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In July 2021 the RSC announced that it was joining the UN Race To Zero (RTZ) by adopting a comprehensive net zero target for 2040 and committing to report annually on progress towards a 50% reduction by 2030 from a 2019 baseline. Net zero means that emissions and removals of long-lived greenhouse gas emissions to and from the atmosphere are balanced. Globally, this action is required to halt ongoing warming, with the time required to reach net zero determining the extent of climate change.

Our targets align with the Science Based Targets Initiative (SBTI) 1.5°C path and have been agreed with the Pledge to Net Zero, the UK environment sector programme implementing the UN RTZ developed by the Society for the Environment (SocEnv). These targets are equivalent to a 4.6% linear per annum reduction and cover all sources that are material to total carbon footprint and where data are available, including indirect Scope 3 emissions.[1]

We have also signed up to the UN SDG Publishers Compact in 2021, committing to accelerate progress to achieve the Sustainable Development Goals (SDGs) during the Decade of Action (2020-2030), of which Goal 13 is Climate Action. Signatories aspire to develop sustainable practices and act as champions of the SDGs, publishing books and journals, arranging meetings and other initiatives that will help inform, develop and inspire action in that direction.

This Net Zero Progress Report (NZPR) illustrates our commitment to these goals, our understanding of our climate impact and our early steps on the journey to net zero. It is the first of our annual reports on our climate change impacts and actions to mitigate them.

Net zero implies the removal of greenhouse gases from the atmosphere to balance emissions. Nature-based solutions to climate change protect and enhance ecological carbon removals, often termed sinks. Projects to chemically sequester carbon dioxide in bulk materials and geological formations are also in development. O□set credits are accounting frameworks to facilitate economic relationships between organisations that cause emissions and those that provide goods or services that include an element of o□setting (e.g. those claiming to be carbon neutral) we will only count them in respect of our targets if they align with the above principles.

[1] The World Resources Institute Greenhouse Gas Protocol (WRI GHG Protocol) categorises greenhouse gas emissions as; Scope 1 direct emissions (such as from natural gas combustion), Scope 2 indirect emissions from energy directly consumed (such as grid electricity), and Scope 3 indirect emissions across an organisation's whole value chain (such as from purchased goods and services).

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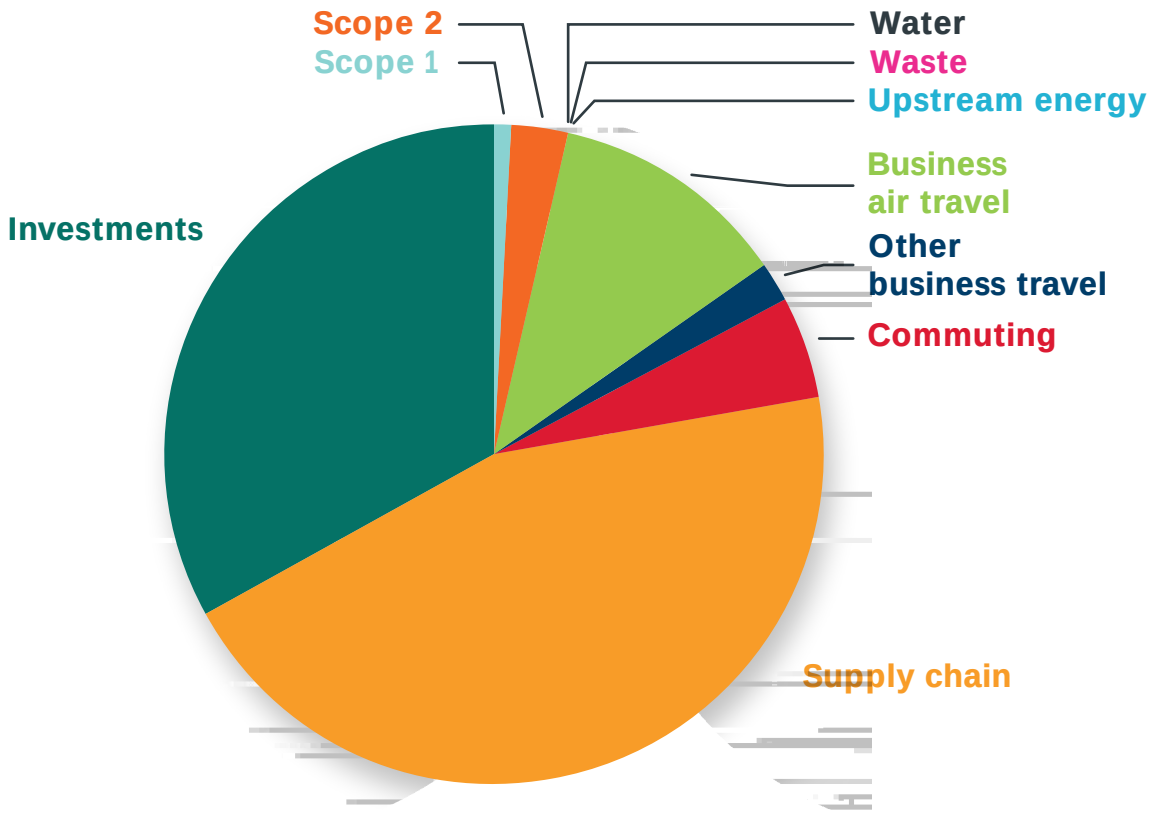
Our baseline greenhouse gas (GHG) emissions inventory for 2019 has been produced according to the World Resources Institute GHG Protocol categories and methods. The RSC boundary includes all sta□, o□ces, commercial activity and supply chain procurement. Member activity is included where it is paid for directly by the RSC such as travel to events.

