ESG Profile and Impact Report 2018

BMO Responsible Global Equity Strategy

BMO Global Asset Management

Contents

In 1947, Xylem's Flygt brand invented the first submersible dewatering pump. Today, Godwin, a Xylem brand, offers a broad product line of fully automatic self-priming pumps used for dewatering and liquids transfer in projects around the world. Further, Xylem has been at the forefront of providing critical response to weather-related events. With its broad portfolio and automated storm water monitoring systems, Xylem – held in the strategy – works with communities to remove floodwaters from critical infrastructure and prevent widespread pollution.

Making a positive impact

2018 marks the 20-year anniversary of our Responsible Global Equity Strategy, and our 1-year anniversary of the strategy being available to Canadians. Based on the expertise of our specialist fund managers and team of environmental, social and governance (ESG) specialists, this strategy is centred on sustainable companies that are proactively managing their ESG opportunities and risks to make a positive impact on society and the environment.

Two decades of experience have shown us that deploying an ESG focus is entirely complementary to long-term performance goals. Basing a strategy around companies with strong ESG profiles, twinned with our engagement, makes sound investment sense, as borne out by the strategy's track record.

This report seeks to analyze how our companies contribute to positive social and environmental impact. An important framework for understanding this is the Sustainable Development Goals (SDGs), which set out a roadmap for a more sustainable world by 2030. We have mapped our investments to the SDGs, and extended our previous analysis by considering in more depth how the strategy performs on three universal issues – climate change, water and labour – as well as the impact of companies within two of our investment themes, Health and well-being and Technological innovation.

I am proud of the responsible investment heritage we have at BMO Global Asset Management, and I believe that by being a responsible member of the investor community, and supporting the development of a sustainable global economy, we will underpin our own and our clients' long-term prosperity and security.

Richard Wilson
Chief Executive Officer and Chief Investment Officer,
BMO Global Asset Management

Our Responsible Strategies range is built on a philosophy of:

Invest

Invest in companies making a positive contribution to society and the environment

Avoid

Avoid companies with damaging or unsustainable business practices

Improve

Use our influence as an investor to encourage best practice management of environmental, social and governance issues through engagement and voting

Impact **highlights**

Climate change

43%

Our carbon footprint is 43% below the MSCI World benchmark

Water

34%

Over one-third of companies responding to Carbon Disclosure Project (CDP) water program achieved a Leadership rating

Labour

400,000

Jobs created by companies in our strategy in 2017

Positive alignment

86%

of strategy holdings align with the Sustainable Development Goals

Technological innovation

88%

Average reduction in carbon emissions achieved by clients of a cloud computing provider

Health and well-being

47 million

Number of people reached through Access to Healthcare programs

Active ownership

47

The total number of companies engaged in 2017

Source: BMO Global Asset Management

What is impact?

Our objective in analyzing impact is to understand how the companies in our strategy contribute to sustainable development – by delivering solutions to sustainability needs through their products and services, and through the way they operate their own businesses.

Measuring impact in listed equities presents challenges, including the fact that companies have a multitude of impacts – some positive, some negative – which cannot be simply netted off to achieve a single score. There are also obstacles in finding relevant, reliable data. Even companies with strong sustainability standards are at early stages of translating this into impact.

As in our previous reports, our starting point has been the **Sustainable Development Goals** (**SDGs**), 17 goals developed by the United Nations that set an agenda for global sustainability for 2030. We have mapped the activities of companies we invest in to the SDGs, using an in-house methodology. We have also looked at the extent to which companies reference the SDGs in their own reporting. 24 of our 55 holdings do so; this shows an encouraging level of awareness, though does not on its own provide proof that actions are being taken in response.

The SDGs give us a good indication of what type of impact our companies have, but tells us little about the depth and breadth of impact they achieve. We have found the **Impact Management Project**[1] one useful source for developing our analysis further, in providing a structured way of defining how impact can be achieved and measured. In particular, we believe it is important, where we can, to identify whether companies are reaching underserved people or communities, and to quantify the scale of impact achieved.

The purpose of this report is to share information with our investors and stakeholders on our ESG profile and impact and, where we lack data, to flag areas where we would like to see improved disclosure.

> Out of the 55 holdings in the strategy, we have found 24 which explicitly reference the SDGs in their corporate reporting.
>
> **Laura Wood, Responsible Global Equities Team**

The report includes:

- A mapping of how our companies' products and services relate to the **17 SDGs**
- How we have used **company engagement** to promote sustainability objectives
- Analysis of how our strategy performs on three universal issues: **climate change**, **water** and **labour standards**. These are issues we believe are relevant across most or all of the companies in our strategy
- Our views on how to understand impact around our two largest investment themes: **Health and well-being**, and **Technological innovation**. Together these account for over half of the strategy

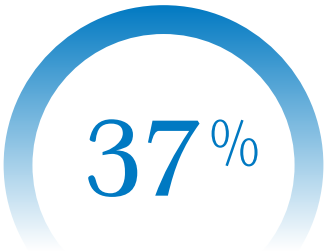
These five dimensions help us all to understand our effects on people and our planet.

What | How much | Who | Contribution | Risk

[1] The Impact Management Project is a multi-stakeholder initiative aimed at creating a shared understanding of impact. http://www.impactmanagementproject.com/

Making tomorrow better

Through the products and services they provide, the companies held in our Responsible Global Equity Strategy are tackling some of the most important issues of our time. We base our strategy around companies addressing six global sustainability themes, and highlight below an example from each.



