

# Sholver Community Led Energy Plan

July 2022

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ABOUT ANYTHING

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THOUGHT  
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FEEL MORE  
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## Oldham Energy Futures

*The Oldham Energy Futures programme ran from 2021- 2022 and was led by Carbon Coop and supported by its partners, URBED, CLES, UCL and Oldham Council.*

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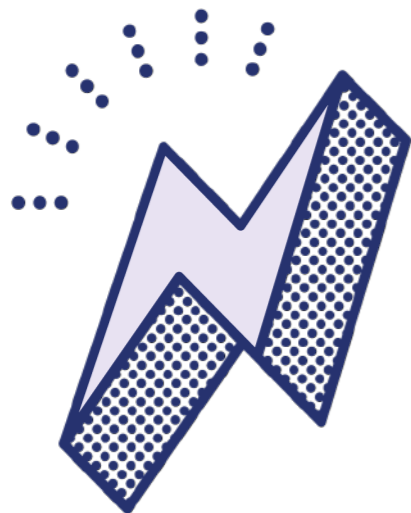
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# Introduction

**The UK is committed to reaching 'Net Zero' carbon emissions by 2050. To meet this target, it will require large-scale changes to heat, electricity and transportation systems.**

We are the Sholver community, located in the northeast area of Oldham, and we want to play a positive role in making the energy transition a success that brings benefit to our whole community.



## The Challenge

Time is of the essence. As the first Green New Deal Council in the UK, Oldham has set two ambitious targets, for the Council itself to become carbon neutral by 2025, followed by the whole borough by 2030. Whilst there has been a general downwards trend in the borough's carbon emissions, from 1277kt (2005) to 773kt (2019), progress has fallen short of what is needed. If the 2030 target is to be met, significant reductions will need to be made each year.

The pie chart on the next page shows that 41% of our area's carbon emissions from electricity, heat and transport are consumed locally. Just under a quarter of our emissions are emitted from heat and electricity, whilst transport use is responsible for approximately 16% of local carbon emissions.

In our community, that means we need our homes to be upgraded to high energy efficiency standards and powered by renewable energy.

Meanwhile, transport systems operating within and beyond the neighbourhood need to run on clean and renewable energy, and active travel for shorter journeys within the neighbourhood needs to be encouraged.

These changes can not take root without local support and action.

- How can the local energy transition achieve legitimacy in the eyes of local residents?
- What benefits could a local energy transition secure for our neighbourhood, both economically and socially?
- How can those benefits be distributed in a fair and equitable manner?
- How can those with the power to influence borough-wide policy-making shape their work to serve the neighbourhood's needs?

In Oldham Energy Futures, we've worked through a community-led diagnosis process to set our priorities. Our lived experience of local issues gives us a unique viewpoint on how to blend energy transition needs with wider neighbourhood dynamics. This is a strong base upon which a locally popular transition can be built.

As a community, we can share knowledge and support people in taking action as individuals and collectively. Through this, we can become advocates for change at a wider borough scale to address issues and challenges that we experience within our neighbourhood.

## Sholver Community Led Energy Action Plan

### What is it?

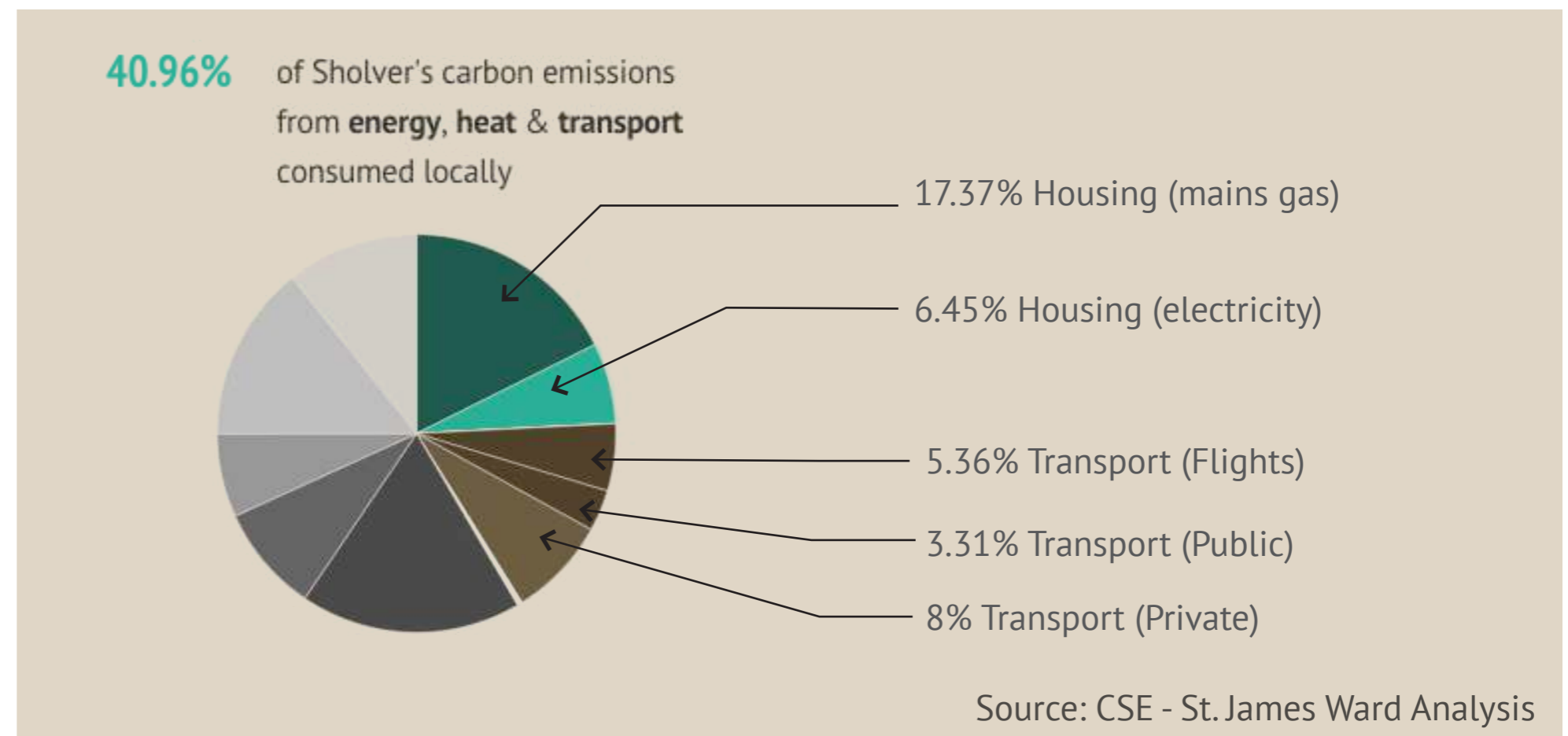
Community-led energy planning (CLEP) is our response to the questions outlined on the last page, with a vision of a future Sholver, that is warmer, healthier, happier and prosperous. The Community-led Energy Plan shows the key findings and actionable recommendations for different audiences that emerged from the Oldham Energy Futures workshop discussions across three energy themes:

- ***Energy Efficiency in the Home***
- ***Sustainable Travel***
- ***Local Renewables & Community Energy***

### How to use our CLEP

The Sholver Community Led Energy Plan is structured in two sections. The first section provides an overview of what we did in the Oldham Energy Futures workshop programme. The second section sets out what we found out during the Oldham Energy Futures programme within each of the three themes, our diagnosis of issues and priority areas for action within our community and for our Council & other stakeholders.

Oldham Energy Futures is only the start. We will use these initial findings to highlight some of the important issues and challenges we face in our neighbourhood and continue to speak to others about their experience, building up our collective knowledge.



# About Sholver

## The Neighbourhood

The neighbourhood of Sholver is located in the semi-rural edge of Oldham, 4km northeast of Oldham Town Centre, Oldham Borough, in the St. James Ward.

Sholver is a residential area that comprises of two parts: Top Sholver with a large housing estate that was built in the 1960s; and Bottom Sholver predominantly consisting of sub-urban semi-detached housing built in later decades. Large areas of green space surrounding the edges of both areas provides attractive views out to the surrounding countryside.



## Welcome to Sholver

Sholver is a semi-rural community on the outskirts of Oldham.

*Our community like living in the area because of the proximity to the hills, the views across Oldham from places such as the Millennium Green, the clean, fresh air and the sense of community they feel.*

We are a group of residents who have a wide breadth of lived experience, from retired solicitors and nurses to social workers. Some members of our group have lived in Sholver all their lives, while others have chosen to move to the area to be closer to family and friends.

The groups' age ranges between 20 and 80 years old, giving a unique perspective of the challenges faced in the area from those of working age, with young families through to retired residents.

Many of us are also actively involved in the community, volunteering at the Sholver & Moorside Community Hub and supporting the various activities and clubs that are run from there. Some have allotments on the Millenium Green; others walk their dogs across the hills and spend time enjoying the fresh air.

For the majority of us, there was a desire to be involved in the Oldham Energy Future project as an entry point into understanding the challenges faced in reaching net-zero emissions, learning how they could make changes on a personal level, and what could happen in their community to support and achieve these goals.



# This is what we did

## Workshop Summary

Our group engaged in the Oldham Energy Futures workshops between June 2021 to December 2021 at the Sholver & Moorside Community Hub.

Through the workshop process, we explored three energy themes:

- ***Energy Efficiency in the Home***
- ***Sustainable Travel***
- ***Local Renewables & Community Energy***

In each theme, we took time to think through how the changes needed could be done in such a way that benefits our whole community, creating a warmer, healthier, happier and prosperous neighbourhood.

### Diagnosis workshops 1-4:

In workshop 1, we were introduced to the Oldham Energy Futures programme. We traced the history of energy through an energy timeline and explored our aspirations for the programme.

In workshop 2, we explored how we can make our homes more energy efficient and warm and how that can improve health and save both on energy bills and carbon emissions. We applied this new knowledge to our own homes and talked about the impacts on our communities in terms of fuel vulnerability.

In workshop 3, we went on a neighbourhood walkabout in two groups and identified some of the barriers to sustainable transport and active travel within and beyond the neighbourhood.

For workshop 4, we went on a trip to Liverpool to visit Squash Nutrition, a community social enterprise cafe and small groceries shop, where we learnt about community ownership, particularly in relation to renewable energy.

### Imagining workshops 5 to 6

In workshops 5 & 6, we looked at example projects from other communities such as Plymouth Community Energy and engaged with external stakeholders such as Transport for Greater Manchester to learn about and discuss ideas to tackle the issues and challenges identified in prior workshops. In three groups, we started to refine the ideas within each theme.

### Defining workshops 7 to 8

In these final workshops, we started to solidify the ideas to bring them into a set of community actions as well as recommendations to stakeholders.

We discussed which kind of community action we would like to try out immediately as a pilot, who the partners could be and where we could get additional resources and funding.

To find out more about what we did in the workshops, please see the Sholver Community Workshop Summary or check out the [Oldham Energy Futures website blog](#).

# Workshop Timeline







# **01 Energy Efficiency in the Home**

# What we found out

## What's the problem?

### UK Context

**The current climate change targets of reaching net-zero by 2050, means that by 2050 energy use in our homes will need to be responsible for zero carbon emissions.**

In the UK, many of our homes are draughty, energy inefficient and cold. Much of the housing stock is old and inefficient - even housing built more recently is likely to need substantial upgrades if we are to meet net-zero targets and reduce other inequalities.

The energy needed to power and heat homes in the UK is responsible for about 22% of the UK's carbon emissions and most of these emissions are caused by gas central heating. Reducing energy demand is key, as is providing heating and power through non-fossil-based means.

Our homes also have a role in reducing the risk of overheating caused by more frequent spells of extreme summer temperatures as the climate warms and changes. Whilst older homes (such as with thick stone walls) can be better at regulating these temperatures, nearly all of our homes are vulnerable in their current state.

In the UK, most households spend around 90% of their time inside the home (Klepeis et al., 2001); therefore, the design and construction of our indoor environments have a significant impact on our lives. The quality of our indoor environments can affect our physical health (such as cardiovascular and respiratory systems), and our mental health.

The UK has a high rate of excess winter deaths, with fuel affordability and difficulty keeping homes warm being one of the prominent factors contributing to this. With draughty/leaky and energy inefficient homes, households may need to spend more money heating their homes and with high fuel costs, this puts pressure on household budgets.

Turning off heating, or substantially under-heating, affects well-being, comfort and happiness, and has links to educational attainment for children.

### Greater Manchester Context

**Greater Manchester has a target to reach net zero by 2038, this includes the decarbonisation of all of the housing stock in the region to net zero.**

In Greater Manchester there are around 1.2 million homes and around 54% of these properties across the region fall within the [EPC](#) D band with an average rating of 63 and average CO2 emissions from heating and lighting at 3.6 tonnes per home.

There are also around 22,000 homes that fall within EPC bands F and G.

Between 2017-2018, there were 2,220 excess winter deaths in Greater Manchester, with a quarter of these potentially linked to cold homes.

## Energy efficiency and EPC data

Climate Guide, together with the Centre for Sustainable Energy (CSE), undertook an analysis of the Energy Performance Certificates (EPCs) for all domestic properties in Sholver.

The EPC rating data provides a high-level indication of the type of housing in the area and the general energy efficiency across the neighbourhood.

We were introduced to the EPC data within the community workshops as it acted as a learning tool to explore the energy efficiency of properties across the neighbourhood. The data has its limitations (see the box on the right), and should not be seen as an accurate take on the energy efficiency or building condition.

Whilst there are these limitations, EPC data at an individual and aggregate level is a useful starting point for exploring energy use in housing, using a simple A to G rating and traffic light colour system across the neighbourhood.

We can use the EPC data as a starting point to identify areas to undertake more detailed energy efficiency surveys and modelling of properties in Sholver.

