FUND AIM AND INVESTMENT PROCESS

The Fund focuses on the opportunities created by the transition to healthy, low carbon and sustainable economies. The investment team selects high-quality companies from nine broad themes with strong growth characteristics to create a globally diversified portfolio. We develop long-term relationships with company managements to promote the best environmental, social and economic outcomes.

Impact Measurement Methodology

May 2018

WHEB

Calculating impact

Introduction

This document describes the methodology that is used in collating and calculating the positive impact associated with WHEB's investment strategy. At its core, WHEB is an impact investor. All the investments made by our investment strategy have positive social and/or environmental impact. By this we mean that we invest 'into companies, organisations and funds with the intention to generate social and environmental impact alongside financial return'[1]. We subscribe to this definition of impact investing and believe, like others, that there are four core characteristics. These are detailed in the table below, with WHEB's approach in each of these areas also highlighted.

Figure 1: Defining impact investing

Core characteristics of impact investing[2]	WHEB's approach
Intentionality: The intent of the investor to generate social and/or environmental impact through investments is an essential component of impact investing.	Our intention is to deliver superior financial returns by investing in companies or projects that deliver social and/or environmental value as a core part of their business operations.
Investment with return expectations: Impact investments are expected to generate a financial return on capital and, at a minimum, to safeguard capital.	Our focus is on maximising financial returns for our investors.
Range of return expectations and asset classes: Impact investments generate returns that range from below market to risk-adjusted market rate.	All our investments are intended to deliver superior risk-adjusted market rates of return.
Impact measurement: A core tenet of impact investing is the commitment of the investor to measure and report the social and environmental performance and progress of underlying investments.	We are committed to measuring and reporting the positive social and/or environmental impact of our investment funds. In this document we set out our methodology for doing this.

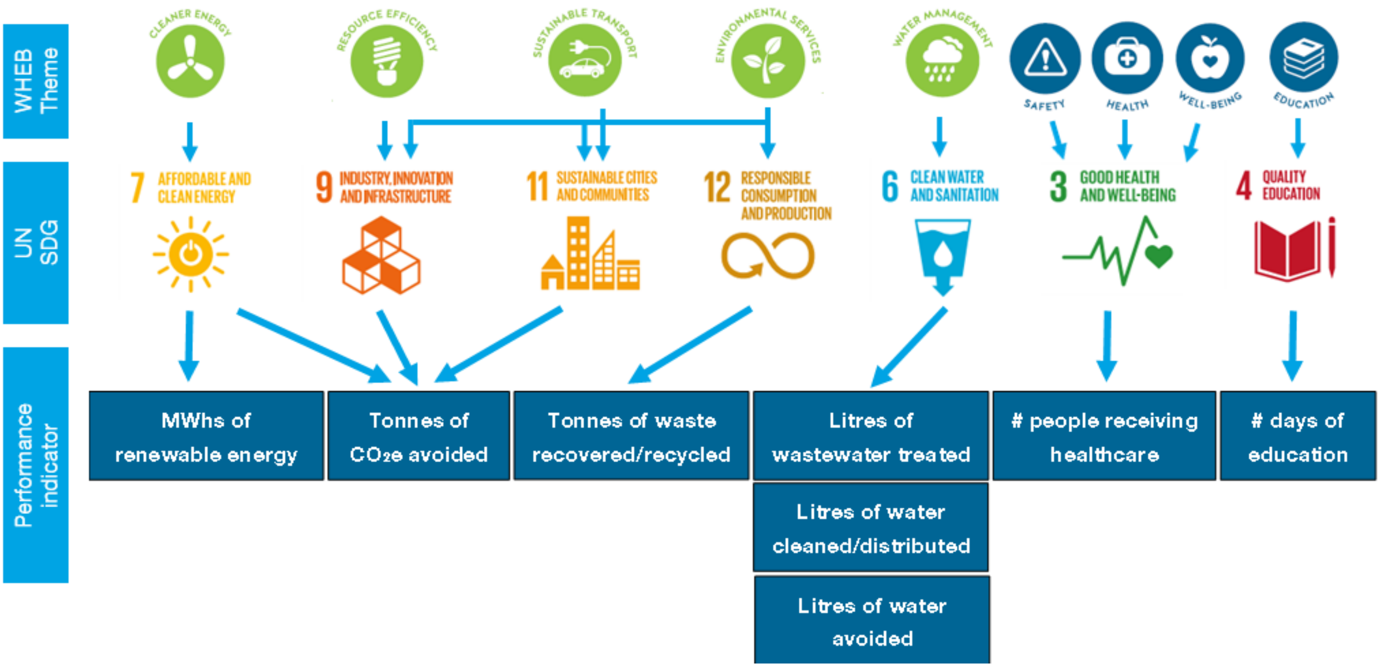
WHEB's investment themes and the UN Sustainable Development Goals

