



GREATER
MANCHESTER
**LOCAL ENERGY
MARKET**

DOING THINGS DIFFERENTLY FOR THE ENVIRONMENT

Citizen Engagement (Work Package 5) Final Report

Local Energy Market 2

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Carbon Co-op

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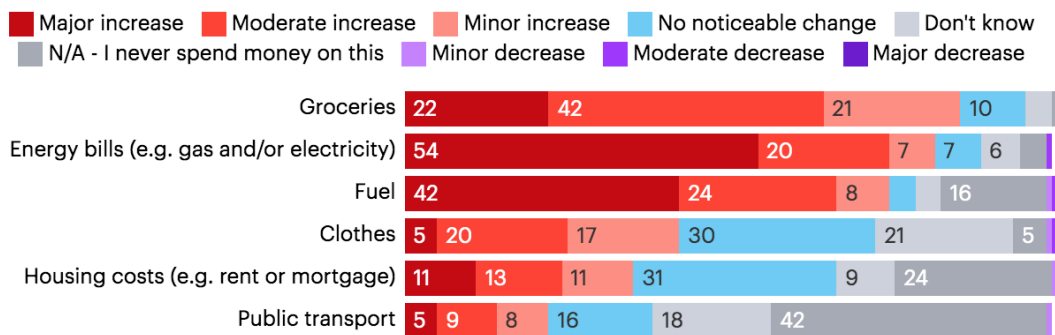
Introduction

There have been several significant global and national events that have no doubt impacted the public's views on energy and the climate crisis over the past two years. The coronavirus pandemic, for example, has seen a lasting impact on how people work and travel and has given us a glimpse at life without traffic and improved air quality in city regions. The pandemic also pushed many into hardship and exposed inequality; in particular, the severity of the UK's food poverty problem.

2021 saw the UK enter an energy crisis with steep increases in gas and electricity bills and several energy firms going bust. Notably the country also experienced a brief crisis in petrol supplies in September 2021. Most recently the devastating war in the Ukraine has also exacerbated the UK's cost of living crisis.

The vast majority of Britons have noticed increases in the price of groceries, energy bills and fuel

Have you noticed an increase or decrease in the price of the following products or services in the last few months? If you never purchase the product or service, please choose the N/A option. %



YouGov

20-21 January 2022

Results from a YouGov survey looking at the cost of living in January 2022

These events were likely to be at the forefront of many people's minds at one point or another between 2020 and 2022, during which time, the engagement activities detailed in this report, took place. Carbon Co-op* carried out this engagement project to not only share plans for Greater Manchester's Local Energy Market (GMLEM) but principally to involve citizens in decision making around the development of the local energy market business model and to platform the views and experiences of local people for the project partnership to hear and consider.

**Carbon Co-op is an energy services and advocacy cooperative that helps people and communities to make the radical reductions in home carbon emissions necessary to avoid runaway climate change.*

Approach

This report is based on a combination of engagement and research activities which were carried out between Feb 2021 and May 2022. The project comprised four main elements as detailed in the table below.

