

RESPONSIBLE INVESTMENT QUARTERLY

Q4 2020



Your success. Our priority.

CONTENTS

01	Foreword.....	3
02	Portfolio Manager Viewpoint.....	7
03	Country Head Focus – Austria	11
04	Infrastructure investing in a post-Covid world	14
05	Solutions to the ever-growing plastic waste problem	19
06	What are the principal considerations and obstacles to climate change risk management?	25

Stewardship in action

07	Voting Q4.....	29
-----------	----------------	----

01 Foreword



Iain Richards

Head of Global Responsible Investment Policy

Looking back over 2020 it was clearly an unusual year. The coronavirus pandemic and lockdowns have required considerable adaptation. The resilience and determination people have shown is remarkable.

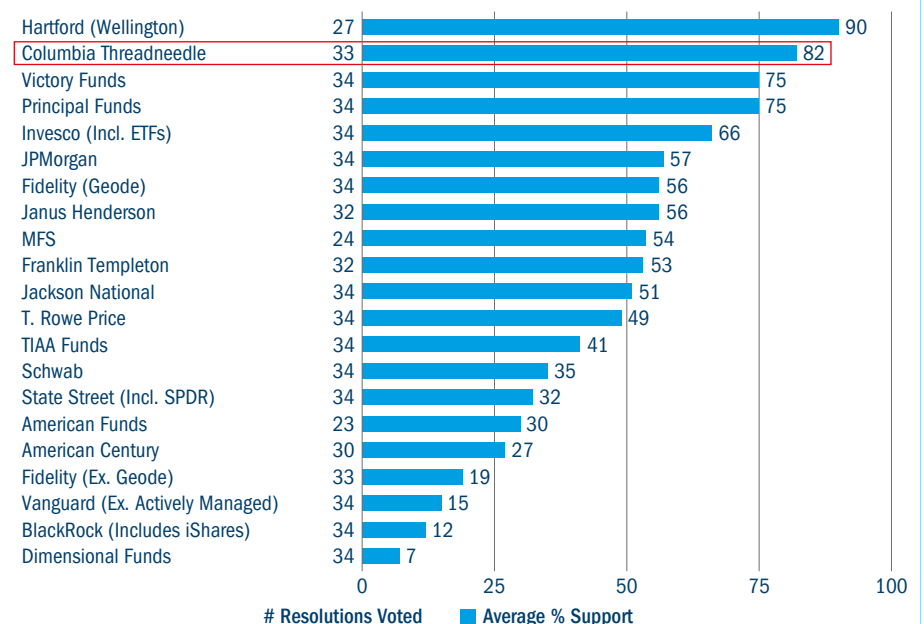
In addition, the continued scrutiny of asset manager voting as an indicator of whether they “walk the talk” has continued, most commonly in relation to voting on climate resolutions. Although we have not always been included in reports published on climate voting, Figure 1 provides a good insight into our ongoing focus on climate voting in a US shareholder resolution during 2020.¹

Climate issues will continue to be a major area of focus that is touched upon in more depth later in this report. For example, Chris Wagstaff, our Head of Pensions and Investment Education, looks at considerations and obstacles to climate change risk management. In addition, Andrea Carzana, one of our European equities portfolio managers, touches on the relevance of net-zero transitions for investors in his portfolio manager’s viewpoint. The topic also features in this quarter’s country focus (Austria) as well as in the insights into infrastructure investing in a post-Covid world.

The scope of our voting activities is of course broad, and another aspect of it continues to be the issue of boardroom gender diversity. We have had an active voting strategy on this issue that has been developing since 2016. During 2020 we took voting action at more than 200 companies where concerns existed, including a number where diversity among the senior executive leadership, a developing area of focus throughout the year, gave us cause for concern.

Looking ahead to 2021, this facet of our voting activity will continue with an

Figure 1: Proxy Votes on 2020 Key Climate Resolutions



Source: Morningstar. “Which Fund Companies Supported Climate Via Proxy Votes?”. 2nd December 2020.

added focus on ethnic diversity. As we vote at thousands of company general meetings, accessing reliable data sources to expand our approach and develop greater consistency remains important. To that end we are indebted to the many organisations and groups that provided invaluable insights and information to us as investors.

Turning back to the pandemic, Covid-19 has forced attention to turn to many of the structural weaknesses that exist in our economies and societies both domestically and internationally. The response from colleagues, across all disciplines, in collaborating to analyse both the short- and long-term implications of

the pandemic has been invaluable to the insights we bring to our investment strategies. That level of research intensity – and enthusiasm – reflects our belief that responsible investment research is fundamental research and the combination of macro, thematic and security level analysis in this context is essential.

In a policy context, both a renewed focus on climate change and on the need for inclusive growth will be important considerations in the post-Covid environment. Both have significant importance for our economies and the wider changes that are already taking place – the fourth industrial revolution.

The nature of these changes will shape the research agenda and we will be looking at aspects of this further over the course of 2021.

As we move into 2021 it is with the momentum provided by the extraordinary pace of ESG adoption among the broader asset management community, which more than doubled during 2020. This has also been reflected in the scale of the assets for which ESG is now a factor. Although much of the attention often focuses on Europe, where the market is already well established, it is notable looking back across 2020 that the rate of change (adoption) has been highest in the US market.²

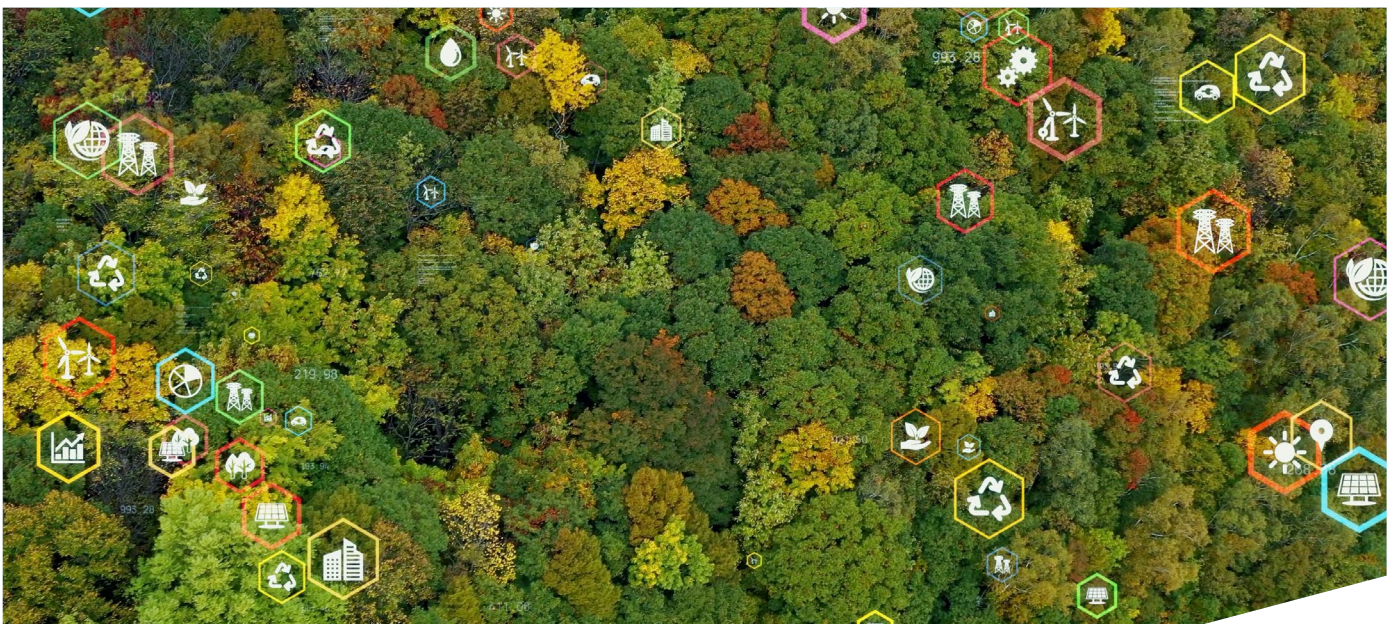
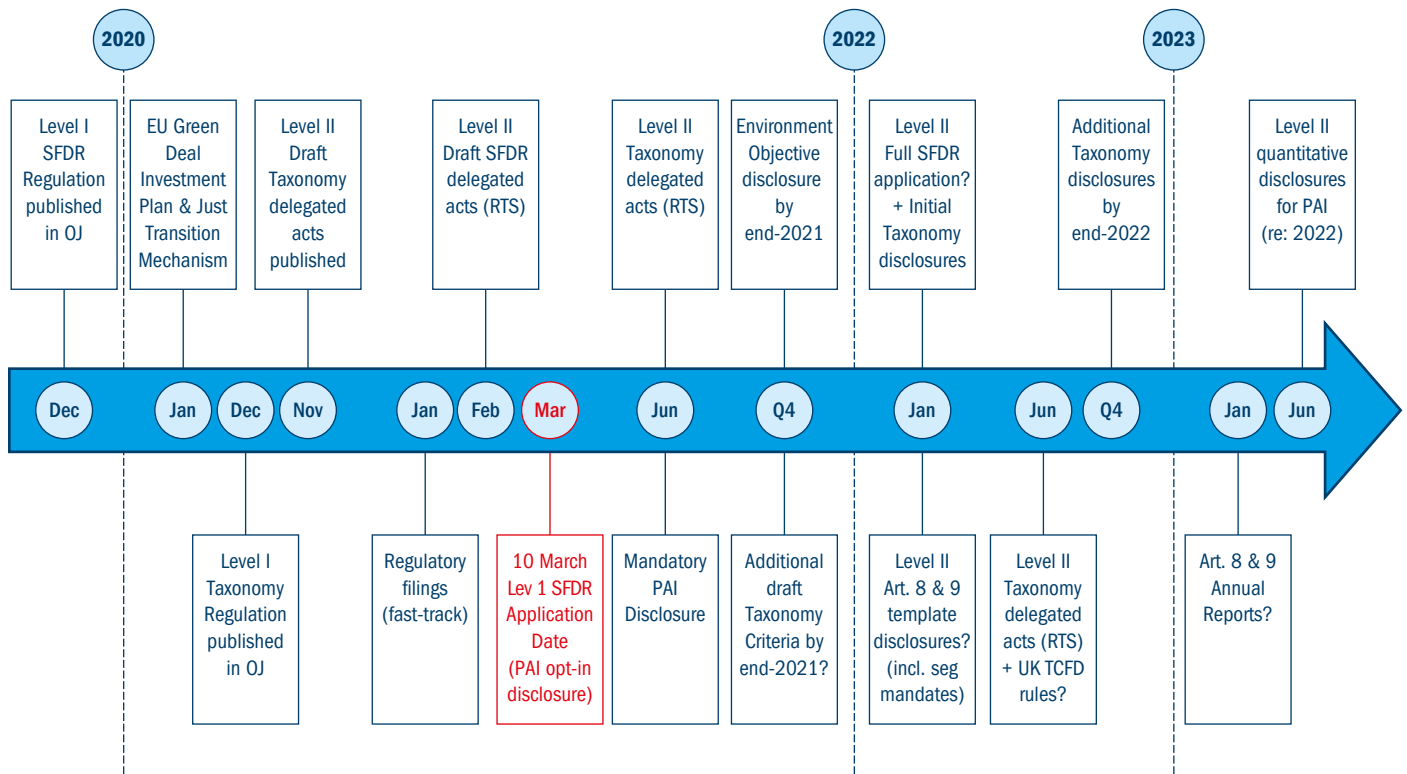


