Net Zero Carbon (NZC) report

WHEB

Investing in solutions to climate change

What is it?

NZC means cutting all GHG emissions to as close to zero as possible, with any remaining emissions reabsorbed from the atmosphere, by oceans and forests for instance.[1]

Why does it matter?

In order to avoid the worst impacts of climate change and maintain a liveable planet, global temperature increase needs to be limited to 1.5°C above pre-industrial levels. The earth's atmosphere is already about 1.1°C warmer than it was in the late 1800s, and emissions continue to rise.

How does WHEB's strategy contribute to NZC?

Five of WHEB's investment themes are focused on companies that sell products or services that enable other parts of the economy to reduce GHG emissions and/or adapt to inevitable climate change. This includes companies that manufacture renewable energy equipment, components for battery electric vehicles, heat pumps and other technologies that improve energy efficiency and reduce resource use.

Figure 1: WHEB's investment themes that are focused on reducing GHG emissions

Cleaner Energy	Sustainable Transport	Resource Efficiency	Environmental Services	Water Management
– Solar power – Wind power – Cleaner energy infrastructure	– Bus, rail & bicycles – EV – EV infrastructure	– Energy-efficient products – Efficient buildings – Efficient manufacturing	– Environmental consulting & monitoring – Sustainable materials – Pollution control – Circular economy	– Efficient water use – Wastewater treatment & water provision

Together these companies help avoid GHG emissions. We aggregate the annual positive impact of these products and services, and in 2022, owning £1m in WHEB's investment strategy was associated with:[2]

Cleaner Energy

Generating

314 MWh

of renewable energy.

Equivalent to the annual energy use of 21 European households.

Resource Efficiency

Avoiding

201 tonnes

of CO_2e emissions.

Equivalent to the energy use of 70 average European residential homes for one year and saving £7,950 in avoided carbon costs.

[1] Net zero carbon is different to carbon neutral for example because carbon neutral can cover a defined part of business operations and typically accounts only for CO_2 emissions, but not other greenhouse gases. Net zero on the other hand means that a company reduces all greenhouse gas emissions across its whole supply chain.

[2] Further detail on these figures is available in section 3. Investors in WHEB's strategy are aligned with these impacts by investing in companies that form part of the crucial supply chains that manufacture these products and provide these services. WHEB's investments contribute to the attainment of the impact, however, they are not solely responsible. The impact is therefore referred to as "associated".

Portfolio greenhouse gas (GHG) metrics

Approximately 60% of WHEB's investments provide solutions to climate change. At the same time, all the investments in the strategy generate GHG emissions in their day-to-day operations. We work with the management of our investee companies to encourage them to set demanding NZC targets and then to assess these targets and monitor the absolute CO_2e reductions across the portfolio on an annual basis.

Many of WHEB's portfolio companies have announced commitments to achieving NZC emissions. Over 90% of portfolio companies with targets have already had these approved – or are committed to having them approved – by the Science Based Targets initiative (SBTi). We plan to further scrutinize the credibility of these targets in 2023.

Furthermore, the thematic structure of our strategy means that we are entirely absent from parts of the economy such as fossil fuel exploration and production that are most at risk from a transition to a NZC economy.

The data over the past three years across Scopes 1-3 for the FP WHEB Sustainability Fund is reported in Figure 2 below.

Figure 2: Portfolio carbon emissions 2020-2022

Indicator	2020	2021	2022	Explanation
Scope 1[3]+2[4] carbon total emissions (tCO_2e) Total amount of carbon that is associated with WHEB's investments in portfolio companies.	169,532	38,038	40,680	Small increase in financed emissions due to selling lower-emitting companies in 2022 and investing in more energy-intensive companies. Of companies held over 2021 and 2022 we saw an average increase in Scope 1+2 emissions of 4.7%.
Carbon footprint (tCO_2e/£1m invested) Total carbon emissions for a portfolio normalised by the market value of the portfolio.	161	24	30	Slight increase due to increase in scope 1 and 2 financed emissions, and small decrease in assets under management.
Carbon intensity (tCO_2e/£1m sales) Measure of average carbon intensity of investee company operations.	380	95	65	Because sales increased faster than emissions we saw an average decrease in carbon intensity at company level of 4.45tCO_2e.
Weighted average carbon intensity (tCO_2e/£1m sales) Measure of a portfolio's exposure to carbon-intensive companies by including the portfolio weighting in carbon-intensive companies.	202	87	71	Companies which showed the greatest improvement in carbon intensity were DSM, Silicon Laboratories and ICON.
Scope 3[5] carbon emissions (tCO_2e/£1m sales) Measure of the carbon intensity of the whole value chain (incl. product) emissions.	983	991	1,515	Our investment in Trane Technologies was the main cause of the year on year increase, contributing to 50% of WHEB's financed scope 3 emissions. The remainder of the increase comes from more companies reporting more categories for scope 3.

