



Responsible Investment Report



Q3 2021

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Responsible investment at Ruffer

AT RUFFER, WE ARE COMMITTED TO BEING GOOD STEWARDS OF OUR CLIENTS' ASSETS.

To do that, and to generate good investment performance, we have always needed to analyse environmental, social and governance (ESG) issues. They represent both sources of value and investment risks. Fully incorporating these considerations into our investment approach forms an essential part of our responsibility to our clients.

Whether it's climate change or indigenous rights, executive pay or workforce safety, we believe our considered approach helps us make better investment decisions.

To the advantage of our clients' portfolios.
For the benefit of the companies we invest in.
And to the good of the environment and society.

HOW WE DO IT

INTEGRATION

ESG risks and opportunities are considered throughout our investment process

ENGAGEMENT

Directly engaging with companies is a key part of our investment process

VOTING

Equity investing comes with rights and responsibilities

We take this seriously

Ruffer are 'climate neutral'. We are signatories and supporters of



Overview of the quarter

THE FIRST HALF OF 2021 WAS TYPICALLY BUSY AS WE FOCUSED ATTENTION ON A STREAM OF CORPORATE AGMS AND OUR ONGOING STEWARDSHIP ACTIVITIES. THE THIRD QUARTER OF THE YEAR TENDS TO BE QUIETER - ALLOWING TIME FOR RESEARCH, REFLECTION AND LONG-AWAITED HOLIDAYS.

But responsible investors can seldom rest on their laurels, and any hopes of environmental respite were quickly dashed by news of devastating wildfires, record-breaking heatwaves, and flash floods across the planet. It was a timely reminder of the relentlessness of the climate crisis and the urgency required in our response to it.

The Intergovernmental Panel on Climate Change (IPCC) published its sixth assessment report in August, addressing the most up-to-date scientific understanding and evidence of climate change.¹ The report included two particularly notable conclusions. Firstly, that humans have played a major role in global warming (irrefutable to the extent there are still people who believe Earth to be flat). And secondly, the frequency and intensity of extreme weather events experienced in recent years are set to increase.

If there is a silver lining, it is that the IPCC's stark findings – coupled with the impact of recent extreme weather – have jolted policymakers in the run-up to the COP26 climate conference scheduled for November. Over half of participating countries have now submitted updated climate action plans ahead of the conference, and pressure has been applied on major emitters – such as China and India – to outline more detailed decarbonisation plans.

¹ [ipcc.ch](https://www.ipcc.ch)

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Elsewhere, the EU unveiled its ambitious 'Fit for 55' plan (so called given their aspiration to cut emissions by 55% from 1990 levels by 2030).² The UK government also bolstered their climate commitments with the addition of a low carbon hydrogen strategy, aimed at enabling hydrogen to become a key part of the energy mix in the decades ahead, cutting carbon emissions in the process.³

We expect to see many more initiatives like these announced in the months and years ahead. This will create both opportunities and challenges for investors. Not least of which includes adding fuel to an inflationary fire quickly gathering momentum. Price rises are inevitable for consumers and businesses as supply chains are shortened and as more industries (not just heavy polluters) are forced to pay higher prices for negative externalities (eg carbon emissions) through taxes or emissions trading schemes. Improving the quality and availability of corporate climate data will be part of this journey; to this end, the UK and US financial regulators recently announced proposals for industry wide reporting on climate impact metrics. We directly engaged with the Financial Conduct Authority (FCA) on their proposals, sharing our practical experience of analysing climate data and producing our inaugural Task Force on Climate-Related Financial Disclosures (TCFD) climate report, discussed in more detail on page 7.

Finally, with wholesale energy prices rising at an unprecedented rate in much of Europe and the UK due to disruption in natural gas supplies, it is a costly reminder of how reliant we remain on fossil fuels. Thankfully, the proportion of our energy being met from domestic renewable sources is growing rapidly, but this in turn brings new challenges, including how to balance the grid and store excess energy. Batteries will play a crucial role and are the subject of the article on page 10.

² carbonbrief.org

³ gov.uk

Stewardship activities in brief

COMPANY

SUMMARY

BARCLAYS

An initial, exploratory meeting to discuss the company's climate change policy and associated issues, including historic timelines, the impact of the last two shareholder resolutions at the 2020 and 2021 Annual General Meetings (AGM) and how Barclays aims to take such policy forward. This was our first meeting with the Chair of the Board and we expect to continue our engagement, including through involvement in future conversations on the setting of targets and refinement of policy in this area.