Technological innovation

accenture

Diversified professional services company, with specialist capabilities in advising corporate clients on a range of sustainability issues

Health and well-being

FRESENIUS

Provider of a diverse set of healthcare products and services which deliver life-saving care to patients globally

Responsible finance

HDFC BANK

Indian private sector bank, with a particular focus on providing banking to rural and agricultural communities

Resource efficiency

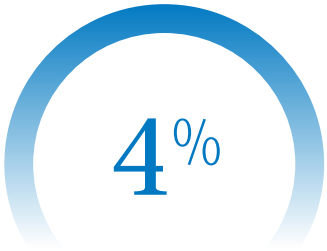
xylem
Let's Solve Water

Supplier of a broad portfolio of products and services addressing the full cycle of water, from collection and distribution to return to the environment

Sustainable mobility

APTIV

US-based automotive supplier, at the forefront of active safety and autonomous driving solutions



Energy transition

umicore

Best-in-class materials recycler, also playing a leading development role in cathode technology for vehicle electrification

3% of the strategy is allocated to No Theme/Cash Holdings as at 31 December 2017

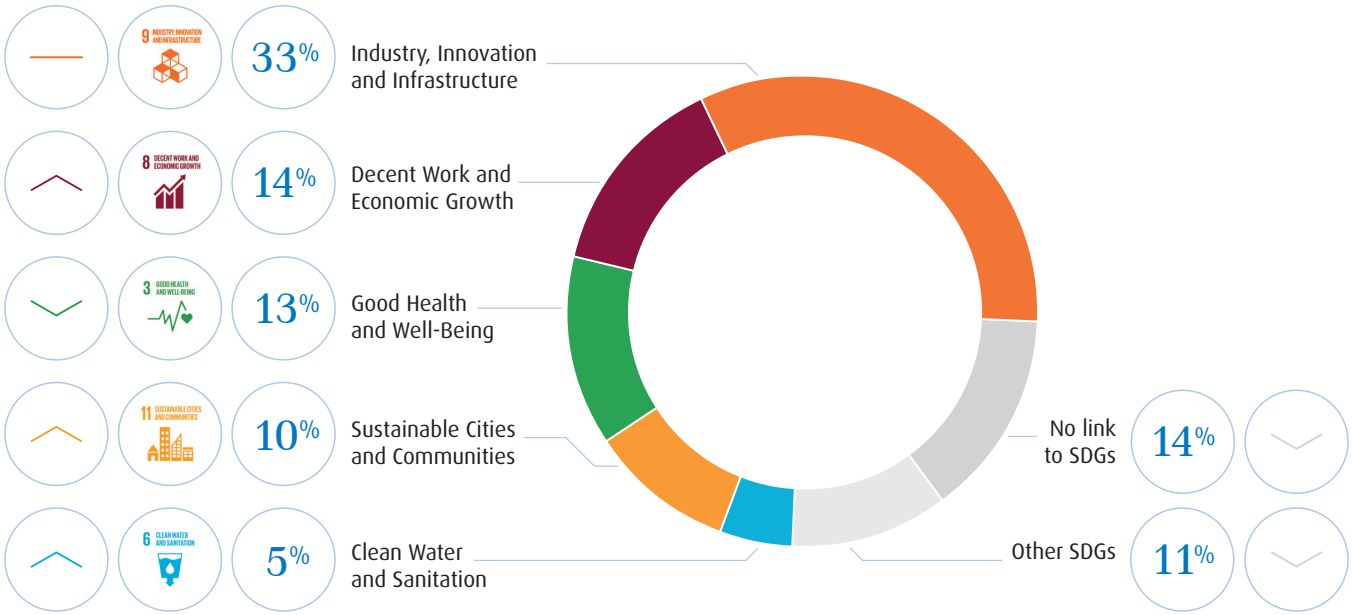
Positive alignment with Sustainable Development Goals

As in previous reports, we have assessed the connection between our strategy and the Sustainable Development Goals, based on an analysis of the core business mandate of each investee company. Considerations such as revenue, strategy and growth in key business units determined whether a company aligns directly to a specific SDG.

Overall, the pattern is similar to last year, with the strongest connection being to SDG9 – Industry, Innovation and Infrastructure.

Notable changes have been a year-on-year fall in the strategy's alignment to SDG3 – Good Health and Well-Being, while alignment to SDG8 – Decent Work and Economic Growth, has risen. We have determined that eight companies, representing 14% of the strategy, do not have a direct link to any single SDG.

Please contact our team should you wish to receive more information about our SDG methodology and initiatives in this area.



Avoiding harm

Avoiding companies which are engaged in damaging or harmful business activities has always been one of the three pillars of our investment philosophy.

Many of the activities we avoid through our screening process are also ones which could potentially undermine the achievement of the Sustainable Development Goals.

Examples of companies we will not invest in include[1]:

- Tobacco or alcohol producers
- Military companies
- Owners of fossil fuel reserves

We also assess companies' performance on a range of conduct issues including labour standards, human rights, environmental management and business ethics.

Making judgements in this area can be complex, and to support us we have an external Responsible Investment Advisory Council which advises on borderline cases. We also work with the Council on how the screening criteria themselves should evolve in response to changing ethical norms and standards.

[1] Full exclusion criteria available on request
Source: United Nations, BMO Global Asset Management

Impact through our engagement

Improve

Investor engagement can both address material ESG risks, such as poor governance, and support the Sustainable Development Goals through engaging on issues such as labour standards, human rights, and how companies make vital products and services available to low-income consumers.

