



# Navigating Environmental, Social & Governance Data for Foundations Final Report

## Capstone Project Team

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*Prepared for*

## **FOREWORD**

A team of graduate students from Columbia University's Masters of Science in Sustainability Management (MSSM) program prepared this report for their capstone course. The MSSM program is co-sponsored by the Earth Institute and the School of Continuing Education.

The capstone workshop is a client-based consulting project in which students address real life sustainability issues. The workshop is designed to integrate the program's distinct curriculum areas, which include: integrative sustainability management; economics and quantitative analysis; physical dimensions of sustainability management; public policy; and general and financial management.

## EXECUTIVE SUMMARY

The Jessie Smith Noyes Foundation (JSN), an environmental and social grant-making organization, is a leader among foundations in the field of sustainable investing. Sustainable investing is an approach that aims to steer capital towards organizations that acknowledge and respond to sustainability challenges.<sup>1</sup> While most foundations engage in grant-making, or program-related investments, JSN is fairly unique in that it strives to align its \$50 million endowment with its mission priorities ('mission-aligned investing'). JSN engaged our team to help advance mission-aligned investing amongst foundations. Specifically, JSN asked us to assess environmental, social, and governance (ESG) data vendor products and how these data sources can support foundations in pursuing mission-aligned investing. ESG data vendors are a relevant piece to the puzzle given that they serve as a primary source of information on a company's sustainability performance and can help investors make decisions about which investment opportunities are compatible with their sustainability objectives.

Despite the growth of sustainable investing amongst large institutional investors, many smaller foundations lack understanding of the value proposition of mission-aligned investing and thus do not pursue it. In 2010, U.S. foundations made \$46 billion worth of grants, but held over \$600 billion in assets.<sup>2</sup> While foundations typically focus on creating impacts through grant-making and program-related investments (PRIs), many overlook the potential to do so by investing endowments in companies that act in a way that advances or aligns with the foundation's mission. As such, many foundations leave the majority of their assets on the sideline as an untapped potential to drive change. Beyond the opportunity to increase impact through mission-aligned investing, foundations may face reputational and/or funding risks if they do not pursue this strategy. If stakeholders view the foundation's investments as contradictory to its mission, the foundations may risks impacts to its

reputation and thus to its fundraising efforts and financial stability.

To pursue mission-aligned investing, foundations and their investment managers have the opportunity to use ESG data products to evaluate companies' sustainability performance. While data vendors sell these products much in the way that traditional financial data products are sold, instead of financial data, ESG metrics may include things like a company's water and energy usage, waste management efforts, or employee safety.

However, small foundations often struggle to understand ESG data and use it in their endowment investment processes. Through our research, we identified four key challenges to the use of ESG data to support mission-aligned investing:

1. **Skepticism** on the part of investors about the quality and completeness of ESG data.
2. **Lack of resources** to acquire ESG data.
3. **Minimal knowledge** about ESG data and how to use it.
4. **Unique missions and vendor offerings**, which make it hard to know which ESG vendor is most relevant to helping the foundation with mission-aligned investing.

To address these challenges, we evaluated ten ESG data vendors on the quality and completeness of their offerings. Then, we built a tool to enable foundations to select their mission priorities and to generate a customized list of relevant ESG data vendors to support them with mission-aligned investing. This project provides JSN with a resource they can share with other small foundations, thereby strengthening their position as a leader in mission-aligned investing.

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## **INTRODUCTION**

The Jessie Smith Noyes Foundation (JSN), an environmental and social grant-making organization, is a leader among foundations in the field of sustainable investing. As a leader, the foundation seeks to advance the field amongst other small foundations. JSN engaged our team to evaluate the diverse offerings of environmental, social, and governance (ESG) data vendors to help JSN and small foundations better understand and use these rich data sources to pursue sustainable investing.

Our project has refined this high-level request to assess the opportunity for foundations to use ESG data to pursue a particular objective of sustainable investing – aligning their endowment investments with their mission priorities, or “mission-aligned investing.” By pursuing mission-aligned investing, foundations can increase their mission impact by investing in companies whose actions are consistent with their social and/or environmental aims.

In our project, we identified and addressed the major challenges that foundations face in using ESG data to pursue mission-aligned investing. First, we evaluated the quality and completeness of ESG data offerings to ensure they are sufficient to support mission-aligned investing. We then developed a simple-to-use tool that allows foundations to input their mission priorities and receive a ranked list of ESG data vendors that are best suited to supporting these investing objectives.

In this report, we will outline additional details about the background on this topic, our approach, and the value we believe this effort will deliver to JSN and other small foundations.

## **CLIENT BACKGROUND**

### **Client Overview**

The Jessie Smith Noyes Foundation (JSN) is an environmental and social grant-maker that uses fairness, integrity, and hard work as guiding principles. Charles F. Noyes established the foundation in 1947 as a memorial to his wife.<sup>3</sup> Until the mid-1980s, the foundation awarded college scholarships and grants to students in the areas of environment and health care. Since 1985, JSN has focused on making grants to non-profit organizations seeking to address damage to natural and social systems. JSN uses grants to support grassroots organizations and movements in the U.S. that address four key social and environmental issues:

1. Environmental justice.
2. Sustainable agriculture.
3. Reproductive rights.
4. Sustainable New York City.

### **Sustainable Investing Leadership**

JSN's leadership strongly believes that the foundation has a fiduciary responsibility to integrate its financial management practices with its mission values of environmental stewardship, concern for community, and corporate accountability to shareholders and stakeholders. While most foundations engage in grant-making or program-related investments, JSN is fairly unique in that it strives to align its \$50 million endowment with its mission priorities. Victor De Luca, the President of JSN, articulated the foundation's investment perspective saying:

*“It makes no sense to use five percent of your assets to try to promote something, while the other 95 percent might be doing something totally contrary. We try to use 100 percent of our assets to promote our values.”<sup>4</sup>*

This investment approach has made JSN a leader amongst small foundations in the field of sustainable investing. JSN's leadership is also

reflected in its robust investment policy, which incorporates a multi-layered approach to sustainable investing. This approach includes:

- **Positive screens** for companies that provide solutions for social and environmental problems.
- **Exclusionary screens** for companies that are contradict the foundation's mission, such as companies that produce synthetic pesticides and fertilizers.
- Participating in **proxy voting** when program interests are involved or in some circumstances when the shareholder resolution deals directly with environmental and social interests.<sup>5</sup>

**Figure 1** demonstrates JSN's key sustainable investing practices as compared to those of a sample small foundation, based on an evaluation of 185 foundations' grant-making and mission priorities, as stated on their webpages, annual reports, and investment policies. Please note that the last three bullets are sub-activities of a foundation investing its endowment in alignment with its mission.

## PROJECT BACKGROUND

### Sustainable Investing and ESG Overview

#### BACKGROUND ON THE FIELD

Sustainable investing is an investment approach that aims to steer capital towards organizations that acknowledge and respond to relevant sustainability challenges.<sup>6</sup> These sustainability issues span the triple bottom line (economic, environmental, and social impacts), and include issues such as climate change, natural resource shortages, population growth, international development, global health, and job creation. The aims of sustainable investors, which are not mutually exclusive, may be to:

1. Achieve superior or competitive financial returns ("competitive returns").
2. Improve outcomes for society and the environment.

For foundations in particular, the latter involves alignment of the investment portfolio with the foundation's mission priorities, thus aiming to improve specific social and environmental outcomes and maximize the impact of their assets. Herein, we will focus the scope of our report on the second objective and refer to it as "mission-aligned investing."

Sustainable Investing Practices	Jessie Smith Noyes (JSN)	Other Small Foundations
Makes grants and program-related investments (PRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Invests endowment in alignment with mission priorities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Has a robust sustainable investment policy</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Engages investment managers in mission-aligned investing</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Monitors portfolio performance for mission alignment</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

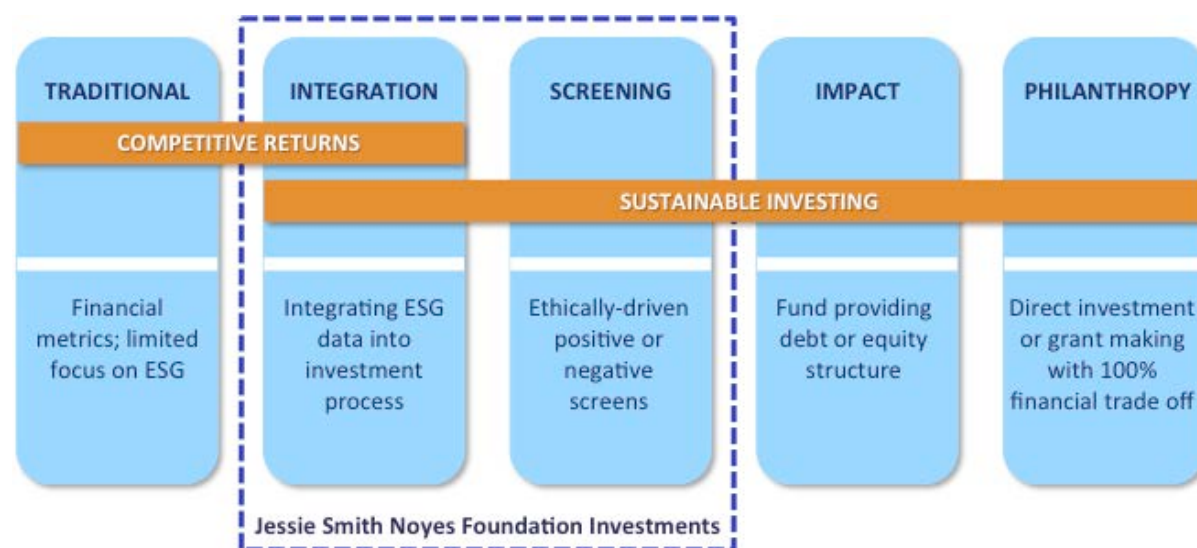
**FIGURE 1**



Despite these frequently common objectives, the term “sustainable investing” often refers to a spectrum of approaches. Over time, industry members have used multiple terms to refer to this field, including Impact Investing, Socially Responsible Investing (SRI), Ethical Investing, Green Investing, Mission-Related Investing (MRI), Responsible Investing (RI), Sustainable Investing (SI), and more.<sup>7</sup> The sheer number of terms can be a barrier to participation by investors, including foundations, who may be confused about the focus or purpose of the field.