FINANCIAL CONDUCT AUTHORITY (FCA)

A meeting to discuss recently proposed sustainable finance and climate disclosure regulations. We welcomed the desire to mobilise listed companies and asset managers into thinking more about their climate risk and to accelerate the transition to a less carbon-intensive economy. We supported the references to active stewardship but suggested more could be done to emphasise the importance of engagement to address climate risk directly. We also expressed a desire for the FCA to push listed firms into reporting more detail about their climate transition plans, with near-term targets and milestones required.

MITSUBISHI ELECTRIC

A meeting to discuss the recent disclosure of fabricated inspection data and how the company intends to improve internal controls, as well as a reiteration of the need for an independent outsider as board chair and a higher percentage of truly independent outside directors.

**MITSUBISHI UFJ
FINANCIAL GROUP**

A meeting to discuss the execution of the company's climate transition plans in the context of market developments and to ensure alignment throughout the company's lending and investment activities with its 1.5°C target by 2050. We also discussed our vote against a shareholder resolution at the most recent AGM where we voted against a proposal to include climate transition targets in the company Articles of Association. We felt the technical aspects of amending the articles of association were unusual and restrictive. We communicated to the company we would vote for a resolution with climate transition targets at the next AGM if no further action was taken by the company.

TOYOTA

A meeting to understand the company's relationship and cross-shareholdings with Toyota Motors, challenge the lack of sufficient independence on the board and explain our votes against the reappointment of the President and Chair of the Board and an outside director at the 2021 AGM.

Further detail can be found in our Stewardship Activities report, available at ruffer.co.uk/2021-Q3-stewardship

TCFD Report

Most readers are likely familiar with Mark Carney. Ruffer clients will be most familiar with references to him in his role as the governor of the Bank of England from 2013-2020.

However, coincident with his tenure in Threadneedle street, Carney was fulfilling a role that may prove to be even more significant. As Chair of the Financial Stability board, he created the Task Force on Climate-related Financial Disclosures (TCFD).

THE AIM? TO IMPROVE AND INCREASE REPORTING OF CLIMATE-RELATED FINANCIAL INFORMATION.

It may sound dry, but successfully establishing clear, comprehensive and comparable data on the impacts of climate change is not just a ‘nice to have’. It will be imperative if the UK is to achieve its net-zero by 2050 target. Helping companies and crucially, investors, to better assess the risks and opportunities presented by rising temperatures, climate-related policy and emerging technologies would lead to better decision making and divert funds to aid with the energy transition whilst also reducing the amount of capital at risk from the negative consequences of a changing climate.

For companies, the recommendations of the TCFD focus on providing a clear framework for the reporting of carbon emissions data. This is split into three categories to help understand the source.

SCOPE 1	Emissions from sources owned or controlled by the company, typically direct combustion of fuel.
SCOPE 2	Emissions caused by the generation of electricity purchased by the company.
SCOPE 3	Includes an array of indirect emissions resulting from business activities such as travel, distribution of products by third parties, and downstream use of a company’s products (eg the combustion of fossil fuels produced by an energy company). This data is currently considered to be low quality and prone to double counting, so is usually omitted from analysis. ¹

¹ fsb-tcfid.org

For investment managers, the TCFD provides a methodology to utilise this data to highlight the sources of climate risk within a portfolio. These range from carbon footprints (the emissions attributable to a portfolio divided by its share of company revenues) to detailed analysis of the impact of different climate scenarios on the underlying businesses and the portfolio as a whole.

The metrics can be broken down to understand the key company contributors, to pinpoint the greatest sources of portfolio risk. They can also help to understand the different types of climate risk. From the physical aspects of the climate changing around us (such as rising sea levels) to the policy and technological changes necessary to move to a net-zero carbon economy, known as ‘physical’ and ‘transition’ risks.

At Ruffer, the core of our approach is a resolute focus on preserving our clients’ capital. Careful and concerted management of climate risk is essential to meeting this goal. We have therefore elected to publish an annual report detailing our climate change framework.

Ruffer’s Climate Action Plan has four key pillars

1 MANAGING RISKS

Identifying the key climate-related risks and opportunities in our portfolios, with the help of TCFD data

2 INTEGRATION

Fully incorporating these considerations throughout our investment process

3 STEWARDSHIP

Aligning our extensive engagement activities to ensure they are focused on the key issues to deliver lasting and meaningful change

4 OPPORTUNITIES

Identifying the technologies and trends required for the energy transition to identify underappreciated opportunities

OUR FOUR-PART CLIMATE ACTION PLAN



The report explains our approach to climate change throughout our investment process. It also highlights our response to the recommendations of the TCFD, including climate metrics on Ruffer's flagship fund. The first report was released in September 2021 and is available at ruffer.co.uk/tcf-report-2021

