

# Best practices for responsible investing

## Portfolio management, research, ownership and collaboration

Leola Ross, Ph.D., CFA, Director, Investment Strategy Research

In the coming years, Responsible Investing will just be how we all invest. Understanding how Environment, Social and Governance factors impact security prices and portfolio structure will be integrated into the entire industry. As we move toward this inevitable reality, Russell Investments is developing best practices for our process, our portfolios and our clients. Russell Investments' responsible practice draws directly from our responsible investing policy and beliefs. These incorporate decisions from asset and manager selection, from direct investing to reporting formats, from asset allocations to dynamic tilts, from our internal policies and practices to industry collaboration. In this note, we review the many ways we are developing this practice as they are drawn specifically from our responsible investing beliefs, just as our responsible investing policy was developed.

### Best practices for responsible investing

As many investors have embraced the idea that they might express preferences for Environment, Social and Governance factors in their investment portfolios, the industry has responded with qualitative analysis, data sources, metrics, products and practices. Here at Russell Investments, we have embraced many of these efforts. We have also developed—and continue to develop—metrics for our own reporting and product enhancement. In this note, we explain the metrics we have already developed and contrast them with our qualitative ranks.

Because our responsible investing policy and practice is driven by our beliefs, this paper is structured according to those beliefs.

In the remainder of this paper, we review our beliefs in detail and attribute our best practices to the beliefs that drive them. Along the way, we illustrate how responsible investing is integrated throughout our investment practice from portfolio design, through to its construction and management. Responsible investing is part of our portfolio management and may drive asset allocation, manager selection, enhance portfolio implementation and/or an allocation to our Decarbonisation 2.0 technology, reporting, industry collaboration, and ultimately active ownership.

*Russell Investments' policy is to incorporate responsible investing into our investment manager evaluation process, our portfolio management, our advisory services, and through implementing proprietary solutions as desired by clients.*

---

## Statement of policy

Russell Investments' policy is to incorporate responsible investing into our investment manager evaluation process, our portfolio management, our advisory services, and through implementing proprietary solutions as desired by clients.

## Responsible investing beliefs

Russell Investments recognises the importance of responsible investing (RI) and environmental, social, and governance (ESG) issues for our clients and our overall investment process. To reflect this, we have developed and codified a set of four beliefs upon which our responsible investing practice is founded. These beliefs are as follows:

1. ESG factors impact security prices. These factors can vary by company, industry, and region and their importance can vary through time.
2. A deep understanding of how ESG factors impact security prices is value-adding to a skillful investment process.
3. Embedding ESG considerations into a firm's culture and processes improves the likelihood of prolonged and successful investing.
4. Active ownership of securities is an effective tool for improving investment outcomes.<sup>1</sup>

Our responsible investing policy and practices give us a strong basis for investing, advising, and building products that reflect our own beliefs while helping to meet clients' goals, preferences and circumstances.

## Best practice for responsible investing

Russell Investments integrates responsible investing into our investment process from the ground up. We evaluate, rank and survey our sub-advisors one by one. We research and report active manager ranks and metrics—several of these metrics are proprietary, based on Russell Investments' long history of developing profiles, factors and quantitative tools for our portfolios. We have developed and implemented systematic strategies for incorporating these proprietary metrics into portfolios, including our Decarbonisation 2.0 technology. We incorporate sustainable practices into our own business just as we ask our sub-advisors to do. Finally, we are active owners of our holdings and focus on specific ESG actions within our engagement activities.

All of this allows us to integrate our responsible investing practice into the Design, Construct, and Manage stages of our investing practice. These practices work well together to help our clients work to achieve their goals with close attention to their preferences and the circumstances facing them now, and in the future.

---

## Belief 1: ESG factors impact security prices

## Belief 2: A deep understanding of how ESG factors impact security prices is value-adding to a skillful investment process

In Belief 1, we acknowledge the impact of ESG on security prices. In Belief 2, we further describe that impact as being complicated to interpret and implement. Therefore, we present our practices related to Beliefs 1 and 2 together and, indeed, many key components of our practice stems from these two beliefs. Before delving into these components, let's remind ourselves, specifically, what impacting and understanding *prices* means in the context of investing—both in the short run and in the long run.

### Investment success vs. profitability

Given Beliefs 1 and 2, it is worth pausing to reflect on how ESG factors are relevant to active security selection. Our first belief is that ESG factors impact prices. We do not assert that ESG factors have a positive or negative impact on prices, only that there is an impact. In some cases, an ESG factor may be underpriced, and in others the ESG factor may be overpriced—and it is the responsibility of the investor to identify where current price lies by including ESG into the pricing assessment.

This distinction brings us to our second belief that this understanding will be value-adding to a skillful investment process. The combination of these two beliefs is, indeed, the cornerstone of our prioritisation of qualitative manager assessments in our own responsible investing practices. Therefore, the investment merit of ESG integration is found not in portfolios with particular ESG factor-exposures, but rather the value-add that comes from understanding how ESG factors may influence the risk of owning a security, i.e. the current price of a security and the trajectory of that price over time.

So how does this differ from profitability? Note that profitable firms are not always the best investments. Thinking back to Peter Bernstein's "Stocks for the Long Run"<sup>2</sup>, recall that declining industries are often underpriced by a market that seeks out shiny, new objects. And, investing in these declining industries—what we often call value investing—may be a solid and value-adding strategy. In a similar fashion, those ESG factors that improve firm profitability may be over-priced, or underpriced, by the market, and can result in either value-adding or poor investment choices. The task of an investment manager is to identify those securities that will outperform the market because they are underpriced, assess their risks in a holistic way and construct portfolios with the full breadth their detailed research. We believe the key to successful ESG integration is in combining the additional investment lens of ESG into an understanding of underpriced securities and overpriced securities.

There is an increasing acceptance in the marketplace that corporations will be more sustainable and, in the long run, more profitable if they have good environmental, social and governance practices.<sup>3</sup> We do not dispute this point—in fact, we have built out a strong set of Material ESG metrics (Steinbarth and Bennett, 2017) to find these firms in a quantitative fashion and will go into deeper detail below. That said, active managers must recognise that not all ESG factors, even those that improve firm profitability, will lead to strong investment results for all securities. Identifying exactly how ESG factors influence current and future prices is essential for bringing their clients the full value-add of ESG into their portfolios.

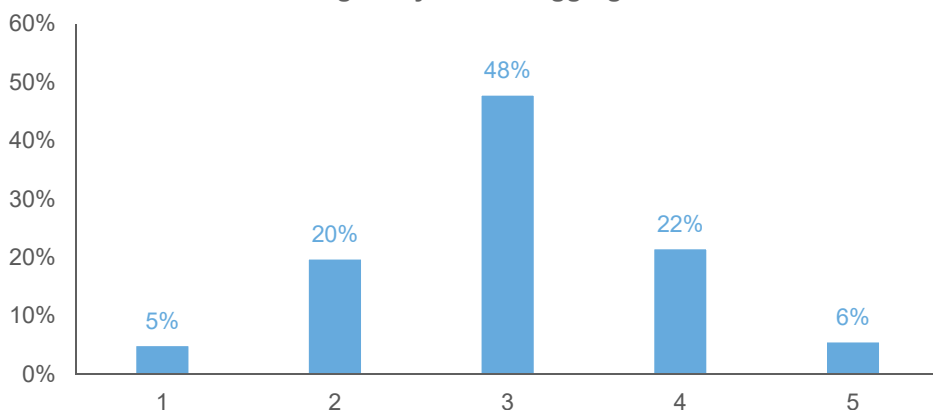
### ESG ranks—a qualitative assessment of our managers

A Russell Investments core competency is our award-winning manager research.<sup>4</sup> In 2014 we added an analyst assessment of ESG integration into our evaluation of each active managers' research rating. Since creating this specific dis-aggregated ranking methodology, we have ranked approximately 70% of our highly ranked managers (on our internal scale of 1-4 where 3 indicates "retain" and 4 indicates "hire," these are 3s and 4s) across all asset classes.<sup>5</sup> Our goal is to expand this coverage to 100% in 2018. Among those ranked we note that active managers exhibit a bell-like distribution of ratings as exhibited in Exhibit 1. While almost half of the rated managers fall into the "3" bucket, we also note that close to 25% have ratings at 4 and we also have more than 5% with 5s (the highest rating). These 4s and 5s are particularly noteworthy because these are not specialist ESG or thematic managers, but the managers we rank for all our products and services.