To alleviate this confusion, we have outlined some of the key approaches to sustainable investing (and their relationship to traditional investing) in **Figure 2**. On the far left of the

investing on the sustainable investing spectrum. Respectively, ***inclusionary (exclusionary) screens*** preference (avoid) investing in companies that support (contradict) the investor’s principles. For example, JSN’s investment policy has an exclusionary screen on companies whose practices, actions, and positions are contrary to or limit a woman’s reproductive choices. Both screening types have historically been associated with moral or ethical investing. ***Integration*** refers to an approach of using extra-financial metrics alongside financial metrics in a traditional investment evaluation process. As such, integration can represent the “sweet spot” of sustainable investing, since it aims to achieve financial objectives as well as environmental and social impact. It also



**FIGURE 2**

diagram is ***traditional investing***, which uses primarily financial information to evaluate a potential investment. To the far right of the sustainable investing spectrum are ***impact and philanthropic investing***, which in contrast tend to be less concerned with financial metrics or returns and more focused on direct investments towards environmental and social causes.

We will focus our discussion on the integration and screening approaches, both of which JSN uses and which fall more towards traditional

represents what many members of the field commonly refer to as “sustainable investing” today. For instance, PricewaterhouseCoopers (PwC) defines sustainable investing as “Assessing how financial, governance, environmental, and social risks and opportunities interact for the long-term viability of an investment.”<sup>8</sup>

ESG data serves as the primary source of extra-financial information for sustainable investors. In other words, investors can use ESG data to

evaluate a company's performance on sustainability issues, including environmental, social, and governance topics. ESG metrics may include things like a company's water and energy use, waste management efforts, employee benefits and safety, relationships with local communities, etc. As awareness grows about the influence of triple-bottom line performance on a company's success and as institutional investors become increasingly interested in mission-aligned investing, demand for ESG data has grown, too. Institutional investors include foundations, universities, and public pensions.

The landscape of ESG data is complex and evolving. ESG data vendors seek to aggregate, measure, and analyze data on the environmental, social, and governance performance of publicly traded companies. Some of these vendors, such as Bloomberg, also provide data on traditional financial metrics, however, many ESG vendors focus primarily or exclusively on the ESG space. Data vendors primarily sell this raw data and research to investment managers who incorporate it into their investment processes, either through fundamental or technical analysis.

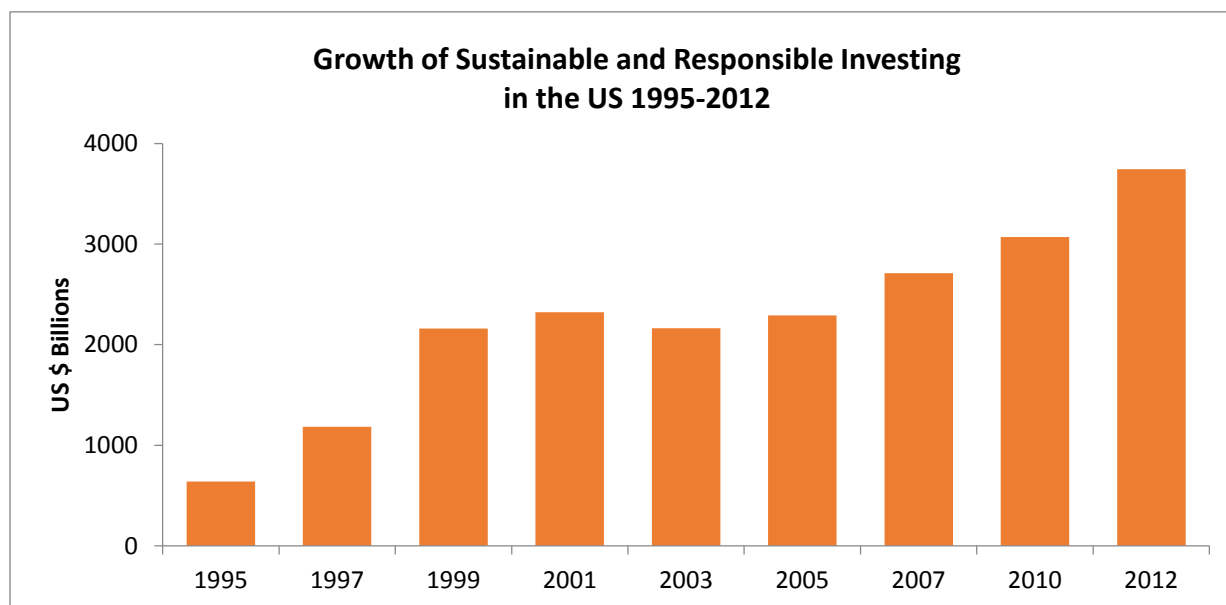
### *Growth of Sustainable Investing*

While certain forms of sustainable investing have existed for over a century,<sup>9</sup> the field has experienced significant growth in the past decade or so, as evident in **Figure 3**. According to the U.S. Social Investment Forum (SIF) Foundation, approximately one out of every eight dollars invested under professional management (or 12.2 percent of the \$25.2

trillion in total assets under management as of 2010) is done so using a sustainable investing approach.<sup>10</sup> PwC points out that, "Sustainable investing in the United States has continued to grow at a faster pace than the broader universe of conventional investment assets under professional management."<sup>11</sup>

This growth reflects rising investor awareness about the breadth and magnitude of sustainability issues, such as governance issues around executive pay or environmental issues such as carbon emissions, as well as about the opportunity for sustainable investing to identify risks and opportunities of a potential investment.<sup>12</sup> Sustainability-related risks can include regulatory / legal, reputational, physical, and competitive risks, while opportunities related to sustainability can include new markets or product lines, or repositioning to capture share in existing markets.

The institutional investor community in particular has been progressively incorporating various types of ESG data and analysis into their investment policies and approaches. For example, mission investing grew by an average of 16.2 percent per year amongst foundations in the 21<sup>st</sup> century, as compared to only a 2.9 percent growth rate in the last three decades of the 20<sup>th</sup> century.<sup>13</sup> The growing trend towards sustainable investing amongst these investors may be reflective of their long-term investment horizon, which makes them increasingly concerned about long-term risks and opportunities related to sustainability issues like climate change, development, and natural resources.



**FIGURE 3<sup>1</sup>**

## Foundations and Mission-Aligned Investing

Despite the growth in sustainable investing amongst institutional investors, small foundations often overlook this investment opportunity. There are three main reasons for this situation:

1. Financial pressures created by the five percent pay out rule for tax-exempt organizations.
2. Lack of understanding of the benefits of mission-aligned investing.
3. Barriers to using ESG data to pursue mission-aligned investing.

### OVERVIEW OF FOUNDATIONS' FINANCIAL STRUCTURE

The majority of grant-making foundations in the U.S. are required by federal law to distribute (or “pay out”) five percent of their investment assets annually. These distributions, typically in the form of grants, go towards tax-exempt organizations.<sup>14</sup> One study by the Foundation Center found that most foundations paid out the

required five percent and the bulk of private foundations in the U.S. distribute between five percent and six percent of their assets every year.

As a result of this regulation, foundations face pressure to generate income and capital gains necessary to support the foundation’s operations and fund its grant-making. Yet, they do not necessarily need to make a trade-off between meeting this requirement and having the potential to make an impact with their remaining endowment investments.

### VALUE PROPOSITION OF MISSION-ALIGNED INVESTING

The aforementioned focus on financial returns is exacerbated by foundations’ frequent lack of understanding of the significant benefits that can result from pursuing mission-aligned investing. According to the Foundation Center, in 2010, U.S. foundations made grants totaling \$46 billion, but held assets in excess of \$600 billion.<sup>15</sup> While foundations typically focus on the ability to drive impact against their mission priorities through grant-making and program-

related investments (PRIs), many overlook the potential to have an impact by investing endowment funds in companies that act in a way that advances or aligns with the objectives of the foundation's mission. As Victor De Luca said, "Although U.S. foundations collectively have billions of dollars in endowments, most leave potential impact untapped by not harnessing their endowments to address their missions."

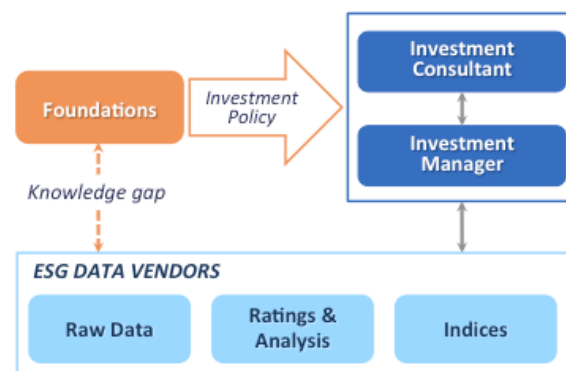
Foundations may also face reputational and funding risks if stakeholders perceive that the foundation's investment portfolio is not aligned to or even hypocritical to the organization's mission priorities. This type of situation happened to the Bill & Melinda Gates Foundation a few years ago. The Gates Foundation, one of the largest in the U.S., focuses grant making on development projects locally and abroad. In 2007, an *LA Times* investigation revealed that the foundation reaps financial gains every year from investments that are not in alignment with their socially-conscious philanthropy. While this is not illegal nor is it uncommon for a foundation, the scandal brought the misalignment to the public's attention and ushered in a wave of bad press for the foundation.<sup>16</sup> While we see this reputational risk as being less pertinent for small foundations, it is still something for foundations to consider.

### **BARRIERS TO USING ESG DATA & MISSION-ALIGNED INVESTING**

Once foundations realize the value proposition of mission-aligned investing, a final barrier is the complexity of the ESG data landscape and the use of this data. There are three main types of participants in the ESG data landscape:

1. Investors (in this case, foundations).
2. Investment advisors (managers and consultants).
3. ESG data vendors.

The interactions between these three groups of players are outlined in **Figure 4**.



**FIGURE 4**

A foundation typically engages an investment manager to manage its portfolio. Occasionally, as with JSN, the foundation will also engage an investment consultant to help develop the long-term investment strategy and in some cases implement the investment policy. If a foundation has an investment policy, as JSN does, the policy typically outlines the foundation's expectations of its investment professional with regards to the types of investments made, the return targets, and the investment strategy.

For a foundation that does not use mission-aligned investing as a strategy to manage their endowment, its investment manager(s) will typically use traditional financial data sources to evaluate potential investments, meaning the ESG data vendors do not play a role in the process of investing a foundation's endowment. However, in situations when a foundation and/or its investment policy does indicate an interest in sustainable investing, ESG data is relevant. In these situations, it is the investment manager that directly uses the ESG data from data vendors. Typically, the manager's firm will have a subscription to one or more of these vendors and will use the data in varying capacities to inform their investment decision on behalf of their client. Thus, the foundations, which

typically lack subscriptions, do not directly interact with the ESG data that informs the investment of their portfolios. This lack of connection creates a knowledge gap, with the foundations often having little understanding of the offerings of ESG data vendors or the role the

data plays in the investment process. This lack of understanding can make it difficult for foundations to embed mission-aligned investing expectations in their investment policies or selection and evaluations of managers, thereby undermining the effectiveness of this pursuit.

