



Brunel

Pension
Partnership

Climate Change Progress Report 2023

Progressing the requirements of

TCFD | TASK FORCE ON
CLIMATE-RELATED
FINANCIAL
DISCLOSURES



This report supplements Brunel's Annual Report
and Financial Statements, for the year ended
30 September 2022.



Delivering stronger investment returns over the long term, protecting our clients' interests through contributing to a more sustainable and resilient financial system, which supports sustainable economic growth and a thriving society.



Brunel Pension Partnership Limited (Brunel) is one of eight national Local Government Pension Scheme (LGPS) pools, bringing together circa £35 billion investments of 10 likeminded pension funds: Avon, Buckinghamshire, Cornwall, Devon, Dorset, Environment Agency, Gloucestershire, Oxfordshire, Somerset, and Wiltshire.

We believe in making long-term sustainable investments supported by robust and transparent processes. We are here to protect the interests of our clients and their beneficiaries. In collaboration with all our stakeholders, we are forging better futures by investing for a world worth living in.

Brunel is authorised and regulated by the Financial Conduct authority as a full-service MiFID firm. We use the name 'Brunel' to refer to the FCA-authorised and regulated company. Company registration number 10429110. Authorised and regulated by the Financial Conduct Authority No. 790168.

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Task Force on Climate-related Financial Disclosures (TCFD) and regulatory requirements

Brunel Pension Partnership's mission to **invest for a world worth living** is encapsulated in its commitment to build Responsible Investment into everything it does. Climate Change was and remains the highest priority of Brunel's RI agenda. In our inaugural year, 2017, we committed to report to the Task Force on Climate-related Financial Disclosures (TCFD). Each year we have voluntarily provided a summary, aligning with the requirements in each [Annual Report and Financial Statements](#).

This report, the final one before mandatory reporting, aims to pull together all the aspects of our climate reporting, capturing the outcomes of the steps we have taken to meet the recommendations of the TCFD, but also those aspects of our commitment to Net Zero, as set out in the Paris Aligned Asset Owner Commitment and reflected in our Climate Change Policy 2023-2030. The commitment is replicated in Appendix A.

In April 2015, the G20 commissioned the Financial Stability Board (FSB) to look into how public and private participants take account of climate-related issues. The outcome of the review was the establishment of the Task Force on Climate-related Financial Disclosures (TCFD). Following a consultation, the TCFD issued recommendations for reporting to assist stakeholders in financial markets to understand their climate-related financial risks and opportunities.

Our reporting will follow the four sections of the TCFD recommendations.

The TCFD recommends reporting is included in an organisation's main financial filings. Brunel's year-end is 30 September, but our climate metrics and targets are set and reviewed each calendar year. Therefore, Brunel has committed to supplementing the summary report



with this more comprehensive report on an annual basis, in order to capture the most up-to-date progress on each of the metrics and targets.

Brunel is a strong advocate for global mandatory disclosures to TCFD. Brunel has supported the work of the UK government in improving climate risk disclosures, culminating in the commitment to making TCFD mandatory across the economy by 2025.

The Financial Conduct Authority (FCA) recommends organizations such as Brunel publish a TCFD report both for the organization but also for each product. Our first report required under the regulations needs to be published by June 2024.

Brunel's client partners are members of the Local Government Pension Scheme, managed by the Department for Levelling Up, Housing and Communities (DLUHC). The final regulations are expected to

be published in autumn 2023, with the expected reporting date for each fund to be December 2025.

To ensure disclosures are made in line with the guidance and standards outlined in the TCFD, both the FCA and DLUHC requirements are set out in this context. The forthcoming FCA and DLUHC TCFD disclosure requirements are seen as a continuation of our current reporting objectives and capabilities. This report, together with our carbon metrics report will act as a baseline for future TCFD entity and product reporting.

Next steps

By 2024, Brunel will be able to comply with all FCA and currently-proposed DLUHC data requirements and will be able to deliver various levels of support to our clients.

Introduction: Climate change is an issue right across our partnership

Climate change presents an immediate, systemic and material risk to the ecological, societal, and financial stability of every economy and country on the planet. It has direct implications for our clients and their beneficiaries. It is therefore a strategic investment priority for us.

Scientific evidence suggests that our climate is changing faster than at almost any point in history.

Limiting the global temperature increase to 1.5°C is now more critical than ever and achieving it is under peril. The world is already at approximately 1.1°C of warming above pre-industrial levels and current policies in place globally put the world on track for a central estimate of around 2.7°C¹ warming by 2100, assuming all country targets are met. This means that 4°C of warming could still be a reality if targets are not met in time. This level of warming is anticipated to have profound implications for the environment, society, and the economy.

What is the role of investors?

The financial services industry's understanding of the nature of climate change has developed significantly over the last few years, with most participants regarding it as a foreseeable and materially significant financial risk. Investors are exposed to the risks and opportunities presented by climate change adaptation and mitigation - managing these impacts is an essential component of an investor's fiduciary duty.

Investors are also part of the solution and have a critical role to play if we are to successfully transition to the

low carbon economy and to ensure that we adapt effectively to the physical impacts of climate change. The COP27 Implementation Plan set out both the scale of the challenge and, for the first time, the role of the institutional investor:

UNFCCC COP27 Sharm el-Sheikh Implementation Plan 2022

It highlights that "about USD 4 trillion per year needs to be invested in renewable energy up until 2030 to be able to reach net zero emissions by 2050,² and that, furthermore, a global transformation to a low-carbon economy is expected to require investment of at least USD 4-6 trillion per year³".

The plan also draws attention to the fact that "delivering such funding will require a transformation of the financial system and its structures and processes, engaging governments, central banks, commercial banks, institutional investors and other financial actors".

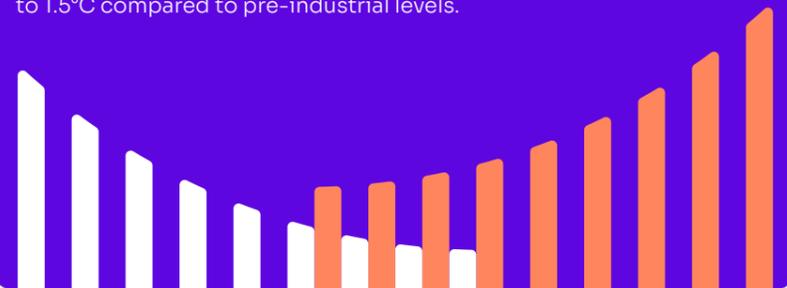
The provision of capital required for mitigation and for adaptation is an investment opportunity. We can also engage with the companies we invest in so they are resilient to regulatory and other changes that will result from climate change. We can support policy makers in taking action to enable the low carbon transition and effective adaptation.

Climate Change beliefs (Climate Change Policy 2023-2030)

We believe that:

- Climate change presents a systemic and material risk to the ecological, societal and financial stability of every economy and country on the planet and therefore will impact our clients, their beneficiaries and all portfolios.
- Investing to support the Paris goals that deliver a below-2°C temperature increase, and pursuing efforts to limit the increase to 1.5C, is entirely consistent with securing long-term financial returns and is aligned with the best long-term interests of our clients.
- For society to achieve a Net Zero carbon future by 2050 (or before) requires systemic change in the investment industry and equipping and empowering our clients (and other investors) is central to this change.

Given our strengths and our position in the market, we therefore believe that the key objective of our climate policy is to systematically change the investment industry so that it is fit for purpose for a world where temperature rise needs to be kept to well below 2°C, preferably to 1.5°C compared to pre-industrial levels.



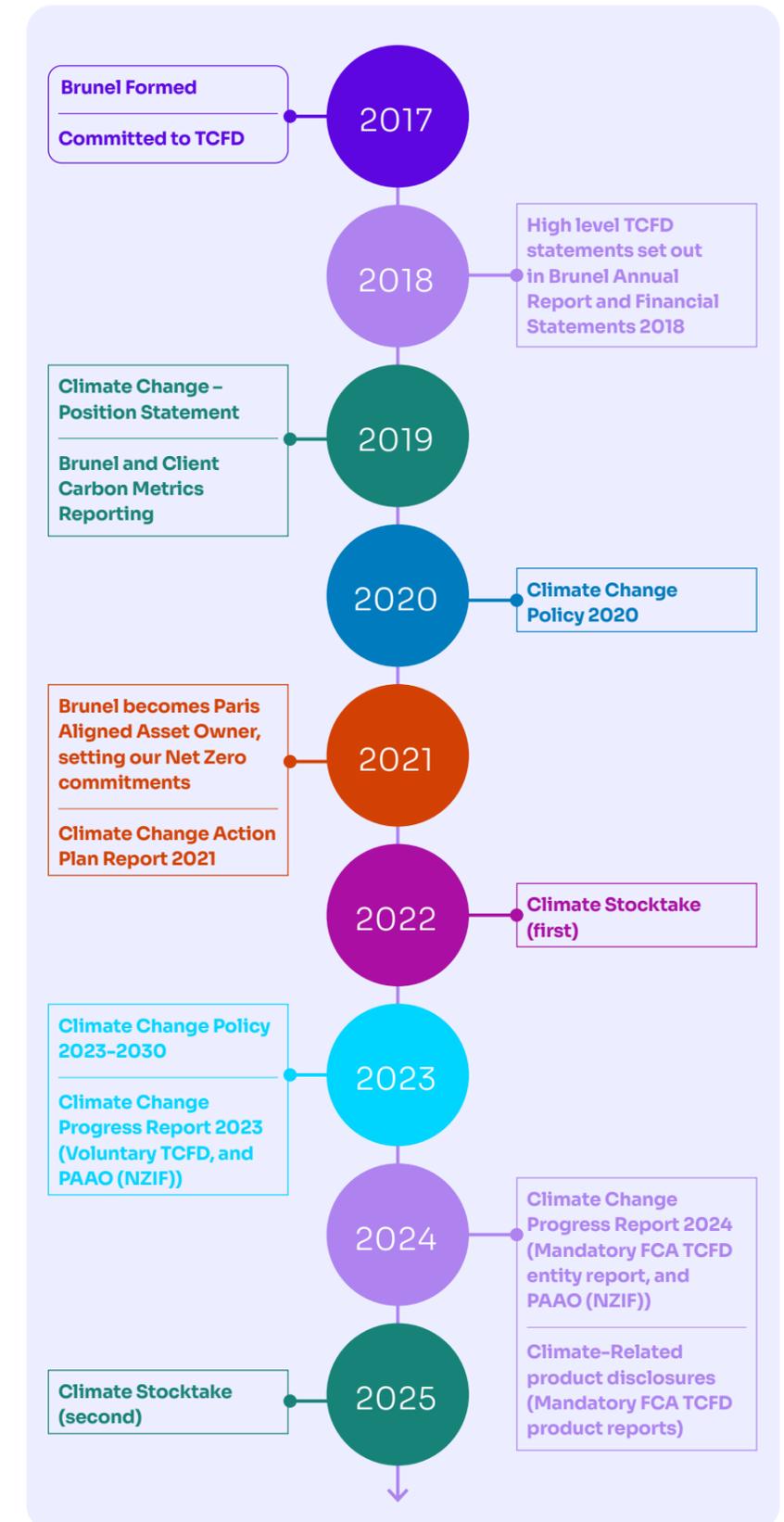
Supporting systemic change in the financial system

We, with our clients, first produced a position statement on Climate Change in 2019. In 2020 we published the partnership's climate beliefs, in addition to the five-point plan, as part of our Climate Change Policy.

In March 2021, Brunel Pension Partnership committed to be Net Zero by 2050 at the latest and halve its portfolio emissions intensity by 2030 through signing the UN Race to Net Zero-compliant Paris Aligned Asset Owner Commitment (see appendix 1). This commitment enhanced our ambitious 2020 Climate Change Policy, which set out the strategy and plan of action, together with key performance indicators.

In 2022 we undertook our first Climate Stocktake - a deep dive to assess what we had delivered; stakeholder views of our progress to date; our priorities going forward; and what updates to the scientific advice and investment best practice were relevant to shape the policy. The outcomes of the stocktake can be reviewed [here](#).

In February 2023 our new Policy launched, following this analysis. It extends that five-point plan to 2030, as we cleave to our aim to change the broader financial system. The Climate Change Policy has been developed in collaboration with our clients and key stakeholders. For each area we have set ourselves a target and these targets are consistent with the Net Zero Investment Framework and target-setting guidance and are reflective of Brunel and its clients' shared priorities to have real world impact. The Climate Change Policy 2023-2030 seeks to meet the requirements of the Paris Aligned Asset Owner Commitment to set out an Investor Climate Action Plan and this report seeks to meet the annual disclosure requirement to report progress.



1 www.climateactiontracker.org

2 IEA 2022 World Energy Outlook, 2022

3 United Nations Environment Programme. 2022. Emissions Gap Report 2022: The Closing Window - Climate crisis calls for rapid transformation of societies. Nairobi: United Nations

We manage more than we can measure

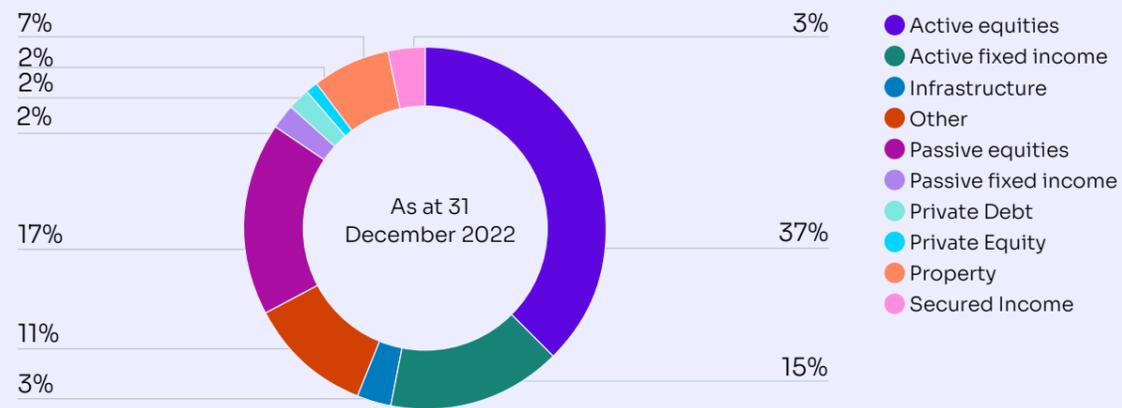
Brunel’s approach to managing climate-related financial risks covers all our investments, and we have made considerable progress across all the asset classes we invest in. Demonstrating progress in all assets classes is complicated as many of the tools and techniques for measuring progress are dependent

on publicly available information and are designed for corporate holdings rather than other asset types e.g., property or asset-backed securities.