[3] Scope 1 emissions covers emissions from sources that an organisation owns or controls directly.

[4] Scope 2 emissions includes emissions that a company causes indirectly (i.e. buying electricity).

[5] Scope 3 emissions are emissions that are not produced by the company itself, and not the result of assets owned or controlled by them. Scope 3 emissions include all sources not within scope 1 and 2 including emissions from all products still in use.

Figure 3: Top five emitting companies within WHEB's strategy (financed emissions)

TOP 5 EMITTERS	% OF SCOPE 1+2 FINANCED EMISSIONS[6]	NZC TARGET DATE	SBTI[7]
Linde	28.10%	Net zero by 2050	Yes
Smurfit Kappa	27.39%	Net zero by 2050	Yes
J.B. Hunt Transport Services	9.23%	No target set	N/A
First Solar	4.36%	Net zero by 2050	Yes
Advanced Drainage Systems	3.84%	N/A	Yes[8]

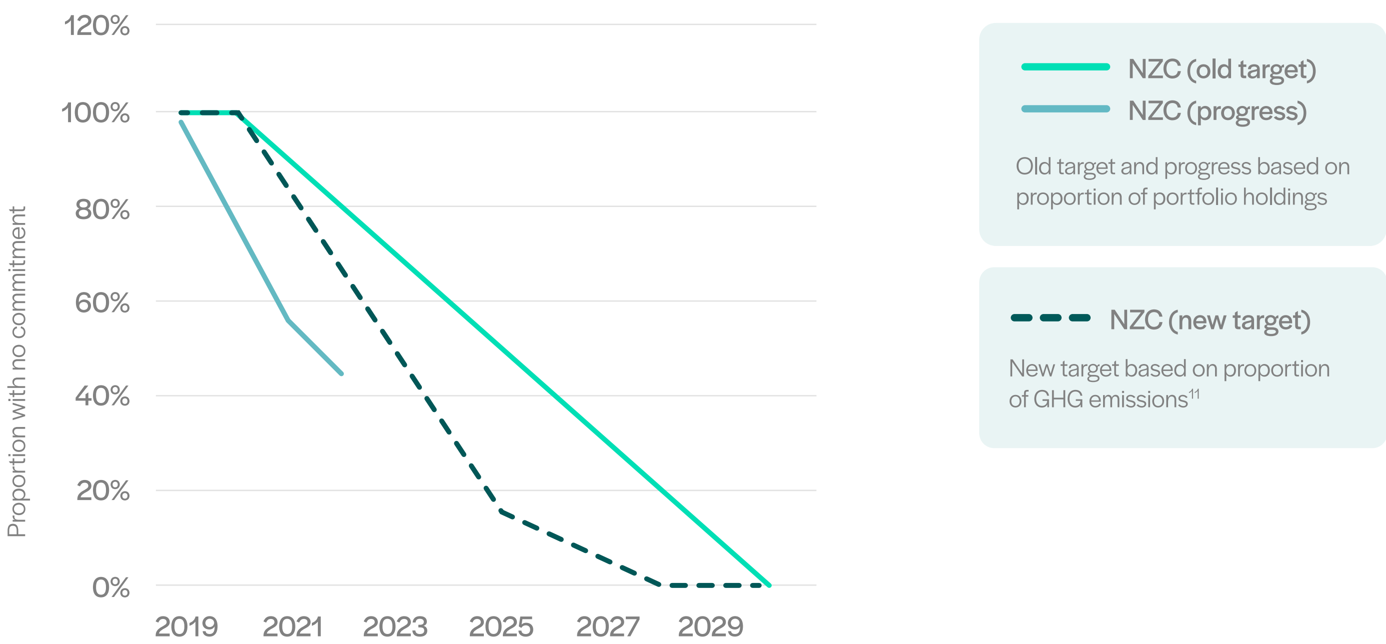
Portfolio Scope 1 and 2 emission targets and reductions[9]

The Scope 1 and 2 emissions associated with WHEB's investments (known as financed emissions) can change in two ways. First, investing in and divesting from companies will change the total tonnes of CO_2e associated with the strategy. For example, in 2021 we sold China Everbright Environment Group, which dramatically reduced our financed emissions. The second way is through actual real-world changes in annual emissions from portfolio companies. Our reporting is intended to reveal both of these dynamics, as shown in Figure 5.

In 2022 financed emissions remains well ahead of target. Actual emissions, however, ticked up 4.7% year-on-year.

Figure 4 also shows the extent to which portfolio companies have set and published NZC targets and/or absolute emission reduction targets. In 2022, three years earlier than originally expected, we achieved our original target of having more than 50% of portfolio companies committed to NZC by 2050. Consequently, we have set a new target to have 85% of portfolio emissions covered by a NZC target by 2025 and 100% by 2028.