Figure 2: EU sustainable finance reform timeline



Source: Columbia Threadneedle Investments, February 2021.

These trends have important implications for both asset managers and asset owners, particularly those in Europe. The initial March 2021 deadline for sustainability-related disclosure in the financial services sector under the Sustainable Finance Disclosure Regulations (SFDR) has everyone's attention and focus. As both groups respond to these requirements, the approach taken will have potentially significant implications for investment strategies.

Given the scale of change involved, the importance of practical approaches to integration, rather than formulaic ones, will be important. A notable example of why this is the case was seen in JPMorgan's perspectives report towards the end of Q4 2020, "Build Back Better to Boost ESG"

(16 December 2020). Increased market volatility and risk of significant draw-downs following the "Covid" crash has propelled ESG investing to the forefront of many investors' decision-making criteria. The Global Sustainable Investment Alliance (GSIA) suggests there are seven commonly used socially responsible investing strategies; in practice, investors use more than one at a time. However, it is worth mentioning that overall their performance has been positive – although there are deviations across these strategies.

The first quarter of 2021 and beyond will see a procession of milestones and deadlines arrive. Although some dates and details of reforms remain to be finalised and confirmed, the EU is already working on the next phase of

reforms. For now though I will conclude with the above chart to offer a quick snapshot of some key aspects of the timeline around the current EU sustainable finance reforms and the all-important disclosure regulation with its focus on sustainability risk as well as principal adverse impacts (Figure 2).

Source:

- <https://www.morningstar.com/articles/1013254/which-fund-companies-supported-climate-via-proxy-votes>
- JPMorgan, ESG Investing: Momentum Moves Mainstream - 2021 brings collective demand for change around the globe, 20 January 2021.



02 Portfolio Manager's Viewpoint



Andrea Carzana

Portfolio Manager,
Threadneedle Sustainable Outcomes
Pan-European Equity strategy

2020 was a landmark year for flows into funds focusing on responsible investment (RI) themes. Although this appetite for funds following RI principles was boosted by the Covid-19 pandemic, it is still growing and should far outlast the impact of the virus. In December 2020 alone, according to Calastone, investors poured £1.1 billion into UK-based actively managed equity funds with an RI focus. This is roughly equivalent to the total inflows to these strategies between 2015 and 2018. Equally notable is that this £1.1 billion inflow accounted for almost two-thirds of the money

invested across all active strategies – December 2020's total of £1.7 billion was itself the highest monthly figure since July 2015.¹

The trend towards RI and sustainability is gaining impressive momentum. However, the headline figures obscure important underlying trends. RI is a broad label that covers many strategies related to sustainability. Much of the money invested in 2020 went into funds marketed as ESG (environment, social and governance) vehicles, focusing on measures of companies' performance against these indicators.

ESG is a long-established investment theme that is now widely recognised and understood. But the fast-growing flows into RI include another, less well-known set of strategies that are more recent and much less mature: sustainable outcome funds. Many of these invest specifically in companies that are facilitating the world's transition to carbon neutrality – or net zero – by 2050, particularly around power generation and transport. As such, hidden within the overall fund flow figures for 2020 is a major trend that is still in its infancy: the wave of investment into companies and technologies that will enable the world economy to transition to net zero within our lifetimes. Many of these are businesses with sustainable themes

closely aligned with the UN Sustainable Development Goals. We believe these companies have the potential to enjoy better growth and returns, with wider competitive moats in the long term versus those companies misaligned with these themes.

2020's focus on the net-zero transition

It is common for investors to confuse ESG funds with sustainable outcome strategies and conclude that they may have missed the boat on investing in sustainable outcome. This is a mistake. ESG has been growing for years but it was only in 2020 that, for the first time, investors began to focus in earnest on the opportunities of a net zero transition.

One of the key reasons for the growing focus on sustainable outcome funds during 2020 was the succession of announcements by governments around the world of policies and stimulus packages to enable economies to reach net zero by 2050, or 2060 for China. Countries including China, Japan and South Korea, as well as the European Union member states and the UK, have committed to net-zero targets. Approved commitments to fund green stimulus and support for carbon-intensive industries as of 1 November 2020,

stood at more than \$1 trillion, with another \$644 billion under consideration by the EU (Figure 1). Now that President Biden has taken office, the US is expected to launch a major green stimulus package of its own. His immediate decision to take the US back into the Paris Climate Accord is indicative of the US's direction of travel.²

The ambitious commitments made in 2020 are vital – but 2021 will be a far more significant year for the net-zero transition than anything we have seen so far.