It is our belief that long-term social, demographic, environmental and resource challenges are reshaping the global economic landscape, creating new investment opportunities for companies providing solutions to these challenges, and growing risks for those sectors that deplete human and natural capital. Finance is a critical catalyst for this change and we aim to invest in companies that are both beneficiaries and enablers of a shift to a more sustainable global economy over the coming decades.

WHEB's investment strategy covers five environmental and four social themes. These themes directly support seven of the UN's Sustainable Development Goals. The positive impact of companies in each theme is assessed based on a set of indicators that relate to the products or services that the company supplies. For example, the positive impact of companies in the cleaner energy theme are measured in terms of MWhs of renewable energy that is generated. In sustainable transport, the impact is assessed in terms of how much the product reduces harmful air emissions (including CO_2e) from transport and, in water management, how many litres of contaminated water are treated.

The selection of each of these indicators has been made primarily with reference to existing measurement indicators that are used in WHEB's investment process. We have also drawn from the work of others in supplementing this list of indicators. This review included the reporting frameworks put forward by asset owners, research groups and other institutions.[3]

Figure 2: Mapping WHEB's investment themes onto the UN SDGs and relevant indicators



Assessing the impact of products and services

Companies typically supply a range of products and services with differing levels of positive impact. Each company in the investment strategy is therefore categorised into one of four bands ranging from 'degenerative' at one extreme through to 'breakthrough' at the other that capture the overall 'blended' level of impact that the company has.

Figure 3: Categories of impact

Degenerative	Degenerative activity covers business activity that creates economic value but which is overwhelmed by related negative environmental/social externalities.
Depleting	Depleting businesses create economic value but also undermine environmental/social systems. Over the medium term, these businesses may be able to transition (for example by altering the materials or business models that they use) into Mitigating or even Breakthrough businesses.
Mitigating	Described as 'change as usual', this covers business activities that create economic value by incrementally reducing environmental/social damage.
Breakthrough	'Breakthrough' businesses replace or transform established systems to deliver radically higher economic value alongside positive environmental/ social impact.

The thematic framework for WHEB's investment strategy means that only companies that have a positive impact and qualify in either the mitigating or breakthrough categories qualify for the strategy. Companies with product or service portfolios that have an overall degenerative or depleting impact will never qualify as potential investments for the strategy.

