# Financing net zero: How can investment meet the climate challenge?

### Royal Geographical Society

with IBG

Advancing geography and geographical learning



### Introduction

Private financial investment is now widely recognised to be crucial to the decarbonisation of the economy and society. As the UK steps up its commitment to achieve 'net zero' carbon emissions, the leading role it has played in the growth of green finance is increasingly vital. But this recent growth has not yet closed a persistent 'investment gap' between targets and current realities in terms of scale or the nature of investment.

In December 2019, the Royal Geographical Society (with IBG) hosted a discussion forum, Financing net zero: how can investment meet the climate challenge, where geographers met with experts from the finance and investment sectors to explore these challenges in more depth. Achieving net zero will require a level of investment and diversity of financial instruments across a breadth of sectors that have not yet been realised.

This briefing paper draws together the discussion from that event, framed by geographical research by the REINVENT project (reinvent-project.eu), to make recommendations on the ways in which investment is and should be taking place.

### **Acknowledgements**

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# Towards a net zero economy

The UK Government and devolved governments in Scotland and Wales have set ambitious targets to achieve a 'net zero' economy by mid-century, and the financial sector is crucial to achieving this transition. A net zero economy will require at least 1-2% additional and appropriately targeted investment per annum. Reorienting existing private financial investment and risk management is also critical to the decarbonisation of economy and society. In the terms of the UK Government, financing net zero requires both 'financing green' and 'greening finance'. However, despite recent growth of so-called 'green finance', there appears to be a persistent 'investment gap', and progress toward the realignment of the financial system around climate considerations has also been slow.

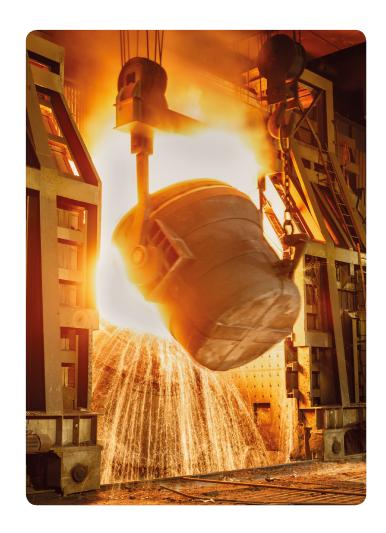
"Carbon emissions have to decline by 45% from 2010 levels over the next decade in order to reach net zero by 2050. This requires a massive reallocation of capital. If some companies and industries fail to adjust to this new world, they will fail to exist."

Mark Carney, François Villeroy de Galhau and Frank Elderson 2019

Looking at the transformation required in these complex sectors to meet net zero demonstrates that financing green innovations alone is not enough. Rather, there is a clear need for the whole financial system to reorient itself to meet this challenge.

### Meeting the net zero challenge

Although the UK Government and devolved administrations have advocated ambitious targets for decarbonisation over the past decades, achieving a net zero future requires action that goes much further and deeper than what we have seen to date. Rather than relying primarily on changes in the energy and electricity sectors, it requires wholesale reduction of greenhouse gases in sectors as diverse as agriculture, steel and petrochemicals. These sectors have complex value chains involving multiple investors. As a result, solutions require a complex set of actors to work together. Transforming these sectors to meet net zero is not only a technological challenge, but also a socio-political and organisational one. The longer this adjustment is delayed, the greater the likely disruption.



### The role for government

The financial sector cannot tackle the transformative challenge of net zero alone. The scale and pace of change required suggests that market coordination is likely to require government direction and support. The speed at which the financial sector reforms will be related to the quality of climate policy action. Furthermore, redirecting finance cannot be a substitute for policy, but must go hand in hand with appropriate additional policy and regulatory measures. The UK Government therefore has an important role to play in enabling and stimulating the reorientation of the financial sector towards a net zero future through the development of long-term climate policy action.

With the UK poised to host COP26 in Glasgow, 2020 offers a unique window of opportunity to take such action. The agreements reached in Paris five years ago must be renewed and strengthened. COP26 will offer the opportunity for the UK to showcase its commitment to tackling climate change by demonstrating how it is turning climate targets into climate action. Bringing the financial sector on board in these commitments will send a powerful signal that the UK is serious about engaging a 'whole of society' approach towards these goals.