Engagement
Calls with **Amazon.com** senior executives, including Vice-President of HR, with a focus on how the company is managing its rapidly-expanding workforce and contractors

Engagement
Dialogue with **Gerresheimer** to encourage dynamic board refreshment, ideally with annual director re-election

US

France

Germany

Switzerland

Engagement
Discussion with US healthcare retailer, **CVS Health** on the responsible sale of opioid drugs

Milestone
Suez committed to align its reporting on climate change with the recommendations of the Taskforce on Climate-related Financial Disclosures

Engagement
Participated in an **Access to Medicine Foundation** workshop on improving cancer care in the developing world, alongside strategy holding **Novartis**

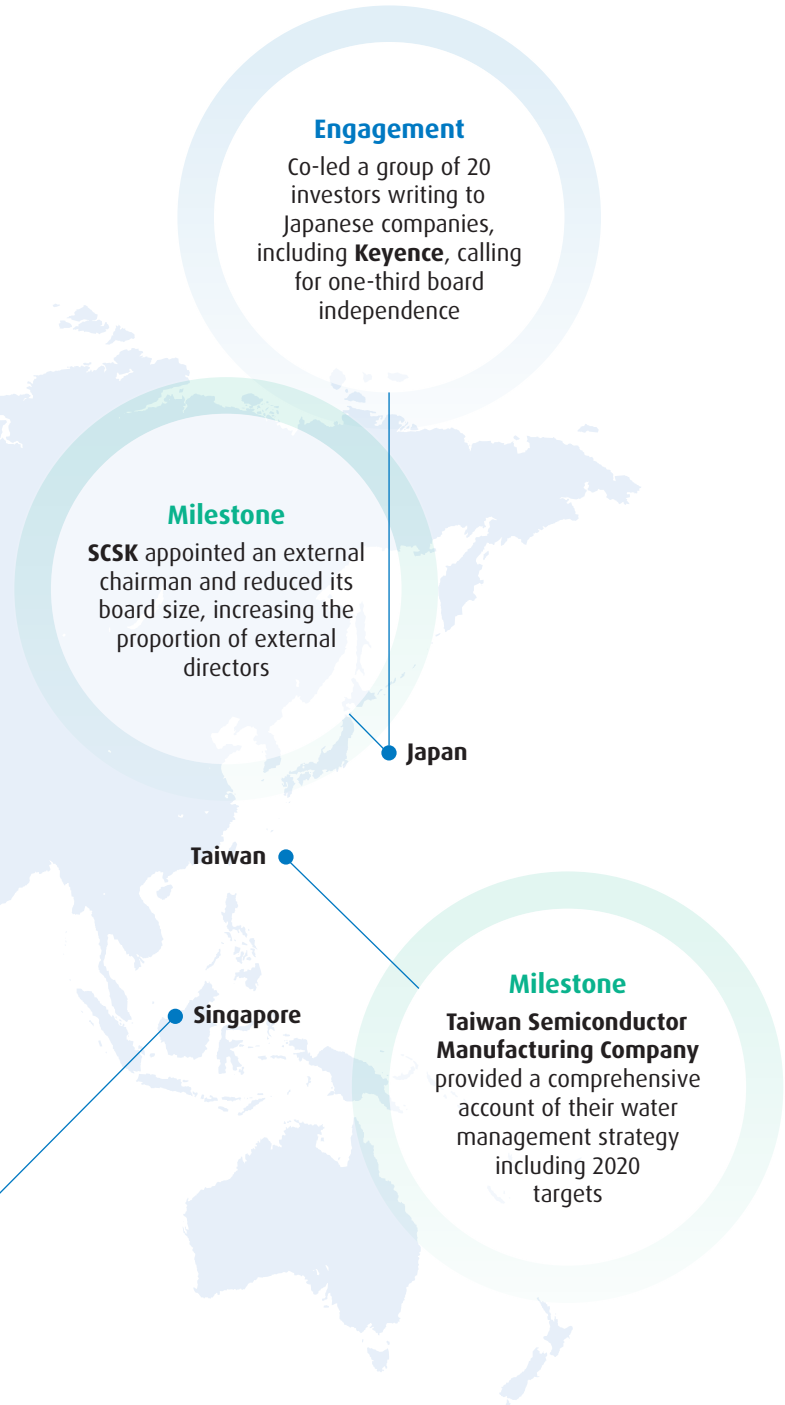
Milestone
Apple has hit its goal of powering 100% of its global operations with renewable energy. It now accounts for 3 gigawatts of clean energy, and its focus is now on promoting clean energy across its supply chain

Engagement
Discussion with **ComfortDelGro** on how the company adopts a strategy in response to the shift to low-carbon transportation

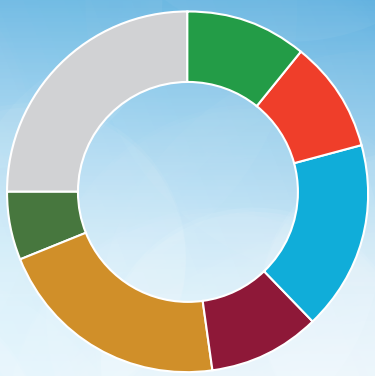
Active **ownership**

Engagement is an integral part of our Invest – Avoid – Improve philosophy.

- In 2017 we engaged with 28 companies across 11 countries held in the strategy, with the aim of improving their management of environmental, social and governance issues.
- We record successful outcomes from engagement as Milestones.
- We also used the annual shareholder vote as an opportunity to engage. We did not support 20% of all resolutions, contacting companies ahead of the vote where possible, and afterwards to explain the reasons why. Our post-AGM communications brought our total engagement up to 47 companies, out of 55 holdings.
- As well as addressing material risks, we also see our investor engagement as a way of supporting the Sustainable Development Goals, and this year have mapped our engagement to the relevant SDGs in order to be able to report where the links are.



Engagement breakdown



SDG3 – Good Health and Well-Being	11%
SDG5 – Gender Equality	10%
SDG6 – Clean Water and Sanitation	17%
SDG8 – Decent Work and Economic Growth	10%
SDG12 – Responsible Consumption and Production	21%
SDG13 – Climate Action	6%
Other / No SDG link	25%

Source: United Nations, BMO Global Asset Management

9

Strategy profile:

Climate change

7 AFFORDABLE AND CLEAN ENERGY

13 CLIMATE ACTION

Our carbon footprint is 43% below the MSCI World benchmark.

We have developed a comprehensive strategy on this issue for our Responsible Strategies range, from avoiding companies with fossil fuel reserves, to investment in solutions, engagement, and disclosure to our investors.