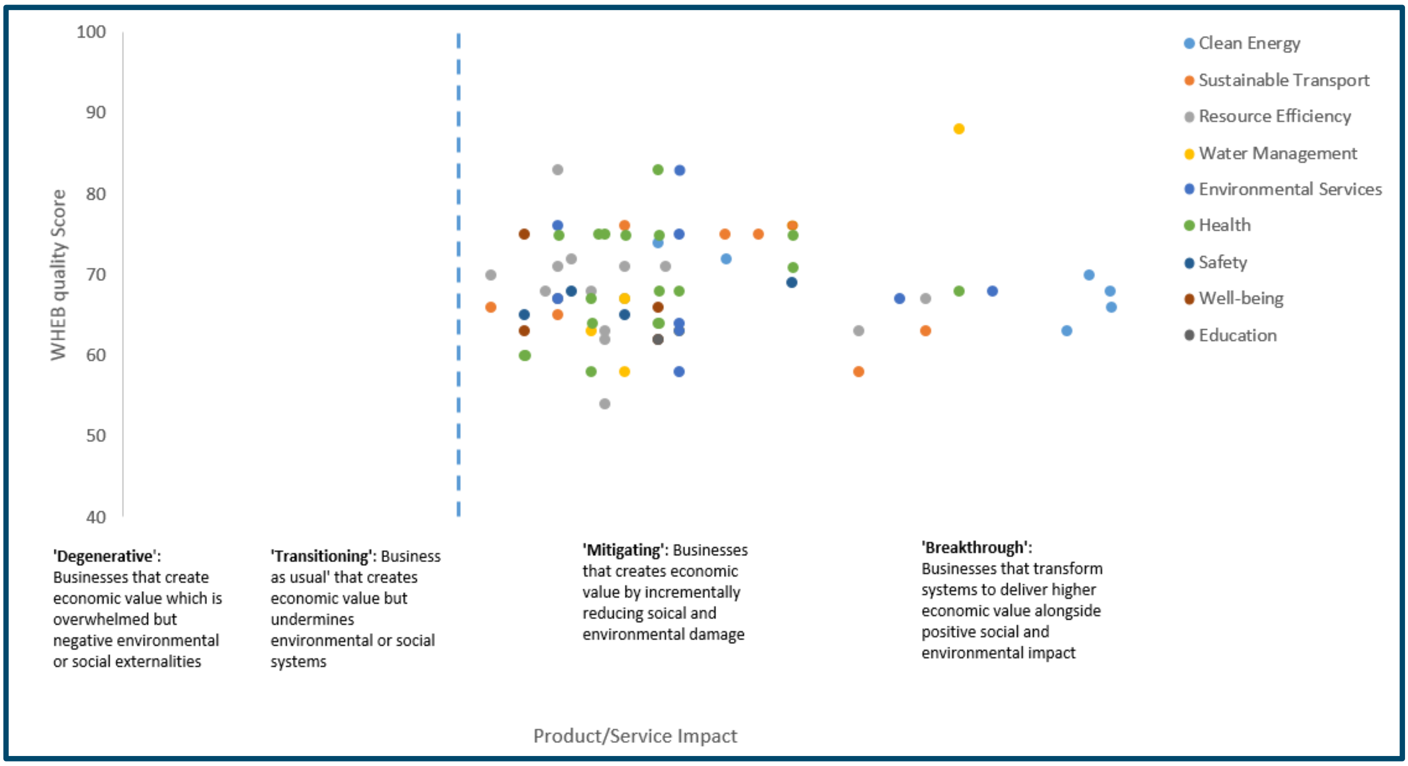
Establishing a company's category is principally based on its products' performance relative to the average performance of incumbent technologies in the relevant industry. For example, companies in the Cleaner energy theme are assessed relative to the CO_2e/MWh performance of a typical combined cycle gas turbine ("CCGT") power station.

Given the scarcity of absolute impact measures in businesses with a positive social impact, the impact rating for these companies is based on a qualitative assessment by WHEB's investment team. In the Health theme, for example, the impact assessment is focused on whether the product/ service is leading to significant improvements in health/safety outcomes for the specific condition/ issue compared with the incumbent approach. This judgement is made as part of the initiation profile that is prepared by the investment team and is backed up with a documented rationale.

Assessing the quality of company policies and practices

In addition to the impact of the products/services provided by our portfolio companies (***what* they do**), the WHEB investment process also assesses the fundamental quality of a company's policies and operational performance (***how* they do it**). The analysis considers five aspects of business operations: market attractiveness, competitive position, value-chain operations, management quality and growth strategy. In assessing the fundamental quality of each aspect, we consider a range of measures relating to both financial and environmental, social and governance ("ESG") management and performance. Figure 4 below illustrates the overall mapping of portfolio holdings in WHEB's investment strategy as at the end of 2017.