This note will summarise the response of the financial sector to date to meeting the net zero challenge, and identify the means to contribute to this goal in the future. It will set out action points for the future that are informed by research from the REINVENT project. The REINVENT project serves to highlight, firstly, that transforming high-carbon sectors to meet net zero is not only a technological challenge, but also a socio-political and organisational one, requiring the coordination of complex sets of actors. Secondly, that financing net zero will require government to play a more active role as the quality of public policy will shape the speed at which the financial sector reforms.



# An emerging response

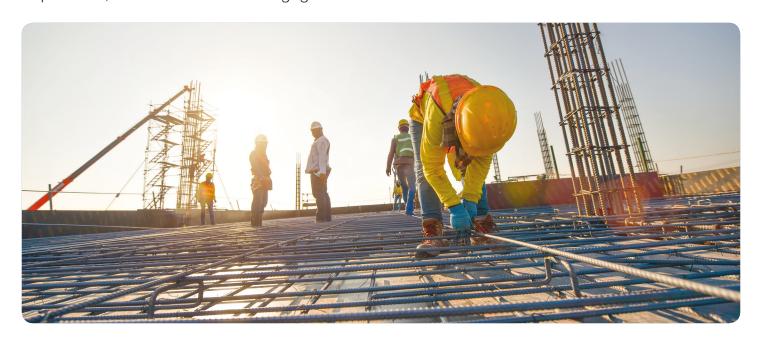
Signatories to the 2015 Paris Agreement committed to 'Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development'. Signs of an emergent response are becoming increasingly apparent:

- There is an increase in the number and diversity of actors taking the climate crisis seriously. The UK Government published its Green Finance Strategy in 2019, while the European Union released its own Action Plan on Sustainable Finance, as well as its plans for a European Green Deal. Beyond the public sector, transnational initiatives such as the Task Force on Climate-Related Financial Disclosure, UNEP FI's Principles for Responsible Banking and Investment, and ClimateAction 100+ enable and encourage financial institutions to act on climate change.
- Simultaneously there has been an increase and diversification in labelled green financial products. Green bond issuances surpassed \$250 billion in 2019, up from \$36.6 billion five years before. There has also been a growing interest in other green financial products, such as loans and mortgages.

 Alongside this growth and diversification in actors and instruments, there are also signs green capital is beginning to flow to increasingly diverse sectors of the economy. In recent years green bonds have been issued by companies in sectors such as forestry, buildings, food and agriculture, steel, and plastics. Nonetheless, energy projects continue to dominate, with more than half of green bond proceeds earmarked for such schemes.

These are promising signs, but the quantity, quality and diversity of finance is currently far from sufficient for achieving a net zero economy, with sectors other than energy and transport remaining largely untouched by green streams of finance.

There are, however, also opportunities here. As the City of London is positioning itself as a centre for green finance there is a clear opportunity for the UK Government and devolved administrations to act on green finance and demonstrate their international leadership in this area.



# Meeting the challenge: financing green

It is well-recognised that a "massive reallocation of capital" from 'brown' (high-carbon) to 'green' (low-carbon) investments is required to meet the UK's net zero target.

"We know how to drive rapid decarbonisation using fiscal tools such as eliminating subsidies from fossil fuels, carbon pricing and shifting public budgets. Refocusing on those really fundamental opportunities will help us drive faster decarbonisation at lower costs."

Financing net zero workshop participant

#### Who needs to take action?

While private investors are often framed as at the heart of green finance, stock markets and indices can also enable, inhibit or direct flows of green finance.

There is an important role for the public sector as well. Economic policy and regulation are needed to recalibrate asset-investor relations. such that low-carbon assets come to hold more value and generate more return, as we have seen in the renewable energy sector (for example via tax credits, price support mechanisms and renewable obligations). The time frame of net zero, and the scale of change required, are key challenges that suggest the importance of policy and regulatory action. Other examples of public sector actions include multi-lateral development banks who can help leverage private funding, while national governments can issue sovereign green bonds.

**Transnational initiatives** also have a critical role to play in awareness raising and mobilising financial actors. They are crucial actors when it comes to redirecting finance towards low-carbon innovation in energy intensive industries. The nature of these sectors, as well as their complex value chains, means the climate impacts of investments are not always as well-understood as in relation to the energy sector, something which intermediaries such as the Climate Bonds Initiative are seeking to address.