The transition to a low-carbon economy is one of the greatest challenges – and opportunities – of our time. The BMO Responsible Strategies are committed to making a contribution, and in May 2017 we published a new, ambitious policy approach. Our policy has five key elements, all of which we believe are essential components of an overall strategy:

- **Divestment** from companies with fossil fuel reserves
- **Case by case** assessment of the adequacy of climate change strategies in other key high-emissions sectors including utilities, transportation and industrials
- **Investment in solutions**, including companies operating in clean energy and resource efficiency, as well as the banks financing these activities
- **Engagement**, where our focus is on encouraging companies to develop transition planning and scenario analysis to ensure they are robust to a range of future energy scenarios
- **Transparency**, through publishing our methodology and carbon footprint, in line with the recommendations of the Taskforce on Climate-related Financial Disclosures

Our Responsible Global Equity Strategy has not held any investments in companies with fossil fuel reserves since February 2016.

> Understanding the climate risks in our investment strategies is important – but so is capitalizing on the opportunities.
>
> **Vicki Bakhshi, Governance and Sustainable Investment Team**

Powering up: **Umicore**

We invest in solutions through our Energy transition investment theme, with **Umicore** being one example. This Belgian-listed materials technology company has been one of the three global leaders in emission control catalysts for internal combustion engines. It is now strategically repositioning itself at the forefront of energy transition – producing materials for rechargeable batteries used in electric vehicles.

Umicore has invested in capacity and taken a dominant market position in producing materials (e.g. cathodes) to meet the anticipated rapid acceleration in electric vehicle battery demand.

The company also is highly conscious of the strain that the global ramp-up in battery production is placing on scarce materials, particularly lithium, and has developed recycling technologies in anticipation of an increased demand to address this issue. Furthermore, Umicore has created a dedicated Sustainable Procurement Framework for Cobalt covering its entire supply chain and is a member of the REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) Consortium on behalf of the cobalt and lithium industries.

With clean-tech innovation at the core of its strategy, Umicore is likely to be a key beneficiary from the transition to a low-carbon economy.

"A big part of the climate puzzle comes down to fixing market failures so that markets better reflect the true financial costs of inaction – and the financial benefits of action."

Michael Bloomberg, Chair, Taskforce on Climate-related Financial Disclosures

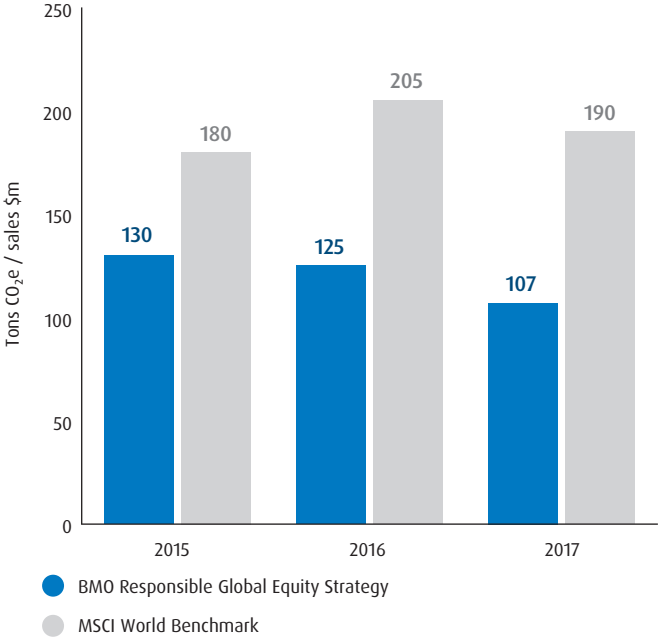
(Above) Sand blows across a normally submerged area at Theewaterskloof Dam, Cape Town with the city threatened by "Day Zero"

Our position on carbon footprinting

We have now tracked and published our strategy's carbon footprint for three years. We are conscious that carbon footprinting does not, by itself, provide a measure of climate risk – due to, amongst other issues, the fact that it only measures direct emissions rather than those arising from the use of a company's products; the backward-looking nature of the data; and gaps in disclosure.

However, we do find it a useful tool to identify potential outliers, and ensure that our analysis fully incorporates any risks associated with higher-emitting companies.

Portfolio-weighted carbon intensity



Source: BMO Global Asset Management

2017 performance

Our portfolio-weighted carbon footprint is 43% below that of the strategy's benchmark index, the MSCI World index. In 2017 the strategy's footprint fell by 14%. This was mainly due to the sale of two companies which were in relatively high-emission sectors: gas distributor **Spectra Energy**, which we sold following the Enbridge acquisition; and materials business **Toray Industries**.

The largest contributors to the strategy footprint now are water and waste company **Suez**, and chemicals firm **Praxair**. We have assessed the climate strategies of both. Although they are in high-emissions sectors, they both have sound emissions management systems, and are positioning themselves strategically as solution providers.

A key part of our investment rationale for Praxair is the range of products it manufactures which are targeted at enabling energy efficiency improvements. The company calculates that while its direct carbon footprint is high, at 24 million MT CO_2e, it enables 68 million MT CO_2e of greenhouse gas savings by its customers, giving it a positive net carbon balance if these Scope 3 effects are included.

Going forward we would like to see companies in our strategy adopt reporting in line with the recommendations of the Taskforce on Climate-related Financial Disclosures, and will press for this through our engagement.

Past performance should not be seen as an indication of future performance. Stock market and currency movements mean the value of, and income from, investments in the strategy are not guaranteed. They can go down as well as up and you may not get back the amount you invest.

Strategy profile:

Water

6 CLEAN WATER AND SANITATION

Over one-third of companies responding to the CDP water program achieved a Leadership rating.

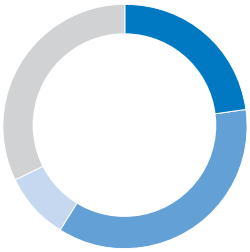
Water-related issues can materially impact businesses; the problem is complex and solutions local. A systematic approach is required by exposed companies, and we encourage best practice.