Figure 4: Mapping company impact

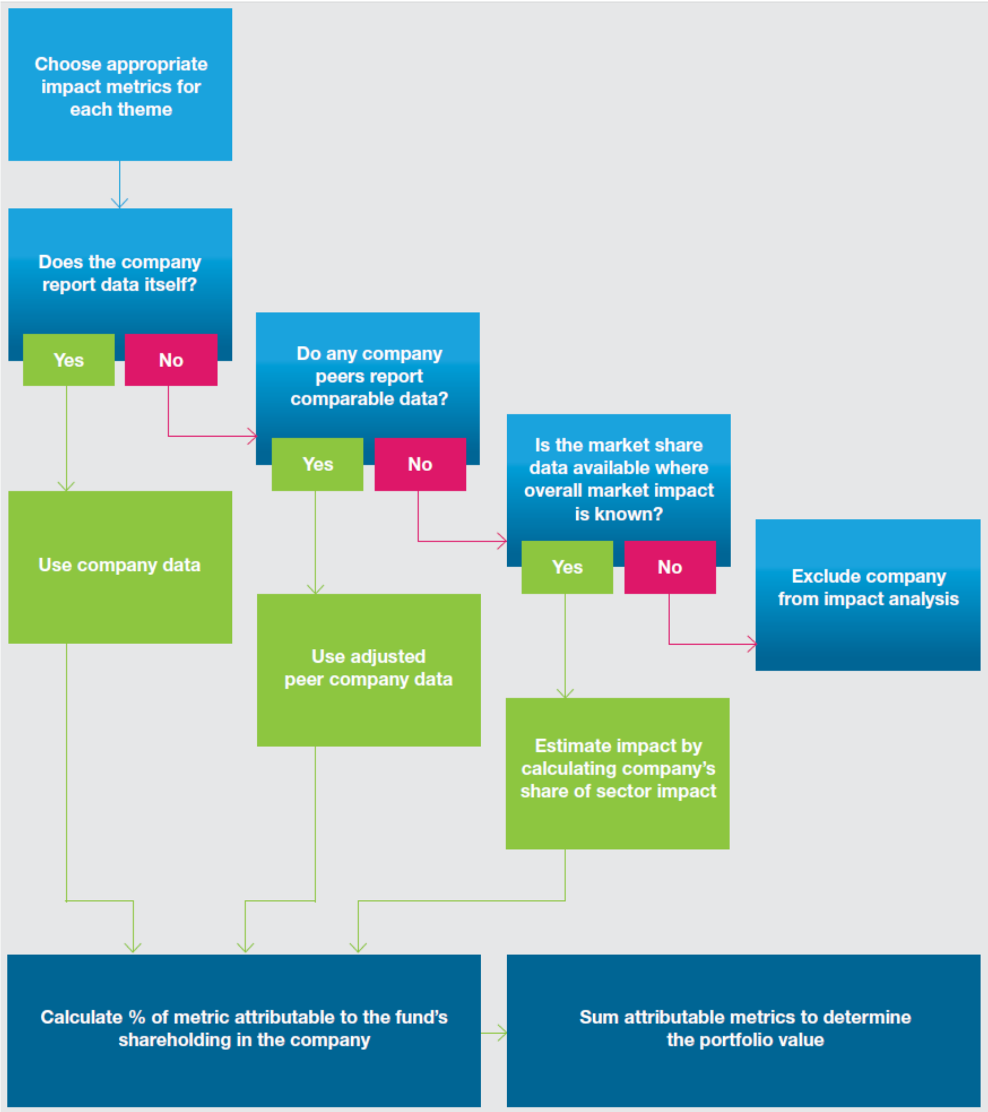


Calculating company impact

As part of WHEB's investment process, data is collected on the positive impact associated with the products and services sold by companies in the strategy. Many companies publish information on the product/service impact without collating this on a company-wide basis. In some cases, companies may collate this corporate level data, but do not report it on an annual basis. Others may not report this data at all or it may be in a format that is not possible to aggregate. Where data is made available by the company, we use this data to calculate the impact of a company's products over the year in question.

Where such data is not available, we use a variety of estimation methodologies to determine company level impact. For example, in some cases we have been able to use data that is reported by peer companies as a proxy. If we know the product-level impact, we can estimate company level impact based on the number of products or services that are sold. Where peer data is not available, we may be able to estimate impact by using information on the market share that a company has, and then using this to estimate the number of products sold. The 'decision-tree' in figure 5 below illustrates how we select the best method for calculating company impact data.

Figure 5: Calculating company impact



Product and service 'tiers'

WHEB invests in businesses that enable and benefit from the shift to a low carbon, sustainable economy. Within nine investment themes we invest in a wide range of businesses. We categorise these into four 'tiers'.

Figure 6: Product and service 'tiers'

Tier	Definition	Examples	Impact estimation
1	Complete product or service that can be used by ultimate customer	Completed wind turbines	Relatively straightforward where numbers of products are known or can be estimated
2	Components or materials used in combination with other components to provide the end product or service	Wind turbine blades or other components	More complex given components represent a proportion of the end-product
3	'Platform' or enabling technologies	Computer aided design software that improves the efficiency of wind turbine blades	Most complex as the product or service is an enabler and not necessarily present in the end product or service
4	Products or services that contribute to the distribution, on-going maintenance or monitoring of end-use products	Operation and maintenance services for wind farms	Complex to determine the contribution to impact of these 'support' type services

In general, data on the impact of tier 1 products or services is widely available and it is therefore relatively straight-forward to estimate company level impact.

Tier 2 products tend to be more complex because the product being sold is merely a component of the end product. In these instances, where company reported data is not available, the impact associated with the component is assumed to be equivalent to the value of the component as a proportion of the value of the final product. For example, for a company selling components into an electric vehicle (EV), we assume that the impact of the component is equivalent to the positive impact of the whole EV multiplied by the value of the component as a proportion of the value of the EV.