Methodology	Focus Topics	No. of people engaged	Audience
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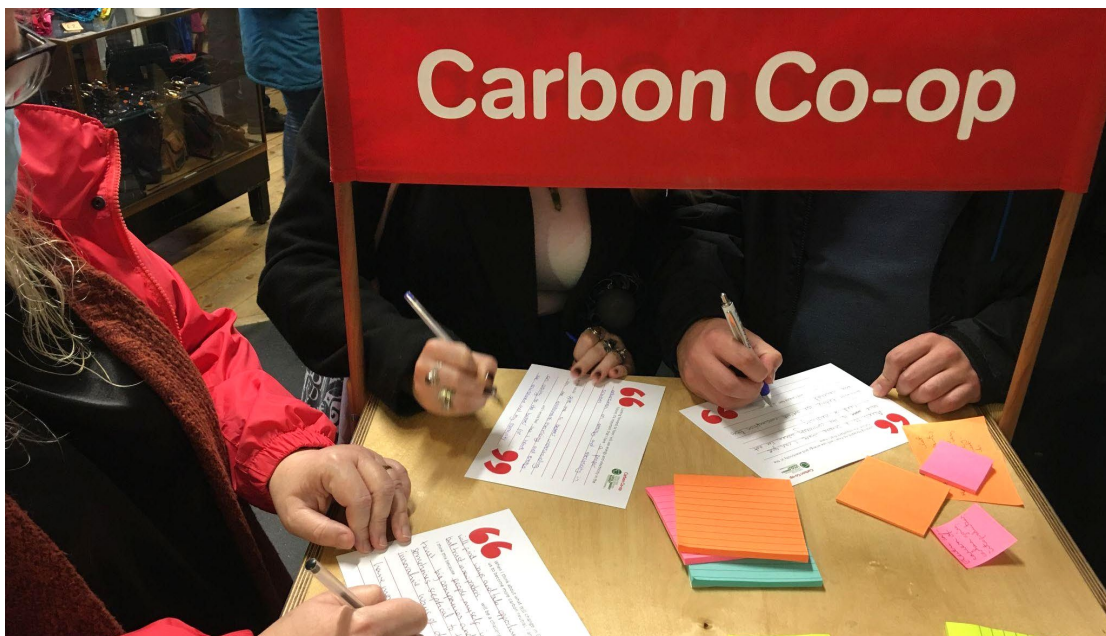
<p><u>Interactive Public Engagement</u></p> <p>Using a variety of tools we held conversations with people, in person, across 14 locations.</p> <p>Tools and activities included:</p> <ul style="list-style-type: none"> ○ Magnetic icons to help discuss the LEM platform and business models as well as the potential benefits or challenges ○ 'Insight postcards' to capture people's needs and challenges regarding the future of energy ○ Discussions around the challenges, opportunities, and exciting and confusing elements of the LEM concept. <p>Locations included:</p> <ul style="list-style-type: none"> ● Northwards Housing Community Event - Crumpsall Park - Crumpsall ● Stretford Public Mall - Stretford ● Cherwell Wellbeing Hub and Supported Living Centre - Heywood ● Age UK Manchester, Crossacres Resource Centre - Wythenshawe ● Greater Manchester Green Summit - Salford ● Want Not Waste, Manchester University Shop - Manchester <p>Find the full list of sites in Appendix 1</p>	<p>GMLEM</p>	<p>282</p>	<p>People and business across GM</p>
<p><u>In-depth interviews</u></p> <p>2 hour filmed interviews which include a glimpse into the interviewee's everyday life. Interviewees were paid £50 each for their contribution to our research.</p> <p>Watch the video to meet our interviewees</p>	<p>GMLEM</p> <p>Ovo Energy Heat and Electric Vehicle tariffs</p>	<p>10</p>	<p>Domestic heat pump and electric vehicle users</p>

<p><u>Citizens' Jury</u></p> <p>Jurors met for 6 days of deliberation over the course of two weeks. During this time, they heard from experts on topics including the energy system, LEMs, governance and scrutiny. The jury were presented with 6 different ownership and governance scenarios and were asked to discuss and vote for which one they were most supportive of. Jurors were paid £70 for each day they participated.</p> <p>Read the full report</p>	<p>GMLEM ownership and governance</p>	<p>15</p>	<p>Citizen's reflective of the GM population. (Also known as a <i>mini public</i>)</p>
<p><u>2 x online surveys</u></p> <p>Shared on Carbon Co-op social media pages and newsletter with an £100 prize draw incentive.</p> <p>Shared alongside a blog post on local renewable generation</p>	<p>Smart Charging and Vehicle To Grid</p> <p>Paying a premium for local renewable energy</p>	<p>78</p> <p>40</p>	<p>Drivers</p> <p>Carbon Co-op membership</p>

Findings

Key Findings

- Citizens in Greater Manchester believe that the local energy market will support the region to reduce carbon emissions.
- People want to see the local energy market providing economic benefit to the region and call for an ownership and governance model that would ensure that happens.
- GMLEM has potential to be an empathetic initiative that could facilitate increased investment into community support schemes including energy efficiency schemes and the purchasing of low carbon technology.
- High levels of transparency and scrutiny were important to people because they lacked trust in the existing energy market. GMLEM should empower people to have a meaningful say in how the local energy market is run.
- Most early adopters and highly engaged citizens that we spoke with said that they are likely to pay a premium for local energy, principally to support the local economy and protect the environment.
- The majority of citizens we spoke with expect local renewable energy to be cheaper.



