



York and North Yorkshire's draft Retrofit Strategy

Increasing Comfort, Lowering
Costs and Supporting our Climate

2025–2030

York and North Yorkshire's Retrofit Strategy

Foreword

Mayor's Foreword

York and North Yorkshire is home to historic cities, thriving market towns, coastal communities and rural villages. It is the best place to live, work and visit. There is so much to be proud about but not everyone feels the prosperity.

Too many people live in deprivation and suffer because of it. Scarborough battles with lower life expectancy than the national average and in York it varies by as much as 11 years between neighbouring communities. Everyone deserves to live long, healthy lives no matter where they are from or how wealthy they are.

With over a quarter of our homes built more than 100 years ago, we have the potential to make a big difference by upgrading our buildings with the latest energy saving technology. This is about making sure everyone can be comfortable in hot summers or cold winters, and that bills are truly affordable.

That is why I welcome York and North Yorkshire's Retrofit Strategy, which sets out how we will go further and faster to make our buildings fit for now, and for the future. By working together we can cut our emissions, reduce household energy bills and create new skilled jobs as we move towards net zero by 2034 and carbon negative by 2040.

With our diverse building stock, strong heritage, growing biobased materials industry, and innovative projects, York and North Yorkshire can test and perfect new ways to upgrade buildings for the future. This is our opportunity to take action and lead the way, for our communities and so many more around the UK.

Mayor David Skaith

Mayor of York and North Yorkshire



Retrofit Strategy Task and Finish Group Chair's Foreword

Our buildings are diverse, unique and in grave need of upgrades to support the health and wellbeing of our communities and businesses, reach our climate change goals and boost our local economy. The scale of the challenge is huge – to become England's first carbon negative region we must retrofit nearly 250,000 homes to EPC C or higher and retrofit over 62% of existing business premises by 2038.

There are huge barriers to retrofit which are highlighted throughout this strategy, but what is also obvious from the engagement that has been done is that there is a large group of organisations with the motivation, expertise and willingness to collaborate to make retrofit happen at pace and scale.

Retrofit represents a great opportunity for York and North Yorkshire to be bold, to lead the way and to reap the benefits for businesses and communities. This strategy builds on great work so far in the region, and sets out our long-term ambition with the acknowledgement that we'll have to adapt due to changing policy and technologies.

The vision outlined in this strategy can only be delivered collaboratively, including local authorities, central government, businesses, skills providers, community organisations and many more.

On behalf of the Task and Finish group I would like to thank everyone who has been involved in developing this strategy for their time, expertise and energy. We look forward to working together in delivering the strategy and making York and North Yorkshire's buildings fit for now and for the future for all.

Carolyn Frank, Federation of Master Builders

Task and Finish Group Chair



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York and North Yorkshire's Retrofit Strategy

The Case for Action

Why Retrofit is important for York and North
Yorkshire

Why Retrofit? What are the benefits?

Comfort

Retrofit is an opportunity to improve the condition and resilience of our buildings to ensure that every person in York and North Yorkshire is comfortable and can afford to heat and cool their building. This is crucial – as of 2023, there were approximately 50,000 households in fuel poverty in York and North Yorkshire³. 63% of homes (221,308) and 57% (11,511) of non-domestic buildings have an EPC below EPC C⁴, which is used as a benchmark for building performance by Central Government – this does not include buildings which have no EPC or are exempt. Without retrofit, existing buildings could become unviable, untenable and at risk of decline or loss. Additionally, 28% of York and North Yorkshire's buildings were built before 1930⁴, and the area has many conservation areas and listed buildings. Retrofitting buildings appropriately can ensure that they are able to be used well into the future, and our heritage assets are preserved.

All of this means that our buildings are generally in poor condition, which can impact people's health and wellbeing. For example, cold homes have been found to have a direct negative impact on the mental and physical health of children and adults⁵. The UK is also experiencing a housing crisis which has resulted in ambitious housing targets across the region. Retrofit could play a part in the solution to meeting housing targets by bringing buildings back into use, especially as 90% of our country's housing stock in 2050 will be homes which exist today⁶.

Cost

As of 2024, 36.3% of households spend more than 10% of their income on domestic energy, which is an increase on previous years⁷. For businesses, energy bills have risen exponentially with the average bill for small businesses being £2889.37⁸. As a result, more than nine in 10 businesses expect to increase the price of their goods and services⁸.

Retrofit can reduce energy use, leading to lower bills for homes and businesses. Properties with an EPC rating below EPC E cost an average of £1000 more per year to heat than a typical home¹⁰. Based on this saving, retrofitting ~250,000 homes in York and North Yorkshire to EPC C or above could save up to £250 million per year in energy bills. There are also wider savings. For example, for every £1 invested in keeping buildings warm, it is estimated that there is an NHS saving of 42p in direct healthcare costs¹⁰.

Additionally, growing our local supply chain for retrofit is an opportunity to support our local economy, creating more jobs and opportunities. Although every building is different, the average cost of retrofitting an existing home to EPC C or above is £35,000¹¹. Applying this average to York and North Yorkshire's need to get ~250,000 homes to EPC C by 2038 results in £8.7 billion of investment to get homes to EPC C, in addition to what is required for non-domestic businesses which is harder to estimate. Keeping this money in York and North Yorkshire by utilising local businesses would grow the economy.

Climate

As storms, floods and heatwaves intensify across the world, there is growing urgency for collective action to tackle climate change. The viability of our economy and communities depends on urgent action. In York and North Yorkshire, the region has an ambition to reach carbon negative by 2040, to ensure we're making our fair contribution to mitigating climate change. YNYCA is also doing more research to understand how we need to adapt to our changing climate, as buildings are at risk from our changing climate such as heat waves, floods, soil erosion and storms¹².

Buildings are responsible for emitting 25% of the region's total emissions⁹. Most of these emissions come from the fossil fuels used to heat our buildings. Two thirds of our emissions come from domestic buildings, with the remainder coming from non-domestic buildings⁹. Additionally, 20% of UK built environment emissions come from the construction and refurbishment of buildings¹². Retrofit can deliver substantial emissions savings. For example, an air source heat pump can deliver a carbon saving of 2900kg per year compared to a gas boiler¹⁴. Therefore, the most sustainable building is one that already exists.

Therefore, retrofitting our buildings to reduce energy use, reduce energy demand (reducing stress on the electricity grid) and move away from fossil fuels, whilst ensuring they are resilient to climate change, is crucial for our carbon negative ambition and the health of our citizens.

Therefore, to support our region across our society, our economy and our environment, we must take action on retrofit. 5

What is the opportunity for York and North Yorkshire?

Aside from the benefits of retrofit, York and North Yorkshire is in a strong position to lead the way for retrofitting buildings.

Our region has:

- A unique building stock, with rural, coastal and urban roots.
- A strong heritage sector, with 28% of York and North Yorkshire's buildings having been built before 1930, and a high number of conservation areas and listed buildings.
- A thriving biobased materials sector including hemp and sheep's wool, which can be used for insulation.
- An ambitious carbon negative aspiration as a region, with a role to play for every person in York and North Yorkshire.
- Innovative projects like the Local Net Zero Accelerator, which focuses on unlocking private sector investment, and the Innovate UK funded Retrofit One Stop Shop for York.

All of this means that we have the ability to test, trial, perfect and lead the way for retrofit.

We are developing this regional Strategy to harness these opportunities. Nationally, retrofit is central to the delivery of the Government's forthcoming Warm Homes Plan and has a role to play in the delivery of national and local housing targets. Additionally, whilst retrofit is currently driven by Central Government funding schemes, Combined Authorities are being given more local powers and devolved funding to deliver retrofit. Therefore, it is essential that we map out our approach now to cement our strong position, so we can make the most of future opportunities.

This Strategy is a result of extensive collaborative work which has identified key action areas. However, to truly deliver transformative change, significant investment (such as a devolved retrofit settlement) is required. This would mean that the region can undertake more retrofit at a greater pace and scale to realise the benefits for the region.

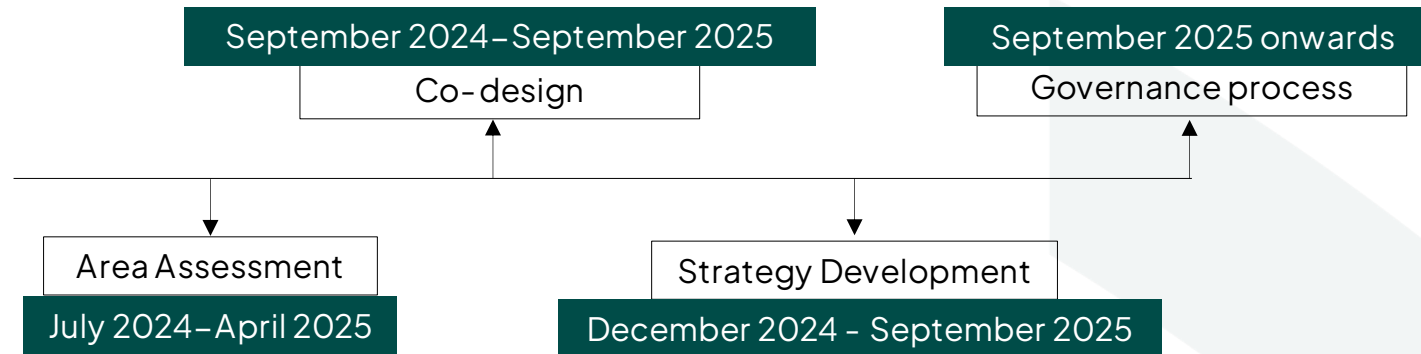


York and North Yorkshire's Retrofit Strategy

Overview of Development Process
How the Retrofit Strategy was developed

Development Process

The Retrofit Strategy has been developed with key stakeholders from across the retrofit system, following the process outlined below. This means that people with the relevant experience and skills have come together to create the Retrofit Strategy, and will play a role in delivering it.



Governance

To guide the development of the Strategy, a Task and Finish Group was established in February 2025. This group includes representatives from key stakeholders such as North Yorkshire Council, City of York Council, the Federation of Master Builders, the York and North Yorkshire Housing Partnership, Historic England, the Federation of Small Businesses, Northern Powergrid and many more. The group exists to support the following objectives:

1. Provide strategic direction to the co-design of York and North Yorkshire's Retrofit Strategy, ensuring alignment with other strategies and activity, resulting in a high quality document that is nationally leading. This must include alignment to York and North Yorkshire's Routemap to Carbon Negative;
2. Ensure the Strategy is deliverable across a range of partners;
3. Support the creation of a Stakeholder Engagement Plan to ensure adoption of the Retrofit Strategy;
4. Provide challenge to the co-design process and document drafting, creating a robust approach and provide holistic subject matter expertise around retrofit, looking across all elements of the retrofit system and wider sectors and regions where needed;
5. Support the development of a proposed governance structure that can provide direction, strategic leadership and accountability for the delivery of the Retrofit Strategy.

Development Process

July 2024 -
April 2025

Area Assessment:

The Area Assessment aimed to build an evidence base to inform the direction of the Retrofit Strategy, which included:

- Review of national and local policy, strategy and research – YNYCA undertook a review of policy, strategy and research both locally and nationally to better understand the retrofit space. This included items like the National Retrofit Strategy and Historic England Advice Note 18.
- Retrofit Skills Assessment – The Retrofit Skills Assessment focuses on our local supply chain. It examined what York and North Yorkshire's current supply chain looks like, what it would need to look like in the future to deliver retrofit at the scale necessary for net zero, and what the gaps are between these. The conclusion of this work was that there is a large gap between the 500 people currently in the supply chain, and the 13,000 needed to deliver retrofit at scale, but that there are ways that more people can be employed into retrofit roles.
- Retrofit Data Consolidation – YNYCA examined what data is held around the region linked to retrofit, to better understand what information there is and how it can be utilised to inform retrofit delivery and strategy. The conclusion of this work was that the region holds a lot of data about buildings, but that this is spread out across different organisations, so for this information to be used strategically it would need to be consolidated into one platform.
- Carbon Abatement Pathways (CAP) Study refresh – When the first Routemap to Carbon Negative was developed, the CAP Study (2021) was undertaken to create a baseline for the region's emissions and understand viable pathways to net zero. As the Routemap to Carbon Negative is being refreshed, the CAP study refresh (2024) provides a refreshed pathway for York and North Yorkshire to reach net zero and carbon negative. It reflects progress made so far and an emissions baseline for 2022. This work breaks down emissions by sector, which includes Heat and Buildings. Some additional work done by YNYCA provides an update to 2023.

Co-design:

Building on initial findings from the Area Assessment, YNYCA held a number of workshops to co-create a vision for retrofit, inform the direction of the Retrofit Strategy and create ideas for implementation. This included:

- York and North Yorkshire Retrofit Strategy Workshop – This full day, in-person workshop brought together 50+ stakeholders from across the retrofit system including skills providers, retrofit experts, local authorities and businesses. The day focused on co-creating a vision for retrofit, examining the strategic priorities and creating a prioritised list of interventions.
- Online workshops – To consolidate the outputs from the in-person workshop, three online workshops were held. These focused on the themes of Strategic Leadership and Collaboration, Developing Retrofit Supply Chains and Market Development. These sessions were more in-depth and added valuable detail to the outputs of the in-person workshop, whilst drawing out themes and further breaking down key challenges.
- Follow-up engagement – Further engagement was undertaken where necessary, such as to better understand a suggested action or to examine how key stakeholders could be involved in the Strategy.

Pulling together the Area Assessment and Stakeholder Workshops:

The Area Assessment and Stakeholder Workshops were then pulled together to create a first draft of the Retrofit Strategy. This involved cross-checking what stakeholders said with the evidence, such as comparing the supply chain barriers from the Retrofit Skills Assessment with stakeholder comments from the workshops.

September
2024 –
September
2025

December
2024 –
September
2025

York and North Yorkshire's Retrofit Strategy

Area Assessment

A summary of evidence and activity

Local Strategic Context – Strategy, Policy and Funding



National

- Warm Homes Plan (expected Autumn 2025)¹⁵
- National Planning Policy Framework¹⁶ and other planning reform
- Historic England – Adapting Historic Buildings for Energy and Carbon Efficiency, Advice Note 18¹⁷
- National Retrofit Strategy¹⁸
- Warm Homes: Local Grant, Warm Homes: Social Housing Fund, Public Sector Decarbonisation Scheme (PSDS)
- EPC reform¹⁹
- National Retrofit Hub Knowledge Hub²⁰
- Minimum Energy Efficiency Standards (MEES)²¹

Regional

- York and North Yorkshire's Local Growth Plan
- Routemap to Carbon Negative
- 10 Year Housing Plan
- Spatial Development Strategy
- York and North Yorkshire Local Skills Improvement Plan (LSIPs)²²
- York and North Yorkshire Skills Strategy²³
- York and North Yorkshire Housing Partnership Housing Prospectus²⁴
- York and North Yorkshire's Retrofit Strategy

Local

- City of York Council Climate Change Strategy²⁵
- City of York Retrofit Action Plan²⁶
- North Yorkshire Council Climate Change Strategy²⁷
- Yorkshire Dales National Park Management Plan²⁸
- North York Moors National Park Management Plan²⁹
- City of York Local Plan³⁰
- North Yorkshire Local Plan³¹

There are a number of completed and developing strategies and plans nationally, regionally and locally which relate to the Retrofit Strategy. The Retrofit Strategy falls into the regional aspect of our strategic context as it covers York and North Yorkshire.

