



Mind the delivery gap

Achieving net zero through
finance and policy

October 2022

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About Bankers for net zero:

Bankers for Net Zero was formed in October 2019 with the aim of galvanising credible, demonstrable leadership from the UK banking sector on climate change. The initiative brings together banks, businesses, policymakers and regulators to define and implement the interventions needed to accelerate the UK economy's transition to net zero. The focus is strategic policy alignment. By creating clarity on which areas of the net zero transition require policies which can optimise the contribution banks can make to the real economy, Bankers for Net Zero enable both policymakers and banks to play their part in accelerating the transition to net zero. Banks participating in the initiative include the British Business Bank, Barclays, Santander, HSBC UK, Allica Bank, Clear Bank, Handelsbanken, Oak North, Paragon, Coventry Building Society, Triodos, Ecology Bank and Tide.

About South Pole:

South Pole, recognised by the World Economic Forum as a Social Enterprise, has been at the forefront of decarbonization since 2006. With its global climate solutions platform, South Pole develops and implements comprehensive strategies that turn climate action into long-term business opportunities for companies, governments and organisations around the world.

South Pole is also a leading project developer, and has provided nearly 1,000 projects in over 50 countries with climate finance to reduce over a gigaton of CO2 emissions, and to provide social benefits to less privileged communities who are particularly vulnerable to climate change.

For more information, visit www.southpole.com or follow us on LinkedIn, Twitter, and Facebook.

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Executive Summary

Banks stand ready to mobilise resources and expertise to help decarbonise the real economy. However, a quid pro quo needs to be recognised if banking's potential is to be fully realised – policymakers must address the substantial policy blockers that exist across the two key areas we have focussed on for this report – SMEs and retrofit.

For both policymakers and banks, ambitious targets and strategies are increasingly in place to address major areas of emissions in the real economy, helping the UK to achieving its net zero targets and reduce banks scope 3 emissions.¹ The Net Zero Banking Alliance Commitment sets out a framework for banks to align themselves and their activities to global climate goals. Many banks have made this Commitment and are increasingly seeking to grapple with the climate challenge they face.² However, new analysis by South Pole for this report found that there are significant gaps between banks' decarbonisation ambitions and what they need to achieve under the Net Zero Banking Alliance Commitments. Furthermore, we face a significant overall 'delivery gap' whereby the tools and interventions for achieving the various targets are often nascent at best, and absent in other places. Addressing climate change will only be successful in the context of partnership between government, businesses, lenders, investors, as well as the consent of the public.

This report looks in detail at both SMEs and Retrofits, both on which B4NZ has produced reports. The purpose of this report is to set a baseline against which progress can be measured in the future, and further sectoral analysis will be produced as B4NZ delves into new sectors, including an exploration of financed emissions in agriculture.

In the retrofit space, banks have an enormous role to play in supporting homeowners to be able to make the significant changes needed to get to a net zero building stock. Furthermore, banks increasingly have tools and finance available to support their customers to adopt low carbon measures. Our research has found, however, that the policy stasis in this space at present creates a rational inertia whereby homeowners will not take action until the carrots, sticks and standards of policy become clearer. New analysis for this report found that key policy actions highlighted by industry leaders Bankers for Net Zero, Green Finance Institute, and the Energy Efficiency Infrastructure Group target some of the key policy gaps or areas with significant delivery risks identified by the CCC.

Within the SME space, many firms require support from banks to measure and tackle their emissions, with additional finance to make changes where this is needed. This is an area where banks – in collaboration with one another and other stakeholders – have many of the solutions in their gift. Banks need to build on their relationship with their customers, and work closely with government to promote consistent, trusted and reliable resources to support decarbonisation. Other detailed work for Bankers for Net Zero looked to strike a balance around data availability to underpin banks' analysis of their Scope 3 emissions.

Addressing emissions cannot be done in isolation from the other major challenges we currently face, particularly the cost-of-living crisis, the need to deliver energy security, and addressing long standing regional imbalances across the UK (levelling up). Rising energy prices have a two-pronged effect whereby they narrow the space for firms and households to be thinking and acting on their emissions, but also make the economics of energy efficiency more attractive (Next page).

Table 1: Average annual gas and electricity bills by EPC

Energy Performance Certificate band	Annual electricity bill 2022/23 (estimate, £)	Annual gas bill 2022/23 (estimate, £)	Annual total energy bill (estimate, £)	Extra annual bill payments compared to EPC band C (£)
EPC C	2,070	1,806	3,877	-
EPC D	2,249	2,226	4,474	598
EPC E	2,605	2,581	5,186	1,309
EPC F	3,080	2,774	5,854	1,978
EPC G	3,258	2,322	5,581	1,704

Source: Energy and Climate Intelligence Unit³

Finally, there are a range of ‘cross cutting’ policy drivers that are also key in supporting sectoral decarbonisation. In particular, long term policy certainty and clarity are vital to support lenders, firms and households to have the confidence to take decisions which help develop the supply side for the skills, capacity, and technologies to deliver the significant changes required to get to net zero.

Box 1: Summary of key asks

- A need for policy clarity around the retrofit decarbonisation pathway – this includes the mix of ‘carrots and sticks’ to support energy efficiency and low carbon heating. Key interventions highlighted by industry include a stamp duty incentive for energy efficiency measures, a building renovation passport, and long term clarity for energy efficiency standards in rented and owner occupied homes.
- Implementing a mix of tax incentives, subsidies, and low-cost finance to support SME decarbonisation.
- Government to work with industry to build awareness and understanding through tools and advice on SME decarbonation.
- Addressing a series of cross cutting issues around an inclusive and just transition, the skills supply side, and standards for transition plan disclosure.

Introduction

Delivering the net zero transition is one of the greatest macro challenges facing society in the coming decades. Banks and other financial institutions have a significant role to play in decarbonising their Scope 1, 2 and 3 emissions.⁴ At an international level, the UN Net Zero Banking Alliance (NZBA) provides a set of commitments on which banks should base their net zero transition. These are summarised in the diagram below.

All Banks who are members of the NZBA have signed the Commitment Statement which states that all signatories must:



Banks are encouraged to meet these commitments, by:



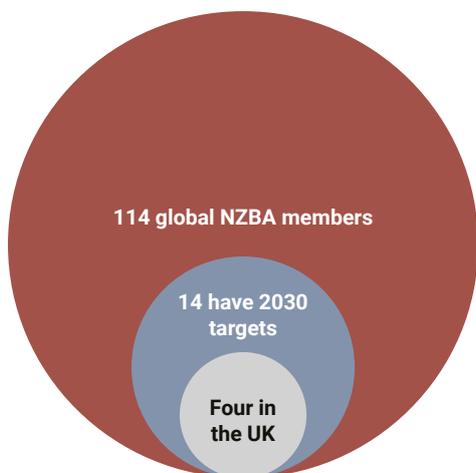
Source: South Pole analysis

Financed emissions are the emissions across a financial institution's (FI) portfolio, or their scope 3 emissions. On average, financed emissions are estimated to be 700 times greater than operational emissions (scope 1 & 2). Calculating and reducing financed emissions is therefore crucial for FIs to achieve net zero by 2050, and manage the risks and identify opportunities related to GHG emissions. Under the Glasgow Financial Alliance for Net Zero (GFANZ), members are required to measure and report progress on their financed emissions to reach climate targets and incentivise whole-economy transition.

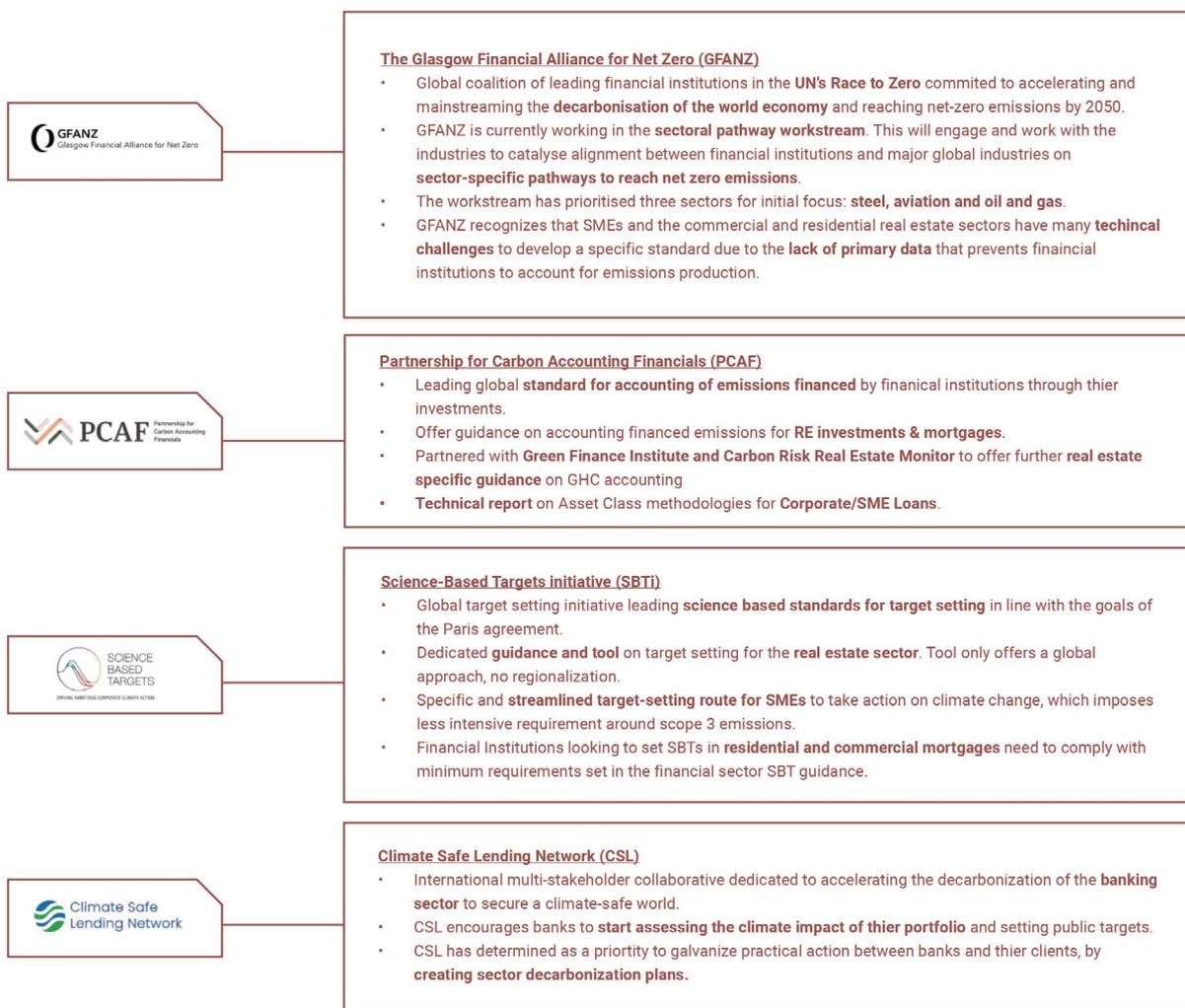
A global survey by the Carbon Disclosure Project indicates, regarding banks:

- Only 23% report on financed emissions, and almost 50% of those do not conduct analysis to understand how portfolios impact the climate.
- 45% have mapped climate-related risks within their operations, but only 20% mapped credit risks, and 55% mapped market risks.
- 45% are taking actions to align at least one of their portfolios to well below 2°C.
- Banks have disclosed a financial impact of USD 600–990 bn from risks, and USD 1,800–1,980 bn from opportunities.