We seek to manage climate risk in each and every portfolio, as well in our own operations, but we are not in a position to quantitatively measure and report progress in all these areas. We prioritise the disclosure metrics

for our listed equities and corporate bonds, as this represents two thirds of our asset under management (AUM). We have summarised our efforts elsewhere and continue the pursuit of evaluating and reporting, in a decision-useful way, on climate risks in all other asset classes and Brunel’s own operations.

Breakdown of Brunel Assets Under Management



Governance

The Brunel Board approves and is collectively accountable for Brunel’s Climate Change Strategy and Policy. Day-to-day operational accountability sits with the Chief Responsible Investment Officer, with oversight from the Brunel Investment Committee and Brunel’s Board.

Climate risk has been identified as a principal (level 1) strategic risk to Brunel. As such, the risk is owned by the Chief Executive Officer, with oversight from Brunel’s Audit, Risk and Compliance Committee, forming part of Brunel’s overall strategic risk framework.

The Chief Investment Officer is responsible for ensuring the integration of climate change into portfolio construction, implementation and overall investment decision-making. All members of the investment team have explicit responsibility for the implementation of our Responsible Investment (RI) priorities, including but not limited to climate risk, within their respective roles.

As Responsible Investment is core to Brunel values, all staff have a high level of awareness of environmental, social and governance risks as they pertain to their roles. As the Investment team have specific responsibilities, maintaining and building this knowledge is a core component of the whole team’s personal development. This includes Chartered Financial Analyst Institutes’ (CFA) UK ESG and Climate modules. For those who are part of Senior Management Certification Regime (SMCR) we have integrated climate and RI as competency requirements, where appropriate.

All staff have RI or sustainability-related personal objectives and these form the central component of our performance management process. Brunel does not routinely use bonuses or variable pay as part of its approach to remuneration. We do, however, have capacity to use small, one-off recognition awards to acknowledge exceptional efforts by an individual or team which could include stewardship and investment activities.

At the start of 2023 Brunel launched its new Climate Change Policy 2023-30, raising its ambitions to manage climate change risk across its portfolios and in the industry at large. The Climate Change Policy was developed in conjunction with key stakeholders, including the Brunel Oversight Board, Brunel Client Group, and the Client Responsible Investment Sub-group, membership of which includes representatives from the administering authorities it serves, and Brunel staff. This policy relates to and interacts with other Brunel policies, including but not limited to: policies across Responsible Investment, Stewardship, Risk Management, Product Governance, Manager Selection and Manager Monitoring.

It is expected that the policy will develop over time, given the fast-changing nature of the climate debate and improvements in climate data. Relatively minor changes to the policy, including clarifications and more specific targets or updates to reflect market developments, can be approved by the Brunel Investment Committee. More substantive changes will require approval by the whole Board, after client consultation if appropriate.

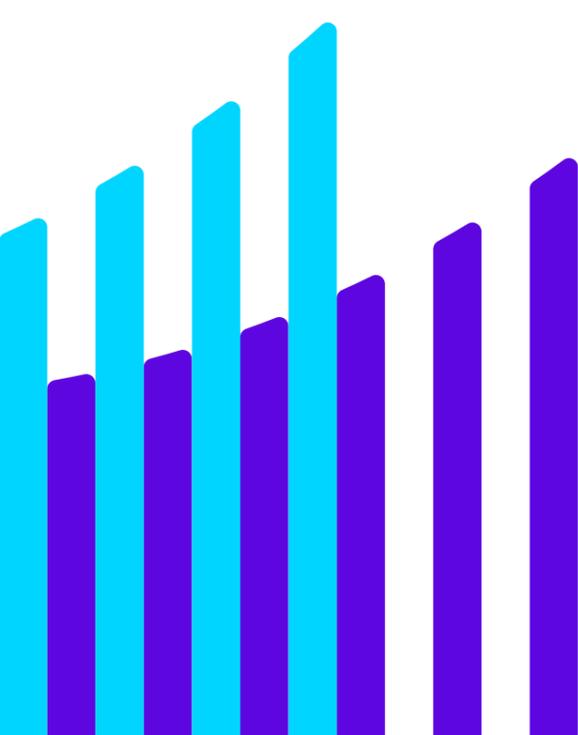
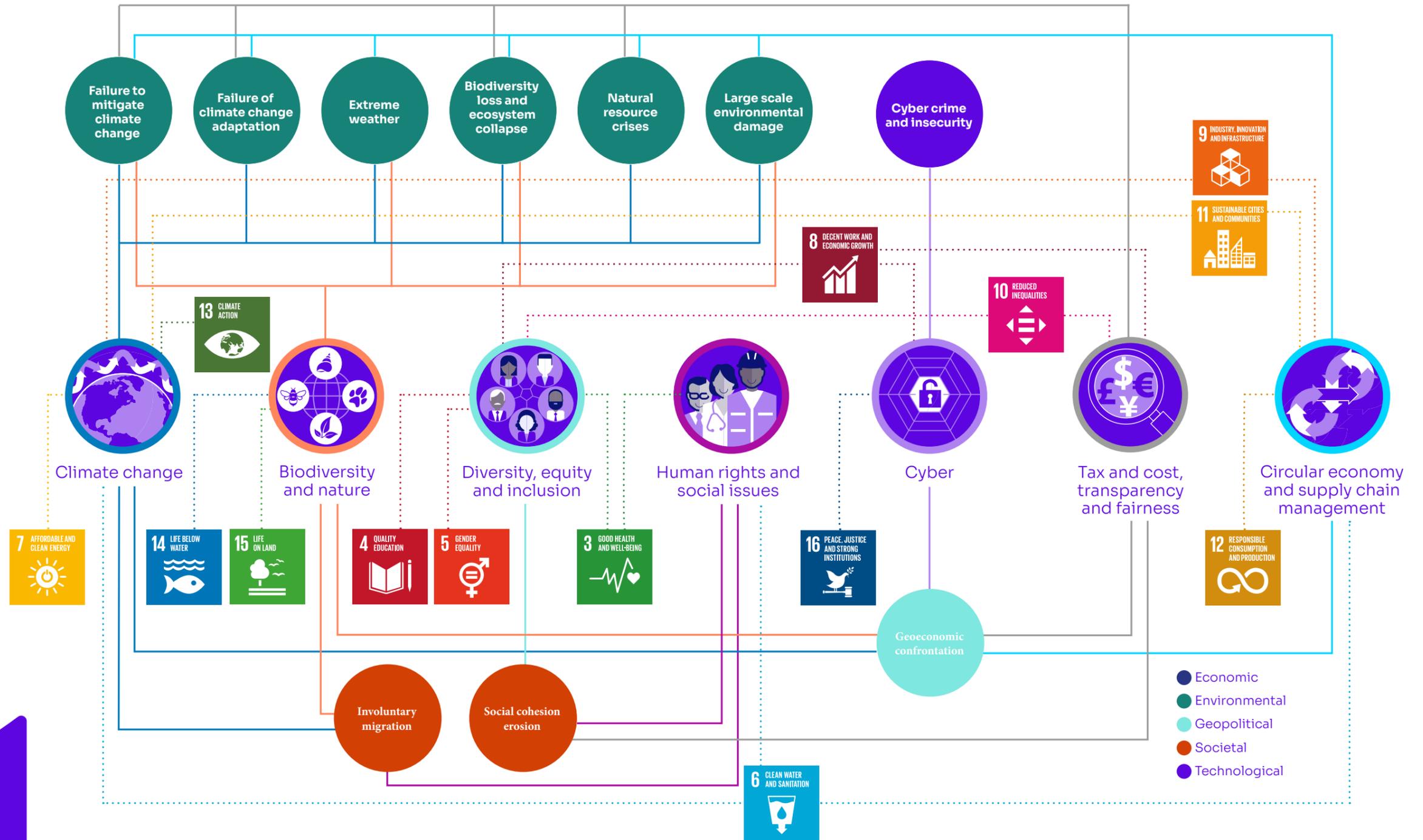
Case Study



AllianceBernstein (AB) Climate academy

In 2021 AllianceBernstein (AB), one of the Global High Alpha investment managers, partnered with Columbia University’s Earth Institute to provide, amongst many projects, a Climate Academy providing an on-line climate training course. Brunel investment team members were amongst those investors who utilized the first set of training modules in 2021/22. Brunel staff are also participating in the 2023 Academy which includes latest research findings and insights, with topics ranging from global food security to China policy and from natural hazards to biodiversity.

To ensure we are addressing systemic risk and rooting both our climate aspirations and our wider seven Responsible Investment priorities in real world change. We have developed and shaped them, not only with our clients, but based on global Responsible Investment priorities. Partnership is one of our key values, and we strongly believe that problems are best tackled together. This diagram demonstrates how our RI priorities fit with the [Global Risks identified by the World Economic Forum](#), as well as the [United Nations Sustainable Development goals](#).



Brunel Governance and Oversight

Brunel is focused on client outcomes. The following governance diagram illustrates the frequency of client interactions, all of which can include matters relating to climate change. The Client RI Subgroup, which meets monthly, provides an in-depth opportunity for input on client needs and expectations. Brunel has a dedicated Responsible Investment team of four investment professionals who support the Brunel Investment Team and lead on engagement and stewardship activities. For further detail of our Responsible Investment Strategy, see our annual [Responsible Investment and Stewardship and Outcomes Report](#).



Assurance

In 2021, Brunel undertook a review of the investment governance arrangements. This included reviewing the governance arrangements, including investment-related committees in place to make investment decisions and oversee portfolio performance and risks. It also involved looking at the embeddedness of Environmental, Social and Governance (ESG) considerations in the investment cycle including the plans and readiness for embedding the

Net Zero Investment Framework in investment activities.

An independent assurance review concluded that “ESG considerations have been part of Brunel’s business since commencement of the business and are embedded throughout the investment processes from investment due diligence to [the] investment monitoring stage.” However, enhancements to formally documenting arrangements, particularly those relating to new commitments, like Net Zero, would provide further assurance

and reduce the risk that these commitments would not be met. This recommendation has been implemented. Our process improvement work must ensure the oversight and monitoring of our climate and net-zero commitments is fully embedded within our governance framework. We will continue to review our practices and processes to identify opportunities for further enhancement and this will be subject to further internal and independent assurance reviews.

Strategy

Our Climate strategy

We believe it is our fiduciary duty to manage climate change and associated risks and opportunities within our investment portfolios, as investment markets are not properly pricing in climate-related risks. Climate-related risks impact all investment strategies and mandates, whether active or passive, and across both long and short time horizons.

Our experience and expertise in managing climate change-related risks and opportunities, scale, influence, and the strength and support of our clients provide us with a unique position in the investment industry. If we do not have a financial system that is fit for purpose, we will not be able to respond effectively to climate change. We can take some specific actions, mitigating risk at the margin, but the impact will be limited without wider change. Our priority to catalyse change in the financial system at scale therefore looks not only to our own efforts, but to partnership with others, and to enabling our clients to be agents of change too.

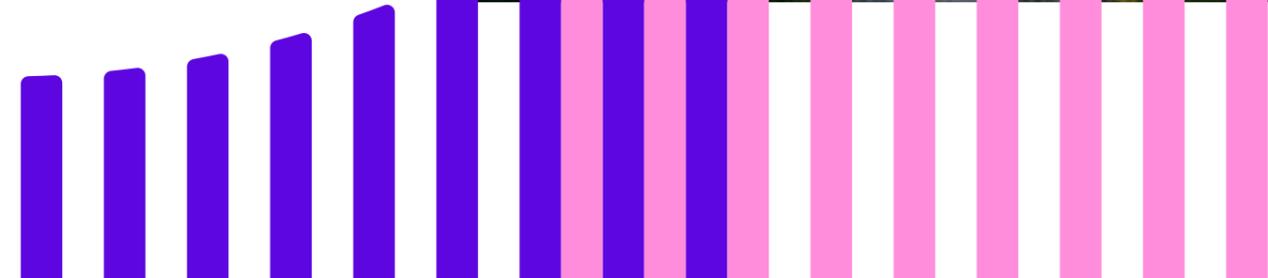
Focused on effecting change in the financial system, our first Climate Change policy, published in January 2020 identified five priority areas: Policy Advocacy; Product Governance; Portfolio Management; Persuasion; and Positive Impact. This was updated in February 2023 setting the **Climate Change Policy 2023-2030**, following our Climate Stocktake and detailed evaluation of the earlier policy’s progress.

These and the associated actions identified in our Climate Change Policy are intended to ensure that our investment portfolios are aligned with the goals of the Paris Agreement on Climate Change.

Since then, we have taken action to meet the commitments in that policy on the five priority areas. Our regular reporting provides insight in these areas through our annual [Responsible Investment & Stewardship Outcomes Report](#), which considers our performance on meeting our Responsible Investment goals, including on climate change. Further detail is provided in our annual [Carbon Metrics Report](#) that showcases key carbon metrics by portfolio.

Offsets

In line with best practice guidance, Brunel does not use carbon offsets in the construction of products or portfolios to achieve emissions reduction targets. We are supportive of the use of offsets by companies where there is currently no technological and/or financial viable alternative. We advocate strongly for the regulation of the voluntary carbon market to enable the use of offsets to play a credible role in the transition to a Net Zero economy.





Policy	Encourage policy makers to establish comprehensive and robust climate change policy frameworks. These need to deliver significant reductions in greenhouse gas emissions, accelerate progress towards the low carbon economy, and enable effective adaptation to the unavoidable impacts of climate change.
Products	Ensure a range of climate resilient products are available to our clients and the wider investment market that deliver substantial climate change benefits and are Paris-aligned. These investment solutions must help clients also meet their future investment goals.
Portfolios	Ensure our investment portfolios are resilient under a range of climate change scenarios (both mitigation and adaptation) by adopting best practices on climate risk management and working with our managers to further improve and develop our processes.
Positive Impact	Enable investments in activities that directly support the low carbon transition and that enable effective adaptation to the unavoidable impacts of climate change.
Persuasion	Challenge and encourage companies and other entities in which we invest and with whom we contract with to support the transition to the low carbon economy, and to ensure that they are resilient to the unavoidable impacts of climate change.

Maintaining rigour in our Climate Policy

We undertook our Climate Stocktake in 2022. The Stocktake sought to answer these questions:

- Did we deliver what we said we would do?
- Does it still meet your expectations and needs?
- Is it best practice?
- What are other stakeholder views?
- Are asset managers aligned?
- Are there companies of concern?

During our Climate Stocktake, we analysed our holdings, engaged stakeholders, held client workshops; and we will publish a report on achievements and on our public policy advocacy. As well as looking backwards and evaluating our progress, we will look forward and seek to set new objectives and targets. A report on the **Climate Stocktake (2022)** process and its outcomes is available [here](#).



