## Baillie Gifford<sup>®</sup>

# Positive Change

Impact measurement methodology

July 2024

This document details the methodology we use to analyse and report on the positive impact associated with the Positive Change Strategy. The sections that follow explain how we analyse the potential impact of a company, how we report on this impact in our annual Positive Change Impact Report and how we collect and calculate headline impact data.

We continue to evolve our approach and to engage with the companies in the portfolio to encourage them to do the same.

### Analysing and reporting on impact

The Positive Change Team takes a positive and proactive approach to impact investing with our two equally important objectives: to deliver attractive investment returns and to contribute towards a more sustainable and inclusive world. We aim to support companies making decisions and taking actions that will be beneficial for their business, society and the environment in coming years and decades.

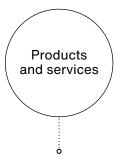
We believe that reporting on impact is fundamental to Positive Change. We aim to be as robust and transparent as possible in our approach to reporting on our second objective 'To contribute towards a more sustainable and inclusive world'.

Analysing and reporting on positive impact is not easy: impact will not always be quantifiable (nor should it be); different companies have different impacts, and there is currently little in the way of standardisation for how companies should report on how they impact people and the planet. To allow the reader to understand our approach to reporting on our second objective, we have explained below how we analyse the potential impact of a company.

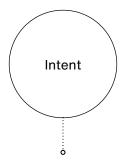
Our approach to impact analysis is based on robust, bottom-up research that is independent from, but complementary to, the investment analysis. We only hold companies in the portfolio for the impact their core products and services can deliver, but we analyse all aspects of a business before making an investment.

We have developed a qualitative framework to allow us to independently and consistently assess and compare how companies are driving change based around three components.

All investment strategies have the potential for profit and loss, your or clients capital may be at risk.



All the companies in the portfolio are there because their products and/or services address a global environmental or social challenge and are improving the status quo. Our assessment of product impact considers the relationship between the product and the problem; the breadth and depth of the impact; and the materiality of the product or service, both in the context of the business and the challenge.



Understanding a company's intent towards delivering positive change can help us to understand how likely it is that the company will deliver on the expected impact. Here we consider a company's mission and how it is implemented; its strategy, actions, commitments and structures; and influence in the wider industry.



Understanding a company's business practices helps us to determine whether it can achieve sustainable growth. This is where we look at a company's actions across the full value chain and its relationship with all stakeholders.

Our impact analysis supports a holistic assessment of companies. We learnt in the very early stages of developing Positive Change that there is no perfect company. There is also no easy way to sum and 'net off' those different positive and negative impacts – they often occur across multiple timeframes, with different stakeholders and, where they are possible to measure (and many aren't), they are not always quantified consistently. Companies will make it into the portfolio where we believe that the overall impact is more positive than negative, based on thorough analysis and professional judgement.

Companies in the portfolio are organised into four themes which represent key global challenges. These themes are: Social Inclusion and Education; Environment and Resource Needs; Healthcare and Quality of Life; and Base of the Pyramid. Our impact analysis drives our inclusion of a company in the Positive Change Strategy, and the key outcomes and impacts are reported on an annual basis in the Positive Change Impact Report.

### **Positive Change Impact Report**

In the Positive Change Impact Report, the output of our impact analysis is summarised for each company in the portfolio individually (both positive and negative). Although we publish the Impact Report annually, we think impact can only truly be measured over the long term, which we define as five years and beyond.