Citizens of Greater Manchester completed 'insight postcards' sharing what they think will be important and challenging for them in the future when it comes to energy and electricity.

Acting on climate change

It was evident throughout our engagement work that people across Greater Manchester were concerned about the future impacts of climate change, locally and internationally. People were keen to find opportunities to act, not only to mitigate the impacts of climate change in the long term but also to attain a sense of hope.

“Looking forward to how I will use energy and electricity in the future, it’s important that I have the option to use more renewable energy as this would be better for the planet, which needs drastic change to prevent further climate change. And I would feel less guilty about using electricity and more confident in the future of the planet.”

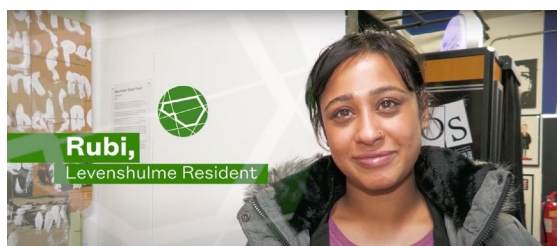
The local energy market was seen as an initiative that would help people to act and feel more action was being taken locally.

For those who did not own or use low carbon technology such as electric vehicles, solar PV or heat pumps the overall environmental and community benefits were reason enough to be supportive of the GMLEM. Many felt that even if they would not be able to participate in the LEM directly it would act as a catalyst for positive impacts in their local area, where they would benefit from seeing, hearing, and smelling the change.

“Exciting to see Manchester taking positive steps to using more renewables.”

“Cleaner air and less traffic noise with more EVs.”

“A LEM would make use of renewables, that’s a good thing no matter how I am involved with it.”



[VIDEO: Hear from Rubi](#)

There was optimism for the increased individual accountability that people felt would come from engaging with such a local initiative.

“Everything feels out of my hands, but a LEM would change that.”

The opportunity to buy local, renewable energy or access public services powered by it, was seen as a way to take action on climate change, by those who did not currently have low carbon technology of their own.

“Exciting that I could buy local, renewable energy.”

“Solar powered libraries would allow me to do better without impacting my student life and I would feel like I am actually contributing to the change.”

For those who were already highly engaged in the development of low carbon technology and smart assets, the LEM was viewed as a great step forward for optimization. People were keen to see innovation in smart technology facilitating this progress as opposed to needing significant behaviour change.

“I don't do things automatically as I have a busy lifestyle so having something that made these low-carbon decisions for me would be useful.”



[VIDEO: Hear from James and Gordon](#)

James' EV charging point, installed at his home in Sale.

Others explained how engaging with a LEM would help encourage them to make necessary behaviour changes.

[VIDEO: Hear from Kate](#)



Kate outside her home in Chorlton

A survey of 40 early adopters and highly engaged citizens found that protecting the environment was one of the main reasons why they would pay a premium for local, renewable energy, with a third of survey respondents referencing this as a priority. This suggests that paying a premium is more about supporting an initiative that has a good ethos, rather than being motivated by individual benefit.

“I would be able to afford the increase of £20 and I am motivated to play my part in combating climate change. I am also keen to support local and community initiatives early on in order to help build momentum.”

Keeping economic benefits local

The LEM being ‘local’ was another key reason why people were supportive of it. In a survey of Carbon Co-op members, data showed that the benefit to the local economy was the number one reason why people would pay a premium for local renewable energy.

“To support further investment, to support the local economy.”

It was evident throughout our research that people felt that there should be local economic benefit from having a GM local energy market.

“In favour of a regional system. Get away from big organisations.”

The Citizen Jury identified several economic benefits including an increase in green job opportunities, support for local businesses and improved local infrastructure. These benefits were noted by many of the people we spoke to.

[VIDEO: Hear from Roy and Debbie](#)



The back of Debbie’s home in Blackley, showing her solar panels and heat pump.