Brunel Pension Partnership Investment Principles

1. Long-term investors
2. Responsible investors
3. Best practice governance
4. Decisions informed through experts and knowledgeable officers and committees
5. Evidence and research at heart of investments
6. Leadership and innovation
7. Right risk for right return
8. Full risk evaluation
9. Responsible stewardship
10. Cost-effective solutions
11. Transparent and accountable
12. Collaborate



One size does not fit all

We have seen a significant step-up in policy commitments, with over 140 of the 196 parties to the Paris Agreement announcing or considering Net Zero targets, covering close to 90% of global emissions.⁴ However, implementation in different parts of the world is moving at very different speeds. Different parts of the world also have different starting points, reflecting different stages of industrialisation. For example, the UK's carbon emissions peaked in 1973⁵ and whilst the US is still the second largest emitter in absolute terms, its emissions peaked in the early 2000s. In contrast, the emissions in many emerging market economies are yet to peak; their emissions intensity will go up before it comes down.

Yet investing in these economies is vital from both an economic and climate perspective – “Emerging and developing economies currently account for two-thirds of the world's population, but only one fifth of global investment in clean energy, and one tenth of global financial wealth”⁶

As a global investor, this means we cannot adopt a one-size-fits-all strategy and must ensure our strategy delivers a real world – real economy – transition, if we are to reduce risk. We recognise that the path to net zero will be bumpy and that even at 1.5°C there are physical impacts to be managed. As a starting point, we have differentiated developed from emerging economy targets, and will work with other asset owners to increase the availability of sector and region-specific data against which to assess progress, and mitigation and adaptation risk.



4 Climate Action Tracker (as at, November 2022)

5 Carbon Brief, 2019

6 IEA, 2021, Financing clean energy transitions in emerging and developing economies

Fossil fuel-related activities

The Internal Energy Agency (IEA) estimates 80% of the world's energy is based on fossil fuels in 2022. In its World Energy Outlook 2022, the IEA utilised the Stated Policies Scenario (STEPS). STEPS takes into account the measures that have been, or are in the process of being, implemented in order to achieve announced energy and climate policy goals. On this basis the share of fossil fuels in the energy mix falls to 75% by 2030 and to just above 60% by mid-century. This reduction is nowhere near steep enough for the world to reach Net Zero. More information about the [IEA's Updated Roadmap to Net Zero Emissions](#) and [World Energy Outlook](#) and STEPS can be found on the [IEA Website](#).

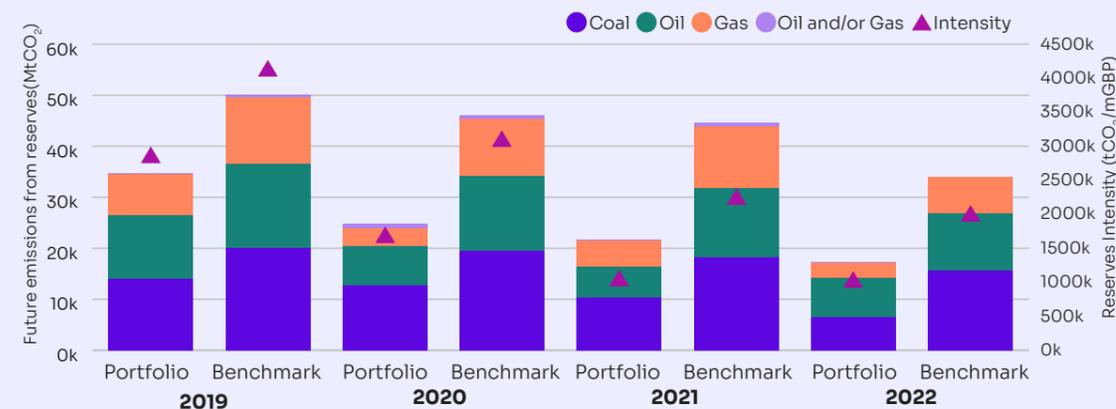
The transition to the low carbon economy calls for significant change in the shape and structure of our economy and requires us to eliminate most or all fossil fuel use and achieve a Net Zero carbon economy by 2050. Brunel actively seeks to reduce the dependence of fossil fuels through positive investment in low carbon sources and engagement with companies to reduce both demand and supply. We also seek to reduce our exposure to industry whilst balancing the desire for real world change that will reduce economy wide carbon emissions.

It is important to identify exposure to business activities in extractive industries in order to assess the potential risk of 'stranded assets'. Stranded assets are assets that may suffer premature write-downs and even become obsolete due to changes in policy or consumer behaviour.

We identify the exposure to extraction-related activities for each portfolio by analysing the revenue exposure and potential emissions from reserves for fossil fuel-related activities. These metrics highlight companies with business activities in extractive industries, as well as companies that have disclosed both proven and probable fossil fuel reserves in the portfolio. In other words, not just 'fossil fuel companies' but those companies who rely heavily on the fossil fuel industry for their own revenues.

Brunel has achieved a **75.4% reduction in reserves intensity** (this takes account of shifts between fossils fuels as coal has a higher intensity than oil, for instance) when compared to the baseline universe in 2019 and **64.5% reduction in reserves intensity** across its portfolios. The chart below illustrates the changes and summarises the key drivers.

Brunel Aggregate future emissions from reserves



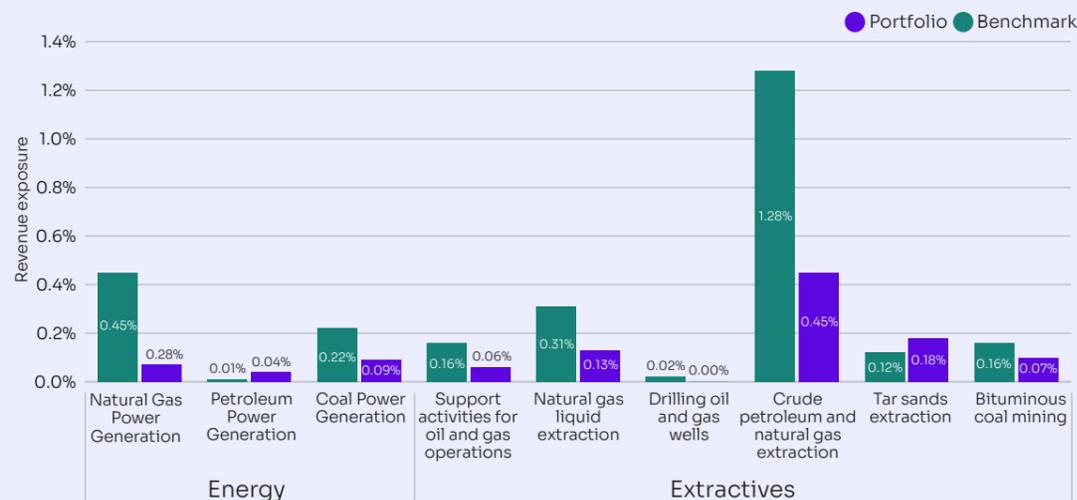
As at 31 December 2022

The above decline has been achieved through:

- decarbonisation of the Brunel portfolios
- asset allocation changes between portfolios (due to client investment decisions)
- additional Brunel sub-portfolios launched in 2021 (FTSE Russell Paris-aligned benchmark series)

Currently, the Brunel Aggregate Portfolio is less exposed to both fossil fuel revenues (1.30% vs 2.72% for its custom benchmark) and future emissions from reserves (17.3 MtCO₂ vs 34.0 MtCO₂).

Revenue Exposure Breakdown of Fossil Fuel Related Activity – December 2022



As at 31 December 2022

Exposure to fossil fuel activities

The graph above illustrates the revenue exposure breakdown of fossil fuel related activity in the aggregate of Brunel’s portfolios (include index tracking funds) and the benchmark as at end-December 2022. Whilst our exposure is significantly below the benchmark in all areas except one. Our exposure to revenues from tar sands extraction is higher than the benchmark.

This is largely attributable to two companies, Suncor and MEG Energy, who specialise in tar sands. These companies are held in our Global High Alpha fund.

Brunel is actively engaging with managers on a wide range of companies whose business models are challenged by the desire to transition to a low carbon future. As outlined above, there is a tension between wanting to achieve real world change through supporting those companies taking action and having investments in companies whose revenue streams are currently concentrated in areas where transition is dependent on significant technological innovation, including those relating to carbon storage and capture.

The asset manager deemed the two companies, Suncor and MEG Energy, were “committed to aligning”.

This was evidenced by the ambitious emission reduction targets (scope 1 and 2 only) and that they are actively seeking positive changes in their industry, including technological innovations. However, later in 2023, following changes in the leadership and focus at Suncor, the manager revised its view and the position was subsequently sold.

As with all high impact companies, Brunel and its asset managers pursuing efforts to enhance analysis of such companies alongside actively engaging with the companies (see Persuasion activities below).

Risk

Brunel climate-related strategic risks and opportunities

We acknowledge the catastrophic impact of governments and society not acting on their awareness of climate risk. To direct efforts in a pragmatic way we have identified the principal sources of strategic risk that are within Brunel’s direct sphere of influence (see table).

Strategic risks are managed by the Executive Committee. It has identified key performance indicators, that are tracked and reported against each quarter as part of the strategic risk review.

Portfolio climate-related risks and opportunities

The greatest impact to Brunel faces from climate risks is to our investment portfolios. The performance of our portfolios is directly linked to the value of the underlying assets, which are increasingly impacted by climate-related risks and opportunities. To ensure that our portfolios are well-diversified, and that our managers have a deep understanding of both the companies or assets in which they invest, and the risks to which they are exposed, managing climate-related risks and opportunities and aligning our investment management to Brunel’s climate change ambitions, are key considerations when appointing third party managers.

Climate change risk and opportunities are embedded into the selection and review processes for every manager and the associated due diligence. Managers are formally reviewed on an annual basis, and quarterly monitoring is undertaken by Brunel’s portfolio

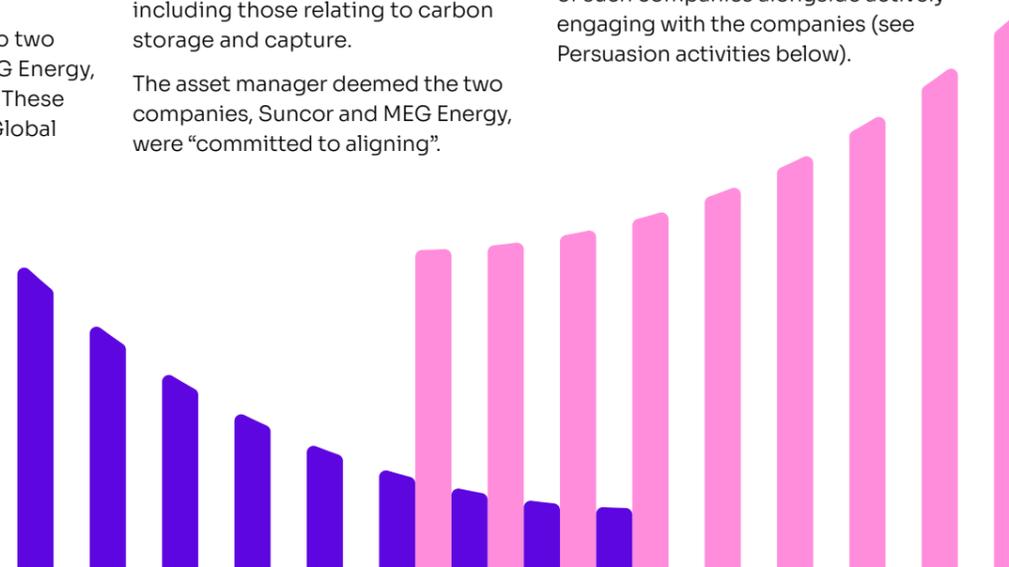
Risk source	Risk description
Market and Reputational	Failure to manage climate risk through poor awareness and responsiveness over how climate risks will impact on markets, our operations, managers and portfolios and, by extension, our clients
Regulation and Technology	Failure to anticipate and effectively manage changes in the market context in terms of regulation, disruption, best practice, innovation and demand - both top-down in terms of product governance, and bottom-up in terms of the impact on individual asset managers and investments
Client and product	Failure to provide portfolios that effectively respond to climate risk in the context of client investment objectives, potentially undermining the objectives of pooling
Physical	Failure to ensure operational resilience
Client and Human Capital	Failure to retain clients, attract talent and positively impact industry behaviour, due to mismanagement of all the above risks

managers, with support from the Responsible Investment team. The Brunel Investment Risk Committee quarterly review includes a series of metrics relating to climate risk management, as well as exposure to other environmental, social and governance risks.

Becoming Paris-aligned as a company and investor is still very new. As such, Brunel has partnered with asset managers to develop and design Paris-aligned investment solutions for clients. Brunel has committed to provide Paris-aligned options, where clients desire them, across all asset classes over time. Our biggest climate project of 2021 was the creation of Paris-aligned benchmarks to support index-tracking investments. We placed great emphasis on developing indices that not only met current needs, but also had scope to evolve in response to rapid industry developments, so that we continue to deliver on our clients’ investment objectives.

Real world impact

As reiterated strongly in our Climate Change Policy 2023-2030, a key focus at Brunel is on stimulating real world change. Determining the course of action that will deliver that change, rather than just make us look good, can often mean making difficult decisions to remain invested in companies that do not immediately appear compatible with ambitious climate objectives. Such decisions are not taken lightly and companies are monitored closely through our investment risk processes. We will use this report to be transparent on holdings that fall in that category, such as climate-controversial companies (see below) and those whose business model is highly focused on specific activities where concern has been raised e.g. pure-play tar sands and thermal coal.



Differences in approach

Broadly speaking our approach to embedding climate change is consistent across our asset classes, in that we seek to manage climate risks and are active in the stewardship of all portfolios. We do however access investments through a variety of instruments and legal structures which provide differing opportunities to impose specific requirements. We also acknowledge that different countries, sectors and asset classes are at different stages of maturity when assessing many environmental, social or governance risks and availability of data varies enormously. We are clear in our Climate Change Policy that one size does not fit all, but we do not use that as an excuse for inaction. Quite the opposite, we view it as an opportunity for innovation to enhance the likelihood of bring about real world change.

It is vital that we engage and work in partnership with our managers and general partners (with the support of our strategic partners) to ensure appropriate objectives and targets to climate. To reflect its importance to our strategy we have set a target to engage with all of them with respect on measuring emissions, disclosure levels and setting targets for decarbonisation and alignment by June 2024. This activity is detailed in our 'Persuasion' section later in the report.

Our investments in listed markets currently represent around 80% of assets under management. Our listed markets portfolios cover global assets as well as specific portfolios for emerging markets and UK equities as well as thematic portfolios for sustainable, and smaller companies. We also have fixed income portfolios that have exposure to sovereign, corporate and other debt as well a multi-asset Diversified Return Fund.