### Limitations of EPC Ratings

- The EPC band/SAP rating includes fuel costs (so it is not a pure 'energy use' indicator as often assumed).
- The carbon intensity measure (how much CO<sub>2</sub> is produced per kWh of fuel consumed) in the EPCs will reduce as more electricity is generated from renewables and less from gas and coal; therefore, older EPCs are likely to be significantly outdated in terms of CO<sub>2</sub>. The environmental impact ratings are also likely to be outdated for similar reasons.
- The EPC presents a snapshot in time and has an expiry date of 10 years from the date of the assessment. In that ten-year window, upgrades may take place, such as loft insulation topped up; that won't be accounted for in the EPC rating of the property. Likewise, a property may have been extended which all has a bearing on energy use and performance.
- The only triggers for an EPC assessment are when a home is built, sold or rented (or if as a requirement for a Renewable Heat Incentive application), so unless there is a trigger, there is little incentive to update them.
- The data uses Reduced data Standard Assessment Procedure (RdSAP), a reduced version of a full SAP assessment that uses certain conventions and assumptions. This means assumptions may be made about the property age, wall types, and insulation levels and if assessors cannot physically access spaces in the home, they will fall back on allowable conventions.
- The EPCs are based on 'standard occupancy.' Whilst this allows you to make high-level comparisons between properties, it neglects the way people actually use their homes, so they do not account for factors such as underheating, which is very common, nor households that are very high consumers of energy.
- They cover regulated energy only, not additional lighting and appliances (i.e. plug loads).
- There are other elements important for developing [retrofit](#) strategies that are not factored into EPC ratings such as building condition, repairs, ventilation, etc.

# What we found out

## In Sholver...

**There is a cluster of properties which have very low energy efficiency ratings, are the oldest housing stock in the area and are in need of energy efficiency improvements.**

There is a cluster of properties located in Top Sholver near East Oldham Methodist Church, adjacent to the A672, where 37 to 47% of properties have EPC ratings between E to G, which is very low. These are also old Victorian terrace housing with solid brick walls which were not built with insulation.

*"When I sit in my living room I can feel the draught coming in through the skirting board."  
(Sholver resident, 2021)*

*"People feel very unempowered and don't feel they have a say in things."  
(Sholver Resident, 2021).*

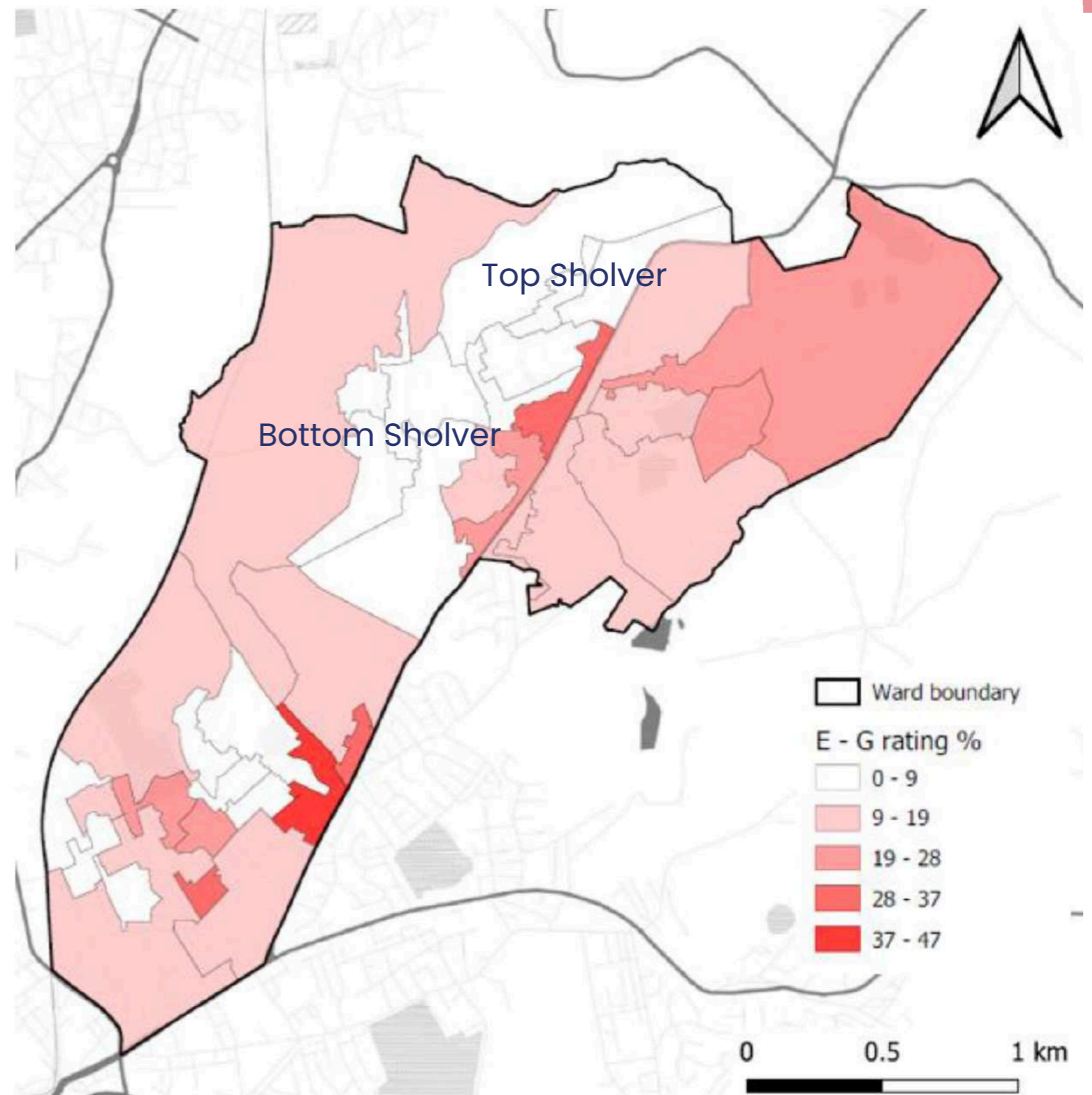
**There is a large proportion of social housing that was retrofitted in the past but that still falls short of the energy efficiency standards we need.**

Within Sholver overall, there are still a large number of homes that have an EPC rating of C and D. Even these homes will require upgrades if we are to meet emissions targets, achieve a balance between energy demand and supply from renewable sources, and eradicate fuel poverty.

## Spatial data: percentage of EPC Ratings E to G in St. James's Ward

Climate Guide and the Centre for Sustainable Energy (CSE) undertook an analysis of EPC certificates of domestic properties in St. James's Ward.

The plan shows that in the area between Ripponden Road, Sholver Hill Close and Dickens Street, 28 to 37% of homes have an EPC rating between E to G, which is very low. Within Sholver overall, 25 to 50% of the housing stock still has a low EPC rating of D to G.



Spatial Data Plan: Percentage of EPC Ratings E to G in St. James's Ward.

## Baseline Mapping: Building Typologies

The housing fronting Ripponden Road and Sholver Lane were the first homes to be built in Sholver, followed by properties on Grafton Street and Dickens Street, built in the late 1800s. Many of these homes are old Victorian terraces with solid brick walls and have low EPC ratings (between D to G).

We could conduct further local research in this area to understand the experience and energy demands of households. This could improve the quality of local data whilst also raising awareness and signposting householders to advice on energy efficiency improvements.



Old Victorian terrace housing along Grafton Street and Dickenson Street



Sholver Neighbourhood Housing Typologies Plan

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## There is a lack of knowledge about domestic energy efficiency measures and their benefits within the community.

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Many people in our community are not aware of the types of domestic energy efficiency measures they can make and the benefits of them in improving comfort and reducing energy bills.

There was also a clear absence of familiarity with the terms and concepts involved in retrofit, i.e. ‘fabric-first, solar thermal, solar photovoltaic, heat pumps and EPCs. There was also a need to share knowledge on how heating systems work.

There is a real need to share the knowledge and resources to support local people in understanding measures they can take to improve the energy efficiency of their homes and the benefits this can bring.

There is also a lack of access to trustworthy and independent information on measures that would be suitable for their home.

*“We have got to assert ourselves... let’s start saying to them: this is what we want and not what you want.”*  
*(Sholver resident, 2021)*

*“I’ve got a smart meter... what use are they?!”*  
*(Sholver resident, 2021)*

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## First Choice Homes need to engage meaningfully with their tenants around future retrofit measures in homes across the neighbourhood.

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In the past, our community have found it difficult to engage meaningfully with First Choice Homes.

First Choice Homes could engage with our community to understand the experience of different households and discuss options for improvements.

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*“It’s about having an honest dialogue with customers.”*

*(Sholver Resident, 2021)*

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# What can we do?

## Why is this important to us?

- Energy inefficient homes and rising fuel costs put pressure on households and vulnerable people in our community to turn off heating altogether or underheat to save money. This is affecting their well-being, comfort and happiness. In St James' ward, statistics\* show an average of 16% of homes in fuel poverty, but in some areas, this is as high as 30%. We know that recent and future energy price rises will push these rates higher.
- The UK has a high rate of excess winter deaths due to people finding it difficult to keep their homes warm. This is an urgent health and social issue in our community that needs to be addressed as part of the local energy transition, so that no one is left behind and everybody benefits.
- A better partnership and communication with First Choice Homes would help to identify homes in need of further retrofitting measures and help to deliver the actual interventions more smoothly with tenants. With very few grants or support (such as reductions in the ECO scheme delivered via energy suppliers), there are gaps in funding to support the delivery of energy efficiency measures locally. This is especially the case for privately owned homes.
- If we are to address the large numbers of energy-inefficient homes in Sholver, we need more financial support and human resources in the community to help make improvements.
- There are immediate DIY energy efficiency improvements that can be made to the housing stock in Sholver, but the knowledge on how to do this well (and without creating unintended consequences) needs to be shared.

\* BEIS sub-regional fuel poverty England 2022 (2020 data)



# 1

## What we can do as a community

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To address the lack of knowledge around domestic energy efficiency measures and their benefits in the community, we could:

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### 1A) Develop a Sholver energy efficiency steering group

We could form a community steering group to work out our next steps and start a campaign around energy efficiency to bring in expertise and support for local people in the area. We could learn from other community energy groups across the UK by tapping into the networks and organisations we've been introduced to as part of Oldham Energy Futures.

### 1B) Engage in local data mapping in the neighbourhood

We could continue the diagnosis and data mapping that we started during the Oldham Energy Futures programme and engage more local people to understand their experiences of their homes and their energy use.

We can use the Oldham Energy Futures maps as a starting point to target specific streets with a higher percentage of EPC ratings below E and continue to identify and speak to households experiencing fuel vulnerability.

This can all help to build a more holistic picture of what is happening now and what needs to happen from the bottom-up. Instead of assumed energy use, we can start recording actual energy use and fuel costs. And we can add to the narrative around energy by observing building conditions and what repairs might be needed before retrofit can take place.

# What can we do?

## 1C) Signpost community members to existing, trusted energy advice resources

To support our community in building knowledge around energy efficiency, we could signpost to useful energy advice resources developed by trusted organisations and charities such as [The Centre for Sustainable Energy \(CSE\)](#), [Changeworks](#) and [Cumbria Action for Sustainability \(CAfS\)](#). CSE provide a lot of useful publicly available resources and [factsheets](#) on their website, including in other languages: [www.cse.org.uk/resources](http://www.cse.org.uk/resources)

These provide information, practical guides and videos, such as simple [DIY draught-proofing](#) and using [central heating controls](#). We could also get in touch with CSE to see how these might be tailored to Oldham and our projects (for example, including contact details of our hub and Warm Homes Oldham), or commission a similar organisation to develop a resource specifically for the energy efficiency challenges within our neighbourhood.

## 1D) Recommend to First Choice Homes an area-based energy efficiency project working with the whole estate

First Choice Homes owns 19% of properties within Sholver. We could recommend to First Choice Homes to work with the community to deliver and provide support and energy efficiency measures across the whole estate.



## 1E) Take the energy advice service into homes

The community could develop a Local Energy Efficiency Hub project at the Sholver & Moorside Community Hub.

As a community, we understand the limits to our own expertise in energy efficiency; therefore, we would work as the Sholver Energy Efficiency Steering Group to launch home visits by trained energy advisors to provide an energy advice service.

The service would provide local people with more hands-on support to act upon the advice given in the one-to-one sessions. Through a home visit, trained advisors would work with the resident to consider which measures are most important to act upon and take the lead on installing basic DIY measures.

A tool library hosted at the Sholver and Moorside Community Hub could be a useful resource for both residents and advisors, where tools could be rented out for free or at a discounted cost.



## 1F) Offer in-depth home energy assessments

The community could go one step further and offer a more in-depth home assessment service, where trained retrofit assessors can conduct whole-house reviews of properties.

These assessments provide a more accurate reflection of a property's full energy use, giving residents a comprehensive view of the issues and a better basis for making decisions about home renovation.

Some measures can be more extensive, disruptive and costly to install. Insulation and draught-proofing work in particular needs to be carefully considered alongside ventilation. The community would need to consider supporting individuals with accessing appropriate trade expertise and finance alongside this new service.

## 1G) Develop bulk purchasing of low-cost energy efficiency products

As a community, we could look into setting up a local bulk buy scheme. The scheme could work to raise and create interest and awareness of energy efficiency measures. Also, we could offer reduced-cost prices to residents by purchasing items such as low-energy light bulbs or draught-proofing materials in larger quantities.

If there is local interest, we could look at more ambitious bulk buy items as part of more significant community retrofit initiatives for whole street retrofits.

Clustering installations in this way can also help to make work more attractive to installers. Some installers prioritise larger installation projects over smaller ones, so clustering could help get the ball rolling on home energy efficiency in Sholver quicker. There are other benefits to this too, such as allowing welfare services and materials storage to be more efficiently planned for.

## 1H) Lobby Westminster to secure a better settlement for energy efficiency retrofit for people living in low-income and energy performing homes

Debbie Abrahams, the Parliamentarian representing Oldham East and Saddleworth, should use the data collected in Oldham Energy Futures to highlight the clear opportunity for retrofit in the area of Sholver and focus their messaging in Westminster on this issue. While the financial and health benefits of whole-house retrofit for the community's priority group are substantial, the current support is inadequate.

