



Tackling decarbonisation in credit portfolios

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The asset management industry is waking up to the urgent need for a coordinated effort to fight the climate crisis. We firmly believe that it is possible to invest and create value while also working to prevent the unfolding crisis.

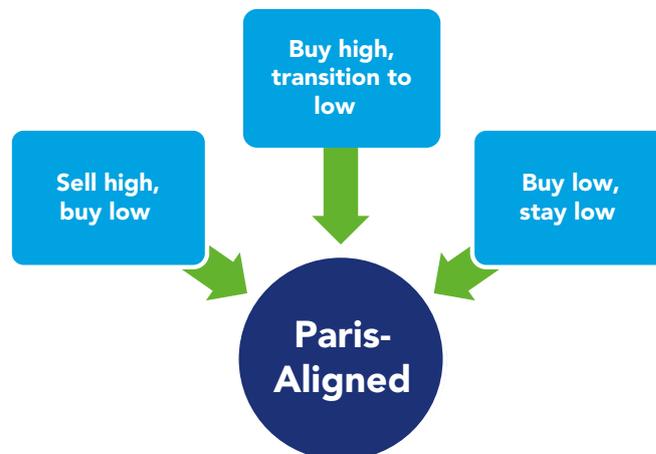
The industrialisation of the global economy over the last 200 years has pumped seemingly endless amounts of greenhouse gases into the atmosphere. Because these gases do not break down quickly or easily, they simply accumulate in the atmosphere decade after decade. This has been the principal driver of a steady rise in the earth's temperature.

Unbridled, this rise in temperatures will have disastrous effects on the global economy, and in turn, society. However, solving the climate crisis requires collective action. Unless we all — individuals, governments and enterprise — take a step to the centre, we could very well fail. Current warming projections suggest society is missing the mark and solving the crisis urgently requires a public-private partnership.

This year, COP26 will take place in Glasgow. Since the Paris Agreement at COP21, many countries now have legally binding carbon targets. 2020 marked strong progress with the world's two largest emitters: China, ranked first, has now committed to be carbon neutral by 2060, while Biden returned the US to Paris climate accord hours after becoming president, having promised to put the country on a track to net-zero emissions by 2050. Assuming this happens, according to Climate Action Tracker, 63% of global emissions will be covered by these targets, making the goals of the Paris Agreement seem more achievable with global warming of 2°C now likely by the end of the century compared to the 3.5°C temperature pathway predicted in 2009. Whether as a reaction to expected policy change, or because of mounting pressure from the public or financial stakeholders, many companies are also following suit by setting their own science-based targets (SBTs) to reduce carbon emissions.

The asset management industry is now waking up to the need for a coordinated effort to fight the climate crisis. It is possible to invest and create value while also working to prevent the unfolding emergency. However, as we have discussed with our clients and prospects, we know and respect that there are a number of different approaches to do this from a credit-investing perspective, such as: investing in innovation; backing the leaders; engaging for transition; buying sustainability-themed securities; and a combination of all of these.

Figure 1. Three roads to Paris: different investment approaches to lower the carbon footprint of portfolio companies to achieve Paris Alignment