Within the Impact Report we disclose impact at a company and portfolio level:

- The Positive Chains show how each company is delivering positive change through its products and services. We do not include positive or negative impacts from the business practices (how the companies operate) in the Impact Report as we report on this separately in our annual Environmental, Social, Governance (ESG) and engagement report Positive Conversations. Further detail is provided in the 'Business Practices Reporting' section of this document.
- For companies held in the portfolio five years and beyond, we have developed full company pages.
   We have included our Positive Change Hypothesis and commentary on progress and real world context.
- The Portfolio Snapshots: Headline Impact Data show aggregated data to illustrate how the portfolio holdings are contributing towards delivering positive change.
- The Portfolio Snapshots: Significant Sustainable
  Development Goal (SDG) Contributions show
  which companies contribute to the United
  Nations SDGs. Our explicit aim is to identify and
  hold companies for their positive contributions.
  Accordingly, the number of holdings we found
  to be making a significant negative contribution
  to the SDGs through their products and services
  is less than those holdings making positive
  contributions.

The methodology we use to report on the above is detailed on page 3.

# **Demonstrating company level impact** through the Positive Chain

We demonstrate how companies in the portfolio are addressing the themes through a Positive Chain. Our Positive Chains are based on the 'Theory of Change', a methodology where identified change is mapped out with outcomes shown in relation to each other chronologically. Our Positive Chains show how each company is delivering change through its product and services and have five components to help illustrate how the holdings are delivering positive change:

- Inputs (the resources used by the company, eg financial capital, human capital);
- Activities (the use of inputs or other actions to produce outputs);
- Outputs (the production or delivery of products or services to beneficiaries);

- Outcomes (short-term changes as a result of those activities and outputs); and
- Impacts (system-level changes expected to happen owing to the company's activities and outputs).

Further information on how we collect our company data contained within the Positive Chains can be found below in the 'Collecting company data' section.

Under the impact column we highlight the UN SDGs and targets that each company is contributing towards through its products and services. Further detail is provided in the 'Significant SDG Contributions' section of this document.

An example of a Positive Chain based on Duolingo, which is owned in the portfolio:

### **Duolingo case study**

Inputs —

US\$194.4m R&D 720 Employees (Y/E Dec 2023) Activities ———

Duolingo's main product is a language-learning website and mobile app that enables users to practise vocabulary, grammar and pronunciation. The company has broadened its scope into childhood literacy and elementary maths education, with ambitions to extend its offering to other subjects.

Outputs ———

Duolingo has 85 million monthly active users, completing over a billion exercises a day. Outcomes ———

The platform's most popular languages are English, Spanish and French, which are studied in 122, 34 and 22 countries respectively, primarily in developing countries. The Duolingo English test, which costs less and is more accessible than conventional English proficiency tests, is accepted by 4,000 higher education programmes. In 2023, 145,000 tests were taken in the world's least developed and lowest income countries, and 180,000 tests were taken in countries engaged in active

conflict.

**Impact** 



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In addition to annual impact shown through the Positive Chain, for companies held five years or more, we have expanded our reporting to include progress over time:

- Positive Change hypothesis. For each company held since inception, the hypothesis outlines how we expect companies' products and services to deliver positive change, and why we believe this represents a good investment opportunity.
- Long-term progress. Commentary and supporting impact (since inception period) and investment metrics (over five-year periods) to ensure that we are accountable to the philosophy that investment returns and impact are complementary. See below for further methodology.
- Real-world context. Further commentary around the challenges each company is solving.

Impact objective metrics, such as Ørsted's avoided emissions from green generation, are selected and monitored by the impact analysts using publicly-available data. Where the full time series of data is not available we do not report.

Investment objective metrics, such as revenue growth and share price return are derived from third party sources including FactSet and Refinitiv.

Revenue growth is calculated using third-party source FactSet, which collects data from both annual and interim, preliminary and final documents (eg 8-K, 10-K, 10-Q). Data is sourced from both the face and the notes of the cash flow statement and balance sheet, and the face of the cash flow statement reported by the company. Sales data is therefore sourced from the income statement. The growth percentage calculation approach is (Sales/Sales -5Y)^(1/No. of years)-1)\*100 The most recently available sales figure (reported prior to the report date) is compared to the same figure five years prior, the difference is then annualised and converted into a percentage.