Efforts to develop a retrofit market will only partly respond to the issue. Those on lower incomes will not be able to afford retrofits without additional support (and therefore miss out on the benefits). Recent government funding has focused on upgrading EPC E to G rated properties, but we think this should be expanded to EPC D rated homes.

# What can we do?

## 2 What you can do as Oldham Council

To develop domestic retrofit opportunities in the neighbourhood, improving energy efficiency and housing standards across Sholver, you could:



### 2A) Explore borough-level options for funding whole house retrofit for vulnerable residents

In support of the actions proposed for Members of Parliament, Oldham Council should investigate how to improve the whole house retrofit support for lower-income people living in low-energy performing homes. Some options to consider to channel funding towards this group:

- Community Infrastructure Levy
- A local energy efficiency fund which recirculates profits from new Council and community renewable energy infrastructure developments and other profitable green initiatives. See “Renewables recommendations” for more information.

### 2B) Develop the supply chain

Creating the conditions for a new domestic retrofit market requires targeted, strategic support for contractors and supply chain companies combined with broader infrastructural development and local economic planning. Oldham Council could support this work by:

- Building a network of contractors interested in retrofit, especially those already operating in the Repair, Maintenance and Improvement (RMI) sector and who have experience of working at the household scale
- Offering local training opportunities
- Supporting contractors to grow. Develop a borough-wide jobs fair to promote and share information about new low carbon jobs and the green economy.

For more information on a possible model for development please see the People Powered Retrofit paper from Carbon Coop here:

[cc-site-media.s3.amazonaws.com/uploads/2019/01/PPR-Report-June-2019.pdf](https://cc-site-media.s3.amazonaws.com/uploads/2019/01/PPR-Report-June-2019.pdf)

## 2C) Refresh 'Warm Homes Oldham'

The Council could work in partnership with the Sholver Energy Efficiency Steering Group to build an effective end-to-end energy advice service, where different organisations in Oldham provide part of an overarching service.

The role of neighbourhood based community actors, who act as trust builders with the local community should play a pivotal role within the full service provision. This could work by:

- Organising a workshop to map out the essential elements of an energy advice service with potential stakeholders. The community has already undergone a mapping activity which we can contribute towards this.
- Agreeing to make the Council's energy advice service, Warm Homes Oldham, the key signposting service for residents that would benefit from an in-home energy advice visit. Whilst Covid-19 affected the Council's ability to run in-home support, the cost of living crisis makes it all the

more pressing to reboot in-home visits and increase the Council's capacity to respond to increased local need.

- Work with the Sholver Energy Efficiency Steering Group to align the recommendations made through Warm Homes Oldham with the in-community energy advice service. For example, our programme encourages a full review of heating systems and home temperature before recommending a reduction in room temperatures.
- Many people living in fuel poverty will already be under-heating their homes, which can lead to health problems. Any recommendation around a change in room temperature should only be made if the resident's health is protected.
- Build an alert system for home energy efficiency funding options. The Council could play an important role in vetting the credibility of the funding.

- Work with other community hubs, to act as a first point of contact on energy advice in Oldham. Once this point of trust has been established, Warm Homes Oldham can be the key sign-post service for in-home energy support. The Council should consider paying a 'finders fee' to these community hubs, to help support the financial viability of community-based energy advice support.

## 2D) Increase energy efficiency targets for new development

Whilst the Future Homes Standards are set to come into force for new development by 2025, the Council should raise the bar within development control and bring in higher energy efficiency standards earlier than this. The Council could look at setting Energy Use Intensity (EUI) and space heating demand targets in particular as these are absolute and more meaningful than percentage reductions.

# What can we do?

## 3 What you can do as First Choice Homes

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**To engage meaningfully with their tenants around future retrofit measures in homes across the neighbourhood and improve the energy efficiency of the housing stock, you could:**

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### 3A) Access local data to inform strategic thinking

During our workshops one tenant from First Choice Homes shared that:

*“It would be great know more about any schemes to help people with low EPC ratings, is this something that could be made available?”*

Tackling this problem could help to improve the warmth, health and comfort of social housing residents.

If you have not gathered existing data about the energy performance of your properties, you can contact the Sholver Community Energy group to access our full data set. This data provides an address level summary of domestic EPCs across Sholver. Our visual highlighting areas in the neighbourhood with higher concentrations of low EPCs buildings may also be useful.

We could work together to enhance your asset data, collecting and adding in actual energy use and fuel costs (not just modelled, as the EPCs use).

### 3B) Pool social housing assets for local good

As owners of property, capital and expertise, social housing providers like yourselves could consider how best to make their resources serve the benefit of the whole community. On property, you could turn one of your voids into a retrofit show home, demonstrating what a less carbon intensive home may look like. This would help bring to life conversations about what the work involves, and the benefits.

Not only would this help to engage local residents, it could provide a valuable asset for engaging the wider community with energy issues. We can imagine how this could become a Local Energy Efficiency Hub, hosting drop in sessions at the show flat or house!

On finances, housing associations like yourselves could offer to fund neighbourhood based energy advice services for all local residents.

On expertise, housing associations already overseeing improvements across their stock, could create a cost offer for other households living within the vicinity, enabling them to upgrade their home at the same time.

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To address the large proportion of social housing that was retrofitted in the past but that still fall short of the energy efficiency standards we need, you could:

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### 3C) Develop an area based energy efficiency programme in Sholver

As owners of 19% of the housing stock in Sholver, you could develop an area-based energy efficiency project in the neighbourhood, supporting residents with training on using their heating systems. This could be a great opportunity to understand the level of readiness for the switch to heat pumps or other non-fossil-based heating, feeding into the planning work of your asset management teams.

You could look at bidding for further Social Housing Decarbonisation Funds to retrofit the housing stock in Sholver.

You could identify and retrofit properties which still require additional energy efficiency measures and coordinate with the wider community to offer resources and support to homeowners and landlords who may want to retrofit their homes at the same time.



# What can we do?

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To address the lack of access to retrofit support services in Sholver, you could:

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## 4 As the Chamber of Commerce

### 4A) Advocate on behalf of the Sholver business community for more local retrofit support

Oldham is covered by a local branch of the Greater Manchester Chamber of Commerce. This organisation advocates on behalf of local businesses to extend their interests.

By sharing data with the Chamber of Commerce and documenting the need for home energy efficiency improvements, the local community could show how much latent need there is for retrofit to help stimulate discussion on skills and training.

The Chamber of Commerce could use this evidence to advocate on behalf of the Sholver business community to bring more retrofit support services and skills training to the community.

## 5 As Oldham College

### 5A) Provide more local opportunities for people in Sholver to develop retrofit skills

Oldham College, the local provider of further education courses, has a department devoted to construction, but there's no apparent focus in any of their current offer on retrofit. The college could provide courses specifically around developing retrofit skills, to build the local retrofit workforce of the future and address the skills gap.

The evidence base developed in Oldham Energy Futures could help to make the case for increasing their educational offer and equipping their students with the right skills to take advantage of this huge potential across the council area. Links could be made between the training and supply chain work being done by organisations like People Powered Retrofit: [retrofit.coop/training](https://retrofit.coop/training)

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To address the range of standards of housing across Sholver, you could:

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## 6 As a local landlord

### 6A) Upgrade the energy efficiency of your rental properties

Now is the time to upgrade the energy efficiency of your rental properties. Since the 1st April 2020, all rental properties being let or sold in England and Wales must have an EPC E rating or above.

This year the government has proposed all properties will need to have an EPC rating of C or above by 2025. The penalty for not having a valid EPC will raise to £30,000.

You could listen to our experiences and work with our community to plan investments that will deliver positive impact for you and your tenants. For example, reducing energy demand through quality insulation works has multiple benefits - not only helping your tenants with comfort, health and affordability, but also improving the condition of your assets.







## **02 Sustainable Travel**

# What we found out

## What's the problem?

### UK Context

According to the 2021 Department of Transport Environmental Statistics report, domestic transport in 2018 was the largest emitter of Green House Gases in the UK, producing 27% of the UK's total emissions.

The number of car trips in the UK under a mile has doubled since the 1970s to around 30%. This rise in short car journeys contributes to noise, congestion and pollution in neighbourhoods, often creating an unpleasant environment for pedestrians and cyclists and residents in their communities.

The UK government published its Transport Decarbonise Plan in 2021, setting out the Government's approach to decarbonising the UK's transport system.

The Government plans to move 25% of its car fleet to ultra-low emissions by December 2022 as an interim step. It plans to ban the sale of new petrol and diesel cars and vans by 2030.

Focusing on efforts to reduce carbon emissions from road transport only through the uptake of EVs comes with caution though as this could increase car ownership by 28%, which will impact the resources required to accommodate the increase and an 11% increase in car traffic by 2050.

It is therefore important to also look at a modal shift away from cars in general to other more sustainable travel options for long journeys such as trains, buses and trams. These transport options reduce the overall reliance and number of car journeys and help alleviate congestion in neighbourhoods, towns and cities.

We also need to encourage a UK-wide culture of walking and cycling for medium to short journeys. We can do this by improving the connectivity and quality of our streets and open spaces, providing additional infrastructure for cyclists and prioritising pedestrians and cyclists within the public realm.

### Greater Manchester Context

The Greater Manchester Transport Strategy 2040 sets a target to make 50% of journeys in Greater Manchester made by public transport or active travel to support a reduction in car use across the region.

Transport for Greater Manchester is working on a ten-year plan for Greater Manchester called the Bee Network.

The Bee Network will deliver new and improved cycling and walking network, reduce car use for everyday trips, promote more sustainable journeys across the region by 2040 and create broader benefits such as better health, reduced congestion on roads and cleaner air.



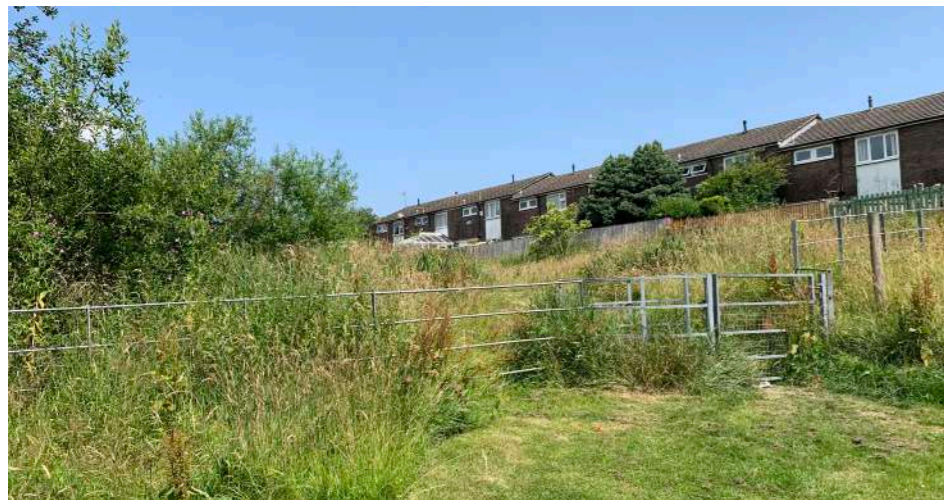
Greater Manchester  
Bee network cycle hire scheme

# What we found out

## In Sholver...

**There is a need to improve walkability, safety and wayfinding around the neighbourhood.**

We walked through Sholver and identified areas which were difficult to navigate on foot - either because of poor pavement conditions, steps which had fallen into disrepair or inadequate lighting, places to rest on steep hills and paths which had no or old signposting.



01 - Existing pathway has inadequate lighting and a lack of signposting.

*“They drive really fast down Cop Road making it not a nice experience walking down the road.”*

*(Sholver resident, 2021)*

*The reservoir used to be accessible on foot - the view from the reservoir is absolutely fabulous. It’s just about the only nice thing down there now.”*

*(Sholver resident, 2021)*

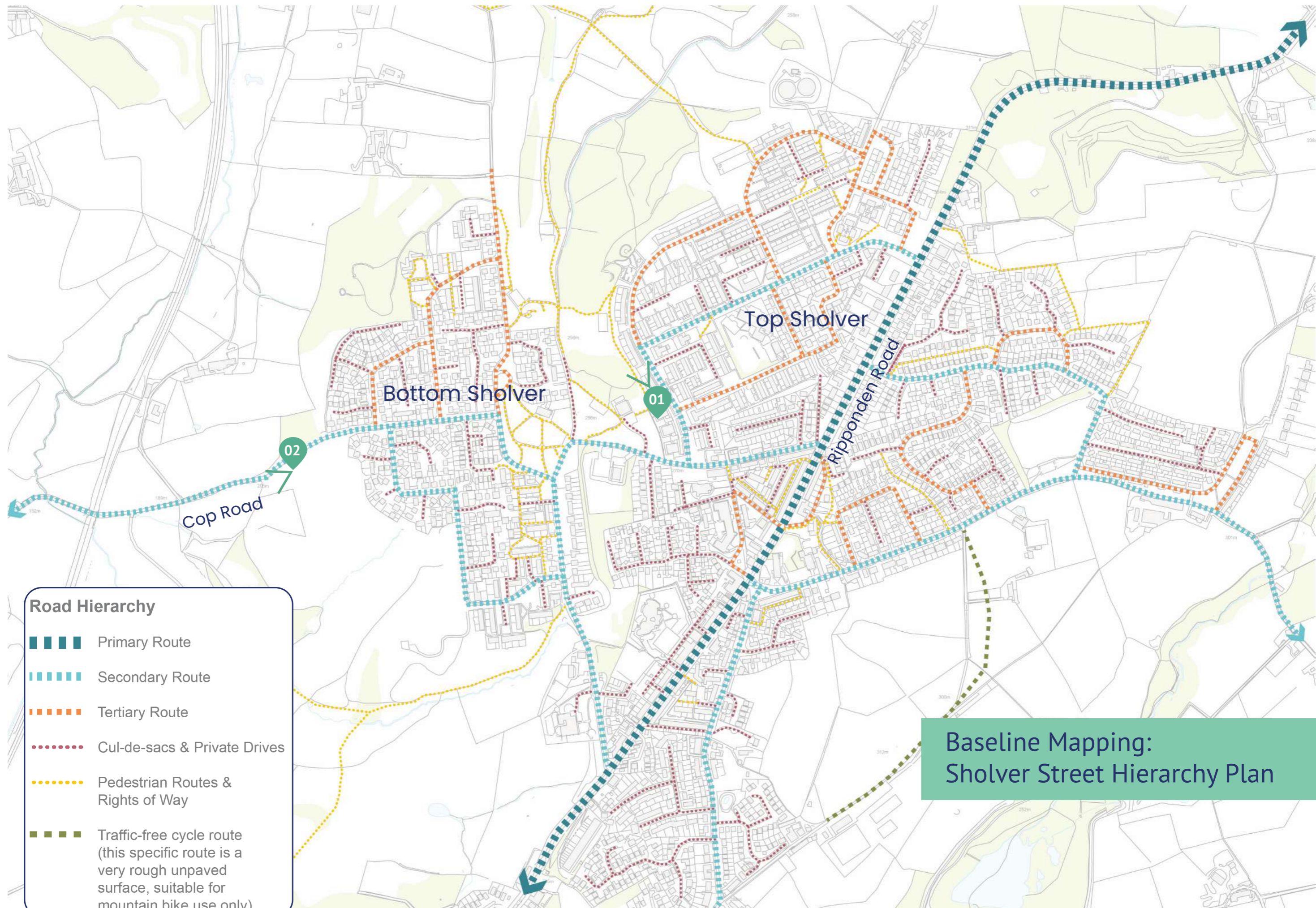
**There are traffic and rat-run issues along Ripponden Road and Cop Road.**

The adjacent street hierarchy plan shows the road through the centre of Sholver is a rat-run. People come down from Ripponden Road when there is an accident on the motorway and cut through the village and west onto Cop Road to Royton.