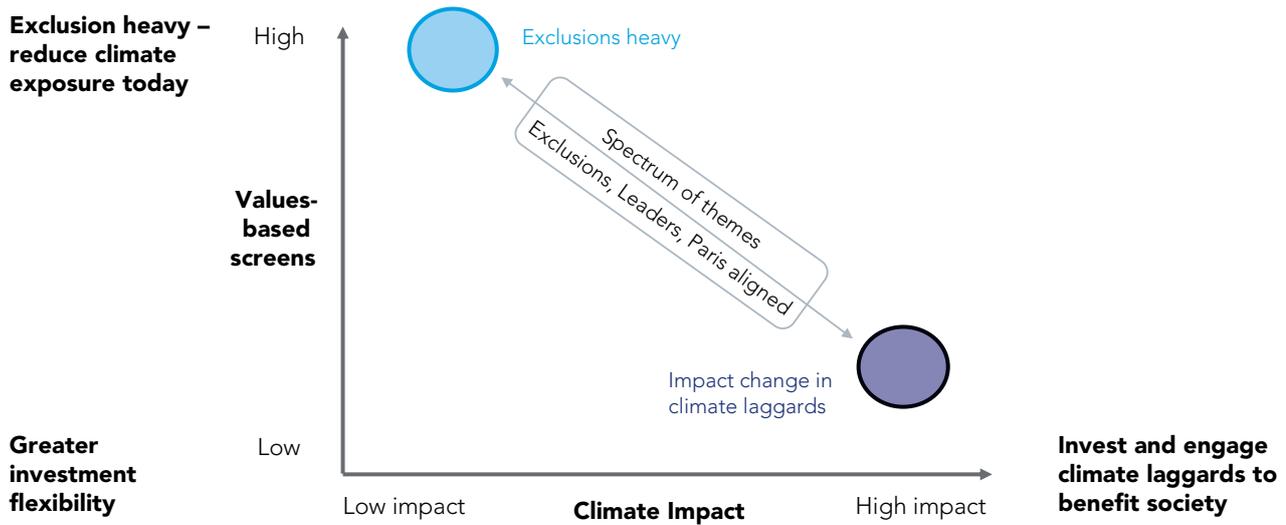
Source: Federated Hermes, as at December 2020.

Defining your climate change goals

Whatever the climate-change investment objective is, it must also be tied to a financial objective. Together, these two co-linear and self-reinforcing investment objectives can be met through creative, solutions-based innovation. As such, most will define both their climate goals and financial objective – and we seek to build solutions that deliver for both objectives.

Credit solutions can be built around a spectrum of decarbonisation objectives: minimising emissions today; supporting climate leaders or innovators; influencing the energy transition; meeting Paris-aligned or net-zero targets, and so on. However, not all of these decarbonisation objectives can be delivered in parallel. There is a trade-off between reducing the level of greenhouse gas emissions in the portfolio today (for example, a leaders-only approach) and being able to directly influence portfolio companies to take climate change action (for example, engaging for transition approach) (see figure 2). The former typically relies on excluding the worst offenders in order to contribute to reducing portfolio emissions and to take a step closer to any temperature or emissions targets set in the short to medium term. While the latter relies on using your rights as a financial stakeholder to engage with those companies to change. This would result in higher emissions in the short term but potentially have a greater climate change impact in the longer term should the companies successfully transition. This 'invest and influence' approach may make a bigger contribution to achieving the Paris goals in the longer term but in the short term, it may result in less attractive temperature alignment paths than approaches focused on excluding 'brown' companies in favour of climate change leaders.

Figure 2. Trade-off between avoiding and influencing



Source: Federated Hermes, as at December 2020.

Tackling climate goals within credit portfolios

Once the decarbonisation objectives are set, there are a number of different investment approaches to consider when implementing these themes. In figure 3, we summarise the different strategy tools that we can apply to deliver a range of climate-change goals within our credit portfolios.

Figure 3. Helping to deliver climate-change goals through our strategy tools

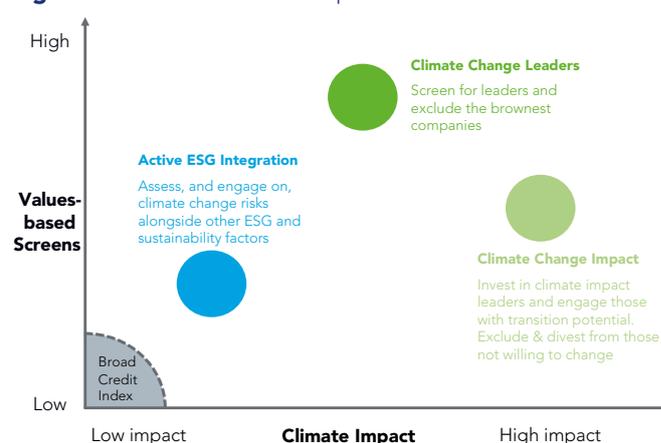
Decarbonisation objectives	Reduce carbon footprint / stop funding "brown" companies	Impact the transition to a low carbon economy	Support climate change leaders or innovation	Contribute to Paris-aligned or net zero targets
Fossil fuels sector exclusions	✓	✗	✗	✓
Exclude material emitters – data based materiality thresholds	✓	✗	✗	✓
Positively screen for Climate Change leaders that provide climate change innovation	✓	✓	✓	✓
Screen for companies that are transition leaders – companies already aligned or have set science based targets for Paris alignment	✗	✓	✓	✓
Invest in climate-focused projects through green / transition / sustainable bonds etc	✓	✓	✓	✓
Impact investing to engage with companies to set Paris-aligned targets and implement the transition	✗	✓	✗	✓