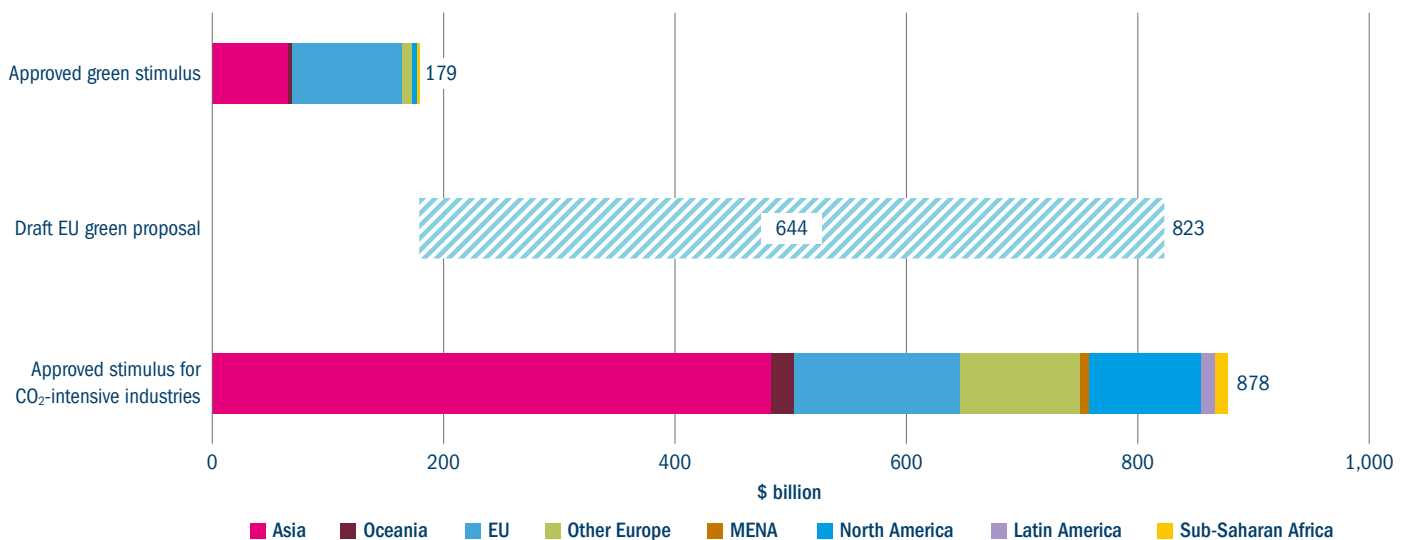
Beginning a multi-decade investment trend

2021 will start to see the funding put in place to drive the net-zero transition. It is already obvious that far more money will be needed to transform the way the world generates energy – which accounts for three-quarters of global emissions – than governments have announced so far. For example, to reach carbon neutrality by 2050, the share of electric cars in total sales must rise from 3% to more than 50% by the end of this decade, production of “green hydrogen” must increase from

450,000 tonnes a year to 40 million, and investments in clean electricity need to rise from \$380 billion a year to \$1.6 trillion.³

The implications for investors are clear. Unprecedented sums must be channelled into the world's energy transition over the coming decades. The sheer scale of the investments required will necessarily mean that this is a multi-decade investment trend, representing an opportunity of unparalleled size. Many of the technologies that will be required to make the transition possible are yet

Figure 1: stimulus approved and near completion as of 1 November 2020



Source: Governments, media reports, BloombergNEF, November 2020.

to be commercialised. The companies developing them will require sustained support from government stimulus programmes for years to come.

The opportunity in sustainable outcomes is, therefore, still in its early stages. If investors do not yet fully appreciate its size and likely duration, this is entirely understandable.

Raising the tempo

In the coming months, however, we expect two major events to increase the tempo of the net-zero effort and to signal the start of a more co-ordinated international drive to achieve the 2050 deadline. First, in May, the International Energy Agency will publish its first roadmap for the global energy sector to reach carbon neutrality by 2050. Companies around the world will treat this document as a framework against which their transition efforts will be benchmarked. This is vital because individual companies' targets for

carbon neutrality vary hugely in their quality and ambition – some have committed to neutrality by 2030, others not until 2060. Global co-ordination will allow investors to judge companies against their peers more effectively, which will help to determine where investment flows.

The second major event of 2021 is in November, when the UK will host the COP26 Climate Change Conference in Glasgow. This will seek to co-ordinate governments' climate change programmes. It will also ratchet up the pressure for governments to keep to the pledges they have made already, and to increase their size if they are to meet the 2050 goal.

The drive to achieve net zero will affect all companies and all investors over the coming decades. Some, such as oil majors with huge legacy assets, will face enormous challenges. Others have been investing in greener technologies for years and are well positioned for the energy transition.

Ultimately, public and private investment will flow to those companies making concerted moves to reach carbon neutrality. They will become more sustainable, more resilient and, therefore, more valuable over the long term. As a result they will enjoy a lower cost of capital than their peers. The global net-zero transition is just beginning: it will shape the investment agenda for decades to come.

Source:

- 1 Calastone, January 2021.
- 2 FT.com, What the US rejoining the Paris accord means for climate policy, 22 January 2021.
- 3 Columbia Threadneedle Investments, January 2021.



03 Country head focus – Austria



Herbert Kronaus
Country Head Austria

With strong green credentials in renewable energy generation and technology, as well as a growing sustainable finance sector, Austria should be well positioned as the world turns to more sustainable business models

There is little doubting Austria's grand green ambitions. After the September 2019 election of a coalition between modern hardline conservatives and the Green party, a new "super ministry" was set up covering transport, energy, the environment, science and innovation. It promised a wave of initiatives to "green" the economy, and place environmentally sustainable business at the core of the country's growth strategy.¹

Perhaps distracted by the Covid-19 crisis, critics say that little has happened yet to fulfil that early rhetoric. Even so, sustainable business is thriving. The country hosts one of Europe's largest "green tech" clusters around the city of Graz, with more than 200 companies developing green technologies and services. Further, hydroelectric plants generate around 60% of the Alpine country's electricity.²

Taking advantage of its mountainous geography, Austria aims to generate 100% of its electricity supply from renewable sources by 2030, up from current levels of around 80%.³ In doing so it is likely to turn to green finance. To date, projects have been financed by the European Investment Bank as well as by green bonds, despite Austria lagging Europe's leading green bond issuers such as France, the Netherlands and Germany.⁴

From green bonds to sustainable investment

The country's green financing plots its path towards creating a sustainable economy. The first issuer of green bonds was Verbund AG, an energy firm, which in 2014 raised €500 million for hydro and wind power plants.⁵ In 2018, the company raised a further €100 million from a digital green *Schuldschein*, which is a private debt placement.⁶ Others have included property bank Hypo Vorarlberg, which issued a €300 million green bond in 2017⁷ to finance mortgages on low-carbon buildings. In 2021, the government has indicated it intends to launch a sovereign green bond, providing a boost to the market.⁸

Over time, the Vienna Stock Exchange has joined the development of green finance. In 2018, for instance, it introduced a green and social bonds listing, adopting the Green Bond Principles of the International Capital Markets Association. The principles are a badge of quality providing for transparency and disclosure, allowing investors to evaluate environmental impacts.⁹ As long ago as 2005 the exchange launched VÖNIX,¹⁰ a capitalisation-weighted index of Austria's leading companies, based on their social and environmental

activities. One of the first national sustainability indices to be launched by a leading exchange, the index has helped underpin growth in ESG investing.

Turning to asset management, the sustainable investment universe continues to grow, according to the latest report from Forum Nachhaltige Geldanlagen (FNG), an industry association promoting sustainable investment in Germany, Austria and Switzerland. In 2019, sustainable assets in Austria reached €30.1 billion as private investors increased their investments by €6.75 billion or almost three quarters (77%).¹¹

But institutional investors still own three-quarters of all Austria's sustainable assets,¹² with pension funds the biggest supporters. A recent survey by the Fachverband der Pensionskassen, Austria's occupational pension fund association, revealed that Pensionskassen (pension funds) in Austria invest €15 billion sustainably, representing 61.5% of their assets under management.¹³

A well-positioned economy

Austria has a long history in sustainable investing. The country's Eco-label for Sustainable Financial Products is one of the oldest of its kind in Europe, and around 130 funds in Austria are currently certified with this label.¹⁴

But institutional investors are not stopping here. In September, the Fachverband der Pensionskassen called for the introduction of a "green supplementary pension" to encourage further investment by pension funds. The idea is that if supplementary pensions conformed to minimum sustainable investment standards, they would attract additional tax breaks.¹⁵

So what does the future hold once the Covid-19 pandemic begins to fade? Despite a slow start in honouring its commitments, environment minister Leonore Gewessler has said she is committed to using state aid to fund green projects.¹⁶ Beyond that, Austria's strengths in renewable energy and green tech are likely to be rewarded if the world shifts to a more sustainable economy.