Specifically, our client helped us to identify four high-level challenges that foundations face when attempting to use ESG data vendors' products. These challenges for foundations include:

1. **Skepticism** on the part of investors about the quality / completeness of ESG data.
2. **Lack of resources** to acquire ESG data.
3. **Minimal knowledge** about ESG data and how to use it.
4. **Unique missions and vendor offerings**, which make it hard to know which ESG vendor is most relevant to helping the foundation with mission-aligned investing.

Together, these challenges often serve as barriers to mission-aligned investing. In the following section, we will discuss our approach to addressing these ESG data use challenges and supporting mission-aligned investing by foundations.

## PROJECT OVERVIEW

### Project Objective

JSN is a leader among foundations with regards to sustainable investing and seeks to advance the field amongst foundations. JSN engaged our team to evaluate the diverse offerings of ESG data vendors to help JSN and small foundations better understand and use these rich data sources to pursue sustainable investing. The focus is specifically on expanding sustainable investing amongst smaller foundations, as they have faced more hurdles with pursuing mission-aligned investing than have more resource-rich large foundations.

### Project Scope

Given this high-level objective, we refined the scope of our project. There are several key scope limitations that helped us to ensure we delivered the best value to our client. However, small foundations may also want to consider issues beyond the scope of this project to maximize impact. Our scope boundaries are outlined below in **Figure 5**.

**Figure 5** highlights two additional scope limitations. Our analysis focused on the ESG data vendors' products, excluding *indices* and

indices are an important component of sustainably invested portfolios. These indices, such as the Dow Jones Sustainability Index, track companies on environmental, social, and

Our analysis also did not assess the quality and completeness of the company-reported sustainability data and other data sources (e.g. news, regulatory filings, etc.) that may serve as

Scope Aspect	Boundary Description
<b>Asset class</b>	We focused on the opportunities for foundations to use ESG data to achieve mission-alignment through <u>investments in public equities</u> (or stocks). ESG data tends to be very specific to the public equities, so the examination of ESG vendors inherently limited the asset class scope. However, public equities are only a portion of foundations' overall possible investment portfolio. For example, JSN allocates between 40 and 60 percent of its portfolio towards public equities. Other asset classes include private equity, fixed income, money markets, real estate and alternatives. In order to maximize impact, a foundation could also incorporate investment vehicles like green bonds or social impact bonds into their investment portfolio. For the purposes of this project, though, these other asset classes and investment vehicles are out of scope.
<b>Geography</b>	Since this project is relevant to U.S.-based foundations, we focused our analysis on <u>ESG data vendors based in the U.S.</u> While these American vendors do include information for non-U.S. companies, there are also many data vendors based throughout Europe and the rest of the world that we did not assess.
<b>Investment objective</b>	As mentioned, there are two primary ways that foundations can benefit from sustainable investing: competitive returns or mission-alignment. While these two objectives are not mutually exclusive, <u>we have focused our examination on the ability of ESG data to support the mission-alignment objective.</u> We assume that the returns from mission-aligned investing can be equal to or greater than those of a traditional investing approach, meaning that foundations can pursue mission-aligned investing while still meeting their return needs. There is a lot of research available about how sustainable investing impacts returns, but due to our team's time and resource limitations, that topics outside the scope of our project.

**FIGURE 5**

governance criteria, and can serve as good benchmarks for an investor. Sustainable indices around specific issues, such as the Access to Medicine Index, give responsible investors an opportunity to align their values with companies recognized for their work in a certain area. While indices are an important part of the sustainability landscape, we did not evaluate them in our project, as they provide limited or no data about the companies in their indices, and thus are a limited data source.

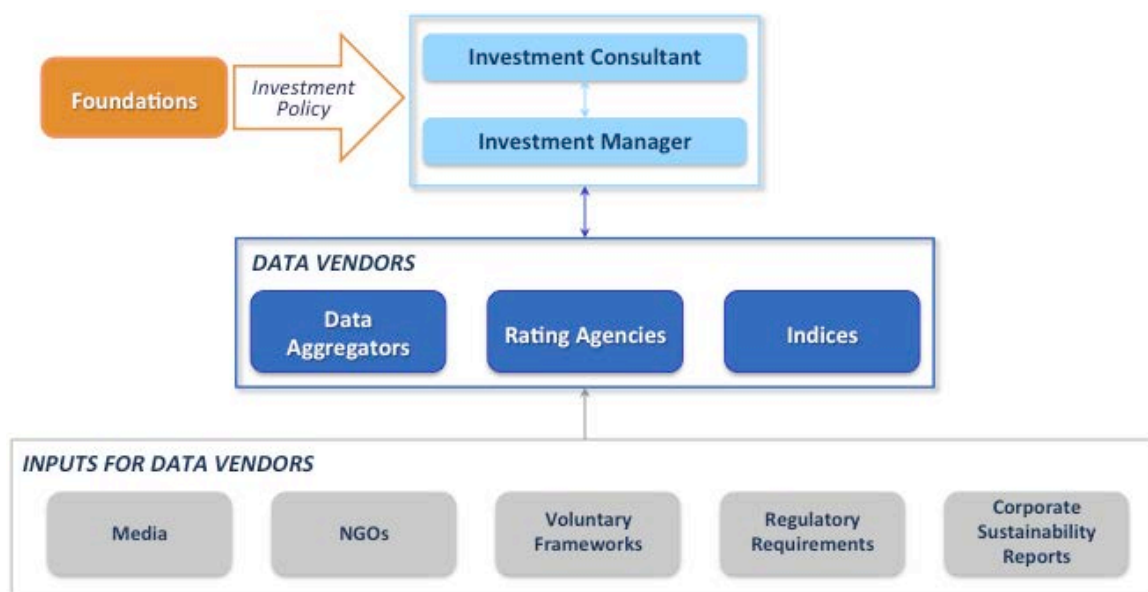
input to vendors' products (e.g. in **Figure 6: "inputs for data vendors"** is out of scope). We acknowledge there are limitations to the existing pool of company (and other) input data and there is room for improvement in many of these data sources.<sup>17</sup> These limitations, which were reaffirmed by some of research and expert interviews, include:

1. Data gaps in information from emerging markets, small companies, and in regions with cultural and language barriers.



2. Variability in the way companies report sustainability data.
3. Varying levels with which companies engage stakeholders to identify relevant sustainability issues when producing sustainability reports.

organizations currently use the GRI guidelines in some capacity.<sup>19</sup> These organizations' efforts are improving the consistency and quality of company-reported sustainability data that serve as a critical input to ESG data products. Furthermore, as government becomes



**FIGURE 6**

Nevertheless, our project assumes that the quality and completeness of this input data is sufficient enough for our analysis to even be relevant. We are comfortable making this assumption because of two key factors. Firstly, the amount of sustainability data reported by companies and other sources continues to grow, indicating that the completeness of the input data pool has improved substantially. For example, 93 percent of the Fortune Global 250 currently reports on extra-financial information and CorporateRegister, a site that compiles sustainability reports from public companies, now has reports from over 11,000 companies.<sup>18</sup> Secondly, several notable international standards organizations, such as the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), and the Sustainability Accounting Standards Board (SASB), produce guidelines that are helping to standardize sustainability reporting. Over 6,000

interested in the relevance of sustainability data to company disclosure, new laws around the world are ensuring the growth of sustainability data into the future. For example, in April 2014, the European Parliament passed a law that will require publicly traded companies to include sustainability information in their annual financial report. This information will include “policies, risks and results [in relation to] social, environmental and human rights impact, diversity and anti-corruption policies.”<sup>20</sup> This legislation, which encourages the use of GRI guidelines, will increase the number of companies producing annual sustainability information from the current 2,500 to nearly 7,000 by 2017. In the U.S., the sustainable investing nonprofit Ceres has been working with BlackRock and institutional investors to launch an initiative that would have major stock indices require companies to disclose environmental

and social data in order to be listed on that index.<sup>21</sup>

## Project Approach

With our scope boundaries in place, we developed a project approach that consisted of two phases. In Phase I, we aimed to evaluate whether the offerings of ESG data vendors are of sufficient quality and completeness to help foundations achieve mission alignment of their endowment investments. If we were to determine the quality and completeness to be sufficient, Phase II would commence. The focus of Phase II would be to find a way to bridge the gap between foundations and ESG data vendors, such that foundations could use the data to support mission alignment. We will outline the specific details of each approach in more detail in the next section: Research Findings & Solution Development.

## RESEARCH FINDINGS & SOLUTION DEVELOPMENT

### Research Efforts

The data collection process for our project was structured around key three efforts:

1. Interviews with ESG data vendors.
2. Interviews with investors (foundations) and investment managers.
3. Independent research.

These three research streams informed both phases of our project, and served as an input to our internal methodology for evaluating data vendors. The following sections provide an overview of our efforts across these three data collection work streams.

#### DATA COLLECTION FROM DATA VENDORS

We researched 10 ESG data vendors. The purposes of these interviews were to:

- Understand the vendors' diverse offerings and methodologies;
- Identify areas of similarity and difference between vendors' products; and,
- Identify industry trends and best practices related to the production of ESG data.

Together, these various data points would help contribute to our evaluation of the quality and completeness of ESG data products. The 10 ESG data vendors that we evaluated are:

- Bloomberg
- CDP (formerly Carbon Disclosure Project)
- FactSet
- GMI (Governance Metrics International)
- ISS (Institutional Shareholder Services) Proxy Exchange
- MSCI ESG Research
- RepRisk
- Sustainalytics
- Thomson One
- TruCost

We selected these vendors based on client requests coupled with the vendors' reputation as industry leaders. Our team collected information on the data vendors through interviews, online research, and data product trials when available and applicable. We collected this research between January and April 2014. See **Appendix B** for descriptions of each vendor.

#### DATA COLLECTION FROM INVESTMENT FIRMS AND FOUNDATIONS

In addition to interviewing data vendors, our team conducted 13 interviews with investment managers, investment consultants and foundations. The objective of these interviews was to evaluate investor and investment manager perceptions of ESG data quality and completeness.

As mentioned above, many foundations rely on such investors to manage their endowments, rendering the decisions and capabilities of investment managers critical to a foundation's pursuit of sustainable investing. Our research focused on buy-side investment managers who



have the experience and access to resources necessary to integrate ESG data into investment decisions, but the pool of interviewees included both users and non-users of ESG data. We also interviewed several small and large foundations to understand how different foundations interact with ESG data. We determined our interview pool based on a compilation of:

1. United Nations Principles for Responsible Investment (UN PRI) signatories in the U.S.
2. Foundations list from the Mission Investor Exchange.
3. Personal contacts.