For all listed equity and corporate bonds, we utilise the same set of carbon metrics to analyse risk. This includes our pooled index tracking funds both those based on traditional market capitalisation and our Paris-aligned funds. Please see [Brunel's Carbon Metric Reports](#) for further details.

As an industry, we have yet to agree a methodology for reporting on multi-asset portfolios in a way that removes the risk of being misleading, because of limitations in data. Brunel has two listed multi-asset portfolios **Diversified Return Fund (DRF)** and **Multi-Asset Credit fund (MAC)**. Our MAC fund however is industry leading in its integration of climate change, with a clear commitments to achieve decarbonisation. Proportions of these funds are able to be analysed using carbon metrics and are reported internally. We are pursuing efforts to increase coverage and report externally in due course.

Scenario analysis

The TCFD recommendations include the requirement to undertake and report on outcomes of scenario analysis. We recognise that scenario analysis is an important tool in assessing what impact climate change may have on our investment portfolios. However, we are also aware that such analysis, as it pertains to climate, is still in its infancy and Brunel, like many other firms, is evolving its processes to embed the analysis in a decision-useful way.

We are working with our clients to provide training to support them and their onward communication with their stakeholders on how the materials can provide decision-useful information.

Previously, we have compared the equity portfolios against three Bank of England climate scenarios, using a free, open source PACTA. This stress testing was an initial step in the development of our climate scenario analysis work.

As a further pilot exercise, in 2022 we undertook to analyse around 1200 listed securities in our equity universe. The scenario analysis utilised market-standard scenarios including:

- NGFS scenarios (Orderly Net zero, Disorderly Net zero) for Transition Risk analytics for in scope investments
- IPCC (RCP 4.5 and RCP 8.5) for Physical risk analytics for in scope investments

The Network for Greening the Financial System (NGFS) was established in 2017 by central banks and supervisors with the aim to promote best practices and enhance the role of the financial system to manage risk and mobilise capital for a low- carbon economy.

The NGFS Climate Scenarios aim to provide an up-to-date reference point for understanding how physical risk and transition risk could evolve in different futures.

During 2022/23, we have been exploring data and analytics provider options to ensure we meet the newly proposed TCFD-aligned reporting requirements which will require LGPS fund-level climate reports, from the Department for Levelling up, Housing and Communities (DLUHC) and the FCA.

Using data and analytics from S&P our chosen data provider will allow us, in addition to our current carbon metrics, to analyse companies' exposure to physical risk from climate change under varying future scenarios, analyse portfolio alignment and understand potential earnings at risk from carbon pricing on a portfolio level. We are still assessing the more appropriate metrics to report on as we await final guidance from DLUHC.



NGFS to S&P Scenario Mapping Table

It is useful to contextualize the scenarios used in the various frameworks in terms of the NGFS for understanding and comparability.

NGFS		International Scenario referred by S&P Global			
		Physical Risk	Transition Risk (Carbon Earning at Risk)	Paris Alignment	Paris Alignment (GEVA)
NGFS Scenario	NGFS Sub Scenario	IPCC SSPx-y	IEA / OECD WEO	IEA ETP	IPCC RCP
Orderly	Net Zero 2050	Low Scenario (SSP1-2.6)		Well below 2 degree (IEA Net Zero Scenario-1.5-degree)	**
	Below 2C		High Scenario (IEA 2C)	2-degree (IEA ETP 2DS-2-degree)	2-degree (IPCC RCP 2.6)
Disorderly	Divergent Net Zero				
	Delayed Transition		Medium Scenario*		
Hot House World	NDCs	Medium Scenario (SSP2-4.5)	Low Scenario (IEA NPS Scenario)	3-degree (IEA ETP RTS-2.7 degree)	3-degree (IPCC RCP 4.5)
	Current Policies	Medium-High Scenario (SSP3-7.0)			4-degree (IPCC RCP 6.0)
Too Little, Too Late	No NGFS Scenarios	High Scenario (SSP5-8.5)			5-degree (IPCC RCP 8.5)

Source: S&P

Below we outline how we plan to use the S&P scenario tool to add to our understanding of how companies and portfolios might perform under different climate futures.

- Physical climate risk from low to high warming (and thereby impact) scenarios
- Alignment to 2 degree and Net Zero scenarios
- Alignment in high warming scenarios
- Earning at risk (Transition risk) under range of scenarios

Physical Risk

Physical risks stemming from climate change can manifest acutely through specific events such as floods or storms, or chronically due to long-term alterations in climate patterns. These risks carry financial implications for organizations, including asset damage, operational interruptions, and supply chain disruptions.

The S&P physical risk analysis will provide point-in-time assessments of exposure to climate hazards, which will enable us to pinpoint the assets most vulnerable to climate hazards for further investigation. The financial implications of these physical risks will be assessed by contrasting changes in climate hazard exposure against a location-specific baseline for each asset. This approach allows us to concentrate on the financial materiality of climate hazard exposures for distinct asset categories.

Paris Alignment (SDA & GEVA)

Using Paris Alignment data, we will be able to track our listed portfolios and benchmarks against the goal of limiting global warming to less than 2°C above pre-industrial levels.

The portfolio alignment approach involves assessing the decarbonization rates of individual companies in comparison to the targets set by the Paris Agreement. These rates are then combined to evaluate the portfolio's overall Paris alignment.

These rates are then combined to evaluate the portfolio's overall Paris alignment.

Transition Risk / Earnings at Risk

Rising carbon prices are likely to have a direct impact on a company's operations where regulations impose a higher price for greenhouse gas emissions. Companies may be vulnerable to pass-through costs of rising carbon prices as suppliers try and recover their own additional regulatory costs.

The S&P Earnings at Risk framework allows us to quantify a company's potential exposure to carbon price increases associated with Scope 1 and 2 emissions for holdings from 2025 to 2050.



Implementation including metrics and targets

Overall Strategy Target

We commit to be Net Zero on financed emissions by 2050, with the goal of limiting global temperature rise to 1.5°C, and Net Zero on our own operations (scope 1 and 2) by 2030. This commitment is made through the Paris Aligned Asset Owners, part of the Paris Aligned Investment Initiative (PAII).

Policy

Public Policy Target – Sovereign debt

100% of UK sovereign issuance to be subject to direct or collective engagement

Central to Brunel’s approach to responsible investment is to assess and address the systemic barriers to the outcomes that Brunel believes support a thriving society and economy. Policy and regulation are pivotal components of corporate and financial supportive, and they provide a framework of rules, limitations and guidelines that participants need to operate within.

We undertake a variety of activities to actively address systemic barriers, including;

- supporting policy makers and regulators through responding to consultations
- providing advice
- participating on working groups coordinating, and signing letters

In early 2022 a series of letters and articles in the financial media criticizing corporates’ consideration of sustainability issues were published. In response, stepping away from our conventional approach to engagement, we submitted a letter to the Financial Times, which the newspaper chose

to publish. The letter we coordinated was cosigned by asset owners collectively representing £675bn of assets. The letter sought to voice the views of significant shareholders of these companies and support the actions taken to deliver their purpose and manage the environmental, social and governance risks.

Examples of how Brunel contributes to Public Policy

International

- International Sustainability Standards Board (member of the Investor Advisory Group (ISSB IAG))

European

- Institutional Investors Group on Climate Change (Board Chair, Co-Chair of the UK Sustainable Finance Working Group) and member of the Paris Aligned Investment Initiative Steering Group

UK

- Transition Plan Taskforce Delivery Group (member and Co-Chair of the Adaptation Workgroup)
- Green Taxonomy Advisory Group (member and Chair of Workstream 4)

Brunel’s policy work continues to focus on the UK government’s Net Zero commitments and we actively participate in supporting implementation. Our collaborative work on EM strategically seeks to address engagement on those assets.

We want there to be a range of climate resilient products available to our clients and the wider investment market that deliver substantial climate change benefits and are Paris-aligned. These investment solutions must help clients also meet their future investment goals.

Our own fiduciary obligations mean there is a clear dependence on our ability to develop, launch and maintain Paris-aligned products in a supportive policy and regulatory environment. Since 2020, Brunel has successfully developed and launched four listed low-carbon products. Brunel has also invested significant proportions of its infrastructure portfolios in renewables and climate solutions (including nature-based solutions).

We are also supporting clients in meeting their local investment targets, which include both social and environmental priorities, through place-based investing.

Climate Action 100+

Brunel Pension Partnership is a signatory to Climate Action 100+ (CA100+) a global initiative led by 700+ investors who together represent over \$68 trillion in combined assets under management. The Initiative’s aim is to ensure that the world’s largest listed corporate emitters take action on climate change. CA100+ is coordinated by its five founding investor networks: AIGCC, Ceres, IGCC, IIGCC and PRI.

The initiative’s centrepiece is the CA100+ Net Zero Company Benchmark, an assessment of the climate change performance of 100 ‘systemically important emitters’, which account for 80% of annual global industrial emissions, and a further 60+ companies who have a significant opportunity to drive a broader economic transition to net zero emissions by 2050. The Benchmark assesses these companies against 10 indicators that reflect the key commitment priorities of the Initiative.

The three aims of CA100+

Signatories to CA100+ agree there should be a common engagement agenda across sectors, regions and business types which consists of seeking commitments from corporate boards and senior management to:

1. Implement a strong **governance framework** which clearly articulates the board’s accountability and oversight of climate change risk;
2. Take action to **reduce greenhouse gas emissions** across the value chain, consistent with the Paris Agreement’s goal of limiting global average temperature increase to 1.5°C;
3. Provide **enhanced corporate disclosure** in line with the final recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and sector-specific Global Investor Coalition on Climate Change (GIC) Investor Expectations on Climate Change guidelines.

Products

Product Governance Target – Portfolio alignment

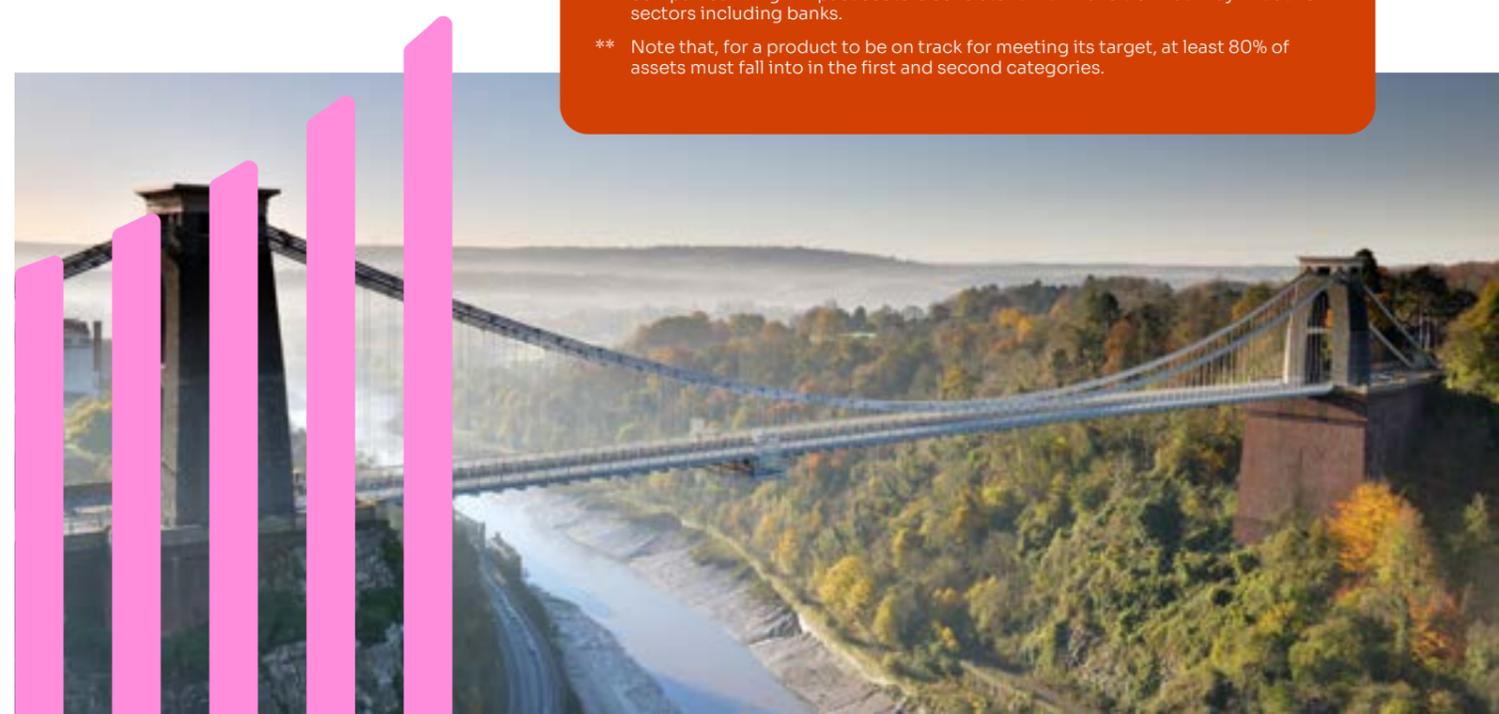
100% AUM in material (high impact) sectors* In developed listed equities that are i) achieving Net Zero or ii) meeting a criterion considered to be aligned or iii) aligning** by 2030, extending to all markets by 2040.

Brunel’s ambition is that by 2040 all listed assets are i) achieving Net Zero or ii) meeting a criterion considered to be aligned or iii) aligning**.

By June 2024, Brunel commits to setting alignment targets for corporate bonds, infrastructure, real estate and secured income consistent with the NZIF and a timeline for target setting in other assets classes.

* Currently in scope are listed companies on the Climate Action 100+ focus list; companies in high impact sectors consistent with Transition Pathway Initiative sectors including banks.

** Note that, for a product to be on track for meeting its target, at least 80% of assets must fall into in the first and second categories.



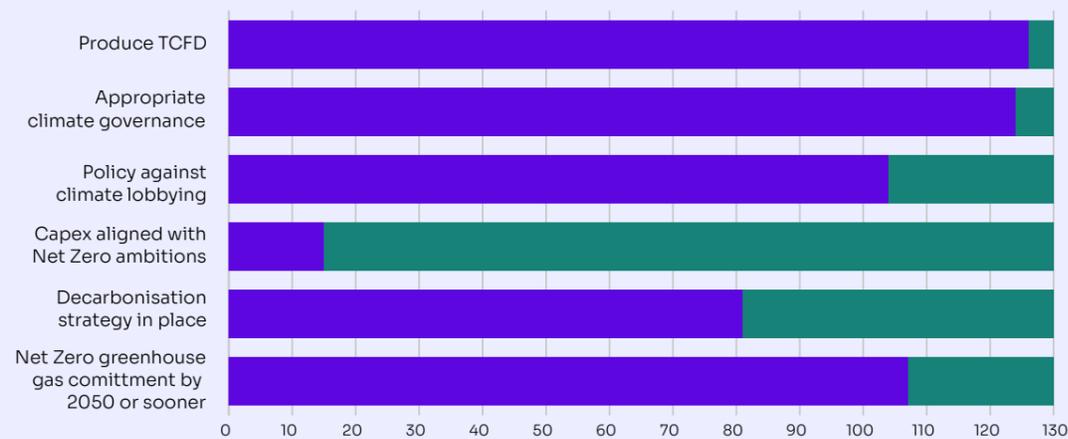
By supporting this high-level agenda, investors are identifying and communicating with companies about detailed expectations. Further, enhanced disclosure about the management of climate risk will enable investors to assess the robustness of companies' business plans against a range of climate scenarios to improve investment decision-making.