A lack of effective water management can impact the financial returns of companies in exposed sectors, particularly as water resources become increasingly stressed, due to factors such as increased demand and climate change. For the seventh consecutive year, the World Economic Forum's Global Risks Report has ranked water crises within the top five risks in terms of impact. Assessing and managing water is also crucial to achieving the SDGs, particularly SDG6 – Clean Water and Sanitation.

Having flagged this as an issue last year, we have since worked to understand our exposure to water risks, and how the companies we invest in are managing these risks. The strategy has a low allocation to several water-intensive sectors such as mining, energy and food and beverage due to our investment choices and screening criteria, and a relatively high weight in sectors such as financials and technology, which leads to a natural bias against water-related risk.

To analyze our remaining risk exposure, we reviewed disclosures made by our companies to the CDP water security program. 40% of our companies were asked to respond, due to being in more water-intensive sectors. Over one-third, of those who responded, achieved a Leadership rating, meaning that they are carrying out best practices in water stewardship.

CDP water program scores



Leadership (A to A-)	23%
Management (B)	36%
Disclosure (D)	9%
Not responded	32%

We combined this with in-depth engagement with companies in the strategy which we see as the most exposed to water risk.

Source: BMO Global Asset Management

Using engagement to assess **water risk**

We targeted eight companies in our strategy for engagement, including **Apple**, **Kerry Group**, **Novartis**, and **Umicore**. Topics included governance of water risk, target setting, water risk assessments and opportunities.

Even though companies are at differing levels of water management, our engagement revealed awareness of the severity of the issue, and an understanding they need to be doing more – even by companies with strong policies such as **Novartis** and **Taiwan Semiconductor Manufacturing Company**.

Our key finding was that companies' operational management systems and targets still often focus on direct operations, but that for companies in sectors such as technology hardware, pharmaceuticals and food, the larger risks are often in their supply chains, which may be highly water-intensive but often have weaker and more fragmented risk management. We were pleased to hear in our discussions that companies are now shifting their attention to these risks, and will continue to monitor progress going forward.

Strategy profile:

Labour

8 DECENT WORK AND ECONOMIC GROWTH

400,000 jobs created by companies in our strategy in 2017.

The way a company treats its workers and suppliers is critical in understanding impact – but published metrics fall short of what we need to understand the quality of labour management.

Collectively, the companies in our strategy employ over 3.5 million people, and influence the livelihoods of millions more through supply chains. In 2017, almost 400,000 jobs were created by companies in our strategy. While this is encouraging, what we really want to understand is the quality of the jobs created.

The way in which companies manage labour issues is fundamental to understanding impact, particularly in relation to SDG8 – Decent Work and Economic Growth. We see it as essential to try to assess this type of impact, particularly in a world where inequality is prevalent. We are particularly conscious of the shift in labour markets being caused by the trend towards automation. While there may be benefits in the reduced need for high-risk manual labour, the displacement of workers could lead to even deeper inequality, exacerbating social tensions and undermining efforts to end poverty. There are good ways and bad ways to automate – and measures such as retraining programs can go a long way to addressing negative societal impact.

We expect all of our companies to respect fundamental principles and rights at work, as laid out by the International Labour Organization (such as freedom of association, and the prohibition of forced labour, child labour and discrimination), in both their direct operations and supply chains. Any significant breaches in standards are identified through our screening processes.

In attempting to assess companies' labour performance, commonly-reported metrics such as employee turnover, board gender equality and lost-time injury rates give only a partial and fragmented view. Many companies of course go well beyond this, but reporting is not standardized or comparable. To help address this, we have supported the Workforce Disclosure Initiative, which aims to improve standards of reporting.

Investor engagement has proven a powerful tool for encouraging improvements in companies' labour standards. In 2018, we will focus particularly on how companies are tackling modern slavery and human trafficking – which, according to the United Nations, is currently the second largest criminal industry in the world.

> The undoubted prevalence of modern slavery should make engaging with companies on its elimination a top priority.
>
> **Rosey Hurst, Responsible Investment Advisory Council**

Engagement focus: **Modern Slavery Statements**

The need to end the exploitation of vulnerable workers took a major step forward with the introduction of the 2015 UK Modern Slavery Act. While the scope is limited to companies with UK operations, 50% of the companies in our strategy have now published Modern Slavery Statements in response.

Rather than reporting simple metrics, these statements set out – using a common format – how companies identify, manage and report on risks related to forced labour, child labour and human trafficking in their own operations and in the supply chain – the subject of Target 8.7 of the SDGs.

Our conversations with NGOs (non-governmental organizations) and companies have shown us that having to produce these statements has helped to raise the profile of this issue within companies, as well as allowing investors to better understand how risks are being managed.

In 2018, we will engage with companies in the strategy to encourage best practice in the publication of these statements, with a focus on companies in higher-risk sectors including food, textiles, retail, and construction.

Thematic focus:

Health and well-being

47 million people reached through programs to improve access to healthcare for low-income communities globally.

Healthcare companies have a clear link to SDG3 – Good Health and Well-Being. Understanding impact requires us to deepen our analysis and look at how much benefit is achieved, and whether underserved communities are reached.

Our Responsible Global Equity Strategy invests in companies involved at different stages of healthcare delivery including new drug development; equipment producers; service providers and retailers. These activities closely align with SDG3 – Good Health and Well-Being.

The combination of global efforts to achieve the SDGs, growing and ageing populations, and higher income levels in emerging markets, creates the conditions for continued growth in the sector. We expect to see reshaping of the sector as developed markets tackle rising healthcare costs, While emerging markets increase the share of their GDP spent on healthcare, particularly as changing lifestyles increase the prevalence of non-communicable diseases such as diabetes and heart disease.

While overall we see healthcare companies as playing a crucial role in supporting human well-being, the sector also carries sustainability risks. When assessing companies for our Responsible Global Equity Strategy, we check for performance on issues including the quality and safety of medicines, and responsible sales and marketing.