---

*The key to successful ESG integration is in combining the additional investment lens of ESG into an understanding of underpriced securities and overpriced securities.*

### Exhibit 1: Percent of managers by ESG disaggregated rank<sup>6</sup>



Source: Russell Investments. Data as of November 2017.

To understand how these ratings can be attained when a manager isn't focusing specifically on ESG, or any particular theme, we review how the ratings are determined. Through a combination of investment manager interviews, survey responses, and a quantitative review of their portfolios, Russell Investments manager research analysts determine how well the manager assesses and incorporates the risk and return impacts of ESG issues. Note that ESG awareness and integration is not about restricting securities, targeting ESG or climate-related metrics of any sort, or even intentionally investing in securities with better environment, social or governance practices. But rather, such awareness and integration is about understanding how E, S and G impact a firm, and will impact the future direction of a security's price. Therefore, it can be entirely legitimate that a manager with a high rating has a material allocation to; for example, firms with fossil fuels, labor issues or governance issues. The point is that the manager understands:

1. how these issues contribute to the future success (or not) of the firm
2. how well the current price reflects these factors
3. how the price is likely to change in the future based on these factors
4. what to monitor over time in managing the position size and sell decision for that security

*ESG awareness and integration is not about restricting securities, targeting ESG or climate-related metrics of any sort, or even intentionally investing in securities with better environment, social or governance practices. But rather, such awareness and integration is about understanding how E, S and G impact a firm, and will impact the future direction of a security's price.*

### Exhibit 2: Ranking active managers on their ESG integration



- › The manager demonstrates **strong awareness** of the potential risk and return of ESG issues on individual holdings and the portfolio structure.
- › The manager can **clearly demonstrate** how portfolio positioning reflects the management of relevant ESG risks and/or how ESG exposures can add value.
- › The breadth of perspective and analytical **inputs on ESG issues are superior to peers.**
- › The manager demonstrates **adequate awareness** of the potential risk and return impacts of ESG issues on individual holdings and the portfolio structure.
- › The manager's perspective and **analytical inputs on ESG issues is undifferentiated** from peers.
- › The manager either **does not demonstrate awareness** of the potential risk and return impacts of ESG issues on individual holdings/portfolio structure.
- › **Meaningful discrepancies** have been found between the target ESG guidelines and holdings in the portfolio
- › The manager's perspective and analytical **inputs on the ESG issues lack rigor.**

Source: Russell Investments, April 2018

In Exhibit 2, we exhibit our qualitative criteria for rating managers on their ESG integration. Note that we are focused on awareness, demonstrated understanding of risks and returns and perspective. As noted above, this qualitative rating is not contingent upon restrictions, metrics, or themes. Also note that the middle ranking, a 3, is reflective of “adequate awareness” and exhibiting similar abilities to peers. Therefore, combining the information in Exhibits 1 and 2, we can assert that roughly 75% of the active manager community is integrating ESG into their portfolio decision-making process.

### Surveys as a starting point

While we rely most heavily on our qualitative assessments of active asset managers, it can take quite a long time to reach each of them individually. To gauge the industry in a timelier fashion, we have also surveyed the investment firms represented in our equity and fixed income active manager universes on their ESG awareness and integration. Noting that the survey is about the firms, rather than individual products, and has a focus on policy and offering in addition to process and awareness, we offer a brief comparison our survey responses to our more in-depth research.

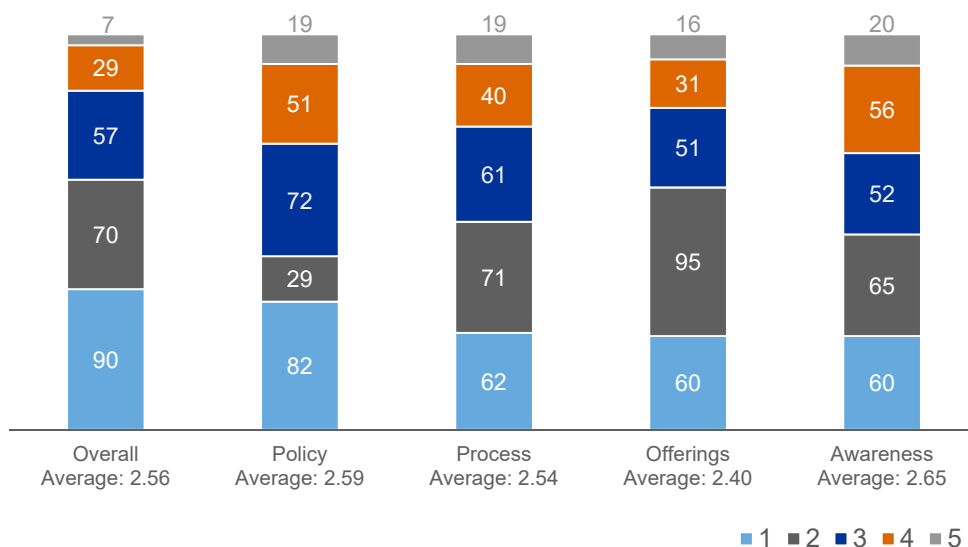
We surveyed 253 managers across 2016 and 2017, including both fixed income (109 responses) and equity (144 responses) investment firms. The survey contained some 20 questions (see Phillips and Smears, 2017 for details) and 13 sub-questions across a variety of ESG topics. Based on survey responses, Russell Investments scores each firm across four categories: Policy, Process, Offerings, and Awareness. Consistent with our manager rankings, the range of scores is 1 to 5 with 5 being the highest possible score.

Key survey findings (see Exhibit 3)

- Similar to our manager-level ratings research, we find that the majority of managers have ESG policies in place (142 of 253) and are aware of ESG as investment factors (128 of 253).
- Almost half of our respondents have incorporated ESG into their firm-wide processes (120 of 253).
- Coupling the information from our manager research, that ~ 75% of active managers are integrating ESG with this information on firm-level policies, awareness and processes, it is noteworthy that less than 40% (98 of 253) offer custom ESG offerings to their clients.
- The smaller role of custom offerings further supports our position that ESG integration is not about being a specialist, but more about evolving a decision-making process.

*We surveyed 253 managers across 2016 and 2017, including both fixed income (109 responses) and equity (144 responses) investment firms.*

**Exhibit 3: Investment firm count by survey scores, broken out by category**



Source: Russell Investments, April 2018.

---

## ESG metrics—standard scores, and materiality

We believe what gets measured gets managed, and this is as true for ESG as it is for any other investment factor. Because of this truth, data providers have entered this space with firm by firm metrics for environment, social and governance factors, as well as carbon and other climate change indicators. Russell Investments has engaged with several data providers, and researched how investment products look according to this data. We have also designed investment technologies to incorporate this data and developed a keen understanding of how this data can be used for the benefit of our clients.

In these next two sections, we review the metrics that Russell Investments calculates, reports and uses in our portfolios. After laying out this information, we distinguish the difference between the information one can glean from our rankings and what can be gleaned from metrics. Finally, before moving on to our best ideas in ESG integration, we discuss how to use ranks and metrics simultaneously in the spirit of best investment practice.

### Standard ESG metric

Since 2012, Russell Investments has been calculating and evaluating a basic ESG metric using our current data vendor's aggregate ESG scores (Ross and Tran, 2015; Ross and Xu, 2017; etc.) We currently calculate these metrics for all products in all Russell Investments equity universes, equity funds and fixed income funds.

Our vendor data has two separate datasets that we utilise— company-specific scores data and country-specific scores data. We use the company-specific scores for all equity holdings and for corporate bond holdings. We use the country-specific scores for sovereign and government-related bonds (Ross, 2017). For a portfolio  $P$ , the ESG score is calculated as:

$$ESG^P = \frac{\sum_i^{N_i P} ESG_i * w_i}{\sum_i^{N_i P} w_i} \quad \forall i \text{ where } ESG_i \neq N/A$$

Where  $ESG_i$  is the aggregate metrics for the company or country  $i$  and  $w_i$  is the weight of that company or country in the portfolio.

The calculation of the underlying E (Environmental), S (Social), and G (Governance) scores follows the same method. Hereto, any reference to our ESG metrics may be understood to apply to ESG, E, S, and G.

In the case of Fixed Income portfolios, we report company and country metrics separately because their distributions look a bit different. In particular, the underlying data for all scores are on a 0-100 scale, however the means of the distributions can be quite different. How one might interpret an active ratio might be highly influenced by an active tilt toward either corporate or sovereign bonds and we don't want to conflate ESG scores with this tilt.

