Janus Henderson INVESTORS

ESG IN CORPORATE CREDIT: CHANGE IS ACTIVE

Investing with a sense of purpose

At Janus Henderson Investors, our focus is on growing and managing our clients' capital and fulfilling our fiduciary responsibilities. In every market, client demand is increasing for us to invest with processes that incorporate environmental, social and governance (ESG) factors and sustainability.

ESG factors are integral to how we think about risk and are embedded within our fundamental analysis. As an active manager, by defining those companies that are genuinely in a process of an ESG transition, we aim to invest selectively and responsibly to help clients stay on the right side of change and capture sustainable returns.

In our view, this approach offers three benefits:

- **The prospect of generating higher risk-adjusted returns** from buying credit improvement that is not yet reflected in a security's price.
- **A greater positive impact on society and the environment** by rewarding and encouraging positive ESG outcomes.
- **Engaging with companies** to influence positive change that supports more sustainable business models.

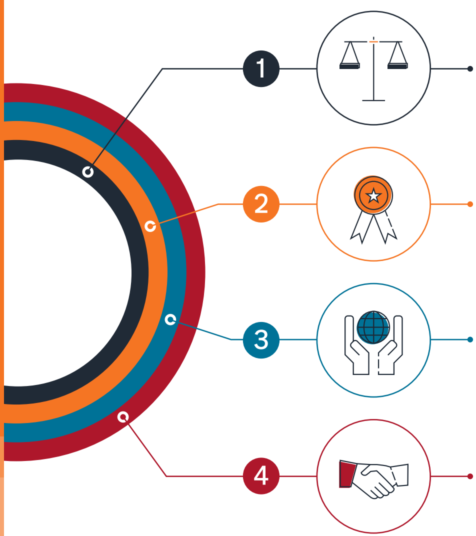
Here we detail our integrated ESG approach and framework, as well as our capabilities, in applying our core ESG principles to actively managing our credit strategies.

Our ESG philosophy: change is active

We believe that repeated and thorough application of ESG should contribute to long-term investment success. This is through seeking to support companies that already invest in a sustainable future, while encouraging change among those that have yet to commit to specific actions. We believe that by actively participating in a positive trajectory of change, we can benefit from this evolution as better ESG credentials should contribute to a lower cost of capital and improved risk-adjusted returns. Our core principles are:

- **Integration is fundamental** – consistent and rigorous ESG evaluation – combining top-down and bottom-up views – is core to our fundamental analysis and portfolio construction.
- **Change is active and inclusive** – assessment of how ESG risks are being addressed and continued re-evaluation should lead to improved risk-adjusted returns.
- **Ongoing dialogue is integral to change** – active and continuous engagement is vital to facilitating change and informs how we shape portfolios.
- **Better outcomes arise from client connections** – an ESG journey is by no means a static one and we connect with clients to understand their needs and tailor portfolios to these as requirements evolve.

These are encapsulated in four pillars:



1. ASSESSMENT OF ESG FACTORS IS AN INTEGRAL PART OF OUR FUNDAMENTAL ANALYSIS AND INVESTMENT DECISIONS
2. CONSISTENT ESG INTEGRATION IN PORTFOLIO CONSTRUCTION SHOULD LEAD TO IMPROVEMENT IN RISK-ADJUSTED RETURNS
3. ACTIVE ENGAGEMENT IS KEY TO EFFECTIVE ESG INTEGRATION INFORMING OUR INVESTMENT DECISIONS
4. WE HELP TO SOLVE FOR CLIENTS' DIVERSE OBJECTIVES TO ACHIEVE ESG OUTCOMES

OUR ESG PHILOSOPHY TRANSLATES INTO A ROBUST ESG FRAMEWORK AND PROCESS WHICH COMBINES A TOP-DOWN THEMATIC APPROACH WITH BOTTOM-UP ESG ISSUER ASSESSMENT.

Top-down sector analysis

Our top-down approach in credit involves applying the Sustainability Accounting Standards Board (SASB) materiality framework to define what we believe to be the most financially material ESG risks and factors attributable to a sector or industry. We consider an ESG risk to be financially material if it has – or could potentially have – a significant impact on a company's credit profile or the pricing of a security.