Investors use the Benchmark to engage with these companies collectively in a process coordinated by CA100+. This engagement resulted in a significant number of companies making significant commitments to action. By October 2022, 75% of companies had committed to achieve Net Zero emissions by 2050 across at least part of their emissions footprint, a 22% increase from March and 17%

increase from 2021. In addition, most of these companies had made progress on their internal climate governance, with 90% having some level of board oversight of climate change and 89% having committed to report in line with TCFD recommendations.

As of December 2022, Brunel has exposure to 130 of the 159 companies covered by CA100+.

Brunel Held CA100+ Companies



As at 31 December 2022, Brunel had exposure to 130 of the 159 companies covered by CA100+ in across our active and passive equities portfolios

Assessing alignment for action

Corporations globally are making commitments, setting targets and laying out plans to transition their business to align with the objectives of the Paris Agreement. We assess the adequacy of the corporations response currently undertaken using the TPI and CA100+ benchmark, as well as data from SBTi and other sources. We are aware that these tools are still evolving to provide more nuanced data for investment decision-making. Whilst acknowledging the limits of assessment methodologies we have; we will use these to engage with managers to challenge the investment case of controversial holdings. We will incrementally increase our expectations on companies, agreeing this with our clients annually.

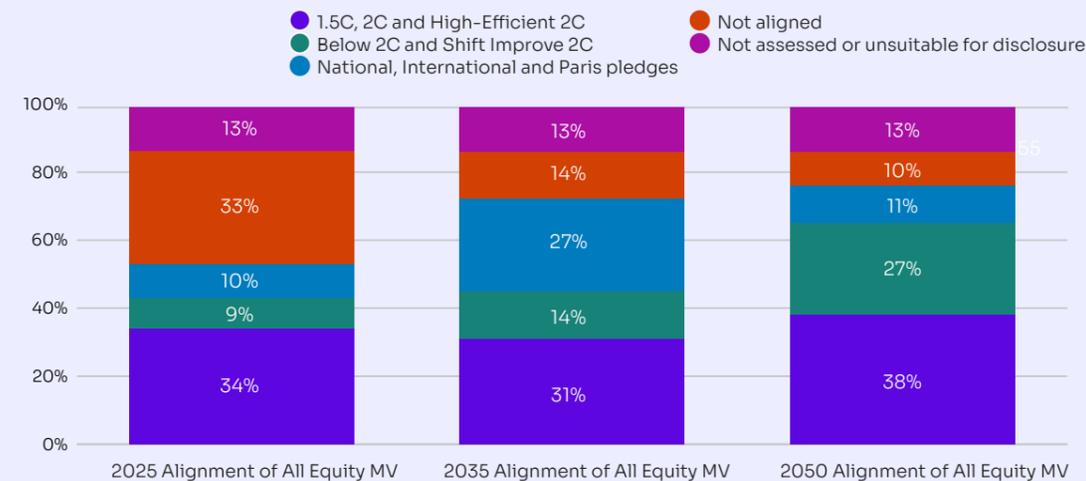
We strongly believe in engaging with perseverance, but selective divestment does and will continue to be part of the tool kit. Our process is illustrated below. We expect managers to support our work to raise the standards of climate risk management, disclosure, and alignment. The ability to support our Climate Policy is a core component of manager monitoring and we will change mandates and managers who are not aligned with our clients' needs.

The Carbon Performance metric from the [TPI Centre](#) tests the alignment of company targets with the UN Paris Agreement goals. TPI uses sector-specific benchmarking based on emissions intensity, utilising three benchmark scenarios for each sector, which in most sectors are: 1.5 Degrees, Below 2 Degrees and National Pledges.

For Brunel's listed equities and corporate bond holdings covered by TPI we can observe the following alignment trends:

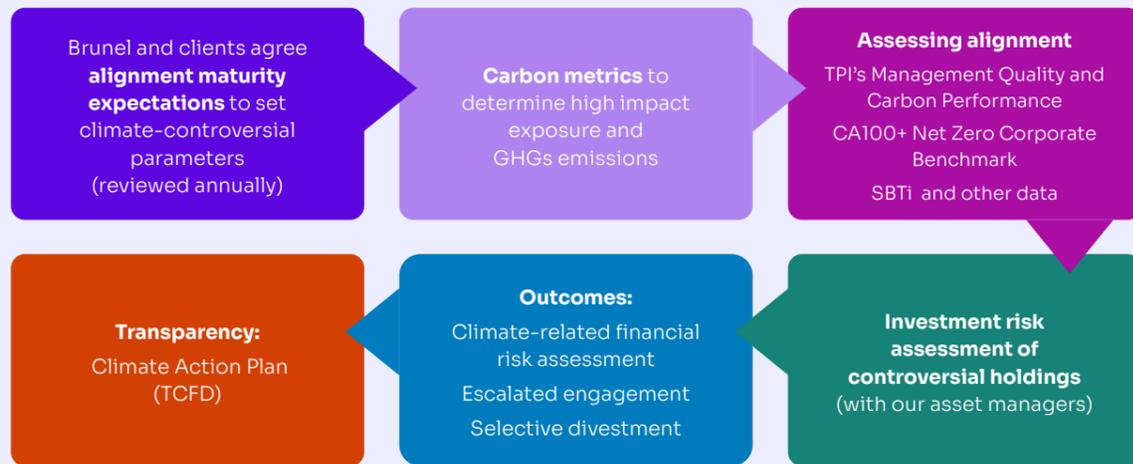
- Reduction in holdings that are 'Not aligned'
- Increase in 'Below 2C and Shift improve 2C' aligned holdings
- Increased '1.5C, 2C and High Efficient 2C' alignment from 2025 compared to 2050.

Alignment of Listed Equity Holdings using TPI Carbon Performance



As at 31 December 2022

Assessing Alignment for Action



Climate Action 100+ Net-Zero Company Benchmark

The Benchmark is not a disclosure mechanism or database itself, but rather an assessment tool. Companies are assessed against ten indicators:

1. Ambition: A long term 2050 goal
2. Targets: Short- and medium-term; scope 1, 2 and material scope 3 emissions
3. Emissions performance relative to targets
4. Disclosure of emissions
5. Decarbonisation strategy: A quantified plan to deliver GHG targets, green revenues targets
6. Capital Allocation Alignment: capital expenditures consistent with Net Zero by 2050
7. Climate Policy Engagement: Paris Agreement- aligned climate (direct and indirect) lobbying
8. Climate Governance: Oversight of transition planning and executive remuneration linked to targets and transition
9. Just transition: Consideration of transition on workers and communities
10. Climate risk and accounts: Transition risk TCFD disclosures and incorporating risks into financial accounts

Source: Climate Action 100+



Controversial companies

Initially as outlined in our climate policy, controversial companies will be defined as those failing all CA100+ indicators. Over time, in line with the NZIF guidance, the number of indicators needing to be satisfied will increase.

We require managers to escalate engagement and justify holdings in controversial companies, including those failing to disclose how they are meeting alignment expectations over time. We have committed to disclosing companies held in the portfolio that fail to meet the requirements as they evolve and the action underway e.g. enhanced engagement.

The CA100+ disclosure framework reflects publicly disclosed information as of 13th of May 2022 as assessed by the Transition Pathway Initiative. The following page provides a summary of those holdings that failed the CA100+ criteria at the time of assessment.

RELIANCE INDUSTRIES LTD

At the time of assessment, the company had not set an ambition to achieve Net Zero GHG emissions by 2050 or sooner. Since the benchmark release, Reliance Industries has announced a target to achieve net zero by 2035. The company has further launched its New Energy business focused on carbon recycling, circular economy and green energy. Although this one initiative will not get Reliance Industries to net zero the belief is that Reliance Industries is moving in a positive direction.

The scale of Reliance Industries might enable it to gain a leading edge in modules, batteries, and energy storage. Reliance Industries is seen as firmly moving towards green energy, having made a \$75 billion commitment for green energy projects in Gujarat. Investment will take place in the state over 10-15 years to set up a 100 gigawatt of renewable energy power plant and green hydrogen eco-system.

ANHUI CONCH CEMENT CO LTD

There is evidence of Anhui Conch Cement making efforts to improve their environmental impact. They have disclosed their Scope 1 & 2 emissions and are leading their sector in China reducing harmful emissions. Anhui Conch Cement is also rapidly scaling its renewable energy capacity having committed to investing a quarter of their cash generation over the next three years into renewable energy.

Meanwhile Anhui Conch Cement is employing numerous strategies to reduce greenhouse gas emissions and particulates. They have set targets to reduce nitrogen oxides by 50%, energy consumption by 6%, and water consumption intensity by 10%, all by 2025 based on 2020 levels.

Anhui Conch Cement has invested in several environmental projects to reduce its emissions. Each cement plant of the Group is equipped with a residual heat power generation system to generate power with the discharged waste gas and residual heat. The generated power is used for production to reduce the consumption of outsourced power and thus indirectly reduce carbon dioxide emission. Anhui Conch Cement has also been experimenting with Carbon Capture, but capacity is limited at 50,000 tonnes and expensive.

BERKSHIRE HATHAWAY INC

Berkshire Hathaway is subsequently no longer held in our active portfolios at time of writing but was flagged as a controversial company when the CA100+ analysis was undertaken.

Berkshire Hathaway is a holding company that operates through a variety of subsidiaries, spanning insurance, energy, rail transport, and consumer products. The climate risk profile of Berkshire Hathaway's operating companies is extremely varied and is therefore approach this through an analysis of the firm's subsidiaries. Three of the most significant subsidiaries include:

Berkshire Hathaway Energy

Berkshire Hathaway Energy (BHE) is an electric utility that has exposure to coal-fired generation, and is by far the parent company's most carbon-intensive subsidiary. BHE's share of coal in its generating portfolio halved between 2005 and 2020, and BHE has committed to retiring all coal units by 2049 and natural gas units by 2050, as well as setting an interim 2030 target for reducing emissions by 50% from 2005 levels. The company is a major player in renewables having invested \$36.8 billion in renewable generation to

date. Our manager believes BHE has a transition-aligned strategy, as between 2005 and 2022, the share of renewable energy in BHE's generation output rose from 10% to 39%. By 2030, the company plans to derive the majority of its power generation from renewable sources.

BNSF

As a rail logistics company, BNSF provides transportation services with an inherently low environmental impact. The company's focus on efficiency further lowers this impact as well as reducing costs. This is achieved through initiatives such as optimizing the number of engines used for each train, and employing energy management systems software. BNSF is also developing a battery-electric locomotive in collaboration with locomotive manufacturer, Wabtec.

GEICO

GEICO is Berkshire Hathaway's largest insurance subsidiary. It operates primarily in automotive insurance, and is the second-largest automotive insurance company in the US. Insurance businesses need to correctly price risk, including climate risk, in order to be successful, meaning that this is a potentially significant risk factor. However, in the case of automotive insurance, we consider the likely impact of climate change on insurance risk to be significantly less than in other sectors such as property & casualty insurance. In addition, since insurance policies are renewed annually, we believe that from a financial point of view, GEICO would be able to quickly adapt to any significant change in the risk profile of its customers owing to climate change.

Portfolios

Portfolios – Decarbonisation

Reduce emission carbon intensity (scope 1&2) for all Brunel’s listed equity and corporate bond portfolios by 50% by 2030, using a trajectory of at least 7% per annum reduction, from baseline of investable universe as at 31/12/2019 (or appropriate subsequent date)

Brunel also commits to set additional decarbonisation targets to cover separate Scope 3 targets to incorporate material sectors and other activities that will assist in achieving our overall goal no later than June 2024.



We provide a quarterly report to clients and the general public that covers stewardship actions and carbon metrics, including emissions intensity and fossil fuel exposure. allow the regular review of climate-related financial risks. We provide an overview of all portfolios to the Board and Brunel Oversight Board (clients and stakeholders). We also deliver detailed public [carbon metrics reports for each client and each Brunel portfolio](#) – these will become the **Climate-related Product Disclosure reports**, acknowledging the progression of reporting on carbon (and carbon equivalent) metrics to wider climate-related disclosures and making it clear that these are the product reports required by the FCA.

A number of different complementary ESG and carbon-specific datasets are used in order to monitor and report, both internally and externally, on the risks within our investment portfolios.

Listed markets carbon metrics – for each portfolio

- Absolute carbon emissions
- Carbon emissions per million pounds invested (carbon footprint)
- Carbon intensity (weighted average carbon intensity)
- Disclosure rates
- Fossil fuel revenue exposure
- Fossil fuel future emissions from reserves

For 2023

- Green revenues (weighted average exposure)
- Management quality scores based on TPI methodology

Planning

- Company physical risk
- Portfolio alignment

Brunel stresses the need to look at companies and assets across multiple metrics, as no one metric will be useful in isolation.



We have set a number of metrics and targets for our listed equity portfolios, which are outlined in our [Climate Change Policy](#).

Carbon metrics reporting overview

Portfolio decarbonisation

The Brunel Aggregate Portfolio is made up of the Brunel’s listed equity portfolios weighted by value of investments as of 31 December 2022. A custom strategic benchmark has been used to enable a meaningful comparison. This is made up of the individual benchmarks from the Brunel portfolios and weighted accordingly, as of 31 December 2022.

Weighted Average Carbon Intensity (WACI)

The WACI, a TCFD-recommended metric, shows a portfolio’s exposure to carbon-intensive companies. This measure is determined by taking the carbon intensity of each company and weighting it based on its holding size within the portfolio.

Carbon-intensive companies are more likely to be exposed to potential carbon regulations and carbon pricing, this is a useful indicator of potential exposure to transition risks, such as policy intervention and changing consumer behaviour.

We outline the WACI of the Brunel Aggregate Portfolio and Brunel Portfolios below. Each of the Active Brunel Portfolios has a lower WACI than its respective benchmark. The Brunel Passive Portfolios (Passive Smart Beta, Passive UK

and Passive World Developed) track their respective benchmarks.

