

TRENDS AND OPPORTUNITIES

SUSTAINABILITY EDITION

THE 'LOW-CARB' DIET: INVESTING FOR A NET ZERO FUTURE

Portfolio Construction and Strategy (PCS) Insights

Trends & Opportunities: Sustainability edition

The 'Low-Carb' diet: investing for a net zero future

This time last year, the interest in sustainable investing was at an all-time high. Investors of all sizes were scrambling to find opportunities that took advantage of the move towards a more sustainable and responsible way of allocating capital.

A year on, and well-documented geopolitical factors have combined to challenge performance of investments that incorporate environmental, social and governance (ESG) considerations. This has galvanised sceptics and led to questions on whether sustainable investing pays off in the sense of higher returns.

We believe the answer is still 'yes' and that developments in 2022 will accelerate the net zero energy transition, as outlined in the *Janus Henderson 2023 Market GPS ESG Investment Outlook*. The Ukraine war has led to record levels of renewable energy production and accelerated the European Union's "fossil fuel detox". Governments around the world have reinforced their carbon neutral targets and are closing carbon intense energy production operations. Companies at the forefront of carbon reduction will, in our view, have a competitive advantage versus companies that are highly exposed to carbon risk.

This combination will have long-lasting ramifications for sustainable investing and make it a more mature investment discipline as we move beyond a "one-size-fits all" model. The introduction of different approaches and strategies that suit personal values and goals will have to be navigated carefully as we inevitably and rightfully move towards a carbon-efficient future.

TAKEAWAYS:

- ▶ Ongoing catastrophic climate events, energy shortages and rapidly rising inflation have placed investors and governments in a dilemma between providing vital services and decarbonising the world's energy.
- ▶ Decarbonisation is potentially the largest structural change in the next decade as governments and companies around the world aim to achieve their net zero goals.
- ▶ As global decarbonisation accelerates, we identify a number of specialist competitive investment opportunities key to mitigating carbon emissions:
 - Natural Resources
 - Technology
 - Securitised Credit
 - Property

What does this mean for portfolios?

“...we emphasise that deep cuts in global greenhouse emissions are required with a decarbonisation of the global economy over the course of this century.

G7 leaders declaration, Germany, 2015.

Decarbonisation is the primary tool to achieve net-zero

Achieving net zero in just three decades is an enormous challenge, but also a big opportunity. With carbon emissions forming such a significant part of climate change mitigation, many investors are naturally looking at their portfolios to examine how much they are exposed to carbon risk and how they can actively lower carbon emissions in the future.

Practical applications of net-zero in portfolios

We currently see three ways investors' typically facilitate decarbonisation within their portfolios both for the purposes of lowering emissions but also positioning to participate in the investment potential:



Source: Janus Henderson Investors, as at January 2023.

Historically, investors that have been following the first approach and simply shifted out of high emitters into climate-aligned companies decreased the carbon risk in the portfolio successfully over the short-term, but constrained the composition of their portfolio. This constraint potentially leads to lower diversification across sectors, themes or industries and can result in greater tracking error or risk to the portfolio.

We believe that investors should focus on investment strategies that not only achieve their decarbonisation goals by excluding carbon laggards, but also actively position their portfolio in a way to capitalise on the opportunities related to the shift to a low-carbon economy. This moves investors closer to the second and third approaches.

Hands-on guide to successful portfolio decarbonisation

Portfolio decarbonisation can be time consuming and complex, as it involves the quantification and assessment of the portfolio's current carbon footprint, the integration of climate risks as well as active changes and shifts, and carbon footprint monitoring of the underlying holdings. It can be broken down into four stages:

1. Assess the portfolio

- ▶ Measure and evaluate the carbon footprint of your portfolio:
 - Assess the portfolio using Task Force on Climate-Related Financial Disclosures (TCFD) metrics, compare against a benchmark, consider the time horizon for meeting goals, and understand the investment implications of the portfolio's transition.
- ▶ Based on those criteria, identify laggards and find opportunities for switching.