In addition to this standard ESG metrics, Russell Investment tracks ESG metric quintiles and "underwhiskers." We sort into quintiles the active managers within each universe and for our equity funds with breakpoints at 20%, 40%, 60% and 80%. The under-whisker is our measure of the portion of each equity product in the bottom 25% of ESG scores by region (see papers cited above). In Table 1, we exhibit some examples of these metrics with representative regional portfolios.

**Table 1: Examples of standard ESG metrics**

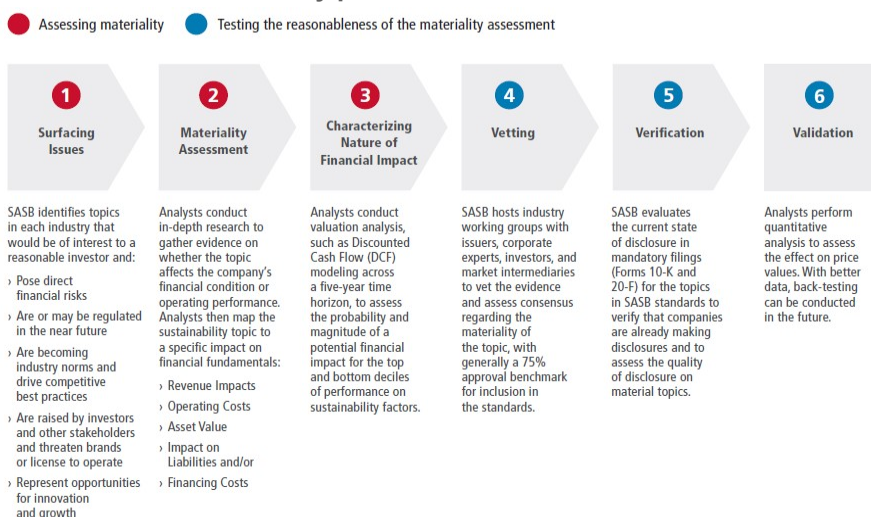
EXAMPLE PORTFOLIOS	STANDARD SCORES				UNDER-WHISKER			
	ESG	E	S	G	ESG	E	S	G
Emerging Markets	59.42	58.43	60.05	60.50	27.9	21.67	26.04	23.26
Global Equity	63.38	65.95	60.68	65.31	23.94	25.38	25.33	28.06
Global Infrastructure	64.92	58.45	66.18	73.72	15.20	22.08	13.61	21.54
Global Real Estate Secs	59.62	61.85	55.31	61.02	17.68	16.61	27.46	12.54
International Devd Mkts	67.60	68.94	66.27	68.54	17.26	16.88	16.12	19.18
Multifactor US Equity	60.06	61.55	57.24	63.20	15.55	14.11	16.63	29.89
Tax-Managed Intl Eq	64.81	65.13	63.73	66.77	21.29	22.03	21.50	23.05
Tax-Managed US LC	61.54	64.01	58.35	64.26	19.80	16.53	24.69	27.49
Tax-Managed US Mid & SC	52.14	45.39	51.14	63.17	28.39	26.25	28.49	22.15
US Core Equity	61.39	63.04	58.48	64.80	13.81	14.38	18.31	22.49
US Defensive Equity	67.75	69.02	64.15	72.71	12.44	12.13	16.14	24.86
US Dynamic Equity	61.56	63.19	58.70	64.87	17.46	18.69	16.57	27.63
US Large Cap Equity	61.37	62.71	58.72	64.69	17.29	19.06	19.15	26.58
US Mid Cap Equity	55.96	51.74	54.36	64.55	22.46	24.01	22.09	24.42
US Small Cap Equity	53.55	47.61	51.30	65.27	16.28	24.51	21.18	16.92
US Strategic Equity	61.86	63.96	59.02	64.56	14.94	14.27	17.78	24.67

Data as of September 30, 2017

**Russell Investments' Material ESG metric**

Russell Investments has developed and introduced a more meaningful use of our vendor data, called the Material ESG metric or score for companies. Steinbarth and Bennett (2017) lay out the methodology for calculating these metrics. We borrow the term “materiality” from the Sustainability Accounting Standards Board (SASB) and exhibit their process for assessing materiality in Exhibit 4.<sup>7</sup> We have taken the material characteristics identified by SASB as material to firm-profitability and mapped these them Sustainalytics disaggregated data<sup>8</sup>. With this more targeted collection of underlying data, we then apply an industry-specific weighting scheme to roll the data up to ESG scores. We will document any updates as our methodology for building the Material ESG metric evolves.

**Exhibit 4: SASB materiality process**



Source: 'SASB's Approach to Materiality for the Purpose of Standards Development' Staff Bulletin No. SB002-07062017. July 2017

We exhibit the Material ESG metrics for our collection of representative portfolios from various regions in Table 2 and compare them with the standard ESG metrics.

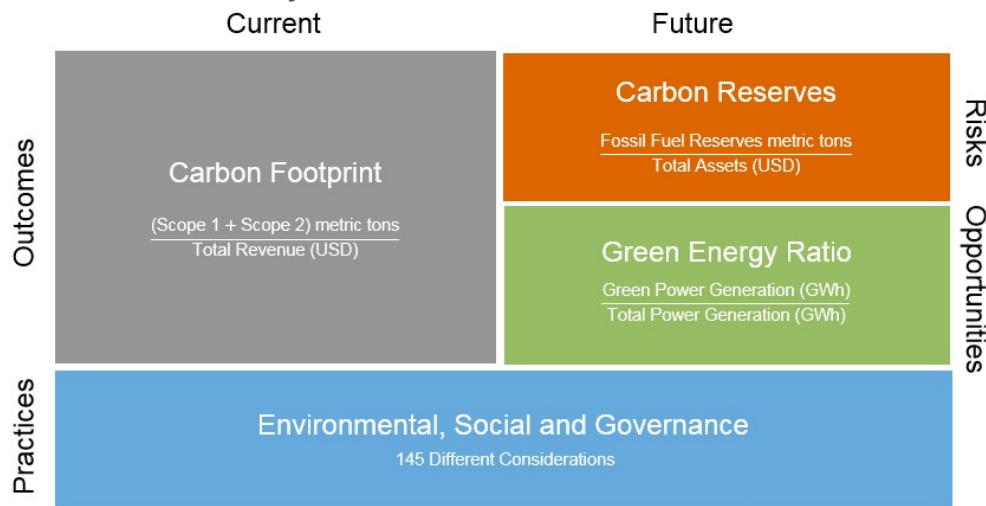
**Table 2: Examples of standard ESG and material ESG metrics**

EXAMPLE PORTFOLIOS	STANDARD SCORE	MATERIAL ESG
Emerging Markets	59.42	5.24
Global Equity	63.38	5.59
Global Infrastructure	64.92	4.80
Global Real Estate Secs	59.62	3.57
International Developed Markets	67.60	5.98
Multifactor US Equity	60.06	5.39
Tax-Managed Intl Equity	64.81	5.60
Tax-Managed US LC	61.54	5.83
Tax-Managed US Mid & SC	52.14	3.89
US Core Equity	61.39	5.49
US Defensive Equity	67.75	6.01
US Dynamic Equity	61.56	5.54
US Large Cap Equity	61.37	5.51
US Mid Cap Equity	55.96	4.10
US Small Cap Equity	53.55	3.74
US Strategic Equity	61.86	5.59
Correlation		0.78

Standard score data as of September 30, 2017;  
 Material ESG data as of June 30, 2017.

As Russell Investment refines our ESG integration, we expect these Material ESG scores to become more typical in our reporting, products and analysis—possibly replacing the standard ESG scores we currently use.

**Exhibit 5: Sustainability metrics in Decarbonisation 2.0**





---

## Climate change metrics—Relative carbon footprint, carbon reserves, green energy, and beyond

Russell Investments developed a methodology designed to lower carbon footprint and carbon reserves in passive, systematic or active portfolios in 2015 which we called 'Decarbonisation 1.0'. In 2016 we learned we could simultaneously boosting the portfolio's green energy and ESG metrics and we incorporated a broader sustainable development, including exposure to renewable sources of energy and responsible business practices in support of a more sustainable 'real economy'. Further, we seek to enable investors to meet goals of positively positioning their portfolios to the potential effects of the energy transition without changing their investment objectives. We detail this methodology in 'Decarbonisation 2.0' (Bennett and Steinbarth, 2017). In Exhibit 5 we depict the elements of our current Decarbonisation 2.0 strategy, which are described in more detail in the next sub-section.