Source:

- 1 FT.com, Climate crisis helps burnish Austria's green credentials, 9 September 2020.
- 2 FT.com, Climate crisis helps burnish Austria's green credentials, 9 September 2020.
- 3 European Commission, EIB and UniCredit Bank Austria finance development of one of Austria's largest wind farms, 31 August 2020.
- 4 Bloomberg, 2020.
- 5 <https://www.verbund.com/en-at/about-verbund/news-press/press-releases/2014/11/14/verbund-begibt-ersten-oesterreichischen-green-bond>, November 2014.
- 6 VERBUND places the first ESG linked syndicated loan, November 2018.
- 7 <https://www.ebrd.com/news/2017/ebrd-invests-in-green-bonds-issued-by-the-lithuanian-utility-lietuvos-energija.html>, July 2017.
- 8 New sovereign and corporate issuers cement Europe's green bond leadership. S&P Global Market Intelligence, 19 October, 2020. <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/new-sovereign-and-corporate-issuers-cement-europe-s-green-bond-leadership-60587041>
- 9 Green and Social Bonds – A Platform for Sustainable Investments, Wiener Boerse. <https://www.wienerborse.at/en/issuers/bond-admission-listing/green-and-social-bonds/>
- 10 <https://www.wienerborse.at/en/news/vienna-stock-exchange-news/voenix-sustainability-index-new-composition-24062019/>, June 2019.
- 11 <https://www.forum-ng.org/en/fng-the-activities/983-fng-marktbericht-nachhaltige-geldanlagen-2018-austria.html>
- 12 Marktbericht Nachhaltige Geldanlagen 2020, *Forum Nachhaltige Geldanlagen*. <https://www.investment-zukunft.at/cms/wp-content/uploads/2020/06/FNG-Marktbericht-2020.pdf>
- 13 Austrian Pensionskassen association pushes for sustainable investments, IPE. <https://www.ipe.com/news/austrian-pensionskassen-association-pushes-for-sustainable-investments/10047630.article>
- 14 The sustainable investment market in Austria is at historic levels, *Born2invest.com*. <https://born2invest.com/articles/sustainable-investment-market-austria-historic-levels/>
- 15 Austrian Pensionskassen association pushes for sustainable investments, IPE. <https://www.ipe.com/news/austrian-pensionskassen-association-pushes-for-sustainable-investments/10047630.article>
- 16 FT.com, Climate crisis helps burnish Austria's green credentials, 9 September 2020.



04 Infrastructure investing in a post-Covid world



Benjamin Kelly

Senior Analyst, Global Research



Ingrid Edmund

Senior Portfolio Manager

The nature of sustainable infrastructure investment has been changed by Covid-19. The economic impact of the pandemic, as governments around the world restrict movement and business activity in an attempt to slow the spread of the coronavirus, has prompted unprecedented levels of state spending in areas of infrastructure ranging from healthcare and education to employment programmes.

In response, capital markets have seen a record level of issuance of social bonds to raise funds for such projects. Morningstar estimates that European sustainable funds

have reached more than \$1 trillion of assets for the first time – with the third quarter of 2020 alone seeing more than €50 billion.¹ Heading into the pandemic, sustainable investment was typically more likely to focus on the environment and climate change mitigation strategies – indeed, when companies and other organisations talked about their ESG (environment, social and governance) performance, the emphasis in recent years has been very much on the first of those three factors.

But investing to produce more beneficial or equitable social outcomes is now firmly in the spotlight.

This is unlikely to fade as the world emerges from the pandemic. There is growing realisation by investors that infrastructure investments have long-term consequences on communities, and ultimately integrating ESG is not just a risk mitigation tool but a return generator and an opportunity to create further value by shaping positive outcomes.

Climate change investment and Covid-19

The idea that investing in infrastructure can benefit the environment and/or mitigate the impact of climate change

is not new. What is different is the pandemic has changed some of the dynamics.

Reduced travel, industrial activity and electricity generation during Covid-19 saw global emissions fall by up to 7% in 2020, according to the UN Environment Programme.² This impact will likely extend well into 2021. Further lockdowns have already been imposed across the world, and it may take several years for demand in sectors such as air travel to return to pre-pandemic levels.

Despite this, atmospheric CO₂ is continuing to rise. This shows that while the measures imposed during the pandemic are helpful in terms of reducing global emissions, they remain far from what scientists estimate is needed.

Meanwhile, the downturn in business activity in 2020 has also led to a sharp fall in fossil fuel prices, and as economies return to growth there is the chance that expansion could be underpinned by cheaper oil and gas, with a concomitant increase in emissions. Furthermore, while the share of renewable energy production has been increasing exponentially, it only translated into 18% of the EU's gross final consumption in 2018, with results in transport and heating/cooling particularly below expectations.

This highlights that more needs to be done to prevent economic recovery leading to a rebound in emissions.

The post-pandemic period is likely to provide opportunities to increase investment linked to climate-change mitigation: the EU, for example, has indicated it will put the environment at the centre of its Covid-19 economic recovery plans,³ while the UK has recently announced more ambitious proposals to meet its emissions targets.⁴ The green stimulus doesn't only achieve a reduction in emissions but also fosters investment which can boost job creation in manufacturing, construction and small and medium-sized businesses, and save consumers money.

In the US, newly appointed president Joe Biden has said the US will rejoin the Paris Agreement,⁵ and several US states already have goals in place to hit at least 50% renewable energy by the end of the decade.⁶

There are no signs that the tough climate targets put in place by governments around the world prior to the Covid-19 crisis will be watered down, which bodes well for the future of sustainable investment. An example is the endorsement of green hydrogen by governments. Hydrogen has been positioned as the clean technology solution to decarbonise areas of the

economy such as transportation, which has until now proved challenging with electrification. Europe's €180 billion investment to scale up and deploy clean hydrogen⁷ could see a sharp reduction in costs and promote the scaling up of production and use of renewable hydrogen.

This will provide additional opportunity in creating a smarter, reinforced distribution grid and new balancing solutions that will enable the integration of more decentralised renewables resources. This includes smart metering and storage among other things. The European Commission estimates that €350 billion in additional annual investment will need to be made between 2021 and 2030, compared with the previous decade. Most of the extra money is to finance interconnections to link up countries' grids and new capacity, including replacing old power and industrial plants.⁸

A boom in social bond issuance

As a barometer for identifying trends within environmental and social investing, look no further than the issuance of specific-use-of-proceeds bonds, especially green, social and sustainability. Issuance in 2020 was underpinned by a sharp increase in

the issuance of social bonds (more than 700% year-on-year)⁹ – where debt financing is channelled to specific projects with agreed socially beneficial outcomes. This could be the creation of jobs, setting up healthcare programmes or facilities, or the provision of education or training. The pandemic has had a devastating impact in all of these areas.

By the end of November 2020 a total of \$155 billion were issued,¹⁰ an increase of 869% on the same period in the previous year. Around \$100 billion was raised by issuing dedicated

Covid-19 bonds covering either social and/or sustainability projects.¹¹ But a record year for social issuance has not been at the expense of green. And this whole segment of issuance – ie green, social and sustainability – was on the cusp of issuing \$0.5 trillion in debt in 2020, another record. As such the rise in social has not been a zero-sum game, with issuers still raising finance for environmental and social projects and increased examination of social factors is not expected to be a transitory trend, this is the new normal for sustainability investing.

Social infrastructure investment after the pandemic

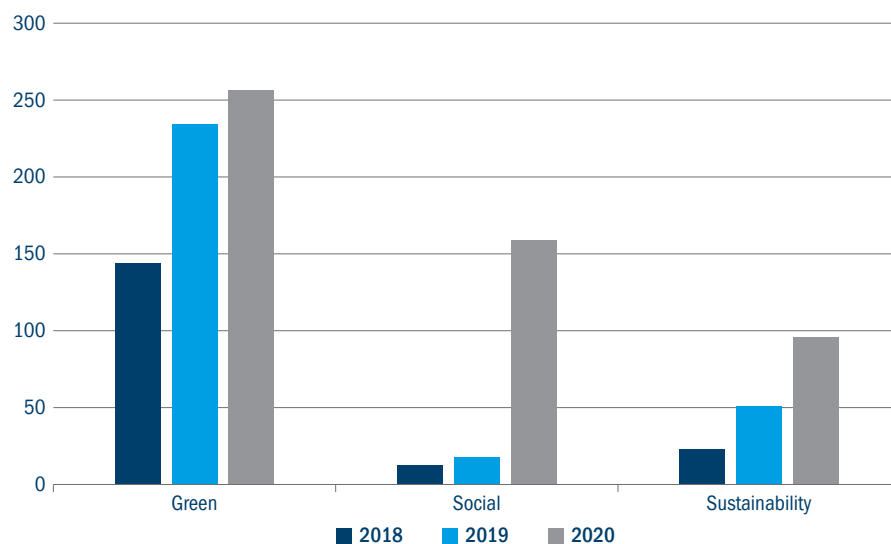
The socioeconomic impact of the coronavirus is likely to be long-lasting: it already appears to have exacerbated income inequalities in many communities, with employment among better paid white-collar workers less likely to have been affected than those in customer-facing roles or jobs that cannot easily be done remotely.

But the rise in social investing may have helped create a better understanding of the interplay between environmental and social concerns.