2. Reduce the portfolio's carbon intensity

- ▶ Swap out climate laggards with leaders – not based on single metrics, like the current carbon intensity, but most importantly based on a forward-looking approach to their role in the net zero transition

3. Integrate climate risk into the investment processes

- ▶ Adjust the process as appropriate to continuously identify and assess risk factors material to a given sector or asset class
- ▶ Account for future carbon pricing and supply chain impacts
- ▶ Holistic integration to include qualitative risk factors such as reputational risks

4. Shift into companies that are involved in the decarbonisation process

- ▶ Incorporate higher risk, higher conviction liquid and illiquid solutions into satellite allocation to manage diversification issues
- ▶ Explore adaption investments to balance the more tech- and renewable-focused solutions
- ▶ Choose fund managers that actively engage and influence businesses through corporate engagement and proxy voting strategies

Source: Janus Henderson Investors, as at January 2023.

The trend towards a sustainable, low carbon economy will require huge effort and financing on a global scale across the full supply chain, which creates attractive investment opportunities.





But successfully integrating climate change risks and transitioning to low-carbon or carbon-free investment strategies and portfolios requires due diligence and a fund managers' expertise and experience.

Potential ways to tackle the decarbonisation challenge

There are many innovative ways that allow investors to manage portfolios to address various aspects of the world's net-zero agenda. Each sector will be impacted in a variety of ways. The buildings and construction sector is a good example where emissions are generated by various activities including extraction of raw materials, transport to facilities, construction, refurbishment and demolition and waste management at end-of-life. Each of these comes with risks but also investment opportunities.

The Janus Henderson PCS Team believes this trend towards net zero will be integral to investment outcomes in the years ahead. In addition to the opportunities presented by more generalist sustainable funds and strategies, our analysis and client conversations have identified four important investment areas for consideration where we believe the demand for climate change solutions will lead to opportunities to create value while helping to curtail emissions.

These key areas for investors are:

NATURAL RESOURCES	TECHNOLOGY	SECURITISED CREDIT	PROPERTY
			
Resources are at the heart of our lives – and therefore the low-carbon transition	Delivering the climate technologies needed for net zero	Taking an active approach to decarbonisation in securitised credit	Identifying sustainable buildings and cities for a net zero future



Sustainable theme: Natural resources

Natural resources are at the heart of our lives – and therefore the carbon transition

Global aspirations for a transition to net-zero by 2050 create investment opportunities driven by urgency and innovation. This requires processes that incorporate sectors and companies across the entire natural resources supply chain.

Europe's energy crisis has accelerated efforts to reduce reliance on hydrocarbons and increase domestic energy capacity. This presents a huge long-term opportunity for companies providing the raw materials, goods and services needed to make this happen.

The global transition to net zero will likely change the way we live and consume...

	Today	2050
Fossil fuels in the primary energy mix	80%	Approximately half
Electric light vehicles	5 million	>2 billion
Homes heated by solar and wind	1 in 50	1 in 3
CCUS facilities*	<20	~10,000
Land used for afforestation	14,200 km	+4,000,000 km


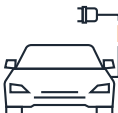



1.75x

the earth's natural resources that humanity is using each year at current consumption rates

39%

less emissions and GDP growth of 0.5% by 2030 can be reached by a circular economy in Europe

...and natural resources will drive these changes across a wide range of net zero themes.