> Our message to healthcare companies is clear – acting responsibly now creates opportunities for the future.
>
> **Yo Takatsuki, Governance and Sustainable Investment Team**

Understanding impact

Despite the focus on positive health solutions, we see the industry as still being at the early stages of attempting to quantify impact in a meaningful way. The diverse nature of the sector – from biotechnology, to large pharmaceutical, to device manufacturers and service providers – also creates challenges for us as investors in choosing consistent impact metrics.

Prevention rather than cure: **QIAGEN**

We invest in **QIAGEN**, a global healthcare analytics company with over 500,000 customers providing molecular testing solutions, which help doctors diagnose disease and improve treatment decisions. These technologies have a wide range of applications including in testing for infectious diseases, immune monitoring and cancer screening. One of QIAGEN's products is a diagnostic kit to screen women for human papillomavirus (HPV) to protect from cervical cancer.

Through the *care*HPV donation program, QIAGEN placed 18 screening systems in Nicaragua, Honduras and El Salvador, which are being used to screen thousands of women. The goal is to help these countries be able to sustain their testing over the long term. In El Salvador, QIAGEN is working towards a near-term screening goal of 30,000 women.

A driver of future growth is QIAGEN's QuantiFERON-TB Gold In-Tube Test (QFT), which is regarded worldwide as the modern standard for the detection of latent tuberculosis infection. In 2016, there were 10.4 million new cases of active TB worldwide and 1.7 million deaths from TB, according to WHO estimates.

"Our models for providing healthcare are leaving people behind. Globally, two billion people cannot access the medicine they need, most of whom live hand to mouth."

Jayasree K. Iyer, Executive Director, Access to Medicines Index

(Above) A physician at the Global Tuberculosis Institute in Newark, New Jersey, examines x-ray photographs of lungs of a TB patient. Image: QIAGEN

Having reviewed the reporting of our investee companies, we see that common metrics reported include number of patients served, amount of money invested in R&D, and annual visits to healthcare providers.

However, we do not believe these on their own truly articulate the positive benefit of investing in healthcare. For example, the number of patients served fails to capture the intensity of impact achieved, as measured by actual healthcare outcomes, or the extent to which companies are targeting underserved communities.

In addition, many healthcare companies disclose details of philanthropic and access programs. These meet the test of being targeted at those of greatest need. Several of our strategy companies including **Henry Schein** and **Novartis** report details on how many people have been helped through their programs. However, philanthropic solutions alone are insufficient to meet global demand, given that 2 billion people lack access to essential medicines[2]. We have a long track record in engaging with companies to seek solutions that have both a commercial and social payoff, and sit on the Expert Panel of the Access to Medicines Index, which we see as a good barometer of progress in this area.

At this point in time, data on the number of people served through access programs is the most widely-reported statistic we can track and report.

We expect to see the sector develop a wider range of metrics in future – with investor engagement a key driver for progress – and give examples below of the type of reporting we would like to see in order to develop our understanding of impact.

Examples of impact	Example metrics
Who – whether underserved people are being targeted	• Number of people reached through targeted access programs • Total number of people reached with improved healthcare, broken down by income group[3] • Affordability metrics – such as cost reduction for standard treatments and medicines[4]
What – the type of diseases being treated	• Portion of financial R&D investments dedicated to Index Diseases[5] out of the company's total R&D expenditures[6]
How much – reporting on actual health outcomes	• Number of lives saved • Reduction in child mortality rates • Quality-adjusted life years delivered

[2] Access to Medicines website, [3] SDG Impact Indicators, Dutch Sustainable Finance Platform (2017), [4] SDG Impact Indicators, Dutch Sustainable Finance Platform (2017), [5] As defined by the Access to Medicines Index, [6] Access to Medicines index.

Thematic focus:

Technological innovation

A cloud-computing provider in our strategy has reduced the carbon emissions of its clients' IT operations by 88% on average.

Technology is a critical enabler of impact – but also one where negative impacts pose a substantial risk.

Companies within the technology space vary widely – from hardware manufacturers, to software providers, to IT-focused consultancies. Our investments range across this spectrum, where we look for companies that both operate responsibly and contribute to sustainability solutions.

We selected this theme as a focus area for impact reporting because we believe that it is in a critical position in the impact debate. Technology can deliver positive impact in its own right – through delivering access to essential services, including communications and the internet. But it is also a critical enabler for a far wider spectrum of impact. The effective use of data and technology lies at the heart of delivering every one of the SDGs – as well as being essential in developing the impact metrics to monitor progress.

However, this is also a sector where negative impacts pose a substantial risk. From controversies over labour standards in supply chains, to the harmful effects of social media, and questions over the misuse of data for political purposes, the reach and power of the sector are both its greatest advantage and its greatest vulnerability.

> The effective use of data and technology lies at the heart of delivering every one of the SDGs.
>
> **David Sneyd, Governance and Sustainable Investment Team**

Understanding Impact

The objectives of the technology sector span across several of the SDGs, such as improving energy efficiency, which supports SDG7 – Affordable and Clean Energy; providing access to the internet, linking to SDG9 – Industry, Innovation and Infrastructure; and enabling companies to collect and manage data relating to their sustainability performance, supporting SDG12 – Responsible Consumption and Production.

Less energy, brighter future: **Taiwan Semiconductor Manufacturing Company**

We invest in **Taiwan Semiconductor Manufacturing Company** (TSMC), the world's largest semiconductor foundry, producing more than 8,600 different products, applying over 200 different technologies for over 440 customers globally. TSMC is increasingly acknowledged for its advanced approach to integrating good ESG practices across its operations and it is one of the leaders amongst global peers. It is Taiwan's largest purchaser of renewable energy, and publishes a comprehensive sustainability report linking its activities to the SDGs.

TSMC's success in delivering low-cost, high-precision semiconductors has been a key enabling factor in improving the energy efficiency of a wide range of its clients' technologies in a cost-effective way. The company now develops chips based on a 7-nanometer process – 7 nanometers being the size of about 20 atoms – which use just 4% of the power of those using the 55-nanometer process that was the industry standard ten years ago.