For example, the EU sees a new green deal as the route out of the pandemic-induced recession because of its ability to create thousands of jobs, not just because it will help the bloc reach its emissions deadlines. Recent research suggests investment in green projects could create up to three times as many jobs as investment in competing fossil fuel-based projects (Figure 2).

A reduction in reliance on oil and gas can have additional social benefits: improvements in air quality as a result of the switch to electric motor vehicles, for example, are expected to deliver major health benefits, and these will be felt disproportionately by those living in more crowded urban areas.

Figure 1: social, green and sustainability bond issuance, 2018-2020 (\$bn)



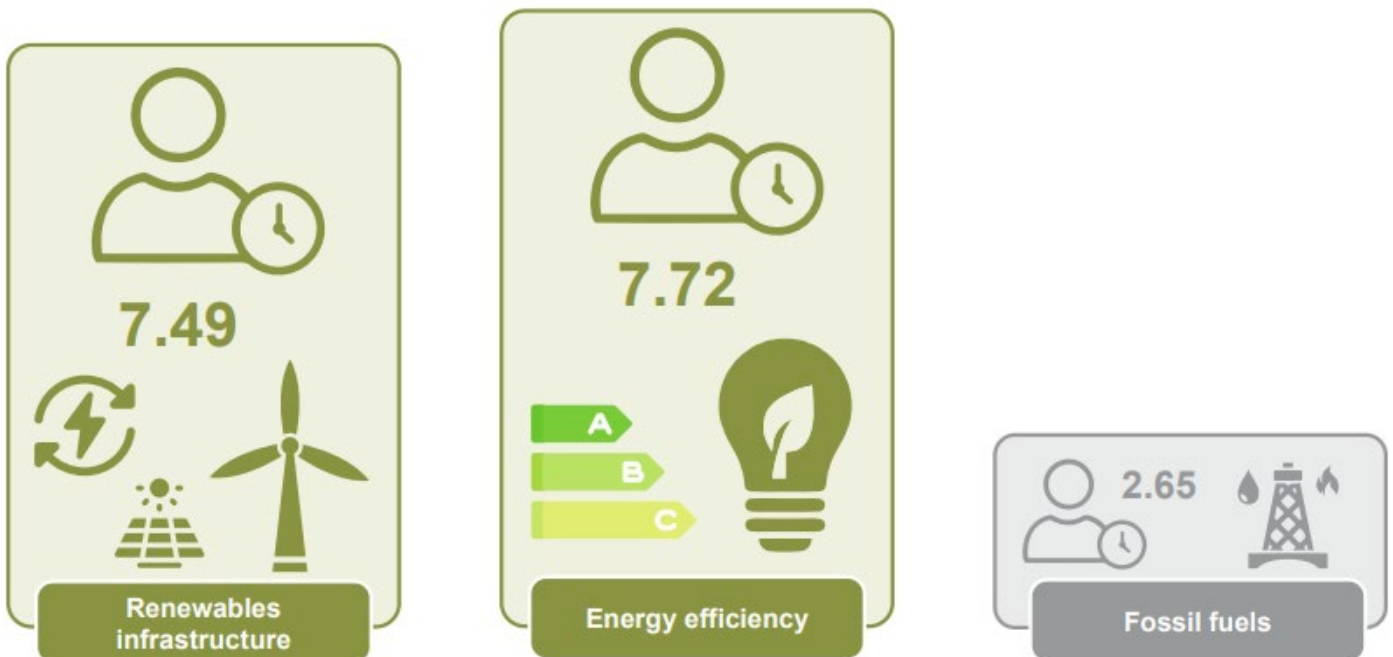
Source: Bloomberg/World Bank, December 2020.

Ultimately, progress in minimising the impact of climate change will inevitably have huge social implications in terms of reducing the prevalence of extreme weather events, thereby limiting the extent to which they can ruin harvests, damage property and displace people in the decades ahead.

Source:

- 1 Prequin Pro, October 2020.
- 2 <https://www.unenvironment.org/emissions-gap-report-2020>, 9 December 2020.
- 3 https://ec.europa.eu/info/strategy/recovery-plan-europe_en
- 4 <https://www.ft.com/content/3eda6c6f-265f-4804-a017-a260d1e101cc>
- 5 <https://www.theguardian.com/us-news/2020/nov/08/joe-biden-paris-climate-goals-0-1c>
- 6 Bank of America Merrill Lynch, May 2020.
- 7 https://ec.europa.eu/commission/presscorner/detail/en/QANDA_20_1257
- 8 <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/eu-says-higher-climate-goal-requires-350b-extra-energy-investment-per-year-60382093>
- 9 Columbia Threadneedle analysis, 2020.
- 10 Bloomberg, November 2020.
- 11 Columbia Threadneedle Investments, June 2020.

Figure 2: Jobs per million investing in green projects versus fossil fuels



Source: Will Covid-19 fiscal recovery packages accelerate or retard progress on climate change? May 2020 Cameron Hepburn, Brian O'Callaghan, Nicholas Stern, Joseph.



05 Solutions to the ever-growing plastic waste problem



Olivia Watson

Senior Analyst,
Responsible Investment Research



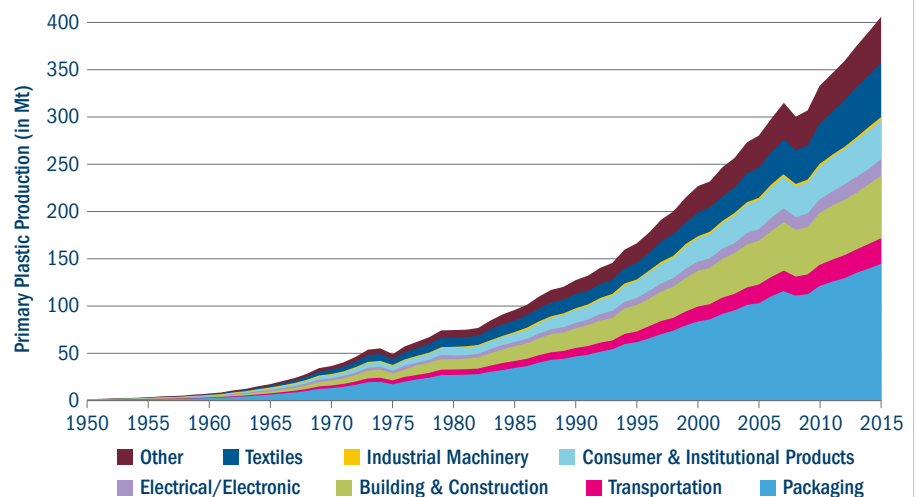
Drew Kettwick

Senior Analyst,
US High Yield

Plastics can bring environmental and economic benefits – for example, in reducing food waste, cutting transport emissions through lightweighting consumer goods, minimising packaging costs, and enabling more flexible product supply chains. These benefits, among others, have accounted for the rapid growth in plastics – typically exceeding the rate of global GDP growth over the past 50 years (Figure 1).

But given the scale of growth, single-use plastics and plastic packaging now represent an increasing proportion of waste streams. The amount of global plastic waste which has

Figure 1: Plastic production by sector



Source: Geyer, Jambeck and Law, 2017, Production, use and fate of all plastics ever made, Science Advances, vol 3/7, <https://advances.sciencemag.org/content/3/7/e1700782>

been recycled is estimated at only 9%.¹ These low recycling rates are compounded by a lack of sufficient waste collection and processing infrastructure in much of the world. Most plastic waste is incinerated, sent to landfill or escapes to waterways, oceans or land where it can become long-lasting pollution, entering ecosystems and even food chains.

In recent years, consumers and non-governmental organisations (NGOs) have pushed back against the rising plastic use trend, and regulators have joined in at a rapid pace. The number of countries adopting plastic bag bans or taxes are now too numerous to mention. At the onset of the coronavirus pandemic there was some expectation that this trend would diminish, with consumers having a greater appreciation for the hygiene benefits of single-use items and plastic packaging. But this was not the case – companies report that the issue remains high on the agenda for consumers, and several, including Coca-Cola, have accelerated their plastic targets and plans since Covid-19.²

While plastic bag bans themselves are likely to be limited in impact, other regulations will shift the plastics and packaging landscape for companies and their investors.

Most notable among these are:

- Extended producer responsibility requirements – which shift the costs of managing packaging waste from taxpayers or consumers to packagers and consumer goods companies.
- Plastic taxes – which seek to rebalance the cost differential between recycled plastic and lower cost virgin fossil-based materials. The UK plans to introduce plastic taxes from 2022³ and the EU recently announced a €0.80/kg tax on non-recycled plastic waste.⁴
- Recycled content requirements – mandating certain percentages of recycled plastic in packaging, such as those in the UK, Europe and California coming in between now and 2030.⁵

As consumer attention intensifies and these regulations ramp up, the costs of plastic packaging waste will gradually be internalised – via taxes and increases in costs, requirements for investment in new technologies, and requirements for investment in infrastructure to enable plastics to become more circular.

