GREATER MANCHESTER LOCAL ENERGY MARKET

DOING THINGS DIFFERENTLY FOR THE ENVIRONMENT

The Greater Manchester Local Energy Market Citizens' Jury Report

Carbon Co-op

Acknowledgements

Thank you to the members of the GMLEM Citizen Jury who spent 6 intense days over the course of two weeks considering, deliberating and compiling the recommendations in this report. The jurors worked hard to take into account a huge amount of technical information relating to local energy markets and governance, alongside listening to each other and contributing their own perspectives and experiences with regard to the future of energy.

About the authors

The recommendations in this report have been written by the members of the GMLEM Citizen Jury in their own words.

The rest of this document has been written by Rachel Lewis with contributions from Carly Harper, Claire Knox and Alex King of Carbon Co-op.

The photos in this report were taken by Brandon Denny.

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Introduction

Introducing the GMLEM Citizen Jury

On the 26th April 2022, 15 people from across Greater Manchester gathered at Friends Meeting House in Manchester Central and began a six day "citizens' jury". The task for these citizens was to tackle a set of jury questions set for them by members of the Greater Manchester Local Energy Market consortium. The central question was how the Greater Manchester Local Energy Market should be owned and governed.

Over the six days, the citizens heard from and asked questions of witnesses, and worked in groups on the jury questions. They reached conclusions together, and were polled on their individual views. They identified individual and collective reasons for their answers.

This report sets out why the jury was held and how it was designed. This report also shares the work of the jury including their recommendations and jury statement.

Why the jury was held

Since 2019 a consortium of organisations have been working together to explore the possibility of establishing a Greater Manchester Local Energy Market (GMLEM).

The GMLEM aims to support Greater Manchester to achieve its goal of becoming carbon neutral by 2038 by developing a more integrated, efficient and cost-effective approach to how energy is generated, managed, supplied, and used within the region. The initiative would involve establishing a market platform for energy suppliers to buy and sell locally generated electricity and flexibility, utilising smart technology, including that within Heat Pumps and Electric Vehicle charging points. The project is funded under the Detailed Designs for Smart Local Energy Systems competition, a part of the Prospering from the Energy Revolution programme under the government's Clean Growth Fund.

The project is led by the Greater Manchester Combined Authority with project partners including: Bruntwood, Ovo Energy, Carbon Co-op, Energy Systems Catapult, Daikin, Cornwall Insight, Graham Oakes Consulting, Cadent, Regen, Electricity North West and Northwards Housing. Different partner organisations have focused on different elements of the project, for example developing a market platform and carrying out Local Area Energy Planning to understand effective decarbonisation strategies.

This citizen jury was held to involve citizens in deciding who should own the local energy market and the appropriate levels of transparency and scrutiny. Carbon Co-op had led on citizen engagement throughout the GMLEM project and prior to organising the citizen jury, had facilitated engagement activities to understand people's views on the GMLEM and the future of energy. The topic of ownership and trust came up often. In particular, people were keen that the LEM would be more transparent than the current market when it came to where renewable energy was coming from and how profits were being used.

Through discussing with project partners the feedback and perspectives Carbon Co-op had gathered from over 300 local people, it was decided that a citizen jury should be held so that citizens of Greater Manchester can be involved with deciding how the Greater Manchester Local Energy Market should be owned and governed going forwards.

The commissioning group and project team

A commissioning group was formed within the GMLEM consortium to develop and agree the questions for the jury to deliberate. The members of the commissioning group were:

Sean Owen - Head of Low Carbon, Greater Manchester Combined Authority (GMCA)

Sean leads the project management for the GMLEM project. His role within the GMCA means that he has clear oversight of low carbon projects across Greater Manchester including the Unlocking Green Energy In Greater Manchester project and the Retrofit Accelerator project.

Graham Oakes - Graham Oakes Consulting

Graham is a systems engineer and founder of Upside Energy. Growing Upside Energy as a business gave him deep insight into the energy system and the challenges it faces as it decarbonises and becomes more distributed and people-centred. Graham is a consultant on the GMLEM project and held a clear vision for how a local energy market could work in GM, helping to identify opportunities and risks and develop frameworks to think about business and technology models.

Jonathan Atkinson - Project Manager, Carbon Co-op

Jonathan is the co-founder of Carbon Co-op and developed the objectives for Carbon Co-op's citizen engagement work on the GMLEM project. The GMLEM project plays a role within Carbon Co-op's organisational ends to reduce domestic carbon emissions, demonstrate energy justice and achieve energy commons.