Furthermore, only 14 banks out of a sample of 63 NZBA members have set 2030 targets. Of these 14, only four are UK banks:



At an international level, a range of institutions are working in collaborative initiatives to establish guidelines, tools and standards that help financial institutions estimate their emissions and set reduction targets that are aligned with climate science. These are summarised below:



At a UK level, Bankers for Net Zero (BfNZ) is focussed on strategic policy alignment to support banks in delivering their GHG reduction targets with a specific focus on Scope 3 or financed emissions, harnessing the forces of financial flows, policy, and a range of key stakeholders to coordinate the delivery of emissions reductions. Any analysis of Scope 3 emissions should start with the real economy and work backwards. This report seeks to address this question across two key areas:

- Retrofit of the domestic building stock
- SMEs – across all sectors the economy

For each of these areas, this report sets out to:

- Summarise the status quo for emissions
- Assess banks' current ambitions for decarbonisation
- Look at ambitions in context of CCC progress
- Describe the surrounding context for decarbonisation e.g. rising energy prices
- Look at the current barriers to change
- Set out the steps to address these barriers.

Overall, this analysis demonstrates the extent to which banks can play an important role in reducing the emissions of the real economy. However, they cannot be successful on their own, and getting the supporting policy drivers right is also essential to success in both of these areas.

This report sets out a baseline for progress in these areas, and future work will monitor progress towards our shared decarbonisation goals on a continuous basis.

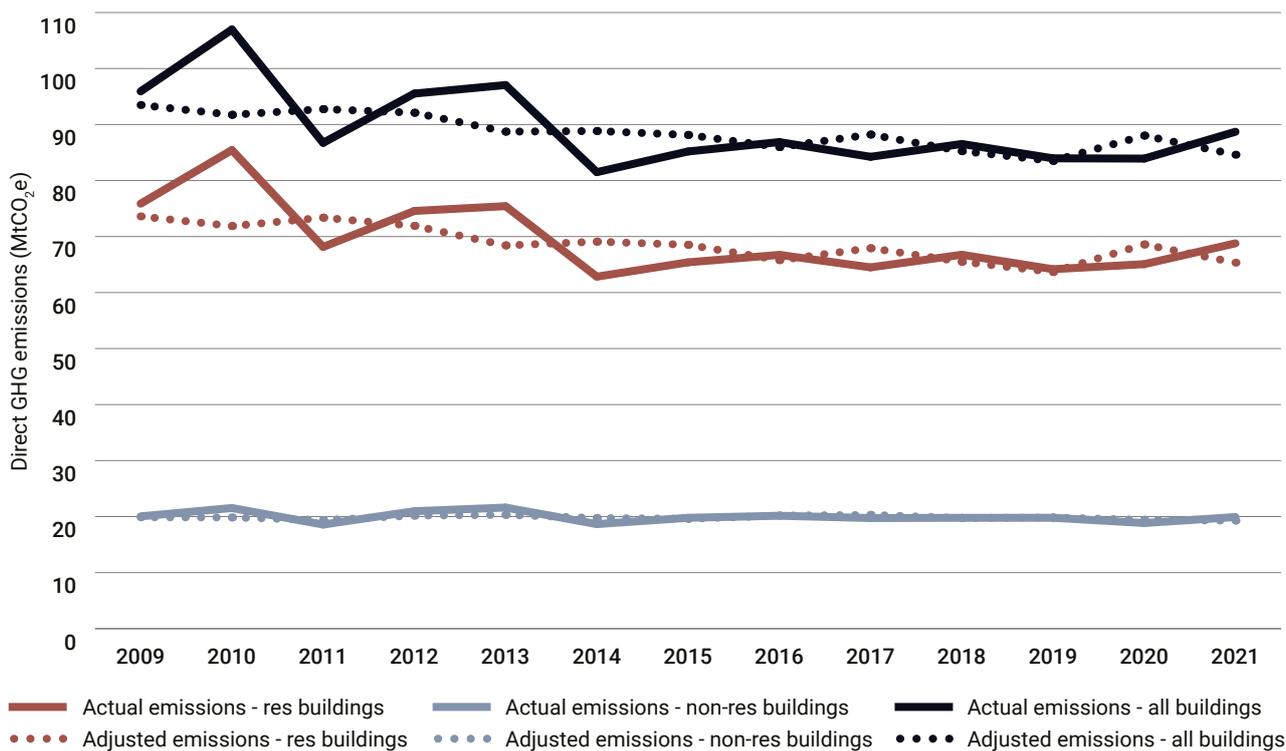


CHAPTER 2

Decarbonising homes and buildings

The decarbonisation of buildings represents one of the greatest challenges in addressing climate change. Buildings are one of the largest sources of emissions according to the Climate Change Committee (CCC), and emissions associated with them remain largely unchanged since around 2015.⁵

Chart 1: Emissions from buildings over time



Source: CCC⁶

The CCC has set out a range of scenarios for how a net zero building stock can be achieved. These vary substantially based on assumptions around (a) the levels of innovation we can achieve and (b) the extent behaviour can be altered towards low carbon options. The variations in some of the non-baseline scenarios are set out in the table below.

Table 2: CCC Sixth Carbon Budget scenarios for decarbonising homes

	Low household behaviour change/engagement	High household behaviour change/engagement
Low Innovation	Headwinds scenario – 71% of homes using hydrogen for heat (still 13 million heat pumps)	Widespread engagement – fully electrified scenario (including heat networks)
High Innovation	Innovation – 10% use of hydrogen, widespread use of heat pumps	Tailwinds scenario – 11% using hydrogen for heat, hydrogen

Source: CCC Sixth Carbon Budget⁷

Regardless of the mix of low carbon heating technologies, all scenarios require two things:

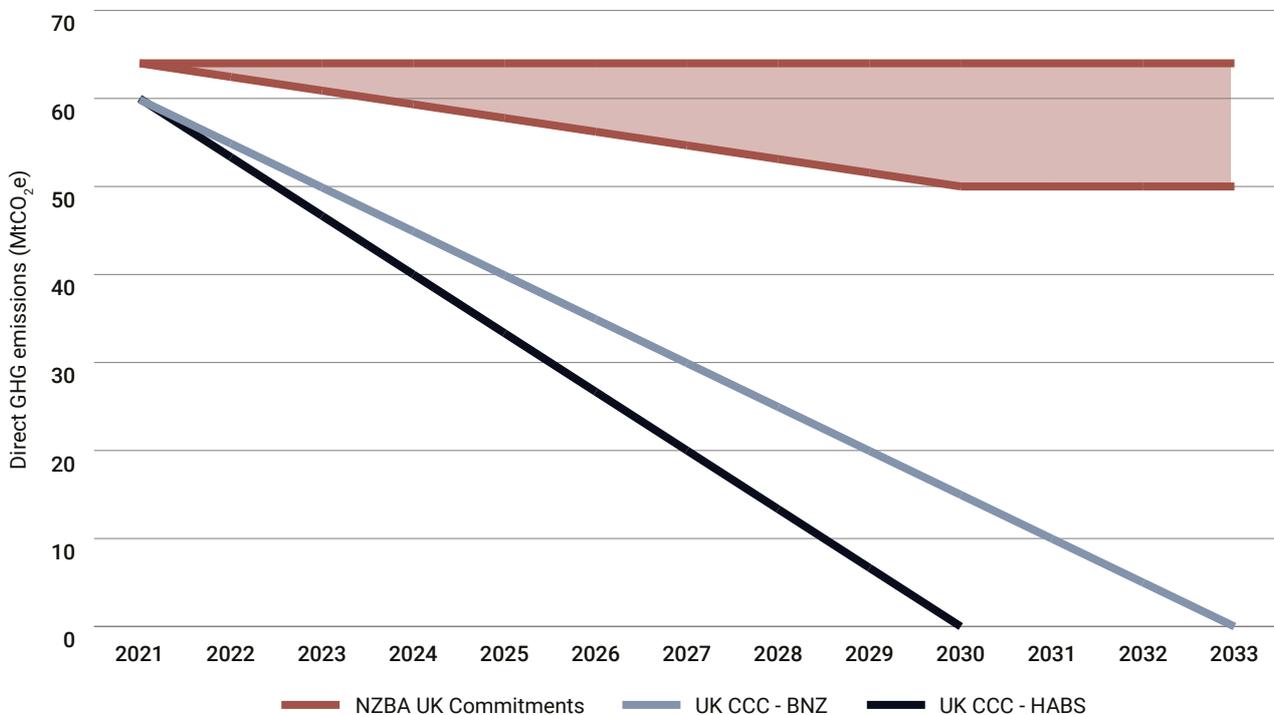
- **A substantial scale up of currently nascent technologies** - heat pumps are a proven technology that can be an efficient source of heating, but their use is underdeveloped in the UK. Switching from gas to clean hydrogen would require a radical scaling up of the production of this fuel in the UK. However, there are significant questions around its appropriateness for heating in a domestic setting, given its energy and cost inefficiency compared to heat pumps.⁸
- **A huge increase in energy efficiency** - this delivers 12% of the reduction in domestic heat demand to 2050 in the CCC’s Balanced net zero pathway.⁹ It is essential for delivering net zero in a cost-effective way, using our resources as efficiently as possible, as well as delivering a wide range of co-benefits, such as improved health.¹⁰

Both of these represent huge challenges in terms of policy, taxation, markets, technology and behaviour change, among other things. There is a need for coordination across a range of actors in order to successfully address these challenges, in which banks can play a vital role.

Bank progress against Commitments

In line with their Commitments under the Net Zero Banking Alliance, banks in the UK have set out targets for reducing the emissions associated with their mortgage books. Analysis by South Pole for this report looks at the current level of bank ambitions in relation to addressing their Scope 3 emissions as pertaining to domestic properties, and how these compare to the nationwide climate targets to 2035. The full methodology is set out in the annex and the results of this analysis are set out in the graph below:

Chart 2: UK domestic buildings with a mortgage energy efficiency pathway vs Residential mortgage portfolio commitments



Sources: South Pole (2022), UKCCC (2022), Bank Disclosures (2022), Energy Performance Certificate for Buildings Register for England and Wales (2022).

At this early stage, the level of banks’ ambition does not match the requirements set out by the UK Government in its Heat and Buildings Strategy. The most ambitious commitments made by banks aim for 50% of their residential mortgage

portfolio to have at least an EPC C rating by 2030. The UK's Heat and Buildings Strategy would require all buildings in the country to achieve at least an EPC C rating by 2035, with more stringent targets for private rental properties and homes with mortgages (i.e. a voluntary commitment to achieve 100% EPC C ratings or better by 2030). The policies set out in the UK CCC's balanced net zero pathway require even faster and more decisive improvement of the UK's building stock.

In order to consider in detail how to address the challenge of financing retrofits, and how banks can be supported to build on and deliver their Commitments, it is first vital to consider the wider context in which this challenge sits.

Decarbonising homes in context

Cost of living crisis

Household budgets are currently experiencing unprecedented pressure as a result of inflation – with energy bills playing a significant role. There is a risk that this increase in bills leads to a significant drop in living standards for poorer members of society. The Government's energy price interventions are significant, but for many households the rise in bills will represent a significant income shock, with an estimated 7 million households still finding themselves in fuel poverty this winter.¹¹ Rising overall costs of energy are present for all households, and these are significantly worse for less energy efficient homes (see below).

Table 3: Average annual gas and electricity bills by EPC

Energy Performance Certificate band	Annual electricity bill 2022/23 (estimate, £)	Annual gas bill 2022/23 (estimate, £)	Annual total energy bill (estimate, £)	Extra annual bill payments compared to EPC band C (£)
EPC C	2,070	1,806	3,877	-
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EPC F	3,080	2,774	5,854	1,978
EPC G	3,258	2,322	5,581	1,704

Source: Energy and Climate Intelligence Unit¹² This analysis predates the energy price guarantee, and so not all of this increase will be incurred by individual households.