It is important to understand the national context for retrofit, as changes at a national level could greatly impact the region. For example, there are calls for electricity prices to be decoupled from gas, and some major planning changes have already taken place nationally such as the removal of the rule requiring heat pumps to be installed at least one metre away from a property's boundary. Whilst some of the national context is advisory rather than set policy, such as the National Retrofit Strategy, it is crucial that York and North Yorkshire's Retrofit Strategy is joined up with these key documents. This strategic context highlights that support for retrofit is growing, and that now is an opportune time for York and North Yorkshire to be at the forefront of local retrofit strategy and delivery.

Regionally and locally, the Retrofit Strategy is intended to complement other strategies and action plans in the region, rather than duplicate effort. As a result, the Retrofit Strategy is more high level and strategic than many of the local documents listed here.

Local Strategic Context – Spotlight on retrofit projects



York and North Yorkshire is home to many innovative projects and initiatives, a few examples of which are detailed here. This highlights the progress that has been made so far, and should inspire us to go further and faster as a region.

Retrofit One Stop Shop for York (ROSSY)

The City of York Council-led and Innovate UK funded ROSSY project has developed a “one stop shop” service in York. The service is seeing good demand from customers, with 100 assessments completed, 45 customers connected to suppliers for installations and 194 advice calls provided so far.

As part of ROSSY, YNYCA has created the York Retrofit Network. With approximately 30 businesses attending each of the 9 sessions so far, the network has been a huge success and highlights the potential of our local supply chain.

Local Energy Advice Demonstrator (LEAD)

Two Local Energy Advice Demonstrator (LEAD) projects in York and North Yorkshire were completed in March 2025, focused on providing advice to homeowners.

North Yorkshire Council's project focused on sharing resources and utilising local organisations to overcome a lack of confidence and communication in retrofit. This resulted in the delivery of 151 Home Assessments, 43 Home Reports and provision of energy advice to 274 people.

City of York Council's project focused on providing advice for harder to treat/solid wall homes in conservation areas and traveller sites. This resulted in the delivery of in-person advice to 452 people and a 100% customer satisfaction score.

UK Shared Prosperity Fund

In 2023, North Yorkshire Council allocated a proportion of their Shared Prosperity Funding (UKSPF) to their sustainability programmes for both businesses and community groups. 72 decarbonisation projects were supported to enact retrofit measures such as replacing doors and windows, installing insulation, lighting upgrades and installing solar panels and heat pumps. This programme has continued for financial year 2025/26 and is being delivered by YNYCA.

Broadacres Housing Association

Broadacres utilised £2.4 million from the Social Housing Decarbonisation Fund to retrofit 400 homes. The team aimed to undertake retrofits which would make a significant difference to people's lives, which resulted in measures often going beyond EPC C. This included 400 solar PV systems, 53 Air Source Heat Pumps, 156 loft insulation top ups, floor insulation in 15 homes and smart air bricks in 24 homes.

Yorkshire North & East Methodist Church

Using over £700,000 of funding from the Net Zero Fund, 20 churches have received decarbonisation works such as solar PV, heat pumps and insulation. This has benefitted over 500,000 people based on average footfall, including users of community ladders, uniform banks and dementia cafes.

Sheepish

Peacock and Verity have ensured sheep's wool insulation is a major component in the designs of 15 Silver Street in Masham, which is currently undergoing extensive redevelopments. Native Architects are integrating biobased materials into the design, ensuring there are teaching and testing elements. Peacock and Verity have also undertaken consultation and research to explore the strengths and pitfalls of developing a Yorkshire Circular Supply Chain for Sheep Wool insulation.

Green Skills Courses

Funded by the UK Shared Prosperity Fund (SPF), and in collaboration with North Yorkshire and City of York Councils, York College supported learners on retrofit courses. These included a Level 3 Award for Energy Efficiency for older and traditional buildings, and a Level 5 award for Retrofit Coordination and Risk Management.

Solar Panels on York Minster

York Minster has had solar panels installed as part of a range of decarbonisation measures, which form part of the York Minster Neighbourhood Plan. The 184 panels on the roof of the Minster were switched on in January 2025, generating 70,000 kWh of energy, enough to deliver a third of the Minster's electricity requirements.

Skills and Supply Chain in York and North Yorkshire



The Retrofit Skills Assessment, completed in February 2025, aimed to set out future retrofit skills requirements for York and North Yorkshire, and identify the gap between this and the current supply chain. This gap is highlighted below.

The assessment examined roles such as installers, manufacturers, professional services (like advice and evaluation) and other administrative roles. Whilst this exercise focused on York and North Yorkshire, it is noted that the supply chain does not follow local authority boundaries, and businesses from West Yorkshire, South Yorkshire, the North East etc. are also part of our supply chain. Businesses from these areas have also been involved in the development of this Strategy.

The main conclusion to draw from the assessment is that there is a huge gap between the current labour force (500 people) and the peak labour requirement in 2031 (13,000 people) required to deliver net zero by 2034, across a range of roles. This will be a substantial challenge to deliver and requires extensive collaboration across the region. However, 25,000 potential employees were identified in other industrial groups with similar skills profiles to retrofit, some of which are roles that will be scaled down as we transition to net zero, such as those linked to oil and gas. Therefore, a key action from this work is supporting these employees into appropriate roles in retrofit, providing long term job security and equipping the region to deliver retrofit.

Current State

- There are 300+ retrofit businesses in York and North Yorkshire;
- There is a particular gap in insulation businesses, with fewer than 10 operating in the region;
- Retrofit businesses are centred around Harrogate and York;
- There is a labour force of approx. 500 people;
- Training provision is concentrated around York and Harrogate;
- There is a general skills shortage in the construction industry which has implications for retrofit. There are also more specific skills shortages in areas of expertise such as heritage retrofit and retrofit assessors and coordinators;
- There are gaps in provision around air source heat pumps, battery storage, insulation and heritage skills, and there is a need for soft skills;
- There is a general sense that the current supply chain is not in a position to scale up to meet identified retrofit requirements;
- Providers report that there is generally a lack of demand for retrofit qualifications, and difficulty around recruiting suitably experienced tutors or having the resources to upskill existing tutors.

Future State

- To deliver all required retrofit measures by 2034, the peak labour requirement is 13,000 people in 2031;
- 25,000 potential employees have been identified in other industrial groups with similar skills profiles to retrofit. This includes industries which are expected to decline due to shifts to renewables, such as roles in oil and gas.

Emissions from Heat & Buildings in York and North Yorkshire



From the Carbon Abatement Pathway (CAP) study (2024) we know that in York and North Yorkshire, the buildings sector (compared to Transport, Power, Business and Industry, Waste, and Land Use, Land Use Change, and Forestry) shows the highest fall in emissions from 2005 to 2023, with a reduction of almost 50% (1.9 MtCO₂e reduction). Changes in fuel mix for electricity generation, above average temperatures and rising costs for electricity and gas are associated with this reduction. Average use of natural gas and electricity shows a downward trend by domestic users, and an upward trend by non-domestic users.

Despite this progress, the buildings sector currently accounts for 25% of emissions in York and North Yorkshire at 1.62 MtCO₂e, with most emissions coming from domestic buildings gas consumption. Two thirds of building emissions in York and North Yorkshire are from domestic buildings (1.09 MtCO₂e) with the remainder from non-domestic buildings (0.54 MtCO₂e). There is also a difference between York, and North Yorkshire - buildings account for 46% of City of York's emissions (0.35 MtCO₂e) and 23% of North Yorkshire's emissions (1.27 MtCO₂e).

When current emissions (from 2023 due to available data) are reviewed against the projections of the original CAP (2021), they are higher than those projected in the decarbonisation pathways. This highlights that although progress has been made since 2005, more rapid decarbonisation is required.

Therefore, buildings are a significant part of the challenge of reaching net zero and carbon negative, and must be tackled.

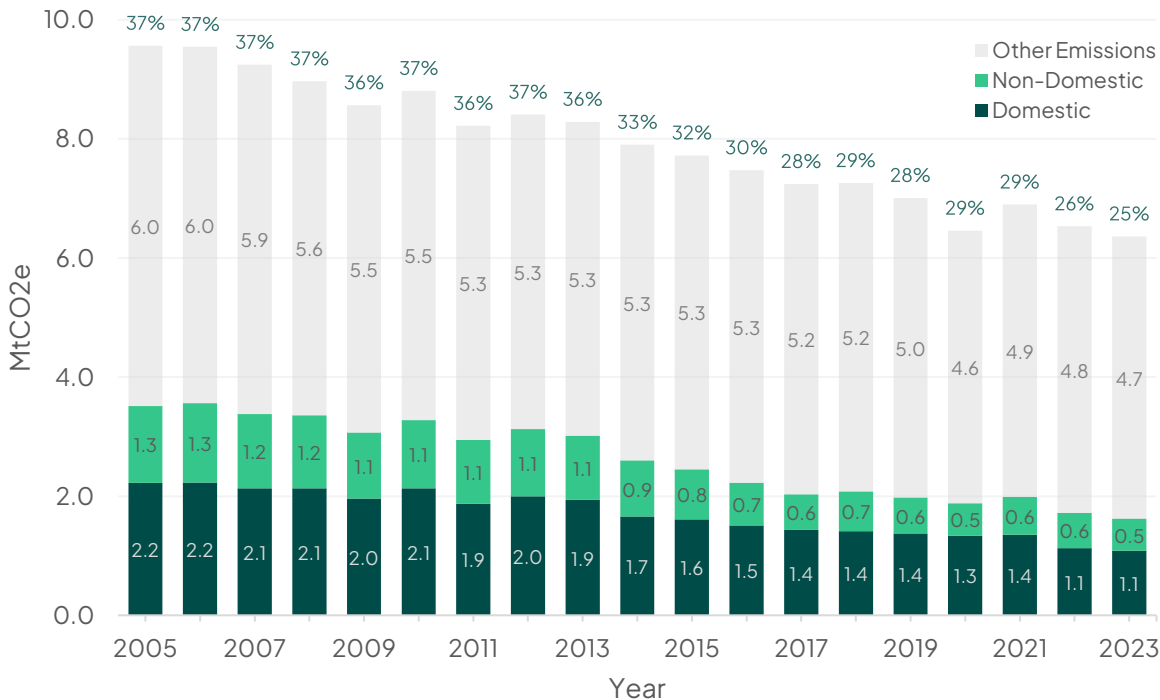


Figure 1. DESNZ Historical Emissions from Buildings compared to all other* sectors 2005 to 2023 across York and North Yorkshire.

*Other sectors include Industry, Transport, Agriculture, Land Use and Forestry, and Waste

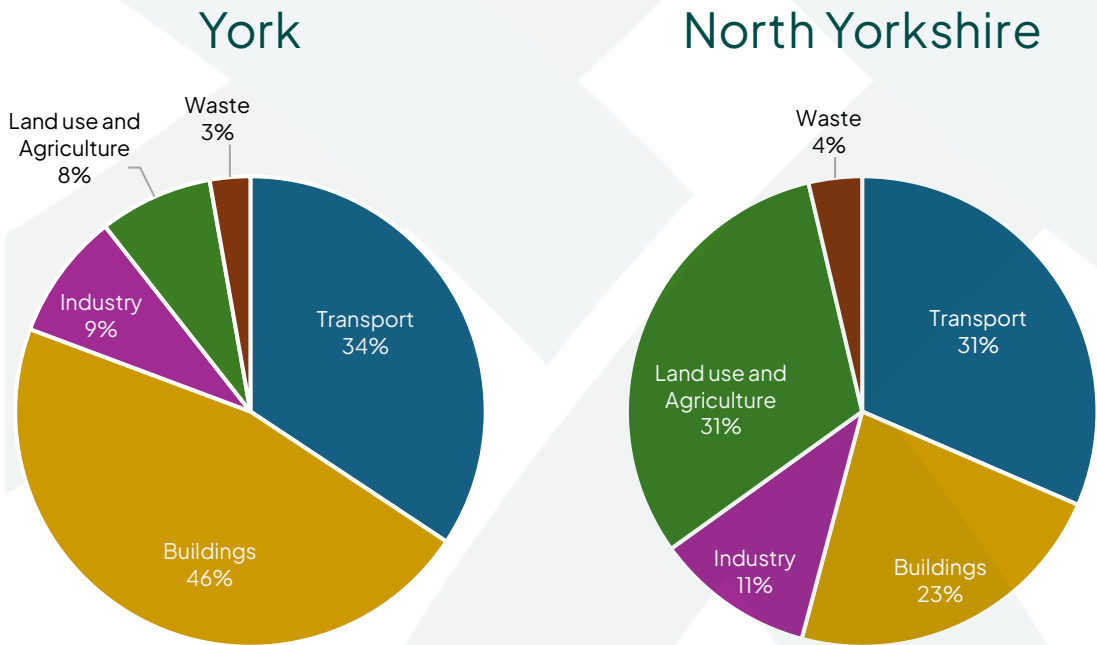


Figure 2. 2023 DESNZ Sector emissions breakdown by percentage for York and for North Yorkshire



Scale of Ambition to Reach Net Zero and Carbon Negative

Based on progress made and our current emissions, the CAP study examined how we can get to net zero and beyond to carbon negative. The York and North Yorkshire Leading the Way pathway shows the scale of possible changes given a set of assumptions. The pathway implies significant electrification of heating, transport and industry, as well as a significant increase in low-carbon power generation and high rates of forest planting.

The York and North Yorkshire Leading the Way pathway is based on assumptions, which have formed the scale of ambition. These are not intended to be 'targets' but provide a direction of travel and illustrate the scale of change required to reach net zero and carbon negative. The scale of the challenge is huge, but to reach net zero and gain the environmental, social and economic benefits of retrofit, we must accelerate the pace and scale of retrofit in line with these ambitions. Scale of ambition figures relevant to retrofit are outlined below, which includes those from the heat and buildings section and business and industry section.

Scale of Ambition

Scale up to retrofit homes to EPC C: 179,328 by 2030, and a further 70,000 by 2038

Retrofit ~1600 public buildings to at least a Display Energy Certificate (DEC) C rating or above by 2030

Retrofit ~1600 community buildings to at least a DEC C rating or above by 2038

Scale up to retrofit 12,726 (32%) of existing business premises to EPC C by 2030, and a further 11930 (30%) by 2038

Scale up rooftop solar to 67227 homes by 2030, and a further 31,000 homes by 2038

Scale up to deploy solar on 1745 business premises roofs per year (48 GWh) up to 2038

Scale up to deploy decarbonised heating (such as heat pumps, geothermal and district heating) to 179,328 homes by 2030 and a further 70,000 by 2038

Scale up decarbonised heating to cover 4000 non-domestic buildings by 2030 and 5000 further non-domestic buildings by 2038

No new oil boiler installation by 2030

Data Consolidation Exercise



YNYCA examined what data is held around the region linked to retrofit to better understand what information there is and how it can be utilised to inform retrofit delivery and Strategy. A summary of this work is provided here.

Key Findings

- There are many different approaches to storing spatial data – some stakeholders list buildings by postal address, some by GPS coordinates etc. Whilst this makes sense for individual organisations, it makes it more difficult to compare datasets across the region.
- However, the majority of data is stored as a spreadsheet, with some limited abilities to provide data visualisation.
- Whatever solution is built to produce a cohesive picture of the region will rely on EPC data initially, as this is the main dataset used by many stakeholders. However, the feedback from different organisations was that EPCs are often not reliable or accurate, and that other forms of measurement might be better – there were no alternative measurements found during this exercise.
- Consolidating data in the region would require extensive use of Information Sharing Agreements (ISAs), as most datasets include some personal information.
- Where automatic updates are not available, the frequency of updating datasets is limited by the capacity required to perform updates. This will vary between stakeholders and is also informed by their reporting mechanisms.
- The social housing sector has more up to date information than private housing, as EPCs only last for 10 years and only need to be renewed when a house is sold or rented, whereas social housing providers are more active in understanding their buildings.
- Whilst there is some information about non-domestic buildings through Display Energy Certificates (DECs) and through anecdotal understanding from organisations about their buildings, this does not create a full picture of the non-domestic buildings in the region.