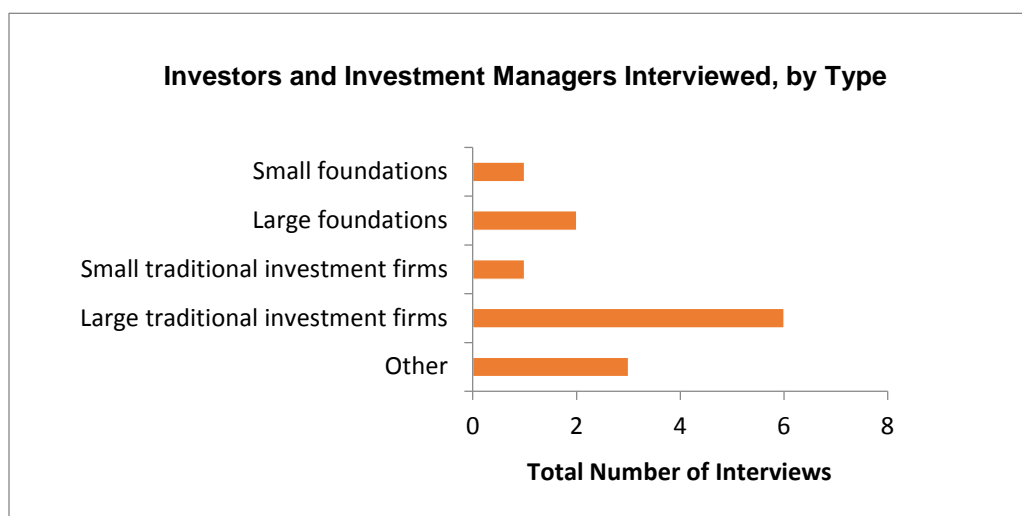
**Figure 7** illustrates the breakdown of the types of investors we interviewed.

While each of these interviews provided us with very detailed information, we acknowledge that it is not a large enough sample size to draw

## DATA COLLECTION FROM INDEPENDENT RESEARCH

Unlike, our other two research work streams, which primarily focused on interviewing as means of data collection, the independent research involved reviewing academic literature and reports by industry leaders and experts. The topics of these reports included things like the evolution sustainable investing, definitions of key players, as well reviews of data metrics and best practices. The main objective of our independent research was to build a baseline understanding of ESG reporting and the sustainable investing landscape, and to create a framework for our approach to Phase I and Phase II of our project.

One of the key reports that we used as baseline research is “Rate the Raters,”<sup>22</sup> a study that SustainAbility, a think tank and strategic consultancy, recently completed. While this study was similar to ours in that it also assessed ESG data vendors, and informed some of our



**FIGURE 7**

statistically significant conclusions. We included the results of our interviews with investment managers, consultants, and foundations in our qualitative analysis, but did not include them in our quantitative analysis due to the limited sample size.

methodology, “Rate the Raters” did not intend to score or rank the vendors it examined, or make recommendations related to vendor compatibility with foundation missions.

## Verification of Challenges

One critical outcome of our research efforts was a validation of the early high-level challenges that we outlined in the Project Background section. Findings from our research helped us to build out a more detailed understanding of each of the four challenges that foundations face with regards to using ESG data products to support mission-aligned investing. To reiterate from the Project Background, these challenges include:

1. **Skepticism** on the part of investors about the quality / completeness of ESG data.
2. **Lack of resources** to acquire ESG data.
3. **Minimal knowledge** about ESG data and how to use it.
4. **Unique missions and vendor offerings**, which make it hard to know which ESG vendor is most relevant to helping the foundation with mission-aligned investing.

This outcome was valuable because it helped ensure that we could make our project relevant to foundations and their investment managers. In the following sections, we have outlined additional information from our interviews and independent research.

### CHALLENGE 1: SKEPTICISM

We discovered in our interviews that many foundations and investment managers are skeptical of ESG the quality and completeness of vendor products. Some investment managers perceive a lack of transparency in using proxy and modeled data.<sup>23</sup> Several of the investment managers we interviewed are concerned that ESG data is “too patchy” to rely on ratings.<sup>24</sup> Thus, some managers with sufficient resources and expertise prefer to conduct their own in-house research and analysis of raw ESG data to avoid vendor bias, and to reduce their dependency on ESG data vendors.<sup>25</sup> Other managers prefer more support in interpreting and applying raw ESG data to their investments. These managers may prefer using a vendor that supplies ratings or analysis. In sum, while skepticism exists, it is mostly on the part of

investment managers, whose preferences vary related to the use of ESG data vendors and the type of data these vendors provide.

### CHALLENGES 2 & 3: LACK OF RESOURCES & ESG KNOWLEDGE

Our interviews with investment managers and foundations established that, due to time and resource constraints, foundations tend not to interact directly with data vendors (data vendor offerings can be expensive relative to small foundations’ budgets). Instead, foundations rely on investment managers to incorporate the relevant ESG data into the investment processes.<sup>26</sup> Given foundations’ lack of direct interaction with ESG data vendors or their products, it is logical that investment managers may have more skepticism (our above finding) than foundations themselves.

As a result of this structure, many foundations are disconnected from ESG and may not receive sufficient information about the vendor offerings or how they can support mission-aligned investing. Victor De Luca also noted that monetary and knowledge constraints play a significant role in preventing foundations from making the most of ESG data products in their investments.<sup>27</sup> This lack of understanding can make it difficult for foundations to embed mission-aligned investing expectations in their investment policies or selection and/or evaluations of managers, thereby undermining the effectiveness of pursuing this investment approach.

### CHALLENGE 4: MISSION DIVERSITY

Foundations’ missions and investment priorities differ significantly. An Associate Director at a large foundation described this level of variety, saying, “If you’ve seen one foundation, you’ve seen one foundation.”<sup>28</sup> Using ESG data for mission alignment of investments is thus a nuanced process that requires careful understanding of the ESG data available, the foundation’s mission priorities, and how the former correlates to the latter. For example, one

foundation may consider a particular ESG metric fundamental, while another may dismiss the same metric as inconsequential. Similarly, one ESG data vendor may collect detailed information on a particular metric category and have gaps in other metric categories. Thus, any single ESG data vendor is unlikely to meet the diverse needs of all foundations, and it may be difficult for foundations or their investment managers to understand which ESG data vendors have the most metrics related to their missions.

## Phase 1: Findings

As described in the Project Approach section, the purpose of Phase I of our project was to evaluate whether the quality and completeness of ESG data vendor offerings is even sufficient enough to support mission-aligned investing. Thus, we aimed to address primarily the first challenge through this phase, that is, the skepticism surrounding ESG data products.

In this phase, we undertook three key tasks that helped us to achieve this objective:

1. Determined major processes that ESG vendors undertake and how these processes may potentially impact quality and completeness of vendor offerings.
2. Compared and contrasted vendor approaches to these major processes, and how, where relevant, these approaches impact client skepticism.
3. Created a set of evaluation criteria, based on our research, and used these criteria to map the quality and completeness of each data vendors' offerings.

### OUTLINING ESG DATA VENDOR PROCESSES

We identified four key processes as inherent to all ESG data vendors' for product development and maintenance. These processes include:

1. **Data collection:** Involves the vendor's approach to identifying and gathering information to input into its product.
2. **Data analysis:** The methods vendors use to provide a proprietary perspective and / or score of a company's ESG performance. Not relevant to vendors that only provide raw data metrics, such as total company water use, but do not provide additional analysis or ratings.
3. **Data updating:** How often a company looks for new information to refresh its products.
4. **Data verification:** The means by which a vendor confirms the accuracy of its data products.

For each of these processes, we outlined how a vendor's approach on this process could potentially impact the quality and / or completeness of a vendor's ESG data product. At a high level, potential impacts to quality and completeness are as follows:

1. **Data collection:** Quality may suffer if vendors do not collect from reliable sources. Completeness could decrease if vendors do not collect data on enough companies to provide a meaningful universe of potential investments. With regards to foundations specifically, completeness may be low if vendors do not collect sufficient data on topics that relate to foundations' missions.
2. **Data analysis:** If vendors do not have a clear methodology for interpreting or rating companies' performance (for vendors that provide ratings), the quality of the product will suffer.
3. **Data updating:** If vendors do not refresh the information in their products, these products may be out of date, impacting potentially both the quality (accuracy) and completeness.
4. **Data verification:** Those vendors that do not practice formal verification processes may be more prone to inaccurate data,

thereby impacting the quality of their offerings.

These potential impacts would come into play later as we developed criteria to evaluate the performance of each vendor with regards to quality and completeness.

## VENDOR APPROACHES TO MAJOR PROCESSES

Using our research, we compared the processes that ESG vendors use to create and maintain data products. Through this comparison, we identified high variability between vendors in the approaches across each of these processes. Thus, while similarities in metrics may exist across some vendors, no two ESG data vendors are exactly the same, nor do any offer the same products to investors and investment managers. The variability also shows there may be compromises to the quality and completeness of some vendors' offerings, thus providing further justification for our subsequent analysis on these two factors.

The first source of variation amongst ESG data offerings is the vendors' data collection processes. While some data vendors use similar sources, none of their data collection approaches are identical. The majority of data vendors our team researched collect data from publicly available documents, such as annual reports, sustainability reports, and news sources. For example, Bloomberg,<sup>29</sup> TruCost,<sup>30</sup> GMI,<sup>31</sup> Sustainalytics,<sup>32</sup> ISS,<sup>33</sup> and MSCI ESG Research<sup>34</sup> uses publicly available company reports as their primary data sources. MSCI ESG Research also incorporates information from press releases into its analysis,<sup>35</sup> and FactSet aggregates relevant news as part of its data product.<sup>36</sup> RepRisk differs from the other ESG data vendors in that it derives all of its data from global news sources and covers 14 languages in its research.<sup>37</sup> The vendors' data collection processes also vary in terms of how vendors identify new data. For instance, RepRisk uses computerized "topic tags" to gather and filter news.<sup>38</sup> Similarly, GMI scans

for proxy statements and key words.<sup>39</sup> Automatic prompts alert Bloomberg research analysts of potential updates, yet the analysts manually scan and input the majority of Bloomberg's raw ESG data.<sup>40</sup> In contrast, some research providers, such as CDP<sup>41</sup> and MSCI ESG Research,<sup>42</sup> directly engages companies. CDP sends out their own questionnaires and surveys to collect data.

Data collection processes also vary in terms of the ways that vendors work to fill data gaps or make their data offerings more robust. Some data vendors broaden their products' scope by incorporating raw data and/or ratings from other vendors. For instance, GMI includes TruCost Environmental Data and social data from Ethix,<sup>43</sup> an SRI screening, monitoring and research tool.<sup>44</sup> FactSet uses GMI ESG Ratings, and TruCost Environmental Data.<sup>45</sup> In addition to shared data, some vendors increase their data coverage of unavailable data by generating proxy information. TruCost assesses environmental risks and opportunities across supply chains. The data is tagged in the data feed so users know exactly where the data is sourced from and whether it is modeled or not.<sup>46</sup> CDP supplies data to several vendors, such as MSCI ESG Research, who obtains its public climate, water & supply chain data.