Cop Road is not safe for pedestrians to walk down due to the lack of pavements, making it an unsafe route.



02- Cop Road - there is only pavement on one side of the road making it difficult for pedestrians to walk along this route.



**Road Hierarchy**

- Primary Route
- Secondary Route
- Tertiary Route
- Cul-de-sacs & Private Drives
- Pedestrian Routes & Rights of Way
- Traffic-free cycle route (this specific route is a very rough unpaved surface, suitable for mountain bike use only)

Baseline Mapping:  
Sholver Street Hierarchy Plan

# What we found out

There is potential to improve the greenspaces and improve access to walking routes in the local area to promote walking in the neighbourhood.

The adjacent green space plan shows that Sholver has access to various large green spaces in the area.

From our neighbourhood walkabout, however, we identified the potential to improve these spaces, including planting more trees, which is essential in tackling climate change.

The hilly topography and lack of rest points along key walking routes in Sholver are resulting in cars for short journeys within the neighbourhood.

Walking around Sholver is uncomfortable because of the hills and lack of places to rest; this means that people use their cars for even very short journeys.

In addition, it is hard to walk to the existing local shops in Sholver, which are a long way away from homes and without any places you can stop and rest comfortably, people are less likely to want to walk.



01. Maintenance issues identified along the workshop 3 walkabout around Sholver.



02. There are opportunities to improve access and maintenance to public rights of way in the local area.



Image (above): Hilly topography and a lack of resting points along many streets in Sholver.



# What we found out

Sustainable public transport options and travel in the area could be improved, especially the frequency and affordability of bus services and the quality of the bus stops.

The public transport plan shows that the bus services between Sholver and Oldham/Manchester are infrequent, especially during the weekend. We know from experience that there is a need for:

- Improved bus routes between Sholver, Shaw, and Royton.
- Cheaper bus fares.
- Improved bus stops that protect from Sholver weather have seating and include up-to-date information on bus timetables and service status.
- Improvements to bus services during bad weather (snow).

There is a lack of meaningful engagement and action around providing sustainable transport improvements for Sholver.

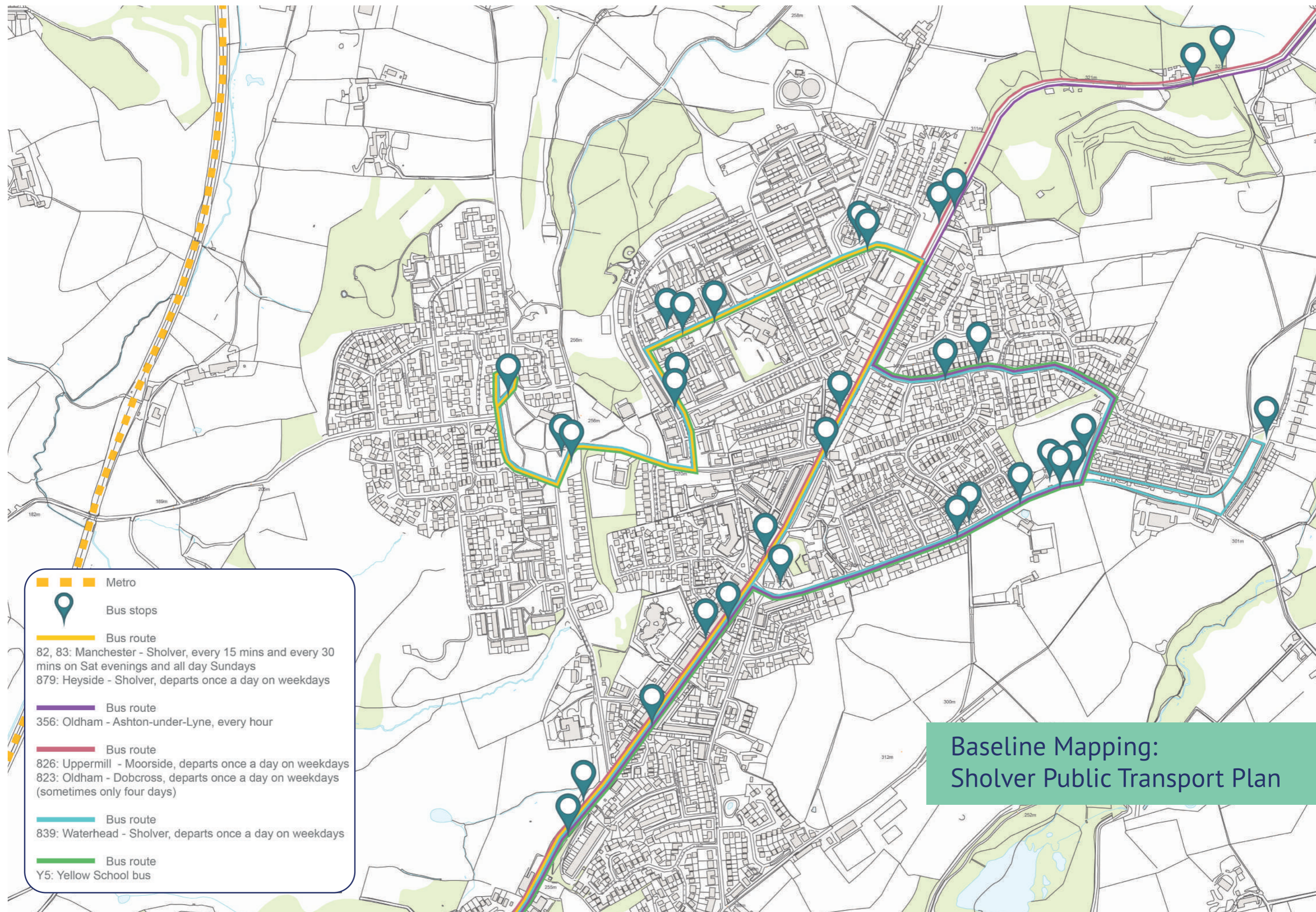
TFGM is refreshing their five-year transport strategy 2040 at a strategic level linking Councils, the NHS, community champions and faith organisations and plans are ‘cascaded down.’

There is a gap between community needs and consultation methods used by TFGM (just using an online survey and local information feeding into strategies rather than direct action). Therefore, the Sholver group are keen to develop a campaign to have their voice heard on issues around the bus service and facilities in the neighbourhood.



.....  
***“There is no shelter or rest spots between here and Watersheddings.”***  
.....

*(Sholver Resident, 2021)*



# What we found out

## Why is this important to us?

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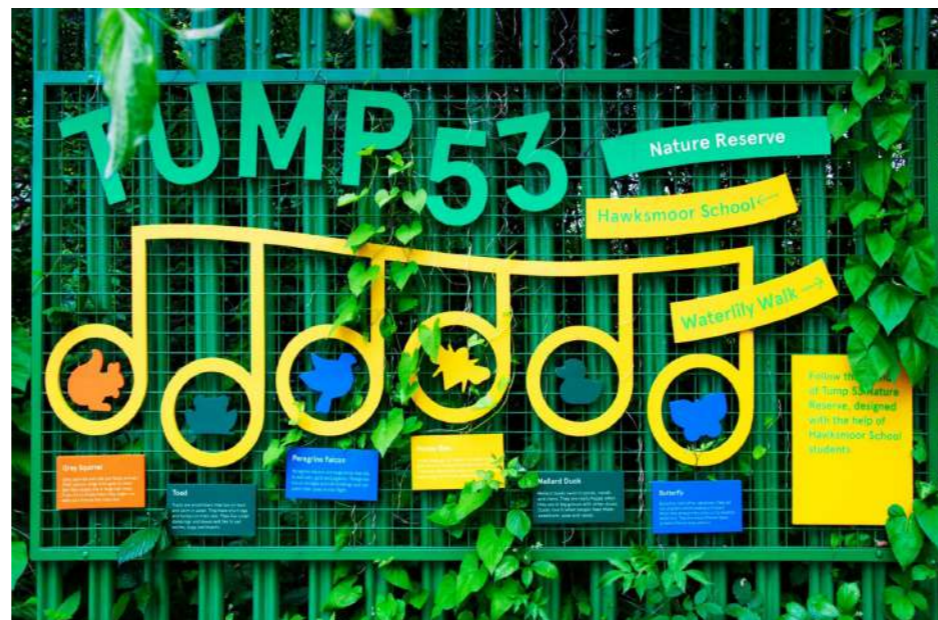
- As we face a cost of living crisis and rising fuel costs, residents need alternatives to using their cars on short journeys.
- People who can't drive or don't own a car should be able to walk through their neighbourhood safely, without the risk of trips and falls from uneven pavements and paths or having to walk on the road due to cars parking on the pavement.
- People should feel safe walking at night, with the help of better quality street lighting.
- Residents should also be able to use public footpaths and public rights of way by having signposts which are well maintained, easy to read and in the correct place.
- Providing more seating on walking routes in the area could encourage and increase journeys on foot within the neighbourhood to destinations like grocery stores and the local school.
- An additional 'corner shop' could be provided in Bottom Sholver to reduce the walking distance to general groceries.
- Improving our green spaces would help people in Sholver enjoy them more, encouraging people to spend their leisure time outside and use the area with family and friends.
- An improved bus service would not only benefit the community as a whole; it would improve access within and beyond the neighbourhood for pensioners with no cars, young families (young people) with no cars, children/kids walking from/to school, especially from local high schools outside Sholver.
- Improving the bus service would also reduce reliance on cars as the only means of reliable transport.
- Reducing car use in Sholver will help reduce carbon emissions from transport locally.
- We need actions to provide alternatives to car use for short journeys to places like school and work, encouraging people to walk and cycle.
- There are also many health benefits to walking and cycling, which could be shared more within the community.

## Example Project: Tump 53 Nature Reserve

This project was set up by Gallions Housing Association in 2011 to regenerate a neglected green space and included workshops to connect children, young people and the wider community with nature and the environment.

Young people from the local schools engaged in tours around the reserve to learn about the local wildlife and engaged in the signage design process that resulted in a set of brightly coloured signage designed to invite others to explore and learn about the nature reserve.

The Tump 53 was connected with an interactive AR app which is activated by codes and signage around the reserve and nature walk. Young adults and children can also engage with the app to learn more about the plants and wildlife in the area.



Images (above): Example Project Tump 53 Nature Reserve, Greenwich, London.

# What can we do?

To address the lack of rest points along key walking routes in Sholver, improve walkability, safety and wayfinding around the neighbourhood and...

To improve sustainable public transport and travel options locally:

## What we've done so far

We have already started with developing the Sholver Futures Travel Group.

Over the past four months, we have worked with Carbon Coop on a pilot project to create the Sholver Futures Travel Group. The group aims to raise awareness, campaign and work with stakeholders such as Oldham Council, First Choice Homes and Transport For Greater Manchester to improve all travel options in Sholver.

We want to become champions of the Sholver community, improve green spaces, promote opportunities to residents, and highlight successes in Sholver.

The project has begun with the community group exploring what problems people in Sholver face when travelling across Sholver and Oldham. We have launched a survey to collect people's opinions. We will be working to bring these results to the community.

## A) "Don't Lose Your Way" – Saving key walking routes.

We are working to identify critical footpaths and cycleways in Sholver, building on work already undertaken in the Oldham Energy Futures neighbourhood mapping workshop to promote the use of them and we are working on setting up a task force to do this.

In addition, we have met with the Public Rights of Way Officer for Oldham Council to understand how they can report issues with Public Rights of Way that have fallen into disrepair or are blocked by fencing and other obstructions that stop people from being able to use the paths properly.