#### What needs to be done?

Increase the diversity and use of labelled green financial instruments. One of the most visible approaches to financing green is through the use of explicit green financial instruments. Green bonds are particularly visible and high-profile examples, but issuances in the UK are lagging behind other countries. Alternative approaches include the application of an internal carbon price by investors, an approach adopted by the European Bank for Reconstruction and Development.

Making low-carbon legible. It needs to be easier for investors to understand which investments are low-carbon. To date, the development of mechanisms (standards, certification, etc.) which distinguish green from non-green investments has been largely undertaken by a range of non-governmental organisations. It is likely that state-based action will be required to further standardise and mainstream these approaches to ensure that action can be ratcheted up as the demands on the financial sector grow.

#### Moving finance out of 'brown' activities.

Financing green needs to be accompanied by moving capital out of brown (high-carbon) activities. Approaches to do so, include:
(1) making the climate risk of such investments more visible (for example through mandatory climate risk disclosure); (2) increased and improved reporting of the impact of investments on climate change; (3) policy measures which would discourage or prohibit the financing of (some) high-carbon activities. These approaches may also require additional policy measures, such as carbon pricing, to reduce demand for high-carbon investments.

"If the net zero transition is going to happen, it needs to be fair and it needs to be perceived to be fair."

Financing net zero workshop participant

A greater diversity of assets and sectors utilising green finance. The majority of explicitly green investments continue to be directed towards a relatively small number of green activities, in particular energy projects. However, evidence from the green bonds segment shows that their issuance is slowly becoming more diverse, with a small number of companies operating in the energy intensive sectors now having issued such bonds. This is further stimulated by the development of taxonomies and other instruments which seek to determine and standardise what counts as green in these sectors.

Measuring and demonstrating the impact of green investment. There is a recognised need to shift focus from quantifying flows of finance to understanding their impact. Impact reporting, especially the inclusion of quantifiable environmental impacts, is currently not always practiced, and fundamental rules regarding how impacts are to be measured, or what reference point to use, are currently lacking. The development of common, international standards is particularly important in this respect, as is the allocation

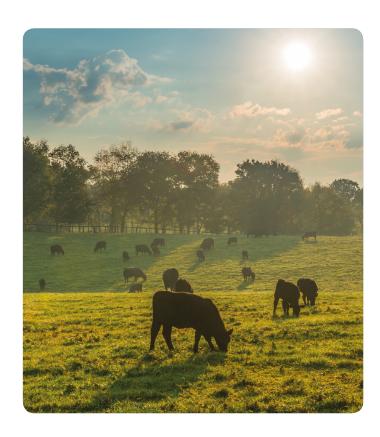
of (human) resources by institutional investors to assess the environmental impacts of their assessments.

"Sometimes on climate finance we are too focused on the finance. We are all talking about billions and trillions and trillions and billions, but at the end of the day if you say 'why are we talking about climate finance', we're talking about it because we want to have an impact. In terms, in particular, of carbon emission reduction or strengthening resilience."

Financing net zero workshop participant

#### Delivering socio-economic co-benefits.

Approaches that seek to stimulate green finance should take into account their place-based environmental and socio-economic impacts and what a transition from a brown to a green economy means for places and people currently reliant on high-carbon activities. There is a role for policymakers to encourage the delivery of socio-economic co-benefits from the transition to a net zero economy, and mitigate any adverse consequences.



# Meeting the challenge: greening finance

The financing of explicit low-carbon activities is unlikely to be sufficient to meet net zero, rather it is likely to require a reorientation of the financial sector to align it with the goal of a net zero economy.

"A few million, even a few billion of loans and investment into something can sound big, but actually we need to analyse what's going on. What's the ten-year plan, how is this picture going to change over the next five to ten years, and where are we going to be?"

Financing net zero workshop participant

Who needs to take action?

Greening the financial system requires action from some of the key architects of the modern financial system, including central banks and stock markets.