When it comes to supporting local business, electric vehicle charging also presents an opportunity. The findings from our survey into electric vehicle charging revealed that people want more from their charge time than just a charge. 13 out of the 20 respondents who used public charge points used their charge time to shop, buy a coffee and a snack or use a

public toilet. 5 used the charge point whilst at work. If new charge points were installed near to independent local shops, cafes, museums, galleries, markets, restaurants, and food halls in Greater Manchester, this could directly support local business.

Crucially these points need to be noted when considering how the GM local energy market is owned, with the Citizen Jury stating:

“We want public ownership over private profit.”

When considering private ownership, the jury noted that:

“If the commercial company involved was a purpose made or highly specialised, locally staffed and owned, non-profit or social interest business, these (jointly owned, private /public) scenarios could be reconsidered, providing the business was transparent and allowed oversight by local citizens.”



Members of the GMLEM Citizen Jury deliberating ownership and governance scenarios.

Understanding local need

Investing profits to support energy needs

Throughout our research, challenges were identified around the LEM ensuring fairness and accessibility when it came to low carbon technology and smart assets.

“Purchasing the tech needed to contribute to the LEM will be a challenge.”

“Looking forward to how I will use energy and electricity in the future, it’s important that I have access to the infrastructure and resources to adequately meet the goals of a more sustainable and greener world. This would encourage and facilitate wider and sustained use and progress and I would feel as though I was having a positive impact.”

As noted in the previous section of this report, feeling able to take action is important for people not only with regards to climate change but also for individual wellbeing. Residents of a Leonard Cheshire Supported Living Centre agreed that:

“It would make us feel proud if we could contribute energy.”

Many of the people we spoke with wanted to see the LEM giving back to local people. For some, ‘local’ equated to ‘ethical’. The majority believed a local system would be able to better understand the needs of the community.

“Could work if we take a holistic approach to understand the needs of people in terms of electricity.”

“There is a sense of equality here.”

A frequent suggestion for how this could be done included incorporating the LEM as:

“a non-profit with surplus going into subsidies for energy research and infrastructure.”

The Citizen Jury also recommended that:

“It would generally be better if it was possible for the commercial partner to be Manchester-based and a social interest organisation.”

Matching need

From our conversations with citizens it is clear that a range of LEM tariff options will be essential to suit the multitude of needs for energy use and flexibility.

However, creating multiple tariff options could likely lead to barriers for some, in terms of decision making and understanding the options available. Several people we spoke with would choose to engage with a local energy market because it's local and an 'environmentally friendly' option. Therefore, technical tariff options that do not reference details on local generation or CO2 reduction may be confusing and off putting.

There will be lots of challenges to overcome when engaging people to use the LEM. A few challenges highlighted by those we've spoken to include: communication on peak / off peak needs to be simple and concise for people with learning disabilities; supported living services are not set up for residents to have smart meters - alternative monitoring systems are needed for them to feel part of and participate in LEM; people with medical conditions could be discriminated against if charged more at peak times and; students often pay rent inclusive of bills so may be excluded from accessing the financial benefits.

[VIDEO: Hear from Janice](#)

When it comes to considering optimisation of local 'assets', i.e heat pumps and electric vehicles, a local energy market could play a role in helping people to choose the best tariff for their needs. This could take the form of 'local trustees' as one person put it.

"Trustees from different areas to make sure it works."

"Needs cooperation from the council for vehicle-to-grid and similar systems to work and suit people's needs."

Some people we spoke with were already welcoming advice on energy tariffs from their social housing provider. Others would be keen to hear from a trusted specialist who would understand energy efficiency and low carbon technology requirements.

[VIDEO: Hear from Graeme, Eddie and Debbie](#)



Tower block in Pendleton, Salford. Home to interviewees, Graeme and Eddie.

Flexibility could also create an unfair advantage on the local energy market. The results from our EV charging survey showed how those without home charging points were less likely to benefit from smart charging schemes at workplaces as they would be more likely to opt for getting a full charge rather than cheaper charging rates from supporting the grid. Out of the 30 respondents who drove an EV, 10 did not have a charging point installed at home. 7 out of the 10 did not have a driveway or garage where they could park their car.