We conduct a sector review annually in line with the framework, adapted for our portfolios and the universe of securities in fixed income. From this output, our Global Credit Research Team assign **ESG sector ratings**, reflecting the materiality of the E, S and G risks, and define the primary ESG risk factor that warrants the most attention. The ratings reflect our view of the most relevant level of ESG risk for most companies within a sector and can help inform portfolio construction in terms of exposure to this sector/industry. Sector ratings, however, do not serve as a 'ceiling' (or limit) for individual ESG issuer ratings (assigned from analysis using our proprietary quadrant framework as shown overleaf).

NON-MATERIAL RISK

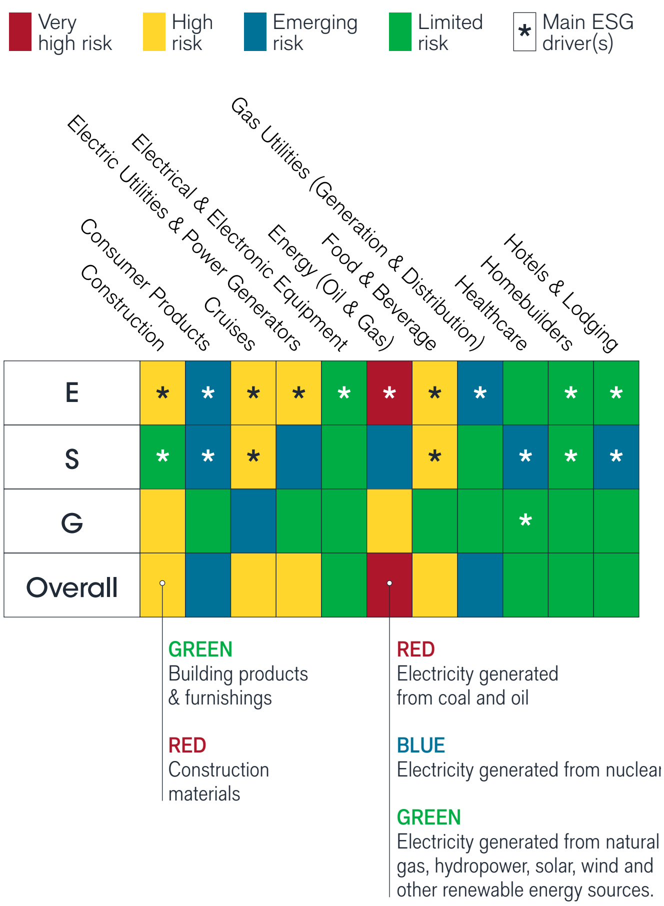
	Sector example
Limited ESG sector risk	GREEN: Healthcare
Emerging ESG sector risk	BLUE: Insurance
High ESG sector risk	YELLOW: Industrial machinery & goods
Very high ESG sector risk	RED: Energy (oil & gas)

MATERIAL RISK

Source: Janus Henderson Investors. For illustrative purposes only. These buckets align to our quadrant framework that evaluates issuers along similar parameters. Limited ESG sector risk implies that ESG risks prevalent in this sector have no financial material impact on companies operating in the sector. Emerging ESG sector risk implies non-material ESG risks that could become financially material.

Sub-sectors may be rated differently from their respective main category (shown in the diagram). For instance, within yellow-rated construction, sub-sector construction materials is rated red, whereas a green rating is assigned to building products & furnishings.

Major sector ratings



Our Fixed Income ESG Research Working Group (its main functions are explained later) reviews for consistency all the ESG sector risk levels assigned by individual groups of sector analysts, using a number of key comparable metrics and data points within each of the E, S and G risk factors.

Bottom-up ESG analysis: a forward-looking approach

As the next step of our integrated ESG process, bottom-up ESG analysis follows the assignment of ESG sector ratings. This forms a key part of fundamental research, feeding into portfolio construction and security selection. Analysts within the Global Credit Research Team are responsible for issuers within a particular sector across both investment grade and high yield. This allows for complete coverage as companies transition between credit rating levels and means our analysts are well attuned to identifying catalysts for change. This expertise is incorporated into how we assess the current and potential future ESG profiles of individual companies.