■ Direct and strong alignment
 ■ Benefits objective
 ■ Small positive influence
 ■ No link to objective

Source: Federated Hermes, as at December 2020.

A range of solutions can be designed that offer the potential to deliver on multiple objectives by combining these strategy tools. As aforementioned, the one exception is that it is not possible to both exclude material emitters and engage with them to transition. That's because it is very difficult to have any influence without a financial stakeholding – and so, this is the one area where you may need to compromise depending on your goals. There is a vast spectrum of solutions that can be created that sit on the values-impact axes introduced earlier. To illustrate the relative trade-offs associated with choosing different approaches, we present examples of three different, hypothetical solution profiles each of which we have scored based on its carbon exposure, climate impact and financial risk in figures 4 and 5.

Figure 4. Trade-off: value v impact



Source: Federated Hermes, as at December 2020.

Figure 5. Examples of bespoke climate-focused solutions

	Active ESG Integration	Climate Change Leaders	Climate Change Impact
Description	Assess climate change risks within ESG integration including engaging companies to improve against climate change metrics	Fund climate change leaders and innovators, exclude brownest companies and engage companies to be Paris aligned	Impact positive climate change and support low carbon transition by investing and engaging with companies in transition
Strategy features	<ul style="list-style-type: none"> Managed to a financial objective incorporating ESG integration Climate change assessed alongside broader ESG and sustainable factors – all assessed and scored in credit selection No specific climate change screens or direct influence on sizing Invest in green/transition/sustainable securities used to fund climate change initiatives Engage portfolio companies to disclose emissions data and set targets to be Paris-aligned 	<ul style="list-style-type: none"> Both financial and sustainable objectives linked to climate change Exclude fossil fuels and most carbon intensive companies Positive screen for sustainability and climate change leaders and innovators. Leaders scores impact sizing and divestment Invest in green/transition/sustainable securities used to fund climate change initiatives Engage portfolio companies to disclose emissions and set Paris-aligned targets 	<ul style="list-style-type: none"> Financial and sustainable objective linked to climate change impact Invest in climate change leaders and climate change innovation Invest and engage climate change laggards who show a willingness to transition Climate Change Impact (CCI) scores impact sizing and divestment Encourage companies to set Paris-aligned science-based targets and monitor progress Invest in Green/transition/sustainable securities used to fund climate change initiatives
Carbon exposure	✓ Includes "brown" sectors with the exception of the most controversial companies	✓✓✓ Exclude worst carbon offenders while also seeking companies with net zero or better emissions	✓ Invest in material emitters who aim to transition and reduce their carbon footprint over time
Climate impact	✓✓ Ability to engage with the most material emitters to improve carbon footprint and aim for Paris alignment	✓ Supports climate change innovation but unable to impact change in most material emitters because excluded	✓✓✓ Will invest and engage the largest emitters to set and deliver on Paris aligned emissions targets
Financial risk	✓✓✓ Broad representation across all sectors	✓ Tracking error and lower diversification by excluding significant part of credit universe	✓✓ More diversified but heavily sensitive to performance of green/transitioning companies

Incorporating climate change into the investment process

At the international business of Federated Hermes, we apply best-in-class ESG integration across all of our strategies. As such, climate change forms a core part of the investment process. Climate change goals represent a significant portion of the engagement agenda managed by either our global stewardship business, EOS at Federated Hermes, or our dedicated Fixed Income engagement team. It has always

been part of our bottom-up analysis alongside credit fundamentals and other broader ESG risks. For all strategies, during bottom-up credit selection, we evaluate the metrics outlined in figure 6 at our credit committee to determine an overall score, which helps us meet our goal of delivering sustainable wealth creation.