We recognise that climate-related risks can be managed in different ways in active and passive mandates as well as for different asset classes. We see the traditional benchmarks and indices as a block to decarbonisation across the industry and are actively seeking and encouraging the development of lower-carbon index solutions.

Since 2021, Brunel has transitioned more than £4 billion of passive funds to the new FTSE Russell Paris-aligned benchmark series that we developed in coordination with FTSE Russell, the index, data and analytics provider.

As of 31 December 2022 the Brunel Aggregate Portfolio had a relative efficiency of 27% versus the custom benchmark. In December 2021 this figure was 35%.

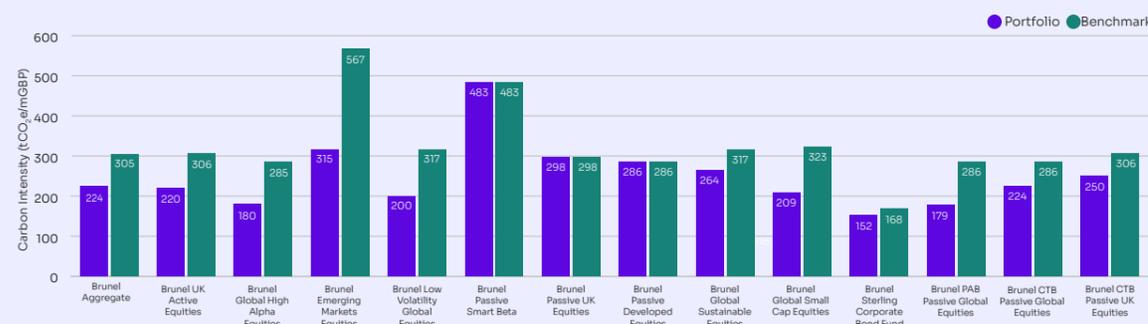
We worked extensively alongside our external fund managers on improving the carbon footprint of our Portfolios. Below we can observe how our portfolios have performed against their respective 2019 baseline.

For a more detailed breakdown of each portfolio’s WACI performance please visit our [Carbon Metrics Report](#).

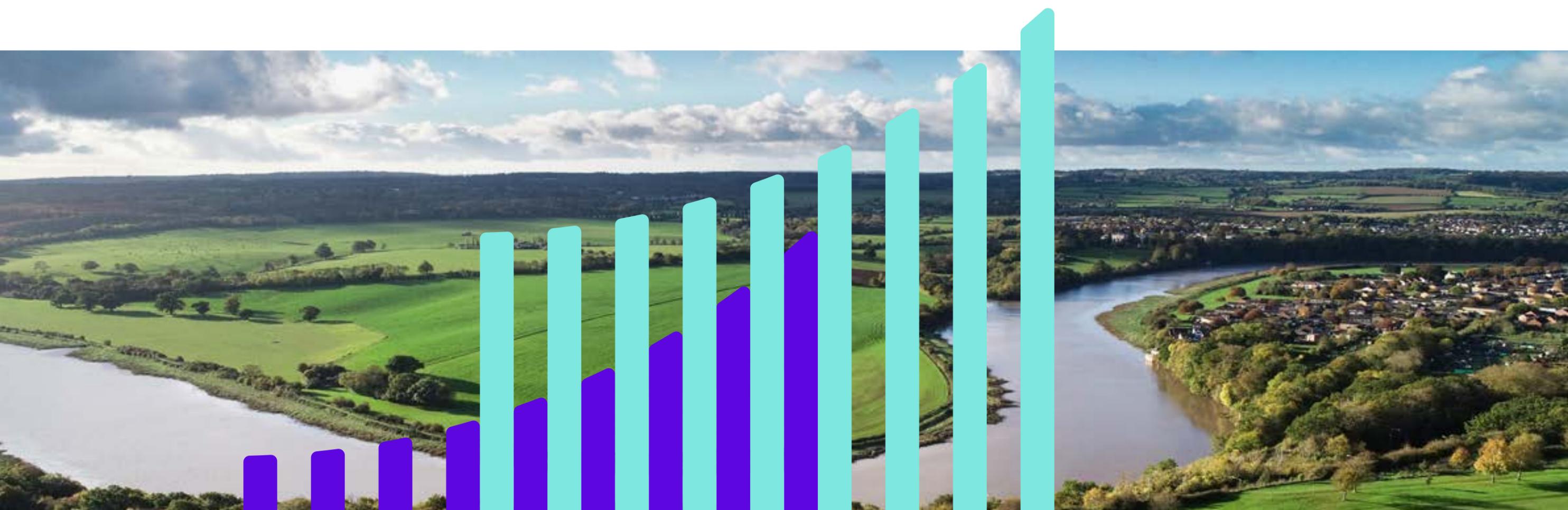
The report includes a variety of carbon metrics, including fossil fuel activities, fossil fuel reserves,

carbon data disclosure rates, absolute emissions and carbon-to-value intensity included for the first time this year for each of the Brunel Active and Passive Portfolios. A summary of some of these carbon metrics are outlined below.

Carbon Intensity



As at 31 December 2022



Carbon intensity

Portfolio	Reduction %	2022 Portfolio	2019 Baseline
Brunel Aggregate	34.68%	224	343
Active Portfolios			
Brunel UK Active Equities	21.91%	220	282
Brunel Global High Alpha Equities	40.22%	180	301
Brunel Emerging Markets Equities	44.70%	315	570
Brunel Low Volatility Global Equities	40.16%	200	334
Brunel Global Sustainable Equities	20.89%	264	334
Brunel Global Small Cap Equities *	32.25%	209	309
Brunel Sterling Corporate Bonds**	17.52%	152	184
Passive Portfolios			
Brunel Passive Smart Beta	12.81%	483	554
Brunel Passive UK Equities	-5.80%	298	281
Brunel CTB Passive UK Equities	10.96%	250	281
Brunel Passive Developed Equities	5.65%	286	303
Brunel PAB Passive Global Equities	41.08%	179	303
Brunel CTB Passive Global Equities	26.13%	224	303

* Trucost updated methodology in 2020 means we have taken December 2020 as a baseline for the Brunel Global Small Cap Equities

** This Portfolio has a baseline of 31 December 2021

Disclosure Rates

The quality and comparability of corporate disclosures is essential to improving the quality of carbon disclosures. This is a key metric as an indicator of data quality and therefore the level of confidence in the disclosures for decision making.

We report on the level of company disclosures for the Brunel Aggregate Portfolio and each Brunel portfolio. The definitions of these are below:

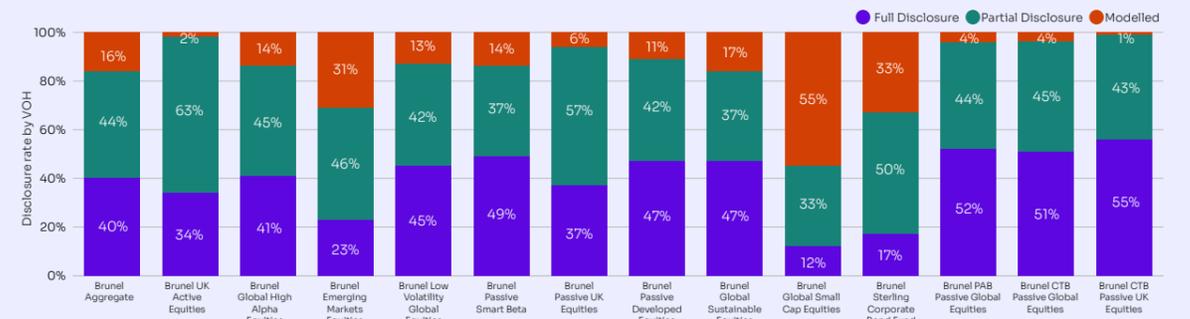
Full Disclosure - Companies reporting their own carbon data (e.g. in financial reports, CDP disclosures etc) across the different Kyoto protocol gases whereas previously only an aggregate emissions figure was required

Partial Disclosure - The data disclosed by companies has been adjusted to match the reporting scope required by the research process. This may include data from previous years' disclosures, as well as changes in business activities.

Modelled - In the absence of usable or up-to-date disclosures, the data has been estimated by employing Trucost models.

The rate of companies in the Brunel Aggregate Portfolio, for which fully disclosed carbon data was available was 46% (carbon weighted method) and 40% (investment weighted method). These scores indicate scope for improved reporting among investee companies, which is a core aim of our engagement strategy.

Disclosure Summary



As at 31 December 2022

We provide detailed breakdowns of fossil fuel-related activities; future emissions from reserves; and disclosure rates for all Brunel portfolios in our [Carbon Metrics Report](#). Each of our clients receives a Carbon Metrics Report annually, with the above information reported for the underlying portfolios they are invested in, as well as their own 'Aggregate Portfolio'.

Positive Impact

Positive Impact – Climate solutions

We commit to providing investment opportunities across asset classes to contribute to Brunel’s own alignment, which in-turn allows clients to meet their climate solutions targets.

- Global Sustainable equity portfolio (reporting green revenues)
- Green, Climate and SDG bonds (report % AUM and £m)
- Infrastructure

Brunel’s Infrastructure portfolios have strong ESG credentials, limiting exposure to high climate impact areas and have strategy targets including;

- o Cycle 1: >35% in renewable energy
- o Cycle 2: 50% in renewable and climate solutions
- o Cycle 3: 70% minimum target for Sustainable Infrastructure, of which at least 40% (i.e. most of the SI allocation) will be in climate solutions

Brunel will provide annual updates as to the sustainable exposure, including climate solutions, of its infrastructure portfolios from 2023 onwards.

- Real Estate and Secured Income (impact and renewables exposure – reporting metrics to be developed)

We feature numerous case studies of investments that specifically target climate solutions through decarbonisation and energy efficiency as well as climate adaptation and resilience, in our annual reporting. We plan to expand our reporting through developing metrics to assist with assessing the portfolios and to set targets in June 2024.

We want to enable investments in activities that directly support the low carbon transition and that enable effective adaptation to the unavoidable impacts of climate change.

We recognise that we can directly support the low carbon transition and adaptation, through investing in opportunities in areas such as renewable energy, energy efficiency, adaptation and resilience. We also recognise that, through sharing our experiences and our successes, we can encourage others to increase their investments in these areas.

Brunel clients each set their strategic asset allocation and so, whilst Brunel cannot set overall climate solution targets, it does commit to providing investment opportunities across asset classes to contribute to Brunel’s own alignment, and it allows clients to set and fulfil climate solutions targets.

We have made positive impact investments across all asset classes and to evidence this we have produced extensive set of qualitative case studies in our [public reporting](#). These investments have gone beyond support for the low carbon transition, and also contributed to a wider commitment to invest for positive impact in support of the United Nations Sustainable Development Goals (SDGs). A particular area of focus has been our infrastructure portfolios

Sustainable Investment Exposure – Infrastructure

Brunel’s Infrastructure portfolios have strong ESG credentials, limiting exposure to high climate impact areas, and have strategy targets for renewable and other climate solutions, including nature-based solutions (see targets below). Brunel will provide annual updates as to the sustainable exposure, including climate solutions, of its infrastructure portfolios from 2023.

Brunel has leveraged the classification system used by FTSE Russell which they use for their Green Revenues Methodology in order to classify investments made in Private Markets, specifically Infrastructure. We have coined the term “Sustainable Investment Exposure”. The analysis is currently based on “contributed capital” (including for exits) amounts rather than revenues due to the lack of publicly available data within Private Markets.

Brunel has worked with StepStone (Infrastructure GP) to map underlying investments to the Green FTSE Revenue Classifications. Below is a breakdown of all underlying companies within their respective Infrastructure portfolios assigned to the most relevant FTSE Revenue classification, including only tier 1 (clear and significant) and 2 (net positive) classifications.

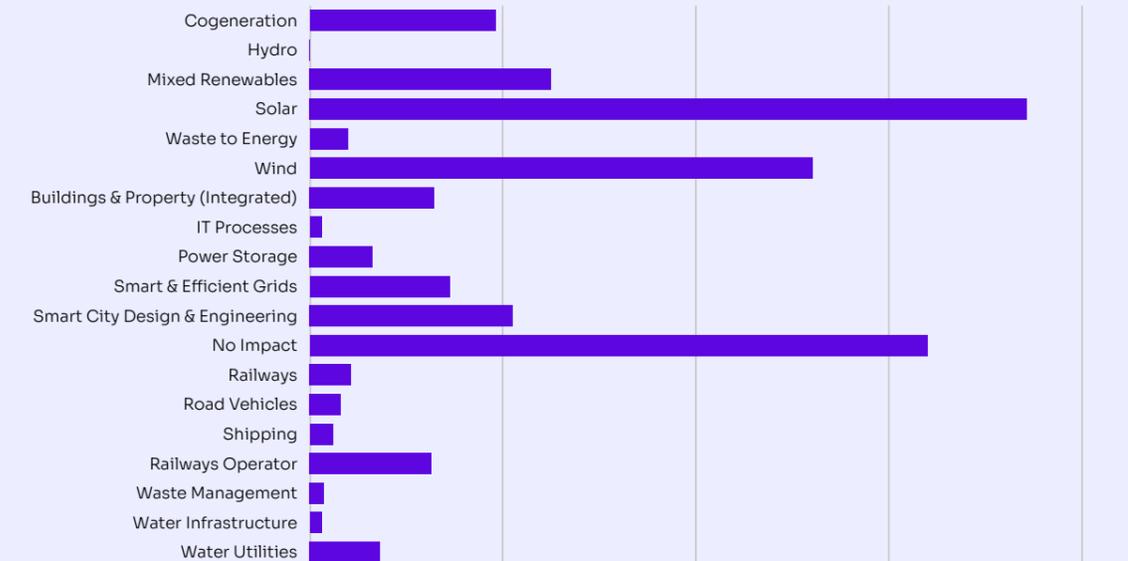
The term “no impact” refers to currently unassigned investments that do not fit within a Tier 1 or 2 FTSE Revenue classification. This does not mean the investment is by any means not impactful. Brunel will periodically review this analysis and what may be considered as an Impact today may not be in the future. Similarly, as technologies evolve, and investments reach certain targets they may be assigned to a FTSE Green Revenue classification.