Figure 4: WHEB portfolio NZC targets[10]



[6] 'Financed emissions' refer to the emissions associated with WHEB's specific level of investment in the investee company.
[7] Science-Based Targets Initiative: https://sciencebasedtargets.org/
[8] Advanced Drainage Systems have committed to having a near-term target approved by SBTi.
[9] We have not yet set a scope 3 emission target as the data is still too incomplete. We plan to keep this under review with a plan to set a target once data is more complete.
[10] The chart purely relates to the commitments companies have made, not actual GHG reductions.
[11] The new target is focused on the actual carbon emissions from the strategy (financed emissions) rather than the proportion of investments covered. This target will be more volatile as it depends on the enterprise value of the portfolio company, as well as the value of WHEB's investment in the company, both of which are constantly changing. Consequently, we use a rolling 12-month average of the financed emissions data point to provide a clearer trend.

Figure 5: WHEB portfolio emission targets & reductions[12]

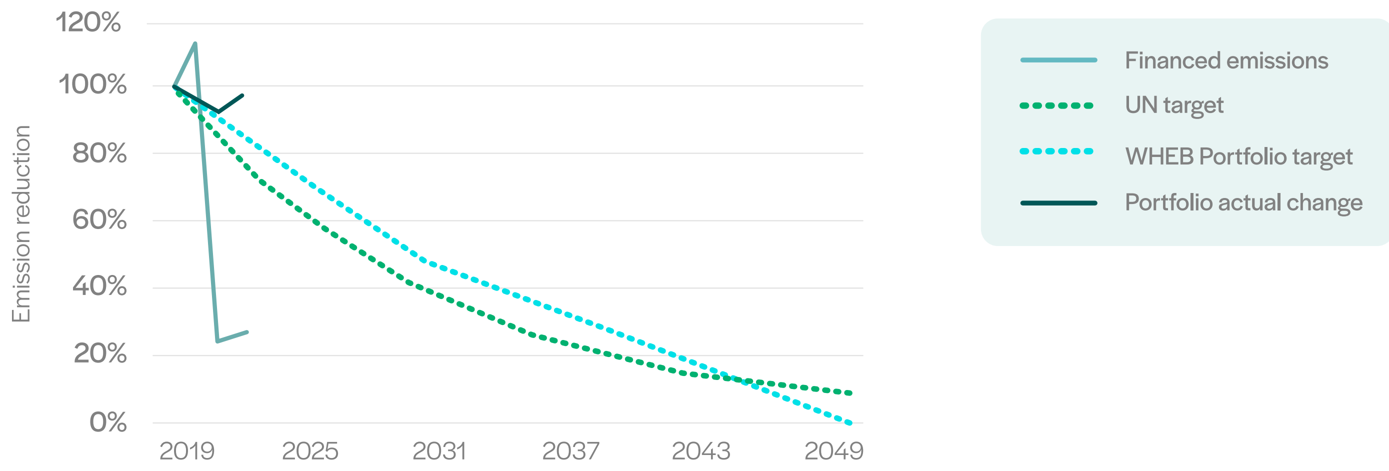


Figure 6: WHEB's portfolio carbon reduction targets

TARGET	TARGET YEAR
85% of financed Scope 1+2 emissions covered by a NZC target of 2050 or sooner	2025
100% of financed Scope 1+2 emissions covered by a NZC target of 2050 or sooner	2028
15% reduction in absolute portfolio emissions (compared to a 2019 baseline)	2025
7.6% portfolio company level absolute reductions year-on-year[13]	2030
50% reduction in portfolio carbon emissions (compared to a 2019 baseline)[14]	2030
100% reduction in portfolio carbon emissions (compared to a 2019 baseline)	2050

Fourteen companies in the strategy have not yet set a NZC target or an absolute emission reduction target. 13 of these together account for less than 4% of the strategy's total Scope 1 and 2 carbon emissions. The fourteenth is J.B. Hunt which accounts for just under 10% of total emissions. The company remains a key target for further engagement on this topic.

Memberships and affiliations

WHEB works with several investor coalitions to collaboratively engage companies, policymakers and standard setters to accelerate progress on decarbonisation. For example, WHEB was a founder member of the Net Zero Asset Managers initiative and has been a long-term supporter of the Institutional Investors Group on Climate Change.

[12] The reduction seen in 2021 is due to the sale of China Everbright Environment Group which contributed 75% of the portfolio's total emissions.
[13] According to the UN the economy as a whole has to decarbonise by 7.6% per year to 2030 (https://www.unep.org/news-andstories/press-release/cutglobal-emissions-76-percent-every-yearnext-decade-meet-15degc)
[14] It is important to note that this does not mean that all companies across the portfolio will necessarily have achieved the target reduction in carbon emissions. It is, however, a commitment that, taking into account sectoral and geographical biases inherent in our investment strategies, emission reductions across the portfolio will be consistent with the global reduction target.