### Defining climate change metrics

Our Decarbonisation 2.0 methodology hinges on four specific metrics. The Bennett and Steinbarth (2017) paper provides full detail and analysis. With our ESG metrics defines above, we share the other three metrics' definitions here.

#### Carbon footprint

We define relative carbon footprint as Scope 1 (direct) carbon emissions plus Scope 2 (electricity consumption) carbon emissions<sup>9</sup> measured in metric tons of carbon dioxide equivalent (CO<sub>2</sub>e), divided by company revenue (USD).<sup>10</sup>

$$\text{Relative Carbon Footprint} = \frac{\text{(Scope 1 + Scope 2) metric tons}}{\text{Total Revenue (USD)}}$$

#### Carbon reserves

We also source reserves data.<sup>11</sup> We refer to relative carbon reserves as the asset relative fossil fuel reserves of a company. Specifically, it is defined as:

$$\text{Relative Carbon Reserves} = \frac{\text{Fossil Fuel Reserves (m tonnes)}}{\text{Total Assets (USD)}}$$

Whereas carbon footprint data is (theoretically) applicable to the entire universe, reserves data only applies to the subset of companies holding reserves implying that reserves data has a theoretical upper limit well below 100% - and will be even more concentrated than carbon footprint in a few sectors.

#### Green Energy Score

The green energy metric is the percentage of total energy produced from renewable energy sources. Classification of different energy sources is defined in the table below. This score ranges from a maximum score of 1 (entirely green sourced energy) to a minimum of 0 (entirely sourced from brown or grey energy), as defined in the table below.

$$\text{Green Energy Score} = \frac{\text{Green Power Generation (GWh)}}{\text{Total Power Generation (GWh)}}$$

In our process we calculate the green energy score for all applicable companies in the universe and calculate an aggregate score for the universe.

We report these metrics monthly for all equity and fixed income funds. As well, we produce these metrics quarterly for all equity products in our active manager universes. This decarbonisation methodology is currently implemented in passive, systematic and active equity fund offerings and can be implemented for fixed income portfolios in a more limited way.

Our implementation methodology for decarbonisation is similar to our implementation of strategic and dynamic tilts in our portfolios. We can implement in active portfolios via manager selection, tailored manager instructions, portfolio emulation, or a completion portfolio.

Finally, we note that our 'Decarbonisation 2.0' will soon be replaced by its next iteration, with updated metrics, including a shift from the standard ESG scores to our Material ESG scores.

#### Using ranks and metrics in practice

In the sections above, we have detailed both qualitative evaluation of active managers' ESG integration through our disaggregated ranks and quantitative metrics that we report by product and incorporate into Decarbonisation 2.0. As well, we have indicated our starting point in integrating ESG is our disaggregated ranks and our observations on how well active managers incorporate the return and risk potential of ESG factors into their expectations of security returns and how they use that potential in constructing their portfolios. This "ranking" of qualitative disaggregated ranks over quantitative metrics is directly tied to the beliefs we shared at the beginning of this note.

A particular point in ranking active managers on ESG integration is that we are not specifically equating integration with positive tilt. Specifically, we are not looking for active managers to favor securities with better ESG characteristics or metrics, but rather to understand well how those ESG characteristics are related to the return expectations of securities. Indeed, active managers may assess these characteristics and decide that the security is underpriced, or even overpriced. If securities are systematically overpriced, we may find that managers with high ESG ranks are actually betting against ESG—such an outcome is not necessarily our expectation, but certainly within reason based on our ranking criteria.

With this in mind, we analysed of how similar, or dissimilar, ranks are from metrics. Focusing on the standard ESG metrics, we present correlations of ranks to metrics in Tables 6 and 7 below.

**Table 3: Spearman correlations of ESG disaggregated ranks to ESG metric for equity universes**

	ESG ACTIVE SCORE	ESG QUINTILE
Asia Pac x Japan	0.65*	0.66*
US Large Cap	0.10	0.11
Global	0.03	0.03
Global x US	-0.11	-0.14
Emerging Markets	0.10	0.07
Europe	-0.18	-0.18
Europe x UK	-0.13	-0.04
Japan	-0.03	-0.05
UK	0.03	-0.03
All universes combined	0.02	0.04

\*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%

Note that for equity universes, only the US large cap equity universe exhibits statistically significant Spearman correlations between ranks and metrics, and rather low correlations even then. What this tells us is that metrics are giving us different information than what we learn from talking with active managers. More specifically, we can infer that higher ESG scores are not indicative of active managers.

**Table 4: Spearman correlations of ESG disaggregated ranks to ESG metric for fixed income universes**

	ESG DISAGGREGATED RANK
Corporate ESG Scores	0.44***
Corporate E Scores	0.33***
Corporate S Scores	0.46***
Corporate G Scores	0.27**
Government ESG Scores	0.49***
Government E Scores	0.48***
Government S Scores	0.52***
Government G Scores	0.19

\*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%

For Fixed Income funds, we observe that ESG scores (metrics) are moderately correlated to ESG ranks and highly significant. Therefore, it is possible that metrics pick-up something different. Our thinking on this difference is that metrics are typically backward looking while our qualitative rankings are more forward looking.

It is fair to ask why ESG scores are different from ESG ranks and also why ESG scores are relevant when they do not coincide with active managers who are taking ESG factors into consideration in their research and portfolios. We have a few comments to make on these points:

1. We consider ESG scores to be backward-looking while ESG ranks are forward looking.
2. Remember that active managers are incorporating ESG information to help them beat a benchmark. If an active manager believes ESG factors are underpriced and anticipate the market will correct the price, then ESG scores may be consistent with ESG ranks. However, there may exist many securities where ESG is, in fact, underpriced. In those cases, the manager might overweight those securities anticipating that the market will correct the overpricing. Ultimately, active managers are tasked with understanding and acting on their expectations of how security prices will respond to all factors and may not be intent upon tilting toward ESG in all situations.
3. Not all the information rolling up to an ESG score will be relevant to the financials of the firm. Because of this, we have built out our Material ESG scores in addition to the standard ESG scores we get from our data provider.

**Table 5: Spearman correlations of ESG disaggregated ranks to Material ESG Score for equity universes**

	MATERIAL ESG SCORE
Asia Pac x Japan	0.27
US Large Cap	0.02
Global	0.00
Global x US	-0.11
Emerging Markets	0.00
Europe	-0.23
Europe x UK	-0.05
Japan	-0.22
UK	0.39*
All universes combined	-0.07

\*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%

**Table 6: Spearman correlations of ESG disaggregated ranks to Material ESG Score for fixed income universes**

	ESG DISAGGREGATED RANK
Corporate Material ESG Score	0.10

\*\*\* significant at 1%, \*\* significant at 5%, \* significant at 10%

As shown by Tables 5 and 6, the material ESG scores are not significantly correlated with the ESG manager ranks either for the equity universes or for corporate bonds in our fixed-income funds.

#### “Quant-amental” ESG

Russell Investments incorporates the wisdom of active managers as they incorporate ESG factors in their portfolios, because they add value for their investors. We do this while tailoring portfolios with factor exposures that include the following to help enhance portfolios, such that they are designed to achieve financial goals while meeting client preferences:

- our favored strategic factor portfolios
- dynamic tilts to capture market movements
- our Decarbonisation 2.0 technology

Ultimately, our direct investing platform and our proprietary methodologies for integrating exposures into our active portfolios giving us quantitative precision along with fundamental insights from our most skilled active managers—we call this the “quant-amental” approach to portfolio design, construction and management.

To complete our discussion of capabilities in regard to incorporating ESG into our portfolios, we review our active ownership beliefs and practices in the next subsection.

---

### Belief 3: Embedding ESG considerations into a firm's culture and processes improves the likelihood of prolonged and successful investing<sup>12</sup>

Russell Investments has decades of experience researching investment managers. Therefore, it should not be surprising that the impact of ESG factors extending to the financial success of companies (in general) can also impact the success of investment firms.