When considering ESG risks, we look at the following three aspects:

- The financial materiality of ESG risk
- Forward-looking ESG evaluation
- Improving or deteriorating trajectory

We place upmost importance on an issuer's willingness to change, as well as its ability to manage and mitigate ESG risks. Crucially, we seek to corroborate what companies say with evidence of this in action. We generally allocate capital to issuers who are committed to improving their ESG profiles. Our approach is focused on actively influencing issuers via engagements to help them transition towards a business model that aims to address ESG risks. We strongly believe that this forward-looking approach, which factors in potential improvement in issuers' ESG credentials, has advantages over a ESG policy based solely on exclusions. Narrowing down the universe in this way does not aid active alpha generation nor does it push the much-needed change to address wider environmental and social issues.

We also work with our clients to deliver solutions most suited to their ESG approach and objectives and manage bespoke ESG-segregated mandates which may necessitate guidelines, such as negative screens and climate-related targets.

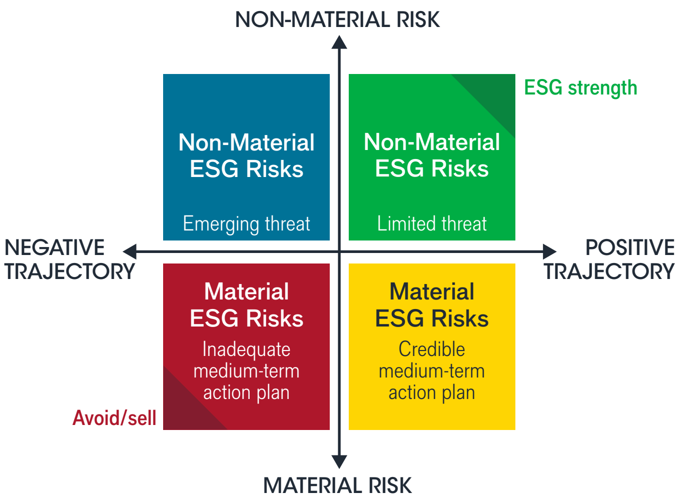
Applying our proprietary ESG quadrant framework

Assigning ESG ratings to issuers involves assessment against our proprietary ESG quadrant framework, which is shared globally across the Janus Henderson Fixed Income platform. The key distinctive features of the quadrant framework are:

- The quadrant focuses on a **medium-term time horizon** (3-7 years). We believe this period allows meaningful change to take place and balances the long-term nature of ESG risks with the visibility needed to assess how credible a company's action plan is and what steps it is taking to execute it.
- It therefore makes an assessment **more feasible and realistic** than looking at a company's action plan to address ESG risks beyond this timeframe.
- As such, it is a **forward-looking** tool based on a practical timeline.

There is a strong link between the ESG sector and individual issuer ESG ratings, reflecting how our top-down and bottom-up approach combine to give a more holistic view of a security. However, a sector rating does not limit an issuer's rating which can be higher than its respective sector. For example, there may be certain companies that have made sufficient effort to modify their practices to address ESG risks related to the sector and capture ESG relevant opportunities. If presented as a formula, it could read as follows:

ESG issuer rating = company ESG risks (reflected in ESG sector rating) – management action plan to address these risks



Source: Janus Henderson Investors. Note: ESG or sustainable investing considers factors beyond traditional financial analysis. This may limit available investments and cause performance and exposures to differ from, and potentially be more concentrated in, certain areas than the broader market.

These ratings are defined as:

GREEN

Issuers which are not materially exposed to ESG risks or for which ESG is a strength, reflected in their ability to capitalise on ESG opportunities (dark green corner).

BLUE

Issuers with emerging ESG challenges that are not yet material but could become so if not managed or addressed.

YELLOW

Issuers facing material ESG risks but have (and are implementing) a credible action plan to manage these risks.

RED

Issuers exposed to significant ESG risks, which we believe are not being adequately managed. In some instances, we evaluate the management of ESG challenges as too weak and ESG risks too elevated for us to hold the credit (dark red corner).