Tier 3 and 4 products/services are typically very complicated to calculate and tend to be excluded from our impact analysis[4]. As a result of our conservative approach, we believe that the reported figures are likely to underestimate the real impact.

Calculating 'net' impact

Every company in the portfolio uses energy and generates carbon emissions through their operations. To calculate the net impact of the portfolio, we need to include the negative footprint associated with the use of energy by all the companies in the portfolio and then subtract this from the positive 'carbon avoided' impacts associated with companies in the Cleaner energy, Resource efficiency, Sustainable transport and Environmental services themes. The data indicates that typically, the negative impact associated with energy use by companies in the strategy is less than 10% of the positive impact associated with their products and services. Currently, underlying reported company data is only sufficient to calculate the net impact of CO_2e emissions. As company data improves we will seek to calculate the net impact for other issues.

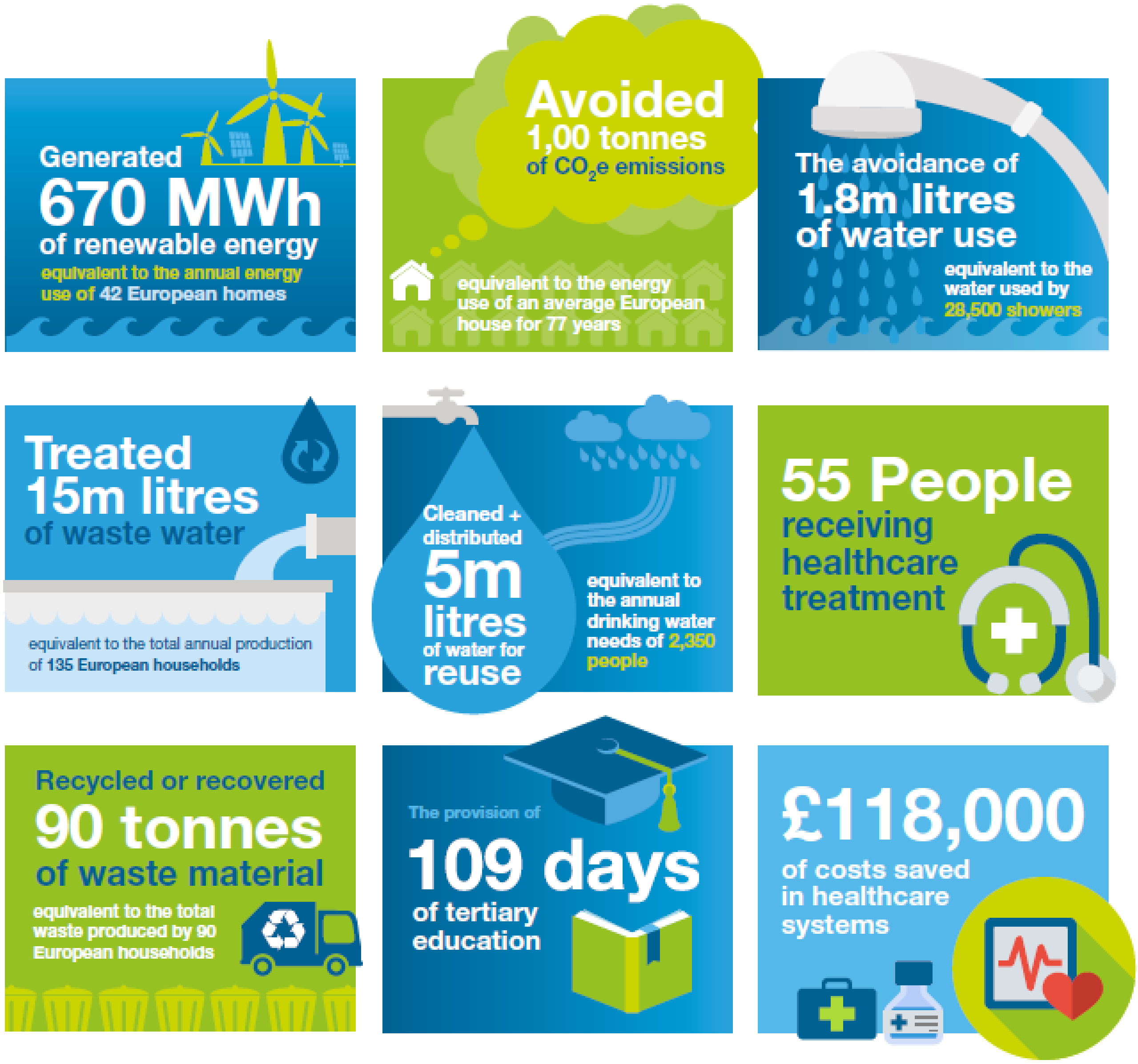
Calculating the impact of the strategy

Having calculated the positive impact over the year associated with the products and services of each company, we than calculate the positive impact associated with the strategy's specific holding in the company. This is calculated based on the value of the shares held in the company as a proportion of the total market capitalisation of the company in question. The total positive impact of the company is then multiplied by the fraction of the company that is owned in the strategy at the end of the calendar year to give the positive impact associated with the strategy.

The positive contributions from each stock are then grouped according to the relevant indicator and summed to give the total impact of the strategy on that indicator. This data can then be divided by the amount of money in the strategy to give the impact associated with a given amount of money invested in the strategy. This is the data that underpins the 'impact calculator'

Figure 7: The impact calculator

Owning £1m of the FP WHEB Sustainability Fund during 2017:



Weaknesses in the data

The quality and accuracy of the final strategy-level metrics are ultimately determined by the quality of the underlying data. Several methodological challenges remain in calculating strategy-level impact data. We describe four in figure 8 that we have experienced in our work. We have also provided an assessment of the challenge and the likely impact on accuracy of the data.

Figure 8: Sources of weakness in the data

Weakness	Estimated effect on impact measurement	Explanation
Underlying data quality	✗✗✗	Only a minority of companies report impact data themselves. Even this data is likely to be based on estimations and assumptions. The biggest source of error in our calculations is likely to be the accuracy of underlying company level impact data.