The report includes metrics highlighting elements of the Ruffer portfolio that could pose significant climate risks: in particular our holdings of energy, materials and financial stocks. These positions do not in any way reflect a lack of concern for climate change, but reflect our conviction that exposure to such economically sensitive sectors is crucial in meeting our capital preservation objectives, and the fact many of these companies will play a key role in providing the resources, processes and capital for the energy transition

The main drawback with the metrics recommended by the TCFD is they are based on fixed data. They cannot incorporate the potential for companies to invest, react and adapt to align with the needs of the energy transition. At Ruffer, we strongly believe in the power of engagement over divestment to encourage progress (read more at ruffer.co.uk/2020-03-climate-change). The transitioning of hard-to-abate sectors is one of the key issues that needs to be addressed in order to achieve the goals of the Paris agreement. Divesting from such businesses has no clear real world impact, it simply creates a less climate-conscious shareholder base. We consider encouraging the most carbon-intensive companies in our portfolios to improve their energy transition plans and lower their real economy greenhouse gas emissions directly supports the goals of the Paris Agreement and can both benefit the environment and reduce the climate risk discount attached to the company.

By utilising the recommendations of the TCFD we can identify the parts of our portfolio that are at risk, but also where our engagement can have the most impact. Helping to drive positive change whilst protecting our clients' capital.

How a

**PINCH
OF SALT**

**can help the
energy transition**

They are fundamental in powering our lives: lithium-ion batteries. Lightweight and durable, we use them in our phones, laptops and increasingly in our cars. Already, they seem embedded in our society, but the electric revolution is only just beginning.

Global energy demand is predicted to grow by up to 40% in the next ten years.¹ Fortunately, much of this growth will come from renewable sources. However, meeting this increased demand is dependent on one aspect of the energy sector that can sometimes be overlooked: the continued research and development of batteries.

The trend of increased use of renewables in energy generation presents a significant area of growth for battery technology. The electrical grid will require large scale batteries to even out the imbalances between supply and demand that can arise. People using solar panels will not want to wait for the sun to shine before they have their morning coffee, the power needs to have been stored overnight.

Since their first commercialisation by Sony in 1991, lithium-ion batteries have been considered the pioneering technology for portable electronics and electric vehicles. At Ruffer, we have made successful investments in companies associated with lithium, electrification, and energy storage. Our investment in this area has ranged from pure play lithium producers such as Livent to electric vehicle component producers, battery storage operators as well as traditional original equipment manufacturers (OEMs) such as General Motors and Volkswagen, who are investing heavily in electrification and battery innovation. We believe these businesses will be key in transforming our digital electronic world as we strive for a greener planet.

Lithium batteries have dominated the battery market thus far due to their unparalleled chemical properties. Lithium-ions carry extremely high charge densities, meaning that a lithium battery can pack in more ions and so hold more power than a battery of equivalent weight made from another, heavier metal with similar chemical properties (for example sodium). Lightweight, they are perfect for mobile applications such as phones, laptops, and more recently electric vehicles.

¹ International Energy Agency 2019 IEA World Energy Outlook 2019 (Paris: International Energy Agency)

With improvements in technology, falling costs and a growing list of countries announcing bans on the eventual sale of combustion engine cars, it is easy to see how demand for electric vehicles is set to increase in the coming decade (for more on this, read our [Q2 Responsible Investment report](#)).

So, will lithium be able to take on the challenge of fuelling the revolution? Not if they continue to be exploited in stationary applications where there is less of a requirement for their lightweight properties. To efficiently distribute global resources and alleviate pressure on lithium supplies we need to find alternative solutions for energy storage.

Whilst widespread vehicle electrification should prove highly effective in decarbonising economies, the increased extraction of lithium could also result in growing environmental and social risks too. One of the key issues is the lithium extraction process requires 1.9 million litres of water per tonne of metal extracted: a highly water intensive business in a world where fresh water is increasingly scarce and agricultural land is in drought.²

Another detrimental problem associated with lithium-ion batteries is their use of cobalt as a cathode. Cobalt is a rare metal and two thirds of it is mined in the Democratic Republic of Congo, where most of the miners work in extremely poor conditions.

All things considered, it is essential alternatives are developed to sustainably match the world's growing energy needs. Whilst we do not see lithium battery production taking a back seat anytime soon, significant levels of investment have been taking place in battery research and development around the world, making it is quite possible other novel materials with higher theoretical charge densities and efficiencies will emerge in the years ahead.