In addition to data collection processes, vendor approaches to data analysis vary. The variability with regards to data analysis is evident in the fact that some vendors provide just raw data, while other companies additionally provide additional analysis and/or a rating (grade) of company performance. For example, Bloomberg focuses on only raw data. The other vendors provide some type of analysis and ratings based on and/or alongside raw data. One example of such a vendor is MSCI ESG Research. MSCI ESG Research provides letter grades AAA – CCC based on an assessment of companies on whether their management capabilities to mitigate and take advantage of risk and opportunities arising from environmental, social

and governance issues. To support these grades, MSCI ESG Research provides qualitative and quantitative analysis of each company's track record and improvement on material sustainability issues (e.g. water would be a key sustainability issue for a food production company).<sup>47</sup>

An added layer of complexity for our analysis and for the vendors' clients is that the vendors' methodology for analyzing / rating companies – and thus the scores the same company receives across vendors – can vary substantially. What is more, not all vendors fully disclose their methodologies for analysis. The mixed levels of disclosure and varying methodologies contributed to the skepticism of some investors that we interviewed. Certain investors expressed higher confidence in raw data than analysis for largely this reason, while others expressed using the ratings / analysis.<sup>48</sup> Trust and disclosure of methodology was also a factor that was echoed within the Rate the Raters report – 88 percent of 1,000 sustainability professionals that SustainAbility surveyed assigning “High Importance” to the Disclosure of Methodology aspect when evaluating ratings and rankings.<sup>49</sup> These points indicates that while the needs of investors are not consistent with respect to the data format (raw data versus analysis) disclosure is an important part of evaluating the quality of ESG products.

The third source of process variation relates to the frequency and methodology with which vendors update their product databases. For instance, MSCI ESG Research refreshes data as it becomes available, not later than every year or sooner if a relevant event affect a company, industry or geographical region happens. It has plans to roll out more frequent reporting.<sup>50</sup> In contrast, along with regular updates, news events and corporate events (e.g. the release of a report or regulatory finding) drive ISS Governance

QuickScore 2.0's data refresh process.<sup>51</sup> Bloomberg updates its ESG data continuously based on alerts from web crawlers and historical reporting cycles.<sup>52</sup> RepRisk updates its database daily.<sup>53</sup>

Finally, the vendors' data verification processes also vary. On the one hand, Bloomberg<sup>54</sup> and ISS<sup>55</sup> directly verify the accuracy of the data they have collected with respective companies from which that data was sourced. TruCost takes a similar approach. It uses reported data and data collected from firms via a request. TruCost fills in where there are data gaps and verifies that it has the most up-to-date information. It will also fill in data gaps with its Environmentally-Extended Input Output (EEIO) model<sup>56</sup>. Sustainalytics has a formal verification process as well. RepRisk also has verification processes, but the process is part of their organizational structure: senior staff review and verify the news that analysts find.

Given the variety of approaches amongst ESG data vendors, we required a clear set of criteria that could be used to evaluate the vendors against key elements of quality and completeness of their data products. We will describe our process for creating and using these evaluation criteria in the following section.

## EVALUATION OF QUALITY & COMPLETENESS

The variability evident across vendor processes made it clear that an evaluation of quality and completeness would not be simple. We selected a few important potential criteria as indicators of the quality and completeness of vendor offerings. We then evaluated vendors against these criteria to determine their ultimate scores for quality and completeness.

For the quality score, we developed criteria that map to the four major vendor processes outlined above, as all of these four processes could potentially impact quality. **Figure 8** outlines these components of the quality score. “Information Sources Disclosure” relates to the data collection phase, and refers to the detail with which ESG data vendors reveal the sources of their data. “Methodology Disclosure Score” gets primarily at the second process – data analysis – and refers to whether vendors reveal their specific approach to assessing and ranking company performance. The third criterion, “Updating Frequency,” is related to the third

number of companies on which an ESG data vendor collects and provides data (the universe of investment options evaluated). As mentioned, the ability of vendors to provide data relevant to foundations’ missions is also relevant to completeness. However, given the variability of foundations’ missions, we could not create a universal metric to evaluate vendors in this area. Thus, we incorporated this aspect into our solution development process (described later), but did not use it in our Phase I evaluation of the quality and completeness of the data.

<b><u>Quality Score Components</u></b>
<b>Methodology Disclosure Score</b> 1 = no/limited disclosure 2 = full disclosure to clients 3 = full disclosure to public
<b>Information Sources Disclosure</b> 1 = no/limited disclosure 2 = discloses type of source 3 = lists/links to specific source
<b>Data Verification</b> 1 = no data verification updates 2 = informal verification process 3 = specific, formal verification process
<b>Updating Frequency</b> 1 = >1 year between updates 2 = 6-12 months between updates 3 = <6 months between updates

**FIGURE 9**

vendor process and assesses how often a vendor attempts to refresh the information on companies in its products. Finally, “Data Verification,” relates to the last process and evaluates whether and how a vendor confirms the accuracy of data collection and entry.

**Figure 9** lists the criteria we used to evaluate the completeness of vendor offerings. The criterion, “Number of Companies,” evaluates the

<b><u>Completeness Score Component</u></b>
<b>Number of Companies</b> 1 = <5,000 companies 2 = 5,000-10,000 companies 3 = >10,000 companies

**FIGURE 8**



Having defined the scoring options, members of our team evaluated the performance of each vendor against these criteria. The team members that performed the assessment were familiar with the vendor(s) that they reviewed, having conducted both interviews and independent research on said vendor(s). The median and mode scores for the evaluations of the 10 vendors are provided in **Figure 10** below.

	Score Type	Mean Score	Mode Score
Quality	Methodology Disclosure	2.5	3
	Source(s) Disclosure	2.4	2
	Data Verification	2.4	3
	Updating Frequency	2.5	3
Completeness	Number of Companies	2.1	3

**FIGURE 10**

As the table shows, the mode and median scores of this vendor set is fairly high. The mode score for each category but source disclosure was three, the highest possible score per category. The mean score for each category is greater than two, the middle possible score.

In terms of individual vendor scores, which is not displayed, there were only two scores of one, and these two scores were not for the same vendor. Also, no vendor scored lower than a two, the median score, and most rated over this score. Cumulatively, these scores led us to conclude that the quality and completeness of ESG data in the marketplace is sufficient to make data vendors relevant.

Our conclusion is also reflected in the increasing popularity of ESG data products. For example, Bloomberg reports a 47.7 percent annual growth rate from 2009-2012 in the usage of its ESG product.<sup>57</sup> Given these combined justifications for the sufficient quality and completeness of ESG data offerings, we pursued Phase II.

## Phase 2: Solution Development

Since we were able to determine that the quality and completeness of the ESG data offerings is sufficient, and thus addressed the challenge of skepticism, our next step was to find a way to bridge the gap between foundations and the ESG data vendors. Doing so would be critical to supporting foundations with mission-aligned investing. Our understanding of the challenges that foundations face with regards to ESG data informed our process in this phase. Specifically, the challenges that we aimed to address in this phase include resource limitations, minimal knowledge of ESG data, and varying mission priorities. Our team was able to conceptualize and build a tool that would serve as a solution to these key challenges. In the following sections, we will outline in more detail the purpose, capabilities, and functionality of the solution that we developed.

### TOOL OVERVIEW

The tool we created, named the Vendor Assessment Tool (“Tool”), creates a tailored evaluation of ESG data vendors based on the mission priorities of specific foundations. The Tool builds on the quality and completeness evaluation described in Phase I, adding in an assessment of each vendor’s ability to meet a given foundation’s mission priorities. We assessed quality and completeness of each vendor’s products in Phase 1 irrespective of particular mission priorities, and then mapped each of the vendors’ offerings to specific mission objectives in Phase 2. We determined the quality, completeness, and mission-relevance of each vendor’s offerings through direct usage of their products. Although we conducted research and interviews with TruCost and FactSet, we did not include them in the Tool due to a lack of access to their databases. The Tool’s comprehensive map of vendor metrics enables it to recommend an optimal set of ESG data vendors, custom-tailored for individual foundations and their investment managers to use in mission-aligned investing. For example, JSN can input its mission priorities, and the Tool

will map the best ESG data vendors for JSN based on ESG data available from each vendor related to those priorities.

The beauty of the Tool is in its simplicity for the user. The interface is clean and clear, and allows the foundation to input terms it is familiar with – its mission priorities – which are then mapped to related ESG metrics on the back end. Through the Tool, we hope to better inform foundations and their investment managers on the data that exists in the marketplace to support mission-aligned investing. In the following three sections, we will describe the user inputs, back-end functionality, and Tool outputs in more detail. Detailed but simple instructions throughout the Tool will guide foundations on how to use it and what the benefits of using the Tool are.

## USER INPUTS

On the User Input Page, the user (a foundation) selects one or more criteria from the list of popular foundation mission priorities. We created these criteria, which are grouped as “Environmental,” “Social” or “Governance,” related, after evaluating nearly 185 foundations’ grant-making and mission priorities, as stated on

their webpages, annual reports, and investment policies. Thus, while the criteria shown represent a broad swath of the mission priorities of U.S. foundations, there may be some instances in which one or more of a foundation’s mission priorities are not available for selection. In this case, a foundation can select as many of its priorities as are available in the given criteria. See **Appendix A** for more details on the criteria categories and descriptions on the mission priorities listed in each.

In addition to choosing relevant mission priorities, users have the option to input their preferred data format for ESG data products. The options include raw data (e.g. metrics, such as tons of GHG emissions) or ratings and analysis (e.g. when a vendor provides more in depth, proprietary and qualitative analysis on the sustainability performance of a company). This feature is meant to address varying investment manager preferences as related to data format, as demonstrated through our interviews. Thus, if choosing one of these options, the foundation may want to discuss the options with its investment manager. Alternatively, the foundation can choose to skip selecting a preference in this category.



**Figure 11** is an example of what this User Input Screen would look like with JSN's mission priorities used as input criteria. JSN's investment policy specifies exclusionary and inclusionary screens on the topics of toxic emissions, extractive industries, environmental justice, sustainable agriculture and food systems, reproductive health and rights, and social justice.