There is a clear two-pronged impact that this development has on decarbonising the building stock.

- **Pressure on household budgets across the board will make large upfront expenditures difficult** – the upfront cost of efficiency and/or low carbon heating have always been a barrier, and the cost-of-living crisis will only accentuate this.
- **The economics of efficiency are now even stronger** – while households are less likely to have the money to invest in efficiency, cost savings can be delivered with the right support. In the medium to long term, efficiency can support higher incomes. This is in addition to the well-evidenced co-benefits of scaling up energy efficiency – such as better indoor air quality¹³ and creating new green jobs.¹⁴

With the right policy levers and financial products, banks can help overcome the barriers to energy efficiency and support households across the country to realise the significant benefits to their living standards.

Energy security

The invasion of Ukraine has been a stark reminder of our reliance on fossil fuels imported from overseas, and consequently our exposure to the global gas market. While the UK is less dependent on fossil fuel imports than many other European countries, the Government found it necessary to take steps through an energy security strategy that preserves the UK's security of supply in the context of a protracted standoff with Russia.

This British Energy Security Strategy focuses new measures and spending commitments on the energy supply side – with a significant expansion of nuclear and ambitious targets for offshore wind. These are significant steps, but will only deliver benefits in the longer term.¹⁵ Analysis has shown that demand reduction – including through energy efficiency and insulation – can deliver more effective energy security benefits on a short term basis.¹⁶

On a long-term basis, renewable power combined with domestic energy efficiency and low carbon heating offers the most effective means of lowering our reliance on volatile international markets for fossil fuels. This is essential to achieving security of supply, protecting our economy, and delivering net zero.

Table 4: Scoring of mechanisms to deliver energy security

Sector	Technology	Impact on gas demand / energy bills of additional action (score 0-2)				Cost (score 0-2)	Political risk (score 0-2)	Score excl. NZ (out of 12)	Net Transition Alignment (score 0-2)	Score incl. NZ (out of 14)
		Winter 2022	2023-25	2025-2030	2030-2050					
Renewables	Onshore wind	0 Negligible	1 Moderate	2 Substantial	1 Moderate	2 Low	1 Moderate	7	2 High	9
	Solar	0 Negligible	1 Moderate	1 Moderate	1 Moderate	2 Low	1 Moderate	6	2 High	8
	Offshore wind	0 Negligible	0 Negligible	1 Moderate	2 Substantial	2 Low	2 Low	7	2 High	9
Fossil Fuels	Coal	0 Negligible	0 Negligible	0 Negligible	0 Negligible	1 Moderate	0 High	1	0 Low	1
	offshore gas - existing fields	0 Negligible	0 Negligible	0 Negligible	0 Negligible	1 Moderate	2 Low	3	0 Moderate	4
	offshore gas - new fields	0 Negligible	0 Negligible	1 Moderate	1 Moderate	1 Moderate	1 Moderate	4	0 Low	4
	Shale gas	0 Negligible	1 Moderate	1 Moderate	1 Moderate	1 Moderate	0 High	4	0 Moderate	5
Nuclear	Nuclear - GW scale	0 Negligible	0 Negligible	0 Negligible	2 Substantial	1 Moderate	1 Moderate	4	2 High	6
	Nuclear - SMR	0 Negligible	0 Negligible	0 Negligible	2 Substantial	1 Moderate	1 Moderate	4	2 High	6
Hydrogen	Green Hydrogen	0 Negligible	0 Negligible	0 Negligible	2 Substantial	0 High	2 Low	4	2 High	6
	Blue Hydrogen	0 Negligible	0 Negligible	0 Negligible	0 Negligible	0 High	1 Moderate	1	2 High	3
Demand Reduction	Thermostats	2 Substantial	2 Substantial	2 Substantial	1 Moderate	1 Moderate	1 Moderate	10	2 High	12
	Boiler flow	2 Substantial	2 Substantial	2 Substantial	1 Moderate	2 Low	1 Moderate	10	2 High	12
	Insulation	0 Negligible	1 Moderate	2 Substantial	2 Substantial	1 Moderate	2 Low	8	2 High	10
	Heat pumps	0 Negligible	1 Moderate	1 Moderate	2 Substantial	0 High	1 Moderate	6	2 High	8

Source: Institute for Global Change¹⁷

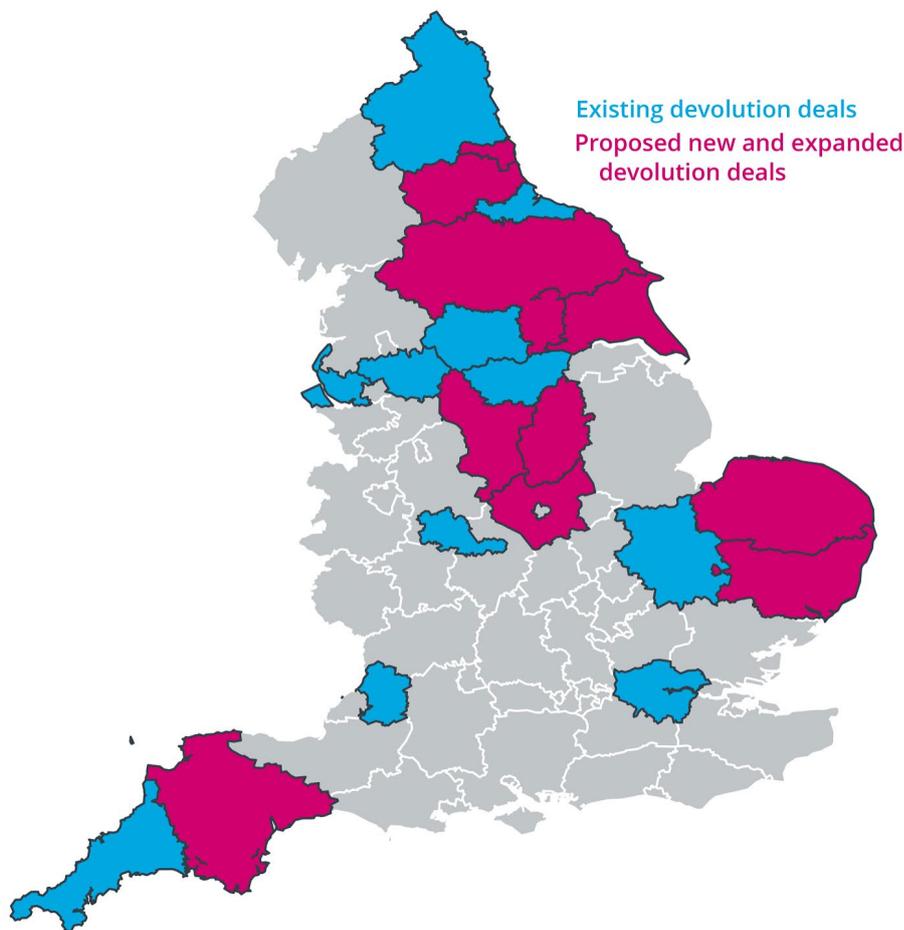
Despite this reality, there were serious shortcomings in terms of new energy efficiency measures within the Government’s strategy. There is a clear opportunity here for private finance to strengthen take up of energy efficiency, and therefore strengthen energy security, if adequately supported through Government policy.

Levelling up

The current Government has put delivering levelling up at the core of its mission, and the Levelling Up White Paper sets out a bold vision for addressing the historic and exceptional regional economic imbalances faced by people across the UK.¹⁸ Delivery against this target, however, has been lacklustre to date. There is a significant gap between the level of ambition from the Government and the policy in place to make levelling up a reality.¹⁹

A cornerstone of the Levelling Up White Paper is the devolution framework to (a) create new devo deals and (b) expand the powers of existing Combined Authorities. This is based on a belief that policy delivery is most effective when delivered by component local and sub-national institutions.

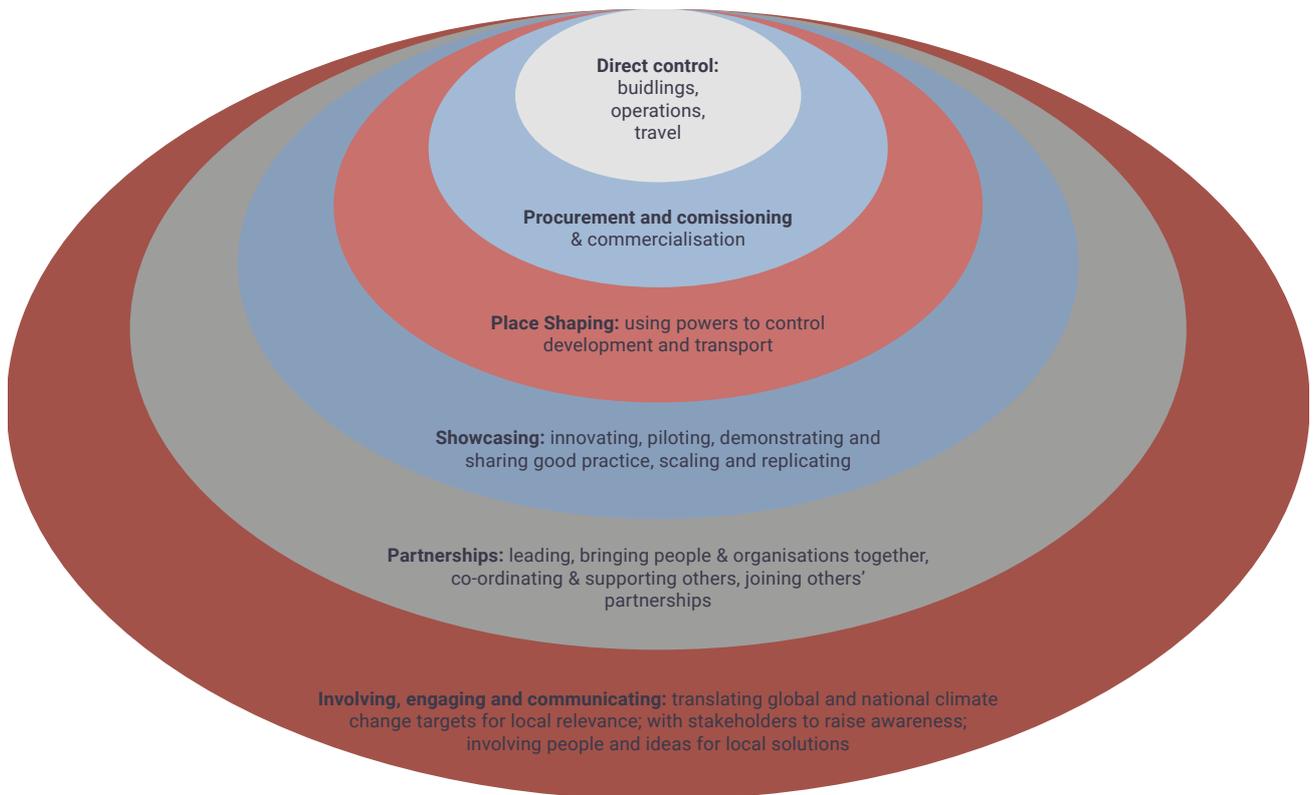
Figure 1: Existing and proposed devo deals in England



Source: Institute for Government analysis of the Office for National Statistics

The devolution rationale is also relevant to the delivery of a net zero housing stock. There is an increasing consensus that retrofit is best delivered at a local level.²⁰ Research by WPI Economics for Local Government Association considered a number of benefits gained through Local Authorities delivering retrofit, given their access to local knowledge and partnerships with key organisations involved in delivery amongst other factors.²¹ The CCC has also highlighted some of the various ways in which Local Government plays an important role in delivering net zero in CCC's advice on the Sixth Carbon Budget.