### Additional notes:

01. When the currency used in the report differs from the securities 'as-reported' currency, FactSet sources exchange rates from WM/ Reuters to convert the data items. An average exchange rate is used to covert data items from the income statement and cash flow statement, and an end-of-period exchange rate is used to convert data items from the balance sheet.

In order to calculate cumulative share price return in US dollars we download the total return index from Eikon Datastream into Excel and then calculate a cumulative return based on the calculation: (opening date from the closing date)\*100. This is the same calculation whether it is daily return or return since inception.

As we are pulling in daily data, to make it easier to find the correct value for each date when calculating longer time periods we usea VLOOKUP function to source the correct share value. We then use the formula above to calculate the time periods requested. In order to calculate the annualised return we first need to calculate the number of years for the since inception period. To do this we subtract the opening date from the closing date and divide this by 365. We then apply this to the cumulative formula, so this becomes (closing value/opening value (1/No. of years)-1)\*100.

## How we collect and calculate our headline impact data

### Collecting company data

- We collect data from each of the companies held in the Positive Change Strategy on what their impact is at the end of their fiscal year<sup>1</sup>. For those holdings that have been in the portfolio for less than the full year, no attempt has been made to pro-rate and therefore we include the full year of impact.
- We try to pick just one or two of the most relevant metrics for each company and this data varies.
   Metrics are guided by the four impact themes which represent key global challenges. For example, we would report on CO<sub>2</sub> emissions saved for a green energy provider in the Environment and Resource Needs theme, or patients treated for a healthcare company in the Healthcare and Quality of Life theme.
- We only include data that relates to positive impacts from the products and services of the companies held in the portfolio (so what they do or sell). We do this to be rigorous and conservative with our reporting. We do not include positive or negative impacts from the business practices (so how the companies operate) in the Impact Report as we report on this separately in the annual ESG and engagement report, Positive Conversations. Further detail is provided in the 'Business Practices Reporting' section of this document.
- The way in which companies measure and report is not always uniform, so as well as obtaining this data from company reports we also engage with companies to understand how they have compiled the data.

- Where information is not available to calculate impact, we do not estimate a company's contribution and so we believe our impact figures are conservatively calculated. Through proactive engagement we hope the gaps in this data will diminish and consistency in reporting will increase over time.
- In some instances, we use the most recent company reported data to calculate outcomes
- Data for CO<sub>2</sub> emissions saved is based on company reporting, which is either in CO<sub>2</sub> or carbon dioxide equivalent (CO<sub>2</sub>e); the aggregate data is presented as CO<sub>2</sub>e as this is the most conservative approach.
- Data in the report is based on companies' publicly-reported data for the financial year 2023 (if reported before 30 June 2024 or through company engagement), unless indicated otherwise. For Sartorius, the company reports -single-use products accounts for about three-quarters of the [Bioprocess Solutions] division's sales revenue. We have interpreted this as 75% in order to calculate the share of total revenue which single-use technologies contribute to.
- Healthcare companies tend to report cumulative data, and therefore data related to healthcare is presented to date, covering multiple years.
- It is important to note that this data is for the overall companies. We are not trying to factor in the specific ownership stake in the companies held by Positive Change clients.

### Calculating the headline impact data

- Where companies report on relevant data, we add this together to provide Headline Impact Data for Positive Change overall.
- As we note above, if a company does not report
  a figure that can be verified, we do not include
  any contribution in these headline statistics.
   We believe this provides a conservative estimate.

<sup>&</sup>lt;sup>1</sup>Our impact report collects data from the full, prior fiscal year. Note that companies will pick slightly different fiscal year end points e.g. some companies have a December fiscal year end, while for others it is March.

