples outlined in this table.	All, depends on the specific invest- ment strategy.
Negative screens (exclusions)	The explicit exclusion of certain investment opportunities deemed unethical or controversial. This is often referred to as socially responsible investing. While historically pursued for ethical reasons, negative screens can also be applied for material concerns; for example, to avoid the potential risks of stranded fossil fuel assets.	Excluding holdings in fossil fuel reserves—or avoiding companies that generate revenue from alcohol, tobacco, gambling, weapons or other sectors—that are inconsistent with investment beliefs.	Public equities, private equities, real assets, fixed income.
Positive screens	The strategic inclusion of companies, managers, or sectors with a record of positive ESG performance relative to industry peers. In some cases, positive screens are referred to as solutions-oriented investments.	Overweighting industry leaders across multiple sectors in a portfolio or pursuing thematic investments that focus on specific ESG factors or industries. This includes solutions-oriented investments like low-carbon or healthcare funds.	Public equities, private equities, real assets, fixed income.
ESG integration	The systematic incorporation of ESG factors where material to performance, as complementary to fundamental analysis. As a more holistic analysis than traditional investing, ESG integration is often pursued as a means of improving investment performance. The specific ESG factors included may be selected according to materiality to the portfolio and/or relevance to the asset owners.	Best-in-class: selecting companies/managers with highest ESG performance. ESG tilt: overweighting holdings with higher ESG performance. ESG momentum: overweighting holdings with improving ESG performance. ESG-specific criteria: using any ESG criteria, including targets or thresholds.	Public equities, private equities, real assets, fixed income.
Impact investing	Investments in companies or funds with the primary intention of generating positive social and/or environmental impact alongside financial returns. These investments are typically made in private markets, and can span a wide range of financial return expectations, from concessionary to market-rate. Foundations pursue these investments both as program-related investments and mission-related investments, as defined by the IRS. Reflecting an evolution of the term, "impact investing" is sometimes used as an umbrella term synonymous with sustainable investing. In that use, the idea becomes a more scalable approach with broader appeal to mainstream investors, rather than a "pure impact" strategy.	Purchasing of community investing notes, investments in a private equity fund, direct investments in social enterprises.	Private equities, debt, and ven- ture capital. Also includes guarantees, fixed income, and public equities.
Shareholder engagement	Pressuring for ESG change within publicly traded companies through proxy voting, filing shareholder resolutions, or engaging in other formal advocacy. This approach offers a sharp contrast to negative screens, as investors maintain company shares in order to keep their seat at the table for engagement.	Proxy voting, filing shareholder resolutions, investor coalitions.	Public equities

Source: WRI, based on information from US SIF, PRI, GIIN, Ceres.

Figure 4 | Differentiating sustainable investing strategies



Source: WRI, adapted from Bridges Ventures (2015).

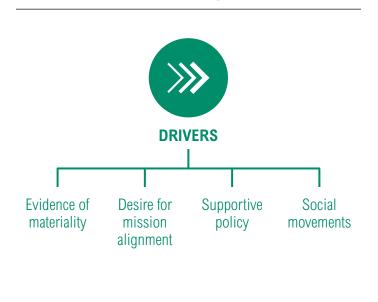
SECTION II. CONTOURS OF A CHANGING **LANDSCAPE**

Informed by discussions with 115 members of the institutional investment community, WRI has constructed a snapshot of the changing outlook on sustainable investing among US-based foundations and endowed institutions. This section presents the current state of play in the sustainable investment market for these asset owners, and the major factors that they and other stakeholders cite in their exploration of sustainable investing.

Drivers and Motives

Multiple forces drive institutional investors toward sustainable investing. Their motivations, generally rooted within broader social and economic shifts, fall into four main categories: (1) a perception and growing evidence of ESG materiality (see glossary for definition), (2) changing policy and regulation, (3) the desire for mission alignment, and (4) momentum from the fossil fuel divestment movement (see Figure 5). These can be related to one

Figure 5 | Leading drivers and motivations for sustainable investing



Source: WRI.

another and mutually reinforcing. The specific response to these drivers depends on the institution's mission and objectives, key stakeholders, dependence on the endowment, and the internal governance structures. A discussion of these motivating drivers follows.

Driver 1. Perception and growing evidence of materiality

As resource scarcity and sustainability become escalating drivers of change for business, the context for investors is also shifting. Long-term investors are beginning to recognize that considering performance on key sustainability factors can help identify companies best positioned to thrive in an increasingly resource-constrained world. Accordingly, when discussing motives for pursuing sustainable investing, institutional asset owners commonly cite an expectation of improved financial performance. Nearly three-quarters of asset managers and one-third of asset owners discussed this among their leading drivers. As one participant described, "ESG is just good due diligence." While this conviction is not widespread in the mainstream investor universe, increasing empirical validation exists to support it.

A growing body of research documents a mostly positive material association between sustainability and corporate financial performance (Friede et al. 2015; Trunow and Linder 2015; Mercer 2009; Morgan Stanley 2015). This includes positive material associations on factors related to corporate governance (Ammann et al. 2010; Bebchuk et al. 2009; Carter et al. 2003; Gompers et al. 2003),7 treatment of employees (Edmans 2011),8 and environmental sustainability (Eccles et al. 2014), among others. One study, for example, found that between 1993 and 2010, companies with integrated sustainability practices outperformed those without by 4.8 percent annually on a risk-adjusted basis (Eccles et al. 2014). In a 2015 study, Morgan Stanley examined the performance and volatility of 10,228 open-ended mutual funds based in the US. The findings show that for 64 percent of the periods reviewed over the last seven years, the sustainable equity funds had equal or higher median returns and lower volatility than the traditional funds within the sample.

A recent meta-study in the Journal of Sustainable Finance and Investment (Friede, Busch and Bassen 2015) provides further evidence regarding the business case for ESG investing over a wide set of data sources. The authors identify 60 review studies—which represent the findings from 2,200 unique vote-count and meta analysis studies.

For 90 percent of the individual studies, spanning from 1970 to 2014, ESG integration was not detrimental to corporate financial performance. Moreover, the findings reveal an overwhelmingly positive association. About 48 percent of the vote-count studies and 63 percent of the meta studies yield a positive correlation between ESG integration and corporate performance (Friede et al. 2015). These findings are consistent with those of the Morgan Stanley (2015a) study, and provide solid empirical evidence of the positive link between sustainable investing and financial performance.

Some asset managers' approaches offered evidence of using ESG to mitigate portfolio risk. For example, one noted that they had dropped holdings in BP before the 2010 Big Horizon oil spill due to its poor ESG performance. This was revealed through a review of the company's social and safety standards during the due diligence and portfolio monitoring process, which indicated a potential risk to the manager. In this case, the incorporation of ESG factors helped reveal material risks that were not captured in the traditional financial analyses.

Driver 2. Changing policy and regulation

New policies and regulations are making ESG externalities financially material to companies and therefore investors. In the US, many policies have thus far remained within state or regional contexts, but some investors are anticipating global policies that would assign a monetary value to externalities such as carbon emissions. These existing and expected policy developments are sending strong signals to investors about the materiality of ESG factors to long-term corporate performance. Collectively, these changes increase the value of sustainable investment practices and make them riskier to ignore. Participant asset managers were more likely to view policy changes as a leading driver than asset owners. A brief description of the strongest signals cited by investors follows.9

GLOBAL POLICY DEVELOPMENTS

The Paris Agreement, 2015, The United **Nations Framework Convention on Climate** Change (UNFCCC). At the UNFCCC's 21st Conference of the Parties (COP21) in late 2015, 196 countries reached a historic agreement to limit global temperature rise. As stated in Article 2.1 of the Paris Agreement:

- 1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:
- (a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change; [...]
- (c) Making finance flows consistent with a pathway toward low greenhouse gas emissions and climateresilient development (UNFCCC 2016a).

Box 2 provides more information on the Paris Agreement and implications for investors.

- **United Nations Sustainable Development** Goals. In September 2015, 193 countries adopted the UN Sustainable Development Goals (SDGs) as part of the 2030 Agenda for Sustainable Development. The aim of the initiative is to mobilize global efforts around a set of goals and targets for eliminating poverty, tackling climate change, conserving natural ecosystems, and reducing inequality and injustice. Building on the earlier Millennium Development Goals, which lapsed in 2015, the SDGs send a resounding call for an inclusive and transformative economy fitted to a resource-constrained planet. They also call on the power and innovation of the private sector to help achieve this vision (United Nations 2016). With widespread consensus on the intended direction of the future world, long-term investors are starting to see a strong case for aligning investments toward such broad sustainability and inclusiveness.
- UN Guiding Principles on Business and Human Rights. Endorsed by the UN Human Rights Council in 2011, the Guiding Principles on Business and Human Rights provide a global standard for preventing and addressing negative human rights impacts of business activity. The principles are based on the underlying recognition that (a) states have an obligation to protect human rights and freedoms, (b) business enterprises must comply with relevant laws and respect human rights, and (c) there must be appropriate remedies for victims of business-related

human rights violations. This framework is accompanied by a set of guiding principles for implementation, which apply to all states and all business enterprises. To fulfill these responsibilities, adhering companies must devise and implement effective systems for risk mitigation, stakeholder engagement, and remediation. The guiding principles have been pivotal in transforming the relationship between business and human rights, and many investors use them to inform sustainable investing strategies and engagement.

NATIONAL POLICY DEVELOPMENTS

- The President's Climate Action Plan. The Climate Action Plan represents a series of policies and initiatives put forward by the Obama administration to cut carbon pollution in the United States, to prepare for the impacts of climate change, and to take a leadership role in international efforts to combat climate change. On reducing carbon, the plan sets standards for reducing total US greenhouse gas emissions to 17 percent below 2005 levels by 2020 through various mechanisms and initiatives (The White House 2013). One prominent action building from this plan, and relevant to investors, concerns the carbon pollution standards for power plants established by the EPA.
- The Clean Power Plan-Carbon Pollution Standards for Existing Power Plants. The Clean Power Plan, proposed by EPA in 2015, is a national policy that sets targets to limit pollution from existing power plants. It aims to reduce national greenhouse gas emissions to 32 percent of 2005 levels by 2030. The plan would be implemented through tailored state-level strategies under the Clean Air Act. In February 2016, the Supreme Court granted a temporary stay, leaving in question the legal authority of the EPA to implement the plan until further judicial review. Despite this uncertainty, the EPA intends to continue to support states in such implementation efforts (WRI 2016b).
- Interpretive Bulletin on Fiduciary Duty, 2015. In October 2015, the Department of Labor released an Interpretive Bulletin (IB 2015-01) providing guidance for fiduciaries considering investment strategies that incorporate ESG factors under the Employee Retirement Income Security Act (ERISA). The bulletin clarifies that ESG is an appropriate component of fiduciary duty when it is core to value: "Fiduciaries also do not need to treat commercially reasonable investments

Box 2 | **The Paris Agreement**

At the UNFCCC's 21st Conference of the Parties in late 2015, 196 countries reached a historic agreement to maintain global temperature rises to well below 2°C above pre-industrial levels. In advance of this meeting, each country was invited to submit a post-2020 climate action plan—known as "intended nationally determined contributions" (INDCs). These plans outline the proposed commitments that each country would take to advance the goals of the convention. As of October 2016, convention parties had submitted a total of 163 INDCs detailing the national GHG targets and mitigation plans of 189 countries.^a The countries covered within the plans account for 98.9 percent of total global emissions.

As each country joins the Paris Agreement (the final step following adoption and signing), the INDC becomes a nationally determined contribution (NDC) indicating a transition from intention to action. Under the Agreement, the NDCs will be progressively strengthened to stay on track toward global goals, with collective progress tracked through a global stock-taking occurring every five years.

For the Paris Agreement to go into force, 55 parties—representing at least 55 percent of global emissions—must formally join. This threshold was reached in October of 2016

The United States joined the agreement in September 2016. The country had previously announced its INDC in the fall of 2014 with a target of reducing emissions by 26–28 percent below 2005 levels by 2025, and making every effort to achieve a 28 percent reduction. While the implementation prospect in the US is uncertain given the disputed regulatory authority of the EPA, this aspiration has caught the attention of US investors.

Apart from the Agreement, investment professionals point to other less tangible signals from the latest UNFCCC negotiations. Some remark that the conversation has shifted away from a top-down regulatory focus to an emphasis on bottom-up economic analysis where investors and businesses play a key role, and consider risk, resiliency, and asset value.

In addition, some corporate leaders are now pushing the movement toward a low-carbon economy. There is growing sentiment that sustainable business practices are becoming a competitive advantage, whereby companies are taking proactive steps to avoid being left behind or dragged down by legacy assets. The corporate and investor leadership in this space is evidenced by various pledges toward voluntary climate action, such as commitments to the American Business Act on Climate Pledge, the Paris Pledge for Action, and the Global Investor Statement on Climate Change, among others.

^a The European Union, representing 28 membe countries, submitted a single INDC.

Source: WRI, based on information from the UNFCCC, CAIT Climate Data Explorer, White House, MSCI, Blackrock, Investor Platform for Climate Change, and expert interviews.

as inherently suspect or in need of special scrutiny merely because they take into consideration environmental, social, or other such factors" (US Department of Labor 2015).

With this clarification, fiduciaries of retirement pension plans may incorporate ESG investments, community development funds, and other types of economically targeted investments¹⁰ (ETI) without the risk of violating the terms of ERISA. While this is more relevant to managers of mutual funds and other retail products, it is relevant to the US pension fund community and has been noted by several endowed institutions as facilitating the addition of ESG criteria for asset managers.

This guidance has further significance given the role of fiduciary duty in determining investment choices. In 2015, the UN Environment Programme's Finance Initiative and the Principles for Responsible Invest-

ment released Fiduciary Duty in the 21st Century, a report analyzing the relationship between ESG investing and policies and laws for fiduciary duty across eight countries (Australia, Brazil, Canada, Germany, Japan, South Africa, the UK, and the US). The findings reveal that within each country, fiduciary duty is not a barrier to sustainable investment practices; on the contrary, they show that ESG consideration may be obligatory. As noted in the report, "failing to consider long-term investment value drivers, which include environmental, social, and governance issues, in investment practice is a failure of fiduciary duty" (Sullivan et al. 2015).

Notice on Investments Made for Charitable Purposes (2015–62). In September 2015, the Internal Revenue Service provided guidance clarifying the use of principal endowment funds by private foundations, affirming that the use may extend to mission-related investments:

Foundation managers are not required to select only investments that offer the highest rates of return, the lowest risks, or the greatest liquidity so long as the foundation managers exercise the requisite ordinary business care and prudence under the facts and circumstances prevailing at the time of the investment in making investment decisions that support, and do not jeopardize, the furtherance of the private foundation's charitable purposes (IRS, 2015).

The notice confirms that private foundation managers may consider the foundation's charitable purpose when determining the prudence of an investment. This permits foundations to make non-jeopardizing investments that support their charitable mission even if it does not offer the greatest expected return rate.

- Foreign Corrupt Practices Act (FCPA). The FCPA is a US law, enacted in 1977, prohibiting the payment of business-related bribes to foreign government officials. The law extends to publicly traded companies and all of their officers, directors, employees, stockholders, and other agents, including consultants and joint party ventures, among others. In addition to the anti-bribery provisions, the FCPA also requires all companies with securities listed in the US to adhere to specific accounting standards. These include maintaining accurate books and records, and implementing control systems for internal accounting (US Department of Justice 2016). To avoid FCPA violations, financial service providers with transactions in international markets must address the compliance risks of all foreign companies and securities exposures within their portfolios. In 2012, a group of institutional investors—including leading sustainable investing asset managers—released an investor statement in support of FCPA. The statement argues that the failure to control corruption and bribery is a significant corporate risk with negative impacts on local economic development, human rights, fair market competition and, ultimately, long-term shareholder value (US SIF 2012).
- **Interpretive Guidance on Climate Related Dis**closure, 2010. In 2010, the Securities and Exchange Commission (SEC) released an Interpretive Guidance to clarify corporate obligations for climate relevant disclosure, which investors could then use to help inform their investment decisions. Acknowledging the financial impacts of climate change, the guidance

clarifies disclosure requirements related to the (1) impact of legislation and regulation, (2) impact on international accords, (3) indirect consequences of regulation or business trends, and (4) physical impacts of climate change (SEC 2010). Despite these guidelines, Ceres (2014) found that corporate lawyers continue to offer very narrow and technical interpretations of the disclosure law, and compliance disclosures on climate change remain very limited. This study also found that most large companies still fail to include meaningful climate-relevant disclosures in annual SEC filing (Ceres 2014). For example, in 2013, 40 percent of S&P 500 companies had no climate-related disclosures in their filings, and those that did largely included minimal useful information.