Figure 2: The role of local authorities in the Sixth Carbon budget



Source: Reproduction of CCC analysis²²

The empowerment and expansion of Combined Authorities set out in the Levelling Up White Paper also represents a net zero opportunity. In combined authorities, Mayors have an important role in being able to convene local authorities and other stakeholders at a sub-national level, and developing and testing innovative approaches to environmental policy challenges. For example, the West Midland Combined Authority sets out a vision for how strengthened powers could help deliver a green industrial revolution, with the area acting as a net zero pathfinder – delivering levelling up while also tackling emissions. Finance models are a key part of this, with one of the key Pathfinder proposals outlining how innovative green finance solutions can support retrofit locally. This model could be demonstrated on a place-based approach in the West Midlands, with similar models replicated across the country.²³



Barriers to change

Households face a range of barriers when it comes to retrofitting their homes with low carbon heating and energy efficiency, and these vary based on type of housing tenure. Focussing on owner occupiers, Green Finance Institute summarised several of these barriers (see table 5). As we will go on to describe, the owner-occupied housing stock is a key area where the gap in policy to overcome barriers is the most severe.

Table 5: Green Finance Institute analysis

Financial Barriers	Non-Financial Barriers
<ul style="list-style-type: none"> • High upfront costs for improvements. • Lack of access to capital. • Low confidence in energy bill savings: A barrier for homeowners seeking full repayment via energy savings. • Duration of tenancy: Energy bill savings may not accrue to the original homeowner if they move property. • Property value-add: Efficiency improvements not considered to increase and/or protect property values. • Availability and accessibility of products: Low penetration and availability of attractive financial offers for efficiency measures. 	<ul style="list-style-type: none"> • Low awareness among homeowners, and disconnect between a genuine concern about climate change and the energy efficiency of their property. • Professional influencers fail to inform and educate homeowners of benefits. • Lack of good quality information and support on products, choices and suppliers, to embark on a renovation 'journey'. • Duration, hassle and complexity (i.e. supply chain, installation, finances) of retrofit projects. • Lack of confidence in the supply chain. • Leaseholders gaining permission: Getting collective agreement amongst groups of share-of-freeholders.

Source: Green Finance Institute²⁴

Several barriers were highlighted as part of our stakeholder engagement exercise, in particular with regard to the role of banks in overcoming them. There were key barriers pointed out, in which banks could play a particularly important role to inform and guide their customers towards retrofit options:

- **Knowledge and understanding** – Alongside the right financial products, a stakeholder in the banking sector highlighted the need for customers to become aware of the decarbonisation options and related finance available to them, before banks can engage with them to develop their interest and buy-in to make use of the finance.
- **Access to finance** – there is significant upfront cost attached to retrofitting homes, whereas any savings occur over years and decades. Clearly, banks have a role in filling this gap through upfront finance.

Research by South Pole found that several banks are taking steps to help households overcome these barriers, as set out in the box below:

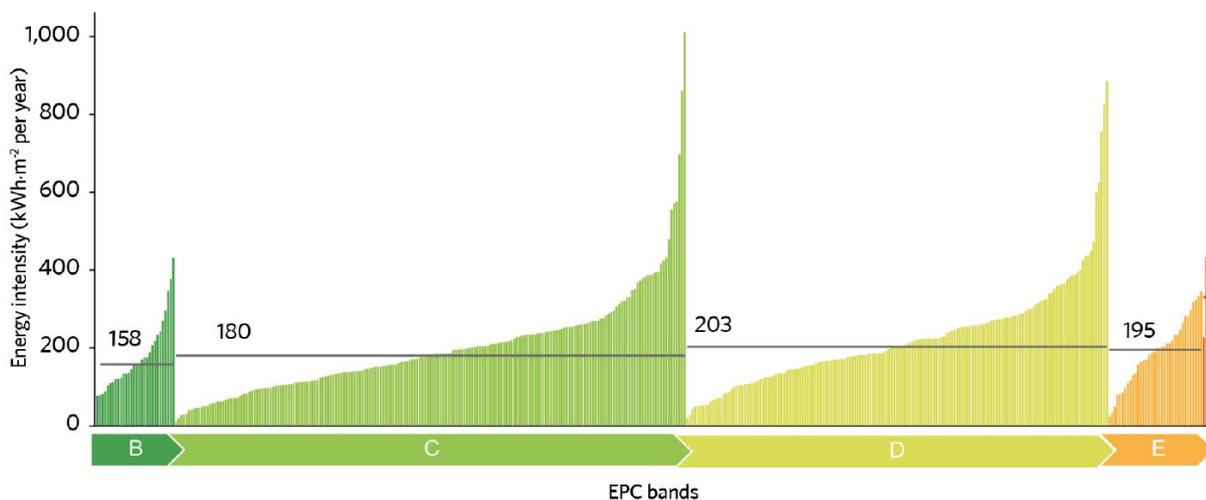
Real estate/retrofit key actions and targets

- The majority of the banks issue **green mortgage products**.
- **Sustainability-linked bonds** from major banks in the UK offer mortgages targeted at homeowners to help them improve their energy efficiency rating.
- A few banks have rolled out **tech-based tools** to support homeowner borrowing for retrofits, such as green building tools that enable energy efficiency measurements.
- Most banks assess their mortgage and real estate portfolio for **climate-related risks**.
- Most banks measure the **financed emissions** from their real estate portfolio and have set or are in the process of setting **targets** for their mortgages lending.

Overall, however, it was strongly emphasised by both bank and non-bank stakeholders that actions by financial institutions alone are not enough to address the emissions of the domestic housing stock. Ultimately, the gap in how the Government will deliver its ambitious targets through policy, urgently needs to be addressed. Key policy barriers were identified around:

- Policy path uncertainty** - One of the key issues highlighted by stakeholders is that the current stasis of policy incentivises an almost 'rational inertia'. There is broad acceptance and expectation that homes will ultimately need to be retrofitted to a low carbon standard, but a sense that the pathway to achieve this goal is unclear. For example, there remain significant questions around what level of Government subsidy will ultimately be available for different households, the role that minimum standards will play for owner occupied homes, whether and when new minimum requirements will be implemented in the private rented sector, and if the Government will include clean hydrogen as part of the domestic heating solution alongside heat pumps. These questions create an environment in which households and other actors in the system arguably have no incentive to act until the 'carrots and sticks' of policy become clear. Otherwise, there is a fear that effort and resources put into retrofitting today will be wasted in the event of future policy change. This includes banks who require assurance of demand before investing to innovate the supply side of products, tools, and resources to support household decarbonisation. There is further uncertainty around the role of infrastructure like heat grids in decarbonisation, with funding highly uncertain beyond 2025.
- Assurance and regulation** - In addition, regulation is required to provide trust and reassurance to consumers who are being asked to make significant changes to their home. This means steps to regulate installers, manufacturers and others on whom we will be reliant to decarbonise the building stock. The Fair Heat Deal coalition, led by E3G, sets out the case for a 'Warm Homes Agency' to oversee the net zero housing transition and support skills development to ensure properly trained professionals are available – another key area where direction from Government policy is required.²⁵
- Data** - Furthermore, a shortage of reliable data on the performance of energy efficiency measures has been highlighted as a barrier to change. Upfront finance from banks to pay for insulation or other energy savings measures needs to be provided on the assurance that those savings will materialise. Currently, Energy Performance Certificates (EPCs) are the main source of data on building energy efficiency in the UK, but several stakeholders raised concerns about the certificates' reliability in measuring real world energy performance. These concerns are corroborated by data collected for the London Energy Map (see below) which shows huge variations of energy intensity within EPC bands, and that the average E properties used less energy per square metre than D properties. Some have suggested a need to move towards asset level energy consumption data as a better and more accurate way of determining property (and correspondingly portfolio) level emissions.

Figure 3: Energy intensity by EPC band in London



Source: London Energy Map²⁶

Overall policy gap

The CCC's analysis in its independent assessment of the Heat and Buildings Strategy suggests that there remain substantial areas where policy must be developed significantly to address emissions from buildings. The CCC assesses areas of emissions based on whether they represent an:

- Unexplained emissions reduction
- Policy Gap
- Policy with significant delivery risks
- Policy with some risks
- Credible policy

The table and graph below set out where each of these ratings applies to different areas of domestic buildings emissions reduction, and then a quantification of these in terms of abatement on the journey to 2035.



Table 6: Policy assessment of residential buildings progress following the Heat and Buildings Strategy.

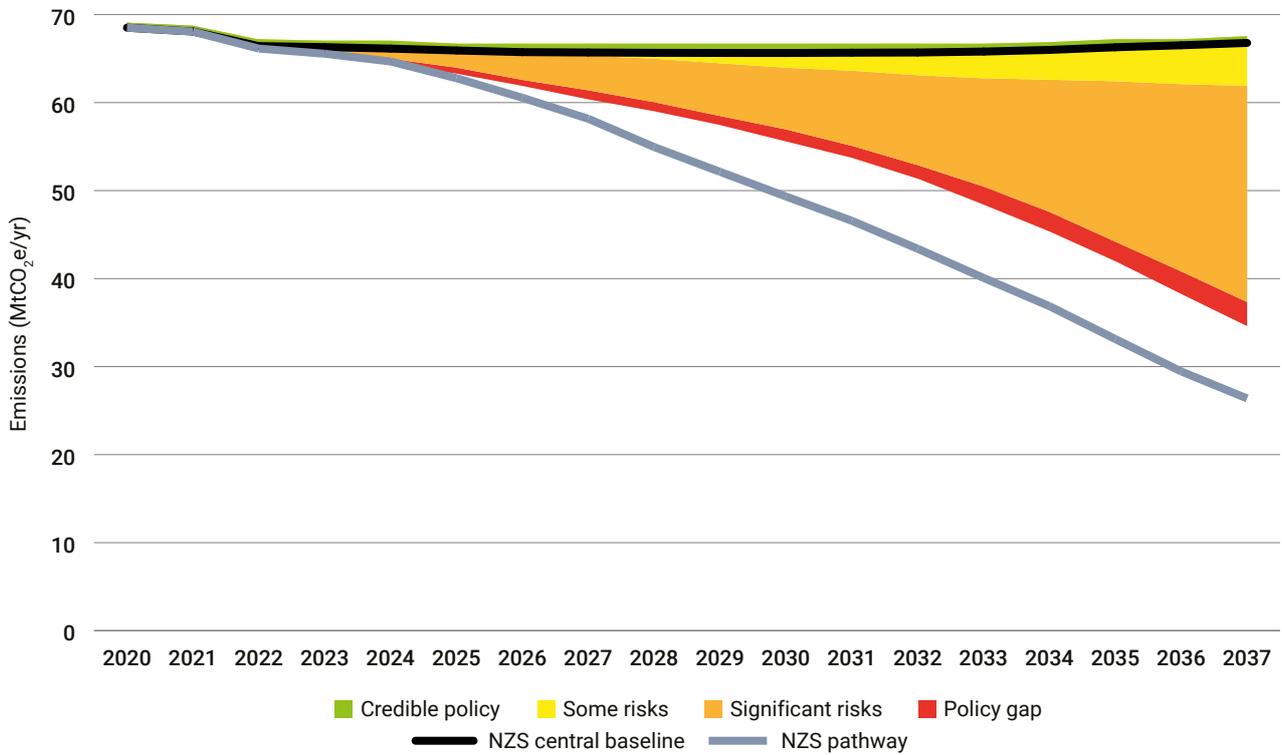
Sub-sector	2021 CCC Progress Report	Heat and Building Strategy
Low carbon heat in non-fuel poor homes	Policy gap	Market-based mechanisms is the main delivery model, supported by (proposed) obligations on heat pump manufacturers and phase out dates for fossil-fuelled heat sources
Heat networks	Policy gap	Heat network funding until 2025 (Green Heat Networks Fund and the Heat Networks Innovation Programme). Funding for heat networks beyond 2025 is unclear, and zoning proposals need work.
New homes	Interim building regulations uplift likely to only deliver low levels of heat pumps Future Homes Standard still needs to be finalised and implemented; no commitment currently to near Passivhaus levels of efficiency despite need to signal well in advance to allow time to upskill workforce.	
Energy efficiency in non-fuel-poor homes	Private-rented sector: proposals for minimum efficiency standards at the point of tenancy Social-rented sector: no clear policy which would either support improvements in these homes, or incentivise homeowners to reach higher standards, has yet been announced. Owner-occupied: policy gap	Mortgage provider obligation is the main delivery model. But this proposal is currently voluntary, and relies on EPCs, which brings problems. No proposals for regulations at point of sale.
Fuel poor homes	ECO 3 and ECO 4 fully funded and implemented. Manifesto commitment to fund the transition for fuel poor households.	Programmes which support low carbon heat and energy efficiency measures (Home Upgrade Grant, Local Authority Delivery scheme, and Social Housing Decarbonisation Fund).