In our assessment of an investment firm's Organisational Environment, we are looking for organisational dynamics, cultural values, and actions, that will support a strong investment process and lead to superior investment results. We believe organisations that do the following are more likely to achieve prolonged investment success:

- attract and retain the right people
- offer a supporting environment for their investment teams
- fair remunerations and incentives
- bestow a level of autonomy to make good investment decisions
- provide adequate resources to do a good job,

Likewise, a firm's incorporation of ESG factors within its organisation impacts its own organisational outcomes. For example, successful investment firms tend to have strong governance to protect the interests of the firm and its employees, as well as dedication to clients' best interests. They are likely to have more transparency and accountability for decision making and outcomes. They are more likely to place integrity at the front and center.

In support of our belief regarding a firm's culture and process, we have the diversity and inclusion disaggregated rank as part of our assessment of an organisational structure. While our belief about culture and processes is not fully expressed with this disaggregated rank, it is an important expression of it.

#### Diversity and inclusion disaggregated rank<sup>13</sup>

In addition to our sub-rank to Research regarding ESG integration, we also have a sub-rank to Investment Staff. Russell Investments believes that investment teams assessed by our manager research analysts to have strong diversity and inclusion will have more stable team structures and better decision-making outcomes.

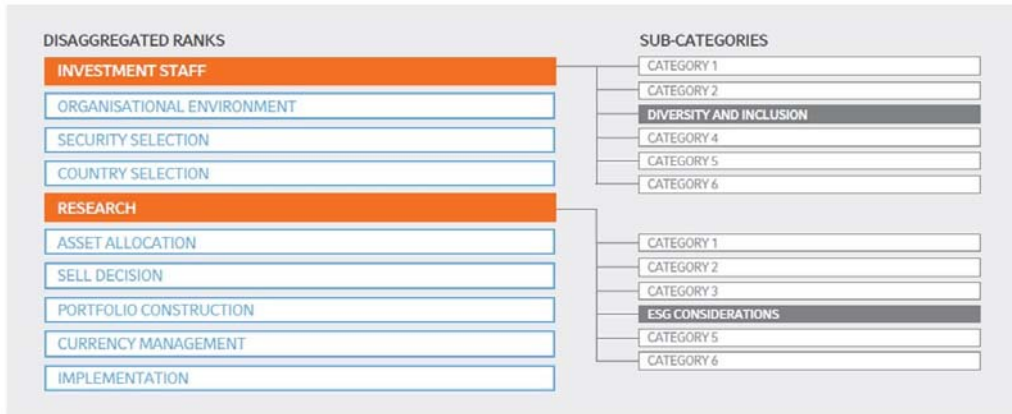
Several studies have shown that diverse and inclusive teams are more successful than non-diverse teams. While these studies do not point specifically to the impact on investment performance, multiple studies have established benefits that can include better task performance by teams and greater organisational stability. These benefits may stem from a tendency of diverse teams to more thoroughly consider risks, consistently reexamine facts and remain objective. Some examples of benefits and studies of interest are as follows:

1. Teams from diverse backgrounds encourage greater accuracy and sharper "cognitive resources" in an examination of facts. Harvard Business Review has cited several studies in an article entitled "Why Diverse Teams are Smarter".<sup>14</sup>
2. Other studies have demonstrated the value of diverse viewpoints to performance. For example, one study found that "informational diversity" – defined as the differences in knowledge bases and perspectives arising from education, experience, and expertise -- is positively related to group performance.<sup>15</sup> Equally important, the study also found that lack of alignment on tasks (i.e. processes) can negate that benefit, so teams must also be inclusive and not just pay "lip service" to diversity.
3. Diverse organisations can be financially stronger. A McKinsey study on diversity found that "companies in the top quartile for racial and ethnic diversity are 35 percent more likely to have financial returns above their respective national industry medians."<sup>16</sup> Similarly, studies suggest that greater female representation in corporate leadership is associated with higher firm profitability. For example in 2016, the Credit Suisse Research Institute wrote that it found clear evidence that "companies where women made up at least 15% of senior managers had more than 50% higher profitability than those where female representation was less than 10%."<sup>17</sup>

4. Diverse and inclusive organisations have an edge in attracting and retaining top talent. J.P. Morgan's CEO Jamie Dimon has been a vocal proponent of that viewpoint.<sup>18</sup>
5. Finally, women may trade differently than men. For example, several popularised articles argue women suffer less from overconfidence. Such articles cite the Barber & Odean (2001)<sup>19</sup> brokerage data study that found men trade 45% more than women, indicating that women tend to hold on to their investment positions longer.

In Exhibit 6 below, we illustrate how both the ESG and the D&I ranks place in our ranking system.

#### Exhibit 6: Including ESG and D&I in Russell Investments' manager ranks



Source: Russell Investments, April 2018.

#### Industry collaboration and support

Also, consistent with Belief 3 is our active role in sustainability and responsible investing through memberships with organisations promoting the inclusion of sustainability in investment processes. As of the writing of this paper, Russell Investments supports the following organisations:

- Principles for Responsible Investments (PRI)
- UK stewardship
- Japan stewardship
- CDP Climate Change
- Global Real Estate Sustainability Benchmark
- Institutional Investors Group on Climate Change (IIGCC)
- International Corporate Governance Network (ICGN)
- Investor Network on Climate Risk (INCR)
- Shareholder Association for Research and Education
- Sustainable Accounting Standards Board

---

## Belief 4: Active ownership of securities is an effective tool for improving investment outcomes.<sup>20</sup>

Russell Investments believes that being an active owner is an important component of its investment responsibilities. Through active ownership, one can better understand both the risk factors and potential return associated with ownership of a company. Good stewardship practices are best implemented not only through Proxy Voting activities, but by being an engaged shareholder. Russell Investments' approach to engagement spans a full range of responsible investing issues, with the underlying objective to protect and/or enhance shareholder value.

Due to our multi-faceted approach to investment management, Russell Investments is uniquely positioned to utilise multiple levels of corporate engagement. This includes engaging with the sub-advisors we hire in our portfolios and working with our proxy vendors. It also requires working with other asset owners to obtain multiple opinions on a given shareholder issue, in addition to engaging directly with management teams of companies we hold in our portfolios.

Whether through the proxy voting process, engaging directly with companies, or collaborating with other industry leaders, Russell Investments is actively working to increase shareholder value as we support and foster positive change.

### Proxy voting

Russell Investments has built a robust proxy voting and governance process over the last 30 years geared toward forceful engagement on issues related to environmental, social, and governance factors. A key element of our proxy voting process is the involvement of a broad set of investment professionals at Russell Investments, many directly involved in the portfolio management functions, in order to create and maintain balance as it relates to weighing the risks and rewards of investments, including proxy voting on responsibility topics. The Proxy Committee and Proxy Voting Guideline Subcommittee meet regularly to help ensure that our Proxy Voting Guidelines are aligned with current best practices regarding voting on ESG issues. The professionals who make up these committees not only stay on top of current issues and topics that are important to asset owners today, but work to analyse the risk and reward merits of these topics.

### Engagement

In addition to proxy voting, being an engaged shareholder is an important component of Russell Investments' Active Ownership responsibilities. Russell Investments is uniquely positioned to utilise multiple levels of corporate engagement. This includes engaging with the investment managers that sub-advise our portfolios to obtain multiple opinions on a security, as well as engaging directly with management teams of companies we own as securities in Russell Investments funds. Our sub-advisors have, in many cases, intimate knowledge of the companies that they invest in and multiple direct engagements with these companies on a host of issues, ESG included. They actively pursue change that generates value creation and/or risk mitigation.

In addition to leveraging the manager relationships, Russell Investments directly engages with companies on a host of topics via our Corporate Engagement Committee. While this has been an ongoing component of Russell Investments' active ownership activity, as part of becoming a UNPRI signatory, Russell Investments has built a more explicit and organised engagement effort. As well, we are actively considering how we can incorporate the United Nations Sustainable Development Goals into our engagement practices. To this end, we have defined our specific engagement focus areas for 2018: Compensation, Accountability, Diversity, Sustainability and Shareholder Outreach (shown in Exhibit 6).<sup>21</sup>

**Exhibit 7: Graphic of our engagement focus areas**

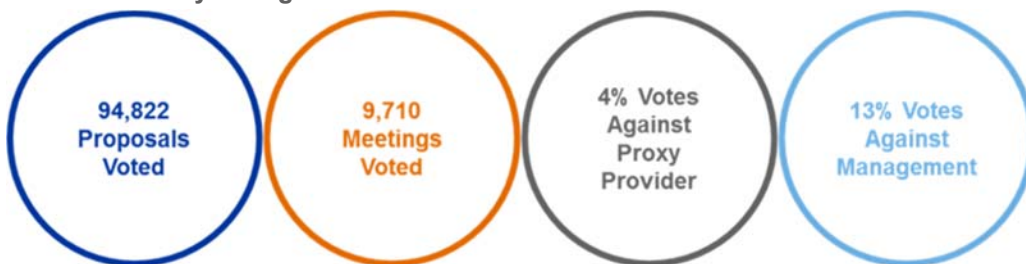


Russell Investments is committed to its active ownership responsibilities and views it as a primary component of being a responsible investor.