Driver 3. Norms of social responsibility mission alignment

Better aligning endowment assets with institutional mission was the most commonly cited driver toward sustainable investment among asset owners, with over two-thirds discussing the importance of mission alignment. The IRS 2015-62 Notice (described above) has facilitated this movement, but there are other catalysts. This sense of social responsibility is influencing foundations, NGOs, pensions, religious institutions, and institutions of higher education.

Broadly speaking, the concept of mission alignment represents a break in the traditional view that programmatic work and mission are separate from management of financial resources – and that financial resources support the mission only through providing dollars to the programmatic work. Asset owners that pursue mission-aligned investing note that impact extends beyond the program work and into investment holdings. These asset owners employ investment holdings as an additional means to meet the organizational mission, or at a minimum, manage investment holdings in a manner that does not detract from their mission.

Asset owners seek mission alignment in a variety of ways, which fall into three main types:

Some asset owners avoid a given industry or sector deemed in conflict with organizational mission. Prime examples of this are the institutions opting to divest from companies with significant fossil fuel reserves in order to avoid supporting an industry that is directly at odds with their program work or vision for a sustainable future.

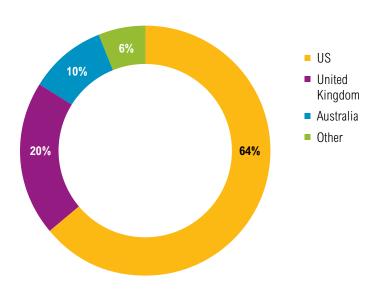
- For other asset owners, mission alignment is more than just eliminating investments with negative impacts. These investors believe that achieving the organization's mission demands an entirely different investment model than one premised exclusively on producing cash to support program work. These investors see their *endowment investments* as a means to achieving more scalable approaches than grant-making or program work in isolation. They often carve out a portion of their endowment for sustainable investing (often through impact investments) or seek value alignment, with market-rate returns, across the entire portfolio.
- On the far end of the spectrum are asset owners that view the *endowment* as an extension of their philanthropic capital. Here, having an impact that is consistent with the institution's mission is the leading criterion for investment decisions, even trumping financial returns. Foundations are the only type of asset owner found to be employing this approach, and those that do generally have family origins and family members on the board of directors.

Driver 4. Fossil Fuel Divestment Campaign

Much of the recent momentum toward sustainable investment has been spurred by the fossil fuel divestment movement, which advocates not owning shares in any company with fossil fuel reserves on their balance sheet, or "divestment." Beginning with a handful of colleges in 2011, the movement has expanded into the broader market (Ansar et al. 2013). A number of activist networks and studentled campaigns—including Divest-Invest, 350.org (which operates a network of local campaigns through its "Fossil Free" project), as well as the globally circulated British newspaper, *The Guardian*—are calling on asset owners to take accountability for the climate impacts of their investments by divesting any equity holdings in the top fossil fuel reserve companies.¹¹

Nearly 550 institutional investors had committed to this pledge as of 2015 (Fossil Free 2016). This includes 126 faith-based organizations, 120 foundations, and 40 universities (Arabella Advisors 2016; Divest-Invest Philanthropy 2015). (See Box 2 for an overview of universities' responses.) While the geographic spread of these institutions is expanding, the greatest concentration of committed foundations remains in the US. This pattern is seen in Figure 6, displaying the committed foundations by global region.

Figure 6 | Most of the foundations with divestment pledges are in the United States



Source: Data from Divest-Invest Philanthropy (2015), re-designed by WRI.

Only a few of the sampled asset owners are pursuing a pure divestment approach. Their rationales were rooted in the institutions' morality and mission alignment. For example, the Rockefeller Brothers Fund's decision to divest was motivated by a conviction that owning holdings in fossil fuel reserves is both counterproductive to their mission and morally wrong. As their president, Stephen Heintz, noted in an interview with The Guardian: "For a fund that is so devoted to fighting climate change and helping to prevent climate catastrophe, to continue to be invested in fossil fuels that are actually causing climate change just was morally hypocritical and unacceptable" (Goldenberg 2015). Others that have made the pledge spoke to the desire to "stand on the right side of history" and similar sentiments, given the grave impacts of the industry on the climate.

Beyond divestment, the movement has helped spark a broader interest in sustainable investing. For about a quarter of participant asset owners, the influence of and pressure from the divestment call was a strong driver toward sustainable investment, regardless of whether they ultimately pursued a divestment approach. Asset owners are increasingly deliberating whether traditional investment practices adequately account for emerging risks and

opportunities. As a result, while a limited number of institutional investors in the sample are following the strict call for divestment, many more are engaging in broader discussions about investment strategies. "Divestment," as one asset manager stated, "has served as an important genesis for sustainable investment." Similar to the asset owners, about a fourth of asset managers and consultants cited the divestment movement as a substantial driver of growth in sustainably invested assets.

In line with this movement, asset managers and consultants note an uptick in the demand for lowcarbon and fossil fuel-free products. This was the case for traditional investment professionals and sustainable investment specialists. These practitioners cite the relative simplicity-liquidating all shares of companies on a list of the largest fossil fuel holding companies—as key to the strategy's appeal and growth. A small number of the sampled asset managers have even partnered with mission-driven institutions to develop these products.¹²

These are among the few examples where sampled asset managers are offering products following a pure divestment approach.

Institutions that do not explicitly take a divestment stance cite practical reasons. Some organizations noted the challenge of screening out specific holdings from commingled funds. For most asset owners, though, the argument against divestment was more theoretical. Many participants believe that the market needs a broader, more holistic approach to climate risk. To them, divestment is seen as too narrowly focused, targeting only one small component of a much larger issue. Some also cited the desire to stay invested in order to engage as active shareholders pushing for change. A number of shareholders of Exxon Mobil have recently demonstrated this strategy in filing a record number of climate-related resolutions at the company's annual general meeting (Schwartz 2016).13 Other asset owners question the power of divestment to impact share price of the divested companies or to force

Box 3 | **Divestment: Response from Colleges and Universities**

FOSSIL FUEL DIVESTMENTS AND UNIVERSITY ENDOWMENTS

than 40 university endowments globallyincluding over 20 in the US—have pledged University of Maryland, Hampshire College, and The New School. The divestment engagement with student groups and careful been informed by multiyear studies. Among for divestment relate to concerns for moral beyond divestment, and the decision has helped facilitate a renewed commitment to climate change. For those schools, the change beyond the investment portfolio.

Many universities, on the other hand, have fully resisted the call for divestment. Some have done so publicly, where the university presidents have issued a public statement on their decision. This includes several and the belief that the institutions can have greatest impact in climate mitigation through both their academic centers (education. assets of the schools) and through active engagement with companies. Consider-ing fossil fuel assets as a risk to financial

Other universities take a middle ground. ment, these institutions—including Stanford and Yale—have responded with a nuanced approach to climate-friendly investing. Stanford, for example, committed to divesting direct holdings in companies engaged in the extraction of coal and oil sands, citing the sectors' high carbon intensity relative to other forms of fossil fuels. Stanford is among at least ten other US universities following this approach—deemed "partial divestment." This approach can include screens for coal, tar sands, and/or oil sands. But unlike some of its peers, Stanford takes this a step world, including carbon pricing. Yale follows a similar strategy. Their commitment includes a reduction in holdings in coal and oil sands industries, as well as the avoidance of new investments in greenhouse-gasintensive energy companies. Its CIO cites the financial risks of climate change and carbon mechanism for addressing climate impacts and risks within their portfolio.

change within the companies.

Decision Making, Governance, and Supportive Networks

Regardless of the specific approach pursued, sustainable investing is an ongoing process that takes time and careful effort. Institutions need to draw on many distinct skill sets to make decisions about investment policies, strategies, and implementation, which requires coordinating multiple stakeholders.

Governance and the internal decision-making process

As the fiduciaries entrusted with the responsibility of caring for and protecting the institution's endowed assets, the board of directors or trustees must set the priorities, scope, and objectives of the endowment, as well as delegate authority, manage distinct roles and responsibilities, and provide continuous oversight. To set sustainable investing in motion, the board will usually have to mandate a specific course of action. Since the board's investment committee often has authority for endowment governance and implementation, that body is heavily involved in the discussion leading to the decision. This process can be challenging. Board members, staff, and other stakeholders may have competing interests, conflicting opinions about the strategic purpose of the endowment and the interpretation of fiduciary duty, and varying levels of knowledge about institutional investments.

Several asset owners cited the value of establishing a separate working group of board members—usually including the investment committee members and other interested and/or expert board members—and staff to explore sustainable investing further, without taking up time in regular board and investment committee meetings. A special committee can propose a path forward to the investment committee and board. Once a mandate is approved, it usually becomes the responsibility of the investment management team—CIO, CFO, other staff, investment consultant, OCIO, and investment committee—to implement the decisions (see Figure 2).

Reexamining the Investment Policy Statement

For most asset owners, incorporating sustainable investing will lead to reexamining the top-level strategic approach for managing the endowment: the investment policy statement (IPS). Several asset owners actively pursuing sustainable investing highlighted the benefit of refining the objectives in the IPS and developing a comprehensive investment strategy before beginning

to execute actual investment decisions. An established sustainable investment mandate and refined IPS will offer clarity on the following areas:

- The reason for pursuing sustainable investing whether for purely mission-driven reasons, as a means of achieving highest possible risk-adjusted long-term returns, or a combination of the two.
- The degree to which the institution is seeking to align endowment investment practices with the organizational mission and values.
- The degree to which the institution believes that ESG factors represent material long-term risks and opportunities for the endowment.
- The key sustainability factors that must be considered by investment staff in evaluating decisions.
- The portion of the endowment affected by the mandate.
- Whether the institution is willing to accept concessional returns, for example, through pursuing innovative financing mechanisms, for any part of the endowment.
- The level of expected risk-return for each part of the portfolio.
- Whether there are specific sectors, products, or services that the institution will not own under any circumstances.

Once the mandate and IPS are approved, the investment committee needs an effective process for ensuring that the policy remains relevant and that investments are implemented accordingly.

Often this requires the restructuring of the entire decisionmaking framework. In many cases, new staff members or consultants with different expertise are added to the investment management team to support effective decision-making and implementation processes.

While investment consultants and asset owners generally agreed that it is valuable to establish the mandate and refine the IPS as a first step in the sustainable investing process, some were less convinced about the need for such linearity. Several asset owners, for example, discussed the difficulty in finalizing the mandate before having any experience with implementation. These asset owners believed they benefited from "learning by doing." In other

Figure 7 | Illustrative internal process for pursuing a sustainable investment strategy



BOARD OF DIRECTORS

Initiates a call to explore sustainable investment options

INVESTMENT COMMITTEE OR SPECIAL COMMITTEE

Explores sustainable investment options

Proposes a path forward for Board approval

BOARD OF DIRECTORS

Mandates a specific course of action that can include the Investment Policy Statement (IPS)

INVESTMENT **MANAGEMENT TEAM**

Develops investment strategy **Executes investment decisions**

> Suggests refinements to IPS as needed

Ensures that investment decisions match the IPS

Source: WRI.

words, they sought to make some investments before having the mandate completely figured out. Often, these investments were in liquid strategies without long lock-up periods or significant transaction costs. Some asset owners said they initially pursued simple investment opportunities-through listed equities vehicles, for example-even if the products did not meet all of their objectives, because perfect products didn't exist. Pursuing these investments allowed them to later reexamine the mandate in light of what they learned from the market.

Outsourced CIO model: A variation in governance and decision making

Investment committees are increasingly deciding that volunteer committees that retain discretion over all portfolio decisions can have significant limitations. Committee members are responsible for making a series of complex decisions regarding asset allocation, manager selection, risk management, policy adherence, and performance evaluation. Completing such tasks in an informed manner, in the face of a shifting and increasingly complex macroeconomic climate, is demanding on its own. In addition, these committees almost always are staffed by volunteers, usually with other full-time commitments, so they also have time constraints. This is especially challenging for institutions with a small investment staff to offer support.

Given the growing complexity of markets and increasing

professionalization of the industry, a significant number of institutional asset owners are dramatically shifting how they function. The outsourced chief investment officer (OCIO) model-started decades ago as a way to give exposure to certain high-performing asset classes to smaller endowments—has increased in popularity in recent years because of its ability to improve the efficiency of managing an endowment and improve governance.

Institutions with smaller endowments—and even several up to \$1.5 billion—are increasingly moving to models where a significant portion of the endowment management is outsourced. This is in contrast to the traditional governance model, where the committee maintains full discretion of the entire portfolio. According to a recent survey by Chief Investment Officer, 45 percent of participating organizations with endowments under \$100 million used the OCIO model in 2015 (Chief Investment Officer 2015). This figure was up 13 percent from the previous year. Small university endowments are also employing this model. The 2014 NACUBO-Commonfund Study of Endowments, for example, shows that just over 50 percent of schools with under \$500 million had moved to the OCIO model (NACUBO 2014).

While the OCIO model used to be one-size-fits-all, there are now a wide range of variations through which an outsourced CIO relationship can take shape. Key variables within the model include the degree of investment discretion and the decision-making operational model (Griswold and Jarvis 2013). Fundamentally, the OCIO model leads to shared fiduciary duty. The investment committee is the governing fiduciary, responsible for strategic decisions and policy and for consistently evaluating implementation against strategy. The OCIO is the managing fiduciary, responsible for implementing and managing the actual investments to meet the strategy and policy. This split, according to the asset owners, allows for more effective management of the endowment. It does so by sharpening asset owners' focus to monitor two fundamental concerns: (1) Given the context and objectives of the institution, is the policy set forth in the investment policy statement right? (2) How well is the policy being implemented? Are the responsibilities—and accountability for them—clear?

Among the asset owners, the decision to transition to an OCIO model was generally independent from the decision to pursue sustainable investing. For asset owners moving toward sustainable investment strategies, an OCIO model presents both challenges and opportunities. On the one hand, the OCIO model removes responsibility for executing investment decisions from the CIO or investment committee, so the asset owners will need to find a creative way of ensuring that their sustainability direction is taken by the OCIO. On the other hand, for smaller endowments an OCIO model can offer access to a wider range of investment products because its capital is pooled with the capital of other asset owners.

Whether the sustainable investing strategy predates the transition to an OCIO, the important point is that the OCIO needs to fully understand the objectives of the asset owner's intended approach. Increasingly, OCIOs are offering services in sustainable investing. Accordingly, the strongest OCIO providers are equipped to help formulate and implement a strong mandate and IPS for an asset owner based on their experience with other clients. Though much like the broader pool of investment advisers, there is great variance in the sustainable investing expertise and capacities of OCIOs.

Networks and peer-to-peer learning

Asset owners indicated that peer-to-peer learning is one of the most effective learning tools for investment staff. Many find it unproductive to attend large conferences where participants are reluctant to make potentially controversial statements or are inclined to make marketing pitches. Instead, smaller targeted group discussions, which allow them to ask candid questions of experts and

peers without fear of criticism, can provide a more productive environment. These group discussions cover a range of topics like fiduciary duty, investment strategies and opportunities, and rethinking risk, among others. Study participants are actively involved in a number of networking groups—including those presented in Appendix A. Some of these groups provide this type of space for peer-to-peer collaboration, alongside other services.