Sustainable Investment Exposure Summary

Sustainable Exposure Summary	Percentage Sustainable Exposure	Value of Sustainable Exposure
Cycle 1	75%	£275,574,812.19
Cycle 2-G	73%	£175,470,049.80
Cycle 2-R	98%	£207,533,221.50

As at 30 September 2022

Sustainable Investment Exposure Breakdown by Sub-Sector



As at 30 September 2022

Key Takeaways - Sustainable Investment Exposure

Sub-sector	Sector
£185m in Solar	£436m in Energy Generation
£130m in Wind	£87m in Energy Management and Efficiency
£62m in Mixed Renewables	£56m in Transport Equipment and Transport Solutions
	£21m in Water Infrastructure and Technology

As at 30 September 2022

Case Study



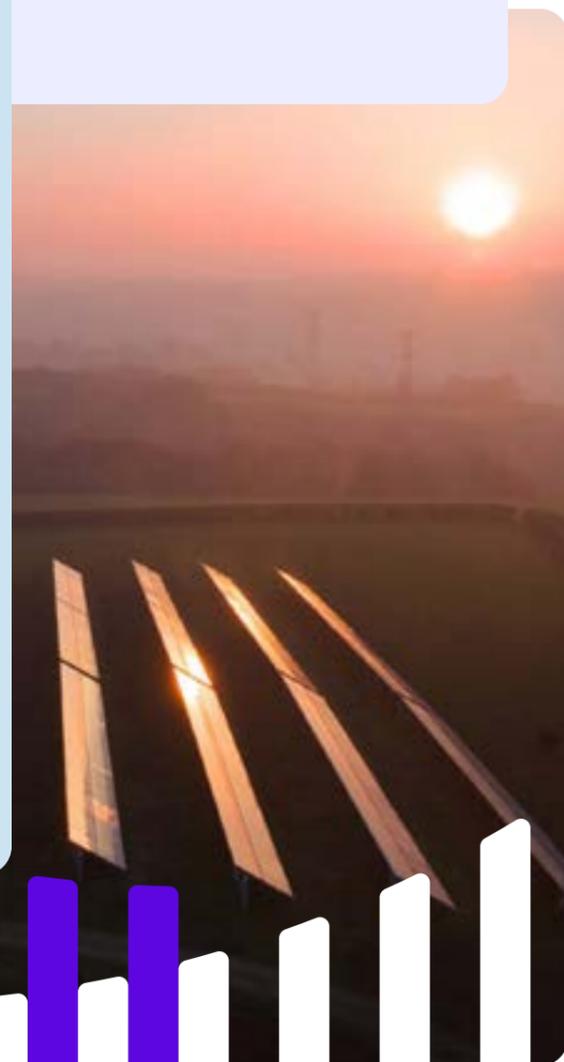
Infrastructure supported by Stepstone

NTR Solar Farm on Reclaimed Landfill Site

NTR has acquired Ockedon solar farm following its acquisition from REG Power Management. The solar farm is located in Essex (UK), and is considered to be one of the largest to be built on a repurposed landfill site in Europe. It will provide 58.8MWp for 17,000 homes, once operational.

NTR is held in our Cycle 1 Infrastructure portfolio. In line with NTR's focus on creating a circular economy to protect the environment, the former landfill site is being left undisturbed. Specialist engineering and design techniques have been adopted by NTR to repurpose the land for renewable energy power generation.

Using the latest solar technology, NTR will install 540-watt bi-facial solar panels which are capable of capturing sunlight on both sides of the panel. These panels have a higher efficiency rate, resulting in increased output density and optimisation of energy yields per square metre. Mobilisation works have commenced with the project expected to be fully operational in late 2023.



Property RI Metrics

We work closely with our managers, monitoring them to ensure that they meet our stringent Responsible Investment requirements across our real estate portfolio. Asking them to participate in benchmarks such as GRESB (Global Real Estate Sustainability Benchmark) brings them into the fold. Using benchmarks allows us to view trend data and look at whether their

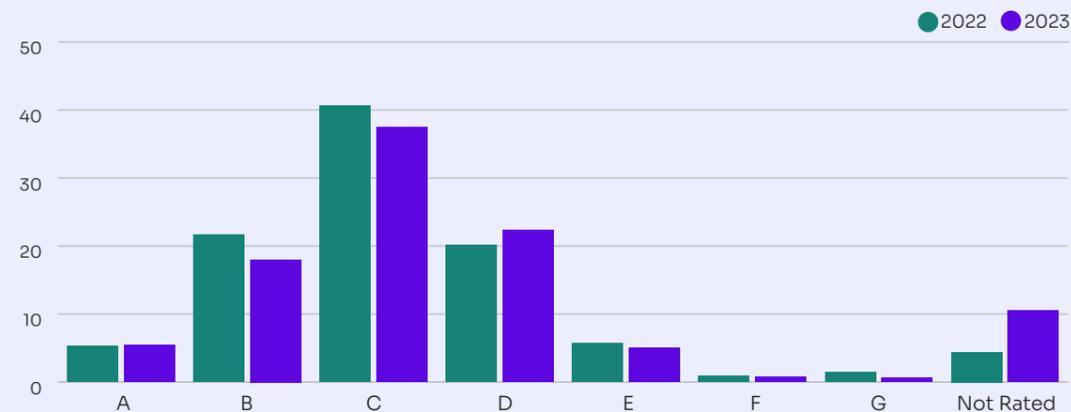
performance is improving or not, so we can question the reasons behind any significant changes. The nature of property allows space for innovation and older portfolios can make significant progress.

We have continued the process of innovation by developing our own Annual Reporting survey, which enables us to measure objectively across our portfolios, and collect numerous data points

covering a range of topics, such as decarbonisation targets, data coverage and physical climate risks. Since expanding the survey to include ESG-specific questions, we now have over 50 ESG data points provided.

We can observe the progress of our UK Model Portfolio's EPC ratings below with the gradual improvement from 2022 to 2023:

UK Model Portfolio - Energy Performance Certificate Ratings



As at 31 March 2023

100% of holdings across Brunel's and UK Real Estate model portfolios⁷ are badged with Green Stars by the Global Real Estate Sustainability Benchmark (GRESB). Furthermore, 100% of the UK model portfolio managers have set fund level Net Zero targets.

Cycle 1 and Cycle 2 Secured Income portfolios have strong ESG and climate credentials. The two long-lease property funds are designated Green Star (GRESB) funds and the third fund component is Greencoat Renewable Income which, as the name implies, seeks to generate contracted income from a diversified portfolio of assets with a focus on solar photovoltaic, offshore wind, bioenergy from waste and, as opportunities

arise, assets in other renewable infrastructure areas. In our annual reporting, we feature numerous case studies of investments that specifically target climate solutions through decarbonisation and energy efficiency as well as climate adaptation and resilience.

We plan to expand our reporting through developing metrics to assist with assessing the portfolios. We aim to set targets in June 2024.

⁷ International model portfolio represents around 50% of AUM, and the UK Model Portfolio over 80% of AUM, and Green star assessment excludes new investments in pre-reporting stage.

Persuasion

Persuasion Target – Portfolio stewardship

Ensure 70% of financed emissions in material sectors are either aligned, aligning or subject to direct or collective engagement and stewardship actions for all listed equity and corporate bonds by June 2024, increasing to 90% by June 2027.

Engage with 100% of investment managers and general partners* on measuring emissions, disclosure levels and setting targets for decarbonisation and alignment by June 2024.

Engage 100% of carbon-based energy and transport infrastructure assets as part of collective or direct engagement, or management interventions. Brunel Infrastructure portfolios have limited exposure to such assets and, where they do, it is often part of a wider programme of energy transition and/or efficiency.

With regard to our private markets' portfolios more broadly, we will sequentially focus on our infrastructure, secured income, real estate, private equity and private debt portfolios, with the ambition of setting targets for the first three of these by June 2024.

* Real estate scope is limited to the model portfolios and engagements in private markets will be a combination of direct and via our strategic partners.

We want the companies and other entities we invest in and contract with to support the transition to the low carbon economy, and to ensure that they are resilient to the unavoidable impacts of climate change.

The Race to Zero campaign 15 sees Brunel join 140 countries and Net Zero commitment initiatives covering 8,307 companies, 595 financial institutions, 1,136 cities, 52 states and regions, as well as 1,125 educational institutions and 65 healthcare institutions.

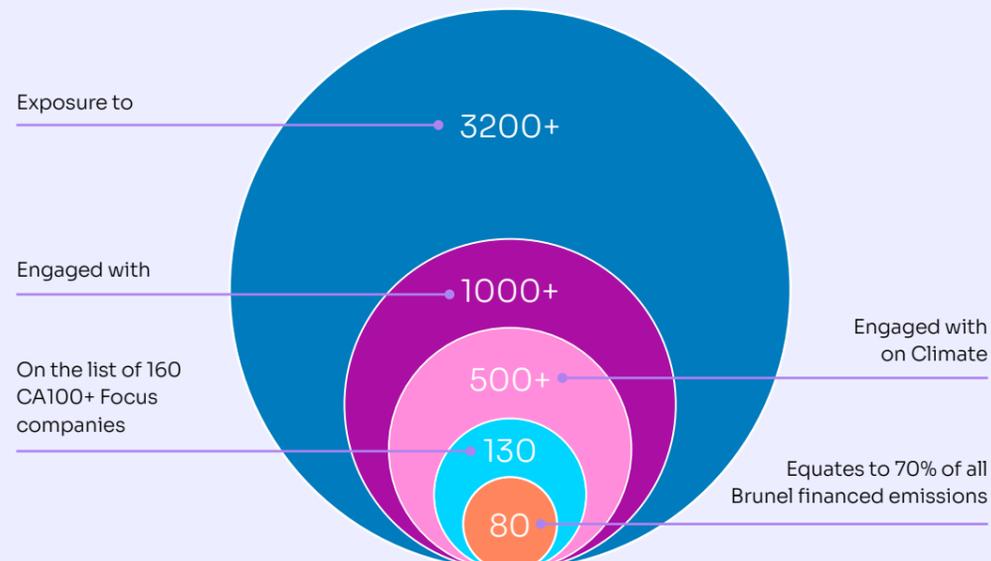
We have three main approaches to persuade companies and other entities to act on climate change, namely:

- (1) engagement via its investment managers
- (2) collaborative engagement, in particular through Climate Action 100+ (CA100+), and
- (3) direct engagement, including voting our shareholdings.

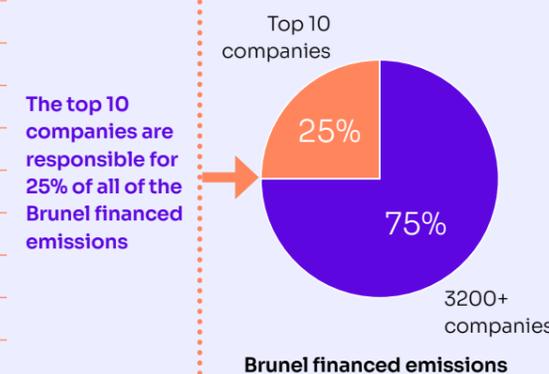
In addition, we will continue to support client engagement with companies e.g. through facilitating their attendance at AGMs, and through facilitating their participation in collective engagement with us and with other institutional investors.

We have set a target to ensure 70% of financed emissions in material sectors are either aligned, aligning or subject to direct or collective engagement and stewardship actions for all listed equity and corporate bonds by June 2024, increasing to 90% by June 2027.

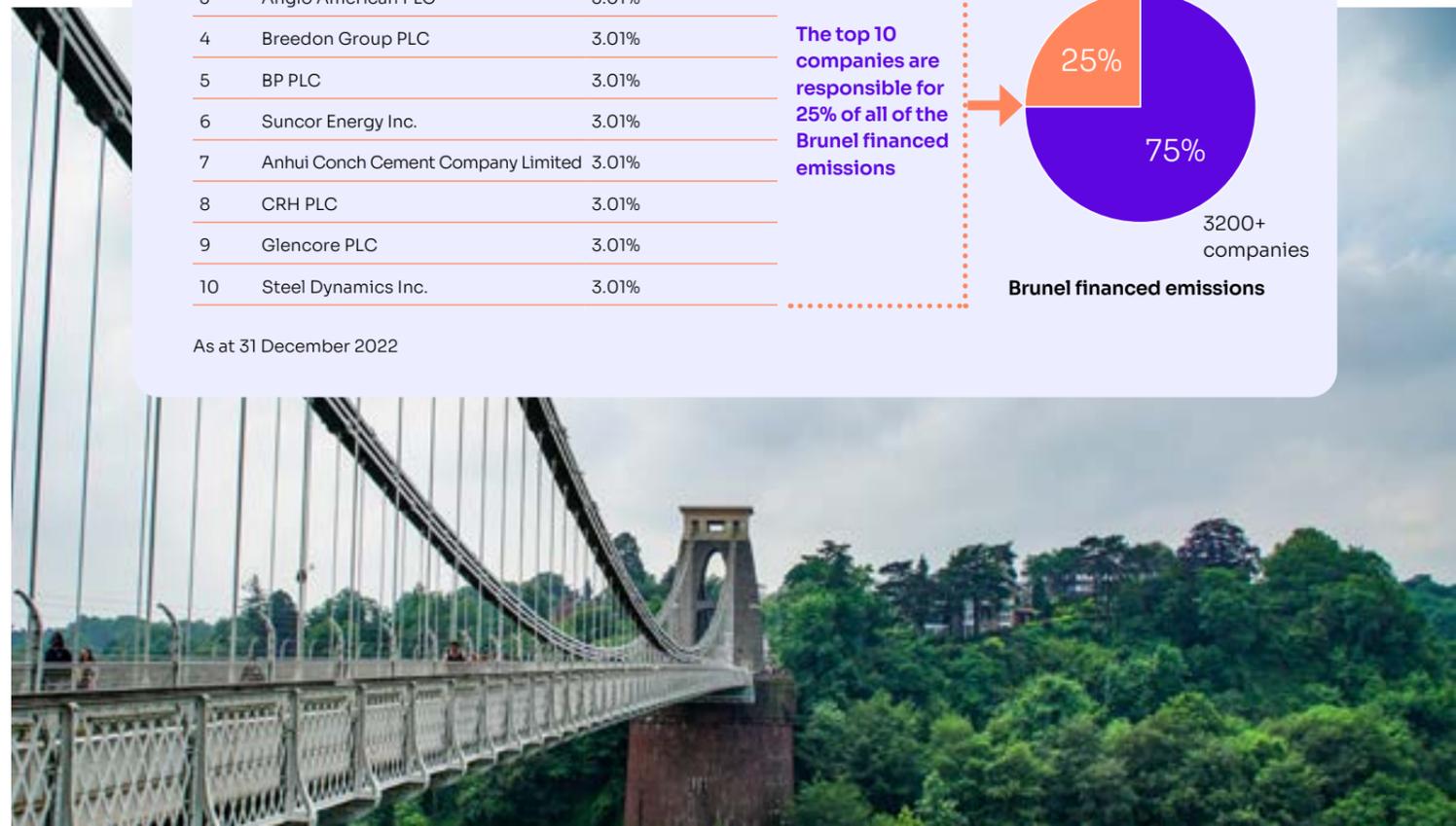
Our initial analysis, based on our engagement in 2021, suggested that we were engaging with around 50% of our emissions. This has since increased to 63%, but 73.18% on an investment value basis, this translates to 76.00% of Scope 1 and 2 financed emissions.