## B) Local Wayfinding project to mark walking routes and new leaflet information.

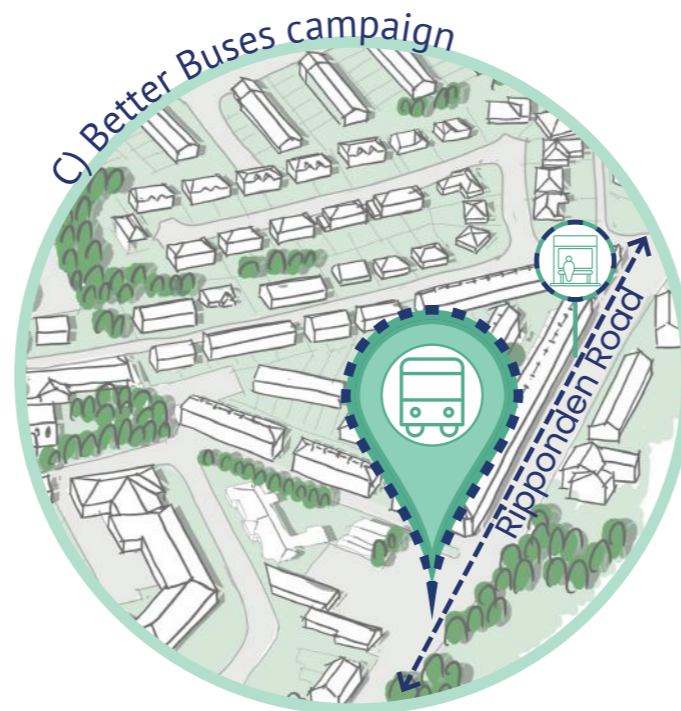
We are exploring funding options to improve seating, lighting, signposting and mapping in Sholver and would like to design a map, working with a local illustrator to design and develop the leaflet of information.

Signs along these walking routes could provide information on the distance to locations and green spaces in the area and be designed to reflect the identity of Sholver / celebrate its heritage.



## C) Better Buses campaign

We plan to launch a campaign focused on improving bus service provision in Sholver and reducing travel fares in the longer term.



# What can we do?

## 1 What we can do as a community

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**To address and reduce the traffic and rat-run issues along Ripponden Road and Cop Road and...**

**To improve the sustainable travel options in Sholver, we could:**

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### 1I) Support Active Travel in Sholver

As a community, we can think about where we park our car; if it is on the pavement, will it block access for someone who uses a wheelchair or pushes a pram?

We can reduce emissions by making shorter journeys on foot and leaving the car at home.

### 1J) Help to improve walking routes in Sholver

We can continue our work within the Sholver Futures Travel Group to map walking routes in Sholver. We can raise awareness in the community to report areas along public rights of way which need improvements or where access is blocked to the Public Rights of Way Officer (PRoW) [PRoW@oldham.gov.uk](mailto:PRoW@oldham.gov.uk) for further investigation.

### 1K) Advocate for better transport options for Sholver

We can share the Sholver Futures Travel questionnaire with others in the community to tell us about their travel experience in Sholver.

We can also encourage others in the community to speak to our local councillors and MP about how they are working to tackle air quality in the neighbourhood and improve sustainable transport options for Sholver.

## 1L) Set up of a sharing electric-bike scheme

The Sholver and Moorside Community Hub could partner with First Choice Homes and Oldham Borough Council to develop a sharing e-bike scheme to create an offer for the whole community. Oldham Borough Council could provide funds for the bikes, and First Choice Homes could manage and maintain the bikes, which could be stored at the Sholver and Moorside Community Hub.

The centre could host a bike library once a month to offer the opportunity for people to try out the bikes for the day within the area. In addition, first Choice Homes could support with funds to bring a cycle training scheme to the area to help people of all ages learn how to ride a bike and use an e-bike.

A variety of bikes could be purchased, for example, e-mountain bikes to complement the topography of Sholver and cargo bikes to manage the weekly grocery shop. The Community Centre could charge a small tariff for residents renting out the bikes.

## Precedent: Deal E-Bikes

Deal e-bikes were developed in partnership between Deal Town Council and Your Leisure. Deal-e-bikes are based at Tides Leisure Centre and have a fleet of seven Deal-e-Bikes (mountain bikes & step-through loop frames) which are suitable for riders of all shapes & sizes.

There's also a longer cargo e-bike with a child seat. Bikes are available to hire from the leisure centre for a full day for £30 or for half a day for £15 pounds.



Image Top: Deal e-bikes, Deal, Kent

# What can we do?

## 2 What you can do as Oldham Council

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To improve the amount, quality and maintenance of the public realm and open space to encourage active travel within the neighbourhood:

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### 2D) Develop a wayfinding project to improve signage and safety for pedestrians

Oldham Council should support the Sholver Futures Travel Group in identifying funding for this and help to lead the project. The community could contact Oldham Social Prescribers, Action Together and Oldham Healthwatch for support in organising the group and walking events in the area. The scheme would need a community leader to drive forward the project in the local area.


Oldham Council should work with community stakeholders to support them with identifying land ownership boundaries and identify parcels of land and streets (some of which have already been identified in the OEF process) owned by Oldham Council, which could be greened within Sholver.

The relevant council departments would need to be engaged, and planning permissions will need to be secured. Funding could be potentially secured through S106 funding from new developments in the area.

### 2E) Improve Sholver green spaces to make it easier and safer for families to use for picnics and play etc.

The Greater Manchester Green Spaces Fund is coming soon and will provide small grants to communities to clean up and improve pocket parks and local green spaces and create new ones where they are needed.

In Sholver, this could support the improvement of the existing green spaces in the local area, supporting greening streets, supporting initiatives for community gardening/food growing, re-greening paved areas in the neighbourhood and improving existing and creating new accessible green spaces for people and /or wildlife. Applications will be accepted on a rolling basis until 2024.



Oldham Council should work with community stakeholders to support them with identifying land ownership boundaries and identify parcels of land and streets (some of which have already been identified in the OEF process) which are owned by Oldham Council, which could be greened within Sholver.

The relevant council departments would need to be engaged, and planning permissions will need to be secured. Funding could be potentially secured through S106 funding from new developments in the area.

## 2F) Develop on-street residential charging points

Oldham Council should proactively plan for on-street residential charging and install on-street charge points in Sholver. They can apply for grant funding from the Office for Zero emissions for residential on-street charge points. The On-street residential charge point scheme (ORCS) provides funding towards 70% of the cost of installing on-street charging points.

Local authorities are invited to submit applications for grants of up to £7,500. See here for details: <https://www.gov.uk/government/publications/grants-for-local-authorities-to-provide-residential-on-street-chargepoints>

Oldham Council could undertake an analysis of the existing LA-wide car ownership pattern in combination with data on socio-demographic characteristics. This can identify key streets that have both the correct demographic profile for ‘early adopters’, together with on-street parking pressures to locate streets that might benefit from charging points.

Additionally, local councils can set up a scheme for residents to request a charge point in their street to gauge interest from them. The Energy Savings Trust provides local authorities with funded support via a range of services, including the evaluation of roll-out of EV charging infrastructure, business and community engagement, and more.

## 2G) Develop Council owned parking Electric Vehicle charging points

Oldham Council could set up rapid charging infrastructure in Local Authority owned car parks in Sholver. The Council could also work with the local businesses in the area to set up a rapid charging infrastructure. In addition, the Council should liaise with Electric North West to understand the costs and sub-station capacity.

# What can we do?

## 3 What you can do as First Choice Homes

To reduce private car ownership and only encourage car use for longer journeys to address and...

To reduce the traffic and rat-run issues along Ripponden Road and Cop Road, you could:

### 3D) Develop Car-sharing / Car club together with the Sholver community

First Choice homes could work with e-cars for business or enterprise car clubs. Usually, an e-car would have around 30 members using a single e-car. The e-car could be provided outside the community hub in its car park and booked via an app service.

Grants to support the purchase of vehicles can be found on the Government Website:

<https://www.gov.uk/government/collections/government-grants-for-low-emission-vehicles>

### Precedent: Ore Valley Housing Association Enterprise Car Club

Ore Valley Housing Association teamed up with Enterprise Car Club and the Energy Savings Trust to provide zero-emissions electric vehicles for use by housing association residents and anyone who lives or works in the surrounding area.

Four fully electric plug-in Nissan LEAFs were purchased, with anyone over the age of 19 able to hire them from £5 an hour using a new mobile app.



Image Top: Ore Valley Car Club

## **7** As Transport for Greater Manchester

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**To improve walkability, safety and wayfinding around the neighbourhood:**

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### **7A) Extend the GM Cycle hire scheme to the Oldham Borough Transport for Greater**

Transport for Greater Manchester (TfGM) should work with Oldham Council to extend the Bee Network cycle hire scheme to cover Oldham Borough as soon as possible.

### **7B) Support and fund Active Travel schemes**

TfGM should work with Oldham Council and the Sholver community to support schemes identified to improve active travel within and beyond the neighbourhood.





## **03 Local Renewables & Community Energy**

# What we found out

## What's the problem?

### UK Context

**UK Government's targets to decarbonise the power generation system from 100% renewables by 2035, will cut CO2 emissions by 78% compared with 1990s levels.**

Our reliance on fossil fuels to supply our energy is therefore shifting. As a country, we are moving to replace this with renewable energy sources such as solar, wind, and hydro.

The contributions made by renewables to UK power generation has more than doubled since 2014 with renewables accounting for 43% of the UK's 312TWh of domestic power generation in 2020.

However, installing new renewable generation in the UK is not at the scale needed to achieve our carbon reduction targets.

The Climate Change Committee has indicated that we need at least a fourfold increase in renewable generation deployment by 2050, and this will be needed at all scales, from offshore wind projects to domestic rooftop solar low carbon transport projects.

### Greater Manchester Context

**The City Region's Carbon Neutrality target is 2038. In order to be able to achieve this target, an accelerated uptake and deployment of low carbon measures is necessary.**

Greater Manchester Combined Authority's (GMCA) number one priority as outlined in its 5-Year Environment Plan (2019) is increasing local renewable energy generation, adding at least a further 45MW by 2024 via commercial and domestic PV, onshore wind and biomass. The plan highlights Community Energy as a key delivery partner in achieving these targets.

In March 2019, over 60 people from community energy groups, Electricity Northwest, public and private sectors including local authorities and GMCA, social investors, commercial property developers, renewable energy installers, local and national charities and organisations, contributed to the development of a [Community Energy Vision and Action Plan](#) for Greater Manchester.

The vision and action plan sets out the target that by 2024 Community Energy will be generating at least 10% of Greater Manchester's renewable energy targets, and will maximise carbon savings through energy efficiency and support a socially just low carbon energy transition. The North West has over 30 Community Energy organisations deploying just under 13.4MW.

## What is Community Energy?

**Community energy refers to a community of people joining together to find or enable solutions for carbon reduction.**

This can be by collectively investing in local renewables from domestic solar to entire wind farms, but also offering local energy efficiency or advice services as well as, for example, transport projects like electric car-sharing or green community transport.

Community energy can range from small volunteer-run organisations that own a couple of small assets to large and highly professional businesses. They are set up for the benefit of their communities and democratically controlled by their members.

The main financial tool used is citizen investment with a 'one-member-one-vote' control, meaning that however much you invest, you will only ever hold one democratic vote in the company.

Surplus profits are re-invested to support further local environmental and social initiatives and services.

The Community Energy sector has been playing a part in helping to reach local and national net-zero targets whilst generating social benefits within the energy transition.

There are over 424 active community energy organisations across the UK that have reduced energy bills by £2.9 million and generated £3.13 million pounds for community initiatives.

In 2019 the total energy generation of the UK community energy sector was estimated at 250MW, which accounted for 0.12% of total energy generation and 0.36 of renewable energy generation. The current prognosis is that, given the right policy environment, the community energy sector could grow 12 - 20 times larger than today by 2030.

### Co-benefits of locally and community owned renewables

There can be significant direct and indirect social and economic benefits to supporting renewables to be built locally and particularly projects which are partly or wholly owned by local communities.

These additional benefits can include:

- More local jobs in construction and operation.
- Keeping project income and benefits within the local economy.
- Improved local environmental impact.
- Lower energy prices for local households and businesses
- Greater local energy security and resilience.
- Income that can be reinvested for the benefit of the community.
- Enhanced community engagement and empowerment.

See the full report by CAG consultants for Devon County Council here: <https://cagconsultants.co.uk/devon-county-council-report-on-socio-economic-benefits-of-community-energy-prepared-by-cag-consultants>

# What we found out

## In Sholver...

There are a number of community buildings, including schools in Sholver where rooftop solar photovoltaics (PVs) could be installed to increase local energy generation.

We went through a local analysis of potential buildings and electricity offtakers for rooftop solar.

The outcome was included in the Oldham Futures EPC and Solar PV analysis, including an initial report from the regional distribution network operator Electricity North West.

*“Energy prices are a big concern, we would like to see more solar energy, everyone who has them seems to say it works out cheaper.”*

*(Sholver resident, 2021)*

Whilst there are not many high energy users in Sholver as there are no large or industrial businesses or utilities companies located in the area there are several community buildings that could potentially be used for solar projects.

Our group also showed an interest in maximising the potential for community owned renewables in the whole of the Oldham borough.

Oldham already has a community energy group, which we could collaborate with: Oldham Community Power

**Precedent: Oldham Community Power: Solar PV on School and Community Buildings**

Oldham Community Power (OCP) was first launched in December 2014. In 2015, they 25 schools and 25 community buildings for their suitability for rooftop solar.

At the end of 2015, OCP received a UCEF grant to develop their work and in February 2016, they became incorporated as a Community Benefit Society.

They launched a Community Share Offer to raise funds for the first round of rooftop solar PV installations and began installing them in August 2016 on several school buildings.

To date they have developed rooftop solar on a number of community buildings across Oldham.

One example project is the installation of 112 solar panels on the rooftop of Beever Primary School in Derker, Oldham which was completed in August 2016.

The solar energy capacity is 29kW with 23,121kWh of energy generated over sixteen months with a saving of 10,379kg of CO2 within this period.