■ Credible policy
 ■ Some risks
 ■ Significant risks
 ■ Policy gap
 NZS central baseline
 NZS pathway

Source: CCC analysis based on actions in BEIS (2021) Heat and Buildings Strategy, BEIS (2021) Net Zero Strategy: Build Back Greener and CCC (2020) The Sixth Carbon Budget: The UK’s path to Net Zero.

¹ The Social Housing Decarbonisation Fund does not explicitly rule out providing finance to owner occupiers who are able to pay, particularly in mixed tenure settings, however the scheme is designed to prioritise fuel poor homes.

Chart 3: Risk rating for emissions reductions from residential buildings policies in the Heat and Buildings Strategy



Source: CCC analysis of BEIS (2021) Net Zero strategy: Build Back Greener technical annex, BEIS (2021) Heat and Buildings Strategy and CCC (2020) The Sixth Carbon Budget: The UK’s path to Net Zero.

In order to set out the potential size of the prize in achieving progress on policy, we quantified how a package of measures developed by industry could influence these areas where there is either (a) a policy gap or (b) significant delivery risks. To do this we analysed the impact of the measures below (see box 2) on the areas of significant delivery risk and policy gap that have already been identified by the CCC.

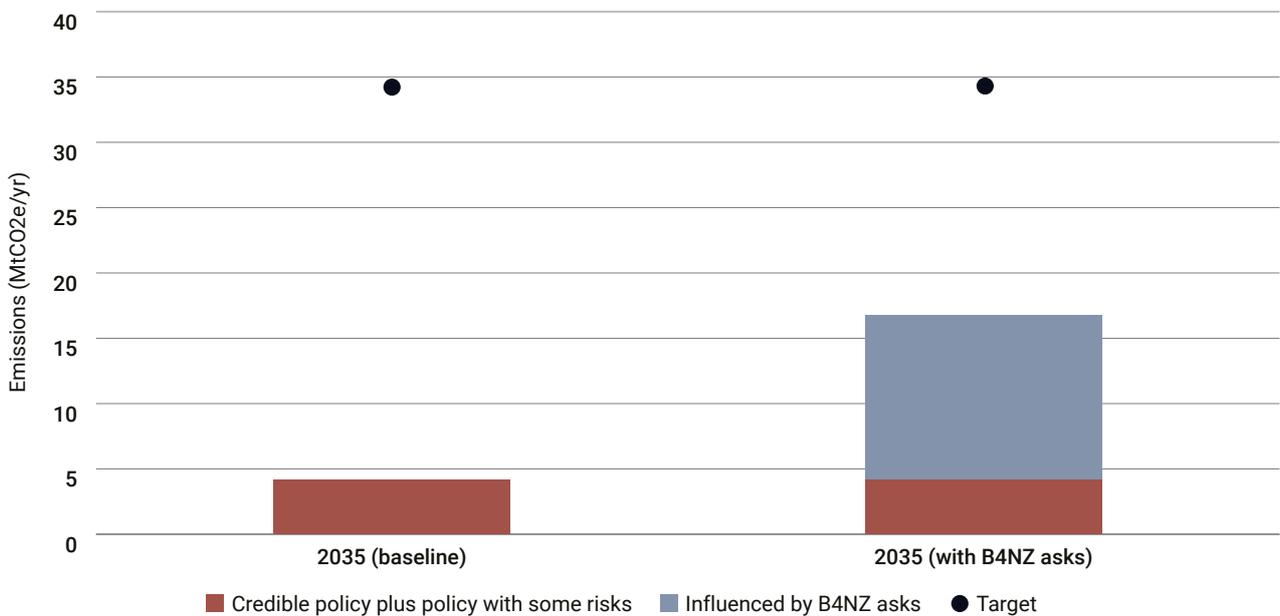
Box 2: Bankers for Net Zero asks on retrofit

1. A government-backed loan guarantee mechanism for lending to at-scale renovation projects anchored in social housing to scale-up a quality supply chain.
2. Long-term regulatory clarity for rented housing and new Minimum Energy Efficiency Standards for owner occupied homes.
3. Fiscal incentives for able-to-pay owner-occupiers and private landlords (eg., lower Stamp Duty for more efficient homes; Enhanced Capital Allowances for investment in retrofitting; zero VAT on low and zero carbon products).
4. Make good on manifesto commitments to invest in decarbonising social housing and public sector buildings, using these to pump-prime the wider market and bring down costs.
5. A government standardised methodology and framework for Building Renovation Passports.

Source: Bankers for net zero²⁸

We then matched these interventions to policy gaps and delivery risks around (a) low carbon heat and (b) energy efficiency for non-fuel poor homes, as these are key areas targeted by these proposals. The matching and justification is set out in the Annex.

Chart 4: Domestic buildings emissions abatement in 2035 - impact of B4NZ asks



Source: WPI Economics analysis of CCC and Bankers for Net Zero.²⁷

This analysis helps to further establish the imperative for policymakers to address the concerns of the CCC, banks, industry and other stakeholders by putting in place policy which can unleash the potential of private finance to retrofit the UK’s building stock.

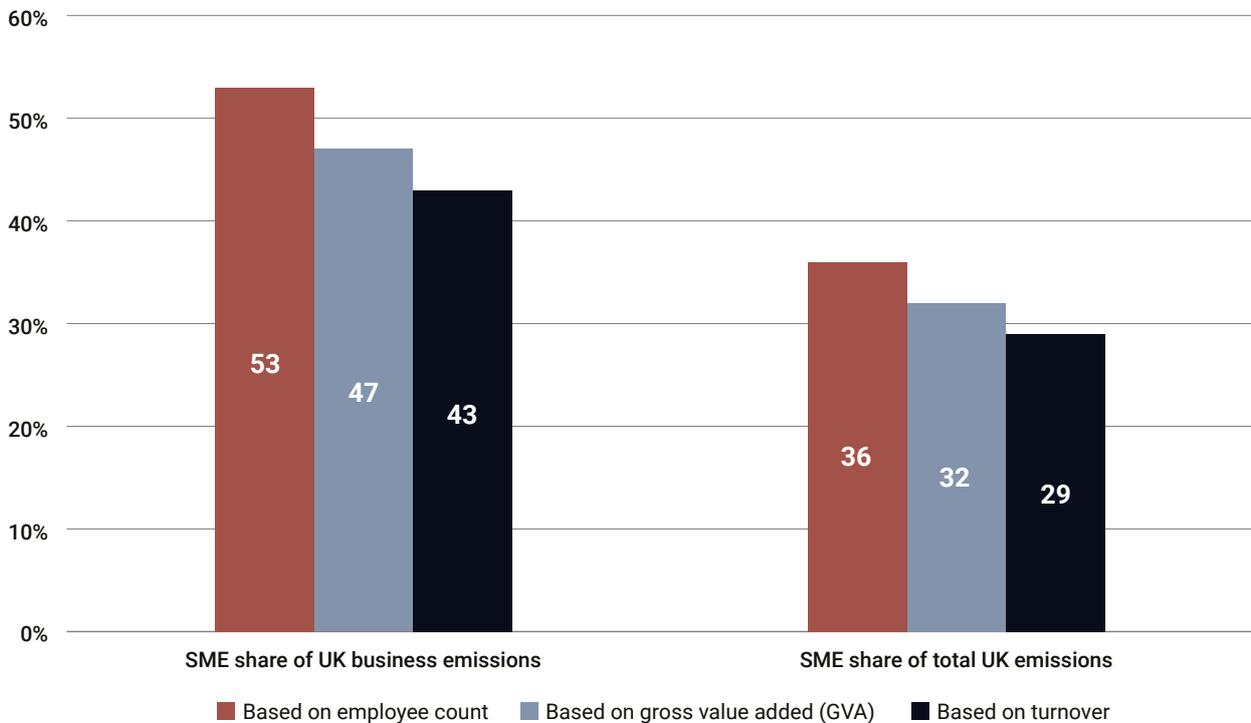
CHAPTER 3 Decarbonising SMEs

“If we don’t help small businesses get to net zero, we can’t reach net zero.” (non-bank stakeholder)

SMEs play a vital role in the UK economy, making up 61% of employment and 52% of turnover at the start of 2021.²⁹ They account for 99% of all businesses, and three quarters of all firms employ no one except the owner.

From a decarbonisation perspective, SMEs represent a substantial share of the economy’s overall emissions. Analysis by the British Business Bank (BBB) sought to quantify this based on a series of different metrics.

Figure 4: Estimated share of emissions for SMEs



Source: BBB³⁰

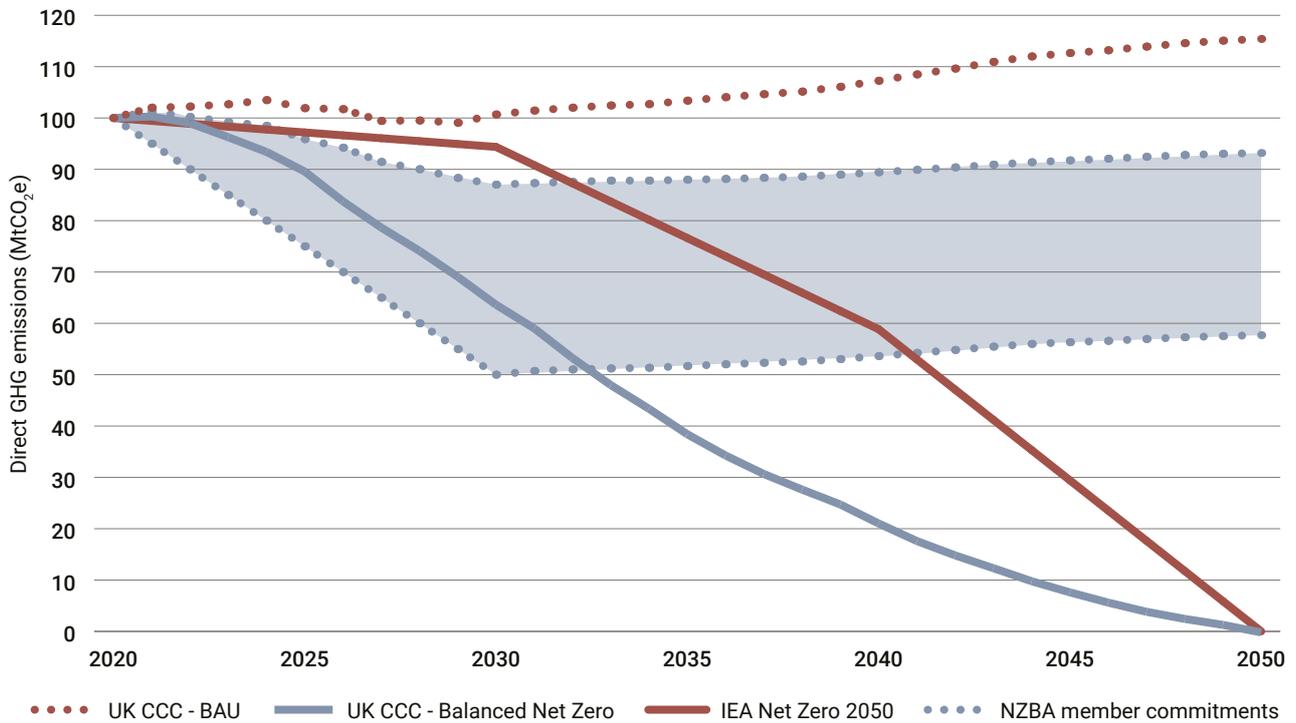
Clearly, SMEs will contribute to the overall economy’s emissions in very different ways depending on sector. Manufacturers, farmers, or professional services firms all have carbon footprints that manifest themselves differently, and face different challenges as a consequence.