Double-counting	✗✗	'Double counting' occurs when a positive impact is counted twice (or more) along a product value-chain. For example, counting the positive impact of a wind turbine operator while also calculating the positive impact of manufacturing one of those turbines. In our view, the actual effect is likely to be quite limited at a portfolio level given the strategy's wide geographic and end market dispersion.
Time-frames	✗	Companies report data at different times of the year. Inevitably therefore the impact calculation is based on a mix of data from one year and the following year. In practice, however, year on year changes are usually modest and the effect we believe is therefore likely to be minimal.
Changes to strategy during year	✗	The composition of the strategy's portfolio changes over the course of the year, but the impact analysis is a 'snap-shot' based on the strategy's holdings at the end of the year. As a consequence, the calculation does not include contributions from companies sold during the year. However, given the strategy's low turnover (c.15%) we believe that the impact on the accuracy of the impact data is likely to be modest.

We have no doubt that there are other sources of error in our calculations, but believe these are the principal ones. We will continue to refine our methodology and work with underlying businesses in the strategy to improve the quality of the data that they report on their own impact.

Reporting and transparency

This document describes the methodology that is used in the impact mapping process that sits at the heart of WHEB's investment strategy. We report quarterly on changes to the portfolio map as part of our regular reporting to clients. These reports are publicly available from the WHEB website[5].

This document also describes the methodology used to generate the data for the impact calculator and the annual impact report. Quantitative impact data has been published in this report since 2017[6].

Additional information on the WHEB investment strategy including how it supports the UN Sustainable Development Goals and examples of engagement with portfolio companies are available from the Impact website[7].

[1] **http://www.thegiin.org/cgi-bin/iowa/resources/about/index.html#2**

[2] Ibid

[3] Particularly helpful in this regard were the papers produced by among others, the Working Group of Dutch financial institutions and companies (**https://www.dnb.nl/en/binaries/SDG%20Impact%20Measurement%20FINAL%20DRAFT_tcm47-363128.PDF?2018020717**), the University of Cambridge's Institute for Sustainability Leadership (**https://www.cisl.cam.ac.uk/publications/publication-pdfs/impact-report.pdf**) and reports by EQ Investors and Tribe Impact Capital.

[4] See for example the case study of Dassault Systèmes published in WHEB 2016 Impact Report (**http://www.whebgroup.com/media/2017/05/WHEB-Impact-Report-2016-1.pdf**)

[5] **http://www.whebgroup.com/investment-strategy/fp-wheb-sustainability-fund/quarterly-reports/**

[6] **http://www.whebgroup.com/news/newsletter/**

[7] **http://www.whebgroup.com/impact**