**ESG Data Vendor Match**  
*For the mission-aligned investor*

1 Please select whether you would like your recommended data vendor to provide either of the following or both:

Data Preference	
Raw Data	<input type="checkbox"/>
Ratings & Analysis	<input checked="" type="checkbox"/>

2 Please select your foundation's ESG priorities from the categories listed below:

Environmental Criteria	Social Criteria	Governance Criteria
Agriculture <input checked="" type="checkbox"/>	Arts and Culture <input type="checkbox"/>	Management Diversity <input checked="" type="checkbox"/>
Air Pollution <input checked="" type="checkbox"/>	Community Development <input type="checkbox"/>	Pay Equity <input checked="" type="checkbox"/>
Animal Welfare <input type="checkbox"/>	Diversity <input checked="" type="checkbox"/>	Political Contributions <input type="checkbox"/>
Biodiversity and Preservation <input checked="" type="checkbox"/>	Education <input type="checkbox"/>	Transparency and Disclosure <input type="checkbox"/>
Climate Change <input checked="" type="checkbox"/>	Fair Wage <input checked="" type="checkbox"/>	Board Independence <input type="checkbox"/>
Energy Efficiency <input type="checkbox"/>	Healthcare <input type="checkbox"/>	
GHG Emissions <input type="checkbox"/>	Human Resources <input type="checkbox"/>	
Infrastructure and Renewables <input checked="" type="checkbox"/>	Income Inequality <input checked="" type="checkbox"/>	
Natural Resources <input checked="" type="checkbox"/>	Poverty <input checked="" type="checkbox"/>	
Waste <input checked="" type="checkbox"/>	Social Justice <input checked="" type="checkbox"/>	
Water <input checked="" type="checkbox"/>	Youth Services <input checked="" type="checkbox"/>	

Rank

**FIGURE 11**

As such, when running the Tool, we chose the following criteria as inputs:

**Environment**

Climate Change  
 Infrastructure & Renewables  
 Natural Resources  
 Waste  
 Water

**Social**

Diversity  
 Income Inequality  
 Poverty  
 Fair Wage  
 Social Justice

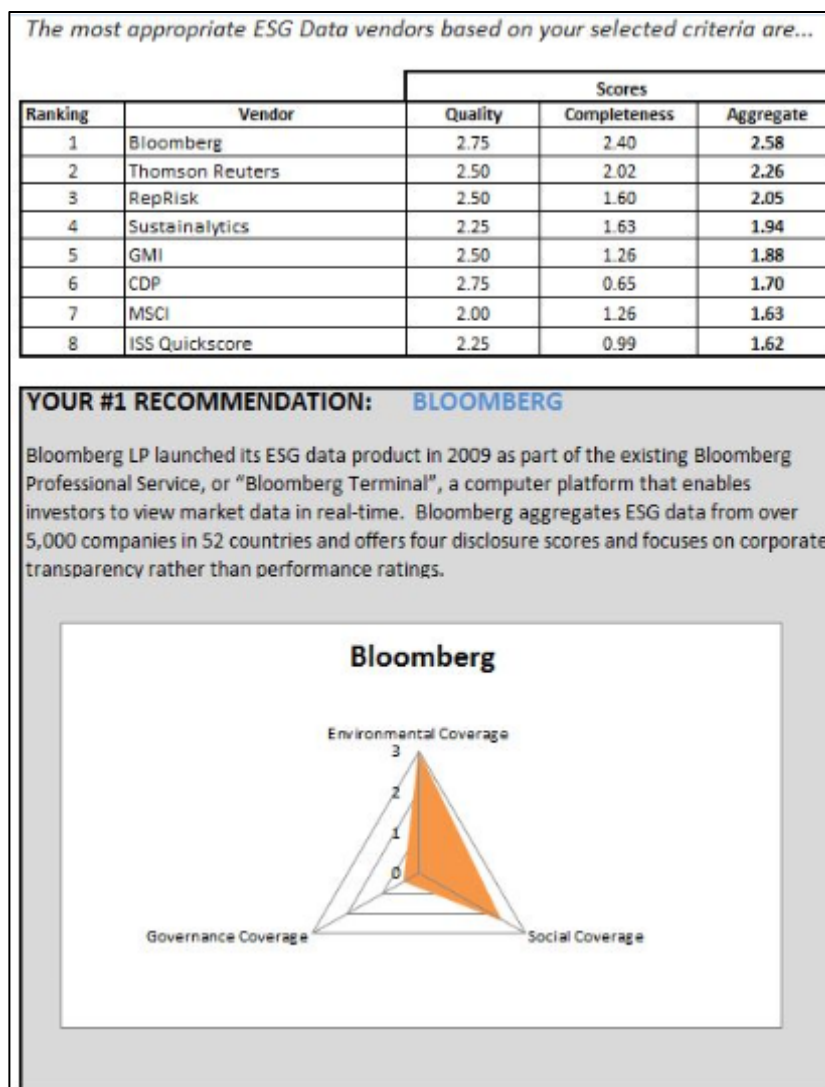
**Governance**

Management Diversity  
 Pay equity

We chose these categories based on the language within the Investment Policy section of the JSN website.<sup>58</sup> To be as inclusive as possible, we ran the Tool twice, once with only Ratings & Analysis chosen and second with only Raw Data options within the Tool. **Figure 11** shows the former of these inputs. However, we will show the results of each preference scenario in a later section.

three key components. These components include:

1. The quality of the vendor's products (based on previously outlined quality score).
2. The completeness of the data in the vendor's offering (including both the previously outlined completeness score and the amount of data provided for the user's selected mission criteria).
3. Whether or not the vendor offers the



**FIGURE 12**

## BACK-END FUNCTIONALITY OF THE TOOL

Once the user has selected its input criteria, the Tool works evaluates each vendor based on

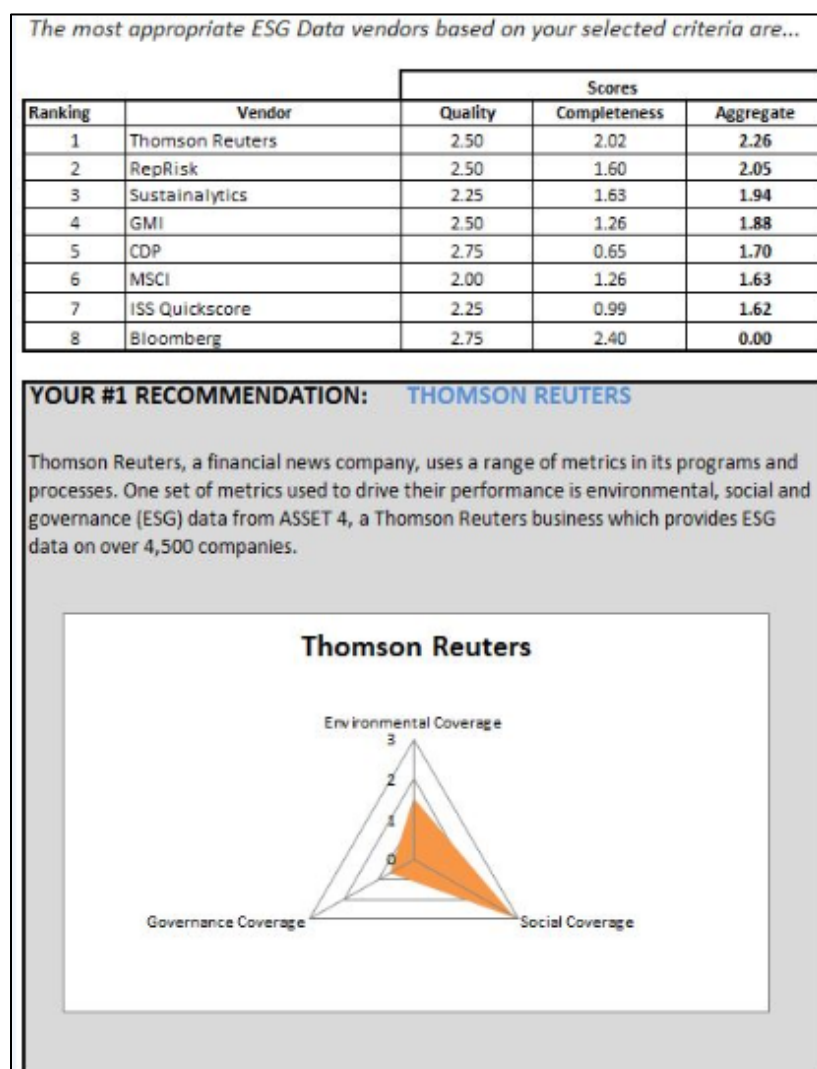
user's preferred data format (raw data or ratings / analysis).

We will not review the elements of the quality and completeness scores previously described,

as these figures are static scores in the Tool and have not changed from the analysis in Phase I. However, the completeness score in the Tool does contain a new sub-score related to the amount of data provided for the selected mission criteria the user selected. Each ESG metric a vendor offers is mapped to the relevant input criteria or left out of the Tool if it is not relevant to any of the mission criteria. The scoring for this element is a relative scoring scale and rates one vendor's relevant metrics compared to what other ESG vendors offer. It is also a dynamic score that changes depending on the specific input criteria selected. Thus, a vendor may

receive a different score for two foundations with differing mission priorities.

Next, the Tool factors in which vendors have the type of information (raw data or ratings and analysis) that the user wants. A table on the back-end marks whether a vendor offers: 1) company ratings grounded in some form of proprietary analysis (ratings and analysis); 2) raw data; or, 3) both. When either of the data format options is chosen, the vendors that fall into the relevant option are "switched on." When a vendor is "switched on" due to its data format relevance, the Tool multiplies the vendor's



**FIGURE 13**

quality and completeness aggregate score by one. In contrast, for vendors that are not switched on, the Tool multiplies the aggregate score by zero, thereby eliminating the vendor from inclusion in the final ranking that the user will see.

## TOOL OUTPUT

Once the back-end of the Tool has evaluated all the criteria we outlined above, it will produce a ranking of the top three vendors, given the particular user's inputs. For the vendor ranked first in this list, the Tool output will also provide a more detailed overview of the vendor and a radar graphic showing the distribution of all metrics in the vendor's database that relate to the environmental, social, and governance criteria available as input options in our Tool.

Figures 12 and 13, given the sample JSN inputs, illustrate the Tool output. **Figure 12** demonstrates the Tool's output if the user selects a preference for raw data, while **Figure 13** demonstrates the output if rankings and analysis are the preferred data format.

Based on the above criteria, the Tool generated the following options for JSN. Bloomberg was presented as the most optimal choice when we chose only raw data and Thomson Reuters was offered as the ideal choice when we chose rankings and analysis. Due to the fact that certain data vendors, such as Thomson Reuters and MSCI ESG Research offers both raw data and ratings within their offerings, they are present in both output views. Additionally, while the user of the Tool is able to see the final quality and completeness scores for each vendor, they also can see a radar chart for the top choice. This chart allows the user to get a more visual idea of the spread of all vendor metrics across the environmental, social and governance criteria that we present in the tool

input (regardless of whether the user selected these input criteria). This will vary user to user. For example, ISS Quickscore is a governance tool and as such, may be selected as good fit for an institutional investor looking for "G" data.

## LIMITATIONS OF THE TOOL

Given the resources available to complete this project, the Tool has some limitations. One of the Tool's weaknesses is the evaluation of metrics and the quality score are based on feedback from members of our Capstone team. Despite the knowledge these team members have of the vendors they reviewed, as described before, the reviews may be more accurate if we were able to increase the number of evaluators and involve vendor clients with intimate knowledge of the vendor offerings.