Figure 6. ESG integrated credit selection



Source: Federated Hermes, as at December 2020. Note: the QESG Score is a quantitative assessment of a company's ESG metrics compared to its peers and how its ESG profile is changing.

The processes and tools that we have established within the Fixed Income team have set a solid foundation for developing specific climate change-themed solutions tailored to the needs of our clients.

For climate change solutions, the key elements in our investment process include: access to company climate change data; stewardship expertise to engage companies; processes to assess and screen companies on climate change criteria and build portfolios; and portfolio-level climate change analytics and reporting tools. As climate data disclosure and availability have both improved within credit, we have evolved our investment process to specifically assess and better incorporate the impacts of climate change, which has created a platform for delivery of climate change-themed solutions.

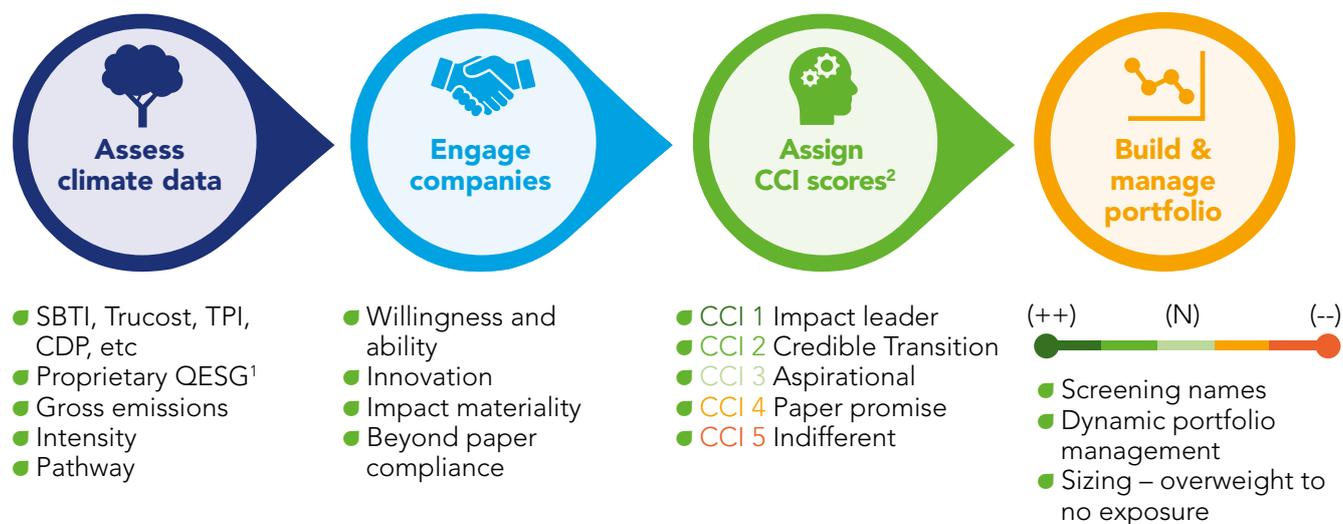
We have a **climate change database** that aggregates external climate change data metrics from several external providers for all issuers in our core investable universe. This allows us to better assess the climate-change risk and progress each company is making against Paris-aligned temperature pathways. This provides a current assessment of the company's carbon footprint and climate contribution. The data is used by the research analysts to assess climate-

change risks in credit selection for all strategies and provides data points for screening and scoring of issuers for climate-themed strategies that have specific decarbonisation objectives.