Strategies for Implementation

Sampled asset owners utilize a range of sustainable investment strategies within their endowed portfolios. Strategies discussed include negative screening, positive screening, ESG integration, impact investing, and shareholder engagement. The distinction between these categories is not always concrete, as there are shared elements between them, giving them slight overlap. The difference between positive screens and impact investing is especially nuanced. Further muddling the distinction is the fact that multiple strategies are often implemented across a single product. Until the field's terminology solidifies, the classification of sustainable investing strategies can be more art than science.

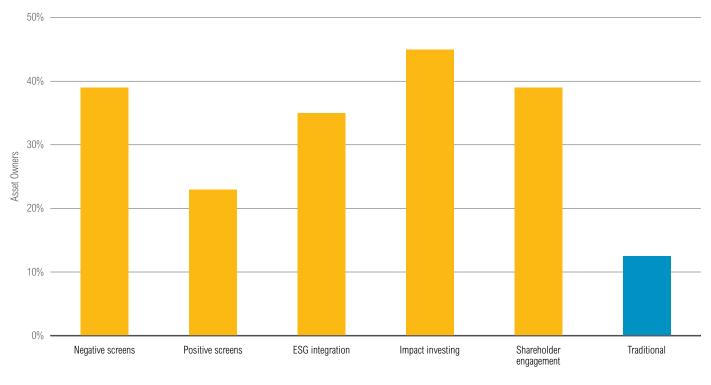
Nonetheless, the majority of sampled asset owners (about 87 percent) implement at least one of these strategies. Often, these are applied to only a select portion of the portfolio. Of those engaged in sustainable investing, about 70 percent pursue two or more of the strategies. Each of these strategies introduces an additional layer of analysis and decision making, so they require asset owners to clearly outline priorities for each investment in terms of desired ESG impact and financial performance. A small number of asset owners exclusively pursue traditional investment approaches, with no sustainable investment strategies (Figure 8).

Negative screening

Who is pursuing it? About two-fifths of the asset owners in the study pursue some form of negative screening. This includes universities, foundations, NGOs, and religious institutions.

Why? Negative screens are often considered the first step in sustainable investing. In fact, this is the oldest form of sustainable investment in the United States. Exclusionary screens have initial roots in the colonial era, when certain religious institutions avoided holding endowment assets in the slave trade (Caplan et al. 2013).

Figure 8 | Investment strategies of sampled asset owners



Source: WRI.

Note: Not mutually exclusive, except traditional; not generalizable to the larger market.

The approach developed into a specific investment philosophy in the 20th century as so-called sin screens that excluded categories such as tobacco, alcohol, gambling, and those supporting the South Africa Apartheid regime, among other social movements.

The continued popularity of the approach is largely due to its simplicity, both conceptually and operationally. Practically, it is straightforward to articulate what an institution is against. For example, it is easy to understand that a foundation supporting community health would want to avoid investments in tobacco companies. Removing (or avoiding) a selection of categorical holdings from a portfolio does not necessarily demand extensive resources and can be implemented relatively simply.

How? Asset owners can pursue negative screens through standard or customized approaches. Investors can simply

select existing investment products that have no holdings in the unwanted sector, service, or product; or they may work with their advisor to remove specific holdings from a given investment opportunity. Some of the common sectors and products appearing on asset owners' exclusion lists include: fossil fuel reserves, coal and tar sands, tobacco, firearms, alcohol, gambling, private prisons, and payday loans. These screens are almost exclusively pursued for moral reasons and mission alignment, although in some cases—as with the coal sector—financial concerns are a complementary motivation.

Investors pursuing sustainable investing often will employ negative screens and then one or more of the approaches described below. For example, one asset owner applies a negative screen across the portfolio to avoid investments in private prisons, payday lenders, tobacco, and firearms. And in addition to this layer, ESG analysis is integrated as

part of the due diligence for manager selection. Another common strategy among asset owners was to pair negative screens for fossil fuel reserves with positive screens in the form of solutions-oriented investments in renewable energy or energy efficiency.

Challenges: While it can be relatively simple to remove particular holdings if the asset owner or manager directly buys and sells stocks, for those owning shares in commingled funds it is difficult. Another challenge is simply defining the threshold of tolerance and then systematically applying that exclusion in the portfolio. With integrated supply chains in an integrated economy, it is never easy to avoid a certain product or sector. For example, if an asset owner decides to avoid companies that generate revenue from weapons, they must decide what this includes. Are they concerned with the companies that provide component pieces for the weapons? Or companies that sell the weapons? Making sense of these grey areas can be a time-consuming endeavor.

Some investment professionals also argue that negative screens are associated with significant trade-offs, namely the loss of broad market exposure and increased risk from inherent sector bias.

For those wishing to improve the ESG performance of companies, not owning shares in screened companies removes the ability to engage with them through shareholder actions or other owner activities. Some believe that divestment of a certain type of company has not been proven to harm the company's performance (Lytle et al. 1997). Yeveral participants also believe that divestment fails to promote solutions to ESG problems—such as climate change—because it focuses on avoiding problems.

Positive screening, solutions-oriented investments

Who is pursuing it? About one-fifth of asset owners discussed positive screening among their sustainable investment strategies. This included participants from colleges, foundations, pension funds, and religious institutions.

How? Positive screens are often employed with long-only listed equities or private equity strategies. The listed equities strategies are usually evaluated against a traditional investment benchmark.

In applying this approach, asset owners pursue a wide range of themes and strategies to essentially reward companies with strong performance on specific ESG themes. Climate-friendly investments were the most common thematic area pursued through positive screens within the group. In fact, over 50 percent of the asset owners pursued some form of climate-themed investments (not exclusively as positive screens). These strategies include a focus on renewable energy, energy efficiency, and low-carbon opportunities, among others.

For example, one asset owner had invested in a carbon efficiency strategy that tilts toward companies with the lowest carbon emissions, relative to peers, while underweighting the most carbon-inefficient companies. The strategy also applies a negative screen to exclude coal reserves. According to the McKnight Foundation (2016), the fund has a 53 percent reduction in carbon intensity relative to the Russell 3000 over 2014–15. Other thematic screens among investors were focused on water, affordable housing, energy access, and food security.

Many of the asset managers in the study are creating new thematic, solutions-oriented products using positive screens. In several cases, positive screens are implemented on top of an ESG integration base. One of the managers' funds, for example, holds equities securities in companies with active involvement in the sustainable energy solutions sector. The strategy is premised on the belief that the companies prioritizing products, services, and methods that contribute to a sustainable future will lead to long-term benefits for investors.

A similar example is a global equities fund targeting companies that generate at least 50 percent of revenues from the sales of environmental products and services, which includes markets for energy efficiency, renewable energy, water, waste, and agricultural markets. Apart from this screen, companies are evaluated according to broader ESG disclosures and risks, making this an ESG integrated fund with a positive screen for environmental solutions.¹⁷

Challenges: Positive screens are generally pursued within a specified portion of an endowment; it is rarely employed holistically across an entire portfolio. Unless it is paired with other strategies, positive screening primarily addresses the opportunity side of ESG and does little to mitigate broader risks.

ESG integration—holistic, material, and values-oriented

Who is pursuing it? About one-third of asset owners discussed ESG integration among investment strategies pursued. Critically, the approach differs from other sustainable investing strategies outlined in this paper because a wide range of asset owners-primarily values-driven owners-find it attractive. Correspondingly, this was the most common sustainable investing strategy pursued by asset managers, including investment consultants and OCIOs.

Investors pursuing this strategy tend to be more focused on long-term returns than short-term returns, because it is often over the longer term that these key ESG risks and opportunities materialize.

Even though this approach is starting to draw interest from investors who are purely financially motivated, there are significant co-benefits along ESG lines to be realized from this approach. For example, one asset owner sees ESG integration as a way to support the conservation mission of the organization by supporting companies that avoid environmental risks and that perform well on sustainability measures.18

How? For asset owners, ESG integration takes a different emphasis depending on whether assets are managed internally or externally.

For those managing assets internally, the focus is on embedding ESG factor analysis into financial due diligence when selecting stocks and securities. This strategy requires clear objectives and more nuanced evaluations and decisions than other forms of sustainable investing. Due to this complexity, asset owners often simply start with a goal of improving broad ESG performance-or performance on factors relevant to institutional mission and values—without defining discrete criteria around specific ESG factors. Because of all the possible ESG approaches and evaluation judgments, there are many ways to implement this type of investing.

While asset owners are increasingly pursuing these strategies, most in our study still rely on external managers. For asset owners with externally managed assets, the emphasis on ESG integration falls to the selection of outside managers and the evaluation of their performance based on ESG integration capacities.

The sampled asset managers tended to have greater expertise in ESG integration for stock selection than the asset owners. They were also more likely to have access to sell-side ESG data. And in addition to using secondary data, they often conduct proprietary research, in some cases by designated ESG specialists. They engage in a sophisticated process to integrate the data into the fundamental due diligence process. This includes pooling, normalizing, or weighting the company-level data by industry, region, or business activity. This is followed by assigning ratings or scores to measure risk; applying threshold scores for a given criteria; or categorizing by qualitative buckets according to underlying objectives or investment philosophies. Lastly, the ESG ratings may be run through performance attribution. Depending on the strategy, the companies revealed as better than average or as having the most positive impact along the collective ESG criteria will be prioritized to some degree, while the worst performers will be excluded from, or underweighted within, the portfolio.

Challenges: ESG integration is an ongoing, dynamic process that cannot be simply applied and forgotten about, like a negative screen. Because it is more conceptually complicated than screening or impact investing, it generally requires more time and resources to develop the investment criteria and strategies.

Identifying which ESG factors are material for a given portfolio of investments is important and can be difficult. Even if the board, investment committee, or CIO identifies a key set of ESG factors that it believes are material to the endowment, these will rarely match the factors expressed by asset managers in the particular strategies they are managing. In general, there is a lack of agreement in the asset manager and asset owner marketplace about what key ESG risks and opportunities are material to long-term asset owners.

Lastly, integration strategies—when relying on voluntarily disclosed, publicly available ESG data-often fall on the assumption that more ESG data means better ESG performance. However, some companies may be highly rated only because they have submitted more data, not because they are fundamentally better companies from an ESG perspective. This is often seen when comparing European companies to American, or large-cap companies to small caps. Neither European nor large cap-companies are inherently higher performing on ESG, but may appear so in ESG scores given their tendency to provide more ESG reporting and disclosure.

Impact investing

Who is pursuing it? Impact investing—in its various forms—was the most common sustainable investing strategy pursued by asset owners. Nearly half of the asset owners discussed some form of impact investment strategy within their portfolios. Over the last decade, a number of large foundations and family foundations have been pioneers in supporting the creation of this strategy as a means to further their missions with investment capital. A recent study of 64 private US-based foundations, by the Center for Effective Philanthropy, found that 41 percent pursued impact investing (Buchanan 2015).

Consistent with this trend, foundations and family offices within our sample reported the highest rates of engagement with impact investing, followed by pension funds and religious institutions. Very few nonprofit organizations, on the other hand, discussed engagement with impact investing—in fact only one, which had invested in the organization's in-house impact fund.

Often, foundations pursue impact investing from the program side—sometimes in conjunction with the endowment side—as a way to expand impact beyond traditional grant-making (i.e. program-related investments). Increasingly, these asset owners are designating a portion of their endowment to impact investing, often an amount between 1 and 10 percent of their total investments (i.e. missionrelated investments). These investments aim to directly support the program areas of the foundations. Accordingly, the investment staff work with the program staff to identify relevant opportunities. If there are limited investment opportunities in specific program areas, foundations may direct investments toward companies that are aligned with their broader vision. For example, one foundation had an impact investment in affordable housing. Although it was not a focus of their program work, it was aligned with their broad vision for a just and sustainable world.

Over two-thirds of investment consultants discussed pursuing impact investing strategies for their clients, and about half of asset managers.

How? Several foundations have dedicated staff for managing an impact carve-out of the portfolio. These staff members often work closely with the program staff to identify investment opportunities in line with the organization's grant-making activities. For foundations, impact investments have historically been classified as program-related investments, counted on tax filing as part of the 5 percent

minimum annual payout from the principal funds alongside grant-making. Most often, the foundation program staff head up evaluation and execution of these investments.

With the guidance on mission-related investing (MRI) released by the IRS in the fall of 2015, it is increasingly feasible—from a legal and tax perspective—for private foundations to pursue impact investing opportunities with the principal endowment assets. Under such guidance, foundations may use the corpus funds to make investments that advance the charitable purpose of the organization, even if the expected rate of return is less than that of investments unrelated to the charitable mission (IRS 2015). In this instance, it is a combination of program staff and endowment investment staff working to evaluate and implement investments.

Most foundations have flexible return targets for this portion of the endowment. In some cases, the portion is divided into smaller buckets defined by a set of linear return and impact targets, with return expectations varying from market-rate to below-market rate. The specific balance of returns and impact goals is dependent on a number of factors, including whether the investment is a program-related investment (counting toward the 5 percent endowment withdrawal) or MRI (the principal endowment investments), the asset class, the structure of the investment, and the specific objectives of the investor.

Since investors generally have the greatest impact on a company through private ownership,20 impact investments traditionally take place in the private equity and debt (including venture capital) asset class (GIIN 2016b). Among participating foundations, impact investments include holdings in private equity funds, co-investments that help leverage private capital toward impact investments, guarantee structures, and direct investments. Beyond the study group, impact investments are increasingly expanding into the public equities space. Confirming descriptions by asset managers of this trend, the GIIN annual impact investment survey recorded growth in public equity investment, which increased from 5 to 9 percent of total impact AUM of responding institutions from 2015 to 2016 (GIIN 2016b; GIIN 2015). Some managers see this growth as stemming from asset owners looking to expand beyond private strategies—into more liquid strategies. Although private investments have historically formed the core of impact strategies, they can be difficult and expensive to implement for many asset owners.

The impact investments pursued by participants tend to target pressing social and environmental needs, often within marginalized or underserved populations, in accordance with the institutional mission. These include market-based solutions for community development, education, housing, microfinance, renewable energy, healthcare access, sustainable agriculture, conservation, and financial inclusion.

Challenges. Because impact returns are equally important as financial returns, there is a strong commitment to the measurement and reporting of the social or environmental impacts (GIIN 2016a). While there are a number of new measurement frameworks and benchmarks to support this endeavor,21 asset owners must invest time and resources to identify and define specific outcomes sought and means by which to measure them. This often requires simplifying broad impacts into quantitative indicators; even then, metrics can be hard to compare across investments.

A challenge to growth for impact investing is that asset owners, managers, and consultants have usually held concessionary return expectations. This expectation has stemmed from the common mission of the capital to advance new and innovative models that the market wouldn't already be financing. The IRS has strengthened this expectation in some ways by designating a special category exemption for the approach. While some strategies have achieved market-rate returns, this overall perception was cited as a reason asset owners seeking market-rate returns did not pursue impact investing.

Traditional approach—traditional financial investment analysis

Many foundations and endowments do not take sustainability into account when investing, and, specifically, do not follow any of the approaches explained above. When considering the broader market, their assets are in the majority; part of the 80 percent of professionally managed US assets that are not guided sustainable investing-in any form (GSIA 2014). These asset owners instead pursue a traditional investment approach.

Within our sample-which skewed toward those with interest in sustainable investing given our selection methodonly about one ninth of asset owners followed a traditional investment approach. These actors cite several reasons for their approach. The leading reason relates to the belief that sustainable investing is a values-based action contrary to fiduciary duty and the mandate to maximize investment

returns. Other reasons discussed were the lack of the right skills, expertise, or resources on staff to effectively introduce a new sustainable investing strategy.