SUCH ISSUER EVALUATION IS SUPPORTED BY ACTIVE AND REGULAR ENGAGEMENT TO ENCOURAGE CHANGE.

Our proprietary ESG ratings are reflected in data analytics tool Quantum, which can be accessed by the investment teams.

Issuer	Industry	Overall credit recommendation	ESG rating
Company A	Automotive	⊘ — **✓** +	● ● ● ● ● ●
Company B	Electric Utilities & Power Generators	⊘ — ✓ **+**	● ● ● ● ● ●
Company C	Energy (Oil & Gas)	⊘ **—** ✓ +	● ● ● ● ● ●

Overall credit recommendation
- ⊘ Avoid
- — Underweight
- ✓ Marketweight
- + Overweight

ESG rating
- ● Avoid / sell
- ● Material ESG risk / inadequate action plan
- ● Material ESG risk / credible action plan
- ● Non-material ESG risk / emerging threat
- ● Non-material ESG risk / limited threat
- ● ESG strength

Source: Janus Henderson Investors. Note: Sample screen of Quantum tool for illustrative purposes.

Our quadrant framework is a dynamic and robust tool designed to translate the assessment of industry-wide ESG risks to individual issuer ESG profiles. It allows for sufficient differentiation in order to be meaningful in our investment decision-making process. For instance, to own a security in the 'red' quadrant, we would need additional relative value to compensate for the high level of ESG risk associated with the issuer.

Such issuer evaluation is supported by active and regular engagement to encourage change. We use our engagement framework to formulate our thinking around ESG analysis and ratings. It aids with understanding how a company is managing ESG risks and guides us in influencing its management's actions.

Our engagement framework: keeping an active dialogue

We believe in the power of connection to drive better outcomes. Our engagement framework recognises the collective effort of asset owners in promoting better ESG practices at investee companies. As an active asset manager, our ethos of investing with conviction and a sense of purpose plays an instrumental role in encouraging regular engagement with the issuers in which we invest.

In fixed income, we define **engagement** as a **targeted dialogue** between an analyst and a company's representatives which aims to better understand a company's ESG risks and initiatives, as well as communicate our expectations **to encourage better ESG practices**. Company progress needs to be assessed **over time**.

Our engagement framework involves:

- Identifying themes and selecting target issuers
- Active issuer engagement through initial targeting and follow ups
- Periodically tracking progress against expectations

The types of engagement we pursue are:

- **Thematic engagement:** Series of engagement meetings with a select group of companies undertaken in line with identified themes.
- **Targeted issuer engagement:** Targeted communication with an issuer seen as an ESG laggard (below average or deteriorating ESG profile) or following an ESG incident.
- **Collaborative engagements:** Coordinated thematic or issuer-specific joint engagement project undertaken with other desks, including our equity colleagues, or with external parties.

Thematic engagements

Our top-down approach to the assignment of ESG ratings to sectors also helps to highlight thematic engagement opportunities.

Across the firm, we focus engagement on three major mega-themes:

- Climate change
- Diversity, Equity and Inclusion (DE&I)
- Corporate governance

As part of our ESG sector review in fixed income, we identify broad E, S and G themes that are closely linked with these mega-themes:

Environmental	Social	Governance
Decarbonisation	Protecting customer health and wellbeing	Fostering strong corporate culture
Embracing technology to manage climate risk	Ensuring essential service accessibility and affordability	Diversity, Equity & Inclusion (DE&I)
Working towards a circular supply chain	Driving stronger social cohesion	

Given the importance of decarbonisation as one of the key ESG megatrends, greenhouse gas (GHG) emissions management has featured consistently as a theme of focus for many of our sector analysts. On top of highly carbon intensive sectors, others include retail & consumer, food & beverage and paper & packaging, to name a few. Among the themes identified in the 'social' category, many sectors can be classed as more exposed in respect to social concerns, such as tobacco, food & beverage (addressing adverse health issues) and leisure, internet media (measures against mental harm) and software services, and IT services sectors. DE&I focuses on progress and ambitions for a diverse and inclusive working environment and tackling structural inequalities.