Banks and SME decarbonisation

Stakeholders suggested that SMEs also featured prominently in terms of banks’ emissions exposures. For this report, South Pole analysed the targets that banks have set for decarbonising their exposure to SMEs through their Scope 3 emissions.³¹

Due to data limitations, the whole economy, rather than SMEs specifically, was used as a proxy for this analysis. A full methodology and discussion of limitations can be found in the Annex. It found the range of commitments made so far by UK banks is insufficient for achieving the levels of decarbonisation needed to align with the road to net zero charted by the CCC (graph below).

Figure 5: Emission reduction pathways and commitments - UK economy



Sources: South Pole (2022), IEA (2021), UKCCC (2020), BankTrack (2022). Index, 2020=100.

Policy is needed to support banks in making more ambitious commitments and to address the main barriers for financing the transition. This section will evaluate the interaction between finance and policy in supporting the decarbonisation of SMEs. Before further discussion of this interaction, there is a need to consider the wider context SMEs find themselves in.

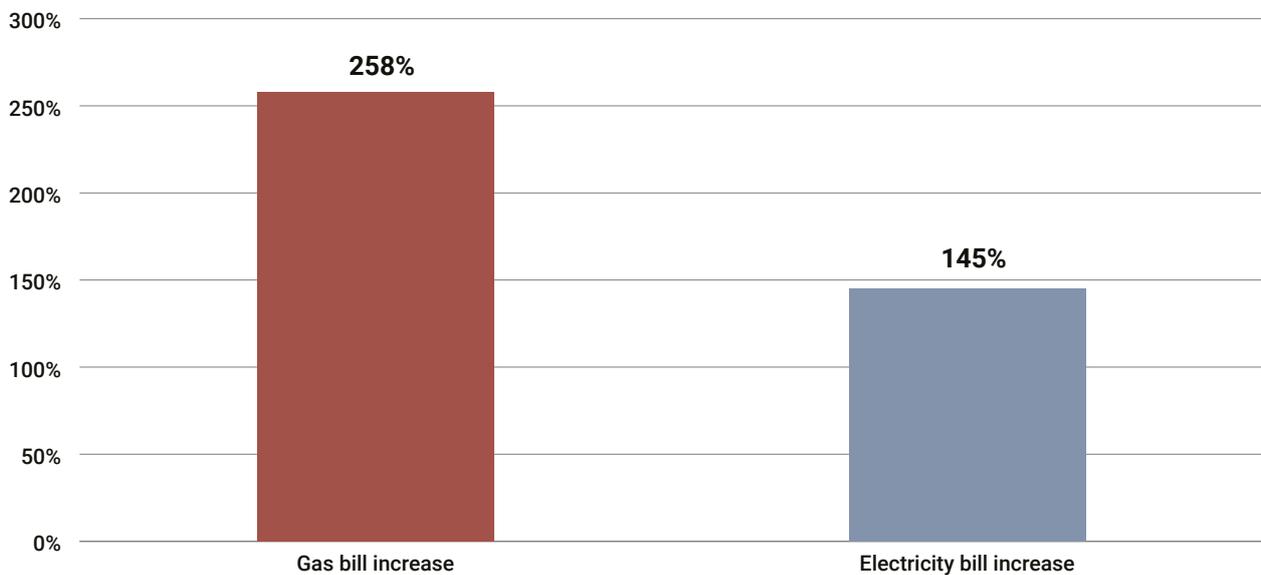
Decarbonising SMEs in context

Energy and cost of doing business crisis

“Small businesses are absolutely terrified of the cost-of-living crisis...they can’t pay their bills so they’re not going to invest. If they get paid by their bigger customers, on time, they will invest in skills” (non-bank stakeholder)

Much like households, small firms are being hit hard by a significant rise in inflation which is having a substantial impact on energy prices and input prices more broadly. Illustrative analysis by the Federation of Small Businesses demonstrates the impact this is having on the energy bills of firms (see figure 6). In addition, in April input price inflation for firms surpassed 19%, its highest level ever on record.³²

Figure 6: Increase in energy bills for an average London based small firm (Feb 21-22)



Source: FSB analysis³³

Stakeholders strongly emphasised the need not to ignore the context of the energy crisis in considering how to support SMEs to decarbonise. There are two vital things that were identified here:

- Small businesses are notoriously time and resource constrained. The fact that they are currently facing a significant ‘cost of doing business’ crisis means that they will have less money for upfront expenditure, and fundamentally may focus less of their time on matters that they may not regard as an immediate commercial priority.
- On the other hand, the crisis does strengthen the case for energy efficiency in business premises, by improving the return on investment for measures that reduce energy demand.

Furthermore, there are wider impacts of this crisis beyond the first order impact on the cost base of individual firms. For example, it was highlighted to us that small construction businesses are likely to carry out much of the workforce training needed for green retrofitting in-house. They may be less able to invest in this training if they are cash constrained due to increased input costs.

Late payments crisis

“Big businesses want to talk about their value to the community – but they need to pay their supply chain decently and treat them well” (non-bank stakeholder)

There is a longstanding issue of small firms being cash strapped due to not being paid swiftly by larger customers. Earlier this year, research from Barclays found that 58% of SMEs are owed money from late payments. For medium-sized firms, this rises to 94%.³⁴ Others have suggested that an estimated £200bn is tied up in unpaid invoices and eight out of ten businesses fail because they run out of cash.³⁵

Again, a lack of cash or fear of business failure will be significant constraints for business owners who need convincing to make the long-term changes needed to get to net zero.

Access to finance

Previous work by WPI Economics for the All-Party Parliamentary Group on Fair Business Banking has looked at some of the issues that SMEs face in accessing finance for their business, as well as dissatisfaction with the level of service they receive by banks. The findings included:

- A significant proportion of SMEs do not feel they get sufficient information from their bank to make decisions on products.³⁶
- Relationship managers can have reportedly up to 3000 clients each, limiting the tailored face-to-face service they can deliver.³⁷
- A survey by the FSB found that 42% of small business owners believe credit availability is poor or quite poor, while only 24% believe it is readily available.³⁸
- Of SMEs rejected for part of an application for finance, more than a third then put their plans to borrow on hold.³⁹
- A worrying number of SMEs use personal accounts for their business (18%), and this number rises significantly for Black and Mixed race-led SMEs (33% and 29%).⁴⁰

Furthermore, many SMEs still have significant residual debt leftover from the Covid crisis. This means that their appetite and ability to take on additional financing to make their business greener is severely limited.

As we will go on to describe, the interaction between banks and small businesses is crucial to navigating the journey to net zero. As a result, these overarching issues around SMEs' access to finance cannot be ignored.

Barriers and drivers to SME decarbonisation

As part of our research, WPI Economics spoke to a range of experts and stakeholders across both the banking and non-banking sectors about the drivers and barriers SMEs faced in the transition to net zero.

One thing participants stressed in particular was that considerations around the decarbonisation of small businesses are multifaceted. There is a need to recognise the different decarbonisation challenges between various sectors in which SMEs operate, as well as between micro-businesses and medium-sized firms, who face significant differences in terms of barriers and motivations. For very small firms, engaging with them to change behaviour is particularly difficult due to their lack of capacity and formalised expertise. One organisation highlighted that a significant challenge for mid-tier firms is that they are large enough to be subject to regulations but their size (relative to larger firms) means that dedicating the capacity required to fulfil compliance is disproportionately burdensome.

There was broad consensus that SMEs in general have recognised that they need to get to net zero. WPI Economics' stakeholder analysis also broadly coalesced around a series of barriers that prevent SMEs from achieving net zero:

- **Accessing education and information on decarbonisation** was described as a key challenge in particular for SMEs. This included knowing what steps they needed to take in order to reduce their emissions, how to access finance, the level of detail required for reporting, and the significance of new regulations on their business.
 - Lack of guidance is further hindered by SMEs' competing priorities/capacity – much of which is framed by the broader context described in the previous section. One non-bank stakeholder expressed how even when they offer support to SMEs for free, SMEs are so busy they don't hear about it so do not make use of it. One bank remarked that: SMEs "are very good at what they do, but they aren't finance, legal or HR experts and they need someone to talk to".
- **Finance** – given the wider context, access to adequate finance was also described as a key barrier to making necessary investments to reduce emissions. However, overcoming other barriers to change was seen as more vital.

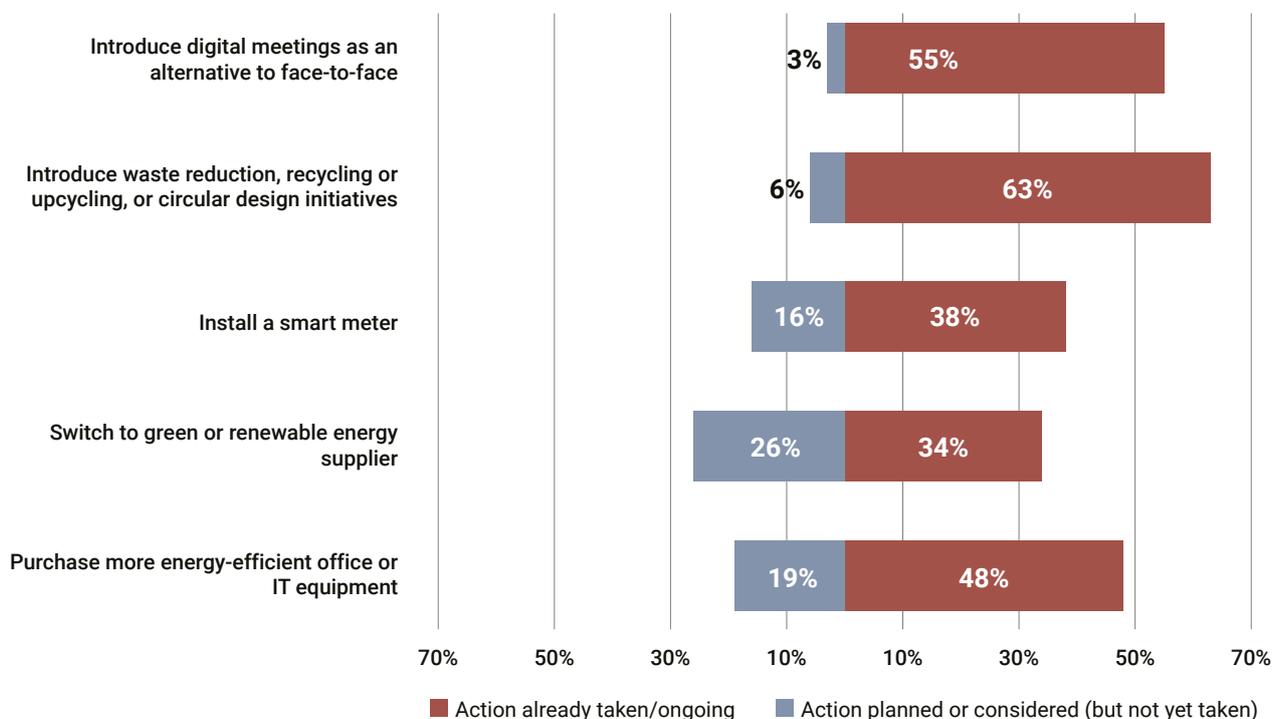
- **Policy clarity** – for example, small businesses may be interested in changing their fleet to EVs, but there is a lack of certainty over what tax relief they might benefit from if they proceed, and what their responsibilities are around charging point installation at employee homes if their company car changes to EVs, etc. One non-bank stakeholder remarked that “There are more questions than answers when they go down that route”.
 - The lack of clarity around retrofit described in the previous section also applies to non-domestic properties as well as peoples’ homes. This is compounded by confusion around landlord/tenant split and how this affects responsibility for emissions.