Standards, Frameworks, and Data

The frameworks and information to support a robust market for sustainable investing are growing. The mounting pool of data and analytics, research on emerging risks,22 sustainability disclosure standards, and investment frameworks are creating the critical infrastructure for investors to act, track, measure, and report on non-financial risks and opportunities. With these data and tools, combined with the scrutiny of growing movement toward ESG regulation and disclosure (discussed in the previous section), previously unseen investment risks and opportunities are increasingly visible. Moreover, examining and integrating these factors into investment decisions is becoming more feasible. Many institutional investors see the growth and improving quality of this sell-side research as an indication that the investment industry is accepting the premise of ESG materiality (Sullivan et al. 2015). This section considers some of the key developments shaping the space.

Standards and guidance for disclosure

Mandatory disclosure requirements have historically been limited to financial accounting, but a growing number of voluntary frameworks for disclosing non-financial risks and opportunities are emerging. These standards have helped generate a reliable and consistent source of information against which to evaluate companies' ESG performance and to inform investment decision making. Climate-related disclosure is an area of particularly rapid evolution, as there are increasing calls from shareholders of public companies to support this proposal (Ceres 2014). Many of the asset owners and asset managers in the study are involved in supporting these initiatives.

Securities and Exchange Commission (SEC).

Federal securities law requires US companies to report material disclosures with regularity, including some ESG factors related to climate change, conflict minerals, and compensation ratios. These disclosures, regulated by the SEC, can be systematically integrated into investment analysis since they are mandatory and standardized. In April 2016, the SEC solicited public comment on the disclosure requirements of regulation S-K, which governs 10K disclosure. The comments, which have been abundant, may help the SEC improve the disclosure requirements for the benefit of both investors and registrants.

- Global Reporting Initiative (GRI). Founded in 1997, GRI is an international organization that provides widely accepted standards for sustainability reporting and disclosure. GRI has developed the Sustainability Reporting Guidelines which are a set of principles and indicators for measuring and reporting ESG performance. The GRI's database of sustainability reporting includes reports from over 23,000 global entities. Of the world's largest companies that report on sustainability performance, 73 percent follow the GRI standards (GRI 2016). GRI also includes an independent operating entity, the GRI Global Sustainability Standards Board (GSSB), which aims to set globally accepted sustainability reporting standards.
- **Sustainability Accounting Standards Board** (SASB). SASB is an independent nonprofit organization that develops and disseminates a set of disclosure standards for public corporations on material sustainability accounting. The organization is guided by the belief that investors are entitled to low cost and accessible information that is material to investments. SASB provides a set of 79 industry-specific standards, each accompanied by relevant metrics and technical protocols. The standards focus on sustainability issues that are expected to contain material information for most companies in a given industry. They are designed for disclosure on standard SEC filings, including forms 10-K and 20-F. The standards and tools aim to help investors incorporate sustainability data, appropriately measure risks, and engage companies on relevant issues (SASB 2016).
- UN Global Compact (UNGC). Launched in 2000, the UN Global Compact is a principle-based framework for responsible corporate practices. It outlines ten principles for responsible business in the areas of human rights, labor, environment, and anti-corruption, and provides a common language for corporate responsibility. Participating companies, nonbusiness organizations, and cities commit to the principles and report on their adherence through an annual Communication on Progress (COP), which is guided by the UNGC's reporting framework. For companies, the annual COP report represents a good starting point for complying with nonfinancial reporting standards. In some cases, it meets government requirements for mandatory disclosures (UNGC 2016).

- Corporate Human Rights Benchmark (CHRB). The CHRB is a new benchmark that provides a ranking of listed companies according to performance on human rights issues. Key performance indicators in the pilot methodology focus on leadership, governance, management systems, performance, and reporting/transparency. CHRB will publish its first ranking in November 2016, focused on the top 100 companies in the agriculture products, apparel, and extractive industries. It will eventually expand to other sectors (CHRB 2016).
- **CDP** (formerly the Carbon Disclosure **Project).** CDP is an international organization that collects and disseminates self-reported environmental information—including standardized climate change, water, and forest data. The data are gathered through an annual corporate questionnaire requested by CDP signatories—a group of over 800 global institutional investors representing over \$95 trillion in assets (CDP 2016a). The most recent climate questionnaire solicited responses from more than 5,500 global companies. The result is the largest global collection of corporate environmental data, giving the financial community the ability to better evaluate environmental risks and opportunities (CDP 2016b).
 - Climate Disclosure Standards Board (CDSB). CDSB, a special project of CDP, is an international consortium that provides a set of frameworks for systematic voluntary reporting of environmental information. CDSB offers a framework for broad environmental and natural capital information, as well as for climate change. These reporting schemes focus on disclosing information relevant to financial performance and value creation (CDSB 2016).
- Greenhouse Gas (GHG) Protocol. The GHG Protocol is a set of global standards and tools for measuring, managing, and reporting corporate GHG emissions. Developed by the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), these seven standards²³ serve as the underlying reporting framework for all GHG standards and initiatives throughout the world-including the International Standards Organization, the Climate Registry, and CDP (GHG Protocol 2016).

- Financial Stability Board (FSB)—Task Force on Climate-related Financial Disclosures (TCFD). In December 2015, the FSB launched a new task force on climate-relevant financial disclosure. It stems from the reality that, despite over 400 regimes existing for disclosing climate risks, no clear standard has emerged. The FSB believes that climate-related risks are not well understood by the markets, at least in part because of "difficulties in measurement, differences in disclosure requirements, and different perceptions of what is considered material to companies." As a result, climate risks and opportunities are likely to be mispriced in the market, which leads to worries that financial-stability risks could emerge if a sudden price correction of the underlying assets were to occur. The task force aims to develop a new set of recommendations for voluntary disclosures on climate risk for issuers of public securities, listed companies, and other key actors in the financial sectors (including investors and asset managers) (FSB 2016).
- Green Bonds. Initiatives to standardize sustainability assessment for climate and green bonds include:
 - **Climate Bonds Initiative.** This nonprofit initiative provides a set of standards (developed in collaboration with partners), with sector-specific, science-based eligibility criteria for a number of qualified green and climate bonds. The standards serve as a screening tool for investors and government to identify bonds that will effectively deliver climate change and sustainability solutions. The initiative also offers a certification scheme to denote assets and projects that meet these given standards, verified by a third party (Climate Bonds 2016).
 - **Green Bonds Assessment.** Moody's Investors Service has recently proposed a methodology for assessing fixed-income securities that raise capital for climate or sustainability purposes. The Green Bonds Assessment (GBA) would provide forwardlooking assessments of the issuer's strength for managing, administering, or allocating proceeds, as well as reporting on environmental projects financed by green bonds. The assessment framework is forthcoming.
 - **Green Bond Principles (GBP).** Governed by the International Capital Market Association, the Green Bond Principles are voluntary guidelines for transparency and disclosure within the green

- bond market. The principles help enable investors to evaluate the environmental impact of a potential bond. Assessments occur against use of proceeds, process for project evaluation and selection, management of proceeds, and reporting (ICMA 2016).
- **B-Corp and benefit corporations.** The nonprofit B-Lab has created a business certification scheme, known as B-Corp certification, that distinguishes forprofit companies that meet high standards of accountability and transparency and that achieve minimum threshold performance on environmental and social impact. In the US, the certification is complemented by the benefit corporation legislation, which provides a legal framework for fiduciaries of benefit corporations to consider environmental and social factors alongside the financial interests of shareholders. Thus far, 31 states and the District of Columbia have enacted such legislation. Investors may use this certification or legal status to identify companies with strong social and environmental records.
- Industry-specific standards. Several sectors already have well-developed standards and are ahead of the securities industry in terms of tracking ESG relevant standards. For example, the US Green Building Council has established the Leadership in Energy and Environmental Design (LEED) certification for the real estate sector. LEED, which provides a 4-point rating of sustainability for a given project, is the most widely used third-party verification and benchmark for green building (LEED 2016). Another example is the timber industry. The Forest Stewardship Council (FSC) certifies forest land and forest products according to a set of principles and criteria of sustainable forest management. The FSC certification has become the gold standard for forest management.
- **Montréal Pledge.** The Montréal Carbon Pledge is a global investor commitment to measure and disclose the carbon footprint of investment portfolios. Since its launch in 2014, over 120 investors across the globe, representing over \$10 trillion in assets, have committed. The pledge is overseen by the Principles for Responsible Investment (PRI), and helps investors realize their commitments to the Portfolio Carbon Initiative, which is a multistakeholder initiative aimed at decarbonizing investment portfolios of institutional investors (Montréal Pledge 2016).

The extent to which asset owners are using these data and standards is variable. With few exceptions—like FSC—the standards are not yet taken seriously or driving decision making among investors. For example, while many investors with exposure to timber and forest products will use FSC to inform investment decisions, many investors still do not incorporate carbon data into decisions, even when it is available. While data and standards are more available and useful for some industries and some regions, there is no widely accepted, comprehensive set of standards for all industries by which to assess performance.

The data sources described in this section are most likely to be used by asset owners with a specialized focus on sustainable investment. These various data sources are critical to informing due diligence on company level performance.

Market Indices for Sustainable Investing

There has been a surge of new sustainability-oriented market indices. Many of these indices are designed to mitigate risks associated with certain industries—for example, the risk of fossil fuel reserves becoming stranded assets. A growing number of indices are designed to increase exposure to investments with positive sustainability impacts. These indices can be used to create new investment products like index tracking funds or derivatives, or more generally to enable investors to benchmark the performance of their sustainable investment portfolios. A sample of these indices is shown in Table 3.

Investment products built around these and other indices continue to attract capital, helping to drive sustainable investments in the market. For example, the Vanguard FTSE Social Index fund, which is benchmarked against the FTSE4Good US Select Index, has garnered net assets of

\$2.2 billion (Vanguard 2016). The Northern Funds Global Sustainability Index Fund, which tracks the MSCI World ESG Index, has total net assets of \$242 million (Northern Trust 2016). And the iShares MSCI ACWI Low Carbon Target ETF, which tracks the MSCI ACWI Low Carbon Target Index, has accrued net assets of \$226 million since its inception two years ago (iShares 2016).

Investment Frameworks

Growing interest in sustainable investing has been paired with a growth in new investment frameworks and guidance for asset owners. These include strategies for implementing broad ESG integration across a portfolio, as well as strategies for mitigating risk from specific sectors or pursuing impact opportunities in specific asset classes, as shown in Appendix B. These resources provide varying utility to asset owners, depending on baseline knowledge, the focus of their objectives, and the status of sustainable investing implementation. Generally, the frameworks are most useful in helping asset owners through the early strategic conversations about devising a suitable sustainable investment approach. It should be noted, though, that many asset owners cited working in collaboration with peers, asset managers, and consultants to be just as important as following directed investment frameworks.

ESG Data, Analytics, and Services

A dynamic market of products and services exists to assist the investment community in constructing, implementing, and managing sustainable investment strategies. Several sell-side research firms now offer a set of diversified data products and services, including ESG data and ratings, portfolio analytics, controversy alerts, norms-based analysis,²⁴ and engagement services. The data aggregated by these research firms are largely sourced from publicly available materials—namely self-disclosure by companies (as earlier described)—

Table 3 | Sample of sustainability-oriented market indices offered by leading index providers

	EX-FOSSIL FUELS	EX-COAL	LOW CARBON	ESG	GREEN BOND	CLEAN TECH/ ENERGY	SUSTAINABILITY IMPACT
DJSI (S&P Dow Jones)	~		~	~	✓	~	
FTSE	✓	✓	✓	✓		✓	
MSCI	✓	✓	✓	✓	✓	✓	✓
Nasdaq				✓		✓	

Source: WRI, with data from MSCI, FTSE Russell, RobecoSam, and Nasdag.

Table 4 | Leading ESG data providers

PROVIDER	SERVICES OFFERED	COVERAGE	METHODOLOGY	RECENT DEVELOPMENTS			
Broad ESG da	Broad ESG data providers						
Bloomberg Professional Service	ESG data and research at the company level. Energy and emissions data, screening, scoring, and other tools for portfolio optimization. All ESG data are available on the Bloomberg terminal. The data help investors evaluate ESG risks and opportunities across a range of asset classes.	ESG data on over 11,300 companies; executive compensation data on over 16,000 companies across 65 countries; research on 20,000 public companies.	The ESG data, collected from published company materials, is integrated into Bloomberg's existing analysis and tools, including the ESG Scorecard, Carbon Risk Valuation Tool, and the Equity Screener, among others. The ESG Disclosure Scores provide company-level ratings based on the disclosure of quantitative and policy-related ESG data; this includes data on over 120 indicators.	In September 2015, Bloomberg LP released a new Water Risk Valuation Tool in partnership with Natural Capital Declara- tion. The Excel-based tool enables analysts to incorporate water risks into company valuations in the mining sector.			
MSCI ESG Research	Ratings, research-based indexes, tools, and analysis on ESG issues for institutional investors.	Over 6,000 equities, 350,000 fixed income securities, and 21,000 funds and exchangetraded funds.	The ESG ratings aggregate over 1,000 unique data points—750 social and environmental and 250 corporate governance points—which spread across 37 ESG issues. Data are sourced from over 100 specialized data sets, as well as company disclosures and media outlets. On a company level, MSCI produces in-depth assessment of key ESG risks and performance factors—from both an industry and geographic perspective. Based on its exposure to material risk and management of material risk, each company is rated relative to the standards and performance of industry-level peers.	In March 2016, MSCI launched the ESG Fund Metrics, which measures the exposure of 21,000 mutual funds and ETFs to ESG risk, sustainable impact, and values alignment. In April 2016, they launched an index—and supporting metrics— to allow institutional investors to align investments with the Sustainable Development Goals.			
Sustainalytics	ESG research, analysis, and advisory services—including rating and ranking of corporate ESG performance. Research at the sector, country, and index level. The Sustainalytics ESG data are also offered through the Bloomberg Professional® service (the terminal).	6,500 global companies are evaluated. Research covers all major global indexes. Carbon solutions suite covers over 10,000 global companies.	Incorporates more than 70 core and industry-specific indicators for material ESG factors. The model evaluates companies' sustainability policies, management systems, and performance outcomes. Each company receives an overall ESG score based on weighted sector-specific and core metrics, relative to the industry best practices. The assessment is structured around four dimensions of ESG performance: preparedness to manage material ESG risks, disclosure reporting, quantitative ESG performance (e.g. carbon metrics), and qualitative ESG performance.	In March 2016, Morningstar launched Morningstar Sustain- ability Rating™ for funds, which provides ESG ratings for 20,000 mutual funds and exchange- traded funds based on Sustainalytics data.			
Environmenta	Environmental data providers						
Trucost	Environmental impact data and research to support fundamental analysis, investment screening, scenario analysis, risk monitoring, engagement. Trucost also provides portfolio audits to evaluate natural capital risk and opportunity across holdings in equities, fixed income, commodities, private equity, infrastructure, and property.	Over 4,800 listed companies (covering 93 percent of global markets by market capitalization)	Data are sourced from corporate disclosure reporting, which is standardized and validated through company engagement. An environmental profiling model accounts for 464 global industries, tracking over 100 environmental impacts. The model also converts the impact data into financial values. The standard metrics of analysis include GHG emissions, water use, resource dependency, pollutants, waste, externality valuation, impact ratio, and profit at risk.	In December 2015, Trucost announced a partnership— TruValue Labs, a technology-based ESG analytics firm pro- viding real-time data. The goal of the partnership is to leverage the strength of both firms to provide enhanced, real-time ESG data to investors.			

Source: WRI, with data from MSCI, Sustainalytics, Bloomberg, and Trucost.

or from data compiled by public sector actors. The interviews indicate that these resources are most widely utilized by asset managers, and to a lesser degree, investment consultants. The vast majority of asset owners, on the other hand, do not directly purchase data subscriptions of custom analytics from research firms. This was also the case for investment staff of college endowments, according to a recent Commonfund (2015) study.