Targeted issuer engagement

Aligned to our conviction in a combined top-down and bottom-up approach, targeted issuer engagement provides a detailed lens to our understanding of companies' individual ESG profiles and helps drive change towards improvement. As part of our selection criteria, we prioritise issuers whose ratings are red (exposed to significant ESG risks that are not adequately managed) and blue (with emerging ESG challenges that require attention before any further deterioration). Additionally, we may use third-party data providers' assessment relating to such matters as UNGC breaches or watchlist cases in selecting engagements. We also prioritise engagement with issuers upon the occurrence of idiosyncratic ESG events or developments.

Process in action: Banks – financial crime prevention ('fostering strong corporate culture')

Governance failings and **financial crime**, in particular, can have material consequences for **banks**, not only in terms of sizeable financial sanctions but also reputational risk. The latter can significantly impact their franchises and access to funding. There have been a few high-profile examples in recent years, which have affected banks' credit spreads.

Through our engagement with some European banks, we found that they have increased their focus and capabilities to fight financial crime, partly due to higher regulatory scrutiny. Many have **established dedicated centralised anti-crime functions** reporting directly or indirectly to their Board and hired more compliance and internal control personnel, as well as providing regular training to employees. It was, however, **difficult to obtain comparable numerical data** on the investments made and headcount added in these fields and so we have encouraged banks to provide this data. We noted that **remuneration structures** based on financial targets, on occasion, encouraged **inappropriate risk taking**. Many interviewed banks highlighted a reduction in the variable portion of remuneration packages, as well as ongoing work to incorporate more long-term key performance indicators (KPIs) into evaluation processes. We also positively noted efforts to instil **a more ethical risk culture** across banks, with many citing improved whistleblowing procedures, but we **found it difficult to assess how profound the changes** have been in terms of better outcomes until more data emerges as time passes.

One bank we follow had been given a Sustainalytics 'watchlist' status in relation to Principle 10 of the UN Global Compact (UNGC) regarding anti-corruption and we met with management to assess governance issues. We discussed the changes made to address these concerns, such as **re-focused training** and **management incentives**, as well as **installing a whistleblowing team** that ensures easier access to report any issues and complaints which helps enforce better standards. The bank now publishes an annual ESG report and disclosures on governance issues against external ESG benchmarks. **This shift has seen a significant fall in governance controversies**. We believe that the bank has taken considerable steps to address previous governance concerns, which are largely historic. As is often the case, third-party ESG rating agencies have been slow to register improvement. Additionally, the bank has put a robust ESG policy and implementation framework in place. We have rated the company as yellow, recognising management's efforts to address ESG matters and reflecting the financial materiality of ESG risks.

Collaboration with the centralised ESG team

The integrated ESG approach to our investment decisions is further enhanced by collaboration with the central ESG team, which comprises three pillars:

GOVERNANCE AND STEWARDSHIP

- Coordinates ESG engagement efforts across investment desks
- Advises on voting and governance
- Actively leads our participation in many ESG and signatory initiatives

ESG INVESTMENT RESEARCH

- Conducts thematic research and assesses the potential impact on company fundamentals
- Identifies ESG research that can add value for us and our clients
- Shares insight from ESG research analysts with the investment teams

ESG STRATEGY AND DEVELOPMENT

- Provides advice and support for three key areas:
  - Product design and solutions advisory
  - ESG data and analytics
  - ESG messaging and content
- Partners with the business on thought leadership generation
- Works with the risk team to advise on ESG risk monitoring

These sub-groups maximise the value of connectivity across our business to help facilitate sustainable returns and positive ESG outcomes. For example, credit analysts within our Global Credit Research Team can partner with our ESG research analysts to work on a collaborative view by leveraging the shared ESG research and technical expertise. This can help generate ideas, increase transparency around ESG risks and challenge portfolio positioning.

Process in action: tobacco evolution – defining leaders & laggards

ESG ratings from third-party providers tend to be backward-looking. They analyse existing or previous ESG risk exposure and reaction but, in our view, often fail to capture future improvements. Only Dow Jones Sustainability data captures this through the share of research & development (R&D) dedicated to next generation products (NGPs). This is where our analysis and engagement come to the fore in identifying and encouraging companies on an improving trajectory.