ENERGY TRANSITION	SUSTAINABLE MOBILITY	SUSTAINABLE INDUSTRY	SUSTAINABLE AGRIBUSINESS	CARBON REDUCTION
				
<ul style="list-style-type: none"> Resource Enablers Renewable Energy Energy Storage Waste To Energy Hydrogen Grid / Power Generation Energy Services Fuel Cells 	<ul style="list-style-type: none"> Low Carbon Transport Batteries EV Metals 	<ul style="list-style-type: none"> Circular Economy / Recycling Industrial Gases Plastic Replacement Waste Reduction Construction 	<ul style="list-style-type: none"> Alternative Protein Sustainable Farms Low Carbon Food Precision Farming Nutrition Water Fertiliser 	<ul style="list-style-type: none"> Reforestation Carbon Pricing CCUS

Source: Janus Henderson Investors, as of 30 September 2022. Bain & Company, as of 11 May 2022. CCUS – Carbon Capture, Usage and Storage*, BHP as of 10 September 2020.

PCS Perspective

- ▶ We believe decarbonisation, global energy shortages, as well as consumer dynamics leaning towards environmentally friendly products, will **drive the demand for responsible natural resources**.
- ▶ Companies delivering natural resources have historically delivered equity-like returns with **low correlation** to the rest of the equity market and are currently **trading at historically low levels** relative to broader markets. In environments of **heightened inflation**, certain equity sectors, such as mining, packaging and forestry are typically able to provide increased purchasing power and **tend to protect against inflation better** than the broader market¹.
- ▶ An **active approach of adding high-quality resources companies** that adhere to low-carbon practices can result in attractive risk-adjusted returns over the long term - while supporting the transition to a more sustainable and low-carbon economy⁵.

¹ Source: Janus Henderson Investors, Global Natural Resources Team, *The Surprising Case for Natural Resources*, May 2022.

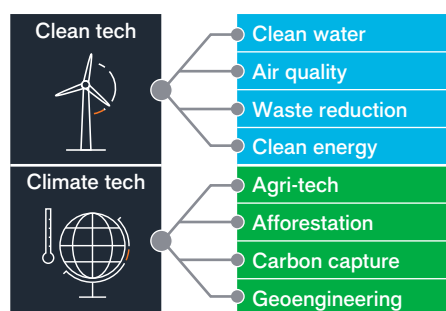


Sustainable theme: Technology

Delivering the climate technologies needed for net zero

Technology is based upon the science of solving problems and is by nature an innovative and deflationary force, with a long track record of making processes faster, cheaper and more efficient. Therefore, technologies will be critical in optimising energy use, decreasing greenhouse gas emissions and playing a major role to accelerate decarbonisation.

Decarbonisation through digitalisation: clean tech and climate tech already play a key role in a greener future...



US\$222bn

Invested globally in climate tech between 2013 and H1 2021

210%

Global growth in investment year on year

...and will accelerate the global move to net-zero and decarbonisation in various ways.

Theme	Digital Democratisation	Tech Health	Low Carbon Infrastructure	Data Security	Smart Cities	Sustainable Transport	Resource & Productivity Optimisation	Clean Energy Tech
Technology	<ul style="list-style-type: none"> AI Data Analytics Fintech Edtech Platforms Data Access 	<ul style="list-style-type: none"> Medtech AI Data Analytics Platforms 	<ul style="list-style-type: none"> Datacentres Moore's Law 5G Infrastructure Platforms Software 	<ul style="list-style-type: none"> Network Security Secure Cloud Identity Protection Data Privacy 	<ul style="list-style-type: none"> 5G Mobility IoT Edge Compute Smart Comms Sustainable Ag + Food 	<ul style="list-style-type: none"> EV's Computer Vision Sensors Battery Management Navigation Platforms 	<ul style="list-style-type: none"> Digital Design & Productivity Collaboration Tools AI Asset Tracking Circular Economy 	<ul style="list-style-type: none"> Renewable Energy Technology Battery Technology Smart Grids Smart Power

Source: Janus Henderson Investors, as at 30 September 2022. PwC, as at 30 June 2022.