Among all participants, the most commonly referenced data service providers were MSCI ESG Research, Sustainalytics, Bloomberg ESG, and Trucost. A brief description of the relevant services offered by these agencies is presented in Table 4. There are numerous other firms in the market not discussed here, including leading data providers such as IW Financial, Vigeo Eiris, and South Pole Carbon. For a comprehensive summary and comparison of all ESG rating firms, Novethic Research (part of the French Caisse des Dépôts) provides a useful report that is updated periodically as the space continues to evolve.²⁵

While there is no widely adopted framework or methodology across these firms, the Global Initiative for Sustainability Reporting (GISR) is working to develop a set of common standards for ESG ratings. Established in 2011, this multistakeholder initiative will provide voluntary accreditation of sustainability ratings, rankings, and indices according to the GISR's principles for excellence. The principles will be used to assess the process and content of the rating methodology along twelve key areas: transparency, impartiality, continuous improvement, inclusiveness, assurability, materiality, comprehensiveness, sustainability context, long-term horizon, value chain, balance, and comparability. A draft model for the accreditation process will be open for public consultation this year (GISR 2016).

The growing amount of data provided by these and other service providers is expanding the capacity of the investment community to implement sustainable investment strategies. At the same time, these data services face substantial limitations—discussed in Section III of this paper—that reduce their utility and application across an endowment portfolio. Nearly all asset managers felt that the current data and tools—while valuable—are not sufficient on their own for evaluating ESG performance.

Proxy advisory services

In addition to ESG analytics firms, there are a small number of firms that offer proxy advisory and governance ser-

vices to investors. These services, and supporting platforms, are designed to facilitate institutional investors in informed shareholder engagement. Commonly provided services include proxy vote management, voting disclosure services, class action settlement recovery, research, reporting, and responsible investment policy development. The two leading firms in this space are Glass Lewis and Institutional Shareholder Services (ISS). Glass Lewis serves over 1,200 clients with more than \$25 trillion in collective assets under management. Among their clients are many of the world's largest pension plans and mutual funds. Each year, the firm covers 20,000 corporate meetings across 100 countries (Glass Lewis 2016). ISS serves over 1,600 institutional clients. The firm's research covers over 13,000 companies and about 39,000 global meetings across 115 countries. Each year the firm executes about 8.5 million proxy ballots representing 2 trillion shares (ISS 2016).

Investment Vehicles

The landscape of investment products is evolving rapidly. Investment vehicles can exist in different asset class categories—such as listed equities, fixed-income, private equity, and cash/equivalents. Asset owners have varying allocations to each asset class, though some are moving away from the asset class-organizing framework altogether. This assessment describes a range of current offerings in sustainable investment products, as discerned from discussions with asset managers, consultants, and other market participants.

Listed equities with long-only positions (often offered as commingled funds)

Listed equity funds hold ownership in companies as publicly traded stocks or shares, generally through the blending together of several accounts as commingled funds. Commingled listed equities funds are accessible to institutional investors of any size, and vary by geographic focus, market capitalization, or investment style (such as dividend growth, income, or index). Compared to more closely held private investments, many feel that these funds offer less direct ability for shareholders to influence company behavior.

Listed equity investment funds fall along a spectrum from very active management to completely passive management. Active management with a sustainability focus involves strategic stock selection with the goal of generating alpha,²⁷ at least in part through an ESG integration process. Sustainable funds that are more passively man-

aged mimic an index while applying specific exclusion or weighting to enhance sustainability performance in some way. Each of these strategies displays various targets for minimizing ESG risks or maximizing positive ESG outcomes. Strategies falling on the risk mitigation end of the spectrum tend to be comprised of holdings across broad market sectors, with the possible exclusion of certain sectors, such as coal and oil. Strategies that seek positive ESG outcomes can be exposed to a broad range of sectors or be more sector-specific, such as a sustainable water fund.

One of the most common examples of a mostly passive strategy within listed equities is negative screening, the original incarnation of sustainable investing. Historically, SRI funds have screened out "sin stocks." A growing number of new products are screening out the most fossil-fuel-intense holdings. The US SIF, for example, lists 27 investment strategies available from their institutional member firms that formally apply a negative screen for fossil fuels (US SIF 2016b).

Another type of listed equity strategy for sustainable investments is Quant ESG funds. This new and emerging type of sustainable fund incorporates ESG data through computer-based algorithms (Gelles 2016). The algorithms, which quantify the materiality of ESG performance of given companies, inform buy/sell decisions for the funds.

Private equity funds

Private equity (PE) is equity capital that is not quoted on a public exchange and is made directly into private companies. Capital can be used to fund rapid growth in a company, to purchase or develop new technologies, to make acquisitions, or to strengthen a balance sheet. Equity ownership in private companies tends to be more concentrated among a smaller number of owners, each with longer term lock-ups than in listed funds, resulting in more ability to force business direction. The investments demand long holding periods to allow for value accumulation, through company growth, turnaround of a distressed company, sale to another company, or public offering (the latter two events are commonly referred to as "exits" in the PE world). Because of long-term holding and ability for investors to take an active ownership role—through funds or directly—a single investor or small group of investors in a privately held company can often exert greater influence than shareholders in public companies can. This can be especially helpful when embarking on a change within a company that requires an upfront cost with financial

benefits to be seen over the longer term—such as the adoption of pollution control technologies or safety training for employees.

Fixed income (bonds)

Fixed-income investments, also known as bonds or money market securities, are essentially loans made to a corporate or government borrower by an investor. The investor maintains a guaranteed claim on the company/government or project/asset and receives a fixed interest rate until the investment matures and the principal is returned.

There are a number of new initiatives to finance projects with positive social or environmental impacts through the debt capital markets, in the form of "green bonds," "climate bonds," and "social bonds." The emergence of these specialized instruments has been accompanied by efforts to standardize sustainability assessment and give guidance on evaluating issuers for these bonds, as discussed in previous sections.

Hedge funds

A hedge fund is an alternative investment vehicle that pools securities through various strategies to maximize return on investment. Established under limited partnerships and open to a select number of accredited investors, hedge funds often use high-risk methods, including investing with borrowed money or shorting stocks. Usually managers of hedge funds do not disclose underlying holdings to investors. Due to such opacity, this can be a challenging area for investors focused on tracking sustainability performance and impact. Further, there are few managers with long track records on sustainability, since this is a new area for sustainable investing. One asset manager, for example, noted that there were only about 200 out of 10,000 hedge funds that were worthy of consideration when applying a sustainable investment lens.

Real asset funds

Real assets are physical assets with actual value that are expected to appreciate over time. Common real asset investments include those in real estate, commodities, infrastructure, and timber and agriculture. The investments include debt, equity, and security strategies. Real assets are available in long-term holding structures, which allow for significant build-out over time.

This asset class offers investors the ability to have substantial positive ESG impacts through investments in assets

Box 4 | **WRI's Sustainable Investment Experience**

SUSTAINABLE INVESTING AND WRI'S ENDOWMENT

In 2014, WRI's board of directors committed to investing the institute's \$40+ million endowment in line with the values and expertise of the organization. This brief case study describes the rationale, process, and initial insights from this ongoing journey.

INVESTMENT BELIEFS

WRI believes that by exerting a resolute focus on material environmental, social, and governance (ESG) performance, institutional asset owners will be best positioned to thrive in coming years. As an organization working to solve long-term problems, WRI will require sound financial grounding in coming years and decades. The capital in WRI's endowment needs to remain and grow over the years to meet the challenges and opportunities presented by changing climate, resource scarcity, and an economy that transforms drastically to meet this new world. WRI believes that investing in enterprises that are equipped to thrive in a resource-constrained world confronted by a changing climate will lead to superior long-term returns. Furthermore, as a long-term investor, WRI can help change the incentives structure for business, and drive companies across asset classes to improve long-term sustainability. Ultimately such a transition—in response to WRI and other long-term-oriented asset owners—will help redirect trillions of dollars in capital toward sustainable assets, supporting economic prosperity, human well-being, and environmental sustainability.

INITIAL EXPERIENCE

investing for a decade before any concrete implementation occurred. When the board first contemplated the issue, the institute faced skeptical investment consultants that advised against pursuing sustainable strategies and recommended considering traditional criteria. The board and consultants understood the charter mandated that, as fiduciaries, the board not consider sustainability and only explicitly try to maximize investment returns. After several years of board and staff discussions within a special committee—over a period of time that norms evolved and the investment environment matured—the institute devised a new

investment mandate and began to shift actual investments. Recognizing that the endeavor would require significant investments in staff time and resources—and that this represented an opportunity for large-scale change beyond the institute—WRI launched a complementary research program on sustainable investing. The program aims to share lessons and develop resources to advance the broader market.

Governance

- To educate, discuss, and ultimately build consensus on how to incorporate sustainability into management of the endowment, WRI developed a smaller subcommittee to engage deeply on the topic.
- Evaluating different practical approaches and implementing the new strategy required expertise and involvement of many different parties: the board of directors, the finance and investment committee, the CFO and finance staff, programmatic staff, the investment consultant, and an ESG data provider. While drawing on diverse expertise was key, having accountability spread too thin slowed implementation and risked producing unclear responsibilities and inefficient performance monitoring.
- WRI's Finance & Investment Committee is moving to a modified OCIO model, where WRI maintains clear direction on sustainability criteria (backed by WRI research), in order to follow best practices for an endowment of WRI's size. Specifically, this will help to allocate clear roles and accountability for managing the endowment.

Assessment of investment opportunities

- There is no simple ESG evaluation process broadly applicable across asset classes, portfolios, or institutions. Given this context, it was important for WRI to set clear objectives and criteria, while at the same time maintaining some flexibility until the market further develops to provide more of what WRI wants to invest in and the information to evaluate it.
- Most ESG tools are imperfect for the range of objectives most asset owners and managers seek. They rely on relative benchmarks and carry implicit assump-

- tions and value judgments. Ensuring the data can be used practically to meet ESC objectives often demands customization and reassessment. It was important for WRI to come to a shared understanding internally, and with the tool provider and investment consultant, about the analysis process.
- The new modified-OCIO model will allow WRI to use its endowment to catalyze the broader market for sustainable investing, through close partnership with an OCIO that has discretion for other clients wanting to invest more sustainably. WRI and the partner will work together to develop strategies for considering ESG risks and opportunities relevant to any long-term asset owner, and also better support emerging external frameworks, tools, and products.

Asset allocation

■ WRI's ESG journey has prompted changes to the asset allocation. For example, prior over-allocation to hedge funds was found to be at odds with the ESG mandate, as only a small number of ESG hedge funds exist and holding-level transparency is usually impossible.

Overall

- WRI is seeking to use its endowment and WRI's rich base of research—to join other asset owners looking to ensure that key material long-term ESG risks and opportunities are assessed in their portfolios. WRI believes the WRI endowment and any other asset owner's long-term oriented assets will benefit from incorporating these factors.
- WRI is on a sustainable investing journey. The institute continues to learn from its experience and from others and refine its approach.
- By investing in this work and sharing our experience, WRI hopes to facilitate an easier process for our peer institutional investors.

More information on WRI's endowment can be found at: http://www.wri.org/sustainable-investing-wri%E2%80%99s-endowment

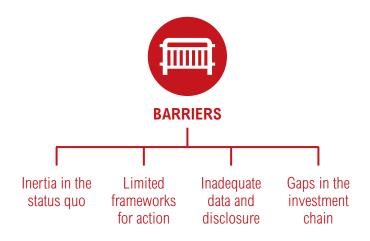
such as sustainable timber or clean power development.

SECTION III. SYSTEMIC BARRIERS

While the market ecosystem for sustainable investing continues to develop to meet the evolving demands of various actors, asset owners are still facing barriers to greater engagement. These barriers exist throughout the course of the investment process, from designing a policy, to implementing a strategy, to evaluating investment performance. Collectively, they hinder immediate and widespread implementation of sustainable investment practices by institutional investors.

Although each actor faces unique barriers, discussions across participants reveal common challenges in the market. The challenges that participants describe converge around four main themes within the investment process: (1) getting the ball rolling, (2) operationalizing a vision, (3) getting informed, and (4) executing investments. In each of these themes, a collection of common barriers—shown in Figure 9-serves to delay or obstruct institutional investors from greater or more immediate engagement with

Figure 9 | Barriers to sustainable investing



Source: WRI.

sustainable investing.

Getting the Ball Rolling—Inertia in the Status Quo

Individuals have Limited Incentive to Disrupt the Status Quo

For many board members, to disrupt the entrenched beliefs, knowledge, and processes associated with traditional investment decision making is a great challenge

with uncertain rewards. Changing these ingrained systems and moving forward with a sustainable investing approach often requires the strong leadership, sense of urgency, and courage of an individual director. In some institutions, this would-be leader needs an extra push to really understand the trends and to trigger an institution to act.

Negative Perceptions: Cynicism around Concepts of "Sustainable" and "ESG" Investing

Many mainstream asset owners, asset managers, and consultants still assume that investment strategies that consider sustainability come with financial trade-offs. Among participant asset owners, this was one of the most commonly discussed impediments. About one-fourth of asset owners-and one-sixth of asset managers-cited such perceptions around ESG as a barrier. These perceptions include negative assumptions regarding products and strategies labeled as "ESG-integrated" or "sustainable"namely that they provide lower returns than traditional approaches. There is also confusion over the meaning of these terms and how they are applied within a vehicle or portfolio. Part of this skepticism relates to the immaturity of the industry. Sustainable investing, still in its infancy, struggles with diverging definitions, value judgments, and poor data quality.

Some investors also draw broad conclusions about sustainable investing from specific cases of poor performance of a given fund, strategy, time period, or sector. For example, some discussed the relatively poor financial performance of the earliest "socially responsible" investment funds in the 1990s—which relied almost exclusively on negative screens. Still others were burned more recently by the promise of early-stage clean tech investments in the 2005–10 time period. Investors are wary of companies that failed to produce strong returns overall, despite significant amounts of money invested during this time (and maybe, in fact, because so much money went in over such a short period of time and investment standards were too lax). This experience has shaped some investors' opinions of all "sustainable" or "ESG" investment strategiesdespite early-technology investments being a very narrow investment strategy. Several asset managers cite this phenomenon as deterring CIOs and investment consultants from feeling comfortable with sustainable investing from a performance perspective. Bringing improved performance data about various sustainable investment strategies to investment staff, investment committees, the larger board, managers, and consultants is a necessary first step to getting the ball rolling toward sustainable investing.

Misalignment of Incentives: Bias toward a short-term perspective

Short-term horizons pervade the modern investment market (MFS 2016). Actors at each point of the market are often pressured to deliver performance over short-time horizons, while ignoring long-term risks, even if material over the long-term. The key drivers of this bias include:

- To plan for ESG risks, companies must make large capital investments that do not necessarily generate returns in the immediate term. But investors do not generally ask companies about most material ESG factors, which require a longer-than-quarterly time horizon. Instead, companies are rewarded in the market (through investments) based on short-term, usually quarterly, performance.
- CIOs and asset managers are compensated on shortterm performance, even though the asset owner institution often cares mostly about the long-term (multiyear) investment horizon (Caldecott and Rook 2015).
- Investment consultants are usually not evaluated on performance—short- or long-term. The easiest path may thus be to recommend well-known established investment funds over newer funds—such as sustainable investment funds—with shorter track records. When their performance is evaluated, it tends to be short-term performance.

These and other incentive structures slant investor decision making away from long-term value creation. As a result, the broad market incentives are at odds with sustainable investing, which requires a long-term view (Trunow and Linder 2015), toward a goal of growing assets significantly over many years.