Next Steps

From the data consolidation exercise, it was concluded that creating a shared dataset amongst key stakeholders in the region would be a useful exercise which would aid strategic thinking. For example, if there are areas where there is extensive social housing but also large businesses and private housing, examining all the available data may highlight opportunities for collaborative solutions.

To understand what the possible solutions are, an options appraisal is currently being undertaken. There are some existing platforms which could enable a shared dataset, but a bespoke solution may offer more flexibility and tackle more of the challenges listed above. This work will be continued and is detailed further in the Data and Research action plan.

Building Stock Summary



York and North Yorkshire's building stock is diverse and covers a range of uses, ownership models, designs and requirements. The scale of the challenge for our building stock is outlined in more detail on the next pages.

Archetypes

Common archetypes for domestic buildings include terraces, and stone built cottages. As the region includes historic centres and market towns, many non-domestic buildings are older buildings, and there are also several large industrial estates.

Heritage

There are a large number of heritage buildings. In this Strategy, heritage buildings are defined as listed buildings, buildings in conservation areas and specially designated landscapes or buildings built before 1930. There are over 2000 listed buildings in York and over 12,200 in North Yorkshire. Listed buildings must have EPCs, but may be exempt from implementing the recommended measures, and Historic England guidance is that carrying out inappropriate work to meet a specific EPC rating can result in harm to the building fabric and health of the occupants³¹. Over 18,000 properties intersect a conservation area in the City of York, and there are 331 conservation areas across North Yorkshire, including two National Park areas which are separate planning authorities (however buildings in protected landscapes can also apply for exemptions). All of these have additional requirements in terms of planning and permissions compared to non-listed and non-conservation areas. Additionally, there are 98,559 dwellings (28%) in York and North Yorkshire which were built before 1930.

Heritage buildings are not only people's homes, but also have a significant economic impact, contributing an estimated £2.1 billion in GVA³² and 41,000 jobs. Based on this and the role that heritage buildings play in York and North Yorkshire, they require a bespoke approach to ensure that harm is not done by retrofitting incorrectly, and that our regional heritage and identity is protected now and into the future.

Domestic Buildings

There are 397,303 dwellings in York and North Yorkshire. 87% of these are private dwellings (private owned and private rented), and 13% are social housing or other public sector dwellings. 88% (348,882) have an EPC, which highlights that 63.43% of domestic buildings in York and North Yorkshire have an average energy efficiency rating below EPC C. Additionally, as of 2023, there were approximately 50,000 households in fuel poverty in the region³.

Approximately 1,161,940 measures are required across the stock, including: wall insulation (156,713), floor insulation (189,478) and loft insulation (75,952), draughtproofing (21,536), replacing windows and doors (52,166) and installing heat pumps (389,231), solar PV (276,864) and battery storage. Overall, the stock requires substantial upgrades to realise the benefits of comfort, cost and climate.

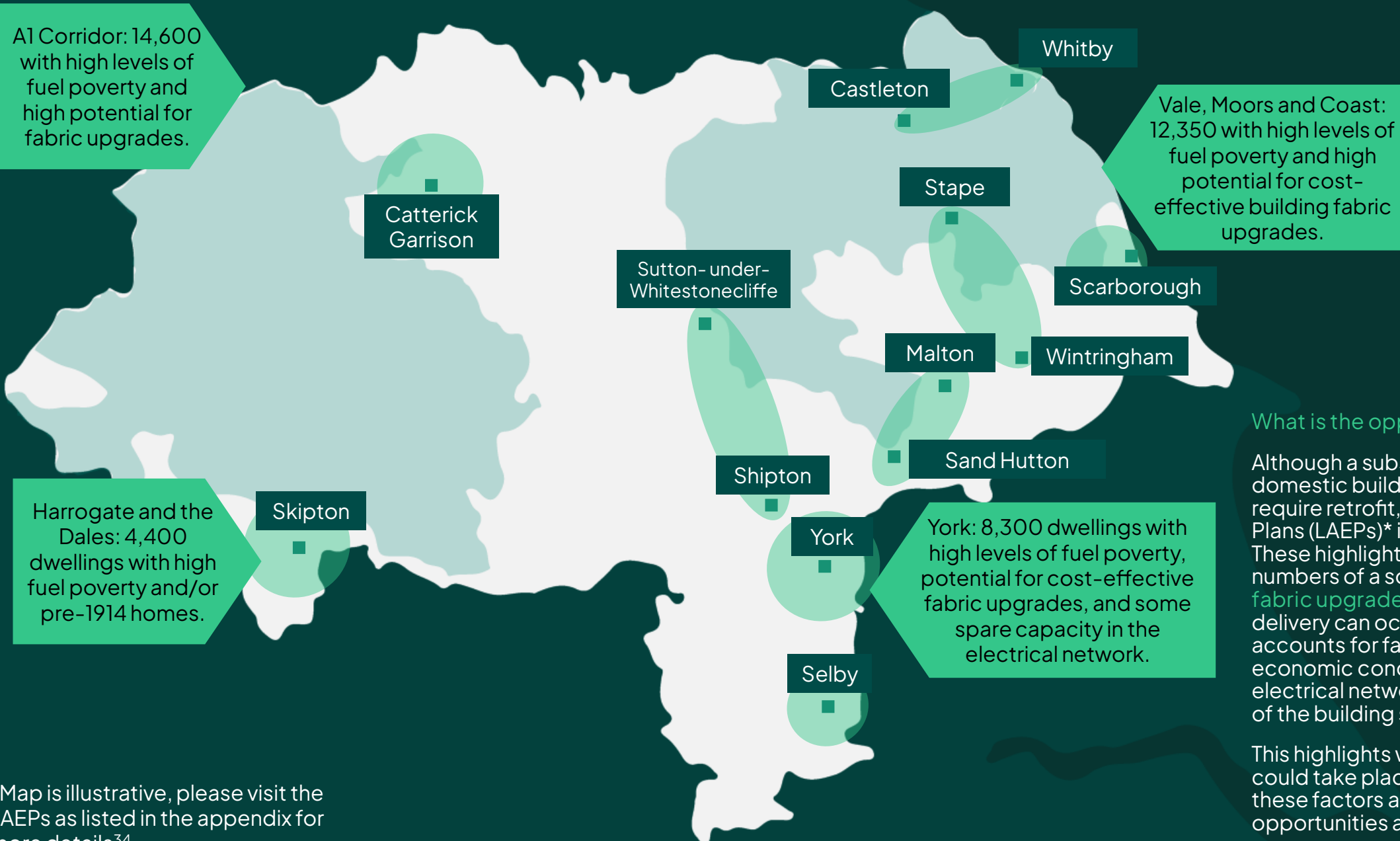
Non-Domestic Buildings

Less information is available about non-domestic buildings, as a definitive source is not readily available. This can include business premises like industrial estates, public sector buildings and community buildings like village halls, places of worship, leisure centres etc. However, some high-level figures have been identified.

57% of the non-domestic stock in York and North Yorkshire has an EPC worse than C. Approximately 90% of the non-domestic stock uses either grid electricity or natural gas. Common measures required across the stock include wall, floor and roof insulation, replacement heating and installation of solar PV.

To better understand and support non-domestic retrofit, further research is required.

Domestic Fabric Upgrades



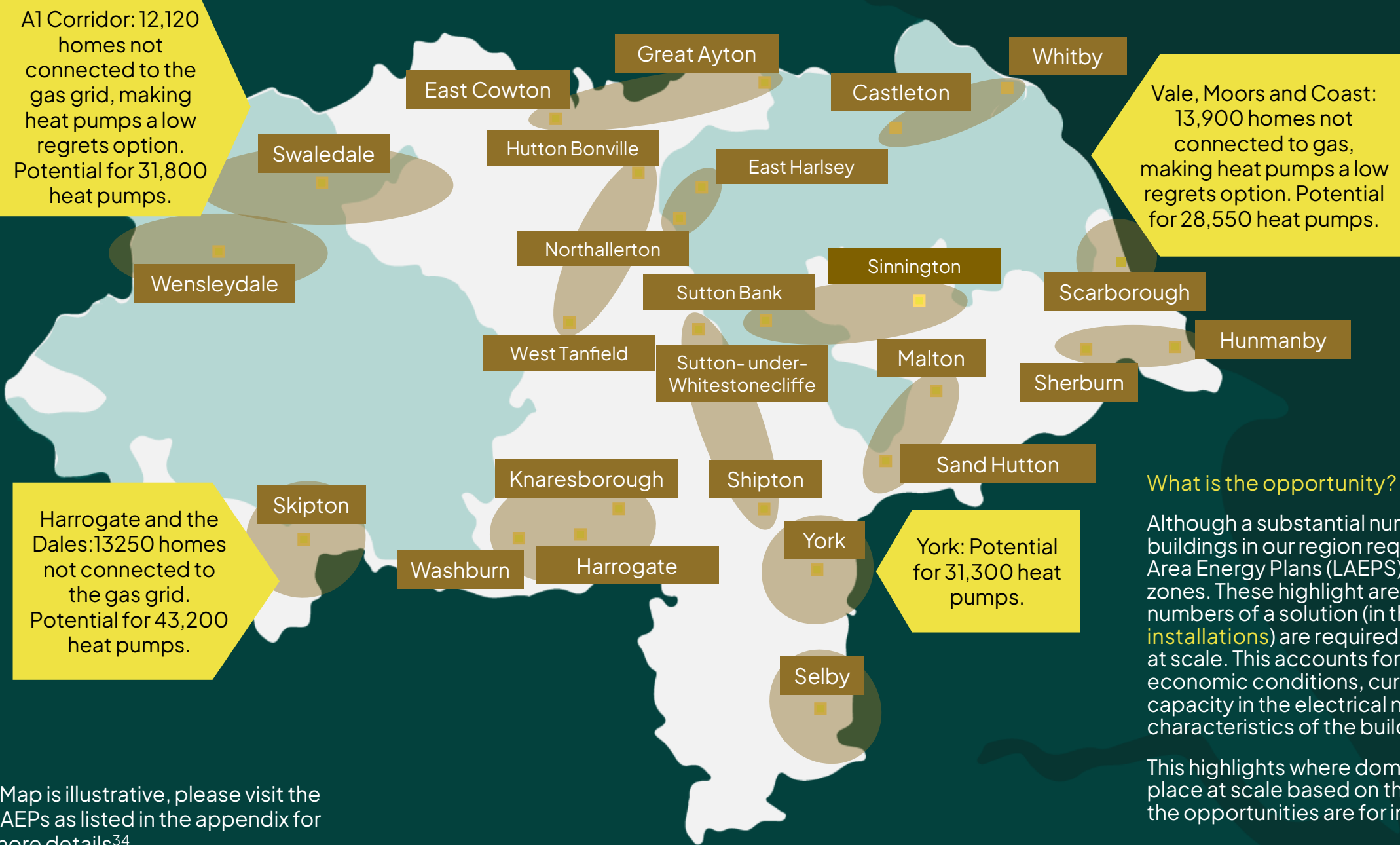
What is the opportunity?

Although a substantial number of the domestic buildings in our region require retrofit, the Local Area Energy Plans (LAEPs)* identified focus zones. These highlight areas where large numbers of a solution (in this case, **fabric upgrades**) are required, so delivery can occur at scale. This accounts for factors like socio-economic conditions, capacity in the electrical network and characteristics of the building stock.

This highlights where domestic retrofit could take place at scale based on these factors and what the opportunities are for investment.

*Map is illustrative, please visit the LAEPs as listed in the appendix for more details³⁴.

Heat Pump Installations



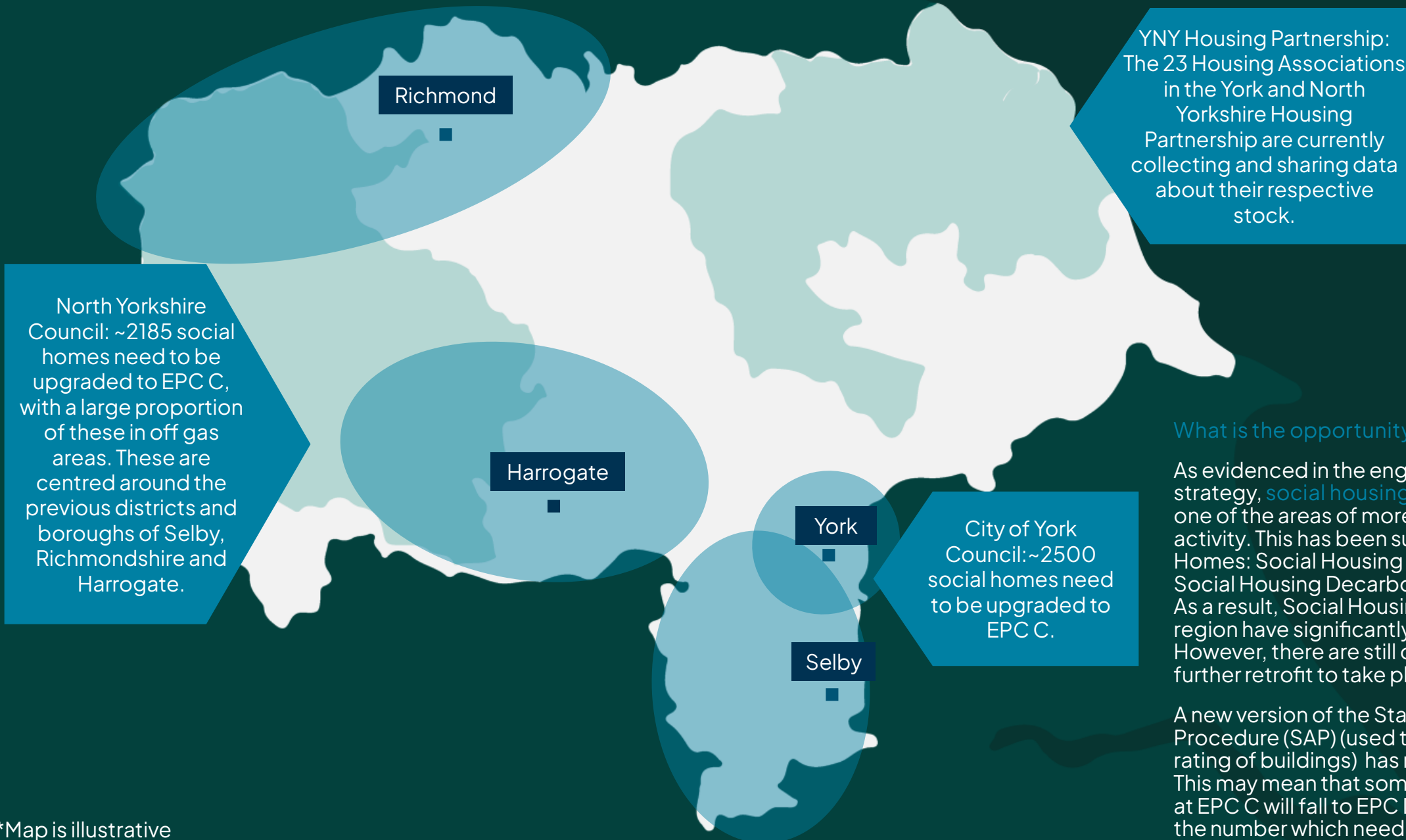
What is the opportunity?