We believe brands that proactively respond to shifting consumer preferences and secure access to recycled content, and those that

develop new recyclable packaging and solutions, will be better positioned. So what measures are proactive consumer brands adopting?

Packaging reuse

Diverse companies from Kroger and Unilever to Burger King are experimenting with packaging reuse models – ranging from in-store refill centres to reusable packaging for home-delivered or store-bought products, to roving low-cost product refill services in urban areas. Such models currently represent a tiny proportion of sales, but the Ellen MacArthur Foundation estimates that converting 20% of plastic packaging to reuse models could represent a business opportunity in excess of \$10 billion.⁶ Such pilot schemes provide brands with the opportunity to increase consumer loyalty, and in some cases improve consumers' experience of their products.

Product and packaging redesign

Improving packaging or eliminating unnecessary packaging materials also provides opportunities to experiment with new products, improve consumer perceptions and reduce costs. Tesco recently highlighted having eliminated 3,480 tonnes (or a billion pieces)

of unnecessary plastic packaging from across its product range and those of its suppliers,⁷ providing an appealing message to address consumer concerns while resulting in cost savings. Brands such as Tide have released new products such as concentrated detergents⁸ – reducing packaging as well as transport costs and emissions.

Substitution

Substitution of plastics with other materials will benefit packagers offering innovative or recycled packaging, as well as those focused on other widely recycled materials such as paper and aluminium. Substitution of virgin and non-recyclable plastics with recycled and recyclable plastics will also play a key role, given the significantly lower greenhouse gas profile of recycled plastics as compared to virgin materials. Bioplastics are often touted as a solution, and while they may have a role to play this can be open to question. Not all bioplastics are more recyclable or biodegradable than fossil-based plastics, posing the same end-of-life challenges and potential reputational risks for companies making environmental claims. The case of Bacardi’s bioplastic bottle highlighted some of the challenges.⁹

Increasing recyclability and use of recycled materials

Finally, and perhaps most critically, the focus of much attention lies in making plastic more circular via increasing packaging recyclability and increasing use of recycled plastics.

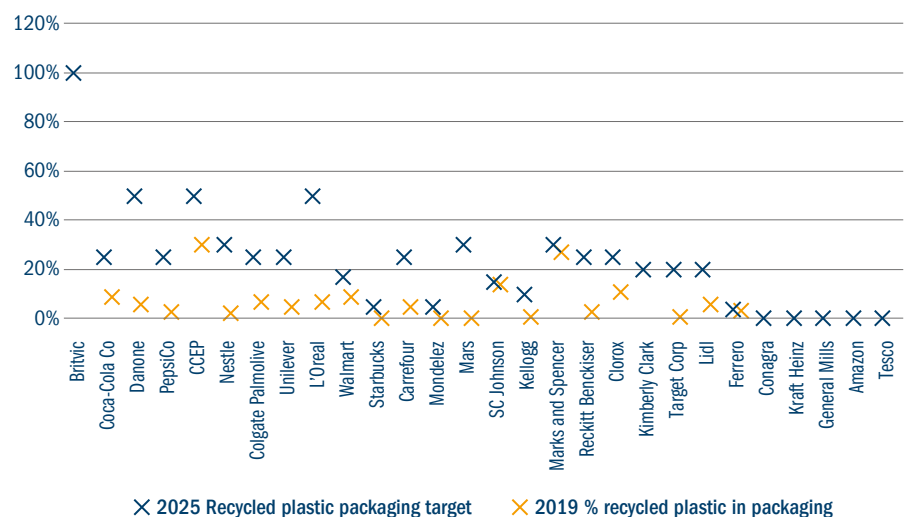
Much of the effort is directed toward meeting voluntary or regulatory targets, which are often focused on 100% recyclability and 25% recycled content by 2025. Progress against these goals is varied, but generally slow. Among consumer goods and packaging members of the Ellen MacArthur Foundation Global Commitment on Plastics, only 6.2% of plastics volume (by weight) was from recycled sources in 2019.¹⁰ At the same time, some companies have not yet set specific plastic packaging targets. Figure 2 highlights the varied degree of progress and the gap to 2025 targets among some consumer goods companies.

The gap between current practice and 2025 goals highlights that just as important as setting high-level goals is the process of securing cost-effective recycled content supply. The market for recycled content is growing rapidly, with capacity coming on stream despite the

pandemic. However, there may still be a shortfall prior to 2025 when availability of food grade recycled plastic may be squeezed. This also comes at a price premium – Nestle has committed to spending up to \$1.6 billion over the next five years to source two million tons of food-grade recycled plastics.¹¹ Such commitments should help to jump start further investment in plastic recycling infrastructure.

Meanwhile companies such as Britvic, a UK beverages producer, are seizing opportunities. The company has moved rapidly with even more ambitious goals – an aim to shift to 100% recycled plastic, to be sourced in part via a co-investment in a PET recycling facility.¹² This approach positions the company well for forthcoming plastics regulations, enables a clear message to consumers, and potentially offers the company an early advantage relative to competitors.

Figure 2: 2025 recycled plastic targets vs current levels



Sources: Data drawn from corporate websites and the Ellen MacArthur Foundation Global Commitment Progress Report December 2020.

Analyst viewpoint: the implications of these changes for packagers and investors

The changing regulatory environment and shift in consumer preferences for plastic packaging has far reaching implications for the packaging sector. Our view is that growth in plastic packaging is likely to continue, but at a slower rate as scrutiny on environmental impacts intensifies. Global growth will also likely be more heavily weighted to emerging economies where the market adoption of plastic packaging is lower and regulations are less stringent.

Companies within the packaging sector will need to continue to adapt to a changing landscape to remain competitive by improving the recyclability of plastic, introducing more eco-friendly products and promoting sustainability within their products to meet customers' demands. This will also carry associated costs, including increased R&D spending to develop new products, procuring supplies of more costly and scarce recycled resins, taxes on waste, and improved ESG disclosure to investors and customers about plastic packaging manufacturers' sustainability goals and progress.

Procurement of high-quality recycled resins to meet the recycled content target of consumer products companies will be a key challenge for plastic packaging companies given the limited infrastructure for plastics recycling and lower overall plastic recycling rates, notably in the US. To meet this demand, a more robust recycling infrastructure will be needed, especially for post-consumer plastic waste.

While these changes create risks to individual companies and business models, they also create investment opportunities within the sector. We continue to apply fundamental and relative value analysis through an ESG lens to companies within the packaging sector to determine which are best positioned to capitalise and which are most at risk in this evolving landscape. Businesses most at risk, in our view, are tied to low value-add and easily substituted plastic products. These are typically single-use products such as straws, plastic tableware, cups, beverage bottles and non-reusable plastic bags. Companies with significant exposure in these areas face the highest risk of outright product bans or regulatory curtailment, but also threat of substitution to other packaging substrates. Companies with a combination of elevated financial leverage and high exposure to single-

use plastic packaging will be the most at risk to the negative consequences of a shift in packaging demand.

Plastic packaging companies will need to adapt their businesses for sustainability by offering a combination of higher recycled content, bio-plastic products and improved product recyclability to remain competitive in the marketplace. Companies that can adapt by offering innovative eco-friendly plastic products will be net beneficiaries as these more sustainable options typically carry a higher margin profile than non-sustainable products, while also serving as a differentiator to win new business and achieve better growth.

Other businesses within the packaging sector that are likely to benefit from the sustainability push will be those that offer cost-effective substitutions that are viewed as more eco-friendly, including aluminium cans and cups, paper products and other bio-based or high recycled content products. As an example, Ball Corporation recently introduced a line of aluminium beverage cups. They are lightweight and infinitely recyclable and, while slightly more expensive than a traditional plastic cup, is taking market share from plastic as a more environmentally friendly alternative.¹³

What next?

As investors, we continue to engage with management teams of consumer goods and packaging companies to better understand their relative positioning and progress towards shaping their products and packaging to meet changing regulatory and customer demands. We also continue to push for improved disclosure of ESG and plastic-related targets and metrics to better understand companies' risk exposure and progress on key issues.

Consumer goods and packaging companies will be key constituents in the move to a more circular and sustainable plastics economy, and we view representation within initiatives

such as the Alliance to End Plastic Waste, the Sustainable Packaging Coalition, and the Ellen MacArthur Global Commitment as a positive signal of commitment to working towards long-term solutions for plastic packaging. Plastic packaging offers benefits to society and we believe it will be a viable long-term product, but challenges remain. A shift to a more circular and innovative model will enable plastic packaging to remain relevant and become a more sustainable option in the future.