Decision Paralysis: Indefinitely Stalled Progress

Asset owners, even those most keen on sustainable investing, commonly get stuck in philosophical discussions that inhibit action. Nearly one-quarter of asset owners described challenges in moving beyond high-level discussions. These actors find themselves in either passive or active decision paralysis:

Passive paralysis: Asset owners are interested in sustainable investing but lack the resources needed in staff time, knowledge, and data resources—to delve into it, in the midst of many competing demands. Active paralysis: Competing philosophical debates on boards and within investment staff—combined with a desire to have a clear overall roadmap before acting—can result in years of conversations and little or no action. Unclear definitions and information on expected returns and "impact" further complicate the discussion and lead to inaction, making the idea of integrating broad institutional values across an entire portfolio seem daunting.

Abundance of Expertise, Absence of Accountability

When introducing a new factor—like sustainability—into investment decisions, asset owners can suffer from having too many people providing deep but narrow advice. This can lead to a disjointed approach, where no single actor or representative provides comprehensive oversight or accountability. Given the complexity of the investment structures and the uncertainty of the markets—among other factors—it has become increasingly difficult to outperform the broad market. When sustainability factors are introduced on top of these factors, it becomes even more difficult to manage various actors and priorities with accountability, as yet new skill sets are required.

Investment committees increasingly realize that the financial markets are becoming too complex for volunteer committees to make investment decisions, and that the traditional consultant relationship does not necessarily lead to good performance. As a result, the outsourced chief investment officer (OCIO) model has become popular over the last 10 years for smaller endowments, and even for some up to \$1.5 billion in size. However, while OCIOs are increasingly offering services in sustainable investing, the market for OCIOs with expertise in sustainable investing is still extremely limited.

Misconceptions about Fiduciary Duty

Despite recent policy and regulatory developments that clarify the link between adhering to fiduciary duty and investing sustainably, many key actors still perceive them as conflicting. About one-eighth of asset owners, and one-ninth of asset managers, described related concerns when discussing barriers to sustainable investing. These sentiments are echoed in the broader market. In particular, consultants and lawyers often do not see ESG factors as material to investments (Sullivan 2015). Asset owners also often misunderstand their fiduciary responsibilities as related to sustainability, and therefore refuse to consider such sustainable investment approaches altogether (Caldecott and Rook 2015).

Figure 10 | Insight from pioneering asset owners—Overcoming internal barriers

BUILD INTERNAL KNOWLEDGE & CAPACITIES

To confront internal resistance to the basic concept of sustainable investing, many pioneering asset owners have found value in educating internal decision makers and staff with needed expertise.

ESTABLISH A WORKING GROUP

Some asset owners also pursue a more thorough investigation of opportunities. They cite benefits from launching special board committees or working groups to research and deliberate an appropriate policy for sustainable investing.

ENGAGE INVESTMENT CONSULTANTS & MANAGERS

Asset owners often collaborate with specialized consultants and managers to explore sustainable investing. But even without hiring specialists, asset owners benefit from engaging existing providers to encourage expansion of sustainable investing products and services on offer.

START WITH A SMALL INVESTMENT

Before finalizing a complex portfolio strategy, a common approach for motivated asset owners is to start small. Experimenting with a portion of the listed equities, for example, can help asset owners gain experience and inform a broader strategy for the full portfolio.

Source: WRI.

While the internal barriers to sustainable investing serve as strong deterrents to asset owners, they are certainly not impenetrable. Many asset owners, including WRI, have taken proactive steps to circumvent these hurdles and have made progress toward implementation. Some of the initial steps that asset owners cite as valuable are shown in Figure 10.

Operationalizing a Vision—Limited **Frameworks for Action**

Operationalizing a Vision, Means Unknown

Even when asset owners have a mandate to begin investing sustainably, they find it challenging to translate this into the investment portfolio. This was among the most commonly discussed challenges by participants. About a quarter of both asset owners and asset managers described difficulty in translating a vision—or institutional values—into a practical investment approach.

Part of this stems from the fact that investors lack detailed guiding frameworks and simply do not know how to take

the first step. The frameworks that do exist are often too general to be actionable or too specific to be useful to mainstream institutional investors that have not already formulated particular investment paths or beliefs.

Adding to the challenge is the absence of standard criteria for what constitutes a "sustainable" or "environmentally friendly" investment, let alone a "mission-aligned" investment. This uncertainty often slows the process of sustainable investment, and can make it daunting to think of integrating broad institutional values across an entire portfolio.

On the flip side, there is risk of "losing the forest for the trees." Successful sustainable investing, like all investing, requires strategic and holistic thinking, as well as detail-orientation. Asset owners looking to invest sustainably across their portfolios can easily miss an offensive investment in one part of the portfolio while focusing on another. This is because institutional endowments are complicated pools of capital, and there are few clear frameworks that fit most investors.

Momentous Goals, with an Uncharted Path

The 2015 adoption of the UN Sustainable Development Goals (SDGs) and the historic UNFCCC Paris Agreement are capturing the interest of investors. The existing and expected policy developments related to these agreements send strong signals to investors about the materiality of ESG factors to long-term corporate performance. Collectively, these policy agendas are building the financial case for sustainable investment practice and making it risky to ignore.

Already, leading investment firms and research agencies are responding. Several have already developed frameworks or integrated various criteria into products to support the SDGs. For example, MSCI, a provider of ESG data, has recently launched new metrics on sustainable impact to help investors align portfolios with the SDGs. While these new products and tools are constructive, asset owners still lack clear frameworks to fit their entire investment portfolios into the future world envisioned by the SDGs and the Paris Agreement.

Opportunities for Peer-to-Peer Learning Needed

While asset owners are eager to learn from peers, they lack good opportunities to do so. As many asset owners note, large conferences generally do not make for constructive learning environments, as they are often dominated by asset managers and consultants who are pitching new business or investment strategies. Speakers at these events also rarely express opinions that risk being controversial or not well-received. And while the plentiful research and reports are useful, many asset owners act only once they learn from the first-hand experience of their peers.

Getting Informed: Inadequate ESG Data, Disclosure Standards, and Performance Metrics

Data—Limits to Relevance, Completeness, and Usability While bounds of ESG data exist, key limitations restrict

While bounds of ESG data exist, key limitations restrict their broader use in mainstream investment decision making. This was the second most commonly discussed barrier by asset managers—cited by one-third of this group. Asset owners are less likely to view data availability as an impediment to sustainable investing, where only about an eighth of participants in this group mentioned it. This discrepancy likely exists because the sustainability analysis is generally executed by the managers who are developing products, rather than asset owners themselves.

Participants described the following limitations in existing data sources. These limitations were validated through WRI's own experience working with consultants and data providers to conduct a tailored ESG analysis for its endowment.

- Lack of agreement in identifying the key material ESG factors. Asset owners and asset managers do not agree on a single set of ESG factors they believe will be material to all long-term investors. As a result, asset owners each have a different set of individual factors. Managers must respond, not knowing what the most important factors are to the broad market of asset owners. With no key set of universal factors, even managers actively incorporating ESG are often competing with other managers professing a different set of ESG factors. Managers looking to incorporate ESG into their existing strategies have difficulty, as well, as they must sort through all the arguments for what material factors are in their judgment. In order to scale products, it is important to identify the core factors that are both material and universally important to asset owners.
- Limited coverage by sectors and risk areas.

Within developed countries, carbon and water are considered the material ESG risk areas (outside of compliance areas) with the best data quality. However, data for other ESG risk areas may be lacking altogether, or in some cases, the ESG information is simply not available in forms that are transferable into investment analysis. But even in areas like carbon and water that are relatively strong, available data can be imperfect for assessing ESG risks and opportunities. For example, climate risk is too often assessed solely through greenhouse gas emissions, rather than evaluated with a more comprehensive set of metrics. To enable investors to evaluate the broader risks and impacts associated with climate change, there is a need for more forward thinking metrics on climate risk. For example, additional factors included in climate risk might include physical risks stemming from climate change and carbon asset risk (Fulton and Weber 2015).

Limited coverage in certain geographies, including developing countries. Study participants also noted geographic and sector variance in data availability. There is notably greater data available for developed markets. In developing countries,

however, it is much harder to find ESG and disclosure data and coverage, although this is improving, particularly in emerging markets.

- Limited coverage in asset classes beyond public equities. Most available ESG data focus on publicly listed equities. While ESG data are sometimes available for unlisted companies, it is more limited and less standardized. This is generally the case for other asset classes as well, although there is increasing movement toward data improvement.
- Data are inconsistent and require expert systems for integration. Since most sustainability disclosures are not yet classified as material, they are not regulated by the SEC and remain voluntary. This means that the information—including self-reported disclosure on carbon emissions—is often inconsistent. There are also many data service providers, each with different metrics and methodologies. Using this information in an effective manner requires complex research systems and specialists who can determine materiality at the company level.
- Analytical methods contain biases. A common theme in discussions with asset managers was dissatisfaction with the methodology of ESG analytics. The data are generally based on industry or other relative benchmarks, which carry implicit assumptions and value judgments. And often, the orientation of the analysis is backward-looking and risk-focused. This perspective means that the analyses offer limited insight on the positive ESG impact of potential investments, which was identified as important by a number of participants.

Corporate Disclosure, Incomplete and Inconsistent

Given the correlation between nonfinancial corporate disclosure and corporate performance (Eccles et al. 2014), uniform and consistently applied ESG disclosure standards would add value to the investment decision-making processes. While several efforts are underway to develop standards on key ESG issues, the overlapping efforts and their (mostly) voluntary nature lead to inconsistency and confusion in implementation by companies—and, ultimately, interpretation by end-users (e.g. asset managers, asset owners, data-service providers, etc.). In some cases, initiatives are trying to meet the demands of too many parties, resulting in standards that are too broad to be practical. Even for mandatory disclosures, the implementation can be vague at best, as is the case with the SEC climate disclosure rules, which are neither strong nor adhered to with consistency.

Concern over Greenwashing

In most asset classes, there are no clear standards to certify that an investment product delivers on certain ESG outcomes, either in their stated methodologies or in the actual integration into practices (Voorhes and Hoque 2015). As a result, investors worry about "greenwashing"—when managers take credit for achieving positive ESG outcomes without actually doing so-and may therefore avoid such labeled products.

While not the norm, there are sectors for which standards have developed and clearly incentivize companies and investors to follow clear methodologies. Notable examples include LEED certification for real estate, and FSC certification for timber and other forest products. Fixed income, on the other hand, is an area where standards and methodologies to meet them are not yet clear. This is evidenced by the liberal definition and use of the term "green bond," for example.

Executing Investments: Gaps and Weak Links in the Investment Chain

Broad Sustainability Interests Need Scale

Up until recently, many asset owners have demanded ESG products with very focused criteria—for example, a focus on avoiding sin stocks, religion-specific criteria (which can differ from religion to religion), or animal rights. This narrow focus has made it hard to pool enough assets into institutional-scale investment vehicles that match the non-ESG products in scale and resources. The limited number of underlying sustainable investable assets has made scaling even more challenging. As the asset owners demanding ESG products diversify beyond the pioneering religious and mission-oriented impact investors, other common ESG demands are gradually arising. For example, the campaign for fossil fuel divestment, which in part calls for removing investment holdings in fossil fuel companies, has become an investment criteria with relatively broad demand. As a result, new products using this screening criteria, like the FTSE Fossil Fuel Free strategy created with Blackrock and NRDC, have come to market.

However, as asset owners increasingly seek to incorporate key material ESG risks and opportunities into portfolios and go beyond simply avoiding negative sectors, they find

the market for institutional-scale and -quality funds with ESG criteria to be generally lacking. This was in fact the most common barrier mentioned by asset owners and asset managers alike. Nearly half of asset owners, and over a third of asset managers, cited the limited availability of institutional-quality sustainable investment vehicles among the barriers to greater implementation.

Gatekeepers Hinder Product Uptake

Investment consultants serve as gatekeepers in the investment ecosystem, selecting which managers, products, and vehicles are available to clients. Many consultants are becoming more educated about sustainable investment approaches and opportunities, but most do not proactively offer sustainable investment products within their platforms. One explanation for this cited by managers and asset owners—among other factors—is the tendency of consultants to make recommendations based on past performance track record. Since many sustainable opportunities are newer and lack track records, these options are discounted. In addition, most consultants make investment recommendations based on short-term time horizons. This generally precludes the meaningful incorporation of sustainability in investment recommendations, which requires long-term, multivear time horizon perspectives.

Challenges in Evaluating Managers' Capacities

Since the reliability of ESG labels—and perceptions around them—remain in question, asset owners must resort to their own devices when it comes to evaluating the sustainability process and performance of potential managers and products. But since most fund selectors lack expertise in ESG integration, performing due diligence on asset managers' ability to integrate ESG into investment processes can be more difficult than other types of due diligence.

There are limited available resources or existing processes and guidance for obtaining necessary information and evaluating ESG attributes of managers. Accordingly, managers are often burdened with multiple requests for information from potential investors and must spend expensive administrative time customizing answers for each asset owner.

Emerging Markets Products are Sparse

The leading sustainable investment products are focused on developed markets where the ecosystem for sustainable investing is more mature. Relative to emerging markets, developed countries tend to have stronger regulations for environmental externalities, companies are more familiar operating within these regulatory frameworks, and the economies are less commodity-driven (with smaller levels of market capitalization from fossil fuel companies). Furthermore, the ESG data for emerging market countries is not as comprehensive as for developed countries. Another result is that passive strategies in emerging market countries can be hard to implement with a sustainability emphasis. As a result, there are few emerging market ESG investments with good track records.

CONCLUSION

This paper traces the current state of play of sustainable investing from the perspective of US foundations and endowed asset owners. Understanding the recent trends, facilitating systems, and persistent bottlenecks that shape the opportunities for sustainable investing can help asset owners navigate the space as they progress on a journey toward sustainable investing.

While mainstream adoption of sustainable investing will require broader market advancements, individual asset owners do not have to wait for these to occur. Our research indicates that asset owners' engagement is impeded not only by market-level barriers, but also by internal barriers. Namely, these are the set of challenges that converge around the theme of "Getting the Ball Rolling—Inertia in the Status Quo," described in Section III. In the immediate term, asset owners can expand their engagement in sustainable investing by circumventing some of these internal sticking points.

To help asset owners along in this process, WRI has developed a few recommended actions as initial steps. These initial actions represent a means of overcoming specific barriers described by participants, and have been validated through WRI's experience with its own endowment. Taking these four actions will help asset owners end inertia in internal decision making and governance, and "get the ball rolling" on sustainable investing.

Initial Actions for Asset Owners

1. **Knowledge and capacity building: Equip inter- nal champions.** The best place for asset owners to start is with internal education. It is important for decision makers to understand the underlying premise of sustainable investing; that is, the materiality of ESG factors to financial performance, the implications of sustainable investing for fiduciary duty, how sustain-

able investing fits into the investment process, and how to evaluate investment opportunities. An internal champion, equipped with this knowledge, can provide coherency and leadership to an uncertain process. A first step, for example, would be to attend workshops, presentations, training sessions, or conferences on various sustainable investing topics.

- 2. Strategic delegation: Form a special committee. In making initial decisions to pursue sustainable investing, asset owners may find it useful to establish a separate working group or special committee within the investment committee. This will allow time and resources needed to cultivate a shared understanding of the relevant issues and to devise the broad approach for the institution's strategy. This is particularly appropriate for those asset owners caught in "active paralysis."
 - **External engagement: Communicate with** consultants, managers, and peer asset owners. Discussing issues of sustainable investing with investment consultants, managers, and peer asset owners can be a crucial part of the learning process for asset owners. These conversations can help inform asset owners about the various debates on relevant topics, the range of sustainable investing strategies pursued by the firm, and potential opportunities or limitations with their current partnerships. Asset owners can also use these conversations to encourage managers and consultants to improve their sustainable investment practices or offerings. There are several ways to formalize this type of engagement; for example, adding an agenda item on sustainable investing discussion for quarterly meetings, requesting annual impact or sustainability reports from existing managers and consultants, and including sustainable investing questions in all requests for proposals (RFPs) for new managers and consultants.
- Portfolio experimentation: Learn by doing. Before making grand commitments across a portfolio, asset owners can consider exploring the investment landscape by investing a portion of the listed equities allocation into sustainable investment funds. The listed equities portion of the portfolio is a good starting point, both because of the liquidity of the asset class and the fact that sustainable listed equity funds are more readily available than those in (some) other asset classes. Asset owners can learn from this process while they reach agreement on an appropriate sustainable investment strategy for the broader portfolio.