“If I’m charging at work I’m charging because I need the power in the vehicle when I need it, I would only charge when I need the power and not occupy the charge spot that others may need.”

Ensuring trust and empowering citizens

Despite overall support for the LEM many of the people we spoke with were wary of the energy market more generally and for some, their trust in energy suppliers had been degraded by the energy crisis.

“Looking forward to how I will use energy and electricity in the future, it’s important that I have trust in those who are providing my energy and a good understanding of their aims. This would make me feel confident in my supplier and I would feel like I would want to support them.”



[VIDEO: Hear from Mavis](#)

Knowing it’s renewable energy

Questions were often raised around how Greater Manchester would achieve mass local generation.

“How will it actually work using Greater Manchester’s resources?”

Knowing that the energy provided on the LEM was local and renewable was an important feature for many.

“A lot of greenwashing goes on, so need to prove that green energy is actually green.”

Co-producing new infrastructure

People also questioned where infrastructure would be installed.

“How will we make sure we don’t spoil our existing natural spaces with the development of renewable energy infrastructure?”

Results from our EV charging survey found people were concerned about DIY charging infrastructure.

“I have concerns about how people without private drives will charge. Several times I have come across wires coming out of windows and across pavements which is blocking access for people who cannot step over the wire.”

These questions and concerns signal that co-production between communities, councils and installers will play a vital role in ensuring new developments work well for people in the long term. The LEAP work carried out as part of this project by Energy Systems Catapult presents a starting point for these types of projects, as does the potential for public ownership of the LEM.



[VIDEO: Hear from Stuart](#)

High levels of transparency and scrutiny

“How will we ensure no one is left behind in a democratic way?”

Many of the issues discussed in this report relate to a broader consideration of how the local energy market will be governed. This was a key focus of the citizen juries' work.

High levels of transparency and scrutiny have two key benefits: increased understanding amongst the general public of local energy markets leading to increased engagement and; decision making that has been informed by diverse experience and perspectives and is therefore more representative of the local population.

“Looking forward to how I will use energy and electricity in the future, it's important that I have true, objective, democratic information provided by various sources to inform and educate as this would help to connect people and so allow us to work together in harmony and help to encourage individual responsibility...”

The citizen jury recommended full public ownership of the LEM with high levels of transparency and scrutiny including:

- An open citizen hearing where local people are invited to scrutinise the annual report and ask questions of GMLEM directors
- A consumer panel which meets twice a year with the GMLEM board where they can directly question the activities and finances of the LEM.

This decision was based on values for local control and public decisions and voices. The jurors understood the risk that this ownership model would pose for the taxpayer. They also noted that ensuring genuine public engagement would be a challenge.

“Accessibility could be an issue. There are potentially barriers if (the consumer panel) is held physically or online, which could reduce the panel's diversity and representativeness.”

There are many innovative, inclusive, and effective ways that high levels of transparency and scrutiny could be achieved in a meaningful way. Offering differing levels of information is key to support people with different levels of understanding of LEMs to engage. There is a risk that the GM LEM could become exclusive to those ‘in the know’. People who do not feel that they have the knowledge and information to make an informed decision may easily dis-engage. This was also identified by the jury:

“If learning how LEMs work is difficult or time-consuming, pro/consumer uptake is likely to be limited - education needs to be wide reaching and easy to understand.”

The price of energy on the LEM

Our research found that those who are most likely to pay a premium for local renewable energy are 'early adopters' or highly engaged citizens who are motivated to pay more in order to support environmental and ethical initiatives.

The data from a survey of 40 Carbon Co-op members and followers showed that 31 people would pay a £20 per year premium for local renewable energy, with the top reasons being to support the local economy and protect the environment.