Source:

- 1 Production, use, and fate of all plastics ever made | Science Advances (sciencemag.org), 19 July 2017.
- 2 Coca-Cola turns to 100% recycled plastic bottles in U.S. | Reuters, 9 February 2021.

- 3 FT.com, UK to introduce plastics tax for packaging by April 2022, 29 October 2018.
- 4 <https://www.icis.com/explore/resources/news/2019/03/07/10329804/eu-commission-proposing-0-80-kg-tax-on-production-of-all-non-recycled-plastics>, March 2019.
- 5 <https://www.gov.uk/government/publications/introduction-of-plastic-packaging-tax/plastic-packaging-tax>, 26 November 2020.
- 6 Ellen MacArthur Foundation, The New Plastics Economy: catalysing action, 2017.
- 7 Tesco removes one billion pieces of plastic - Tesco PLC, 30 December 2020.
- 8 Compaction | Sustainability - Tide, accessed 5 February 2021.
- 9 Bloomberg Opinion, Has Bacardi Solved the World's Plastic Problem?, 2 December 2020.
- 10 Global-Commitment-2020-Progress-Report.pdf (ellenmacarthurfoundation.org)
- 11 Nestlé creates market for food-grade recycled plastics (nestle.com), 16 January 2020.
- 12 Britvic announces move to 100% recycled plastic bottles in Great Britain by the end of 2022 - Britvic PLC, 20 October 2020.
- 13 Atlanta Business Chronicle, Ball Corp aluminum cup plant producing for retail launch first half 2021, February 2021.





06 Considerations and obstacles to climate change risk management



Chris Wagstaff

Head of Pensions and Investment Education

What must asset owners ask themselves in approaching – and the challenges they must overcome in implementing – an effective climate change risk management policy?

Climate change as a global systemic risk is increasingly integral to asset owners' risk management. However, in approaching and ultimately implementing a climate change risk management policy, asset owners must ask themselves some fundamental questions while taking on board a number of key considerations.

These include:

- **Determining at which point of the portfolio construction process climate change risk management considerations should be implemented and whether they should be a primary or secondary consideration.** For most, climate change risk management will be integral to manager selection but perhaps secondary to considerations such as the portfolio's required rate of return, risk parameters, diversification and liquidity when determining the strategic asset allocation, given the potential to significantly alter the risk/return, diversification and liquidity characteristics of the portfolio.
- **Whether to align portfolios with the objectives of the Paris Agreement,¹ as many asset owners are already starting to do, some in anticipation of regulation potentially moving in that direction.** However, this is no easy task given that there is no single validated approach for measuring and evaluating the temperature alignment and, indeed, the carbon intensity of a portfolio. Not to mention the transition pathways of a portfolio's holdings with data availability being

largely limited to equities, credit and sovereign bonds. Thankfully, the publication of the IIGCC Paris Aligned Investment Initiative will assist asset managers and asset owners in implementing investment policies in line with the Paris Agreement's goals.²

- **Establishing what "good" looks like.** Although the Paris Agreement sets a very long-term target to aim at, asset owners will invariably look to their peer group for an initial baseline comparison and ongoing monitoring of their chosen climate metrics. To do so successfully will require greater levels of transparency from all, with each setting realistic interim milestones.

Three key obstacles to assessing carbon and greenhouse gas emissions exposures

With the above in mind, asset owners (assisted by their investment consultant and asset managers) must navigate their way around three key obstacles to assessing the carbon and greenhouse gas emissions exposure of their portfolios. These are: the paucity of quality Scope 1, 2 and, particularly, 3 greenhouse gas emissions data

analytics; the inconsistency of ESG (environmental, social and governance) data, of which climate risk is a key “E” risk factor; and inadequate disclosures by companies of their greenhouse gas emissions. The latter severely compromises the accuracy of both ESG data and the greenhouse gas emissions data compiled by data vendors and analysed by asset managers.

Scope 1, 2 and 3 emissions data analytics Measuring emissions is not an exact science. Scope 3 emissions in particular are poorly defined, largely estimated and subject to double counting, while there is significant disparity among data providers in capturing the data as each adopt different methodologies and take a different view on the same factor. Despite these limitations, investors are using the available data (principally Scope 1 and 2, but also Scope 3 – often after making judgmental adjustments) to formulate views on which companies are striving to boost their sustainability credentials and then using the data to track how these companies progress over time.

Inconsistent ESG data As many ESG data providers have inconsistent coverage, lack standardised methodologies and provide subjective ESG assessments of companies this makes it extremely difficult to measure

ESG factors consistently. Reassuringly, those asset managers with strong stewardship and ESG credentials are working on class-leading and differentiated solutions which, over time, will enable them to provide asset owners with more accurate data to further inform their decision making.

Inconsistent company disclosures of GHG emissions However, this aspiration continues to be compromised by inconsistent company disclosures of greenhouse gas emissions. While there are a number of global reporting frameworks, such as the Task Force on Climate-related Financial Disclosures (TCFD), that help companies voluntarily report sustainability information to a wide range of stakeholders, not all pull in the same direction. Of course, given how new the science of climate disclosure is, it is perhaps inevitable that these bodies are each grappling with what “good” looks like and which metrics best capture the climate-related risks of (and opportunities offered by) reporting entities operating in myriad sectors. However, each continues to adapt in order to provide investors with the information they need to make informed decisions about the sustainability of a company’s activities.

Indeed, with greater disclosure and transparency comes the ability to better assess and price climate-related risks and opportunities pertaining to each business which, in turn, leads to more accurately priced securities, more price-efficient financial markets and more efficient capital allocation. Thankfully, the direction of travel is for companies to fully disclose the climate risks associated with their activities in a more standardised and consistent manner.

Ideally benchmarked to science-based targets aligned with the Paris targets, asset managers and asset owners will be better able to back the winners – those with the technologies and competitive advantages to thrive in the transition to a low carbon emissions world. They will also be able to use this information to make informed decisions around excluding or tilting a portfolio away from particular industries or stocks.

Transition and physical risk analysis and reporting

Transition and physical risks analysed by asset managers are reported to asset owners, many of whom are increasingly analysing these risks themselves and, in turn, reporting the carbon intensity of their portfolios (against appropriate benchmarks) to their members or beneficiaries.

Portfolio exposures to these risks are typically reported through carbon footprinting. The TCFD recommends that asset owners report the weighted average carbon intensity of their portfolios (per individual security weightings) based on Scope 1 and 2 emissions (those within an organisation's control) and expressed in terms of tonnes of CO₂ equivalent (tonnes CO₂e)/\$m sales). However, many asset managers in their reporting to asset owners, especially for equity portfolios, provide additional metrics such as carbon emissions (tonnes CO₂e/\$m invested) and total carbon emissions (tonnes CO₂e).

Perhaps the most obvious limitation of carbon footprinting is that it doesn't capture the costs associated with reducing a company's carbon footprint. Indeed, two companies in different industries, or any two industries, may share the same carbon exposure but one may find it much easier and less costly to reduce its carbon footprint than the other, having a transition pathway that isn't as compromised

by carbon lock-in. This is where more analytical effort needs to be concentrated.

Likewise, physical risk analysis can be approached from several different angles. For instance, where a portfolio's assets are "geo-locatable", it is possible to measure exposure to physical risks associated with climate change directly using catastrophe risk modelling tools, analysing the portfolio's physical risks by perils such as floods, earthquakes and wildfires. This, in turn, can trigger more detailed analysis as to how such a risk exposure is managed or insured.

As an extension of this risk analysis – although very much a work in progress and notwithstanding the three limiting factors identified earlier – asset managers and asset owners are seeking to add to their climate change risk management by developing climate Value-at-Risk (VaR) measures of their portfolio climate exposures to estimate potential portfolio losses under a given climate scenario.

Source:

- 1 The Paris Agreement's central aim is to keep a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C by 2100.
- 2 The Institutional Investors Group on Climate Change (IIGCC) is the European membership body for investor collaboration on climate change, whose mission is to mobilise capital for a low carbon transition. The Paris Aligned Investment Initiative is led and coordinated by IIGCC with a steering group of leading asset owners (<https://www.iigcc.org/resource/iigcc-paris-aligned-investment-initiative/>)

STEWARDSHIP IN ACTION

Columbia Threadneedle Investments views an integrated, joined-up approach to stewardship as an integral part of its responsible approach to investment. We vote actively at company meetings, applying our principles on a pragmatic basis. We view this as one of the most effective ways of signalling approval (or otherwise) of a company's governance, management, board and strategy. We classify a dissenting vote as being where a vote is cast against (or where we abstain/withhold from voting) a management tabled proposal, or where we support a shareholder-tabled proposal not endorsed by management. While analysing meeting agendas and making voting decisions, we use a range of research sources and consider various ESG issues, including companies' risk management practices and evidence of any controversies.