The jury was designed and facilitated by staff at Carbon Co-op. Dr Malcolm Oswald, Director of Citizen Juries CIC provided support with designing the jury and acted as a project mentor.

Jury questions

With input from other GMLEM project partners and the Citizen Jury design team, the commissioning group agreed to present the jurors with 6 scenarios.

Each scenario had one key variation for the jurors to deliberate. The first three scenarios presented three different ownership models:

- Scenario 1: joint ownership between GMCA and a private commercial partner;
- Scenario 2: full private commercial ownership and;
- Scenario 3: full GMCA (public) ownership.

Scenarios four to six presented higher levels of transparency and scrutiny for each of the three ownership models. The jurors were asked to vote on how supportive they were of each scenario.

Although the jurors were only presented with three different ownership models, they were asked to list the most important reasons to be supportive and unsupportive of each scenario. These questions were designed to draw out the reasons behind their vote. This in turn would provide

insight into ownership preferences, values and principles beyond the governance models presented.

The jury questions can be read along with the results here.

Planning and delivery

How the jury was designed

The key elements of designing the jury included:

- **Developing the scenarios and questions**

  for the jury to deliberate and answer

- **Recruiting expert witnesses**

  to provide relevant impartial information to help the jury answer the questions and produce recommendations

- **Forming an oversight panel**

  to review the material presented to the jury and to note points of bias and ensure clarity for a lay audience

- **Recruiting the jury**

  to ensure a group of citizens, that reflected the demographics of Greater Manchester, were involved in producing the final recommendations

- **Designing sessions to support the jury**

  to work well together, digest the relevant information from witnesses, deliberate the scenarios and questions and produce their recommendations.

- **Recruiting a critical friend**

  to answer additional technical questions for the jury after expert witness presentations

Minimising bias

It's important that bias is minimised where possible when designing and delivering a Citizen Jury so that jurors use their own values and knowledge to weigh the evidence they are given. Limited time and resources for this project meant that there were also limits on the measures that could be taken to reduce bias. Carbon Co-op implemented the following design controls to monitor and minimise bias where possible:

- Members of the commissioning group were only involved in developing the jury questions and were deliberately not involved in designing the jury material or sessions.
- Expert witnesses were given a detailed brief on how to minimise bias in their presentations and remain impartial during their session.
- An oversight panel was recruited specifically to monitor the bias in expert witness presentations and jury material.
- It was important that the oversight panel had some level of understanding of the energy system in order to review the expert witness presentations but that they were distinct from the commissioning group and GMLEM project consortium to maintain impartiality.

- Carbon Co-op made sure that the oversight panel were able to review material from members of the GMLEM partnership and the Carbon Co-op staff team, where bias may have been more likely due to their involvement with the GMLEM consortium.
- Whilst recruiting applicants for the jury Carbon Co-op visited 14 public sites across Greater Manchester, in person, speaking to people at random. This random selection removes some 'self selection bias' however the final group of jurors were not selected at random.
- Carbon Co-op reflected on their processes and noted other opportunities for minimising bias that could be implemented in future Citizen Juries.

Oversight panel

The oversight panel was formed to review the material presented to the jury. They were asked to check for bias and note points that were unclear or that would be difficult for a lay audience to understand. In the second oversight panel meeting the group discussed which changes to the material were 'advisory' or 'recommended' and these were then sent as a list to the expert witnesses.

The members of the oversight panel were:

James Lester

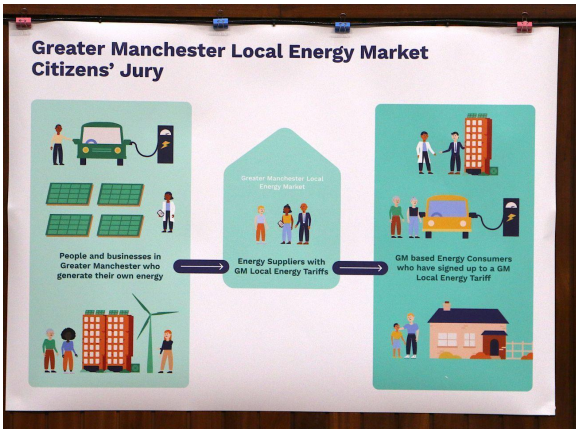
James is head of operations at a tech start-up in Manchester and has a special interest in retrofit and green energy. He's overseen two major retrofits projects and is an active Carbon Co-op member and investor in People Powered Retrofit, Carbon Co-op's sister organisation.