**Active ownership by the numbers**

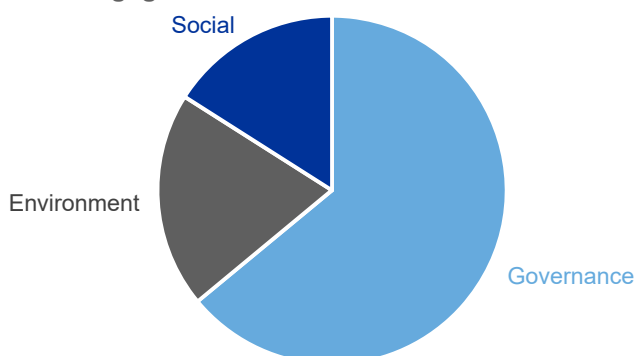
In Exhibits 8 and 9, we show our 2017 statistics for proxy voting and engagement.

**Exhibit 8: Proxy voting statistics 2017**



Data as of December 31, 2017

**Exhibit 9: Engagement statistics 2017**



Data as of December 31, 2017



## Demonstrating our capabilities

In this paper, we have focused on how our responsible investing practice draws from our beliefs. In the same way, our responsible investing pillars draw from our beliefs. We tie these concepts together in Exhibit 10.

### Exhibit 10: Policy, beliefs, practices and accountable individuals

<b>Policy</b>	Russell Investments' policy is to incorporate responsible investing in our investment manager evaluation process, our portfolio management, our advisory services, and through implementing proprietary solutions as desired by clients.			
<b>Beliefs</b>	ESG factors impact security prices. These factors can vary by company, industry, and region through time.	A deep understanding of how ESG factors impact security prices is value-adding to a skillful investment process.	Embedding ESG into a firm's culture and processes improves the likelihood of prolonged and successful investing.	Active ownership of securities is an effective tool for improving investment outcomes.
<b>Practices</b>	Portfolio management process	Insights & research	Culture & processes	Stewardship & Active ownership
	<ul style="list-style-type: none"> <li>› <b>Manager ranks:</b> on our sub-advisors on ESG integration</li> <li>› <b>Surveys:</b> sub-advisors to get a pulse on the market</li> <li>› <b>Manager selection:</b> our portfolio managers select products with knowledge of ESG ranks and metrics</li> </ul>	<ul style="list-style-type: none"> <li>› <b>Products:</b> ESG products and product enhancements</li> <li>› <b>Research:</b> research metrics &amp; universes</li> <li>› <b>Reporting:</b> report our sub-advisor ranks and all relevant metrics for listed assets (including bonds)</li> </ul>	<ul style="list-style-type: none"> <li>› <b>Corporate ESG:</b> global teams integrate ESG across organisation</li> <li>› <b>Sustainable work practices:</b> keep our internal practices in check</li> <li>› <b>Diversity and inclusion (D&amp;I):</b> support associates across the globe</li> <li>› <b>Industry collaboration</b></li> </ul>	<ul style="list-style-type: none"> <li>› <b>Proxy voting:</b> vote proxies and incorporate ESG into our policy</li> <li>› <b>Engagement:</b> join other shareholders to influence the companies we own</li> <li>› <b>Sustainable development goals (SDG):</b> considering SDGs as part of our active ownership practices</li> </ul>
<b>Accountable individuals</b>	4 associates	2 associates	3 associates	3 associates

## Design, Construct, Manage in the context of responsible investing

As noted above, Russell Investments can integrate responsible investing into the design, construction and management of our portfolios. We can do this due to our broad suite of capabilities. In this section, we review how responsible investing integrates in each of these steps. To guide us as we design, construct and manage a portfolio, we set goals with the preferences and circumstances of our investors in mind. Clearly, different client segments in different regions across the globe may have different preferences and circumstances regarding responsible investing.

Responsible investing is gaining momentum across regions, both as a collection of investment factors and as a strong preference for many of our clients. These clients are concerned with the circumstances of environmental degradation including global warming, social injustice and the political upheaval it causes, and the governance issues that contribute to these and other issues. Therefore, we introduce a variety of levers for building responsibility into our portfolio process.

---

Because investment outcomes are the primary goal of Russell Investments portfolios, our first step would be to establish the return, risk, liquidity and cash flow profile we seek to achieve. In the context of these investment outcomes, we can consider the suite of options we have for building responsible investing goals into the portfolio that may include:

1. Further emphasising active managers with high ESG ranks
2. Targeting metrics such as above median ESG scores, lower relative carbon footprints and carbon reserves, higher green energy
3. Achieving impact goals through our investing choices and our active ownership.

Across our design, construct, and manage decision levels, we have proprietary internal and client-ready external reporting capabilities. We seek to provide our portfolio managers with the information they need to achieve clients' responsible investing goals.

### Design—desired outcomes and asset allocation decisions

In the design of portfolios, we focus on our strategic asset allocation and the latitude we give our portfolio managers to diverge from that strategic asset allocation. To integrate responsible investing into our portfolios, we have a variety of allocation and latitude decisions we can influence.

Consider the range of potential decisions by asset class:

**Equities** – In our equity portfolios, we might be allocating to selected larger cap strategies, regions with responsible investing more integrated into the culture such as Europe, allocating to thematic funds with strong investment propositions, scaling back on emerging markets and selected small cap strategies.

**Fixed Income** – In our fixed income portfolios we might be allocating to higher quality bonds, diversifying our credit-capture strategy, focusing on developed markets FI, credit through green bonds, scaling back on HY bonds and EMD.

**Alternatives** – We have a number of levers to pull in alternatives such as allocating to thematic listed infrastructure and REITs, reducing exposures to energy commodities, adding impact investing to private asset allocation.

**Multi-asset** – In addition to adjustments within each asset class, multi-asset portfolios may include adjustments across asset classes to ensure that the return and risk profile of the investment solution matches the goals of the fund. Some typical adjustments might include a tilt toward equities to accommodate for higher quality fixed income. To diversify equity risk, private impact-oriented assets may be attractive as well if investors can use low liquidity assets.

In making these allocation adjustments, capturing investment skill, delivering strong investment returns and carefully balancing risks remain at the forefront of our process.

### Construct—manager selection and positioning, 'Decarbonisation 2.0', incorporating metrics and reporting

Reviewing and selecting active managers are core competencies at Russell Investments—our extensive use of active managers is based on our Strategic Belief in active manager skill. This belief is both that we believe there are active managers with skill and, also, that we can identify those managers with skill.

Our belief in active manager skill extends to our Responsible Investing Beliefs. Indeed, our first two beliefs noted in the introduction reflect the importance of skill in incorporating ESG into a portfolio:

1. ESG factors impact security prices. These factors can vary by company, industry, and region and their importance can vary through time.
2. A deep understanding of how ESG factors impact security prices is value-adding to a skillful investment process.

---

*Reviewing and selecting active managers are core competencies at Russell Investments. To that end, our preference is to construct portfolios with active managers to capture value-add from ESG factors and manage ESG-related risks.*

---

To that end, our preference is to construct portfolios with active managers to capture value-add from ESG factors and manage ESG-related risks. Across asset classes we identify the products with high ESG ranks, and keep our portfolio managers apprised of active manager ESG ranks as a critical first step. After assessing active managers, factors, overlays and other return sources for our funds, we select what we deem to be the most appropriate products for the investment goals of the portfolio. We can size allocations to active managers and other products with both their investment capabilities and ESG capabilities in mind. Finally, we can specifically include a directly invested sleeve in each of our broad asset classes to target specific ESG and carbon metrics in the management of the portfolio.

There will be times when active managers are not part of the option set, particularly where fee pressures are intense. Where selecting active managers is not possible, we have our suite of metrics (as noted in previous sections) to guide portfolios.