"Technology and innovation helps translate our scientific knowledge into meaningful improvements in our day-to-day lives."

Mr. Wu Hongbo, former UN Under-Secretary-General for Economic and Social Affairs

(Above) TSMC's market share in the total global semiconductor foundry segment has risen consecutively for the past seven years, reaching 56 percent in 2016 – a level which is likely to have been maintained or exceeded in 2017. Image: Taiwan Semiconductor Manufacturing Co., Ltd.

The diversity of both the type of contribution made by the players involved and the wide range of actual outcomes achieved makes the reporting of consistent impact metrics a challenge. This is reflected in the reporting of our investee companies, where impact metrics are rarely seen and generally not comparable.

One of the most significant areas of progress has been in improving energy efficiency. Companies report on their own GHG (green house gases) emissions, percentage of energy sourced from renewables or power usage effectiveness as operators – but few extend this to reflect emissions avoided by their clients through more energy-efficient products. One exception is **Amazon.com**, whose cloud subsidiary Amazon Web Services – the world's largest public cloud provider – reports that it has reduced its customers' carbon emissions by an average of 88%.

We continue to engage Amazon.com on improving disclosure on its own climate performance.

Other companies provide software solutions that equip clients with the ability to monitor and improve their sustainability performance. The reporting in this area is often case-specific or anecdotal in nature, rather than providing outcome-based metrics.

A stronger area for the sector is reporting on providing access to technology to underserved people, particularly through the expansion of internet infrastructure, where the resulting increase in communications access, mobile financial transactions and online education are often quantified.

While there is a shortage of impact reporting now, we hope that the sector's familiarity with data will enable rapid improvements. Below we give examples of metrics we would like to see.

Examples of impact	Example metrics
Who – whether underserved people are being targeted	• % of revenues from underserved markets • Number of underserved individuals reached through products/services (such as low-income consumers, small businesses) • Affordability metrics – such as cost of a basic internet service
What – the type of product/services provided	• Number of first-time internet connections[7] • Number of secure payment transactions processed in underserved markets • Proportion of R&D investment focused on green technologies
How much – quantifying impact outcomes	• Amount of GHG emissions avoided through services provided[8] • Increase in hardware energy efficiency resulting from process improvements

[7] SDG Impact Indicators, Dutch Sustainable Finance Programme (2017), [8] SDG Compass and CDP.

Three layers of expertise – experience, insight and integrity

The BMO Responsible Global Equity Strategy draws on the expertise of three teams. The investment process is led by the Responsible Global Equities Team. They are closely supported by our in-house Governance and Sustainable Investment Team (GSI) and the independent Responsible Investment Advisory Council (RIAC).

Responsible Global Equities Team

The Responsible Global Equities Team is based in London and is led by Jamie Jenkins. The team uses a fundamental, bottom-up approach with a focus on quality, growth companies demonstrating a clear commitment to sustainability.

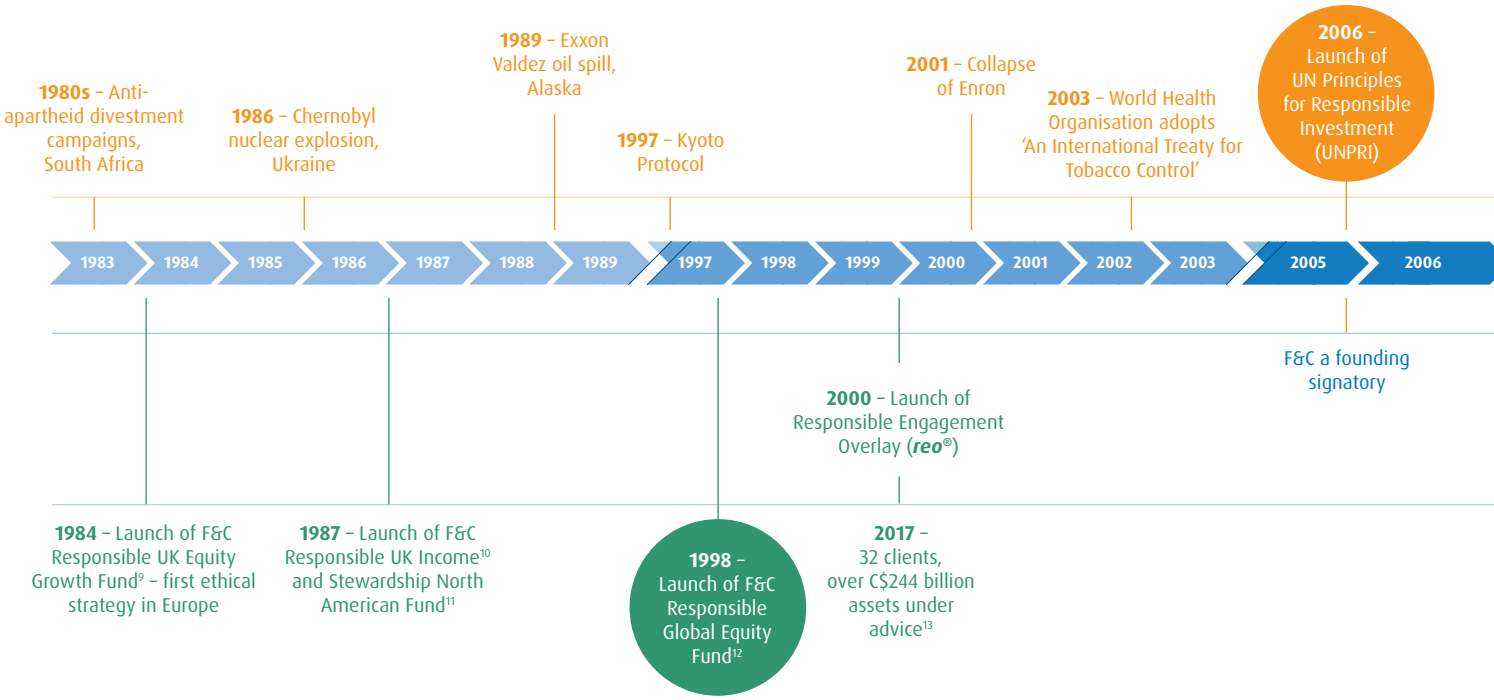
The team can leverage the wider global equity research resources of BMO Global Asset Management and an explicitly long-term investment horizon is used to try and exceed our performance objectives.