A sector example is **tobacco**, which has significant social risks. One US company has first-mover advantage in heat-not-burn (HNB) tobacco products and other non-tobacco related technologies, such as asthma inhalers; it derives a significant portion of revenues from these NGPs, and has invested substantially in R&D here. It aims to move smokers from traditional tobacco to NGPs, as these are shown to remove a large part of the combustion-related harm. To minimise the risk of unintended negative consequences from misuse, the company has stopped using social media to advertise its NGPs and are in the process of introducing age-verification control on purchases to prevent underage usage.

We engaged with the company to explore in more detail its future strategy and view of NGPs, in order to determine its status as a possible ESG leader compared to peers. This analysis highlighted the importance of looking at the proportion of revenues from NGPs as well as the percentage of R&D (and commercial) budget allocated to these products when comparing tobacco companies.

The company's goal to achieve half of revenues from NGPs by 2030 appears realistic. Considering its proactive approach to developing a credible NGP portfolio and track record in migrating revenues to help mitigate potential risks, we considered this as sufficient reason to assign the company a **yellow ESG rating, a notch above** the **red sector rating**. It is highly probable that at some point the regulator could also start scrutinising these NGPs, but for now, the regulator's focus is to shift consumption away from the more damaging combustible tobacco. Very high ESG risks reflected in the overall red sector rating for tobacco also recognise the potential risks associated with further taxes on the nicotine content in the new products.

Developing ESG leadership within fixed income

We continuously work to review and strengthen our ESG processes through tapping into expertise and collaboration across the firm. The ESG team within fixed income is enacted through three dedicated groups:

FIXED INCOME ESG FORUM

- Facilitates ESG initiatives and actions within fixed income
- Shares ESG strategy and best practice for our fixed income strategies
- Maintains the coordination of ESG efforts across the firm

FIXED INCOME ESG RESEARCH WORKING GROUP (RWG)

- Identifies and resolves ESG matters related to fixed income research
- Establishes a framework for assimilating/ sharing research from the central ESG team
- Facilitates the Fixed Income team's engagement process and ESG integration
- Reviews and improves internal proprietary fixed income scoring models

FIXED INCOME ESG DATA WORKING GROUP (DWG)

- Develops solutions for data issues, such as ESG data gaps through using proprietary ESG models
- Aids the simplification of ESG data use within the Fixed Income team

Summary: capturing a positive trajectory

Considering ESG risks is crucial to our credit analysis and in particular identifying those that are **financially material**. By participating in a positive trajectory of change, this enables the opportunity to capture risk-adjusted returns from investing in companies actively improving their ESG profiles.

Our integrated ESG approach takes a positive stance in **identifying and encouraging change**, rather than simply excluding issuers or industries. Conversely, if we deem an issuer non-investable on ESG grounds, it will override our overall investment recommendation.

Just as with credit metrics, we are focused on identifying an improvement in ESG that is not yet reflected in the price of a security to maximise alpha generation. Investment in **companies** with weaker ESG profiles **making strides to manage risks** can be the **most profitable** if we can identify these before the market prices in the reduction in risk.

This highlights the **importance of bottom-up** in our process. Marrying this with a **top-down view** allows **a more comprehensive view of the risks** of investing in a security. It also provides an opportunity for **collaboration** among analysts covering different sectors and regions, promoting an invaluable sharing of insight to **aid relative value recommendations**.

In summary, we believe in allocating capital to issuers with varying ESG profiles; identifying and **focusing on those** with **improving ESG credentials** – not only ESG leaders – as a way of generating higher risk-adjusted returns and a greater positive impact for society. By **engaging** with ESG laggards, companies in high risk ESG sectors or those with deteriorating ESG profiles, this creates the opportunity to **influence transition and work towards positive change**.