But beyond these internal actions, asset owners will need support from other key stakeholders to advance the market and its supporting systems. In order to transition to a market in which all institutional investors consider sustainability as part of fundamental decision making, the system-level barriers also must be addressed. Additional support is needed to help eliminate the challenges of internal decision making. Asset owners can only take it so far. Accordingly, WRI has designed a set of recommendations for tackling both internal and external barriers, each of which require input and resources from a range of market actors. These four broad recommendations respond directly to the four themes of barriers revealed through participant interviews (see Section III). They were developed for asset managers, consultants, data providers, research firms, investor networks, and other actors interested in facilitating the mainstreaming of sustainable investing among institutional asset owners.

Support needed from asset managers, investor networks, and other service providers

- Inspiring and empowering investment decision-makers. Asset owners need help moving from discussion to action. Boards can get stuck in philosophical discussions and face confusion over the relationship between fiduciary duty and sustainable investing. They need to know that they can start down the path of sustainable investing without many additional resources. Examples of needed resources include:
 - a. Guidance on the relationship between fiduciary duty and ESG integration.
 - b. Guidance on the governance issues of incorporating ESG into investment strategy mandates, through investment policy statements (IPS) and other relevant mechanisms.
- 2. Actionable Investment Frameworks. Existing investment frameworks for asset owners are often too broad or too tailored to be useful to the mainstream market of asset owners. Asset owners and their CIOs/ OCIOs/consultants need an actionable investment framework to help structure their portfolios and choose asset managers. The development of clear and meaningful sustainability standards, accompanied by a clear set of methodologies for achieving these standards, would help clarify investors' expectations. Examples of needed resources include:

- a. Practical mechanisms for constructing portfolios in alignment with a resource-constrained world.
- b. Guidance, high-quality standardized questionnaires, and evaluation criteria for assessing asset managers' adherence to sustainable investment frameworks.
- Improved data sources. Asset owners, consultants, and asset managers need better information. Quality data is lacking, especially in certain sectors (commodities, carbon, climate risk) and geographic areas (developing countries). Even when it is available, it is not always in the right format or place (in terms of materiality and on a financial information platform). Examples of needed resources include:
 - Guidance on the type of data and tools that actors should use in applying sustainable investment frameworks.
 - b. ESG data and tools that fit into existing investment decision-making frameworks.
- Quality supply of investment products. There is a limited supply of high-quality investment products for mainstream investors who want to ensure that material ESG risks and opportunities are accounted for in their portfolios. Resolving this will require a coalition of smart investors and researchers who insist that the biggest material ESG factors be taken into account in investment decisions, and come together to invest. That will build a critical mass of capital to encourage investment products from high quality managers. Examples of needed actions include:
 - a. Investment professionals—including managers, asset owners, OCIOs, and others-need to work together to demand and develop products that integrate ESG for mainstream investors.
 - b. Investment consultants and other gatekeepers need to develop internal capabilities for assessing managers and products with integrated ESG processes. They also need to be informed enough about the ESG marketplace to assist their clients in designing effective implementation strategies.

Transforming the US investment ecosystem to systematically reflect the world's long-term environmental, social, and governance realities will be a challenging endeavor. It will require many different market actors to influence change at

the many different points in the investment chain—especially regarding underlying beliefs and assumptions.

The purpose of this broad landscape assessment is to help inform these actors in devising practical and collaborative strategies to leverage this change. These findings are also informing the strategies for WRI's nascent Sustainable Investing Initiative, which is developing a collaborative research, educational, and peer learning program to confront the key sticking points revealed in this paper. While unknowns in the current market persist and questions remain, this assessment provides common footing to move forward and advance the market for sustainable investing. This will be a critical step toward creating a low-carbon, sustainable, and just economy fitted to the future world.

ABOUT WRI'S SUSTAINABLE **INVESTING INITIATIVE**

Launched in 2015, WRI's Sustainable Investing Initiative uses WRI's investment experience, data, research, and convening power to advance sustainable investing practices in the mainstream investor markets. WRI facilitates this transition by:

- Shifting investment capital, starting with our own capital, to companies that incorporate ESG externalities as part of fundamental financial analysis today.
- **Producing cutting-edge research** with a focus on what's useful to mainstream investment decision makers.
- **Educating asset owners** on fiduciary duty, ESG issues, and on incorporating sustainability performance into their investment decisions.
- **Supporting asset managers** in developing and improving investment products to incorporate environmental, social, and governance factors as part of fundamental financial analysis.
- **Collaborating with peer investors** to engage as active shareholders with companies.
- Identifying and disclosing agency problems in investment decision making that are contrary to asset owners' intentions related to sustainability.
- **Convening experts** in sustainable investing with institutional investors who want to learn from their experience.
- **Exchanging knowledge** with market participants at the cutting edge of practice, including asset managers, investment consultants, information providers, standards bodies, and associations.

For more information, see: http://www.wri.org/our-work/project/sustainableinvesting-initiative.

APPENDIX A. SUSTAINABLE INVESTOR NETWORKS AND ASSOCIATIONS

NETWORK	OVERVIEW	MEMBERS	MEMBERS' AUM	SERVICES/RESOURCES
Ceres Investor Network (Investor Network on Climate Risk)	Ceres is a nonprofit organization with a 25-year history of successfully mobilizing investors and businesses toward a sustainable future. They pursue a number of strategies including corporate engagement, policy advocacy, and sustainable investing. They focus on climate change, energy, water, and supply chains.	One of the main arms of Ceres is the Investor Network on Climate Risk (INCR), which represents about 120 members. This includes some of the largest pension funds in North America, large university endowments, labor and religious pension funds, foundations, and family offices.	\$15 trillion AUM (INCR members)	The network convenes and advocates on behalf of members to encourage investors and businesses to address climate and sustainability risk. The network also develops resources, tools, and frameworks to guide investors in incorporating these risks into investment decisions.
Confluence Philanthropy	Confluence Philanthropy is a membership association that supports and catalyzes members toward mission-aligned investing.	The network is international and is comprised of public, private, and community foundations, individuals, and investment firms.	Represents over \$130 billion in philanthropic assets.	It holds an annual conference, and provides regular training sessions, webinars, and working groups on mission-aligned investment strategies across asset classes, investment vehi- cles, and advocacy strategies.
Corporate Governance Network (ICGN)	ICGN is an investor-led network that aims to promote effective standards for corporate governance and investor stewardship, through the ICGN Global Governance Principles.	Members include investors, companies, and other governance professionals across 47 countries.	Over \$26 trillion	Services include: peer networking and dialogue, policy advocacy, resources, and education.
Council for Institutional Investors (CII)	CII is a nonprofit, nonpartisan association of corporate, public and union employee benefit funds and endowments that aims to be the leading voice for effective corporate governance practices and strong shareowner rights.	Membership includes 120 general members (pension funds and other benefit funds); and 50 associate members (non-voting), which are asset managers.	General members: manage over \$3 trillion. Associate members: manage over \$20 trillion.	Services include: education, peer networking and knowledge exchange, policy advocacy, and research.
Intentional Endowments Network (IEN)	IEN is a broad-based collaborative network that supports colleges, universities, and other mission-driven organizations in aligning endowment investments with institutional values and sustainability goals.	IEN is comprised of about 80 members, including universities, pension funds, foundations, and asset managers and consultants.	NA	The network serves as a forum for education and training, peer networking, convening, thought leadership, and information exchange on ESG and sustainable investing. The network helps identify pragmatic solutions for enhancing institutional approaches to sustainable investment.
Global Impact Investing Net- work (GIIN)	GIIN is a nonprofit organiza- tion committed to increasing the scale and effectiveness of impact investing.	The network is comprised of hundreds of asset owners, asset managers, and service providers. The GIIN Investors' Council is a leadership group made up of about 60 large-scale impact investors.	GIIN's Investors' Council represents \$60 billion impact investment AUM, with total AUM at \$11 trillion.	GIIN's network membership offers a platform for investors to gain access to tools, industry information, networking opportunities, and other resources to strengthen capacity for impact investing.

NETWORK	OVERVIEW	MEMBERS	MEMBERS' AUM	SERVICES/RESOURCES
Mission Investors' Exchange (MIE)	MIE is a national membership association providing a forum for philanthropic innovators to share ideas and tools to enhance the impact of their investment capital.	250 foundations, family foundations, community foundations, and other affiliates.	NA	Educational opportunities, institutional learning programs, convenings, partnerships, and working groups along sector lines.
Principles for Responsible Investment	The UN-supported Principles for Responsible Investment (PRI) is an international network of investors from over 50 countries who have committed to implementing six principles for responsible and sustainable investment.	By April 2016, there were 1,500 signatories committed to the principles; this was up from 1,070 signatories in 2012.	Signatories represent \$62 trillion, up from \$32 trillion in 2012.	It holds an annual conference, and provides regular training sessions, webinars, and working groups on mission-aligned investment strategies across asset classes, investment vehi- cles, and advocacy strategies.
Toniic	Toniic is a global network of impact investors that aims to develop, improve, and share effective strategies for investment portfolios, community engagement, and structured deals.	Toniic serves individuals, family offices, foundations, and funds in over 26 countries. Its global members include 202 active impact investors.	Toniic members represent \$4.5 billion AUM (with 25% in impact investments).	Toniic organizes working groups, thematic events, and regular convening. Members work together to source, share, and syndicate impact deal flow; they share due-diligence; coinvest in impactful projects and funds; and collaborate on research.
US SIF (Forum for Responsible Investment)	US SIF is a nonprofit organization that conducts research and advocacy to advance sustainable, responsible, and impact investment across asset classes.	US SIF is comprised of hundreds of members, including investment firms, research firms, financial advisors, nonprofit associations, pension funds, and foundations.	\$2 trillion	Services include: networking, education, advocacy, research, media, and marketing

Source: WRI, with data from Confluence Philanthropy, IEN, GIIN, MI, PRI, Toniic, ICGN, CII, and US SIF.

APPENDIX B. SELECT SUSTAINABLE INVESTMENT FRAMEWORKS AND GUIDANCE

NAME OF KNOWLEDGE PRODUCT	DESCRIPTION	SOURCE, YEAR
Broad ESG focus		
An Investment Framework for Sustainable Growth	Presents methods for integrating sustainable growth principles into the standard investment process.	Mercer, 2014
Governance Process for Evaluating Sustainable Investing - A Guide for Nonprofit Fiduciaries	Presents a framework for addressing governance- related issues in sustainable investing, with five key steps around motivation, objectives, stake- holders, risks/costs, and other considerations.	Russell Investments, 2014
The 21st Century Investor: Ceres Blueprint for Sustainable Investing	Provides guidance for institutional investors on integrating ESG considerations into the investment. It recommends ten steps investors can take to help them become sustainable investors.	Ceres, 2013
Aligning Expectations - Guidance for Asset Owners on Incorporating ESG Factors into Manager Selection, Appointment, and Monitoring	Provides guidance to help asset owners assess whether the investment policies/processes of external managers are consistent with their ESG expectations, with the goal of promoting greater understanding of ESG risks and opportunities, and aligning interests of the asset owner and their managers.	PRI, 2013
Total Portfolio Activation - A Framework for Creating Social and Environmental Impact across Asset Classes	Introduces a conceptual framework to help investors identify and operationalize opportunities to align investment activities with their mission and values.	Tellus Institute, 2012
Shareholder Engagement		
Engaging on Anti-bribery and Corruption	An evidence-based guide on investor-company engagement on anti-bribery and corruption.	PRI & UN Global Compact, 2016
Engagement Guidance on Corporate Tax Responsibility: Why and How to Engage with your Investee Companies	Guidance for investors on company engagement with focus on corporate tax responsibility.	PRI, 2016
21st Century Engagement: Investor Strate- gies for Incorporating ESG Considerations into Corporate Interactions	Guidance for institutional investors on how to engage with companies and policy makers on ESG issues.	Ceres & Blackrock, 2015
Proxy Voting for Sustainability	Presents Proxy Voting Sustainability Principles and examples of shareholder resolutions and proxy guidelines to help investors address sustainability issues through shareholder resolutions.	Ceres, 2011

NAME OF KNOWLEDGE PRODUCT	DESCRIPTION	SOURCE, YEAR
Environment Focus		
Risks and Opportunities From the Changing Climate: Playbook for the Truly Long-Term Investor	Presents working "playbook" for investors to help customize their management approach to climate risks and opportunities.	Cambridge Associates, 2015
Investing in a Time of Climate Change	Estimates the potential impact of climate change on portfolio returns, asset classes, and various industry sectors over the next 35 years, and outlines actions for investors to manage climate-related risks and opportunities.	Mercer, 2015
Climate Change Investment Solutions: A Guide for Asset Owners	Guidance on climate change investment strate- gies and solutions, including strategic review of investment policies, managing risks and opportunities through strategic asset allocation, reducing carbon intensity of assets, and reducing vulnerability of assets to climate change.	Global Investor Coalition on Climate Change, 2015
Carbon Asset Risk: Discussion Framework	Provides fact-based guidance to finance professionals for evaluating exposure to the nonphysical risks of climate change, called carbon asset risk.	WRI & UNEP FI Portfolio Carbon Initiative, 2015
Investing to Curb Climate Change: A Guide for the Institutional Investor	Outlines a variety of strategies that institutional investors can use to manage climate risks—across all asset classes—and to help generate solutions.	US SIF, 2013
Investor Handbook for Water Risk Integration	Provides recommendations on how to integrate water into investment policies, portfolio management, strategic planning, and client relationship building.	Ceres, 2015
Asset Class Focus		
A Practical Guide to ESG: Integration for Equity Investing	A detailed guide on ESG-integrated analysis for listed equity investments.	PRI, 2016
Fixed Income Investor Guide: Putting Responsible Investment into Practice in Fixed Income	Guidance on how to integrate ESG analysis into the management of fixed income investments, including how to use ESG criteria risk analysis, valuations, and screening the investment universe.	PRI, 2014
A Guide to Responsible Investment Reporting in Public Equity	Provides clarifying guidance on responsible investment reporting expectations, to help asset owners improve the quality of reporting for individual mandates.	Produced by 16 UK pension funds, 2015
Introducing the Impact Investing Benchmark	Presents a comprehensive analysis of the finan- cial performance of 51 market-rate private equity and venture capital impact investing funds.	Cambridge Associates and GIIN, 2015

Source: WRI based on publically available information from institutions' websites and respective publications.

APPENDIX C. INTERVIEW PROTOCOL AND GUIDE

Interview Protocol

Goal: The purpose of the interviews was to understand how asset owners and asset managers are currently engaging in sustainable investing practices. Specifically we sought to identify the main motivations and drivers of sustainable investing, the investing strategies pursued, the facilitating factors, and the challenges that actors face in identifying and implementing investment strategies.

Format: The interviews were largely conducted over the phone, which allowed for a wider geographic reach. The interview format was semi-structured. This format, which was selected over a survey format, enabled us to understand the nuanced thinking of various actors in their engagement with sustainable investing. The semi-structured format allowed for a more natural and iterative conversation, which revealed insights that would have been missed through a closed-end survey.

Further, this method was deemed most appropriate for the subject matter, which is sometimes sensitive in nature because of reputational concerns. To further ameliorate privacy concerns, and to encourage candid conversations, the interviews were not recorded. Instead, conversations were documented through note-taking in live time, which was validated in debriefing sessions following each conversation.

Interviewers: Interviews were conducted by WRI staff. Generally, at least two staff members participated in each interview.