Although a substantial number of the domestic buildings in our region require retrofit, the Local Area Energy Plans (LAEPs)* identified focus zones. These highlight areas where large numbers of a solution (in this case, **heat pump installations**) are required, so delivery can occur at scale. This accounts for factors like socio-economic conditions, current heating methods, capacity in the electrical network and characteristics of the building stock.

This highlights where domestic retrofit could take place at scale based on these factors and what the opportunities are for investment.

*Map is illustrative, please visit the LAEPs as listed in the appendix for more details³⁴.

Social Housing Upgrades

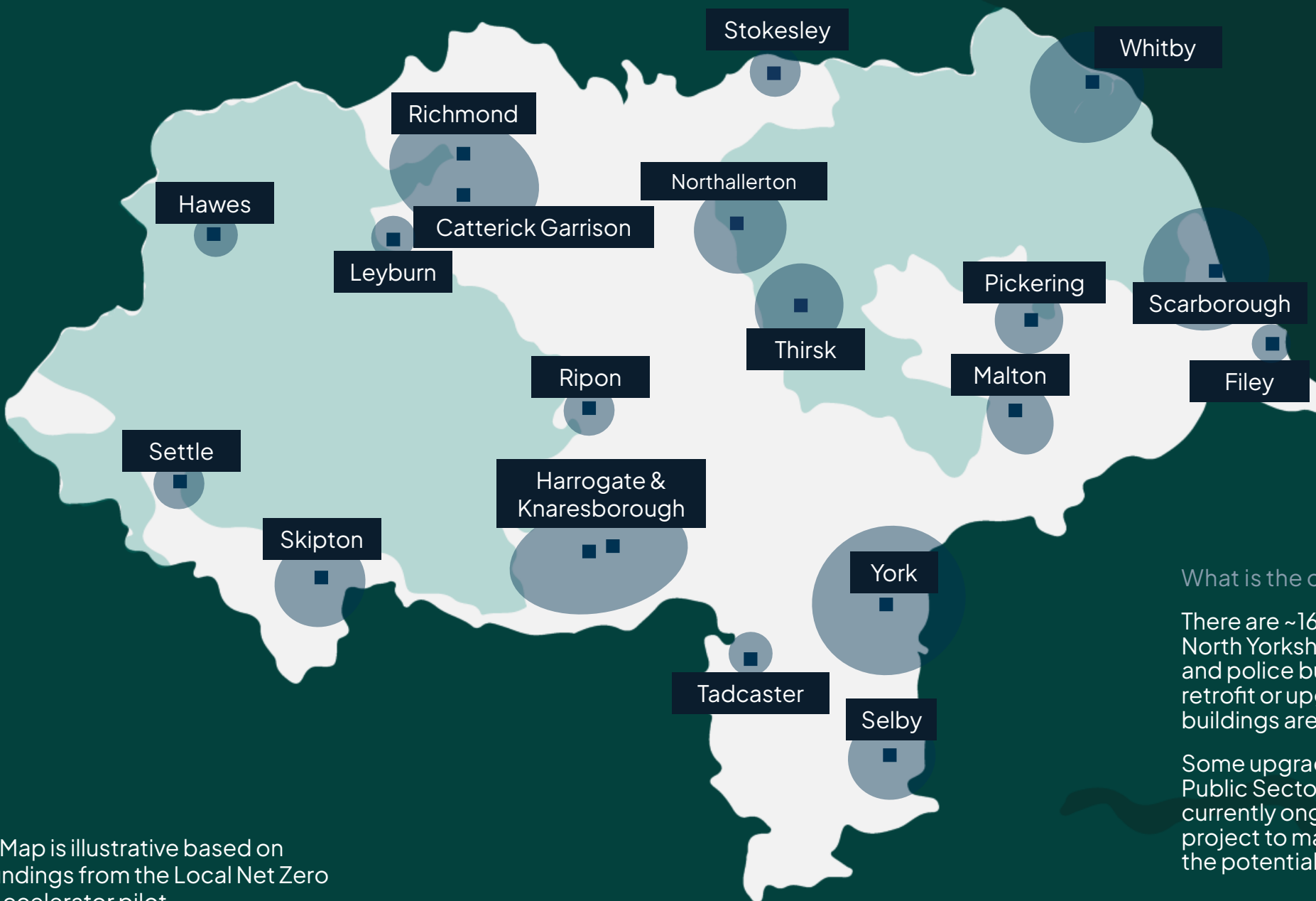


What is the opportunity?

As evidenced in the engagement for this strategy, [social housing retrofit](#) is currently one of the areas of more significant retrofit activity. This has been supported via the Warm Homes: Social Housing Fund (previously the Social Housing Decarbonisation Fund (SHDF)). As a result, Social Housing Providers across the region have significantly uplifted their stock. However, there are still opportunities for further retrofit to take place.

A new version of the Standard Assessment Procedure (SAP) (used to calculate the energy rating of buildings) has recently been released. This may mean that some properties currently at EPC C will fall to EPC D, therefore increasing the number which need to be uplifted.

Public Sector Building Upgrades



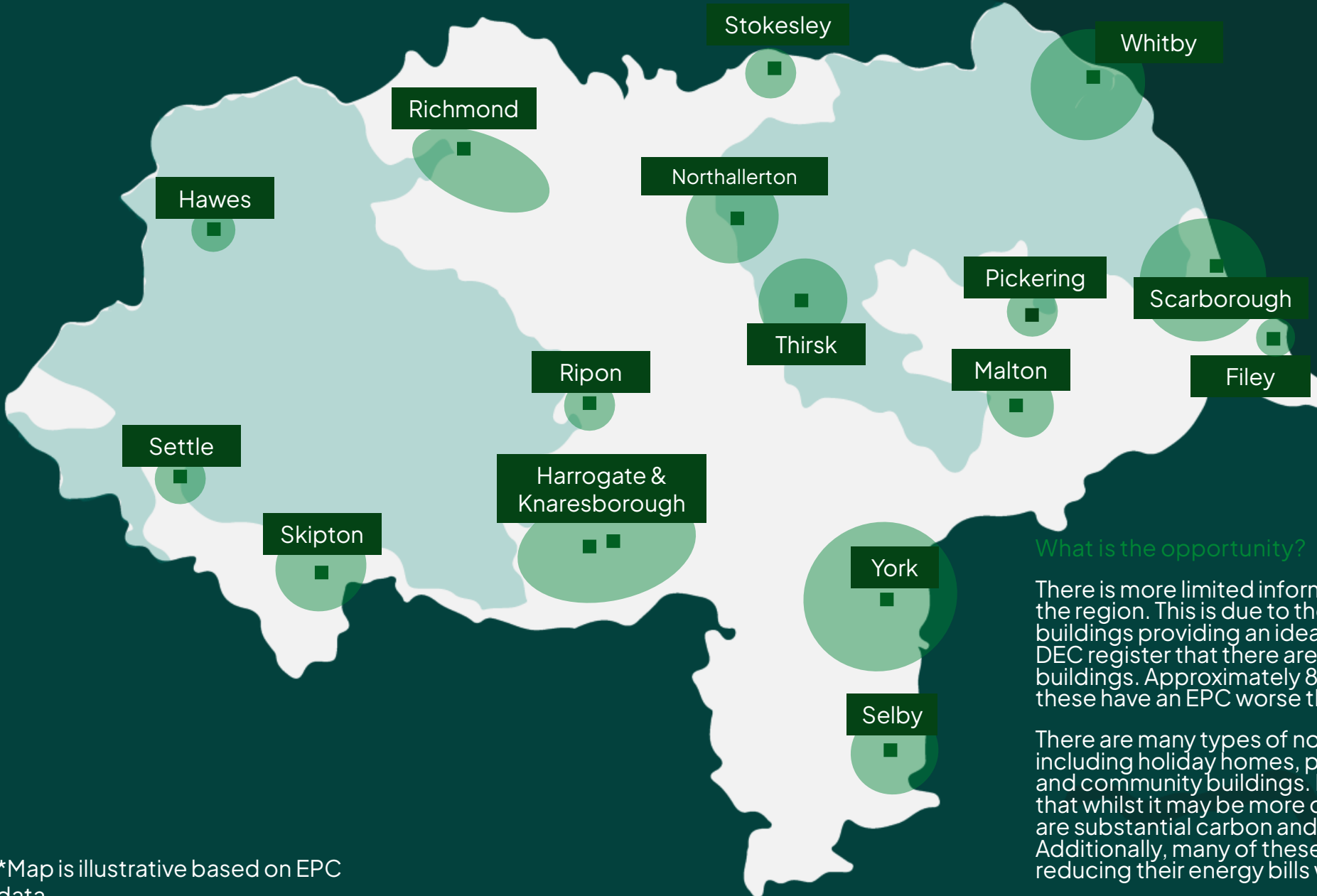
What is the opportunity?

There are ~1600 public buildings* across York and North Yorkshire, such as leisure centres, care facilities and police buildings. The majority of these require retrofit or upgrades of some kind. Many of the buildings are pre-1919 and others are listed.

Some upgrades have taken place, such as through the Public Sector Decarbonisation Scheme. Work is currently ongoing via the Local Net Zero Accelerator project to map public sector assets and understand the potential for private investment.

*Map is illustrative based on findings from the Local Net Zero Accelerator pilot.

Non-domestic Upgrades



What is the opportunity?

There is more limited information about non-domestic buildings in the region. This is due to the lack of a definitive list of non-domestic buildings providing an idea of scale. However, we can see from the DEC register that there are in excess of 20,000 non-domestic buildings. Approximately 88% of buildings have an EPC, and 57% of these have an EPC worse than C.

There are many types of non-domestic buildings in the region, including holiday homes, places of worship, warehouses, theatres and community buildings. In the co-design process, it was noted that whilst it may be more difficult to retrofit these buildings, there are substantial carbon and cost savings due to the size of the assets. Additionally, many of these buildings serve their communities, and reducing their energy bills will support this further.

*Map is illustrative based on EPC data.

Building Context in York and North Yorkshire – Opportunity Points



As shown on the previous pages, the scale of the challenge for delivery of retrofit is huge, but there are many benefits to be realised. This section examines what opportunity points (outside of policy and funding) are available to support further delivery of retrofit, outside challenges such as skills or finance.



Boiler replacements

According to Heat in Buildings³⁵, 1.2 million boilers are replaced every year in England. Based on the same rate of replacement for the number of homes in York and North Yorkshire, this suggests that approximately 18,000 boilers are replaced in the region every year. If all of these boilers were replaced with heat pumps, York and North Yorkshire could install just over 93,000 heat pumps between 2025 and 2030. This would also be a key lever for other approaches such as geothermal and heat networks.



Home improvements

The home improvement industry has a lot of overlap with retrofit and is a good indication of the appetite homeowners have for making changes to their homes. In 2024, it was predicted that 1.06 million new kitchens would be installed in the UK in 2024³⁸. Based on the same rate of replacement for the number of homes in York and North Yorkshire, this suggests over 16,000 kitchens are replaced every year. As this work is disruptive anyway, it is a prime opportunity for retrofit to occur. Where possible, retrofit could also be mentioned as part of existing maintenance programmes.



Vacant homes

In York and North Yorkshire, there are approximately 4759³⁶ long term vacant homes, which are homes that have been unfurnished and not lived in for over 6 months. Retrofitting and refurbishing these buildings could provide an uplift to housing provision in the region.



Moving to a new building

A key opportunity point is when a building changes hands through a sale. 840,030 homes and 101,390 non-domestic buildings were sold in England in 2023–24³⁹, highlighting the scale of the property market. Ensuring retrofit is understood by key stakeholders in this transition such as estate agents, will be crucial for encouraging buyers to consider retrofit.



Solar

Analysis of more than 5 million property sales has shown that installing solar PV on a typical home could increase its value by £1891–£2722. Homes fitted with solar feature a statistically significant price premium of between 0.9% and 2%³⁷.

These figures are illustrative estimates based on national and local data, and influencing these opportunity points will require substantial collaboration and engagement across the region. However, this does highlight some of the opportunities for change across our current building system, which can be utilised to gain all the benefits of retrofit.

York and North Yorkshire's Retrofit Strategy

Co-Design Process

A summary of engagement done and feedback received

Co-design Process

Building on initial findings from the Area Assessment, YNYCA held a number of workshops to co-create a vision for retrofit, inform the direction of the Retrofit Strategy and create ideas for implementation. This included a full day, in-person workshop, three online workshops and supplementary engagement with key stakeholders.

Stakeholders involved in this development have spanned the whole retrofit system, including local authorities and social housing providers, national experts, community groups, skills providers and businesses. They are further detailed in the appendix. Some examples include:



Feedback from these sessions has been used to create the vision for retrofit in York and North Yorkshire, shape the strategic priorities, highlight barriers and prioritise actions.

Although many barriers to retrofit were identified through this engagement process, it has also highlighted the number of people and organisations who are passionate about retrofit, and the momentum that has been created in the region. This Strategy aims to build on that momentum and create more opportunities.



Workshop outputs – themes and barriers

The workshops examined what retrofit should look like in the future and key considerations for the Strategy, with some themes emerging. The workshops also highlighted a number of barriers to retrofit being delivered at pace and scale. These barriers were consistently explained as being interlinked, meaning that they all need addressing concurrently. The themes and barriers are outlined below.

Themes



Retrofit should focus on the people in the buildings, rather than just the buildings themselves.



Benefits such as health improvements, reduced bills, reduced carbon emissions, improved comfort in buildings throughout the year etc. should be showcased as benefits rather than ‘co-benefits’, to make sure that there is a reason for everyone to retrofit their building.



Although retrofit is a challenge, our region has a number of unique opportunities that we need to showcase and build on, such as heritage and biobased materials.



Non-domestic buildings should be included in the strategy because there are opportunities for decarbonisation at scale, and many have a large social impact such as community buildings.

Barriers



There is a lack of demand for retrofit across domestic and non-domestic private buildings. Reasons for this include a lack of understanding of what retrofit is and where to go for support.



Our local supply chain is currently unable to scale up to future demand. Reasons for this included the need for different skills specialisms and soft skills, and a lack of a long-term pipeline of work.



Finance is a key barrier - retrofit is perceived as expensive and there is a lack of financial incentives and products.



There are challenges around data and evidence which result in a lack of a data-driven approach. These include that retrofit is reliant on EPCs which are not always accurate, and that there are large gaps such as information about non-domestic buildings.



More collaboration is needed across the region to deliver our retrofit vision. Some specific challenges include a lack of clear roles and responsibilities, short term policy and funding, and systems (such as planning and procurement systems) not catching up with delivery needs.