**Equities** – We have a robust list of hire-ranked managers from our universes that includes many with strong ESG ranks of 4 and 5. We also have thematic managers deployed in specialty products that will focus on environmental issues, impact investing, or other related topics. Where we can emulate equity managers, we are free to apply our Decarbonisation 2.0 technology to these active manager portfolios directly. Where we cannot emulate, we can include a Decarbonisation 2.0 allocation along with other factor, sector and country adjustments we would typically make to a portfolio. In those cases where active managers are not an option, we employ our Decarbonisation 2.0 technology for factor-based or index-based portfolios. We are constantly updating our Decarbonisation technology with new metrics such as the Material ESG scores.

**Fixed Income** – In the case of fixed income, we also have a robust list of hire-ranked managers that includes many with strong ESG ranks of 4 and 5. As well, we work with select managers to create strong portfolios with enhanced responsible investing characteristics according to the preferences of investors. We are building out our list of thematic (typically green bond) funds.

**Alternatives** – In the case of alternatives, we have ESG ranks on many of our listed options including listed real estate, listed infrastructure and hedge funds. For private assets, we have a base of impact funds that we use for bespoke mandates.

**Multi-asset** – At the multi-asset level, we can combine active manager selection and allocation, emulation, overlays, and specialty sleeves to continue responsible investing practices from the design stage into the construct stage of our portfolios.

### Manage—emulation, overlays and active ownership

As we manage our portfolios through market cycles, our choices move from strategic to dynamic. Our strategists and portfolio managers monitor macro events across the globe, identifying opportunities to add value to our portfolios. Through our broad range of capabilities, we maximise our use of skilled active managers that build responsible investing into their portfolios. Moreover, we constantly monitor global and regional macro events to keep portfolios current in their dynamic positions through overlays and direct investing.

Where emulation is not possible, we may use a directly invested portfolio allocation to tailor portfolios with a completion that will enable the strategic factor portfolio, dynamic tilting, and our Decarbonisation 2.0 technology.

**Equities** – In our equity portfolios, we can most efficiently manage portfolio exposures and tilts while including our Decarbonisation 2.0 technology. Our technology for optimising skilled security selection from our active managers, portfolio exposures, active tilts and Decarbonisation is called Enhanced Portfolio Implementation (EPI). We use EPI in the equity allocation of many of our portfolios equity and multi-asset portfolios.

**Fixed Income** – In our fixed income portfolios, we constantly monitor our active manager positions and complement their portfolios with our direct investing capabilities to tailor exposures to ever-changing markets and macro events, including events related to climate change, governance issues and political unrest.

**Alternatives** – In our listed alternatives portfolios, we employ overlays and direct investing to achieve desired dynamic tilts. In our private assets, we can work with our funds to keep portfolios on target for responsible investing goals.

---

**Multi-asset** – At the multi-asset level, we can monitor daily how our investments are positioned relative to responsible investing goals and we have enhanced reporting across asset classes to keep our multi-asset portfolio managers apprised of ranks, metrics, and active manager ranks.

**Active ownership** – A key component of our management strategy is to increase the value-added of our portfolios through active ownership. We believe that active ownership is both value-adding and our primary tool for impacting the corporations we own on behalf of our clients.

**Reporting** – As we continue to build and enhance our responsible investing practices, we also continually update our reporting capabilities. These reporting capabilities include proprietary information for our portfolio managers on the vast array of details related to responsible investing ranks, metrics, and engagements. This is in addition to client-ready reporting that may be tailored to specific bespoke products or produced across our fund complexes.

### From policy and beliefs to practice—a summary

In the coming years, Responsible Investing will just be how we all invest. Understanding how Environment, Social and Governance factors impact security prices and portfolio structure will be integrated into the entire industry. As we move toward this inevitable reality, Russell Investments is developing best practices for our process, our portfolios and our clients. These practices incorporate decisions from asset and manager selection, from direct investing to reporting formats, from asset allocations to dynamic tilts, from our internal policies and practices to industry collaboration. In this note, we have reviewed the many ways we are developing this practice as they are drawn specifically from our responsible investing beliefs, just as our responsible investing policy was developed.

**Belief 1: ESG factors impact security prices. These factors can vary by company, industry, and region and their importance can vary through time.**

**Belief 2: A deep understanding of how ESG factors impact security prices is value-adding to a skillful investment process.**

These two beliefs are the foundation of our responsible investing practice. They have led us to incorporate ESG into our active manager evaluation, the development of proprietary metrics and direct investing capabilities. This development includes the Decarbonisation 2.0 technology that can be applied to index-driven, systematic and active portfolios, and the reporting for our portfolio managers and our clients.

**Belief 3: Embedding ESG considerations into a firm's culture and processes improves the likelihood of prolonged and successful investing.**

This belief drives us to develop corporate practices internally to engage associates and build community, evaluate active managers' commitment to diversity and inclusion, and participate in several industry groups supporting sustainability and responsible investing.

**Belief 4: Active ownership of securities is an effective tool for improving investment outcomes.**

This belief supports our long history of proxy voting and shareholder engagement. As we continually improve all our practices, we have developed specific focus areas for engaging with the companies we own that targets E, S, and G with the explicit goal of improving outcomes for our investors.

As we further develop our responsible investing practice, we endeavor to lead the investment community in integrating investing best practices with responsible investing best practices. Ultimately, we expect these two to be one and the same.

- 
- <sup>1</sup> Forrest, Kuharic and Trecker (2016). *Responsible Investment Beliefs and Capabilities*, Russell Investments.
- <sup>2</sup> Jeremy Siegel (1994, 1998, 2002, 2008, 2014). *Stocks for the Long Run*, McGraw-Hill.
- <sup>3</sup> Larry Fink (2018) <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>
- <sup>4</sup> In 2014, for a sixth year in a row, Russell Investments was voted among the top two for having the best manager due diligence practices by respondents in a 2014 *FundFire* survey of nearly 100 consultant relations professionals. Russell Investments was rated as having the most rigorous due diligence process for evaluating a product's suitability in a client portfolio. In five of those years, we were ranked #1.
- <sup>5</sup> As at the writing of this paper on 16 April 2018. This count relates to our researched universes of active managers which extends beyond the subadvisors we use in our funds.
- <sup>6</sup> Again, note that this is this count relates to our researched universes of active managers which extends beyond the subadvisors we use in our funds.
- <sup>7</sup> This first step in our process, mapping sustainability subcategories to SASB materiality closely follows the process outlined in Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate Sustainability: First evidence on Materiality. *The Accounting Review*, Vol 91 No 6, 1697-1724.
- <sup>8</sup> More details on the mapping are available in the appendix.
- <sup>9</sup> The complete carbon emissions of a company's value chain, referred to as Scope 3, is currently not included in our calculation. This is primarily due to our lower confidence in Scope 3 data availability and reliability due to lower levels of company reporting and higher levels of estimation. Scope 3 emissions are also inherently more complicated to estimate because of the need first to identify and map a company's complete value chain. As data availability and robustness improves for measuring Scope 3 carbon emissions, we will continue to evaluate incorporating this data into our process. In the meantime, we take a targeted approach to addressing specific points in the value chain where carbon emissions are particularly substantial. As explained in further detail in the sections that follow, we incorporate renewable energy production, coal, and other fossil fuel reserves exposure specifically because these are significant sources of complete value chain emissions for not only the companies impacted by these metrics, but indirectly for the entire security universe. Our research agenda includes continually evaluating and expanding this targeted approach. For example, in 2017 we will research vehicle emission efficiency, another important source of value chain emissions. We believe this methodology addresses material sector-specific issues that have an impact on aggregated value chain emissions while at the same time maintains a high standard for data quality.
- <sup>10</sup> The relative carbon footprint, reserves and green energy score formulas presented in this paper refer to security-level characteristics. To generate a portfolio-level score we take the sum product of portfolio weight and security-level scores divided by coverage.
- <sup>11</sup> The carbon data used in this study is from Trucost. <https://www.trucost.com/>
- <sup>12</sup> Borrowed from Forrest, Kuharic and Trecker (2016).
- <sup>13</sup> Thanks to Kris Nelson for authoring this sub-section.
- <sup>14</sup> Rock, D. and Grant, H., (November 4, 2016). *Why Diverse Teams are Smarter*. Harvard Business Review. Retrieved from <https://hbr.org/2016/11/why-diverse-teams-are-smarter>.
- <sup>15</sup> Jehn, K. A., Northcraft, G. B., and Neale, M. A. (1999) *Why Differences Make a Difference: A Field Study of Diversity, Conflict, and Performance in Workgroups*. *Administrative Science Quarterly*, Vol. 44, No. 4. Retrieved from <http://web.mit.edu/cortiz/www/Diversity/PDFs/Jehn%20et%20al%201999.pdf>.
- <sup>16</sup> Hunt, V., Layton, D., and Prince, S. (January 2015). *Why Diversity Matters*. McKinsey & Company. Retrieved from <http://www.mckinsey.com/business-functions/organization/our-insights/why-diversitymatters>.
- <sup>17</sup> Dawson, J., Kersley, R., and Natella, S. (September 2016). *The CS Gender 3000: The Reward for Change*. Credit Suisse Research Institute. Retrieved from <http://publications.creditsuisse.com/tasks/render/file/index.cfm?fileid=5A7755E1-EFDD-1973-A0B5C54AFF3FB0AE>.
- <sup>18</sup> Weber, L. and Ensign, R. L. (September 27, 2016). *Promoting Women is Crucial*. The Wall Street Journal. Retrieved from <https://www.wsj.com/articles/promoting-women-is-crucial-1475030918>.
- <sup>19</sup> Barber, B. M. and Odean, T. (February 2001). *Boys Will Be Boys: Gender, Overconfidence, And Common Stock Investment*. The Quarterly Journal of Economics.
- <sup>20</sup> Thanks to Rob Kuharic and Sarah Alvarez for authoring this section.
- <sup>21</sup> See Kuharic, Rob, Will Pearce, Heather McClellan, Sarah Alvarez, (February 2018) *Enhancing shareholder value through active ownership*, Russell Investments.