Image: Oldham Community Power

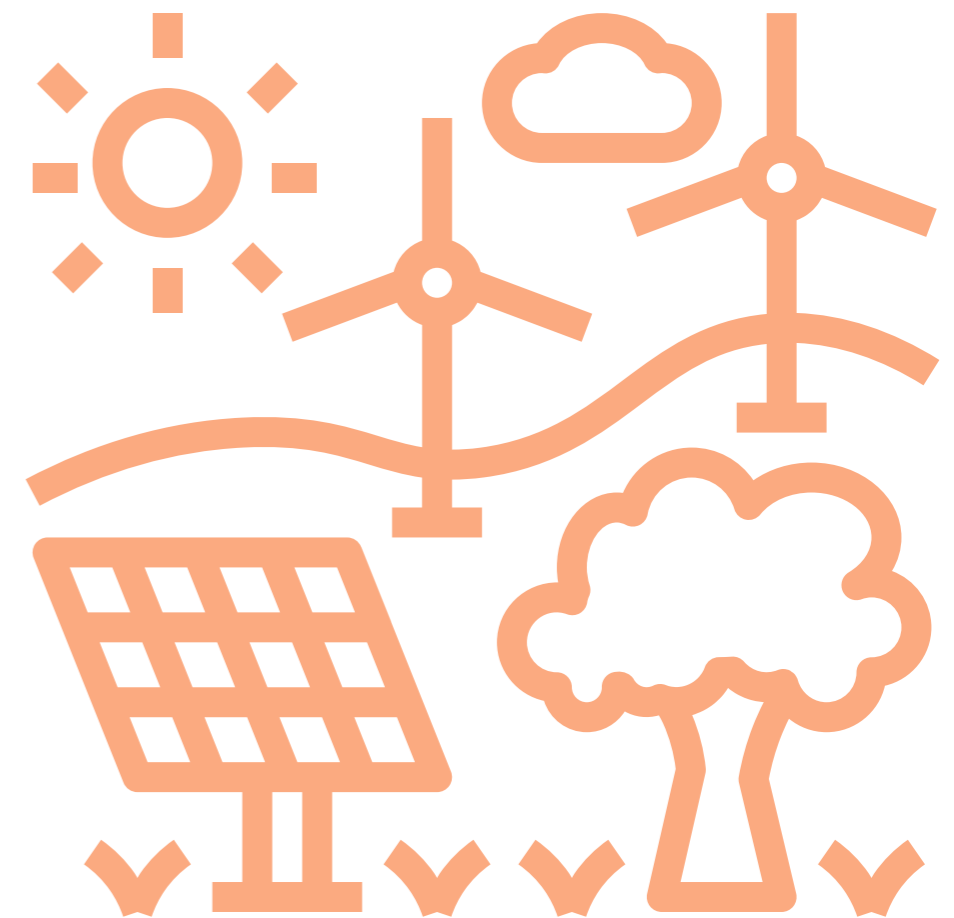
## There is large potential in wind energy for areas like Sholver.

We also discussed the potential of a renewable energy wind project on the community owned Millennium Green but unfortunately the site is too close to residential homes to be feasible.

We would in general welcome wind energy in the area, as long as it is wholly or part owned by the community and benefits are shared with people locally.

*“We have a lot of wind all year round’. ‘I can always put my washing out and it’s still moving on the line.”*

*(Sholver resident, 2021)*



# What we found out

## Why is this important to us?

- We can help decarbonise the energy system by generating renewable energy locally on rooftops of our homes, businesses and community buildings.
- Whilst there is a huge investment in large-scale renewables to feed the grid (particularly off-shore wind), we are way off the 100% decarbonised grid electricity goal. Medium-sized onshore renewables will be a crucial part of delivering the increase in the renewable generation we need.
- As the nation moves to more electric heating and electric cars, the national grid will have to reinforce the network to transmit the extra load. Producing renewables where the energy is needed can reduce the need for additional network infrastructure.
- When we install solar PVs on community anchors such as local community centres, it helps them reduce their energy costs and creates more local resources available for them to focus on delivering social services.
- Local and community owned energy can create additional benefits for us by saving on our bills, boosting the local economy and even creating surplus that can be re-invested in the local energy transition.
- Rising electricity wholesale prices have also focused minds on the need for more home grown energy, as well as on the need to hedge against future price rises.



## Precedent: Plymouth Energy Community

*To tackle climate change and fight fuel poverty, Plymouth City Council collaborated with the local community to establish the Plymouth Energy Community (PEC).*

*PEC have established two companies: one that installs renewables and one that works to support people with energy efficiency measures.*

*To date, PEC has successfully installed 6MW of solar generation which can provide electricity for up to 2,000 homes. A local community land trust receives an annual land rent from the ground-mounted array, and the income is used for local projects such as a community allotment garden.*

*PEC has accrued surplus of around £1.5 million, which they are reinvesting further into their carbon and fuel poverty reduction projects.*

*PEC has become a true pioneer in the municipal energy transition, and is specifically a good model for how local authorities can work with and nurture community efforts to improve energy efficiency and address social issues. Most importantly, PEC encourages residents to take charge of building a just city fit for future needs.*



*Image (above): Plymouth Energy Community*

# What can we do?

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To encourage more local renewable energy generation in Oldham...

To have more renewable energy generation in Oldham owned by the community and...

To support Sholver residents to produce their own energy on their homes and businesses:

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## What we've done so far

We already started with this by creating a Sholver Action group with the aim to increase local renewables in Oldham.

Since February 2022, we have been working with Carbon Coop to explore how we can help to increase community owned renewables in Oldham and to develop a longer term project plan for this group and initial fundraising activities for initial engagement and awareness raising programmes.

## D) Collaborating with an existing community energy initiative

We decided to concentrate on community energy, because we believe that it could bring the most benefits for us as local people. As a group we understand the importance of supporting and connecting with existing initiatives in Oldham and decided to explore how we could join forces with Oldham Community Power to help them deliver more renewables across the borough, increase their

local engagement and maximise community benefit. We have had several meetings with OCP board members with very fruitful conversations already.

## E) Exploring roof top potential to maximise local benefits

Building on the solar data analysis completed under Oldham Energy Futures we approached Royal Oldham Hospital to explore their appetite for community solar. This has now become a real opportunity for a large community owned installation which we will be pursuing together with OCP, Carbon Coop and other stakeholders.

## F) Building knowledge and capacity

We learned about the community energy business model and the benefits it can offer and are excited to explore how in Oldham we could co-own large renewable installations, that not only reduce our carbon emissions and offer a return for citizen investors, but also produce profits which we could re-invest in for example energy efficiency support for people in fuel poverty.

# 1 What you can do as a community

To support Sholver residents to produce their own energy on their homes and businesses:

## 1M) If you are a homeowner or a landlord, you can invest in solar installations on your roofs

It is important to note that rooftop solar should be considered as part of a wider set of energy efficiency measures. The first step is to reduce heating needs by insulating the home well.

Every property is different and a full home assessment for energy efficiency will produce a list of recommendations for energy efficiency measures including solar and storage technology.

Domestic solar PV is a 30-year investment. Solar Energy UK research, with modelling carried out by the University of Cambridge and sustainability consultants Think Three, shows that installing solar on a typical home could increase its value by around £2,000, and reduce running costs by more than £300 a year over the lifespan of the system. (The running cost figure is based on gas and electricity prices from Spring 2021: the comparative savings will have gone up significantly because of the energy price crisis).

The increasing price of energy is significantly reducing the payback period for domestic solar, but how quickly you see a return on investment will depend on the size of the system and how much of the energy you are able to use on-site.

In order to make solar energy cost efficient it is important to maximise self-consumption of the energy produced, this means installations on properties occupied during the day will be much more cost effective.

While you can sell the excess electricity to the grid via the Smart Export Guarantee, the price per unit sent to the grid will be a fraction of what you pay for energy from the grid.

Payment rates vary depending on the supplier so it's worth checking [who is currently paying the most](#).

Excess energy can be [stored in different forms](#). If you have an existing immersion tank for your hot water, installing a solar diverter (such as iBoost, immerSUN or eddi) could prove the most cost effective option.

# What can we do?

There are also options around battery power storage and also heat batteries but these are still costly and whether they make sense for your property will depend on the size of your installation and your energy usage pattern.

If you are interested in exploring these ensure that you ask for quotes which separate out the battery installation cost and payback estimation from your overall solar estimates.

It might still be worth considering

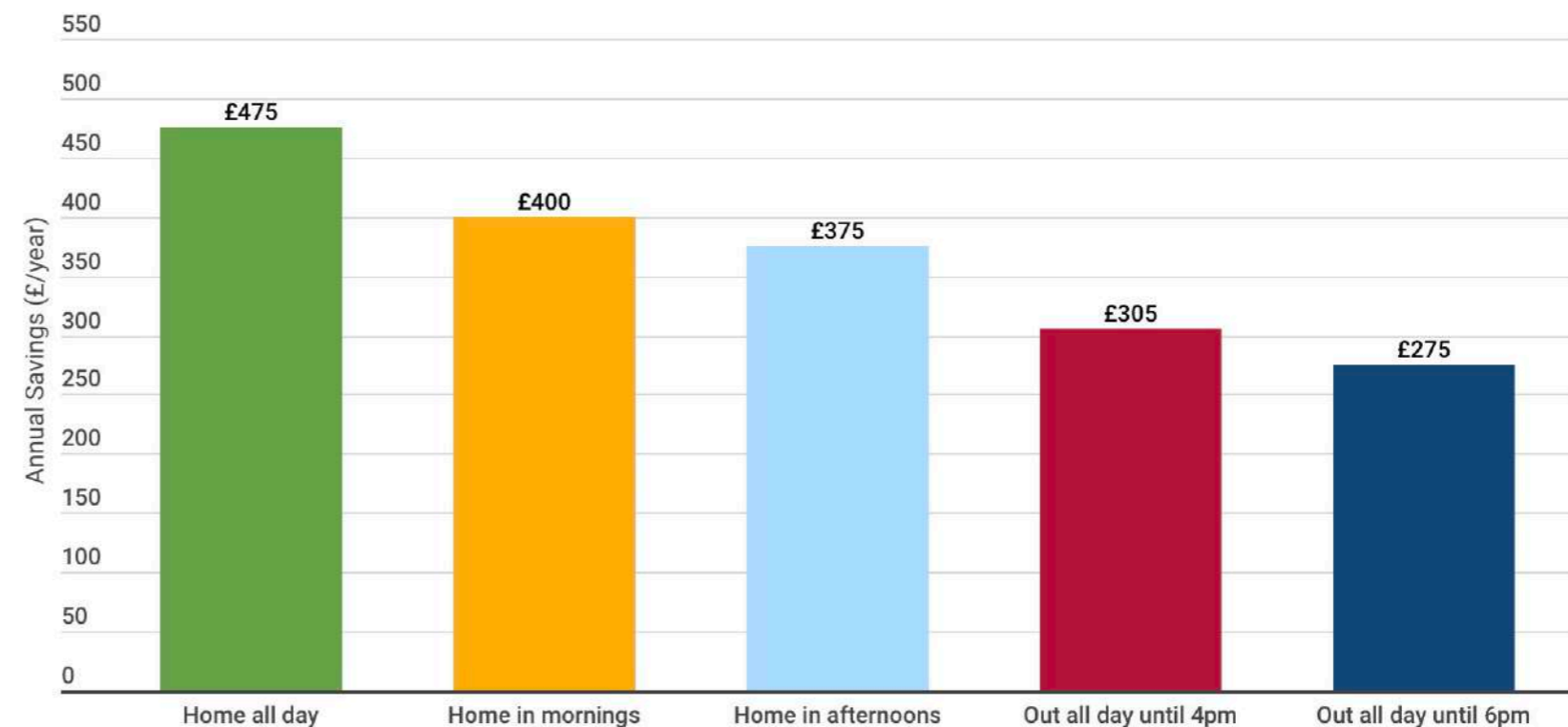
maximising the installed capacity even if you won't initially use all electricity in-house, to prepare for future installations, such as low carbon heating technology run with electricity or an electric car charging point.

The best way to start is by doing some research, for example read the Energy Savings Trust pages on solar here: <https://energysavingtrust.org.uk/advice/solar-panels/>

Then ideally get 3 quotes from solar installers. They should be MCS certified and you can find installers in your local area on the MCS website here: <https://mcscertified.com/find-an-installer/>

## Annual savings/income per year (with Smart Export Guarantee) in Manchester, North West, UK with domestic solar

t CO<sub>2</sub> saved/year = 0.75



Updated: March 2022

energy  
saving  
trust

Image (above): Annual savings/income per year (with Smart Export Guarantee) in Manchester, North West, UK with domestic solar (Taken from Energy Savings Trust: <https://energysavingtrust.org.uk>)

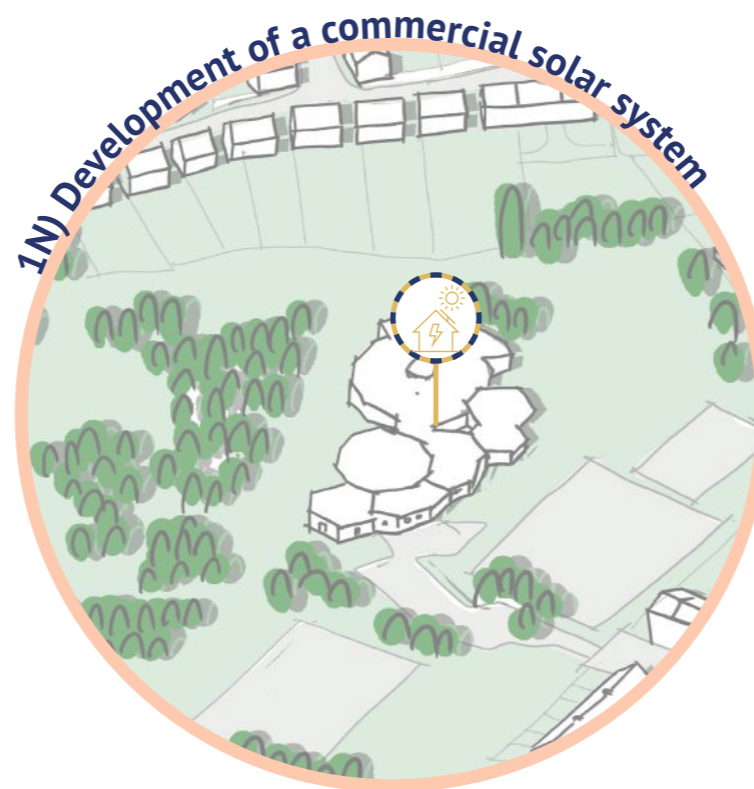
## 1N) If you own a business or run a school, leisure or community centre, a commercial solar system can help to reduce your costs and your environmental impact if you have a high on-site electricity usage all year round and in the daytime.