Sarah Holliday

Dr Sarah Holliday is a researcher at Nesta Challenges and co-founder of social enterprise Telescope, where her work centres on facilitating and empowering people on the frontline of social challenges to have their voice heard in the policymaking process. She has a technical background in solar energy research within academia, as well as holding a Social Innovation Fellowship with Year Here. This led to her work in community energy, establishing a community solar project in East London with Mayoral funding as well as being elected as a director of Community Energy London from 2019-2020.

Nkechi Nuella Anasoh

Nkechi is an Energy Engineer and consultant and has substantial experience working across industry in the oil and gas sector. Nkechi was a visiting researcher to the University of Lancaster as a commonwealth professional fellow with a focus on gender equality, affordable and clean energy. In recent years Nkechi has broadened her focus and interest in renewable energy, climate risks and emission reduction as industries diversify portfolios to reduce carbon emission.



The oversight panel met twice prior to the jury taking place along with Malcolm Oswald, Director of Citizen Juries CIC. The three panel members were able to review three of the seven expert witness presentations including presentations from Sean Owen, Matt Fawcett and Steven Britton and Dan Starman. They also reviewed the material created by Carbon Co-op to illustrate the scenarios and the LEM.

The remaining expert witness material was reviewed by Malcolm Oswald.

Recruiting the jury

82 people applied to be a jury member. A combination of strategies were used to reach out to and recruit, a group that reflected the demographics of the Greater Manchester population. Key to the premise of citizen juries is the fact that the selected jurors' values and experiences broadly represent those of citizens across the region.

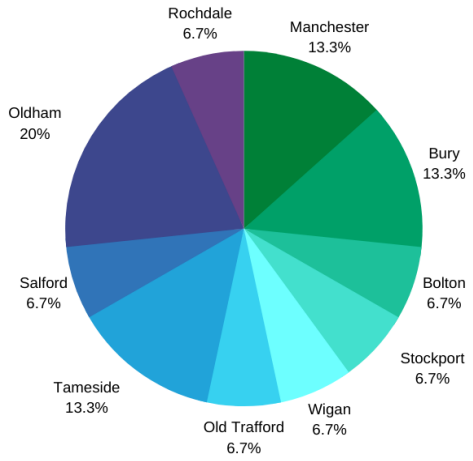
Carbon Co-op began their recruitment with an engagement tour visiting a range of locations across Greater Manchester boroughs, in-person, to speak with over 200 people about the GMLEM and the opportunity to participate in the jury. The tour included; community centres, parks, care homes, shopping centres, housing association community events, climate action events, repair cafes and business forums. After reviewing applications and identifying gaps in representation Carbon Co-op published a press release call out which was shared in Manchester World. Carbon Co-op continued to reach out to places beyond ‘environmental focused’ groups including Northern Girls Club (a North West based Women's network), community groups, community art organisations and men clubs, including Rammy Mens club and Andy’s Man Club. Social platforms were utilised such as 'Meet Up' and posts were shared in community based Facebook pages including 'what's on in Rochdale', to advertise the jury. Alongside this, Carbon Co-op contacted community anchors who they had existing relationships with including the OBA Millenium Centre and Sholver & Moorside Community Centre, to broaden outreach.

An ‘information pack’ was shared with applicants which included details of the £70 incentive that jurors would receive per day they participated.

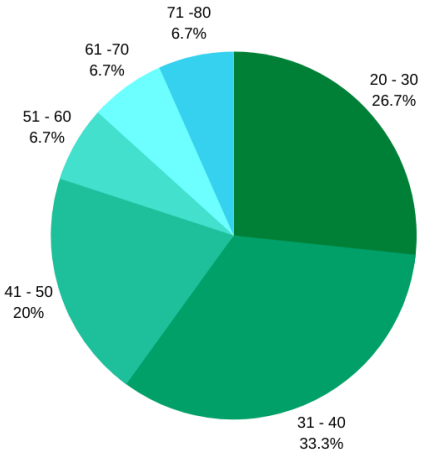
A process of stratified sampling was used to select the final members of the jury, including 3 reserves, to help ensure a minimum of 12 citizens. The sample chosen was controlled for postcode, gender, age range, ethnicity, employment status and level of engagement with low carbon technology. The jurors were then contacted to check that they were still able to attend, that their circumstances hadn’t changed and to understand any additional support they might need to participate including support with digital technology or accessing the venue.