Jamie Jenkins
Head, Responsible Global Equities

Nick Henderson
Director, Responsible Global Equities

Andy Penman
Director, Responsible Global Equities

Laura Wood
Associate, Responsible Global Equities



"Two decades of running this strategy has left us in no doubt that global sustainability and financial performance go hand in hand."

Jamie Jenkins, Head of Responsible Global Equities

Governance and Sustainable Investment Team

Our Governance and Sustainable Investment Team (GSI) is dedicated to researching and engaging companies on environmental, social and governance issues that impact our clients' investments.

Alice Evans
Co-Head, GSI Team

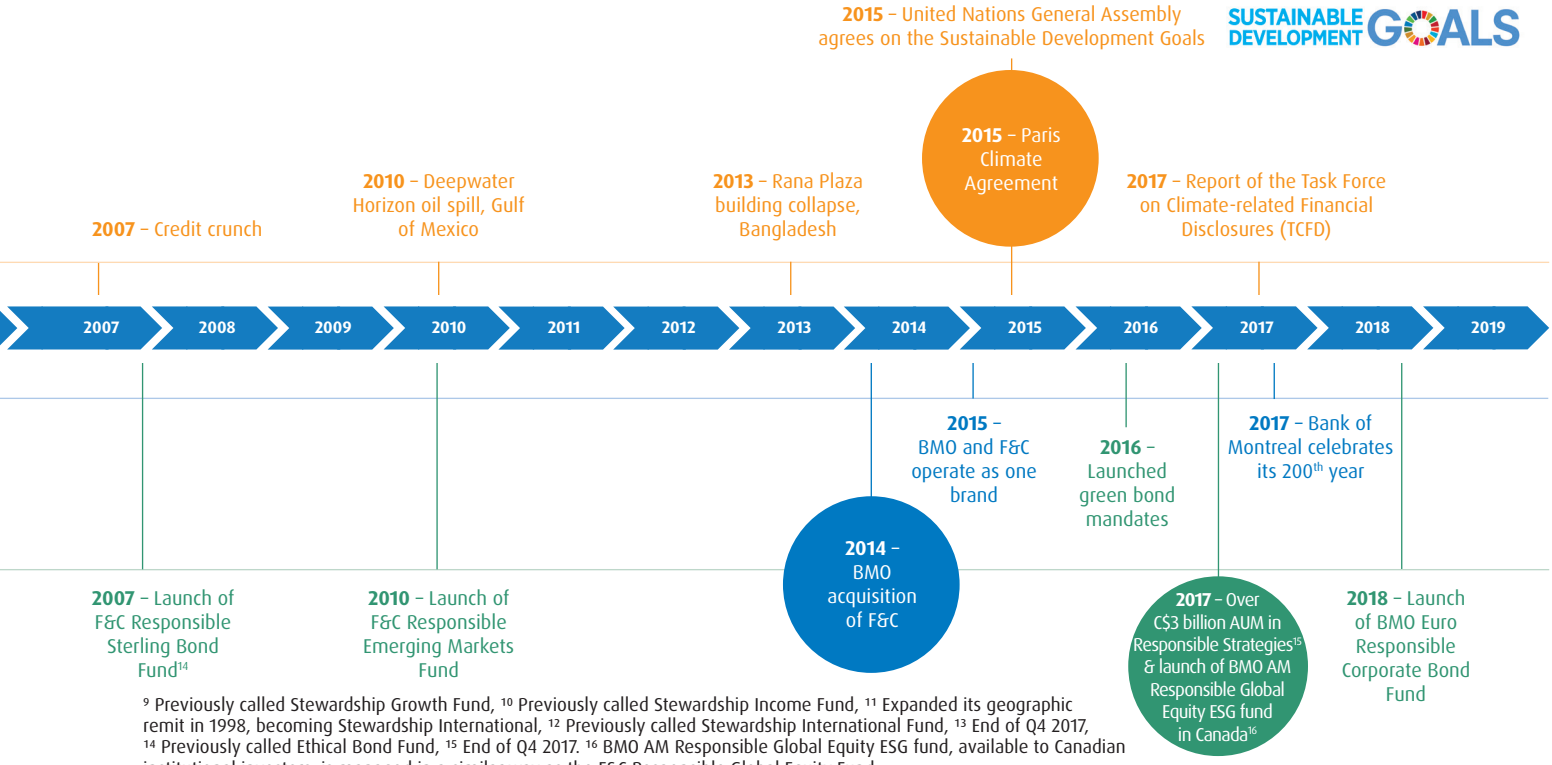
Claudia Wearmouth
Co-Head, GSI Team

Responsible Investment Advisory Council

The independent external Responsible Investment Advisory Council (RIAC) is a body of sustainability experts who focus on providing advice on ethical and sustainability issues. Meeting quarterly, they advise on the evolution of our exclusion criteria.

Most Revd Justin Welby
President, RIAC

Howard Pearce
Chair, RIAC



[9] Previously called Stewardship Growth Fund, [10] Previously called Stewardship Income Fund, [11] Expanded its geographic remit in 1998, becoming Stewardship International, [12] Previously called Stewardship International Fund, [13] End of Q4 2017, [14] Previously called Ethical Bond Fund, [15] End of Q4 2017. [16] BMO AM Responsible Global Equity ESG fund, available to Canadian institutional investors, is managed in a similar way as the F&C Responsible Global Equity Fund.
Source: BMO Global Asset Management

BMO Global Asset Management

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