One such possible alternative to lithium could even be common table salt, one of the world's most abundant materials. Sodium is known as the most democratic of elements. Extracted from seawater, it provides an energy storage solution which is not as reliant upon geographically localised raw or critical materials. Cathode materials currently being used comprise of iron and manganese, which are more abundant and accessible than the cobalt used in lithium-ion batteries.

Further, given the fundamental similarities between sodium and lithium, it is no surprise there has been a sharp increase in interest into the exciting capabilities of sodium-ion batteries. Both are group 1 metals and +1 charged ions. Manufacturing processes of sodium-ion batteries



replicate those of lithium-ion batteries which provides a considerable cost benefit given the use of already established supply chains.

The big drawback with sodium is it is a heavier element, therefore a battery with the same energy output as a lithium battery would be substantially heavier: perhaps not the best material for the next iPhone. But thanks to the abundance of sodium, low supply costs of battery components and improved thermal stability of the materials, sodium-ion batteries could well revolutionise areas in which weight and volume are not of primary concern, such as off-grid and renewable energy storage, load levelling and forms of transport.

The sustainability advantages to sodium-ion batteries are clear. Despite this, there are only a handful of businesses worldwide solely dedicated to developing their industrialisation, including UK-based Faradion

Another firm, Natron Energy, based in California, have created a sodium-ion battery using Prussian Blue, an ancient pigment used in dyes. The pores of the material are larger than sodium-ions, so the ions are able to pass through the pores with minimal resistance, giving it a significantly longer life than seen in previous prototypes. The beauty of this product is not only have they developed a better functioning battery, but it has essentially been created from household materials.

One of the world's leading battery manufacturers, CATL, recently announced a breakthrough in producing their first generation sodium-ion battery for electric vehicles (EVs) in an attempt to ease pressure on lithium supplies.³

We expect to see sodium-ion batteries taking market share in applications and geographies where lower costs are paramount and higher weight acceptable. With interest growing in such materials, we believe a more environmental and socially sustainable shift away from our reliance on lithium is becoming closer to a reality. As yet, there are very few direct and liquid ways to gain investment exposure to the sodium-ion market, but we are keeping an eye on this, as well as other new developments relating to EVs, renewable energy and the battery storage market.

About Ruffer

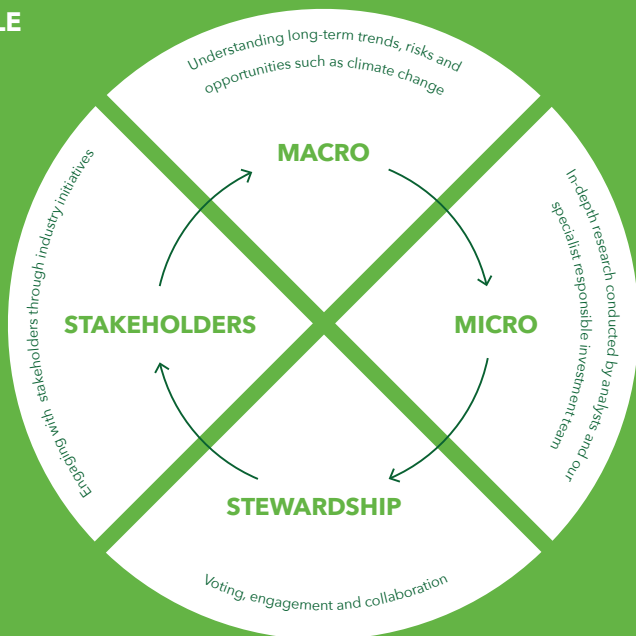
OUR AIM IS TO DELIVER GOOD POSITIVE RETURNS – WHATEVER HAPPENS IN FINANCIAL MARKETS.

To invest well, we need to take on risk. With risk comes great responsibility. Our preoccupation is with not losing money, rather than charging headlong for growth. It's by putting safety first that we have made good money for our clients. Through boom and bust. For over 26 years. If we keep doing our job well, we will protect our clients' capital – and increase its real value substantially.

We believe that investing responsibly will lead to better long-term outcomes for our clients.

Our decision to invest in companies is based on both fundamental and ESG analysis. As part of the investment process, our responsible investment team partner closely with the analysts in our research team to identify and evaluate the impacts a company's operations could have on the environment and society. Likewise, the risks associated with weak corporate governance practices are evaluated. To fulfil our duty to act as responsible stewards of our clients' assets, we use our judgement to determine when to engage and how to vote at shareholder meetings to best protect the economic interests of our clients, while remaining cognisant of the impact on all stakeholders. Engagement with the companies we invest in not only gives us an opportunity to deepen our understanding of the business, but it is also an effective tool to achieve meaningful change.

OUR RESPONSIBLE INVESTMENT FRAMEWORK





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