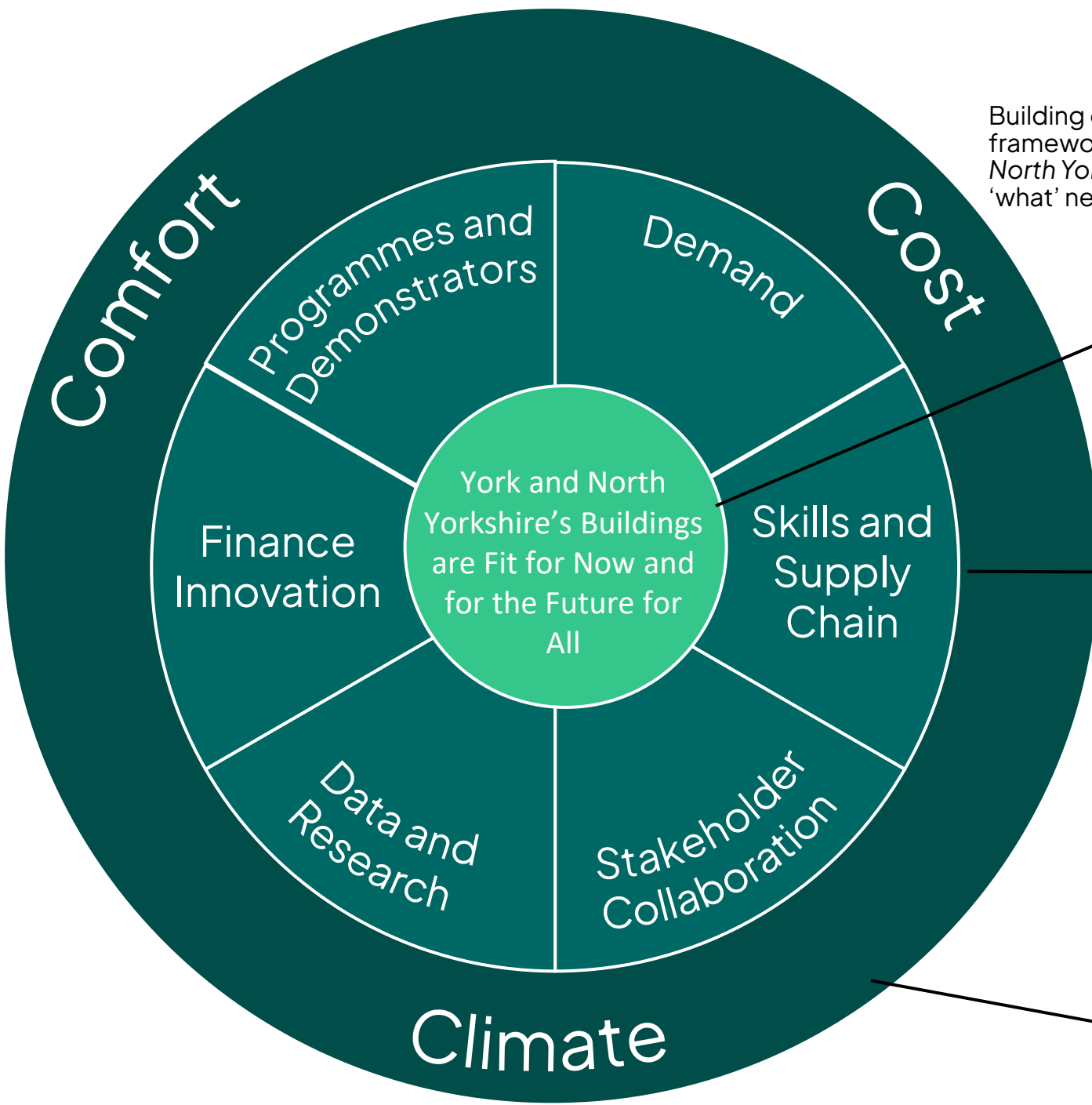
York and North Yorkshire's Retrofit Strategy

Strategic Framework

An outline of our vision, strategic priorities and outcomes

Strategic Framework

Building on an extensive evidence base and working closely with stakeholders, this framework sets out the region's approach to delivering our vision, that *York and North Yorkshire's Buildings are Fit for Now and for the Future for All*. It summarises 'what' needs to happen (the strategic priorities) and 'why' (the outcomes).



Vision:

This is the long-term goal for retrofit in York and North Yorkshire.

Strategic Priorities:

The strategic priorities are the 'what' and the areas of focus for activity, which span the whole retrofit system. They must all be tackled to increase the pace and scale of retrofit. They are:

- Demand - Grow York and North Yorkshire's market demand for retrofit at a pace and scale aligned to regional and national retrofitting and net zero targets.
- Skills and Supply Chain - Support the supply chain for retrofit to cope with growing demand.
- Finance Innovation - Reduce finance as a barrier to retrofit, to ensure it does not hold back the rate of change.
- Data and Research - Ensure a data and research driven approach to retrofit.
- Stakeholder Collaboration - Enable York and North Yorkshire organisations to be united in their approach to retrofit and coordinate strategic delivery
- Programmes and Demonstrators - Demonstrate best practice and deliver programmes that meet the pace and scale of retrofit required.

Outcomes:

These are the 'why' of the Retrofit Strategy, which outline what needs to happen as a result of the Strategy. All activity under the Retrofit Strategy will aim to meet at least one of these outcomes.

York and North Yorkshire's Retrofit Vision

York and North Yorkshire's Retrofit vision is an ambitious, long-term goal for retrofit in York and North Yorkshire. To achieve our vision, we must transform our retrofit system to deliver at pace and scale, ensuring a just transition for communities and businesses and supporting the region's carbon negative ambition. All interventions included in this Strategy should be aligned to this vision. The vision is explained in more detail below.

Our vision for retrofit includes both domestic and non-domestic buildings. Although domestic buildings contribute more in terms of emissions, there are substantial savings for businesses and communities as a result of retrofitting non-domestic buildings. Additionally, taking this approach will allow more collaboration across our building stock.

Every person in York and North Yorkshire should be able to feel the benefits of retrofit (comfort, cost and climate), at home, at work, or at leisure.

'York and North Yorkshire's Buildings are Fit for Now and for the Future For All'

The region must ensure that retrofit solutions are specific to York and North Yorkshire and build upon our local opportunities, such as our heritage assets and biobased materials. Retrofit solutions must be appropriate for the types of buildings we have in the region, such as terraces, stone-built cottages or industrial parks.

Our buildings must be comfortable and healthy, and must be protected from the impacts of climate change (such as flooding and overheating). All buildings (where retrofit is possible) must make their fair contribution to reducing our greenhouse gas emissions.

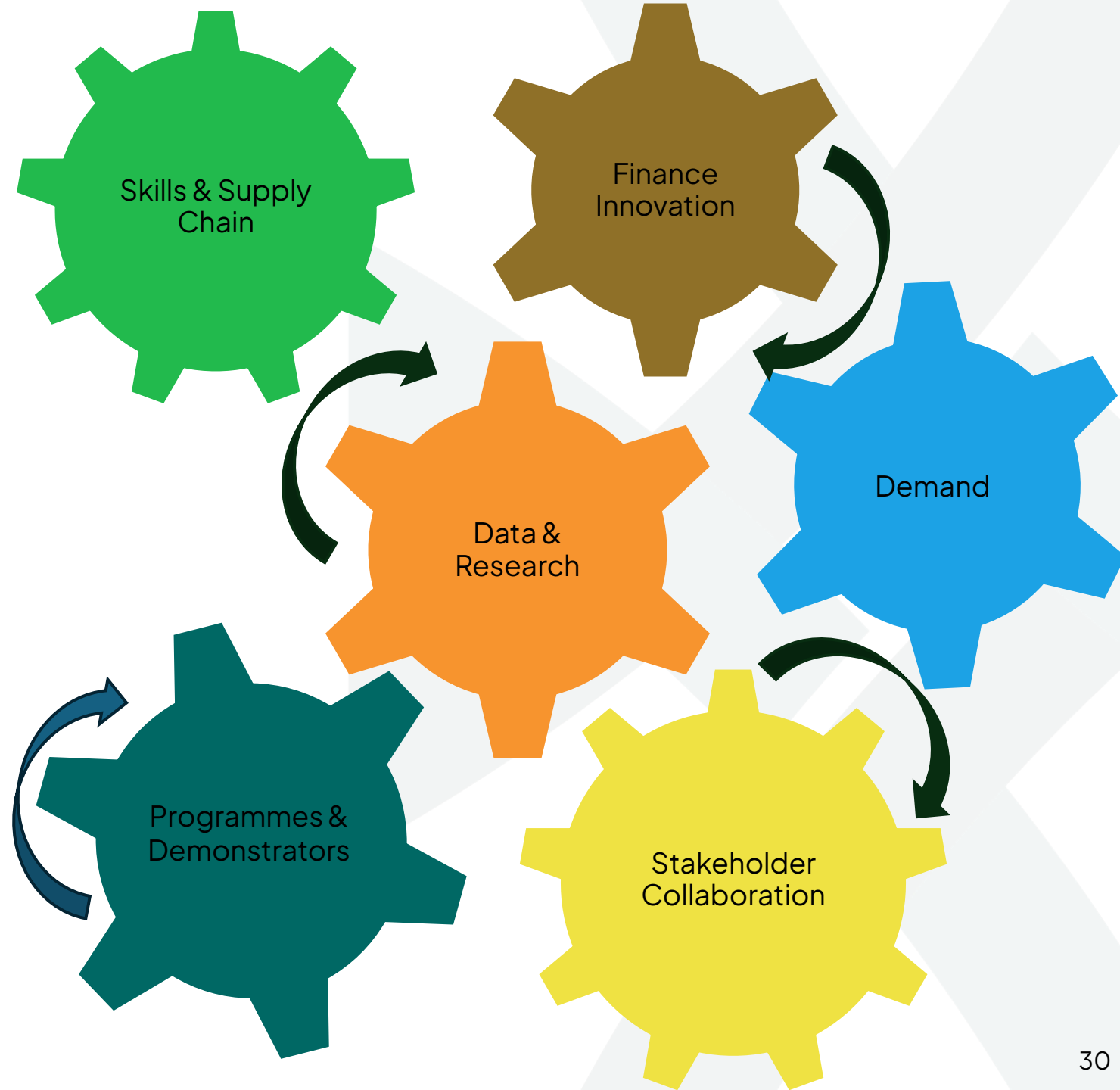
Strategic Priorities

The six strategic priorities are the areas of focus for activity, which span our whole retrofit system. These are:

- **Demand** - Grow York and North Yorkshire's market demand for retrofit at a pace and scale aligned to regional and national retrofitting and net zero targets.
- **Skills and Supply Chain** - Support the supply chain for retrofit to cope with growing demand
- **Finance Innovation** - Reduce finance as a barrier to retrofit, to ensure it does not hold back the rate of change
- **Data and Research** - Ensure a data and research driven approach to retrofit
- **Stakeholder Collaboration** - Unite local organisations in their approach to retrofit and coordinate strategic delivery
- **Programmes and Demonstrators** - Demonstrate best practice and deliver programmes that meet the pace and scale of retrofit required.

They must all work together to strengthen and grow the retrofit system, ultimately leading to an increased pace and scale of delivery.

Each of these strategic priorities is intricately linked to the others, highlighting the complexity of the retrofit system. Investing heavily in one strategic priority and not the others will not tackle the fundamental barriers to retrofit. For example, increasing **demand** from the public without strengthening the **supply chain** will result in a backlog of work and a struggling supply chain.



Outcomes

The outcomes are what should happen as a result of the Retrofit Strategy being delivered. All activity under the Retrofit Strategy will aim to meet at least one of these outcomes, but ideally will balance the three. They are:

Comfort

Buildings are comfortable to be in all year round. Comfort looks different for everyone, but generally people should be warm enough in cold weather and cool enough in hot weather. Crucially, this comfort level should not be blocked by high energy bills or leaky buildings, and should have positive outcomes such as decreasing damp and mould and the associated health impacts.

Cost

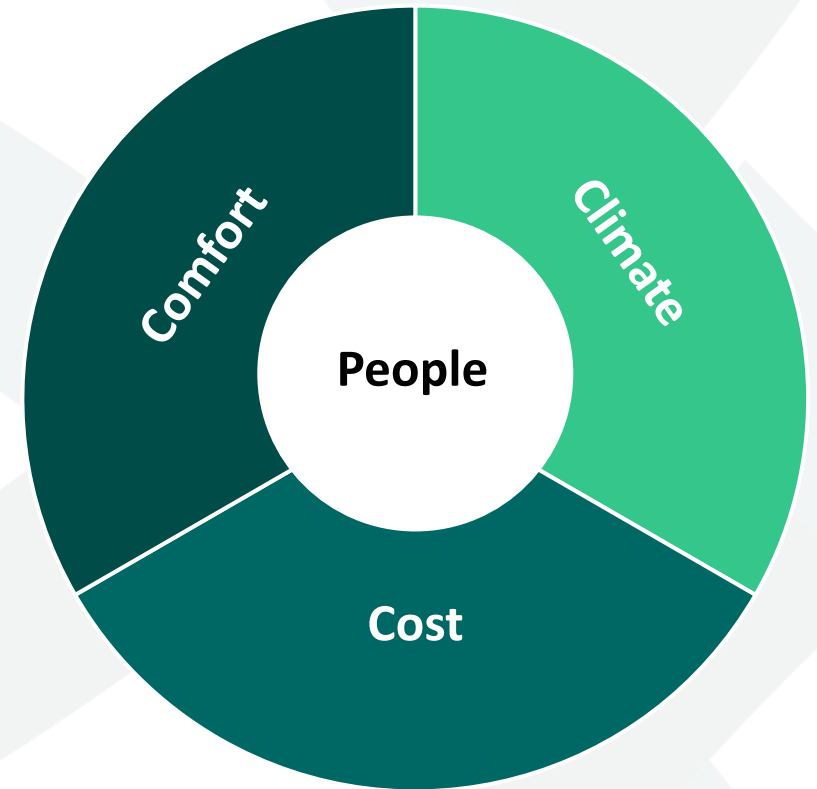
York and North Yorkshire feels the economic benefits of retrofit, such as:

- Energy bill savings.
- Savings to the health system as a result of reduced health impacts from damp, mouldy or poorly performing buildings.
- A huge opportunity for businesses in the region to scale-up to meet retrofit demand, even if they're not currently in the industry. This will allow the economic benefits of retrofit to stay within York and North Yorkshire.

Climate

Climate change is mitigated by reducing greenhouse gas emissions, and we adapt to our changing climate. This may lead to improvements in the resilience of our buildings to flooding, storms and extreme heat, as well as reductions in the amount of energy we use and our switching to renewable energy.

People are at the centre of this approach, meaning that the benefits of retrofit are felt by the people of York and North Yorkshire.



York and North Yorkshire's Retrofit Strategy

Action Plans

What actions we will take to deliver our strategic priorities

Action Plans

The Action Plans are the ‘how’, showcasing how we will achieve the strategic priorities. There are six in total, one for each strategic priority. Prior to delivery, a more detailed implementation plan will be created for the actions outlined, including how success will be measured. Accompanying each strategic priority is some context from the area assessment and co-design process.

These action plans have been created using the area assessment, feedback from stakeholders and national evidence. Logic models were created for each Strategic Priority to ensure that the range of actions included links back to the desired impact and tackles the barriers that have been identified – these logic models are included in the appendix. The action plans are intended to be collaborative and require commitment from a range of partners, with proposed lead partners indicated in bold, and potential partners also mentioned. However, further work is required to ensure all the right organisations are included in each action.

As the Strategy covers the period 2025–2030, it is expected that these action plans will be updated to reflect the requirements of new activity as technology and policy changes.

Action Impacts




The actions selected have a range of impacts, which is indicated in the impact column. This shows which of the outcomes each action meets out of Comfort, Cost and Climate, indicated by the icons opposite. Actions must result in at least one of these outcomes.




Action Timescales


The Strategy builds on existing work, and therefore some actions are already underway, some have secured resource but are not yet being delivered, and others have the potential to significantly move the dial on retrofit but require significant resource. This is indicated using the colour coding opposite.

Devolution

Some of the interventions described in this Strategy could form part of a devolved retrofit programme. Relevant actions are indicated by the icon opposite.