Some of the key drivers identified for SMEs included:

- **Risk** - across bigger SMEs there is a growing recognition that failure to decarbonise poses a substantial risk to their business from multiple perspectives. Early decarbonisation could help future proof the business and mitigate these risks, such as ultimately facing regulation due to their emissions, or facing pressures from larger firms or through government procurement.
- **Opportunity** - businesses are increasingly seeing opportunities to differentiate themselves through decarbonisation. This includes innovating into markets for low carbon technologies to contribute to emissions reduction, for example EV technology, as well as improving their appeal to more environmentally conscious consumers. SME innovators are important players in many markets, alongside bigger firms. Additionally, many green measures – particularly building energy efficiency and electric vehicles – have the potential to save businesses money over the longer term.
- **Doing the right thing** - there is widespread recognition among small businesses of the climate crisis and that action needs to be taken, but many do not know where to begin.

The BBB looked at some of the most common actions that have been taken by businesses to date:

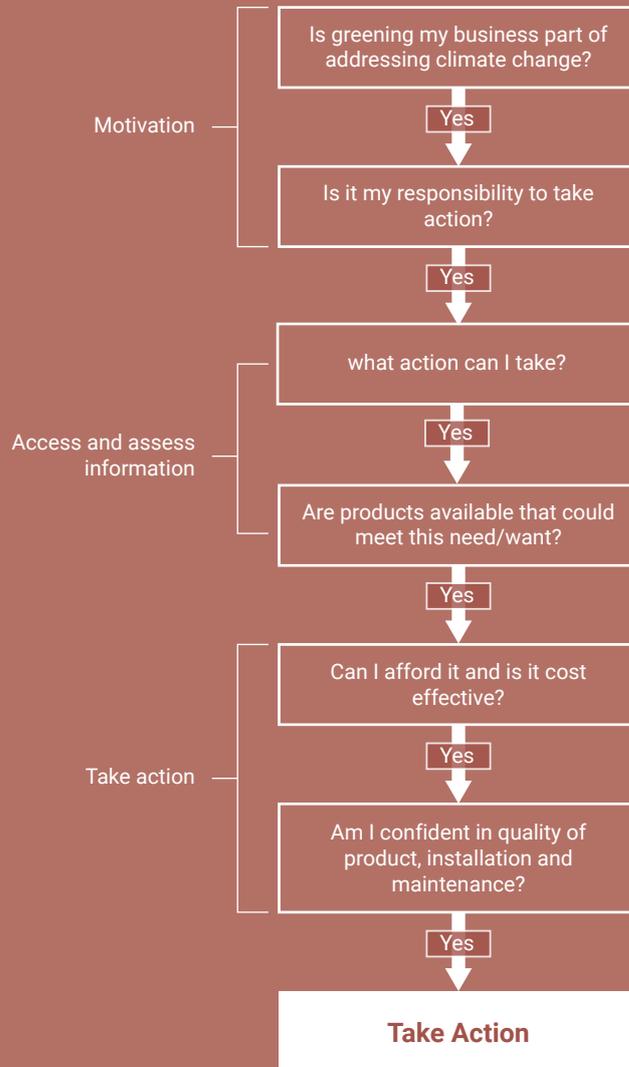
Figure 7: Top five actions taken by SMEs to reduce their emissions



Source: BBB

The chart below demonstrates the journey that SMEs take when considering whether to address their emissions, bringing together some of these barriers and drivers.

Case study 1: SME decarbonisation journey



Source: WPI economics analysis

Some stakeholders have emphasised to us that in contrast to a decarbonisation journey, SMEs face a decarbonisation ‘maze’ where different decisions direct them through a web of complex routes, often leading to dead ends.

The role of banks

Clearly banks play a crucial role in helping small firms get to net zero as providers of finance. However, as the analysis above shows, there are also a number of other key steps that need to be made before a business gets to the finance application stage. These are around businesses’ recognising the need to reduce emissions, understanding the steps that they can take to reduce emissions and help their business, as well as confidence in these being effective.

Banks were identified as offering a number of important potential areas of added value, in addition to financing, subject to the right broader conditions:

- **Information** - stakeholders highlighted that information is fragmented, which often leads SMEs to halt their decarbonisation journey even if tools are available. In addition, stakeholders emphasised how banks have the potential to encourage SMEs to take action at various touch points, and are in a unique position due to the number of businesses they will collectively reach as their clients. Engagement with stakeholders both within and outside of the banking sector highlighted the importance of banks signposting to guidance and support at different touch points of the customer journey. Many banks currently offer tools and advice, as shown by the South Pole research below.
- **Holding clients accountable** - Another stakeholder suggested banks could encourage their bigger business customers to support small suppliers. The stakeholder analysis underlined the role of bigger businesses in building capacity to support decarbonisation efforts of small businesses throughout their supply chain, rather than simply passing down the costs of decarbonisation. Ultimately, many stakeholders we spoke to felt that these supply chain signals from big firms could play the biggest role in driving change among SMEs. Stakeholders highlighted positive examples of big businesses supporting their supply chain, such as Unilever.⁴¹
- **Financing** - for a subset of decisions that SMEs need to take to decarbonise, additional finance will be needed to support them to deliver these. Banks are clearly in a position to provide this, with caveats around issues associated with SME finance that were described in earlier in the chapter.

South Pole's analysis highlighted several actions being taken by banks to support SMEs to decarbonise:

SME key actions and targets

- A few banks have rolled out **tech-based tools** to support SMEs to measure and understand their **carbon footprint**.
- Specific programmes to help small businesses transition into circular enterprises through **knowledge, networks and financing**.
- A few banks are looking to improve **access** to credit and financial services for SMEs.

In order to fully realise the positive role banks can play in supporting their small business customers to decarbonise, stakeholders suggested a number of key steps forward for the sector:

- **Focus on building positive relationships with clients:** Some businesses – known as happy non borrowers – are likely to have a fairly passive relationship with their bank as they do not seek any finance to grow their business.⁴² In many cases, especially with those more actively engaged, banks will need to leverage good relationships with clients to support their decarbonisation journey. One bank characterised supporting clients in their net zero transition as a “vacuum [they] seek to fill”, underlining the gap left by larger banks’ move away from relationship banking. Another specified that a “decentralised model facilitates trust and deep knowledge” of client business needs, and that the “sharpest tool in the (net zero) transition is the relationship between client and lender and the investment case they build”. While several stakeholders were keen to see a return more in person relationship management style banking, others stressed that effective relationship-based banking can mean many things, and needn’t mean a return to a previous bank branch based system.
- **Rebuild trust** - A joint study by the Financial Conduct Authority (FCA) and Competition and Markets Authority (CMA) found that just 13% of SMEs trust their bank to act in their best interest, and only a quarter felt their bank supported their business.⁴³ Rebuilding trust between banks and clients would help their relationship through the net zero journey to be more effective.
 - A non-bank stakeholder highlights that some banks are going the extra mile to rebuild trust, but have “abandoned” the relationship model, in the area of debt in particular.
 - There was some scepticism from both from bank and non-bank stakeholders about PR/greenwashing/“smoke and mirrors”. However, all see an important role for banks in supporting business customers to take advantage of the opportunities of decarbonisation, and recognise banks’ genuine interest/concern in scope 3.

- **Make things simple** - Stakeholders WPI Economics spoke to were concerned about the sheer diversity of different tools/calculators that banks requested for firms’ emission calculations. Ultimately, these needed to be streamlined to simplify and standardise the process.

Overall, there is a need for banks to (a) provide tools to calculate emissions, (b) signpost to information and guidance on decarbonisation strategies and (c) supply finance to support decarbonisation.

Policy has a clear role here in supporting banks in delivering on their potential to achieve their targets. However, it is also a space for banks to openly collaborate with one another and wider stakeholders to deliver some of the solutions. This is an area where Bankers for Net Zero are currently leading activity.

Role of Government as a facilitator

There are a series of key means by which Government can support action by SMEs to address their emissions. We have split these into three broad categories – (1) financial incentives, (2) information and tools, and (3) providing data.

As previously mentioned, a key overarching issue that needs to be considered in policy design is around commercial landlords, who in most cases will have the responsibility and capability to address the emissions associated with heating, cooling, and running buildings. Policy needs to address landlord decisions in addition to those of the firms themselves.

Financial incentives

It was clear from the stakeholder engagement that there is an important role for Government in improving the business case for SMEs to decarbonise, as a complement to various other measures. A range of financial interventions have been suggested, which are summarised in the table below.

Table 7: Assessment of options for financial support

Type of incentive	Policy	Strengths	Weaknesses
Tax incentive	Corporation tax discount	Favoured by middle market companies, works with the grain of an existing system well understood by firms.	Carries potential for deadweight loss to those firms already investing to make changes, fails to support firms not making a profit.
	Excluding business rates from a green assessment	Popular with smaller firms – existing system is essentially a penalty for green investments. Targets a broad range of firms.	There are questions around the incidence of the cost business rates – arguably this would ultimately benefit landlords rather than firms themselves according to previous analysis.
Subsidy	‘Help to Green’	Could be better targeted and have lower deadweight than a tax incentive	May suffer from low take up depending on approach to implementation.
Improved access to finance	Guarantees through British Business Bank (BBB)	Stakeholders have suggested that BBB response to the pandemic “shows that guarantees work” in terms of driving finance to small firms.	Needs to provide the right type of finance in order to be effective and avoid shortcoming of early pandemic support schemes.

Source: WPI Economics analysis

Ultimately, Government should work closely with industry and other stakeholders to determine the appropriate means of supporting SMES to decarbonise financially, likely through a combination of the above. Most stakeholders we spoke to were very supportive of a role for the BBB through guarantees. This can work within existing bank and customers relationships to support investments which decarbonise businesses. We suggest this option is prioritised for further exploration by policymakers.

Advice and tools for firms

The need to aid SME understanding of their own emissions and how to address these was consistently highlighted as important by stakeholders. It was highlighted to us that better information and guidance can aid SME decarbonisation by highlighting the 'quick wins' that are available in terms of reducing emissions, as well as potentially bigger changes that may require upfront finance.

Whether SMEs are taking out loans to decarbonise or not, it is imperative they have access to tools and advice which (a) allow them to measure their own emissions in a reasonably simple way and (b) have access to guidance on how to address emissions from different sources.

Resources such as the SME Climate Hub were highlighted to us as being – while not perfect – effective in delivering the kind of support that SMEs need to be able to measure their emissions and take appropriate action. Banks also provide a significant number of tools and overall level of support in this space. However, often multiple tools and sources of information can mean that SMEs get confused and put off taking action. In addition, awareness of these tools and sources of advice by SMEs more broadly is low.