The following pie charts show the profile of those who participated in the jury.

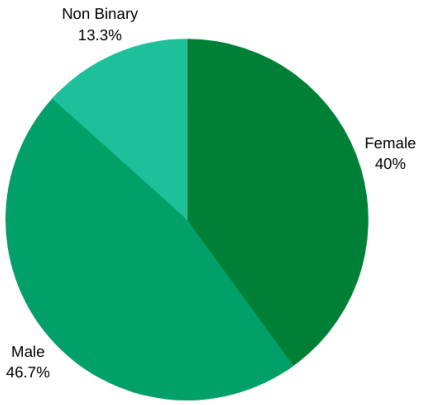
Borough



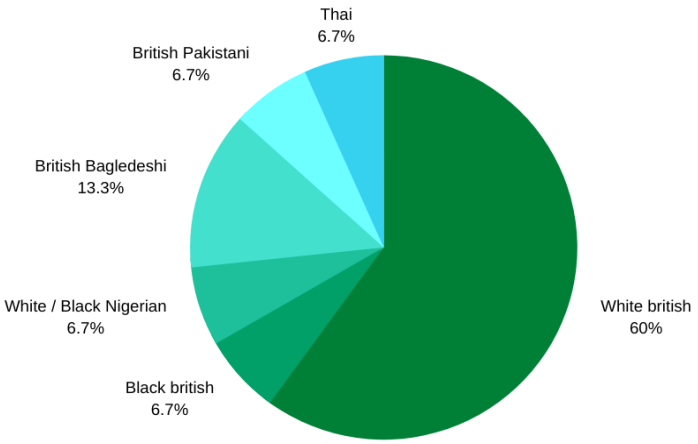
Age



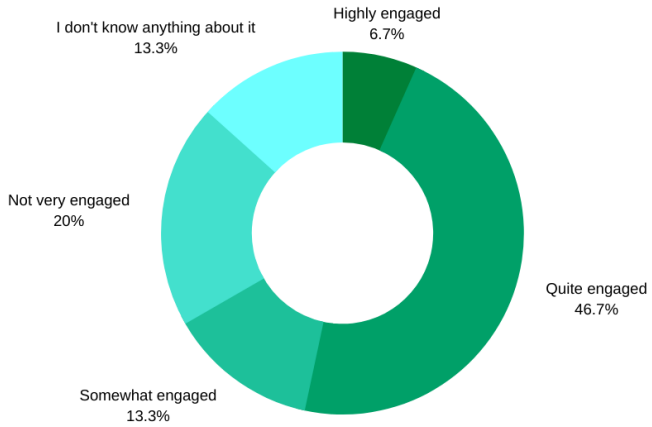
Gender



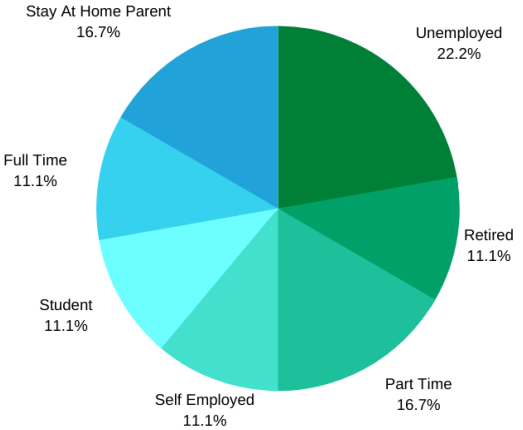
Ethnicity



Level of previous engagement with low carbon technology



Employment Status



Critical Friend

The critical friend attended the majority of expert witness sessions and helped jurors with understanding technical information and putting it into context. The critical friend role was particularly important for this jury because the expert witness sessions covered very technical topics related to energy and local energy markets. The critical friend to the jury was Matt Fawcett, co-founder of Carbon Co-op. Most of Matt's current work is within the 'Energy Systems Team' at Carbon Co-op, primarily looking at how domestic energy demand can be shifted to better match periods in which low carbon generation is plentiful.