The payback period on a commercial rooftop solar system can be less than five years according to Solar Energy UK research – after which it will effectively produce free electricity for at least a further 25 years. This depends on the size and position of your roof and how much energy you use on-site in the daytime.

You can contact a solar installer to undertake a free desktop assessment of your property to start off with. If initially suitable you can order a full survey, laying out savings and costs. A full MCS assessment should be able to give you an estimated payback time.

If you don't have the investment capital available you could work with a local community energy company. They will raise the money and install and maintain the solar array.

You will buy the power via a Power Purchase Agreement for a considerable reduction in comparison to grid prices. You can invest in the company yourself and receive an annual return and any profits are reinvested for environmental community benefit.



## 10) Invest in community energy

You can become a citizen investor. This means you buy shares and become a co-owner of local (or national) community renewables projects.

This will usually give you a return on investment of 4-6% and a democratic vote in the organisation. Shares usually start at between £100 - 250.

You can learn more about becoming a community share investor here: <https://www.uk.coop/support-your-co-op/community-shares>

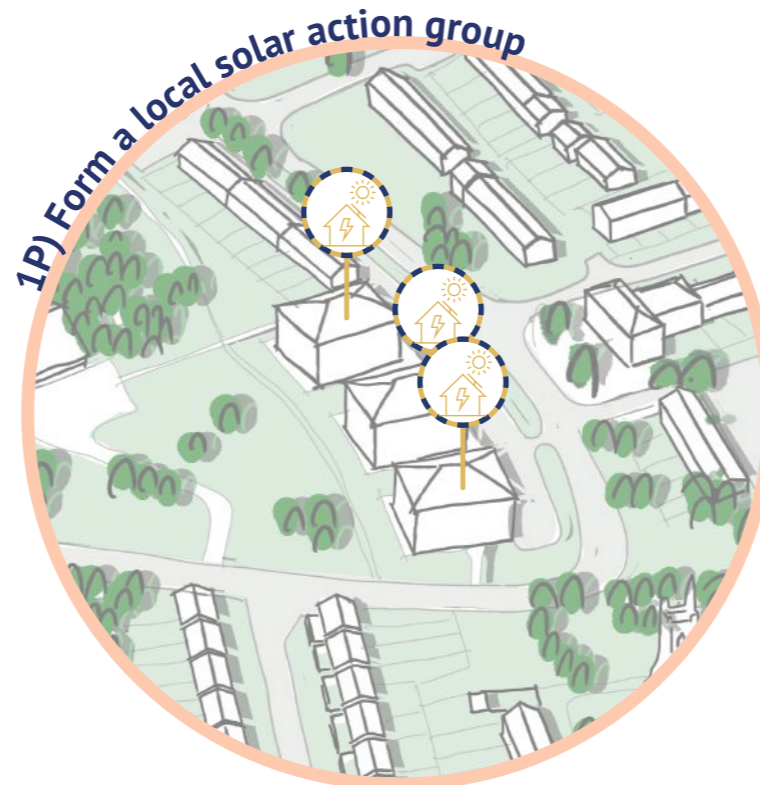
# What can we do?

To encourage more local renewable energy generation in Oldham, we could:

## 1P) Form a local solar action group

Form a local group in order to raise awareness of and encourage more locally owned solar in your area. This could also be as part of an existing community, residents or tenant group.

This can also be run as a time limited funded project, delivering one or several of the below activities. You can access information and support needed via for example Community Energy England.



## 1Q) Build awareness with local businesses, schools or community centres

With energy prices rising many local businesses and organisations would benefit from solar on their roofs.

You could contact the buildings already identified in the existing data on St. James's ward non-commercial solar roof potential to raise awareness and encourage them to install solar.

If they lack the necessary capital investment, they could benefit from community energy (see 2K).

You can find the style of engagement that works best locally, this might be sending out official emails with a flyer attached, using personal contacts or organising an official event with the local business network.

## 1R) Identify roofs with solar potential

The group can extend on the existing data on St James' non-commercial solar roof potential by doing further exploration of roofs, possibly also expanding reach into neighbouring wards.

You could do local engagement activities like a public 'roof spotting' campaign or a series of workshops to identify roofs with potential in Oldham. You can use these events also as a way of engaging new people, combine it with a talk by community energy or solar experts or a witness account/site visit with someone in the community who already has solar.

Bath & West Community Energy has a ['roof spotting' guide](#) for citizens that gives in-depth information on the kind of roofs that are suitable and likely to give a good return on investment. For the techy people in the group, have a play with this software here: <https://easy-pv.co.uk/home>

## 1S) Work with an existing community energy group or start your own

Oldham has a community energy group already called 'Oldham Community Power'. There is potentially another group developing around the Northern Roots project. These are already set up as organisations that can raise finance and deliver solar projects.

You can contact them and ask if they are interested in collaborating with you, so e.g. you make the connections to local businesses and organisations for solar opportunities and they deliver the solar projects.

Or you can set up your own organisation. You can find resources on how to do that and support from [Community Energy England](#). Or you can look into working with a national community energy organisation called [Big Solar](#).

In that case the installation will be financed and owned by the community energy group and the business or organisation can use renewable energy at a reduced cost under an agreement that can lock in the energy price long-term. This is a typical [community energy offer](#).

## 1T) Develop mutual homeowner support

If there is local demand, homeowners can work together to create relationships with good quality installers and do the initial research and due diligence.

Research in projects such as [Solar Made Easy](#) show that clustering several homes makes it more attractive to installers, who can be hard to get engaged for domestic solar. You may get discounts from installers if they can reduce time from receiving multiple jobs within a local area.

You can then also share your experience with neighbours and do word of mouth social marketing for domestic solar.

# What can we do?

## 8 As Oldham Community Power

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**To develop more locally and community owned renewables, you could:**

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### 8A) Concentrate on non-domestic roofs with high solar potential

Post subsidy the community energy model has changed. The sector now tends to concentrate on non-domestic roofs with solar potential of 50kW and higher and an on-site energy consumption of 80% minimum. Smaller buildings with a high social impact like schools and community centres can be included in a larger pipeline of properties for one community share offer.

There are a number of large buildings in either commercial or public ownership in the Coldhurst/St James Ward where arrays of more than 50kW are feasible. For the full data analysis contact us directly.

### 8B) Work with us

We bring much needed local expertise and connections and will be able to support with identifying suitable roofs and making initial contact.

As a community energy company you can also do an outreach programme in order to build your cooperative's active membership and create pipelines of roofs for the next share offer.

These kinds of activities are best accomplished with project funding employing professional engagement project workers. There are also examples in the community energy sector of localised member action groups, which act as a local task force of trained volunteers.

## 8C) Create a local membership offer to lower barriers to participation

Create a scaled membership and investment offer through which local citizens can become members without having to invest large amounts in order to lower barriers to participation and strengthen local accountability. Maybe have a local membership offer of £1.

## 8D) Create community benefit funds

Explore a community benefit model additional to investor benefits that is transparent, citizen-led and can support the most vulnerable.

### Precedent: Egni Co-op

Egni Co-op develops rooftop solar energy in Wales and has over 4.5MWp of capacity on 88 sites, including schools, community buildings and businesses.

It's the largest rooftop solar co-op in the UK saving their sites more than £100k in electricity costs and reducing carbon emissions by 1000 tonnes/year.

All surplus goes into climate change education in schools. They work closely with local councils on identifying the right sites across each locality.

The installations are mainly financed by Egni's rolling community share offer which has already raised £4.62M from local investors who receive a 4% annual return on their investment.



Images (above): Egni Co-op solar PV projects

# What can we do?

## 2 What you can do as Oldham Council

To encourage more local renewable energy generation in Oldham, you could:

### 2H) Support domestic solar

Recommendations are set out as part of the energy efficiency recommendations (see page 22).

### 2I) Support the scaling up of community owned renewables

**Additional to the extensive support already given, here are some further recommendations:**

You could support and participate in the development of a multi-stakeholder investment vehicle in order to deliver large scale community-owned renewables projects in Oldham, which can produce community benefit funds to support energy transition projects, especially in the area of energy efficiency/fuel poverty relief.

You could ring-fence funds from Section 106 or Community Infrastructure Levy payments from developers for community energy feasibility studies.

You could create a special financial reserve in the Council budget for investment in community shares for schemes in the borough.

You could give access or first option to public land and assets for community energy especially for larger projects to deliver at scale and maximise value.

You could support community energy through your energy procurement and contracting. This could be via the development of a [sleeving PPA pool](#) or via a financial instrument, such as a 'synthetic PPA'. Under a [Synthetic Power Purchase Agreement](#), the council could work with a community energy organisation to set a guaranteed 'strike price' for every kWh of renewable energy that is generated and sign this off in a Renewable Electricity Guarantee of Origination, or REGO.

Please see this [best practice guide](#) for some examples. You can contact Carbon Coop for further information.

## 3 What you can do as First Choice Homes

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**To encourage more local renewable energy generation in Oldham and...**

**To support Sholver residents to produce their own energy on their homes and businesses, you could:**

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### 3E) Maximise on solar PV installations on your stock across Sholver

Solar photovoltaic (PV) on properties, especially in combination with batteries or hot water storage and in combination with heat pumps (only after fabric first energy efficiency measures have been done) will protect your tenants against rising energy prices. So where possible integrate into the energy efficiency measures implemented under the decarbonisation grant.

If you are doing up roofs as part of your maintenance programme, why not take the opportunity to fit solar right away. It is much more cost effective and also helps in terms of minimising interruptions and disruptions.

Domestic properties fall under the G98 'connect and notify' protocol, so therefore any grid upgrade costs would fall to the DNO and not the applicant. This applies even if you fitted several hundred homes with PV simultaneously by a single corporate owner, which would have positive implications on finance.

### 3F) Create infrastructure for the local supply chain

You could support both Sholver residents and the local supply chain by doing the due diligence and creating relationships with quality installers and share this information with local homeowners and landlords.

This could stretch to actively engaging homeowners when you do solar installations in the area to create a cluster of jobs to make the offer more attractive for the installers, which are currently hard to engage for domestic solar installs.

# Recommendations Summary

## Community Recommendations

This recommendation summary provides actions for the community to address issues and challenges around each energy theme in Sholver.














**We are already developing the following projects as part of the pilot action group work:**

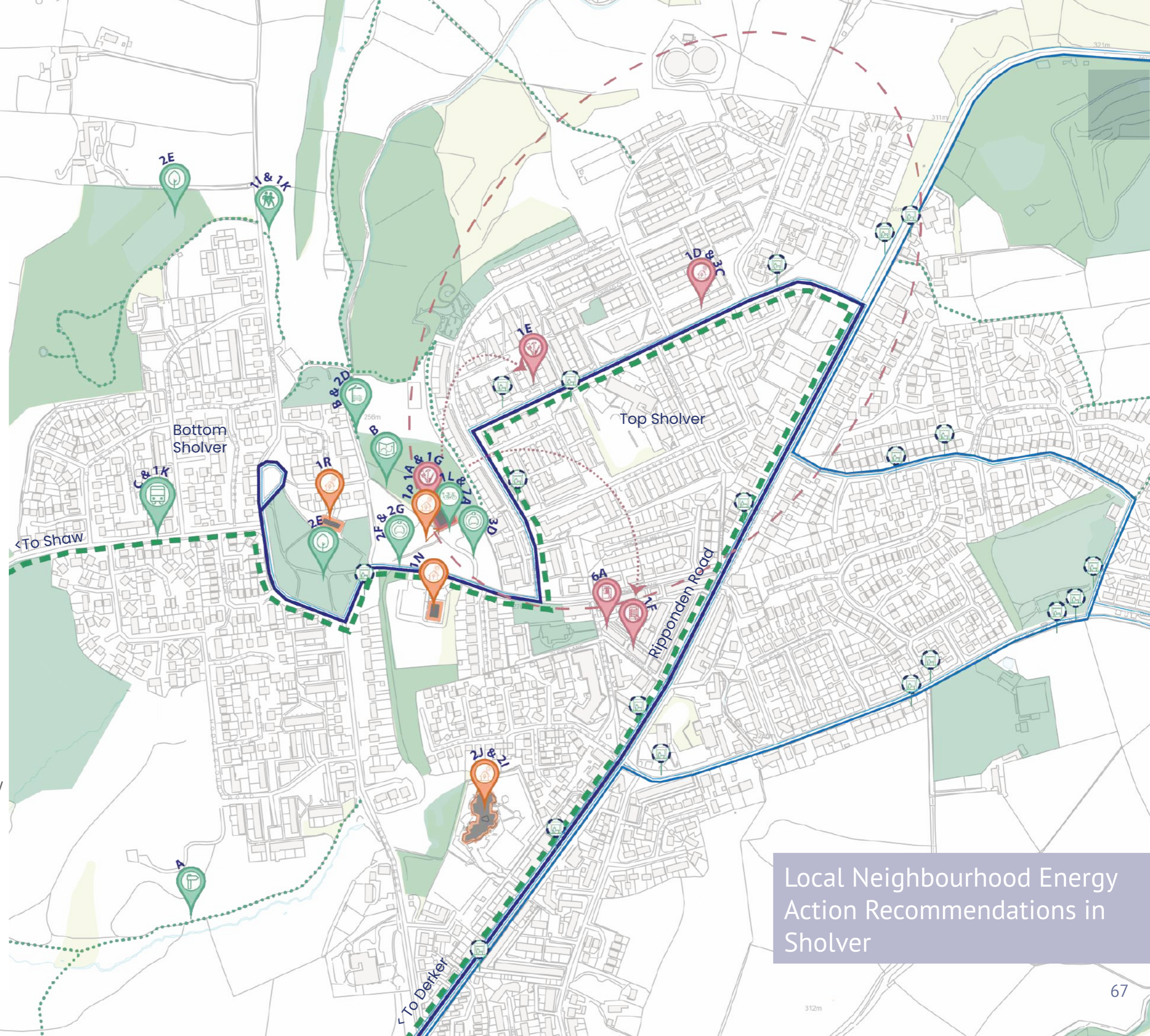
- A) Saving key walking routes in Sholver through the “Don’t Lose Your Way” project.
- B) Developing a Local Wayfinding project to mark walking routes and a new leaflet of information.
- C) Creating a Better Buses campaign.
- D) Collaborating with an existing community energy initiative.
- E) Exploring rooftop potential to maximise local benefits.
- F) Building knowledge & capacity around local renewables and community energy.