Rank	Company Name	% of Brunel financed emissions
1	Shell PLC	3.90%
2	Holcim Limited	3.65%
3	Anglo American PLC	3.01%
4	Breedon Group PLC	3.01%
5	BP PLC	3.01%
6	Suncor Energy Inc.	3.01%
7	Anhui Conch Cement Company Limited	3.01%
8	CRH PLC	3.01%
9	Glencore PLC	3.01%
10	Steel Dynamics Inc.	3.01%



As at 31 December 2022



Operational risk

The third pillar of Brunel’s approach to Responsible Investment is “walking the talk”, ensuring that our own operational practices are best practice, whether on diversity, cyber or climate. Brunel has made a firm-wide commitment to the integration of climate risk throughout its own operations.

Brunel has committed to be Net Zero in its operational (Scope 1 and 2) emissions. We have made considerable progress in measuring our Scope 3 emissions, and progress towards reducing them by 2030.

For the first time Brunel commissioned a full carbon footprint report to set a baseline for our operational emissions. The report was prepared, and footprint calculated by Carbon Managers using the data supplied by Brunel over the 12-month period to 30 September 2022.

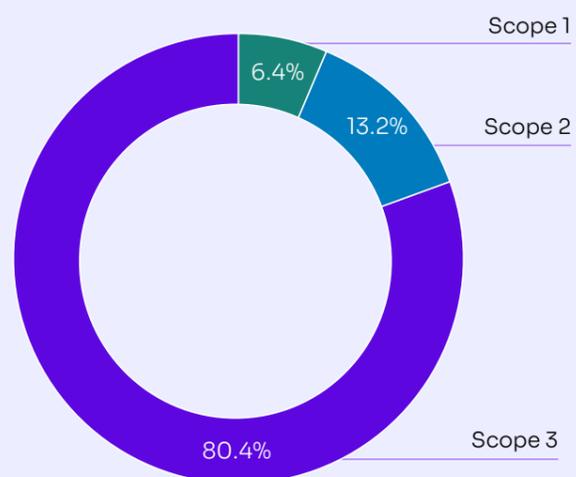
The footprint covers direct emissions from burning fuel and refrigerants (Scope 1), indirect emissions from electricity use (Scope 2) and supply and value chain emissions (Scope 3) from activities where a company has less control. This includes emissions from business travel, employee commuting, water use, waste disposal, resource use, and other indirect emissions associated with fuel/gas and energy production and supply. As an investment business we have excluded financed emissions from this section as they are covered above in our portfolio reporting.

Operational Carbon Footprint

Scope	Total (tCO2e)	Total (%)
Scope 1	4.99	6.4
Scope 2*	10.24 (0.00*)	13.2 (0.0*)
Scope 3	62.63	80.4
Total	77.86	100

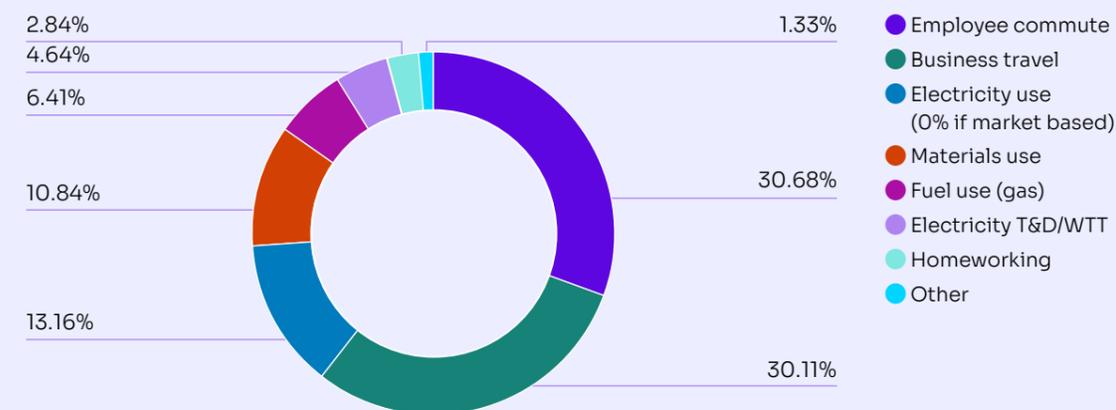
*Market-based figures. Brunel’s electricity is renewable so both figures may be shown.

Brunel CO2e Emissions by Scope as Percentage of Total



As at 30 September 2022

Brunel CO2e Footprint Impact as Percentage of Total



As at 30 September 2022

The footprint will be used as a baseline from which to act and improve data collection and accuracy.

Initial actions Brunel will take to improve our organizational footprint in the next reporting year will be:

- Improve the quality of the data by appointing an executive level sustainability champion and a cross company working group
- Develop a process for regular data collection, perhaps monthly or quarterly
- Collect timely and accurate data for the 2022-23 footprint
- Review our internal policies and procedures to support the reduction of our carbon footprint, such as our travel and expenses policy
- Review our benefits package and how this can further support our move to net zero
- Explore the possibility and impact of credible carbon offsetting in the short term, as we move towards carbon reduction



Looking ahead

We have a deep belief in and focus on the need for climate related activity to underpin all investments.

With this in mind, our approach and methods of reporting will continue to evolve as both data and requirements do. We have undertaken voluntary reporting before now and we will continue aim for best in class with what is shared. Responsibility is a core value of Brunel and our approach grows from that value.

We will continue to work in partnership with our clients to not only develop more efficient reporting approaches and help them to meet their requirements.

Our next steps will include

- Providing our clients advice and guidance, as well as essential data feeds to allow them to meet their mandatory DLUHC requirements

- Reporting on physical risk and adaptation, including nature based solutions engagement with 20 consumer staples companies

- Enhancing our alignment analysis

We will of course, in line with our strategy continue to engage with asset managers and general partners.



Appendices

Appendix 1: Paris Aligned Asset Owner Commitment Statement

As asset owners with millions of beneficiaries around the world, we reiterate our full support for the Paris Agreement and strongly urge governments to implement the actions that are needed to achieve the goals of the accord, with utmost urgency.

Recognising the need to address the risks that investors and their beneficiaries face from climate change, investors are taking action, but we acknowledge that there is an urgent need to accelerate the transition towards global net zero greenhouse gas emissions and do our part in helping deliver the goals of the Paris Agreement.

In this context, my institution commits to the following consistent with our fiduciary obligations:

- Transitioning our investments to achieve Net Zero portfolio GHG emissions by 2050, or sooner
- Implementing this commitment with the aim of achieving real economy emissions reductions and undertaking a comprehensive set of actions available to investors, drawing on the Paris Aligned Investment Initiative's Net Zero Investment Framework
- Setting objectives and targets, including an interim target for 2030 or sooner for reducing Scope 1, 2 and 3 emissions associated with our portfolios and setting a target for increasing investment in climate solutions, consistent with a fair share of the 50% global reduction in CO2 identified as a requirement in the Intergovernmental Panel on Climate Change special report on global warming of 1.5°C

- Where offsets are necessary where there are no technologically and/or financially viable alternatives to eliminate emissions, investing in long-term carbon removals.

- Ensure any direct and collective policy advocacy we undertake supports policy and regulation relevant for achieving global Net Zero emissions by 2050 or sooner

- Implementing a stewardship and engagement strategy, with clear voting policy that is consistent with an objective for all assets in the portfolio to achieve Net Zero emissions by 2050 or sooner

- Engaging with asset managers, credit rating agencies, auditors, stock exchanges, proxy advisers, investment consultants, and data and service providers to ensure that funds, products and services available to investors are consistent with achieving global Net Zero emissions by 2050 or sooner.

- Setting a target and reducing our operational (Scope 1 and 2) emissions in line with achieving global Net Zero emissions by 2050, or sooner.

- Disclosing objectives and targets, and publishing a clear Investor Climate Action Plan for achieving these goals as soon as possible, no later than one year from making this commitment, and reviewing and updating targets every five years or sooner.

- Reporting annually on the strategy and actions implemented and progress towards achieving objectives and targets, and in line with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations.

Our institution's commitment recognises that investors across the globe have different opportunities, constraints and starting points for achieving net zero emissions and there are a range of methodologies and approaches available to investors to set targets and implement strategies. In some asset classes or for some investment strategies, agreed Net Zero methodologies do not yet exist. We will, therefore, work to address these challenges.

Our commitment is based on the expectation that governments and policy makers will deliver on their commitments to achieve the 1.5°C temperature goal of the Paris Agreement, and in the context of fulfilling our fiduciary obligations.

Any institutional asset owner may sign the Paris Aligned Asset Owner Commitment and use the Net Zero Investment Framework. To be recognised and showcased as making a Net Zero commitment under the Paris Aligned Asset Owner initiative an asset owner must complete and submit a signatory form to one of the four regional investor networks (AIGCC, Ceres, IGCC, IIGCC) indicating their CEO has approved signing on.

Asset owners that are members of AIGCC, Ceres, IGCC, IIGCC will have access to activities to support implementation of the commitment provided by the networks.

More information is available at www.parisalignedassetowners.org/

Appendix 2: Summary of FCA and DLUHC data requirements

To note, metrics assessment primarily relates to listed markets portfolios; other asset classes are reported but not against all the metrics below.

Summary of FCA and DLUHC specific data requirements

A firm must include in its TCFD product report	Covered by 2023 Reporting	2024 TCFD
Scope 1 and 2 greenhouse gas emissions (also DLUHC)	✓	✓
Scope 3 greenhouse gas emissions (also DLUHC)	✓ ^a	✓
Total carbon emissions (also DLUHC)	✓	✓
Total carbon footprint (also DLUHC)	✓	✓
Weighted average carbon intensity	✓	✓
Relevant contextual information on context and interpretation	✓	✓
Historical annual calculations	✓	✓
Any disclosures under where the <i>firm's</i> approach materially deviates from the <i>firm's</i> overarching approach disclosed the TCFD report	✓	✓
DLUHC specific	✓	✓
Disclosure Metric	✓	✓
Portfolio Alignment (defined slightly differently from 2 above)	✓/✗ (partial)	✓

As far as reasonably practicable the following must be included	Covered by 2023 Reporting	2024 TCFD
Climate value-at-risk	✗	✓
Metrics that show the climate warming scenario with which a TCFD product is aligned, such as using an implied temperature rise metric	✗	✓
Quantitative scenario analysis (DLUHC requirement more broadly defined)	✗	✓
Any other metrics that the firm considers an investor will find useful (also DLUHC)	✓	✓

In addition, we have made commitments in our 2023 Climate Change Policy which require quantitative reporting and will be in addition to the mandatory requirements outline above.

Appendix 3: Fossil fuel related activity

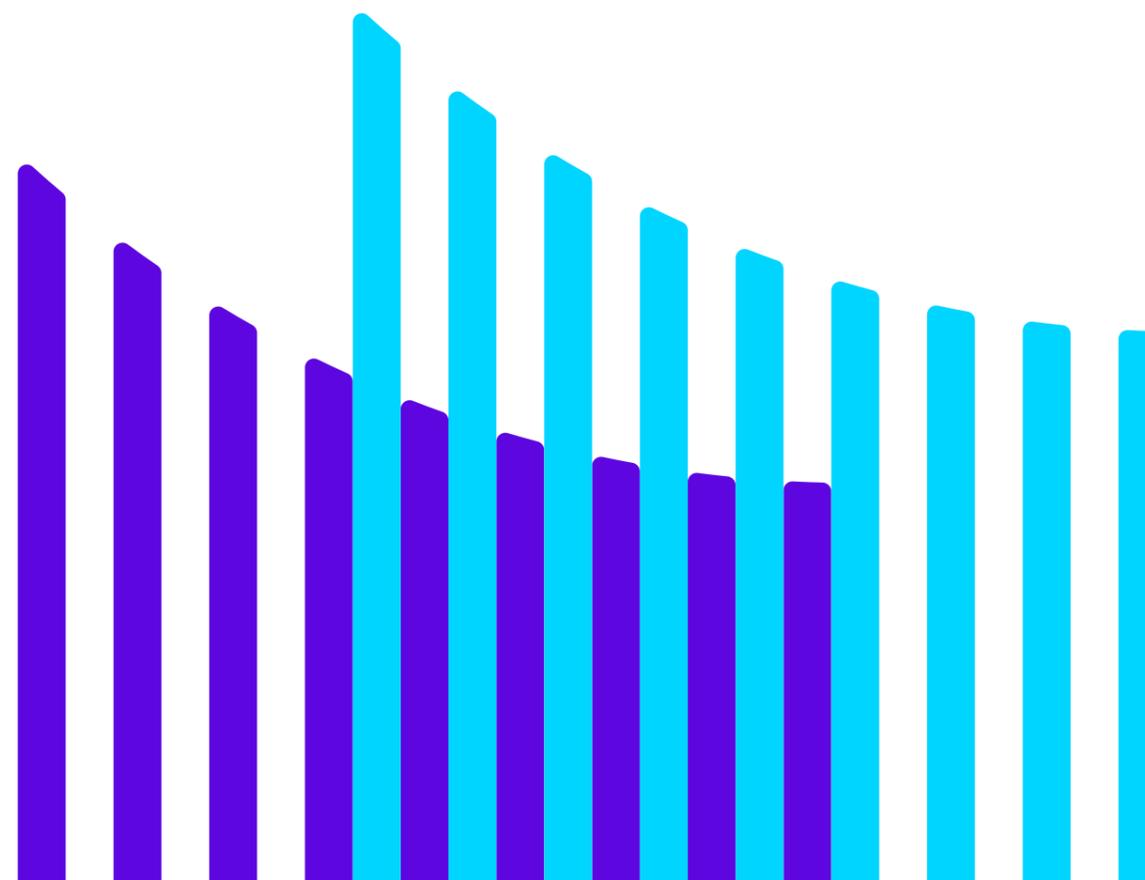
The definition of extractive-related industries and fossil fuel reserves for the purpose of this report:

Extraction-related activities:

- Crude petroleum and natural gas extraction
- Tar sands extraction
- Natural gas liquid extraction
- Bituminous coal underground mining
- Bituminous coal and lignite surface mining
- Drilling oil and gas wells
- Support activities for oil and gas operations

Fossil fuel reserves:

- Coal (metallurgical, thermal or other)
- Oil (conventional or unconventional)
- Gas (natural and shale)
- Oil and/or gas (where no further information)



Getting in touch with the team

If you have any questions or comments about this report please email Faith Ward, Chief Responsible Investment Officer at RI.Brunel@brunelpp.org.

Please visit our website to read our latest reports, news and insights and other materials to keep you up to date. For general fund manager enquiries, meeting requests and other materials (updates, newsletters, brochures and so on), please contact us on investments.brunel@brunelpp.org.

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