In addition to the historical data provided from the climate change database, we have also developed proprietary **Climate Change Impact (CCI) scores**, which provide a forward-looking assessment of a company's climate change impact. They assess its willingness to decarbonise and set targets, log progress made against those targets and rate the company's potential to contribute to the reduction in global emissions from its current footprint. These scores are managed by the dedicated Fixed Income engagement team, which evaluates metrics from the climate change database, insights and progress on climate change from our engagement relationships, as well as supplementary company information from the research analysts.

For climate-themed solutions, these scores can provide a framework for screening and sizing positions to ensure the strategies deliver on both their financial and climate change-related sustainable objectives. In figure 7, we illustrate this process for a climate change impact strategy.

Figure 7. The pathway to decarbonisation: our proprietary Climate Change Impact score



Source: Federated Hermes, as at December 2020.

In addition, we have a **proprietary carbon tool** that enables us to monitor and measure the carbon footprint, both by absolute emissions and carbon intensity, as well as climate-related engagement statistics at the overall portfolio level. This aggregated view is a simple way to monitor and report on the climate change metrics of the portfolio. Another useful lens to assess climate change is through risk systems, where it is possible to evaluate both climate-related shocks and scenario analysis. Such tools provide an important feedback loop for credit selection and portfolio construction.

Measuring progress

The final important element is **monitoring and reporting progress** against the climate-change goals or any specific decarbonisation objectives that have been set. The industry has reached a stage where the data providers have reasonable coverage of scope 1 and 2 emissions³ and carbon intensity, but scope 3 disclosures can be less reliable. For credit portfolios, there are some additional challenges. Firstly, data coverage can be lower than for equities especially with non-publicly listed high-yield issuers where emissions data disclosures can be limited. Also, in many cases where disclosures do exist, it is necessary to go through a complex exercise to map data from the credit-issuing entity to the relevant equity entity to source the data. This is one reason why we find real-time insights from both our engagers and credit analysts so valuable in complementing the climate data when evaluating the CCI scores.

¹The QESG Score is a quantitative assessment of a company's ESG metrics compared to its peers and how its ESG profile is changing.

²CCI denotes our proprietary Climate Change Impact Score.

³Greenhouse gas emissions are categorised into three groups by the Greenhouse Gas Protocol, a widely used international accounting tool. Scope 1 emissions: all direct GHG emissions by a company. It includes fuel combustion, company vehicles and fugitive emissions. Scope 2 emissions: indirect emissions from the generation of purchased electricity, heat and steam. Scope 3 emissions: all other indirect emissions that occur in a company's value chain (for example, purchased goods and services, business travel, employee commuting, waste disposal etc).

Figure 8 outlines a myriad of metrics that can be used to monitor the progress of climate change portfolios. We have mapped these to the relevant decarbonisation objectives.

Figure 8. Monitoring the progress of climate-focused portfolios

Decarbonisation objectives	Reduce carbon footprint / stop funding "brown" companies	Impact the transition to a low-carbon economy	Support climate change leaders or innovation	Contribute to Paris-aligned or net zero targets
Reporting metrics				
Reductions in carbon emissions or intensity relative to the market	✓			✓
Reductions in absolute emissions or carbon intensity over time relative to defined temperature pathways	✓	✓		✓
Report exposure to brownest companies or sectors	✓			✓
Increasing % of portfolio invested in leaders or climate change innovators over time	✓	✓	✓	✓
Demonstrate companies making climate change impact by a shift from lower to higher CCI scores over time	✓	✓	✓	✓
Improving % of companies that have 1) set science-based targets (SBTs) for emissions reductions and 2) target increasing % of the portfolio over time that have set targets consistent with 2°C and below temperature pathways	✓	✓	✓	✓
Target increasing % of portfolio that has either set Paris-aligned SBTs or are being actively engaged to do so		✓	✓	✓
Target increasing % of the portfolio that are being engaged on climate change issues		✓		✓

Source: Federated Hermes, as at December 2020.

These are just some of the considerations that you need to take into account when either allocating to or building climate change portfolios. If you would like to discuss our tailored climate-focused solutions, please do not hesitate to contact us.

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