PCS Perspective

- ▶ We believe technology will play a **key role in cutting carbon emissions** and accelerating the path to net zero.
- ▶ Industries, such as aviation, rail and manufacturing, could face significant challenges to reduce emissions, creating **attractive investment opportunities in technology**.
- ▶ Tech companies could prove to be an appealing satellite allocation in investors' equity portfolios, as they **help mitigate effects of inflation** based on their ability to create more efficient products, services and production processes.
- ▶ Tech is a **highly fragmented market**, highlighting the need for active managers to identify **profitable, higher-quality** companies.
- ▶ Identifying first movers that position their companies for **long-term success in climate technology** requires **experienced managers**.



Sustainable theme: Securitised credit

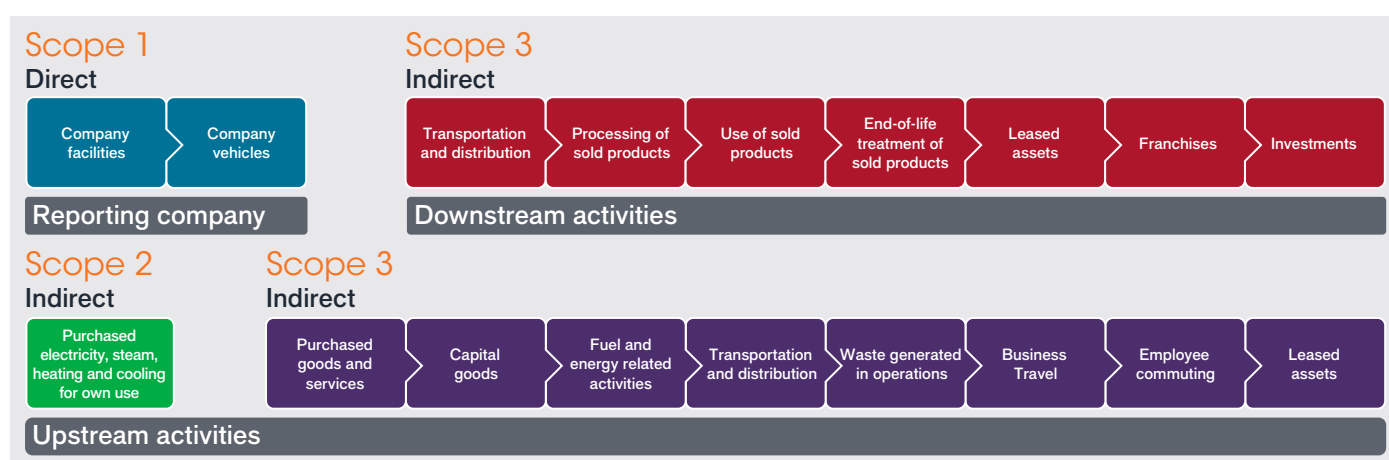
There's nothing passive about decarbonisation in securitised credit

Decarbonisation in fixed income is often discussed in the context of core fixed income – corporate and sovereign debt – and less with regards to securitised credit, such as mortgage and other asset-backed securities. However, client demand for securitised debt, with the clear intention of improving the portfolio's carbon footprint, is accelerating.

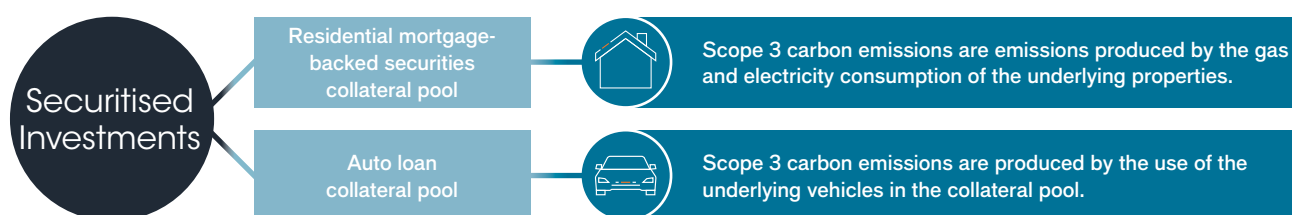
Securitised investments are not spared from the issues around data coverage, quality and transparency regarding organisations' net zero efforts. Due to their complex legal structure, these assets require multiple levels of due diligence by the investor to assess the carbon footprint across multiple layers of the securitisation process (from loan origination to Special Purpose Vehicle).