Impact	The intervention results in:
	<ul style="list-style-type: none">• More comfortable buildings• Reduced health impacts from buildings
	<ul style="list-style-type: none">• Reducing greenhouse gas emissions• Adapting to a changing climate
	<ul style="list-style-type: none">• Savings for energy bills or the health system• Supply chain economic benefits

Colour	Meaning
	Intervention is already being delivered
	Intervention has resource secured, but is not yet being delivered
	Intervention requires significant resource or support to be delivered

Icon	Meaning
	This intervention could form part of a devolved retrofit programme

Demand: Grow York and North Yorkshire's market demand for retrofit at a pace and scale aligned to regional and national retrofitting and net zero ambitions

The co-design process confirmed that there is a lack of demand for retrofit across domestic and non-domestic private buildings. Current demand levels are not in line with what is required to meet our regional ambition of carbon negative by 2040. Reasons for this lack of demand included:

- The public is sceptical of retrofit schemes, especially where they are not driven by local Councils;
- The retrofit system is difficult to navigate and people do not know where to get information from. When it comes to undertaking retrofit works, trust is a key component for choosing contractors and making financial decisions;
- There are levers which can be pulled, such as shifting retrofit to become part of regular household spending – a quarter (24.34%) of UK homeowners' weekly spending is designated for the household (£195.40)⁴⁰. Additionally, boiler replacements (boiler and fitting) in the UK cost around £5500⁴¹, with boilers needing replacing every 10–15 years.
- There is a general lack of understanding of what retrofit is and the benefits it can have.







However, there was a recognition that because of the benefits of retrofit for comfort, cost and climate, demand needs to be increased.

What we need to do:

- Increase the profile of retrofit across the public, supply chain and leadership organisations;
- Ensure people are supported to better understand and access retrofit;
- Provide clear and easy routes to retrofit for communities and businesses.



Demand

Action	Description	Proposed Lead and Potential Partners	Outcomes
Engagement Campaign	<p>Making use of existing research and evidence, run an engagement campaign highlighting what retrofit is and what help is available across the region with the objective of increasing understanding of and confidence in retrofit and its benefits for all, such as homeowners, renters and landlords, community groups, businesses etc. This must link to the one stop shop and other activity in the region. Activity may include:</p> <ul style="list-style-type: none"> • Highlighting case studies of different types of buildings to make retrofit more inclusive, and including details of archetypes and building types such as terraces or stone built homes, and community buildings or businesses; • Holding engagement events for the public and for businesses; • Working with front line services such as GPs to raise awareness of retrofit and its health benefits; • Utilising engagement tools like social media; • Looking at innovative solutions, such as featuring retrofit in television or other media. <p>[Plan for campaign established 2026]</p>	YNYCA, CYC, NYC, Community Groups	  
Develop a York and North Yorkshire Retrofit One Stop Shop	<p>Building on the work done so far in York and North Yorkshire such as two Local Energy Advice Demonstrator (LEAD) projects, and the Retrofit One Stop Shop for York (ROSSY) project, undertake a full options appraisal to explore the options for a one stop shop for York and North Yorkshire. This appraisal will include scoping finance options to operate the service, as well as exploring available finance options for residents and landlords in both domestic and commercial buildings, and linking with existing service provision, such as Citizens Advice and the NHS. Based on evidence from LEAD and ROSSY, the one stop shop itself should encompass the whole retrofit journey, including advice, assessments, finance solutions and suggested tradespeople.</p> <p>[2026]</p>	YNYCA, CYC, NYC	  

Skills and Supply Chain: Support the supply chain for retrofit to cope with growing demand

During the co-design there was a general consensus that our local supply chain is currently unable to scale up to future demand. The workshops and the Retrofit Skills Assessment highlighted a number of constraints which are preventing our local supply chain from scaling up, including:


- The current lack of demand (as discussed in the demand section) is discouraging to businesses in the industry, and makes it difficult for them to invest in retrofit skills;
- Skills providers are often not getting enough people on courses and therefore are unable to continue provision without significant funding;
- The complexity of retrofit creates a need for lots of different skills specialisms and soft skills. For example, heritage retrofit requires a separate set of heritage related skills which require further training and investment. Additionally, interacting with customers can be challenging as retrofit is a poorly understood area of construction, so soft skills like communication are required;
- There are skills shortages in the region, especially in relation to air source heat pumps, insulation, scaffolding, retrofit assessors and heritage skills.

What we need to do:

- Collaborate with local and national partners to ensure that performance standards are high and enforced, and retrofitted buildings perform as promised.
- Work as a region to train and recruit the existing and future workforce to cope with retrofit demand – including housing teams in councils and social landlords, and the use of existing programmes and services.
- Equip skills providers with the evidence and mechanisms needed to develop provision that supports local skills needs.
- Create certainty for the supply chain by showcasing the potential pipeline of work.



Skills and Supply Chain

Action	Description		Proposed Lead and Potential Partners	Outcomes
Retrofit Skills Knowledge Resource	To evidence the need for retrofit skills, collate and share materials such as the Retrofit Skills Assessment, audits from businesses highlighting their skills needs, and skills requirements from delivery of Warm Homes: Local Grant, Warm Homes: Social Housing Fund and the Public Sector Decarbonisation Scheme. This evidence can then be used to drive and inform provision. [2026 onwards]		YNYCA, CYC, NYC, York and North Yorkshire Housing Partnership	£
Regional Retrofit Network	Seek finance to extend the currently Innovate UK funded and York based Retrofit Network. As part of this, the network should be extended to include North Yorkshire. Topics should include biobased construction, quality and performance standards, skills etc. Additional aspects of the network may include: <ul style="list-style-type: none"> • An online platform for resources to use between sessions; • Using the Careers Hub's Collaboration Tool to connect businesses with schools and colleges; • Support for businesses, such as support to register with MCS and TrustMark; • Encouraging 'on the ground' training such as apprenticeships; • An annual conference for the retrofit supply chain with Yorkshire Combined Authorities. [From December 2025]		YNYCA, North East & Yorkshire Careers Hub, other partners TBC	£
Retrofit Skills Programme 	Utilise current funding and future devolution to support retrofit skills by delivering courses and building retrofit skills into programme design. This should build on successful programmes such as the Green Skills Project funded by the Shared Prosperity Fund, detailed on page 18.		YNYCA, partners TBC	£

Finance Innovation: Reduce finance as a barrier to retrofit, to ensure it does not hold back the rate of change

One of the key areas identified as a barrier to increasing demand is that retrofit is expensive and there is a lack of financial incentives. Reducing this barrier is crucial to enabling more retrofit to take place across York and North Yorkshire.

For private owned buildings, whilst there are government schemes these mostly cover those in fuel poverty or with other specific requirements, meaning that there is a finance gap for those who are unable to fund the upfront cost of retrofit who are also ineligible for these schemes. Additionally, the finance market does not have a comprehensive finance offer for retrofit, largely due to the perceived risk associated with retrofit.

For private rented buildings, a key challenge is that for a lot of landlords they will not see the financial benefits of retrofit, as their tenants are the ones who actually live in the buildings. This creates complexities around bill savings. Additionally, whilst some funding schemes cover private-rented homes, accessing these can be challenging due to complex eligibility requirements.






For non-domestic buildings, some finance is available for assessments which identify improvements which could be made, but there is relatively little finance available to actually deliver on measures, especially as non-domestic buildings like warehouses or churches are often large and complex. This is also complicated by some non-domestic buildings being privately rented, which creates the same challenges as private rented domestic buildings.

What we need to do:

- Support the development of a variety of financing models and fiscal incentives, ensuring that everyone has a route to retrofit;
- Work with local finance stakeholders to create momentum, capacity and confidence in the local retrofit finance system



Finance Innovation

Action	Description		Proposed Lead and Potential Partners	Outcomes
Carbon Negative Challenge Fund – Retrofit Finance	Through the Carbon Negative Challenge Fund, support projects which examine how innovative financial solutions can be brought forward to enable wider uptake of retrofit in the region. [From March 2025]		YNYCA, other partners TBC	£
 Pilot financial policy options for YNY	Taking a relational approach, seek funding to pilot financial policy approaches in York and North Yorkshire, working with other Yorkshire Combined Authorities to gain wider learnings. Offers should align to the one stop shop and other provision, and aim to fill gaps in current retrofit finance, such as offering a blend of funding and loans to those in the group between ‘able to pay’ and covered by government schemes. Following the pilot, begin rollout of financial policy approaches. [2026 onwards]		University of York, YNYCA, other partners TBC	 £
Finance Industry Roundtable	Host a Roundtable to discuss the state of finance for retrofit in the region, identify opportunities for new products or approaches, and agree a future communications strategy. This may include mortgages, loans, funds and other finance mechanisms. The discussion should link to the opportunities identified in this strategy (e.g. heritage, biobased construction), and the pipeline of retrofit identified as part of the area assessment. [late 2025]		YNYCA, Finance Institutions	 £ 
Local Net Zero Accelerator	Support leveraging private sector investment into the decarbonisation of public sector buildings via the Local Net Zero Accelerator, a £2m programme focused on exploring the utilisation of private investment into regional decarbonisation. Continue to explore any further opportunities to support retrofit via the programme. [ongoing until March 2026]		YNYCA, NYC, CYC	 £

The co-design process highlighted that there is a high amount of knowledge and expertise across stakeholders in the region. However, it also highlighted challenges around data and evidence which result in a lack of a data-driven approach for the region, including:

- Data is spread across the region and organisations, and there are substantial gaps;
- Regional (and national) retrofit programmes are reliant on EPCs, which are not always accurate and not every domestic building has one;
- There is limited data about non-domestic buildings, as DEC's provide less detail;
- Adapting buildings to climate change is crucial, but for this to happen more needs to be understood about the severity of specific impacts.





Based on this, the following aims and objectives were created for the Data and Research enabler:

What we need to do:

- Bring together data sources to create a comprehensive understanding of retrofit in the region, including building condition, socio-economic factors and skills;
- Develop clear metrics and methods of evaluation for the region.



Data and Research

Action	Description		Proposed Lead and Potential Partners	Outcomes
Retrofit Dashboard 	<p>Create a shared retrofit data platform to support market development and ensure a joined up regional approach. This should include data on buildings such as EPCs, information gathered as part of LNZA, adaptation needs and heritage status, and wider retrofit data such as skills needs, public engagement etc. The dashboard should be utilised to:</p> <ul style="list-style-type: none">• Create a spatial plan for retrofit which can be utilised to inform delivery and future funding opportunities.• Establish an investible project pipeline, to include non-domestic opportunities and community energy.• Establish clear metrics and methods for evaluation as part of the dashboard. <p>This should complement the Local Area Energy Plans and other data work in the region, and be user friendly to recognise capacity constraints in different organisations. [Options appraisal completed by Summer 2025, delivery from 2026]</p>		YNYCA, CYC, NYC, other partners TBC	 
Climate Adaptation Study	Utilise the York and North Yorkshire Climate Adaptation study to understand the impact of climate change on buildings, and how the region can adapt. Once outputs are available, incorporate these into the Retrofit Strategy and relevant interventions. [Study completed by December 2025]		YNYCA, CYC, NYC	

Stakeholder Collaboration: York and North Yorkshire organisations are united in their approach to retrofit and use their levers to create change

The co-design process highlighted how many stakeholders are involved in the retrofit system, and how much work has been done to date. However, there was a general sense that more collaboration is needed across the region to deliver our retrofit vision. Some specific challenges which were mentioned are:











- There is a lack of clear roles and responsibilities for organisations involved in retrofit, which inhibits collaboration;
- Policy and funding is short term and currently driven primarily by Central Government, which creates a competitive environment and does not allow time for collaboration or strategic planning;
- Infrastructure has not caught up to the needs of retrofit, such as the planning system or procurement guidelines, and stakeholders (particularly local authorities) have limited capacity.

What we need to do:

- Develop clear roles and responsibilities for organisations (including local authorities, housing associations, community groups, training providers etc.);
- Utilise levers such as procurement, planning, funding and devolution to enable retrofit at a greater pace and scale;
- Engage with key stakeholders to facilitate joint working, such as applications for funding;
- Reflect local learnings and challenges up to national government to evidence policy change.



Stakeholder collaboration

Action	Description	Proposed Lead and Potential Partners	Outcomes
Joint working framework	<p>Create a joint working framework between key regional partners to set out how organisations should work together and identify opportunities for joint working. This should outline clear roles and responsibilities for retrofit and identify levers such as: procurement practices, maximising the impact of the planning and house building system and private rented regulations, joint approaches to funding opportunities, sharing data etc.</p> <p>The framework will be linked to the ongoing governance of this Retrofit Strategy, and measures will be put in place to ensure feedback of local challenges and solutions to central government. [Draft framework created by end of 2026]</p>	YNYCA, CYC, NYC, North York Moors National Park, Yorkshire Dales National Park, York and North Yorkshire Housing Partnership etc.	  
Continue Regional Relationships	Continue working with and learning from other areas and organisations such as West Yorkshire Combined Authority (WYCA), South Yorkshire Mayoral Combined Authority (SYMCA), North East Combined Authority (NECA), Greater Manchester Combined Authority (GMCA), the North East and Yorkshire Net Zero Hub, and the National Retrofit Hub, seeking opportunities for collaboration. This should particularly focus on challenge areas such as adaptation, skills, finance etc. [Ongoing]	YNYCA, WYCA, SYMCA, NECA, GMCA, North East and Yorkshire Net Zero Hub, National Retrofit Hub	  
York & North Yorkshire Retrofit Strategic Partnership	Put out a call for strategic partnerships with supply chain actors to increase collaboration and knowledge sharing across the public and private sectors. Memorandums of Understanding (MOUs) will be utilised to formalise the relationship and establish the York and North Yorkshire Retrofit Strategic Partnership. [from 2026]	YNYCA, supply chain partners	
Retrofit Strategy Delivery	Create an implementation plan, governance and reporting structure to ensure delivery of this retrofit strategy involving all relevant partners [completed by Strategy completion]	YNYCA, Retrofit Strategy partners	  

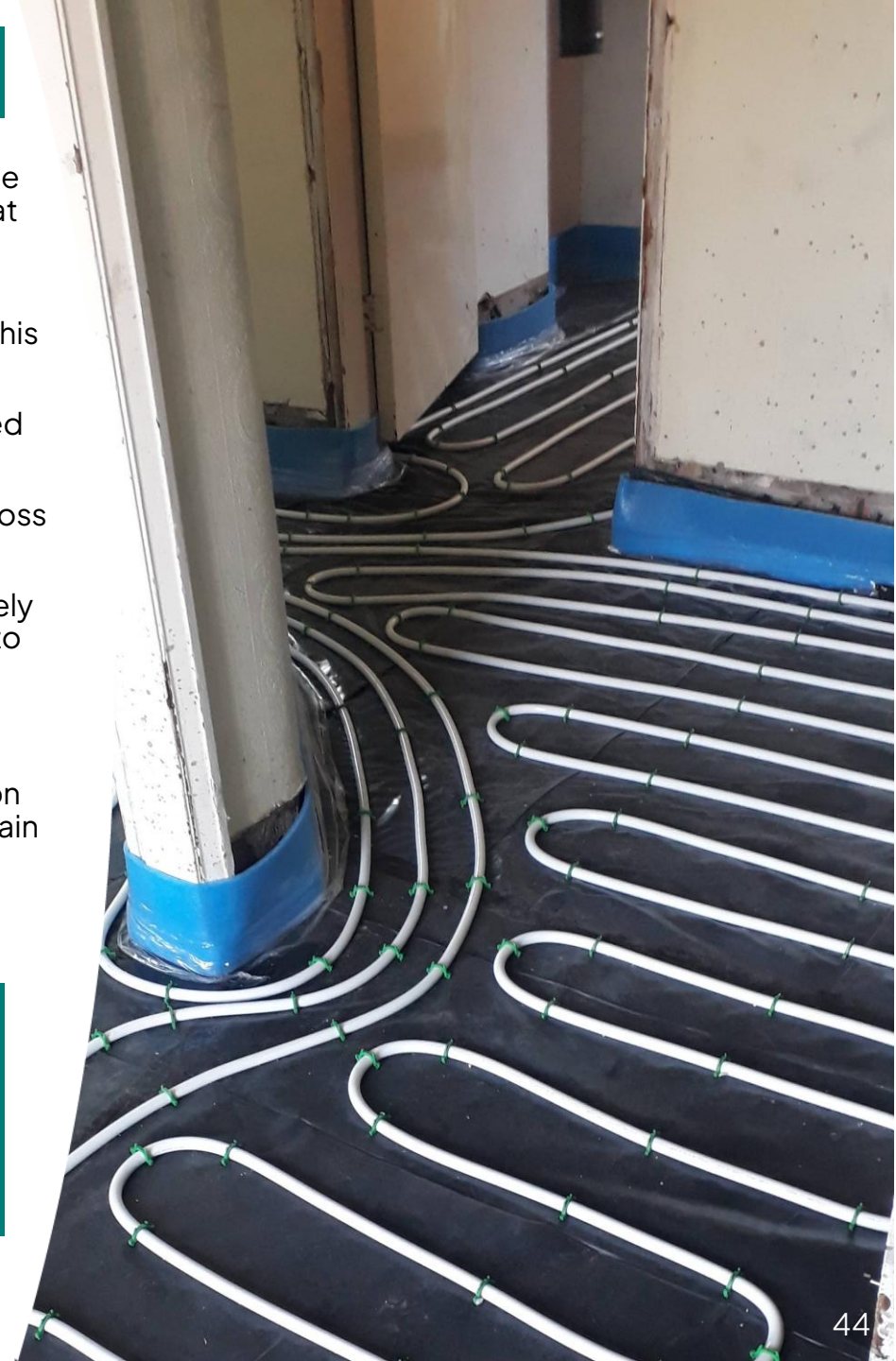
Programmes and Demonstrators: Demonstrate best practice and deliver programmes that meet the pace and scale of retrofit required.