FOR MORE INFORMATION, PLEASE VISIT **JANUSHENDERSON.COM**

Janus Henderson INVESTORS

Important information:

ESG or sustainable investing considers factors beyond traditional financial analysis. This may limit available investments and cause performance and exposures to differ from, and potentially be more concentrated in, certain areas than the broader market.
The views presented are as of the date published. They are for information purposes only and should not be used or construed as investment, legal or tax advice or as an offer to sell, a solicitation of an offer to buy, or a recommendation to buy, sell or hold any security, investment strategy or market sector. Nothing in this material shall be deemed to be a direct or indirect provision of investment management services specific to any client requirements. Opinions and examples are meant as an illustration of broader themes, are not an indication of trading intent, are subject to change and may not reflect the views of others in the organization. It is not intended to indicate or imply that any illustration/example mentioned is now or was ever held in any portfolio. No forecasts can be guaranteed and there is no guarantee that the information supplied is complete or timely, nor are there any warranties with regard to the results obtained from its use. Janus Henderson Investors is the source of data unless otherwise indicated, and has reasonable belief to rely on information and data sourced from third parties. Past performance does not predict future returns. Investing involves risk, including the possible loss of principal and fluctuation of value.

Not all products or services are available in all jurisdictions. This material or information contained in it may be restricted by law, may not be reproduced or referred to without express written permission or used in any jurisdiction or circumstance in which its use would be unlawful. Janus Henderson is not responsible for any unlawful distribution of this material to any third parties, in whole or in part. The contents of this material have not been approved or endorsed by any regulatory agency.

Janus Henderson Investors is the name under which investment products and services are provided by the entities identified in the following jurisdictions: (a) Europe by Janus Henderson Investors International Limited (reg no. 3594615), Janus Henderson Investors UK Limited (reg. no. 906355), Janus Henderson Fund Management UK Limited (reg. no. 2678531), Henderson Equity Partners Limited (reg. no.2606646), (each registered in England and Wales at 201 Bishopsgate, London EC2M 3AE and regulated by the Financial Conduct Authority) and Henderson Management S.A. (reg no. B22848 at 2 Rue de Bitbourg, L-1273, Luxembourg and regulated by the Commission de Surveillance du Secteur Financier); (b) the U.S. by SEC registered investment advisers that are subsidiaries of Janus Henderson Group plc; (c) Canada through Janus Henderson Investors US LLC only to institutional investors in certain jurisdictions; (d) Singapore by Janus Henderson Investors (Singapore) Limited (Co. registration no. 199700782N). This advertisement or publication has not been reviewed by Monetary Authority of Singapore; (e) Hong Kong by Janus Henderson Investors Hong Kong Limited. This material has not been reviewed by the Securities and Futures Commission of Hong Kong; (f) Taiwan R.O.C by Janus Henderson Investors Taiwan Limited (independently operated), Suite 45 A-1, Taipei 101 Tower, No. 7, Sec. 5, Xin Yi Road, Taipei (110). Tel: (02) 8101-1001. Approved SICE licence number 023, issued in 2018 by Financial Supervisory Commission; (g) South Korea by Janus Henderson Investors (Singapore) Limited only to Qualified Professional Investors (as defined in the Financial Investment Services and Capital Market Act and its sub-regulations); (h) Japan by Janus Henderson Investors (Japan) Limited, regulated by Financial Services Agency and registered as a Financial Instruments Firm conducting Investment Management Business, Investment Advisory and Agency Business and Type II Financial Instruments Business; (i) Australia and New Zealand by Janus Henderson Investors (Australia) Limited (ABN 47 124 279 518) and its related bodies corporate including Janus Henderson Investors (Australia) Institutional Funds Management Limited (ABN 16 165 119 531, AFSL 444266) and Janus Henderson Investors (Australia) Funds Management Limited (ABN 43 164 177 244, AFSL 444268); (j) the Middle East by Janus Henderson Investors International Limited, regulated by the Dubai Financial Services Authority as a Representative Office. No transactions will be concluded in the Middle East and any enquiries should be made to Janus Henderson. We may record telephone calls for our mutual protection, to improve customer service and for regulatory record keeping purposes.

Outside of the U.S.: For use only by institutional, professional, qualified and sophisticated investors, qualified distributors, wholesale investors and wholesale clients as defined by the applicable jurisdiction. Not for public viewing or distribution. Marketing Communication.

CCAT_3520/0722_US