### 1) As a community, we could work together to:

- 1A) Develop a Sholver Energy Efficiency Steering Group.
- 1B) Engage in local data mapping in the neighbourhood.
- 1C) Signpost community members to energy advice resources.
- 1D) Recommend to First Choice Homes an area based Energy Efficiency project working with the whole estate.
- 1E) Take the energy advice service into homes.
- 1F) Offer in-depth home energy assessments.
- 1G) Develop bulk purchasing of low cost energy efficiency products.
- 1H) Lobby Westminster to secure a better settlement for energy efficiency retrofit for people living in low income and energy performing homes.

- 1I) Support Active Travel in Sholver.
- 1J) Help to improve walking routes in Sholver.
- 1K) Advocate for better transport options for Sholver
- 1L) Set up of a sharing electric-bike scheme.
- 1M) If you are a homeowner or a landlord, you can invest in solar installations on your roofs.
- 1N) If you own a business or run a school, leisure or community centre, a commercial solar system can help to reduce your costs and your environmental impact if you have a high on-site electricity usage all year round and in the daytime.
- 1O) Invest in community energy.
- 1P) Form a local solar action group.
- 1Q) Build awareness with local businesses, schools or community centres.
- 1R) Identify roofs with solar potential.
- 1S) Work with an existing community energy group or start your own.
- 1T) Develop mutual homeowner support.

-  Energy efficiency in the home action
-  Sustainable travel action
-  Local renewables & community energy action
-  Buildings identified as a base for energy efficiency actions
-  Focus area for FCH energy efficiency improvements
-  Existing greenspaces with potential to be enhanced
-  Existing walking routes with potential to be enhanced
- Existing bus services**
  -  1 service every 15 minutes)
  -  1 service per hour
  -  1 service per day
  -  Potential new bus route connecting Sholver with Shaw and Derker
-  Existing bus stops to be enhanced with shelters and seating
-  Building rooftops identified by the community with solar potential



## Local Neighbourhood Energy Action Recommendations in Sholver

# Recommendations Summary

## Council & Other Stakeholder Recommendations

This recommendations summary provides actions for Oldham Council and other stakeholders to take in order to address issues and challenges around each energy theme in Sholver.

### 2) As the Council, you could:

- 2A) Explore borough level options for funding whole house retrofit for vulnerable residents.
- 2B) Develop the Supply Chain.
- 2C) Refresh “Warm Homes Oldham.”
- 2D) Develop a wayfinding project to improve signage and safety for pedestrians.
- 2E) Improve Sholver green spaces to make it easier and safer for families to use for picnics and play etc.
- 2F) Develop On-street residential charging points.
- 2G) Develop Council owned parking Electric Vehicle charging points.
- 2H) Support domestic solar.
- 2I) Support the scaling up of community owned renewables.

### 3) As First Choice Homes, you could:

- 3A) Access local data to inform strategic thinking.
- 3B) Pool social housing assets for local good.
- 3C) Develop an Area Based Energy Efficiency programme in Sholver.
- 3D) Develop Car-sharing / Car club together with the Sholver community.
- 3E) Maximise on solar PV installations on your stock across Sholver.
- 3F) Create infrastructure for the local supply chain.

#### 4) As the Chamber of Commerce, you could:

4A) Advocate on behalf of the Sholver business community for more local retrofit support.

#### 5) As Oldham College, you could:

5A) Provide more local opportunities for people in Sholver to develop retrofit skills.

#### 6) As Landlords, you could:

6A) Upgrade the Energy Efficiency of your rental properties.

#### 7) As Transport for Greater Manchester, you could:

7A) Extend the GM Cycle hire scheme to the Oldham Borough.

7B) Support and fund Active Travel schemes.

#### 8) As Oldham Community Power, you could:

8A) Concentrate on non-domestic roofs with high solar potential.

8B) Work with us.

8C) Create a local membership offer to lower barriers to participation.

8D) Create community benefit funds.

# Glossary

We've put together a glossary of terms to explain some of the most commonly used terms in this action plan:

## **Absolute zero**

A state in which no greenhouse gases are released into the earth's atmosphere, meaning no carbon removal or negative emissions technologies are used to balance carbon emissions.

## **Accessibility**

'Accessibility' of the transport system often refers to the extent to which the transport system is suitable for people with a range of needs (for example, people with prams and wheelchair users). It may also be used to describe more generally how good the level of transport provision is in different areas.

## **Active Travel**

The terms 'active travel' and 'walking and cycling' are used in this document to encompass a range of methods of active mobility, including trips made by wheelchair, mobility scooters, adapted cycles and e-bikes.

## **Adaptation**

Refers to adjustments in ecological, social or economic systems in response to the impacts of climate change.

## **Bikeability**

Modern cycle training programme delivered across 3 levels to children and adults.

## **Air tightness**

Airtightness refers to how much air is moving in and out of a building. Typically, the more air tight a building the more efficient its energy use, as less energy is being lost through leaks in the building's fabric. However, at the same time, controlled ventilation must be in place to allow for air flow.

Eliminating all draughts in a building. This is sometimes measured in air changes per hour and extremely airtight houses will have very low levels of air changes. As with all houses, ventilation is necessary to make sure our houses stay healthy!

## **Carbon emissions (CO2)**

Carbon dioxide (CO2) is released or 'emitted' into Earth's atmosphere mostly by the burning of fuels containing carbon, as well as through the decay of plant matter.

Carbon emissions are naturally removed from the atmosphere by plants which absorb carbon to build their tissues, and by being dissolved into the ocean.

However, since the 19th century the amounts of carbon emissions have increased hugely as we burn more and more fossil fuels for energy. CO2 in the atmosphere it acts as a blanket to slow the loss of heat from Earth into space, causing global warming.

## **Carbon offsetting**

A carbon offset negates the overall amount of carbon released into the atmosphere by supporting a climate positive campaign elsewhere, such as funding a renewable energy project.

## **Car Clubs**

Sometimes known as car sharing) car clubs use electronic systems to provide customers unattended access to cars for short-term rental. Business models can be categorised into round trips, where the vehicle must be returned to its home station, and flexible, which allows one-way trips. Vehicles may be owned by individuals and lent out or form part of a fleet owned by a single organisation

## **Climate Change**

The process of shifting from one prevailing state in regional or global climate to another. Often used interchangeably with “global warming,” scientists sometimes also use the term to refer to periods of climatic cooling. Climate change is typically the preferred term over “global warming” because it helps convey that there are climate changes in addition to rising temperatures. Absolute zero

A state in which no greenhouse gases are released into the earth’s atmosphere, meaning no carbon removal or negative emissions technologies are used to balance carbon emissions.

## **Climate Justice**

A concept that addresses the climate emergency as a social, economic, political and ethical problem whose impacts are experienced unequally. Achieving climate justice involves finding solutions to climate change which create a fairer, more equal world. It is related to the concept of a Just Transition.

## **Community Infrastructure Levy (CIL)**

A planning charge, introduced by the Planning Act 2008, as a tool for local authorities in England and Wales to help deliver infrastructure to support the development of their area.

## **Contractor**

Organisations appointed to carry out construction or installation works. Types of contractors for energy efficiency includes: electricians, architects, installers, general builders and more.

## **Decarbonisation**

Measures taken by an organisation, industry, business, government etc to reduce and eliminate carbon dioxide emissions.

## **Decentralised energy**

Energy that is generated off the main grid close to where it will be used, rather than at an industrial plant and sent through the national grid. This can include energy from solar, wind, geothermal or biomass sources, as well as district heating and cooling.

## **Energy efficiency**

Achieving a minimum level of energy use within a building to reduce wasted energy, whilst maintaining desired levels of heating, lighting, and cooling.

## **Energy performance**

Energy performance is a measure of the energy efficiency of a building, measured by the amount of energy required to provide lighting and heating for the building.

## **Energy assessment or energy audit**

An energy assessments is an examination of a building to find out how much energy is being used within it, and to identify improvements which would reduce energy use.

# Glossary

## **EPC – or Energy Performance Certificate**

An Energy Performance Certificate – or EPC – is a four-page document which sets out the energy efficiency of a property on a traffic light system of A to G – A being the most efficient. An EPC provides an indication of how much it will cost to heat and power a property.

## **ESCO – or Energy Services Company**

They specialise in managing energy improvement projects. The ESCO may perform any or all of the following services: auditing, developing packages of recommended measures, arranging financing, installing or overseeing the installation of measures, resident and staff education, equipment commissioning, maintenance, measuring, verifying, and guaranteeing savings.

## **Fabric First**

Building ‘fabric’ is the walls, windows, floors and roof of your home. Fabric first means improving these parts of the home first through making them ‘airtight’ and insulated to save energy, then looking at renewable sources of heat and power.

## **Fuel Poverty**

A condition that describes households that must spend a high proportion of their income to keep their home adequately heated or are unable to heat their home to an adequate temperature.

## **Greenhouse gas emission**

Gases in the Earth’s atmosphere that absorb and trap heat, radiating it back to the Earth’s surface in a process known as the greenhouse effect. The primary greenhouse gases include carbon dioxide, methane, nitrous oxide, ozone and water vapour.

## **Green Recovery**

Measures and policies which aim to stimulate economic recovery following the impact of the COVID-19 pandemic whilst also prioritising sustainability and facilitating the shift to a low-carbon economy.

## **Heat Pumps**

These are devices used to warm and sometimes cool buildings by transferring heat energy from a cooler space to a warmer space using technology which works on the same principle as a fridge.

## **Insulation**

Insulation refers to a material (wool, wood fibre etc.) which is used to prevent loss of heat. It can refer to the insulation of a building itself (cavity wall, internal wall, external wall, loft etc.), but you can also insulate smaller elements, such as insulating a water tank or hot water pipe to reduce heat loss and optimise the efficiency of the part.

## **Kilowatt kW / Kilowatt hour kWh**

A standard unit of electrical power equal to 1,000 watts. A kilowatt hour is a unit of energy equal to one kilowatt of power expended for one hour.

## **LED**

An LED – or light-emitting diode – is an electronic device made of semiconductors that emits light when an electric current is passed through it. They are much more efficient than traditional halogen bulbs, which waste a lot of energy as heat.

## **Net Zero**

Net zero is the state in which the greenhouse gases going into the atmosphere are balanced by the removal of greenhouse gases out of the atmosphere – which happens naturally by trees and plants and through technology such as carbon capture and storage.

## **Passivhaus Standard**

An international standard for energy efficiency in building construction which significantly reduces a building's ecological footprint. This is achieved through good insulation, airtightness, passive solar gains and internal heat sources. Buildings built to the Passivhaus standard require little energy for heating or cooling.

## **Public Rights of Way**

Paths on which the public have a legally protected right to pass and re-pass.

## **Retrofit**

Making upgrades to an existing house (like new windows or insulation) which improves its energy efficiency.

## **Renewable Energy**

Energy from sources that are naturally replenishing but flow-limited; renewable resources are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Examples include Solar, Wind, Hydroelectric, Geothermal and Tidal.

## **Resilience**

The ability to anticipate, prepare for, respond to and withstand hazardous events, trends or disturbances resulting from climate change.

## **Solar PV**

Technology that can turn solar energy from the sun into electricity.

## **S106 Agreement**

A mechanism which makes a development proposal acceptable in planning terms that would not otherwise be acceptable. They are focused on site-specific mitigation of the impact of development.

## **Travel Mode**

The means by which travel is done. Common travel modes for people include passenger car (driving alone or shared ride), public transit

(bus, tram or train), walking, and bicycling. Common travel modes for freight include land (road, rail, and pipelines), maritime, and air transportation.

## **Ventilation**

The process of supplying outdoor air to or removing indoor air from a building by natural or mechanical means. Controlled ventilation is necessary to maintain the health of a building and prevent damp and mould.

## **Walkability**

The overall walking conditions in an area; how friendly an area is to walking.

Walkability is affected by the presence and quality of walkways as well as the surrounding environment, including the design of buildings and their location relative to the pavement, as well as vegetation such as landscaping and street trees.

Good destination accessibility and good connectivity contribute to walkability.

# Resources

We've put together a set of useful resources to provide information on the energy themes we explored during the workshop.

Carbon Coop Oldham Energy Futures Project Website:

<https://oldhamenergyfutures.carbon.coop/>

Carbon Co-op Webinar Programme:

<https://carbon.coop/carbon-co-op-webinar-programme/>

## Energy Efficiency in the Home Resources

Centre for Sustainable Energy Advice Leaflets on Domestic Energy:

<https://www.cse.org.uk/resources/category:advice-leaflets>

Introduction to the Energy System & Energy Efficiency in the Home:

<https://oldhamenergyfutures.carbon.coop/learning-best-practice/>

People Powered Retrofit paper from Carbon Coop:

<https://cc-site-media.s3.amazonaws.com/uploads/2019/01/PPR-Report-June-2019.pdf>

## Sustainable Travel Resources

Sustrans website - a charity dedicated to making it easier to walk and cycle in the UK:

<https://www.sustrans.org.uk>

Ramblers 10 steps to developing walkable neighbourhoods:

<http://www.ramblers.org.uk/news/blogs/2019/february/walkable-neighbourhoods.aspx>

School Streets Initiative with information on how to develop a school street:

<http://www.schoolstreets.org.uk>

## Community Energy & Local Renewables Resources

To learn more about community energy or start your own initiative:

<https://communityenergyengland.org>

Community Energy project funding:

<https://communityenergyengland.org/pages/funding-opportunities-2>

# Join Us!

## Do you want to get involved?

Get in touch by email:

carly@carbon.coop

0161 820 1273

Bridge 5 Mill, 22a Beswick Street, Ancoats,  
Manchester, M4 7HR

Or go on the Oldham Energy Futures website  
and get in touch on there to find out more  
about the project and how to get involved in  
Sholver Energy Futures:

[https://oldhamenergyfutures.carbon.coop/  
contact/](https://oldhamenergyfutures.carbon.coop/contact/)