During the co-design there was a general consensus that delivery is not happening at the pace and scale required to meet regional ambitions to meet net zero by 2034, to reduce fuel poverty, reduce bills, reduce health impacts and improve comfort in buildings. This is evidenced by the CAP study, which highlights that limited progress has been made since 2020. Key challenges include:












- Delivery is taking place primarily through central government funded programmes such as Warm Homes: Local Grant. Although the region has been successful with receiving funding from schemes, this makes a relatively small dent in overall delivery numbers;
- Other delivery is sporadic based on natural demand from communities and businesses, which is limited (further detail in the [demand](#) section);
- Organisations in the region approach retrofit delivery differently, resulting in a lack of consistency across York and North Yorkshire;
- However, there are opportunities to make retrofit the easy, obvious answer. For example, approximately 18,000 domestic boilers are replaced every year in York and North Yorkshire, so encouraging people to shift towards other technologies like heat pumps, and undertake fabric upgrades could substantially shift delivery numbers.
- Additionally, there are a number of areas where York and North Yorkshire could be a demonstrator for different elements of retrofit. For example, as the region is home to many listed buildings, conservation areas and buildings built before 1919, there is an opportunity to showcase more heritage retrofit and gain understandings about how to do this at scale. York and North Yorkshire also has a thriving biobased materials sector, but challenges around guarantees restrict wide use of these materials.

What we need to do:

- Deliver retrofit at scale across domestic and non-domestic buildings via programmes;
- Demonstrate best practice retrofit, utilising our regional strengths.



Programmes and Demonstrators

Action	Description		Proposed Lead and Potential Partners	Outcomes
Retrofit Demonstrators Programme 	Building on work done across the region, develop a business case and seek funding to create and highlight retrofit demonstrators. These should showcase examples of best practice of retrofit, acknowledging some of the barriers and opportunities described in this strategy. This could include retrofit of heritage buildings, business premises, community buildings, use of biobased materials and consideration of climate change adaptation. These demonstrators should then be showcased to communities, businesses and organisations to encourage further retrofit. [TBC]		YNYCA, Historic England, other partners TBC	 £
Warm Homes: Local Grant	Ensure delivery of Warm Homes: Local Grant. Ensure that scheme delivery links in to other elements of this Strategy and retrofit activity around the region, and that lessons learnt about demand are shared. Lessons learnt and progress should be shared with key stakeholders to ensure inclusion in future programmes.		CYC and NYC	 £ 
Warm Homes: Social Housing Fund	Ensure delivery of the Warm Homes: Social Housing Fund. Ensure that scheme delivery links in to other elements of this Strategy and retrofit activity around the region, and that lessons learnt about demand are shared. Lessons learnt and progress should be shared with key stakeholders to ensure inclusion in future programmes.		CYC, NYC, York and North Yorkshire Housing Partnership	 £ 
Public Sector Decarbonisation Scheme	Ensure delivery of the Public Sector Decarbonisation Scheme until it finishes in 2028. Ensure that scheme delivery links in to other elements of this Strategy and retrofit activity around the region, and that lessons learnt about demand are shared. Lessons learnt and progress should be shared with key stakeholders to ensure inclusion in future programmes.		CYC, NYC and Office for Police, Fire, Crime and Commissioning	 £ 
Devolved Retrofit Delivery Programme 	Design a retrofit delivery programme utilising lessons learnt from delivery and the engagement and research completed for this Strategy. This programme must plug gaps in delivery, such as those who are not covered by current funding schemes and can't pay for retrofit on their own.		YNYCA	 £ 




York and North Yorkshire's Retrofit Strategy

Evaluation

How we will measure success

Evaluation

Prior to delivery, a more detailed implementation plan will be created for the actions in the Strategy, including how success will be measured. Some example metrics include:

Principle	Indicator	Metric
Climate 	CO2 Emissions	Tons of CO2/CO2e
	Energy Consumption	kWh/m2/year
	Renewable Energy Production	kWh/year
Comfort 	Fuel Poverty	% of households
	Type and number of retrofit measures	# of retrofit measures
	% of buildings above EPC/DEC C	EPC
	Incidents of mould	# of incidents
	Number of excess deaths due to extreme heat	# of deaths
	Number of excess deaths due to extreme cold	# of deaths
	Use of warm spaces or cool spaces	# of users or hours used
Cost 	Investment in retrofit	£
	Jobs in retrofit	#FTE
	Growth of supply chain	# of businesses in retrofit
	Financial savings from retrofit (energy bills)	£
	Number of retrofit courses provided	# of courses



York and North Yorkshire's Retrofit Strategy

Appendix

Further detail and background documents

References

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Glossary

- **Climate Change** is a change in the state of the climate that persists over a long period of time, usually a decade or more. These changes can be caused by natural forces such as volcanoes. However, since the 1800s human activities such as burning fossil fuels have been the main driver of climate change.
- **Greenhouse gases** (often abbreviated to GHGs) are gases that absorb and emit radiation, which causes the greenhouse effect. They primarily include water vapour, carbon dioxide, nitrous oxide, methane and ozone. There are also some entirely human-made greenhouse gases, including sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons.
- The **Circular Economy** is a way of working that promotes smart use and reuse of the resources we already have within our economy, making the most of these materials and minimising our need for virgin natural resources. We currently live in a linear economy, where we take resources, make them into things and then waste them. A circular economy approach would mean that instead of wasting them, we find ways to reuse what we make and design it in a better way so that we make the most of our resources. Circular economy is sometimes abbreviated to CE.
- **Climate Change Adaptation** is adapting to the climate change impacts that are already happening, or that are expected in the future. Even if we stopped all emissions today, there are still some impacts of climate change that we are committed to that will impact us and future generations. Adaptation might involve reducing our vulnerability to erosion due to rising sea levels, or increased summer temperatures. It also includes utilising any positives of climate change, such as longer growing seasons.
- **Climate Change Mitigation** is essentially reducing climate change, usually by reducing the sources of greenhouse gases (such as by reducing fossil fuel use) and/or increasing capture and storage of gases (for example by planting trees).
- **CO₂e** is a metric that compares emissions from other greenhouse gases to the amount of carbon dioxide that would produce the same amount of warming. Different greenhouse gases have different properties. For example, methane creates strong warming over a short time period, whereas carbon dioxide creates warming over a longer time period. Using this metric means that we can express a carbon footprint with one number rather than using a different one for each greenhouse gas.
- **Net Zero** refers to anthropogenic greenhouse gas emissions and anthropogenic greenhouse gas removals becoming balanced over a period of time. The difference between Net Zero and Net Zero Carbon is that Net Zero focuses on all greenhouse gases including carbon dioxide, methane, etc. Reaching net zero emissions is dependent on what metrics are chosen to compare the emissions of different greenhouse gases.
- **Carbon negative** is a step further than carbon net zero. Instead of carbon emissions and carbon removals being balanced, there is more carbon removed than emitted. This doesn't necessarily mean that carbon emissions have lowered, as it may rely on carbon capture technology.
- **Renewable energy** refers to energy that comes from natural sources that can be replenished quicker than they are used. Examples include solar power, wind power, hydropower, geothermal energy and bioenergy.

[For more definitions, please visit: Climate change glossary terms for businesses - Y&NY Growth Hub](#)

Task and Finish Group

Membership

The development of the Retrofit Strategy is overseen by a Task and Finish group, which includes representation from:

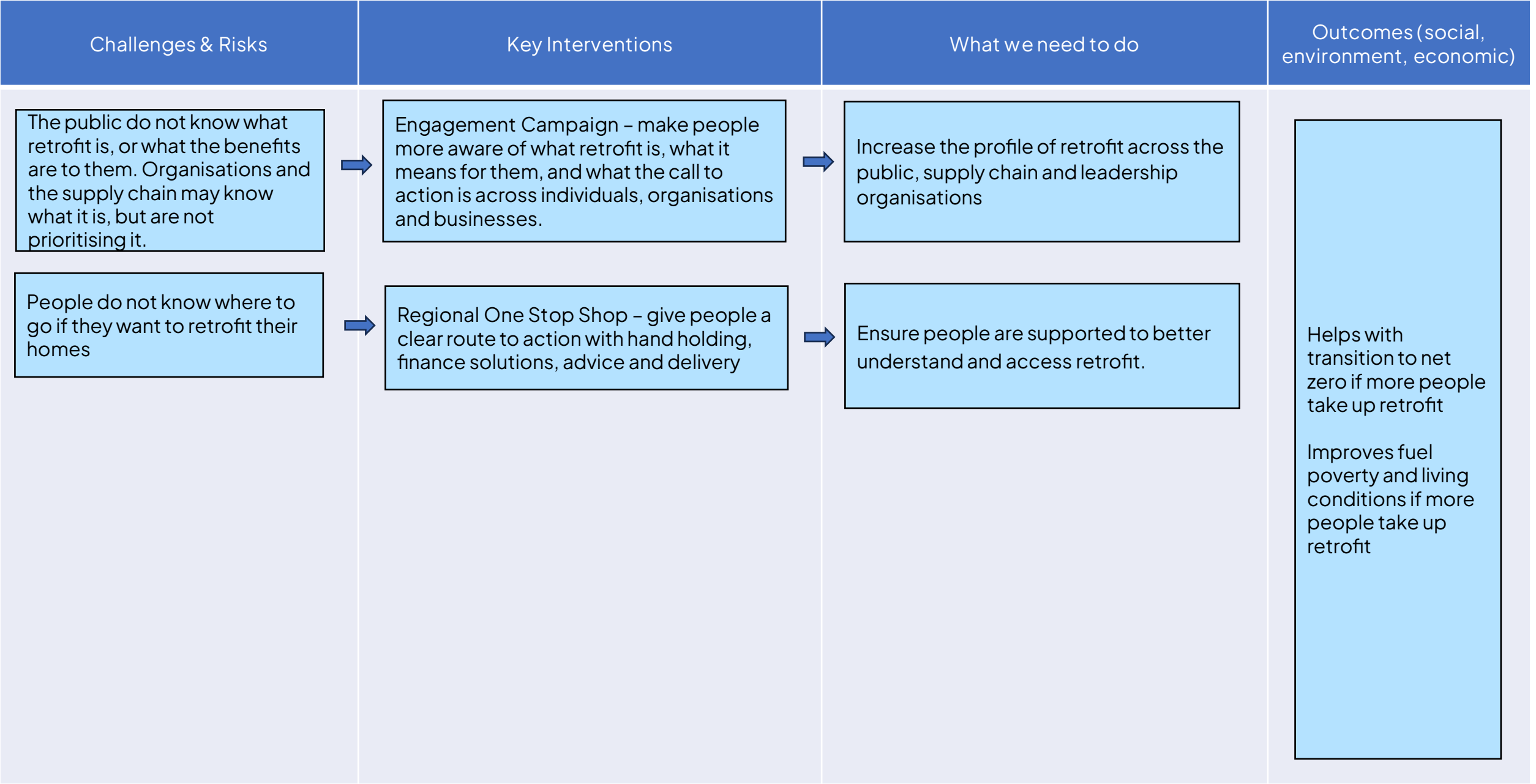
- Federation of Master Builders (Chair)
- York and North Yorkshire Combined Authority (Secretariat)
- North Yorkshire Council
- City of York Council
- North York Moors National Park Authority
- Yorkshire Dales National Park Authority
- Northern Gas Networks
- Northern Powergrid
- Further Education Colleges (represented by Harrogate College)
- Zero Carbon Harrogate/North Yorkshire Climate Coalition
- York and North Yorkshire Housing Partnership
- Third Energy
- Mass Architecture
- York Climate Commission
- Align Property Partners
- York Residential Landlords Association
- Federation of Small Businesses
- Historic England
- York and Scarborough Teaching Hospitals NHS Foundation Trust
- West and North Yorkshire Chamber of Commerce