# Appendix: SASB Materiality Map Sample



## SASB Materiality Map™

SASB's Materiality Map identifies likely material sustainability issues on an industry-by-industry basis. This map serves as a snapshot of likely material sustainability issues at the time of our initial analysis and may be subject to change as issues and industries are ever-evolving. Click on a highlighted cell at the sector-level and then on any highlighted cell at the industry-level to see suggested accounting metrics and additional information for each issue.

### Sector Level Map

- Issue is likely to be material for more than 50% of industries in sector
- Issue is likely to be material for less than 50% of industries in sector
- Issue is not likely to be material for any of the industries in sector

### Industry Level Map

- Not likely a material issue for companies in the industry
- Likely a material issue for companies in the industry

ISSUES	Health Care						Financials	Technology and Communications	Non-Renewable Resources	Transportation	Services	Responsible Transfo
	Biotechnology	Pharmaceuticals	Medical Equipment and Supplies	Health Care Delivery	Health Care Distribution	Managed Care	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand	Click to
<b>Environment</b>												
GHG emissions												
Air quality												
Energy management												
Fuel management												
Water and wastewater management												
Waste and hazardous materials management												
Biodiversity impacts												
<b>Social Capital</b>												
Human rights and community relations												
Access and affordability												
Customer welfare												
Data security and customer privacy												
Fair disclosure and labeling												
Fair marketing and advertising												
<b>Human Capital</b>												
Labor relations												
Fair labor practices												
Employee health, safety and wellbeing												
Diversity and inclusion												
Compensation and benefits												
Recruitment, development and retention												
<b>Business Model and Innovation</b>												
Lifecycle impacts of products and services												
Environmental, social impacts on assets & operations												
Product packaging												
Product quality and safety												
<b>Leadership and Governance</b>												
Systemic risk management												
Accident and safety management												
Business ethics and transparency of payments												
Competitive behavior												
Regulatory capture and political influence												
Materials sourcing												
Supply chain management												

© 2017 SASB™ Materiality Map™

---

## REFERENCES

- Barber, B. M. and Odean, T. (February 2001). *Boys Will Be Boys: Gender, Overconfidence, And Common Stock Investment*. The Quarterly Journal of Economics.
- Bennett, Scott and Emily Steinbarth (2017). *Decarbonisation 2.0: Russell Investments' sustainable investing solution for the energy transition*. Russell Investments.
- Dawson, J., Kersley, R., and Natella, S. (September 2016). *The CS Gender 3000: The Reward for Change*. Credit Suisse Research Institute. Retrieved from <http://publications.creditsuisse.com/tasks/render/file/index.cfm?fileid=5A7755E1-EFDD-1973-A0B5C54AFF3FB0AE>.
- Kuharic, Rob, Will Pearce, Heather McClellan, Sarah Alvarez, (February 2018) *Enhancing shareholder value through active ownership*. Russell Investments.
- Forrest, John, Rob Kuharic, and Sherrie Trecker (2016). *Responsible Investment Beliefs and Capabilities*. Russell Investments.
- Hunt, V., Layton, D., and Prince, S. (January 2015). *Why Diversity Matters*. McKinsey & Company. Retrieved from <http://www.mckinsey.com/business-functions/organisation/our-insights/why-diversitymatters>.
- Jehn, K. A., Northcraft, G. B., and Neale, M. A. (1999). *Why Differences Make a Difference: A Field Study of Diversity, Conflict, and Performance in Workgroups*. Administrative Science Quarterly, Vol. 44, No. 4. Retrieved from <http://web.mit.edu/cortiz/www/Diversity/PDFs/Jehn%20et%20al%201999.pdf>.
- Khan, M., Serafeim, G., & Yoon, A. (2016). *Corporate Sustainability: First evidence on Materiality*. The Accounting Review, Vol 91 No 6, 1697-1724.
- Rock, D. and Grant, H., (November 4, 2016). *Why Diverse Teams are Smarter*. Harvard Business Review. Retrieved from <https://hbr.org/2016/11/why-diverse-teams-are-smarter>.
- Ross, Leola (2017). *ESG and Carbon Scoring for Fixed Income*. Russell Investments.
- Ross, Leola, Peiyuan Song, and Will Pearce (2014). *Are ESG tilts consistent with value creation?* Russell Investments.
- Ross, Leola, Peiyuan Song, Will Pearce, and Veronique Botton (2015). *Are ESG tilts consistent with value creation in Europe*. Russell Investments.
- Ross, Leola, Peiyuan Song, and Artemiza Woodgate (2015). *ESG and the under-whisker*. Russell Investments.
- Ross, Leola and Ly Tran (2015). *ESG Exposures by Sector and Factor*. Russell Investments.
- Ross, Leola and Shuang Xu (2017). *Measuring carbon footprint in equity benchmarks and universes*. Russell Investments.
- Steinbarth, Emily and Scott Bennett (2017). *Materiality matters: Introducing a new ESG metric*. Russell Investments.
- Weber, L. and Ensign, R. L. (September 27, 2016). *Promoting Women is Crucial*. The Wall Street Journal. Retrieved from <https://www.wsj.com/articles/promoting-women-is-crucial-1475030918>.

---

## ABOUT RUSSELL INVESTMENTS

Russell Investments is a global asset manager and one of only a few firms that offers actively managed multi-asset portfolios and services, which include advice, investments and implementation. Russell Investments stands with institutional investors, financial advisors and individuals working with their advisors—using our core capabilities that extend across capital market insights, manager research, asset allocation, portfolio implementation and factor exposures to help investors achieve their desired investment outcomes.

### FOR MORE INFORMATION:

Call Russell Investments at **09 357 6633**

## Important information

---

The information contained in this publication was prepared by Russell Investment Group Limited on the basis of information available at the time of preparation. This publication provides general information only and should not be relied upon in making an investment decision. Before acting on any information, you should consider the appropriateness of the information provided and the nature of the relevant Russell Investments' fund having regard to your objectives, financial situation and needs. In particular, you should seek independent financial advice and read the relevant Product Disclosure Statement or Information Memorandum prior to making an investment decision about a Russell Investments' fund. Accordingly, Russell Investment Group Limited and their directors will not be liable (to the maximum extent permitted by law) for any loss or damage arising as a result of reliance being placed on any of the information contained in this publication. None of Russell Investment Group Limited, any member of the Russell Investments group of companies, their directors or any other person guarantees the repayment of your capital or the return of income. All investments are subject to risks. Significant risks are outlined in the Product Disclosure Statements or the Information Memorandum for the applicable Russell Investments' fund. Past performance is not a reliable indicator of future performance.

The Product Disclosure Statements or the Information Memorandum for the Russell Investments' funds (as applicable) are available by contacting Russell Investment Group Limited on 09 357 6633 or 0800 357 6633.

Copyright © 2018 Russell Investments. All rights reserved. This information contained in this publication is proprietary and may not be reproduced, transferred, or distributed in any form without prior written permission from Russell Investments.

First used: June 2018

AI-26605-06-21