## In 2023, in their provision of products and services, companies are estimated to have:

# Environment and resource needs

### Ecolab 3.8m

Novozymes\*

Ørsted\*

Tesla 20m

Umicore 8.7m

Through products in use and/or sold during the year, enabled the avoidance of close to

**33 million** tonnes of CO<sub>2</sub>e

# Social inclusion and education

### Coursera 142m

Duolingo 85m

Provided access to education and/or training to

**227 million** registered learners

Healthcare and quality of life

### Alnylam 5.1k

Dexcom 2.3m

Moderna\*

Provided treatment and disease management solutions to over

2.3 million patients

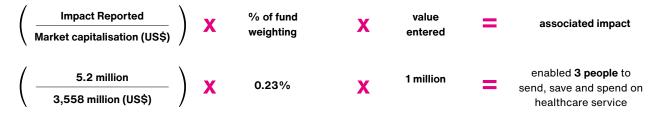
Data for carbon dioxide equivalent (CO<sub>2</sub>e) saved is based on company reporting which is either in CO<sub>2</sub> or CO<sub>2</sub>e; the aggregate data is presented as CO<sub>2</sub>e as this is the most conservative approach.

Data related to healthier lifestyles, healthcare services including treatment and disease management and instruments for scientific research is presented to date, covering multiple years.

\*In compiling our headline impact data, we have included all relevant companies, recognising their contributions to the overall highlighted impact. However, due to year on year variations in reporting by companies, we were unable to obtain precise figures for some entities, indicated in grey. This approach ensures our estimates remain conservative while highlighting the impact all portfolio companies are delivering. In time we hope to be able to encourage companies to increase their reporting.

### **How our Impact Indicator works**

- We take the overall impact data we have collected for the companies in the portfolio. The data for each
  company is divided by its market capitalisation (the total value of the listed shares of a company) in US
  dollars. This figure is then multiplied by the percentage weighting of that company in the representative
  portfolio (all as at end December 2023).
- · We aim to factor in ownership stakes using our Positive Change Impact Indicator.
- To calculate individual investments in our Impact Indicator, the figure is pro-rated again for the value entered and converted into the relevant currency.
- To illustrate, Safaricom, a company in the portfolio, enabled 5.2 million people to send, save and spend money on healthcare services. Using the impact formula, we can establish the impact associated with a particular ownership stake in that company through investing in Positive Change:



### A few important notes:

- The impact is generated by the companies rather than individual investments. As long-term providers of capital, the Positive Change Strategy aims to support these companies to improve their product(s) or service(s) as well as their business practices, to create a more sustainable world for future generations. However, while increasing an investment in the strategy increases your stake in the companies, it does not actually lead to an increase in the overall impact the company would have delivered last year. For more information on this, please see The Capital Chain section below.
- Our reporting year is dated from 1 January 2023 to 31 December 2023, and we report on all companies held as at 31 December 2023.
- For those holdings that have been in the portfolio for less than the full year, no attempt has been made to pro-rate the contribution and therefore we include the full year of impact. However, as we have a long-time horizon and aim to invest in our holdings for 5–10 years on average, portfolio turnover is low.

- Where we have divested a holding in the reporting year, we do not include the impact of that business.
- Headline Impact Data, while providing an indication of the impact of the portfolio, is vulnerable to inconsistencies. These can be caused by underlying assumptions. How companies measure and report is not always uniform and, in some cases, requires conversion to allow for aggregation across the portfolio. For example, converting Xylem's reduced water loss from cubic meters to litres.
- If a company does not report a figure that can be verified, we do not include any contribution within the Headline Impact Data snapshot; as such, we believe this provides a conservative estimate.

### Significant SDG contributions

All companies in the Positive Change portfolio contribute to the UN SDGs. We take a rigorous approach to SDG mapping, identifying the SDGs that companies contribute to through the delivery of their products and services, at the target level (they have 169 underlying targets). We map the SDGs which we expect companies to contribute to over a five year time period. This ensures that companies are genuinely addressing the changes needed to deliver the goals, rather than merely aligning with one of our four themes at a superficial level.

We do not consider alignment to the Goals through business practises as this is not the reason companies are held within the portfolio. For robustness and consistency we undertake the SDG mapping independently of company reporting. The link between each company's impact and the SDGs is shown in the Positive Chains, and at aggregate level across the whole portfolio in the Portfolio Snapshots, as detailed earlier.