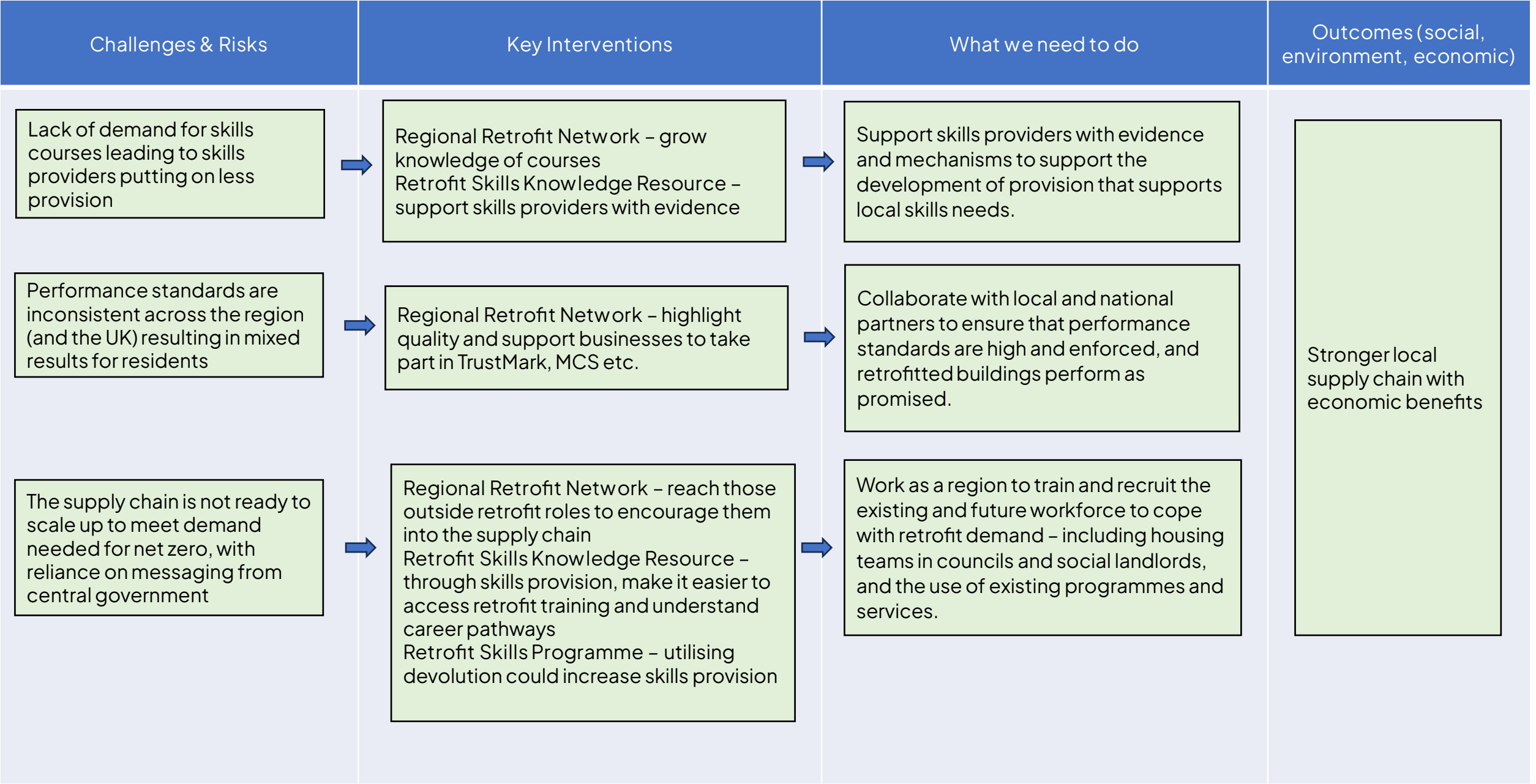
Role of the Task and Finish Group

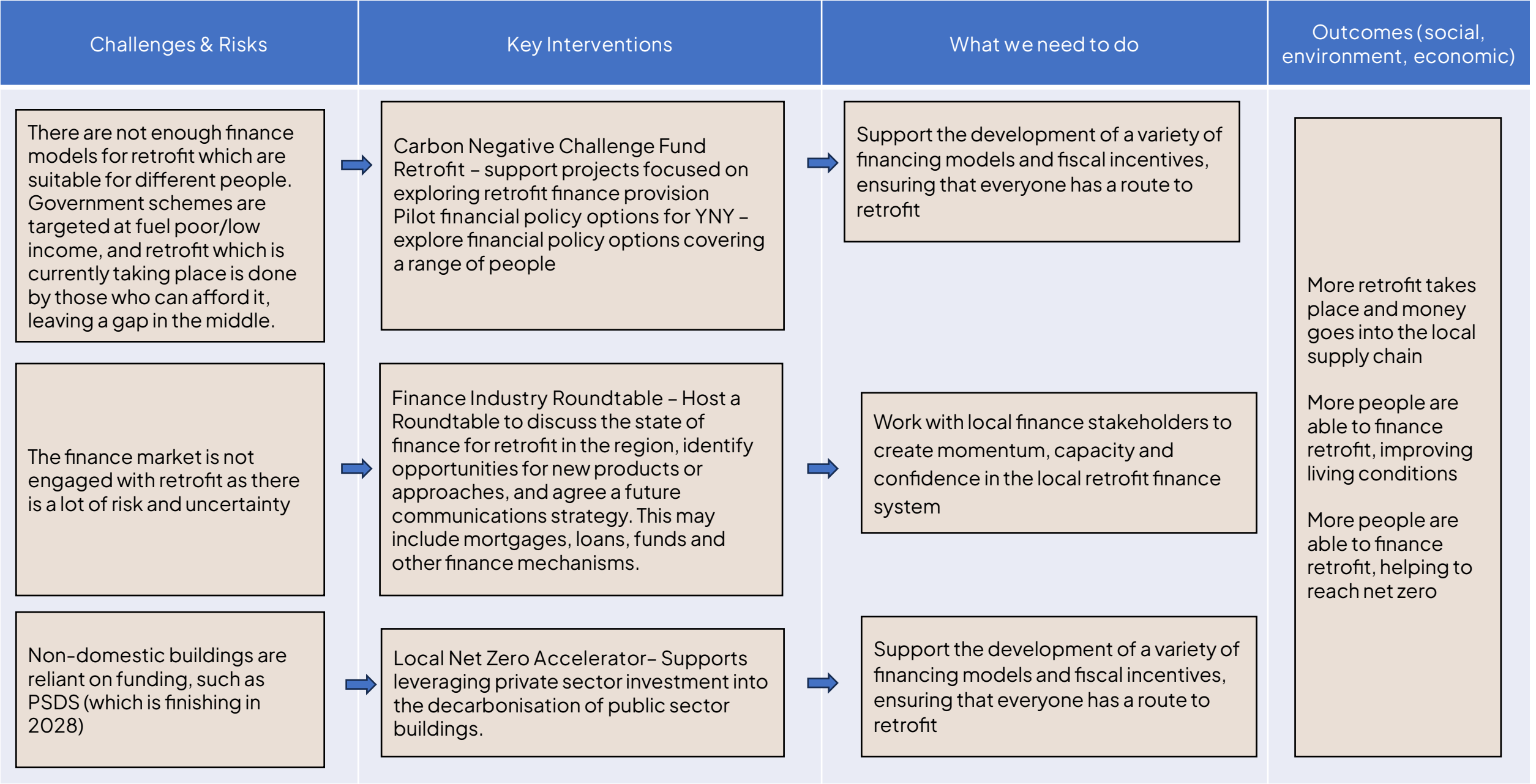
The Task and Finish Group was created in March 2025 to guide the development of the Retrofit Strategy and support the following objectives:

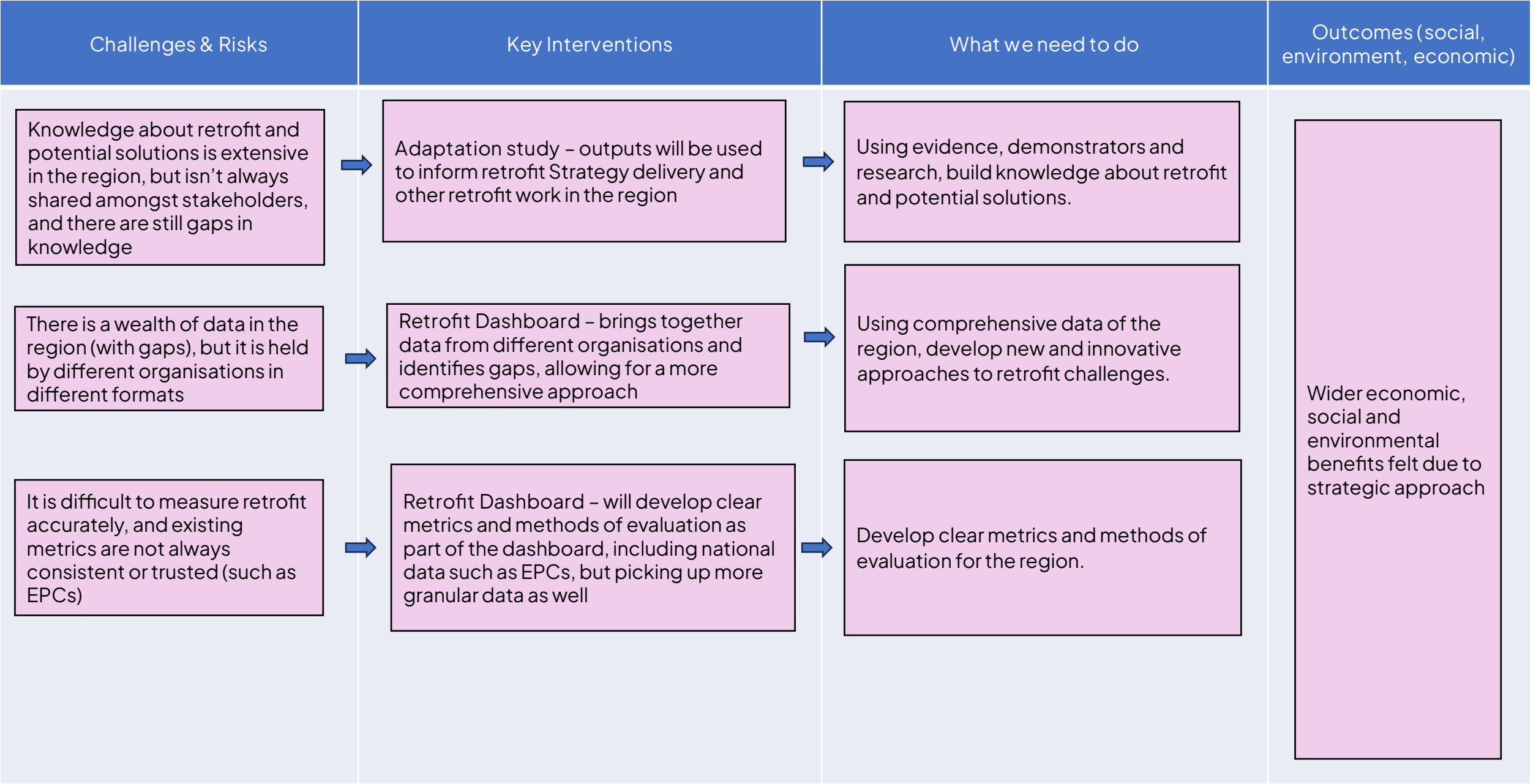
- Provide strategic direction to the co-design of York and North Yorkshire's Retrofit Strategy, ensuring alignment with other strategies and activity, resulting in a high quality document that is nationally leading. This must include alignment to York and North Yorkshire's Routemap to Carbon Negative;
- Ensure the Strategy is deliverable across a range of partners;
- Support the creation of a Stakeholder Engagement Plan to ensure adoption of the Retrofit Strategy;
- Provide challenge to the co-design process and document drafting, creating a robust approach and provide holistic subject matter expertise around retrofit, looking across all elements of the retrofit system and wider sectors and regions where needed;
- Support the development of a proposed governance structure that can provide direction, strategic leadership and accountability for the delivery of the Retrofit Strategy.

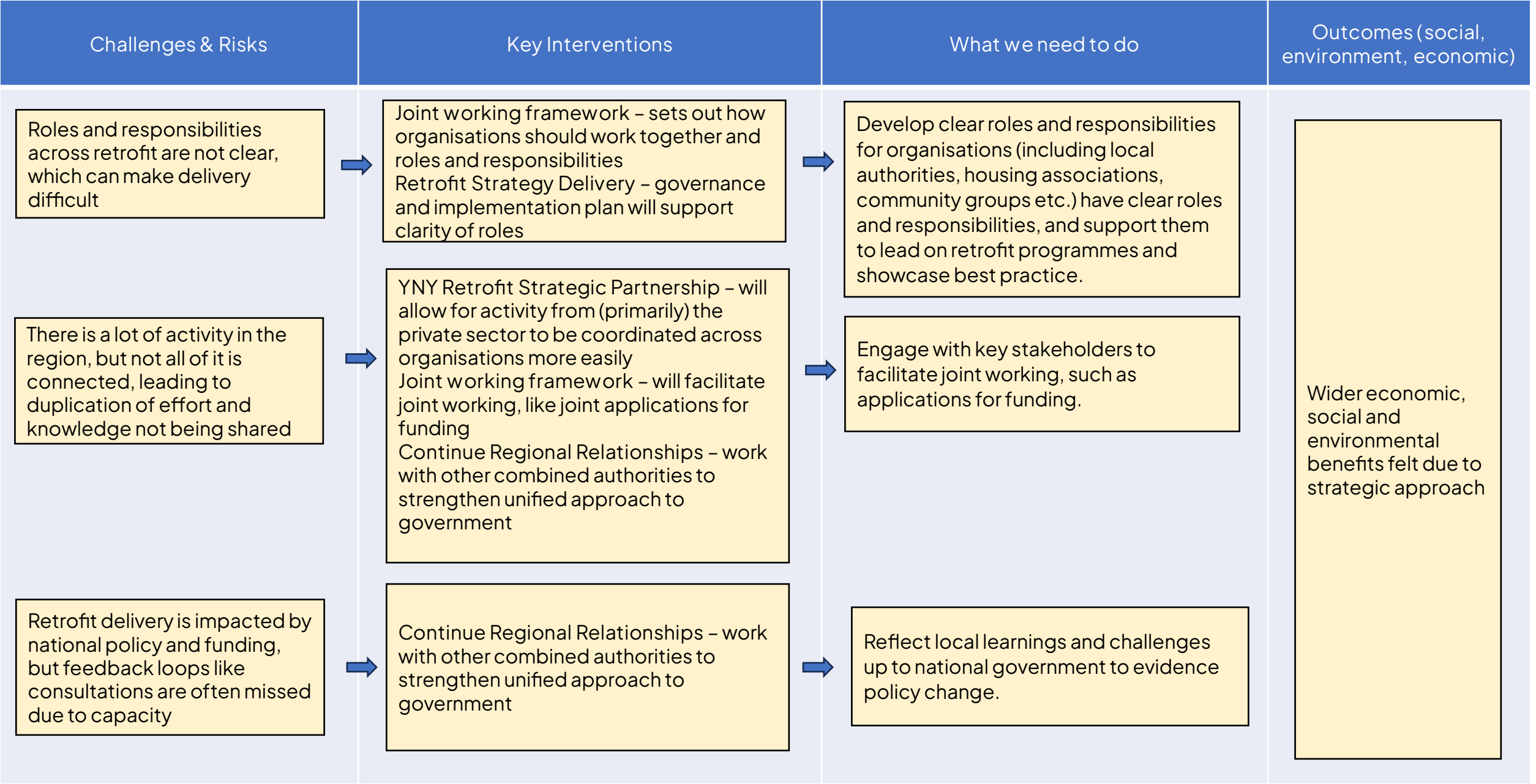
Prior to the Retrofit Strategy being signed off, the proposed governance structure will be shared.











Challenges & Risks	Key Interventions	What we need to do	Outcomes (social, environment, economic)
There is not currently a clear route to retrofit for everyone	Warm Homes: Local Grant, Social Housing Fund and Public Sector Decarbonisation Scheme – continue delivery of funded programmes and use lessons learnt in future programmes Devolved Retrofit Delivery Programme – outlines delivery for buildings	Deliver retrofit at scale across domestic and non-domestic buildings via programmes	Social benefits such as improved comfort and reduction in health impacts Economic benefits such as bolstered supply chain and bill savings Environmental benefits such as contribution to net zero
There is a wealth of data in the region (with gaps), but it is held by different organisations in different formats	Devolved Retrofit Delivery Programme – outlines delivery for buildings Retrofit Demonstrators Programme – includes case studies of challenge areas	Demonstrate best practice retrofit, utilising our regional strengths.	
Retrofit is currently based on funding, which is sporadic and short term	Warm Homes: Local Grant, Social Housing Fund and Public Sector Decarbonisation Scheme – continue delivery of funded programmes and use lessons learnt in future programmes Devolved Retrofit Delivery Programme – outlines delivery for buildings and utilises devolution	Deliver retrofit at scale across domestic and non-domestic buildings via programmes	

Contributors

Thank you to all the organisations who have been part of the co-design of this Strategy, including:



NORTH YORKSHIRE CLIMATE COALITION