Another limitation of the Tool resulted from our development methodology. Specifically, we mapped some vendors' metrics based on Excel-based sample data sets we downloaded from the respective vendor's website. We had to use these data sets in the place of the full vendor offerings in situations where we were unable to interview and/or access the actual client-facing interface. For vendors to which the Columbia University libraries do not subscribe, we relied on the availability of free trials, which were not available for all vendors, or on these data sets.

## VALUE OF THE TOOL

Despite these limitations, we believe that our Tool has value. It builds on the achievements of Phase I by address the three remaining challenges foundations face when attempting to use ESG data for mission-aligned investing. **Figure 14** demonstrates how Phase I and II of our project addressed the four major challenges we outlined in the Project Background section.

	Challenges	Our Solution
Phase 1	Skepticism of ESG Data	<input checked="" type="checkbox"/> Evaluated quality & completeness of data
Phase 2	Time / resource / financial constraints	<input checked="" type="checkbox"/> Is free & user-friendly
	Minimal ESG data knowledge	<input checked="" type="checkbox"/> Educates on ESG data offering
	Varied mission priorities	<input checked="" type="checkbox"/> Is customizable

**FIGURE 14**

Here, we would like to build out on the education benefit (in **Figure 14**) a bit more, as we have discussed other benefits in previous sections. Our project, specifically our Tool, will help bridge the knowledge gap for foundations that do not have direct access to the vendors' products.

Our project educates foundations and investment managers in several key ways:

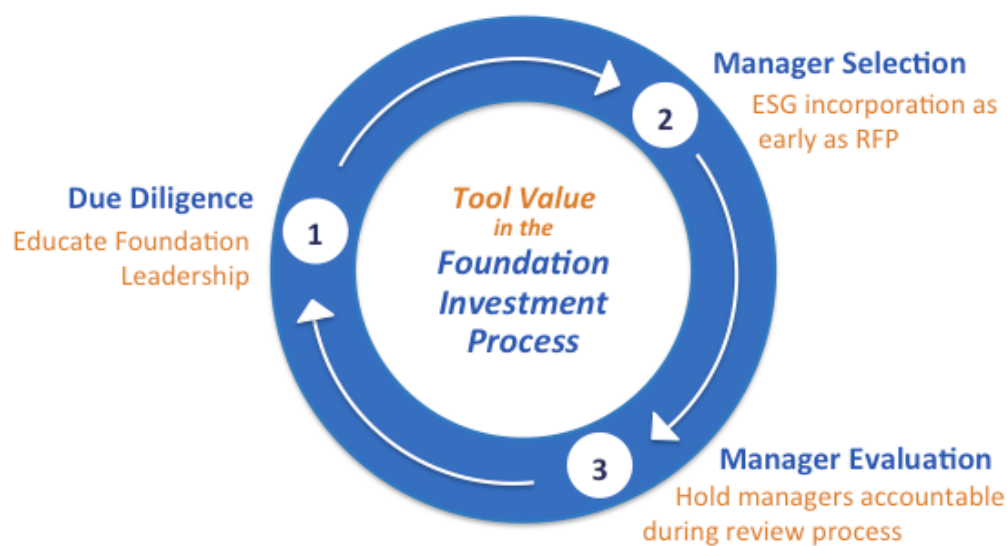
- Familiarizes users with ESG metrics, which investment managers are more familiar with, and how they map to the mission priorities with which foundations are more familiar.
- Provides users with an understanding of ESG offerings that are relevant to the foundation's mission priorities.
- Indicates vendors that can provide additional analysis (in addition to raw data) for managers that are less familiar with ESG topics and sustainable investing.

## **RECOMMENDATIONS**

### **Proposed Implementation**

Given the value of our solution, we believe there are three areas in the investment process where our project can support foundations in pursuing mission-aligned investing. These areas, which are depicted in **Figure 15**, include: 1) Due diligence; 2) Manager selection; and, 3) Manager evaluation.

The educational component of our Tool is critical throughout the entire investment process, but especially upfront during due diligence. We hope foundations can use our Tool to help better understand the ESG data that aligns with their priorities. The education piece will be particularly relevant to the foundation's leadership and its finance committee. A better understanding of ESG offerings may even help the foundation to develop a stronger investment policy related to mission-aligned investing.



**FIGURE 15**

The foundations leadership or finance committee can use our Tool as they look to select investment managers, specifically during the request for proposal (RFP) process. For example, a foundation might favor an investment manager who incorporates the ESG data (or data vendor) that aligns best with the foundations priorities.

Finally, foundations typically review their investment managers regularly. Our Tool could become an important engagement mechanism in reviewing managers and holding them accountable to mission-aligned investing objectives.

In addition to our target audience, small foundations, we believe the Tool could have several other applications. Investment managers and investment consultants, who have foundations as clients, can find value in this Tool by independently better understanding the mapping between mission priorities and available ESG metrics. Also, high net-worth individuals looking to invest their wealth in alignment with their values can use this Tool to identify ESG data vendors that are appropriate.

## Value to JSN

Given the described value of our project and the recommended use of this solution, we believe that our project has met JSN's request to evaluate the diverse offerings of ESG data vendors to help JSN and small foundations better understand and use these rich data sources to pursue sustainable investing. We hope our solution provides Jessie Smith Noyes with a resource that they can share with other small foundations, thereby strengthening their position as a leader in mission-aligned investing. JSN can continue to be an advocate in the field and will now be armed with tools that will help foundations better engage with their investment managers around the goal of mission-aligned investing.

## CONCLUSION

Sustainable investing is a growing practice, particularly as investors seek to marry financial return objectives with aims to improve social and environmental outcomes. Our project focused particularly on the opportunity for foundations to achieve the latter objective by aligning endowment investments with their mission priorities. Through mission-aligned investing,

foundations can increase their impact by investing their capital in companies whose actions align with the foundation's social and/or environmental aims.

Yet several challenges often prevent foundations from pursuing mission-aligned investing. These barriers, which our research confirmed, include:

1. **Skepticism** on the part of investors about the quality and completeness of ESG data.
2. **Lack of resources** to acquire ESG data.
3. **Minimal knowledge** about ESG data and how to use it.
4. **Unique missions and vendor offerings**, which make it hard to know which ESG vendor is most relevant to helping the foundation with mission-aligned investing.

Our project addressed each of these challenges. First, we evaluated the quality and completeness of ESG offerings to ensure they are sufficient to support mission-aligned investing. Then we developed a tool that allows foundations to input their mission priorities and receive a ranked list of ESG data vendors that are best suited to supporting them with mission-aligned investing.

This project addresses just a part of the mission-aligned investing field, and there are additional opportunities for foundations that lie outside the scope of our project. Yet it is our hope that this project can help to educate foundations on the availability of relevant ESG data offerings and to enable foundations to better engage with their investment managers throughout the investment process to support mission-aligned investing.



## **APPENDIX A – Glossary:**

We provide below list of terms as defined by us, used for the purpose of this project, unless otherwise noted.

**Aggregator:** An organization that collects and sells ESG data, but does not analyze, rate, or rank it.

**Assets Under Management (AUM):** The market value of a portfolio management by an investment firm<sup>59</sup>.

**Completeness:** The quantity of metrics as they pertain to a foundation's priorities.

**Data Vendor:** An organization that sell aggregated financial, environmental, social, and/or governance data, as well as companies that develop and sell company or industry scores or ratings.

**Data Verification:** An assurance of data accuracy by vendors.

**Environmental Profit and Loss Account (EP&L):** A financial statement that accounts for environmental impacts throughout an organization's supply chain<sup>60</sup>.

**Environmental, Social, Governance (ESG):** A set of investment criteria based on a company's disclosure of its operations in these three areas. Environmental criteria may include water and energy usage, waste management, and natural resource management. It highlights environmental opportunities and risks and how companies are approaching them as well as compliance with regulations. Social factors include employee working conditions, relationships with suppliers, and relationships with the communities in which they are based. Governance factors include board structure and tenure, transparency, and anticorruption mechanisms.<sup>61</sup>

**Event-driven data:** In reference to data refresh process that is driven by news events or corporate events (e.g. the release of a report or regulatory filing).

**Quality:** In reference to data, quality is a function of the user-friendliness of a data vendor's product interface and the extent to which the vendor discloses its methodology for ranking and/or rating development.

**Information Sources Disclosure:** A vendor's degree of transparency of its data sources.

**Methodology Disclosure:** A data vendor's transparency regarding its methodology of collecting, ranking, and rating data.

**Mission-Related Investing (MRI):** An investment strategy that targets specific environmental, social, or governance criteria<sup>62</sup> in accordance with a foundation's mission.

**Natural Capital:** Naturally occurring resources and ecosystem services, such as clean water, erosion protection, and carbon sequestration, which provide economic value.<sup>63</sup>

**Negative Screening:** The practice of identifying companies whose practices generally characterized as "bad or harmful" in some way, such as weapons manufacturing, arms dealing, alcohol and cigarette production, and choosing not to invest in them.



**Positive Screening:** Also known as “support” or “preference”; the practice of purposefully investing in a company committed to responsible business practices, products, and/or services that provide a positive impact.

**Rater:** A data vendor that analyzes ESG data to create ratings and/or rank companies based on disclosure, transparency, and/or performance.

**Sustainable Investing (SI):** An umbrella term that includes, among others, mission-related investing, impact investing, socially responsible investing, responsible investing, and green investing.

## APPENDIX B – Data Vendor Summaries:



### Bloomberg

Bloomberg LP launched its ESG data product in 2009 as part of the existing Bloomberg Professional Service, or “Bloomberg Terminal”, a computer platform that enables investors to view market data in real-time. Bloomberg New Energy Finance (BNEF) is another sustainable investment product that offers clean energy and carbon market research. Bloomberg compiles ESG data from over 10,000 companies in 52 countries. Bloomberg ESG offers 4 disclosure scores: overall ESG metrics disclosure, environmental metrics disclosure, social metrics disclosure, and governance metrics disclosure. The scores do not emphasize any particular metric. The company focuses on corporate transparency rather than performance.

**Website:** <http://www.bloomberg.com/bsustainable/#products>

### CDP

Founded in 2000, CDP is an international, non-for-profit organization, registered as UK charity. Its Headquarters is located in London, and has offices in United States and over nine other countries. CDP, formerly known as Carbon Disclosure Project, provides the only global system for companies and cities to measure, disclose, manage and share vital environmental information. CDP works with market forces, including 722 institutional investors with assets of U.S. \$87 trillion, to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce them. CDP's client types include investors, companies, cities, governments (Australia, Canada, France, Germany, Singapore, Spain, Sweden, Denmark, UK and U.S.), policymakers, alliances, and international institutions. CDP holds the largest collection globally of primary climate change, water, supply chain, cities, and forest-risk information. Such insights lie at the heart of strategic business, investment and policy decisions. CDP is both an aggregator of primary source information and a rater.