**Central banks** are seen as central players in greening the financial system. We see the leading role that the Bank of England has started to take as especially promising. not least as it is becoming internationally recognised as an example of good practice. In short, the Bank of England's approach seeks to make the heart of the global financial system more responsive to climate change through managing exposure to climate transition risk by disclosing how it integrates climate-related financial risks across its balance sheet and processes; the establishment of supervisory guidelines and requirements; and stress testing banks against diverse climate scenarios. Transnational initiatives such as the Central Banks and Supervisors Network for Greening the Financial System further assist the transfer of knowledge through sharing examples of best practices between central banks in this area.

Stock exchanges could commit to a net zero economy, which would require companies listed on these exchanges to be aligned with this target. There is an impetus for the London Stock Exchange to take such action, considering its exposure to fossil fuel assets that may decline in value as the transition to a net zero world takes place. However, for such an approach to be successful, it would require a critical mass among stock exchanges, to prevent companies from moving their listings to other stock exchanges with less rigorous requirements.



#### What needs to be done?

Greening the financial system likely requires a variety of changes, including the eradication of fossil fuel subsidies, the establishment and alignment of carbon markets with the net zero goal, and the alignment of public finances with this goal.

Incorporating climate risk in all financial decision-making. Making the aforementioned shifts will require a change in thinking about risk and impact that not only recognises the impact of investments on the climate, but also the impacts of climate change (and associated risks, if left unaddressed) on the financial system. There are a variety of ways in which such a shift in thinking, and associated practices, can be achieved. These include the mainstreaming, and possibly mandating, of climate risk disclosures to enable investors to make informed decisions; transformation of risk management practices; and the mainstreaming on climate considerations in financial decision making.

#### Advancement of tools and metrics.

Mainstreaming of climate considerations into financial decision making relies on advancement in climate related tools and metrics. Recent years have seen significant progress in this area, enabling climate metrics to be meaningfully integrated in financial decision making. Examples include the development of forward-looking data that indicates the direction of travel of companies included in investment portfolios, as well as comparing that data to scenarios and policy directions.

#### What will success look like?

In many ways, we are still in the early days of the process of greening finance. There are, however, several potential impacts that require attention in the years to come. While much attention to date – in particular in relation to financing green – has been on the quantities of finance available, the processes of greening finance should ideally result in a change to the quality of finance available.

"It's not just about the quantity of capital, it's about the quality of that capital as well. It's going to have to be more long term, it's going to have to integrate environmental concerns, but also social factors, and that really speaks to the issue of measuring impact."

Financing net zero workshop participant

Although there are clear signals from stakeholders that greening finance will require the incorporation of climate considerations in all financial decision making, there is the potential for adverse unintended socioeconomic consequences, which are likely to be geographically uneven. Policies will need to be in place to anticipate and mitigate such consequences.



# **Action points**

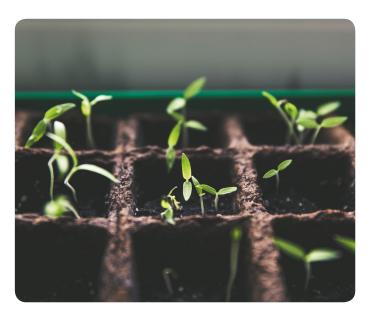
#### **Financial sector**

Identify appropriate tools and methods for aligning work with national and international climate strategies; recognise and generate new and diverse forms of green finance expertise; work with governments and educational institutions to develop programmes that deliver the skills required to integrate such expertise in financial decision making; be transparent in how your organisation addresses the climate challenge; evaluate and communicate the climate and other co-benefits of your practices on the real economy.



#### **Public sector**

Identify the investment needs of different sectors to make the transition to a net zero economy; consider how economic policies and regulations can encourage investment in low-carbon assets; stimulate forms of green finance that can deliver socio-economic co-benefits; work with transnational initiatives to find those who can champion and support the alignment of the financial sector with a net zero economy; participate in the development of (inter)national standards for establishing green investment criteria; evaluate the impact of new financial mechanisms and instruments on national emission targets.



#### Third sector and businesses

Ramp up the ambition of transnational initiatives – align initiatives with key goals such as a 1.5 degree world or net zero target; collaborate with financial and educational institutions to build the evidence base for the quantity, quality and diversity of finance needed for a net zero world; work with the public and financial sector to develop financial innovations for financing decarbonisation; collaborate with other organisations to trial the implementation of new financial instruments and mechanisms.