Navigating the carbon data challenge in securitised credit through an active approach:

While most companies report their Scope 1 and 2 emissions, Scope 3 emissions² account for more than 70% of businesses' carbon footprint, ...



...and therefore require an active and thoughtful analysis when investing in securitised assets with their many layers and underlying collaterals.



Source: Janus Henderson Investors, as at October 2022.

PCS Perspective

- ▶ Due to its complex nature, **decarbonisation in securitisation requires multiple levels of due diligence** to assess the carbon footprint of its underlying assets.
- ▶ An experienced manager and an **analytical and actively managed approach** throughout the securitisation process are needed, e.g. carbon emissions assessment of underlying collaterals pool.
- ▶ **Securitised investments can be an attractive core fixed income alternative**, with similar features, such as low volatility, low correlation to equities, high quality (if composed of investment grade securities), and **low interest rate sensitivity**, as their floating nature provides a natural hedge to rising rates.
- ▶ **'Green' securitisation** unlocks financing to sectors of the financial infrastructure that cannot tap into the traditional bond or loan market whilst supporting global net zero efforts.

² Source: UN Global Compact. Scope 1 emissions cover GHG emissions directly from operations, owned or controlled by the company. Scope 2 emissions refer to indirect emissions, for example, emissions from the generation of energy and electricity used by the company. Scope 3 are emissions that are related to an organisation's activities, but not under its direct control or result of activities from assets owned or controlled by them. However, it encompasses emissions that companies are indirectly responsible for, up and down its value chain.