Our final vote decisions take account of, but are not determinatively informed by, research issued by proxy advisory organisations such as ISS, IVIS and Glass Lewis as well as MSCI ESG Research. Proxy voting is effected via ISS. Although we subscribe to proxy advisors' research, votes are determined under our own custom voting policy which is regularly updated. The RI team assesses the application of the policy and makes final voting decisions in collaboration with the firm's portfolio managers and analysts. Votes are cast identically across all mandates for which we have voting authority. All our voting decisions are available for inspection on our website seven days after each company meeting.

In prioritising our engagement work, we focus our efforts on the more material or contentious issues and the issuers in which we have large holdings – based on either monetary value or the percentage of outstanding shares. There are

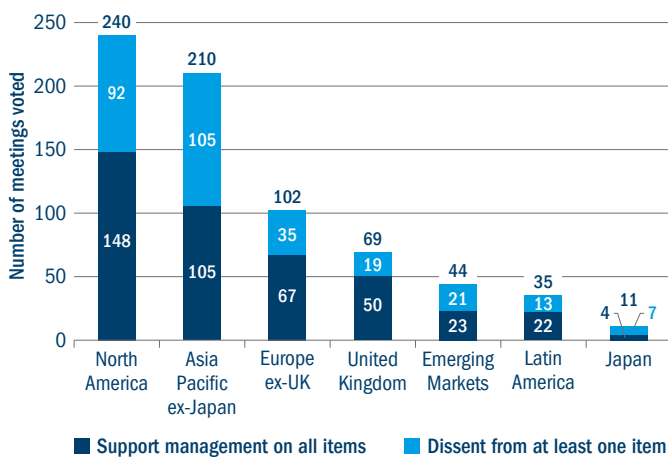
many companies with which we have ongoing engagements, as well as a number that we speak to on a more ad hoc basis, as concerns or issues arise. We actively participate in several investor networks, which complement our approach to engagement. Along with other investors, we raise market and issuer-specific environmental, social and governance issues, share insights and best practice. We do not make use of third-party engagement services.

The significant impact of Covid-19 on companies' ability to operate continues to be a main topic of engagement. Our approach to active stewardship remains unchanged: we continue to engage with companies to better understand their management of financial and non-financial risks and how they generate sustainable long-term returns. How companies respond and adapt to Covid-19 will be a core part of this analysis going forward.

07 Voting Q4

Between October and December 2020, we voted at 711 meetings across 47 global markets. This compares to 688 meetings voted across 41 global markets in the third quarter. Of the 711 meetings, 378 were annual general meetings, 300 special meetings, eight court, seven combined annual/special, and six each for proxy contests, written consent and bondholder meetings. We cast at least one dissenting vote in 311 meetings (44%).

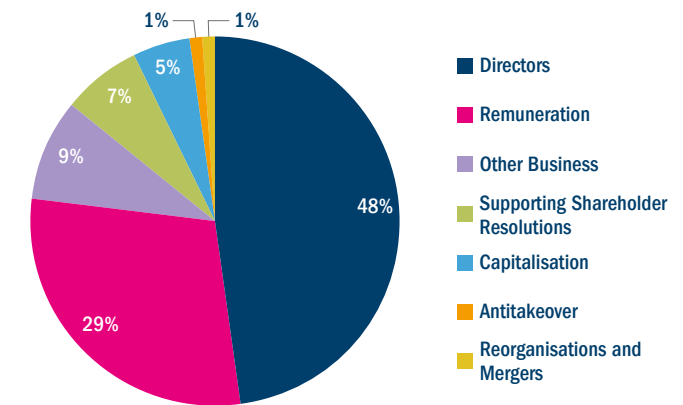
Figure 1: Meetings voted by region



Source: Columbia Threadneedle Investments, ISS ProxyExchange, 30 December 2020.

We voted in 47 separate markets in the fourth quarter. Most meetings were voted in the United States (238), followed by Australia (83) and United Kingdom (64). The majority of the voting items that we did not support throughout the quarter continue to be related to directors followed by remuneration and non-salary compensation-related proposals.

Figure 2: Proportion of dissenting votes per category



Source: Columbia Threadneedle Investments, ISS ProxyExchange, 30 December 2020.

To find out more visit
COLUMBIATHREADNEEDLE.COM

EMEA.Stewardship@columbiathreadneedle.com

US.Stewardship@columbiathreadneedle.com

RI.Thematic@columbiathreadneedle.com



Important Information

For use by professional clients and/or equivalent investor types in your jurisdiction (not to be used with or passed on to retail clients). This is an advertising document. This document is intended for informational purposes only and should not be considered representative of any particular investment. This should not be considered an offer or solicitation to buy or sell any securities or other financial instruments, or to provide investment advice or services.

Investing involves risk including the risk of loss of principal. Your capital is at risk. Market risk may affect a single issuer, sector of the economy, industry or the market as a whole. The value of investments is not guaranteed, and therefore an investor may not get back the amount invested. **International investing** involves certain risks and volatility due to potential political, economic or currency fluctuations and different financial and accounting standards. Risks are enhanced for emerging market issuers.

The securities included herein are for illustrative purposes only, subject to change and should not be construed as a recommendation to buy or sell. Securities discussed may or may not prove profitable. The views expressed are as of the date given, may change as market or other conditions change and may differ from views expressed by other Columbia Threadneedle Investments (Columbia Threadneedle) associates or affiliates. Actual investments or investment decisions made by Columbia Threadneedle and its affiliates, whether for its own account or on behalf of clients, may not necessarily reflect the views expressed. This information is not intended to provide investment advice and does not take into consideration individual investor circumstances. Investment decisions should always be made based on an investor's specific financial needs, objectives, goals, time horizon and risk tolerance. Asset classes described may not be appropriate for all investors. **Past performance does not guarantee future results, and no forecast should be considered a guarantee either.**

Information and opinions provided by third parties have been obtained from sources believed to be reliable, but accuracy and completeness cannot be guaranteed. This is an advertising document. This document and its contents have not been reviewed by any regulatory authority.

In Australia: Issued by Threadneedle Investments Singapore (Pte.) Limited ["TIS"], ARBN 600 027 414. TIS is exempt from the requirement to hold an Australian financial services licence under the Corporations Act and relies on Class Order 03/1102 in marketing and providing financial services to Australian wholesale clients as defined in Section 761G of the Corporations Act 2001. TIS is regulated in Singapore (Registration number: 201101559W) by the Monetary Authority of Singapore under the Securities and Futures Act (Chapter 289), which differ from Australian laws."

In Singapore: Issued by Threadneedle Investments Singapore (Pte.) Limited, 3 Killiney Road, #07-07, Winsland House 1, Singapore 239519, which is regulated in Singapore by the Monetary Authority of Singapore under the Securities and Futures Act (Chapter 289). Registration number: 201101559W. This advertisement has not been reviewed by the Monetary Authority of Singapore.

In Hong Kong: Issued by Threadneedle Portfolio Services Hong Kong Limited 天利投資管理香港有限公司. Unit 3004, Two Exchange Square, 8 Connaught Place, Hong Kong, which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 regulated activities (CE:AQA779). Registered in Hong Kong under the Companies Ordinance (Chapter 622), No. 1173058.

In the USA: Investment products offered through Columbia Management Investment Distributors, Inc., member FINRA. Advisory services provided by Columbia Management Investment Advisers, LLC. Collectively, these entities are known as Columbia Management.

In EMEA: Issued by Threadneedle Asset Management Limited. Registered in England and Wales, Registered No. 573204, Cannon Place, 78 Cannon Street, London EC4N 6AG, United Kingdom. Authorised and regulated in the UK by the Financial Conduct Authority.

In the Middle East: This document is distributed by Columbia Threadneedle Investments (ME) Limited, which is regulated by the Dubai Financial Services Authority (DFSA). For Distributors: This document is intended to provide distributors' with information about Group products and services and is not for further distribution. For Institutional Clients: The information in this document is not intended as financial advice and is only intended for persons with appropriate investment knowledge and who meet the regulatory criteria to be classified as a Professional Client or Market Counterparties and no other Person should act upon it.

Columbia Threadneedle Investments is the global brand name of the Columbia and Threadneedle group of companies.