**Website:** <https://www.cdp.net/>

### *FactSet*

FactSet Research Systems Inc., trades as FactSet, was founded in 1978. The Global Headquarters is located in Norwalk, CT. FactSet covers 2,500 clients, and has 50,925 users. FactSet's primary product offering is personalized workspaces, which include standard features: Market Analytics, Financial Content and Data Sets, Microsoft Office Integration of market data, Financial Screening, Customized Analytics and Data, portability in access; access to thousands of commercial databases, and proprietary FactSet global datasets; 24/7 client support, customized installation assistance, ongoing in-person and online training sessions, Single Sign-On, Instant Messenger, mobile access, and Quality Assurance. FactSet integrates with leading statistical packages, including MATLAB® from MATHWORKS®, R Project, and SAS® for statistical computing. FactSet's client types include investment managers, hedge funds, investment bankers, wealth managers, private equity, buy-side and sell-side traders, Plans and Pensions, consultants, advisors, legal, government agencies, venture capital firms, and Academics.

**Website:** <http://www.factset.com/>

### *GMI Ratings*

GMI Ratings is a private company founded in 2010 by merging three companies: The Corporate Library, Governance Metrics International, and Audit Integrity. GMI covers 6,300 companies worldwide and uses 150 ESG metrics to build individual company ratings. The ESG research and rating services (GMI Analyst) has been GMI's flagship product since its inception. GMI carries four additional products. First is AGR – Accounting and governance risk. Second is FAM (the Forensic Alpha Model), which carries data only, no research or analytics. GMI's third product offering is their Global Leader Board: a database of officers and directors that analyzes the connection between Boards and management with its structures. The forth is GMI's Diverse Director Datasource, which is a database covering the diversity of management teams. While GMI covers all areas of E, S and G metrics, Governance data is their self-proclaimed expertise and their strongest feature. Furthermore, Environmental data is procured from Trucost, but the analysis occurs in house. Ethix provides an additional screening tool to GMI's Analyst product, focused on exposing controversial business practices.

**Website:** <http://www3.gmiratings.com/>

### *Institutional Shareholder Services (ISS)*

ISS is a proxy advisory firm that offers institutional clients, hedge funds, mutual funds, and similar organizations guidance on proxy voting execution and reporting. This analysis focused on the ISS Governance QuickScore 2.0 product offering, a data and rating product designed to help institutional investors identify governance risk factors. The ISS Governance QuickScore 2.0 product includes potential governance indicators, such as executive compensation and board independence. Clients use this product to recognize concerns based on risk signals. Many investors use the product as a screening tool. The product focuses on four pillars of Governance: Board structure, Shareholder rights, Compensation/Remuneration, and Audit-related practices. The database covers 4,100 companies and

nearly 200 governance factors, with approximately 40-90 data points per company. QuickScore uses a hybrid scoring approach. Each company is given a score (1-10, 10 being the highest risk) at the company and factor level based on quantitatively driven analysis, correlations between governance metrics and financial metrics, and relevant qualitatively driven analysis of governance best practices. Primary data sources include company filings and event-driven data. The analysis is tailored by region and sector.

**Website:** <http://www.issgovernance.com/>

### *MSCI ESG Research*

MSCI Inc. provides investment decision support tools to investors globally, including asset managers, banks, hedge funds and pension funds. MSCI products and services include indexes, portfolio risk and performance analytics, and ESG data and research. As of September 2013, approximately USD 8 trillion are estimated to be benchmarked to the MSCI Indexes on a worldwide basis. The product research for this project is MSCI ESG Research's proprietary ratings model, MSCI ESG Intangible Value Assessment (IVA). Through an analysis of material issues for the industry and rigorous benchmarking against industry peers, MSCI ESG IVA may reveal risks and opportunities not typically captured by conventional financial analyses. MSCI ESG IVA is designed to help investors understand ESG-driven risks and opportunities and integrate these factors into the portfolio construction and management process. MSCI ESG Research's global team assesses hundreds of data points for over 5,000 publicly traded companies.

**Website:** <http://www.MSCI.com/products/indexes/esg/>

### *RepRisk*

RepRisk was founded in 1998. After working with banks and providing risk management consulting services, RepRisk launched its ESG database in 2006, focusing exclusively on ESG and ESG-related reputational risks. The database contains over 110,000 companies, of which 43,000 are associated with negative incidents, controversies and criticism (ESG risks). The database also covers over 10,000 projects (such as mines, pipelines, power plants, etc.), 7,000 NGOs and 6,000 government bodies, as well as ESG risks related to sectors and countries. The database is updated and grows daily as new information is screened, filtered, analyzed and quantified. RepRisk's research is based upon a wide variety of external stakeholders and third parties such as international and local media, NGOs, government agencies, think tanks, newsletters, blogs, etc. – with the idea that this perspective helps assess whether a company's policies, processes, and commitments are translating into performance. RepRisk covers 27 ESG issues in their research and performs their analysis in accordance with established norms such as the World Bank Group IFC Performance Standards, the UN Global Compact and the Universal Declaration of Human Rights. They also cover over 30 Topic Tags, which are specific ESG “hot topics” such as fracking, arctic drilling or palm oil. The list of Topic Tags are expanded regularly based on client feedback and emerging trends. RepRisk covers 14 languages in its research. In addition to the database, RepRisk provides customized reporting, screening and benchmarking tools for asset managers, asset owners, banks and corporates. Their clients consist primarily of banks, insurances, asset managers, and asset owners, with a growing number of corporate clients.

**Website:** <https://www.reprisk.com/>

### *Sustainalytics*

Sustainalytics is a private company that provides 15 highly customizable products covering 5,000 companies worldwide. The products are highly customizable. Next to their product offerings, Sustainalytics also offers consultancy services, assessing how the client compares to its competitors/peers, establishing goals and targets, and analyzing and developing a responsible investment policy. While their product is highly customizable to the clients' needs, specific ESG data is

used in response to those needs. Overall, however, Sustainalytics tracks, 120 metrics and indicators are tracked overall, but not for every industry because specific ESG metrics of ESG data are not disclosed, and are only shared with the clients. Like most large ratings companies, Sustainalytics serves the investment community as a whole including (investment managers meant as well as asset owners, such as [pension plans, foundations, and endowments.

**Website:** <http://www.sustainalytics.com/>

### *Thomson Reuters*

Thomson Reuters combine industry expertise with innovative technology to deliver critical information to leading decision makers in the financial and risk, legal, tax and accounting, intellectual property and science, and media markets, powered by the world's most trusted news organization. Thomson Reuters uses a range of metrics to ensure that their programs make progress and deliver real results. One set of metrics used to drive their performance is environmental, social and governance (ESG) data from ASSET 4, a Thomson Reuters business that provides ESG data on over 4,500 companies.

**Website:** <http://thomsonreuters.com/esg-research-data/>

### *TruCost*

TruCost is a Public Limited company, founded in 2000, that collects environmental data approximately 4,600 companies worldwide, and creates financial representations of natural capital risks and opportunities. TruCost selects many of those companies because of their listing in the MSCI ESG Research World and S&P 500 indices. TruCost developed approximately 550 sector profiles. TruCost has quantitative company, geographic, and sector metrics on carbon and other greenhouse gas emissions, waste, water usage, dependence on natural resources, and pollutants. Uniquely, TruCost monetizes these environmental impacts to create financial metrics, such as externality valuation, impact ratio as the sum of impacts relative to a firm's revenue, and profit at risk. TruCost bases its monetization processes on environmental economics literature and an academic advisory panel.

The company offers a wide range of products and services to investors, companies, governments, researchers, and academics. Their primary investment tool is EBoard, a platform where investors access natural capital metrics by company, geography, sector, or year; create custom reports of this information; search company briefings; and, compare their own portfolios to their benchmarks. TruCost also works with index providers to create new products, which included the S&P U.S. Carbon Efficient Index and NYSE Euronext's Low Carbon 100 Europe Index. Other services include portfolio audits, which aid institutional investors in understanding their funds' exposure to risks and opportunities associated with natural capital for making investment decisions. TruCost also supports investors and companies generate sustainability reports compliant with standards such as UN PRI, NCD, CDP, and GHG Protocol. Further, TruCost helps companies measure and report the environmental impacts of their supply chain; perform Life Cycle Assessments (LCAs); provides environmental reporting assurance; and develop Environmental Profit and Loss (EP&L) statements. TruCost also helps government agencies with sustainable procurement, work with researchers to assess the economic implications of environmental impacts, and help academic institutions understand their environmental footprints and become more sustainable.

**Website:** <http://www.trucost.com/>



## **APPENDIX C – ESG Standardized Reporting:**

A variety of ESG reporting standards, tools, research, and reporting-focused entities currently exist, with the purpose of providing standardizing reports.<sup>64</sup>

<b>Climate</b>	<ul style="list-style-type: none"> <li>• CDP</li> <li>• Corporate Leaders Group on Climate Change</li> <li>• Global Framework for Climate Risk Disclosure</li> <li>• Intergovernmental Panel on Climate Change (IPCC)</li> </ul>
<b>Corporate Governance</b>	<ul style="list-style-type: none"> <li>• European Centre for Corporate Engagement (ECCE)</li> <li>• Global Corporate Governance Forum</li> <li>• International Corporate Governance Network (ICGN)</li> </ul>
<b>Fair Trade</b>	<ul style="list-style-type: none"> <li>• European Fair Trade Association (EFTA)</li> <li>• Fair Trade Federation (FTF)</li> <li>• Fairtrade Labeling Organizations (FLO) International</li> </ul>
<b>Human Rights</b>	<ul style="list-style-type: none"> <li>• Business and Human Rights Resource Centre</li> <li>• International Labour Organization (ILO)</li> <li>• Social Accountability International (SAI)</li> <li>• United Nations Universal Declaration of Human Rights (UNDHR)</li> </ul>
<b>Investment Research and Reporting</b>	<ul style="list-style-type: none"> <li>• Enhanced Analytics Initiative (EAI)</li> <li>• Global Reporting Initiative</li> <li>• Global Reporting Initiative Sustainability Reporting Framework</li> <li>• Sustainable Investment Research Analyst Network</li> <li>• United Nations Environment Programme Finance Initiative</li> <li>• United Nations Global Compact</li> </ul>
<b>Sustainable Investing</b>	<ul style="list-style-type: none"> <li>• Ceres</li> <li>• Conference Board Center for Corporate Citizenship and Sustainability</li> <li>• Equator Principles</li> <li>• European Centre for Corporate Engagement (ECCE)</li> <li>• European Social Investment Forum (Eurosif)</li> <li>• Social Investment Forum (SIF)</li> <li>• Studies of Socially Responsible Investing</li> <li>• World Business Council for Sustainable Development (WBCS)</li> </ul>

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