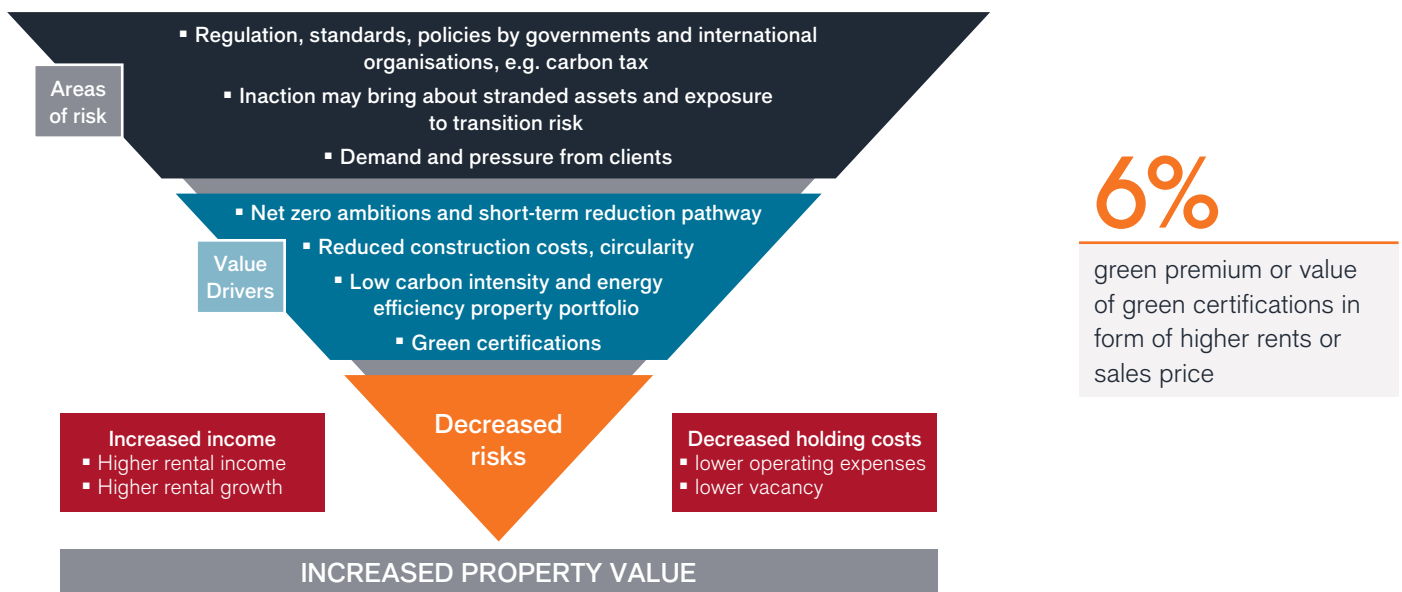


Sustainable theme: Property

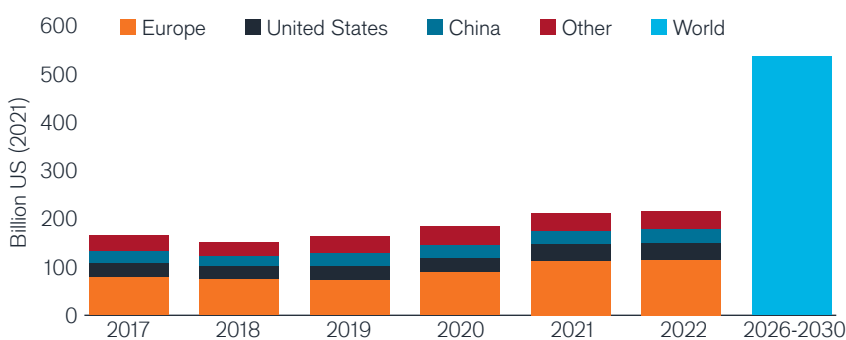
Building a net zero future

On average, humans spend 90% of their lifetimes in buildings. As a natural consequence, housing is responsible for about one-third of global energy usage and carbon emissions, rising to up to 70% in urban areas³. To align with net zero goals, carbon emissions from buildings operations will need to more than halve by 2030, requiring significant efforts to reduce energy demand through clean and efficient technologies from net-zero buildings, renovations, low-emissions energy supply and materials.

Environmental factors represent the biggest risk and opportunity within real estate and need active assessment to identify outperformers:



Annual investment in energy efficiency in the buildings sector to get to net zero, 2017-2030⁴



Source: Janus Henderson Investors, International Energy Agency, JLL Research, as at October 2022.

US\$536bn

estimated global annual investment in energy efficiency between 2026-2030

PCS Perspective

- ▶ The decarbonisation challenge for buildings is immense, but not impossible. Energy efficiency and carbon emissions of buildings are improving, **but remain far from the net zero milestones**, creating risks but also **opportunities**.
- ▶ **Going Green in real estate is proven to pay off**, as energy cost savings, improved building quality, and also a positive branding impact, can lead to higher asset values, higher occupancy rates and rental values, with reductions in operating costs resulting in higher investment returns and asset prices.
- ▶ An allocation to properties within a diversified portfolio **addresses the three biggest concerns we see in client portfolios today**: 1. inflation, 2. consistent income, 3. diversification, whilst benefitting from increasing economic spending and flows into the **net zero transition**.

³ Source: U.S. Environmental Protection Agency, as at September 2021.

⁴ Source: International Energy Agency (IEA), 2021.



Matthew Bullock
EMEA Head of Portfolio
Construction and Strategy

"The PCS Team's analysis of current client positioning, trends in asset flows and the importance being placed on decarbonisation and net zero in our consultation conversations clearly demonstrates that sustainability themes could fundamentally reshape investment allocations and returns in the years ahead. Generalist sustainable strategies meet some investor needs but we are seeing increased interest in tactically targeting specific climate change solutions. This is a trend we expect to gather momentum and complexity with a growing number of opportunities being presented in 2023 and beyond."

Connect with us

To learn more about Janus Henderson's Portfolio Construction and Strategy team, or arrange a one-on-one consultation, contact your sales director or explore more at janushenderson.com/pcs

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