Length: Interviews lasted between 30 minutes to 1 hour, depending on the length of the responses and the pace of the conversations.

Time period: Interviews were conducted from August 2015 to June 2016.

Interview guide: Interview guides were tailored to each group of market actors: asset owners, asset managers, consultants, data providers, and investor networks. Questions in the guide that were irrelevant to a given participant were skipped. In many cases, follow-up questions that were not included in the guide were added as one-offs during an interview. A sample quide is presented on the following pages.

Interview Guide - SAMPLE

Interviewee name, title and institution Interviewers Date

KEY INSIGHTS

Contact info.

Introduction: Thank you for taking the time to speak with us! We are conducting a study on the sustainable investing landscape for institutional investors in the US. We want to understand how the various market actors, including foundations and endowed asset owners, asset managers, and consultants are engaging in this space. We are particularly interested in learning about the motivations, drivers, strategies, tools, data, and barriers that shape the opportunities for institutional investors to implement sustainable investment strategies. This is timely research as WRI is currently engaged in its own journey with sustainable investing of its own endowment. We hope to learn from others and share our lessons for others to follow. Our aim for this research is to inform other institutional asset owners who are grappling with questions on sustainable investing and to ultimately help advance the market.

We have a series of discussion questions, which will take between 30 to 60 minutes. We appreciate your candid response. All content will remain anonymous. Do you have any questions?

Questions:

- 1. Tell us about yourself and your role in your organization.
- 2. For managers/consultants: Who are your clients? What drives them to your services/products? Trends in demographics?
- 3. Can you describe your endowment/assets under management (for managers & consultants)?
 - a. What is your investment approach? What are your priorities?
 - b. How is it governed?
 - c. Do you pursue sustainable investing (SI)?
- 4. If yes to 3c (if no to 3c skip to question 11): What are the main reasons for pursuing SI (as an AO, consultant or manager)? How did the decision originate?
- 5. Describe your SI strategy/approach.
 - a. How long have you pursued SI? How has the strategy evolved over
 - b. For what portion of your portfolio, which asset classes?
 - c. What are your objectives? Outcomes sought?
 - d. What are your return expectations for sustainable investing?
 - e. How do you determine asset allocation?
 - f. How has your consultant or advisor supported you in this process?
 - g. What types of investment vehicles do you use (or offer)?
 - h. Have you found high-quality sustainable investment opportunities in every asset class?
- 6. How do you integrate ESG into the financial analysis and investment decision-making process, (include details for buy/sell decisions, portfolio monitoring, and company meetings). Illustrate this process with examples.
 - a. How are material ESG factors identified, prioritized and addressed across industries and regions?
 - b. What tools/resources do you use to assess ESG factors? (Thoughts on effectiveness, limitations. Coverage?)
 - c. Describe how your firm measures ESG performance and impact.
- 7. For asset owners and consultants: How do you engage asset managers?
 - a. How do you evaluate managers on ESG?

- b. What have been the biggest challenges in terms of engaging them on sustainability?
- 8. For asset managers and consultants: What have clients been demanding in terms of strategies and products for sustainable investing? Has this shifted over time? How so?
- 9. For asset managers and consultants: What has been your experience engaging with institutional investors on ESG ratings? How wellarticulated are strategies, how do you transpose between theirs and yours?
- 10. Are there barriers that prevent greater engagement with SI practices?
- 11. If no to 3c: What are your main reasons for NOT pursuing an SI?
 - a. How has your consultant or advisor supported you in this process?
 - b. Is it something you are interested in? What is preventing you from engaging?
- 12. Tell us about your participation in any sustainable investment initiatives (e.g. PRI ICGN, CERES/IIGCC, USSIF/UKSIF, etc.). (Do you find these coalitions valuable? How so?)
- 13. What do you think the market needs for sustainable investing to become mainstream?
- 14. Who else should we speak with?
- 15. Is there anything else you want to share?

ABBREVIATIONS

AU	ASSEL OMILEIS
AUM	Assets under management
CF0	Chief financial officer
CIO	Chief investment officer

EPA United States Environmental Protection Agency ERISA the Employee Retirement Income Security Act ESG Environmental, Social, and Governance

FSB Financial Stability Board FSC Forest Stewardship Council

GHG Greenhouse gas

GIIN Global Impact Investing Network
GRI Global Reporting Initiative
INCR Investor Network on Climate Risk

INDC Intended nationally determined contribution

IPS Investment Policy Statement

LEED Leadership in Energy and Environmental Design

MIE Mission Investors' Exchange MRI Mission-related investing

OCIO Outsourced chief investment officer
PRI Principles for Responsible Investing
SASB Sustainable Accounting Standards Board

SDGs Sustainable Development Goals
SEC Securities and Exchange Commission

SI Sustainable Investing

UNFCCC United Nations Framework Convention on Climate Change

GLOSSARY OF TERMS

Alpha. The excess return of a fund compared to the return of its benchmark, which is often an index.

Asset class. A group of securities that share similar characteristics in terms of risk/return expectations and performance in a given market. Traditionally, there are three main asset classes: equities, fixed income, and cash equivalents. Commodities and real assets are sometimes considered additional asset classes.

Asset manager. An agent managing assets on behalf of an asset owner. Asset managers are not the legal owners of the assets under management, but are required to act as a fiduciary to clients. This term is often interchangeable with investment manager.

Asset owner. The legal owner of assets. Asset owners include individuals, such as retail investors or high-net-worth individuals; and institutions such as foundations, family offices, charities, churches, pension funds, insurance funds, and sovereign wealth funds, among others. Some asset owners manage their own assets, while others outsource asset management to specialists.

Endowment. Financial assets donated to a nonprofit organization for the purpose of providing financial support for the organization in perpetuity. Endowment revenue may be restricted by various donor stipulations. Generally, the principal endowment amount—or corpus—is kept intact, while investment income from dividends is distributed to fund program activities. Private nonoperating foundations are required, by federal law, to annually distribute 5 percent of invested assets from the endowment for charitable purposes.

ESG. ESG is an acronym for environmental, social, and governance factors.

ESG integration. The systematic incorporation of ESG factors that are material to performance. These factors are complementary to traditional fundamental analysis. As a more holistic analysis than traditional investing, ESG integration is often pursued as a means of improving investment performance. The specific ESG factors included may be selected according to materiality to the portfolio and/or relevance to the asset owners.

Fiduciary(ies). An agent responsible for acting solely in the interest of another party. This includes managing the assets of another person or group of people, known as the principals. Fiduciaries may not profit from this relationship without the informed consent of the principals.

Fiduciary duty. A legal responsibility to act solely in accordance with the interest of another party.

Impact investing. Investments in companies or funds with the intention of generating positive social and/or environmental impact alongside financial returns. These investments are typically made in private markets, and can span a wide range of financial return expectations, from concessionary to market rate. Foundations pursue these investments both as program-related investments and mission-related investments, as defined by the IRS. In some cases, it is used as an umbrella term synonymous with sustainable investing, rather than a separate asset class.

Institutional investor. A large entity that pools money and has substantial investments in securities, real assets, or other investment assets. This includes financial institutions, pension funds, foundations, universities, and endowments, among others.

Investment consultant. An advisor offering investment planning services to clients.

Investment manager. A financial service company or (individual within the company) that manages investments on behalf of clients. Responsibilities of the investment manager include purchasing securities, monitoring portfolios, settling transactions, and reporting, among others. This term is generally interchangeable with asset manager.

Long versus short position. With long positions, the investor owns the holdings with the expectation that they will rise in value. In short positions, on the other hand, the investor borrows stock shares and sells them with the expectation that they will fall in value. In the former, the investor benefits with an increase in value, and in the latter, the investor benefits with a decrease in value.

Mainstream or traditional investing. Investment practices that consider only fundamental financial analysis in decision making. This is in contrast to sustainable investing which incorporates non-financial data—environmental, social, and governance factors—into the financial analysis.

Materiality. The state of having financial relevance to a transaction or balance within a financial statement. Information is considered to be material if the omission of such information from the financial statement could influence the economic decisions of the information users (IASB 2005).

Negative screens (exclusions). The explicit exclusion of certain investment opportunities deemed unethical or controversial. While historically pursued for ethical reasons, negative screens can also be applied for material concerns; for example, to avoid the potential risks of stranded assets. This is often referred to as socially responsible investing (SRI).

Outsourced Chief Investment Officer (OCIO). A service provider that manages an investment portfolio (or a portion of a portfolio) on behalf of an asset owner. The level of responsibility and accountability vary by arrangement, but can cover duties such as asset allocation, manager selection, portfolio implementation, risk management, and providing ongoing oversight, among others.

Positive screens. Investments in companies, funds, or sectors with a record of positive ESG performance relative to industry peers. This can include focusing on specific ESG factors or industries (thematic investments) or simply overweighting industry leaders across multiple sectors in a portfolio.

Shareholder engagement/advocacy. Pressuring for ESG change within publicly traded companies through filing shareholder resolutions or engaging in other formal advocacy. This approach offers a sharp contrast to negative screens, as investors maintain company shares in order to keep their seat at the table for engagement.

Sustainable investment. Any investment approach that considers social, environmental, and/or governance (ESG) factors in making investment decisions. This includes negative screens, positive screens, ESG integration, shareholder engagement, and impact investing. Other similar terms for sustainable investment include "social, responsible, and impact investing," "responsible investing," "mission-aligned investing," and "values-based investing."

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ENDNOTES

- 1. Outsized performance is seen in large university endowments (\$1+ billion in assets) for 10- to 25-year annualized returns, relative to a selection of broad market benchmarks. Smaller sized university endowments demonstrate more modest performance against such benchmarks.
- 2. While each type of asset owner operates within distinct investment parameters, interviews were held with a fairly wide range of institutional asset owners in order to help capture the full flavor of the investment land-scape. This includes asset owners such as foundations, NGOs, colleges, universities, religious institutions, and pension funds. While private high-net-worth individuals have been among the early leaders in sustainable investing, they were intentionally excluded from the sample due to their distinct investment considerations from institutional investors.
- 3. In a recent Morgan Stanley survey of individual investors, 71 percent of participants stated an expressed interest in sustainable investment (Morgan Stanley 2015b).
- 4. This figure accounts for all capital invested through negative screening, positive/best-in-class screening, norms-based screening, sustainability-themed investing, impact/community investing, and corporate engagement and shareholder action. This study includes the following markets: Europe, the United States, Canada, Asia, Japan, Australasia, and Africa (GSIA 2014).
- Enabling policies include the Paris Agreement, the 2015 DOL guidance on economically targeted investments, and the 2010 SEC guidance on climate risks disclosure, among others. See Section II for further discussion on enabling policies (Deutsche Asset & Wealth Management 2015; Friede et al. 2015; Mercer 2009; Morgan Stanley 2015b).
- 6. Growth in sustainable investing is outstripping growth in traditional investing. Between 2012 and 2014, assets managed with SI practices in the US grew by 76 percent, while growth in total professionally managed assets was only 10 percent (GISA, 2014).
- 7. Material corporate governance factors within the cited studies include board diversity (percentage of women, African-Americans, Asians, and Hispanics on the board of directors), executive compensation, and shareholder rights.
- 8. As measured by employee satisfaction.
- The policy developments described in the paper do not represent a comprehensive review of all relevant policies. Our discussion is limited to those that were identified as most relevant by participating investment professionals.
- 10. Economically targeted investments are investments that strive for financial returns first, but that also consider social returns. This is a synonym for sustainable investment.
- 11. Most campaigns urge investors to divest from the top 200 fossil fuel companies. These are defined by CarbonUnderground 200, which provides an annually updated list of the top 100 public oil and gas companies and top 100 public coal companies—based on the potential carbon emissions of their reported reserves. This list, managed by Fossil Free Indexes, is accessible at: https://docs.google.com/spreadsheets/d/1QgU9VN23JaNh2B0pb9eoHM5EMozsznaojplulQuljDg/edit#gid=663041172.

- Examples of fossil-free or low-carbon investment products developed in partnership between asset owners and asset managers include the Blackrock/NRDC fossil-free fund and the McKnight/Mellon Capital lowcarbon fund.
- 13. While all nine resolutions were ultimately rejected, a proposal that would require Exxon to report on the impact of climate policies on the company received a record number of supporting votes for any climate resolution. Advocates see this as a signal that support for such a measure has been increasing over time.
- 14. This view is supported by research from the South African divestment movement of the 1970s and 80s. Some evidence indicates that the stock prices of US-based firms that planned to remain in South Africa performed better than those that announced plans to leave.
- 15. McKnight Foundation provided a \$100 million investment for seed funding for Mellon Capital to launch the fund, which was developed in collaboration with Mercer and with support from Imprint Capital (prior to its acquisition by Goldman Sachs).
- 16. Calvert Global Energy Solutions Fund.
- 17. Impax Environmental Markets PCL.
- 18. TNC (2016). "Our Investment Policy."
- 19. In their "Short Guide to Impact Investing," the Case Foundation references 2008 as the birth year of the term "impact investing." It cites the Rockefeller Foundation (among others) as pioneers supporting the impact investing sector.
- 20. Private ownership is often associated with a long time-horizon as well as a significant ownership stake, which enables the investor to influence the management team.
- 21. Frameworks for tracking the social and environmental benefits of impact investments include: IRIS metrics managed by GIIN; The Impact Investing Benchmark created by GIIN and Cambridge Associates; and a number of measurement frameworks produced by B Lab, including B Analytics, B Impact Assessment, and GIIRS Ratings.
- 22. For example, Carbon Tracker (2013) shows that known fossil fuel reserves already surpass the carbon budget needed to maintain Earth's temperatures within 2°C of warming. If the planet is to avoid catastrophic climate change, the value of those assets is effectively stranded.
- The seven GHG Protocol standards are: (1) corporate accounting and reporting standard; (2) corporate value chain (Scope 3) standard;
 product life cycle standard; (4) project protocol; (5) GHG protocol for cities; (6) mitigation goal standard; and (7) policy and action standard.
- 24. Norms-based analyses evaluate a company's or project's compliance with international norms or standards for business conduct. Examples of such norms include the United Nations Global Compact and various labor standards established by the International Labour Organization (ILO). An investor may use these standards to apply negative screens.
- 25. See Novethic Research (2013).
- 26. Different asset owners place the vehicles described below into different asset categories than as organized; we attempted to match how most asset owners group them.
- 27. Alpha is defined as the excess return of a fund compared to its benchmark, which is often an index.

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ABOUT WRI

World Resources Institute is a global research organization that turns big ideas into action at the nexus of environment, economic opportunity and human well-being.

Our Challenge

Natural resources are at the foundation of economic opportunity and human well-being. But today, we are depleting Earth's resources at rates that are not sustainable, endangering economies and people's lives. People depend on clean water, fertile land, healthy forests, and a stable climate. Livable cities and clean energy are essential for a sustainable planet. We must address these urgent, global challenges this decade.

Our Vision

We envision an equitable and prosperous planet driven by the wise management of natural resources. We aspire to create a world where the actions of government, business, and communities combine to eliminate poverty and sustain the natural environment for all people.

Our Approach

COUNT IT

We start with data. We conduct independent research and draw on the latest technology to develop new insights and recommendations. Our rigorous analysis identifies risks, unveils opportunities, and informs smart strategies. We focus our efforts on influential and emerging economies where the future of sustainability will be determined.

CHANGE IT

We use our research to influence government policies, business strategies, and civil society action. We test projects with communities, companies, and government agencies to build a strong evidence base. Then, we work with partners to deliver change on the ground that alleviates poverty and strengthens society. We hold ourselves accountable to ensure our outcomes will be bold and enduring.

SCALE IT

We don't think small. Once tested, we work with partners to adopt and expand our efforts regionally and globally. We engage with decision-makers to carry out our ideas and elevate our impact. We measure success through government and business actions that improve people's lives and sustain a healthy environment.



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