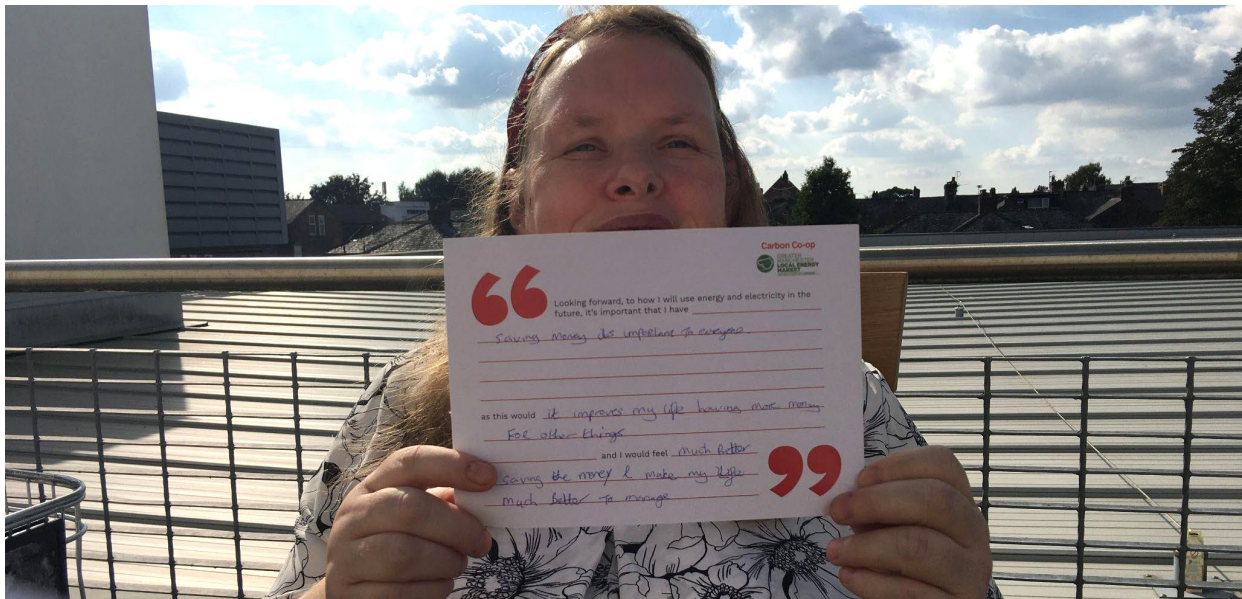
Despite the recent energy price rises, the data did not show that affordability was a key concern for these respondents when considering this premium. There was no relationship between household income or current energy bill prices and willingness to pay a premium which suggests that £20 per year would be a reasonable option to put forward and is likely to be accepted by this group of people.

"We still support Ecotricity even though they're more expensive than other suppliers, and we are poor, because it's important."

However, the majority of the people we spoke with during our public engagement activity across GM believed that renewable, local energy should be cheaper believing it to be a less costly system. For many people within this group cheaper energy prices trumped ethical tariff options.



[VIDEO: Hear from Ken](#)



Michelle, resident of Leonard Cheshire Support Living service in Urmston shares what she has written on her 'insight postcard'

"Looking forward to how I will use energy and electricity in the future, it's important that I am saving money, it's important to everyone. This would improve my life, having more money for other things and I would feel much better saving the money and it would make my life much better to manage."

Several people we spoke with were also highly engaged but would not choose to pay an expensive premium for financial reasons and believed that charging more would be unethical.

"Access and funding will be a challenge for me. Renewable sources and eco-friendly products and services are often expensive and I feel, in a way, helpless. Renewable and carbon friendly energy should not only be available for the rich."

Appendix 1: Recruitment sites

- Northwards Housing Community Event - Crumpsall Park - Crumpsall
- Northwards Housing Community Event - Scotland Hall Road Park - Newton Heath
- Merseyway Shopping Centre - Stockport
- Cherwell Wellbeing Hub and Supported Living Centre - Heywood
- Leonard Cheshire, Eden Square Supported Living - Urmston
- Stretford Public Mall - Stretford
- Want Not Waste, Manchester University Shop - Manchester
- Sustainable Living In The Heatons - Stockport
- Rainbow Haven Refugee Resource Centre - Gorton
- Afflecks Palace - Manchester
- Age UK Manchester, Crossacres Resource Centre - Wythenshawe
- Greater Manchester Green Summit - Salford
- Boiler House Repair Cafe - Moss Side
- Bolton Community Voluntary Service Event - Bolton (online)