Scope 1 includes direct emissions from natural gas combustion and fugitive emissions from air conditioning units in our owned and leased buildings. Scope 2 represents indirect emissions from grid electricity consumption, based on billing data and national emissions factors. Scope 3 includes a range of other indirect sources of emissions where we have varying levels of control. Our UN RTZ commitment is to account for all GHG emissions where they are material to our total impact and where data are available.

Data quality varies among Scope 3 categories. It is high for business air travel and upstream energy where we have billed data and reliable emissions factors. However, it has been necessary to use sampled data and sectoral emissions factors for other sources such as commuting, supply chain and investments. Whilst this illustrates the relative scale of these sources and provides a baseline to identify the major sources of emissions from our activity, absolute values should not be relied upon. We are continuing to work with our suppliers, investment managers and other data providers to improve the quality of these estimates.



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The table below presents Scope 1 and 2 emissions for 2020 and 2021 in comparison to our baseline year. We are working to improve the data quality of other Scope 3 emissions sources and will report their progress in future years.

		GHG	/ CO2		
A	201	2020	*Change against baseline*	2021	*Change against baseline*
Stationary combustion	78.6	70.5		83.7	
Fugitive emissions from air-conditioning	11.0	11.0		11.0	
1	.	1.4	*-9%*	4.	*+6%*
Purchased electricity – location based	363	263		199	
2	3 3	2 3	*-27%*	1	*-45%*
1 + 2	452	345	*-24%*	2 4	*-35%*

The COVID-19 pandemic has substantially altered our working lives leading to significant reductions in emissions in 2020 and 2021. Business air travel was low and emissions from energy use in our buildings have fallen by over 30%. We are working to lock in these reduced emissions where we can achieve equally good or better outcomes for the organisation with more sustainable choices.

E 40% 201 . We expect continued reductions as we conclude the move of digital services into the cloud and upgrade lighting in our Cambridge o ce, Thomas Graham House (TGH), with greater control and more e cient LED fittings. Gas use is up slightly due to reduced heat gain from o ce equipment and increased ventilation. The emissions intensity of grid electricity is also likely to fall in coming years as renewable generation continues to grow.

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. The RSC is a dynamic and global organisation and, therefore, travel will always be required. But we want our sta to travel less, travel smart and travel well. Video conferencing and remote participation will be key tools, but so too will choosing lower carbon options such as fewer travellers, rail where feasible and direct flights.

, developed through our Future Workplace pilot, such as virtual communication booths and Teams Rooms to maximise productivity and reduce the need to travel.

E have been commissioned for TGH to supplement those recently installed on the Science Park. Personal car travel is the largest source of commuter emissions so we will continue to support the uptake of public transport, walking and cycling.

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. We are working with suppliers to gather data specific to the RSC which will feed into future development of responsible procurement policies.

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. However, some components of the portfolio (alternative assets) are currently di cult to analyse so approximations have been made. Investment policy was amended in 2020 to require the RSC to consider environmental and social impacts. The Finance Resources Board scrutinises carbon footprint and other social impacts of equity & fixed income investments on an ongoing basis.

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We are taking specific actions to put the RSC on the path to net zero across the major sources of emissions:

A P are being commissioned for TGH to complement the existing 50 kWp array. This will reduce our exposure to volatile and rising electricity prices and ensure low carbon supply.

B H (BH). A building consultant has been engaged to identify and cost suitable alternatives, such as air source heat pumps and induction hobs, and options to reduce our demand for energy.

H **.** We will present quantitative data on the impact of this shift in future and help sta to make the best choices for themselves and the planet.

. Solar Pot.sl wtainability.