Our explicit aim is to identify and hold companies for their positive contributions. Accordingly, the number of holdings we found to be making a significant negative contribution to the SDGs through their products and services is less than those holdings making positive contributions.

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# Independent verification – Positive Change Impact Report

The Positive Change Team seek independent limited assurance over aspects of the Positive Change Impact Report. We engage an independent third-party annually to seek Limited Assurance over Selected Information contained within the Positive Change Impact Report under International Standards on Assurance Engagements (UK) 3000 - 'Assurance Engagements other than Audits or Reviews of Historical Financial Information' ('ISAE (UK) 3000'). Please see the most recent Positive Change Impact Report for the full opinion on the most recent reporting year.

We hope that this impact measurement methodology provides clients and prospective clients with comfort that the way in which we report impact, and the underlying data we use, are robust.

# Business practices reporting (covering ESG issues)

We publish *Positive Conversations*, which is an accompaniment to our annual Impact Report using a different, but equally important, lens to look at the contribution of the Positive Change portfolio to society. The Impact Report focuses on the impact of

the products and services of the companies in the portfolio, whereas Positive Conversations looks at the business practices (ESG) of these companies, essentially how they operate and behave. It also details our engagement, or positive conversations, with management teams as we seek to support and influence companies over the long term.

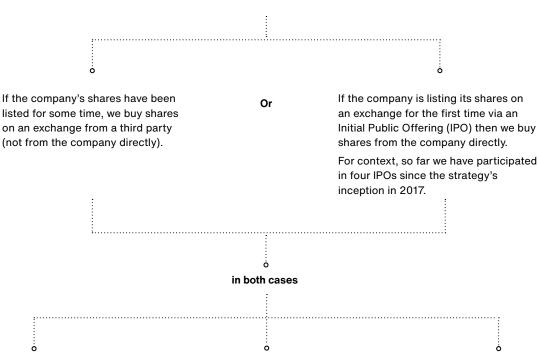
Positive Conversations includes information on key ESG issues such as carbon footprint and net zero expectations, social issues such as financial inclusion and governance matters, as well as important information on company engagements and proxy voting.

We produce separate reports because it is important to distinguish between business strategy (products and services) and business practices (ESG). While companies make it into our portfolio based on the impact from products and services, we aim to own shares in exceptional companies that operate with honesty and integrity, that treat their stakeholders well, and are leaders within their respective areas. We believe our bespoke approach will lead to more interesting and effective conversations and actions over time.

### **The Capital Chain**

We hold shares in companies who have publicly listed shares. What does this mean for where your money goes?

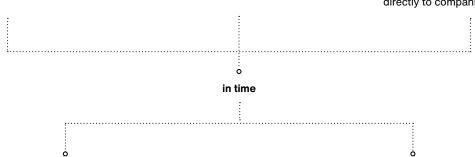
### You invest in Positive Change



The Positive Change portfolio holds shares in the companies in which we invest. Together, shareholders are the owners of the business.

Part ownership of the business means that we, on your behalf, have the right and the responsibility to engage with management teams on important topics about how the business is run. Supportive long-term shareholders can also perform other important functions:

- Not selling shares and supporting company management during periods of short-term pressure from other stock market participants can help them realise long-term strategy.
- At times companies may need to raise more money from their existing shareholder base. As long-term shareholders we can choose to support these capital raisings. In these cases we would be providing capital directly to companies.



We may choose to sell the shares in a company and relinquish our ownership stake. This could be because our investment and impact cases have played out as expected and we don't foresee future investment or impact potential, or because the investment did not work out as we expected.

We aim to hold the shares of the company in this portfolio for 5–10 years on average. This is backed up by our portfolio turnover. We feel this long holding period allows us to best fulfil our role as supportive long-term shareholders in helping the companies in the portfolio deliver both financial returns and impact.

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