While the Government did engage in significant efforts to raise awareness of these tools to SMEs in the run up to COP26 in Glasgow, we note that activity in this regard has died down significantly since then. Our key recommendation is that the Government substantially upscale its efforts to promote tools and advice which can support SME decarbonisation immediately. In order to promote these tools as widely as it can, it should work with key stakeholders – including the banks – to ensure that SMEs are consistently directed towards tools such as the SME climate hub.

Availability and standardisation of data

Striking a balance between banks' need for data and delivering simplicity and consistency for the end customer was seen as vital by those we spoke to. Better data is necessary in order to ensure that bank risk appetite is maintained to ensure ongoing availability of finance for SMEs, and to support them in reliably reporting Scope 3 emissions. Banks cannot ultimately support clients to act to reduce emissions that cannot be measured.

Significant detailed work – including by Smart Data Foundry for Bankers for Net Zero – has gone into how to arrive at a solution which could work for smaller firms and banks. Ultimately, government leadership is highly likely to be needed to drive consistency in this space, building on exploratory work such as this.



CHAPTER 4

Cross cutting policy issues

In addition to sector specific analysis in this report, it is vital to also consider how cross cutting policy issues also affect our ability to deliver net zero for banks' Scope 3 emissions in these areas. This was a topic that was returned to repeatedly by stakeholders, and some of the key themes are picked up in the box below.

Box 3: Key cross cutting policy issues

1. **Long term policy certainty with a roadmap** – One stakeholder highlighted that for virtually every sector, a lack of policy clarity is a significant challenge to decarbonisation. Without clear, consistent and long-term policy signals to support decarbonisation, lenders, firms and households cannot have the confidence to take decisions which help develop the supply side for the skills, capacity, and technologies to deliver the significant changes required. Individual policy interventions that have been well designed are no substitute for sound governance and certainty. The decarbonisation of surface transport through the rapid growth in the Electric Vehicles market has been highlighted as key example of where clear long-term policy has helped to deliver change. Organisations such as the Institute for Government have highlighted a lack of long termism as well as market testing as being a key reason for the failure of previous policy designed to decarbonise the building stock.
2. **A secure supply of skills** – many of the new or growing green sectors require larger pipelines of individuals of certain skillsets if they are to be successful in delivering emissions reduction at scale. To do this, there needs to be (a) a reliable supply of individuals with those skillsets from educational institutions and (b) effective retraining for those already in work to develop the skills needed, particularly helping those from high carbon sectors to do so where possible.
3. **Effective standards for disclosure** – through Transition plans, the Sustainable Disclosure Requirements and similar initiatives, there needs to be clarity for investors and other stakeholders about how firms are delivering against net zero and environmental goals. There is a vital role for Government – such as through the Transition plan taskforce⁴⁴ – to ensure these are meaningful and comparable in terms of the information that's being provided.
4. **Delivering a just transition** – if banks only act on the basis of targets to reduce their exposure to high carbon parts of the economy/society, there is a risk of vulnerable households/businesses becoming locked out of financial services, for example they live in older poorly ventilated/heated homes. Government has to step in to ensure that financial solutions as well as the assets they unlock (e.g. housing) remain available more broadly, and to ensure the bank exposure is addressed by emissions abatement of the building stock. Furthermore, there is a need to ensure that the benefits of restoring nature and biodiversity are fully captured as part of any net zero transition.

Annex: Assumptions and limitations

South Pole methodology

Indexing of scenario absolute emission pathways

Underlying sources of decarbonisation scenarios and pathways typically work with different absolute emissions estimates. This is a consequence of the differences in methodologies, as well as the data supporting the analysis of each institution. The main implication of these differences is that each scenario will have a different carbon budget assigned for the next decades, and some scenarios will require more absolute emissions reductions than others, affecting the conditions required to achieve a given pathway. In order to allow for an indicative comparison of the different scenarios and targets, all pathways have been re-baselined and indexed to 100 in 2020.

Comparisons across geographies

In this assessment, global scenarios have been compared to regional and country-specific scenarios due to a lack of public data availability. The decarbonisation scenarios associated with a country can significantly differ from global scenarios, and the differences between them may be a by-product of the scope of the scenario and its consideration of global and regional characteristics. This comparison does not signal greater or lower decarbonisation ambition for the different scenarios analysed.

Extrapolating carbon intensity targets to absolute emissions pathways

The emission reduction targets published by banks (as of the time of writing) only apply to certain sectors, and the majority aim to achieve a reduction in some measure of carbon intensity rather than reductions in absolute GHG emissions. Estimating the impact of carbon intensity targets set by banks on the absolute emissions pathway of an entire economy or sector is limited by public data availability for the different data points required to produce such an assessment (growth projections for banks and the relevant sectors; breakdown of size and market share of financing provided to a given sector or geography; physical activity data; and carbon footprints, etc.). For this reason, in order to enable an indicative comparison between the emissions trajectory associated with bank targets and different net zero scenarios, South Pole has assumed that carbon-intensity targets impact the sectors of the UK economy that they target on an absolute basis. This means a target to reduce the carbon intensity of a certain sector or activity by 15% will be depicted as a 15% reduction in the emissions associated with that sector in the UK CCC business-as-usual scenario. This approach is likely to overestimate the real emission reductions that would be achieved by banks as their business and financing continues to grow in absolute terms, offsetting some of the gains made from reducing the carbon intensity of a given activity.

Depicting banks' climate commitments as a range of potential outcomes

In order to encompass the different levels of ambition displayed by banks in their existing targets, South Pole has developed a range of potential outcomes. This range takes as an upper boundary the extrapolation of the least ambitious targets available to the business-as-usual emissions pathway for the UK economy, and as a lower boundary the application of the most ambitious targets to the business-as-usual emissions pathway for the UK economy. This range does not consider the distribution of the underlying targets which would affect their impact in the overall economy. This gives the impression that there is an equal number of ambitious and unambitious banks. In reality, the majority of the global banks that have published targets sit close to the upper boundary of the area depicted in the graphs presented.

No further emissions reductions are considered after 2030

Since no specific targets (aside from a commitment to net zero emissions by 2050) have been set for after this period of time, South Pole assumes no emissions reductions are achieved after 2030 under the current targets communicated by banks. This is consonant with the estimations carried out for current policies by organisms like the UK CCC, which limits its projection to 2037 at the latest. It also highlights the great amount of uncertainty and risk attached to the achievement of such policies.

WPI Economics analysis of CCC data

For this analysis, we have mapped the policies below to the areas of policy that have been identified by the CCC as either having an outright policy gap or as being at 'significant risks'

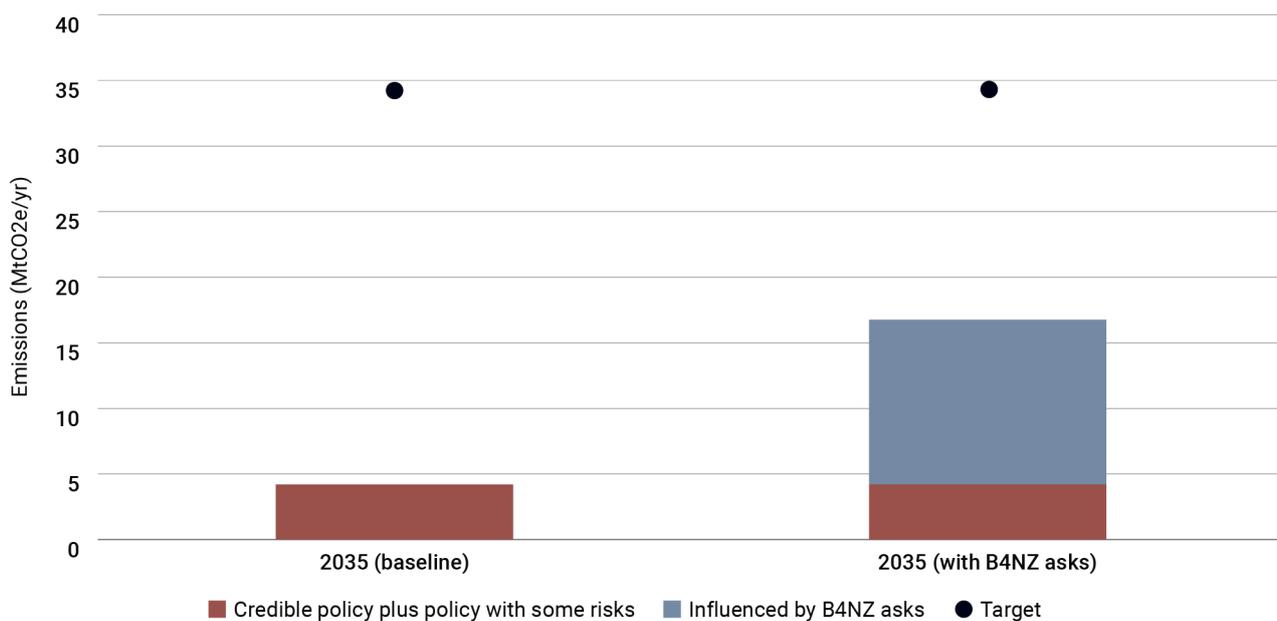
The policies are the following:

1. A government-backed loan guarantee mechanism for lending to at-scale renovation projects anchored in social housing to scale-up a quality supply chain.
2. Long-term regulatory clarity for rented housing and new Minimum Energy Efficiency Standards for owner occupied homes.
3. Fiscal incentives for able-to-pay owner-occupiers and private landlords (eg., lower Stamp Duty for more efficient homes; Enhanced Capital Allowances for investment in retrofitting; zero VAT on low and zero carbon products.
4. Make good on manifesto commitments to invest in decarbonising social housing and public sector buildings, using these to pump-prime the wider market and bring down costs.
5. A government standardised methodology and framework for Building Renovation Passports.

We have mapped the above asks to the key areas of policy gap or significant delivery risks highlighted by the CCC in relation to domestic buildings. Specifically, these help to address gaps around low carbon heating and energy efficiency for non-fuel poor homes. The above recommendations can be mapped to the gaps as set out in the table below:

Policy area	Emissions with significant gap
2, 3, 5	Non-fuel poor owner Occupied housing (energy efficiency and low carbon heat
1, 4	Non-fuel poor social rented

The emissions allocated to these gaps were based on the publicly available CCC data which sets out emissions allocated to each of these areas, from the Independent Assessment of the Heat and Buildings Strategy (pages 34-50) as well as the publicly available tables (Figure 3.4).⁴⁵ This is used to produce the indicative analysis within our Chart, where we add the emissions associated with the policy areas above in the table above to those where there is either firm policy or policy with some risks.



It is important to understand that this is only indicative analysis that sets out where policy interventions we have identified could influence areas of planned emissions abatement in the Heat and Buildings Strategy, where policy and delivery steps are currently lacking according to the CCC's analysis. This graph should not be interpreted as saying that these interventions would fully resolve emissions in this space, or move emissions between the areas highlighted by CCC (e.g. from significant risks to only some risks)

Endnotes

- 1 Scope 3 category 15 emissions – the carbon emissions associated with banks' lending
- 2 <https://www.unepfi.org/net-zero-banking/>
- 3 <https://eciu.net/media/press-releases/2022/poorly-insulated-homes-to-pay-1-000-more-on-gas-bills-this-winter>
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- 27 WPI Economics analysis: This is indicative analysis which considers which areas of domestic buildings abatement, where there is currently a policy gap or significant delivery risks, are targeted by B4NZ proposals. It is not intended to suggest that the policy gap or delivery risks would be resolved by these policies on their own.
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October 2022