Jury sessions and expert witness presentations

The GMLEM Citizen Jury took place over two consecutive weeks from Tuesday 26th April - Thursday 7th May 2022 with the jurors meeting for six days in total. The six days were broken up with a bank holiday weekend in the middle. The jury took place in person at Friends Meeting House in Central Manchester.

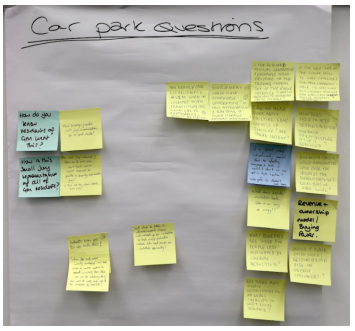
Expert witnesses

Five expert witnesses were each asked to take part at a specific point in the jury proceedings. In addition Sean Owen from the GMLEM commissioning group presented to the jury to explain why the event was being held. Matt Fawcett, from Carbon Co-op and the juries 'critical friend', also presented to give some background to the energy price rises that were making national news headlines at the time the jury met. The expert witnesses were each given a detailed brief with specific questions to answer for the jury. Guidance was also given to ensure the presentations were suitable for a lay audience and were relevant to the jury questions.

Each jury member was given a ring binder containing printed copies of the expert witness presentation slides and blank paper for notetaking. The expert witness presentations were video recorded and uploaded to Youtube for the jurors to watch again if needed.

Jury questions

Each presentation was followed by 10 minutes of reflection where expert witnesses were asked to leave the room and jurors could consider the questions that they wanted to ask the expert witness. The questions were written on post-it notes and collected on a sheet of flip chart paper. The facilitators then read the questions out loud, as agreed with the jurors, for the expert witnesses to answer. Questions that were not answered within the time allowed were placed into a ‘car park’ and sent to the relevant expert witness or to the critical friend by email. Expert witnesses provided written answers to these follow up questions, which were then printed and shared with jurors in their binders. Some questions remained unanswered. You can find all the questions the jury asked the expert witnesses here.



Feedback

At the end of 4 of the 6 days Carbon Co-op used a H form framework to collect feedback from the jurors on what they felt worked well and what could be improved.

A ‘H form’ is a way to collect feedback using a scale in the shape of a capital ‘H’. One end is marked ‘what worked well’ and the other is marked ‘what could be improved’. Typically respondents attach their feedback to the scale on a post-it note or similar. The scale helps respondents to indicate how crucial they believe their point to be.

This feedback was then used to develop ideas for the following sessions. Some jurors also felt comfortable emailing the Carbon Co-op team directly to provide more detailed feedback.

Jury sessions

Day 1

After a brief introduction from Carbon Co-op the jurors heard from Sean Owen to understand why the jury had been called.

Focus topic: Introductory presentation: why are we here?

Presenter: Sean Owen - Head of Low Carbon, Greater Manchester Combined Authority

Presentation duration: 10 minutes (followed by 10 minutes for questions and answers with members of the jury).

Questions covered in expert witness presentation:

- What is the Greater Manchester Combined Authority?
- What is the Greater Manchester Local Energy Market project?
- Why has the jury been called?
- Who has commissioned it?
- What is the subject of the jury?
- Where are we now and what steps will follow the jury to lead to decisions being made?
- Why do the results of the jury matter, and how will they be used?

"The first presentation from Sean was insightful. It set the scene for what we were doing and why it was important" ~ Anonymous Juror

Following Sean Owen's presentation the jury then had a session with Matt Fawcett. The aim of the session was to stimulate conversation around the current energy context and in particular the concerning price rises, providing an opportunity for jurors to share their experiences and thoughts.

Focus topic: Why are our energy prices rising?

Presenter: Matt Fawcett, Carbon Co-op

Presentation duration: 5 minutes (followed by 10 minutes for discussion).

Questions covered in expert witness presentation:

- Why are energy prices rising?

Setting ground rules

After a short break the jurors were asked to consider what ground rules they would like to implement to create a supportive, respectful and focused environment for them to work in. Jurors were invited to take a minute on their own to consider what ground rules were important to them before sharing in pairs and then as a group of six. The jurors agreed their ground rules which Carbon Co-op wrote up on flip chart paper to be displayed throughout the proceedings.

Following lunch the jurors had their first expert witness presentation.

Focus topic: How does the energy system work?

Expert witnesses: Steven Britton - Senior Analyst and, Dan Starman - Head of Assets & Infrastructure and Networks, Cornwall Insight

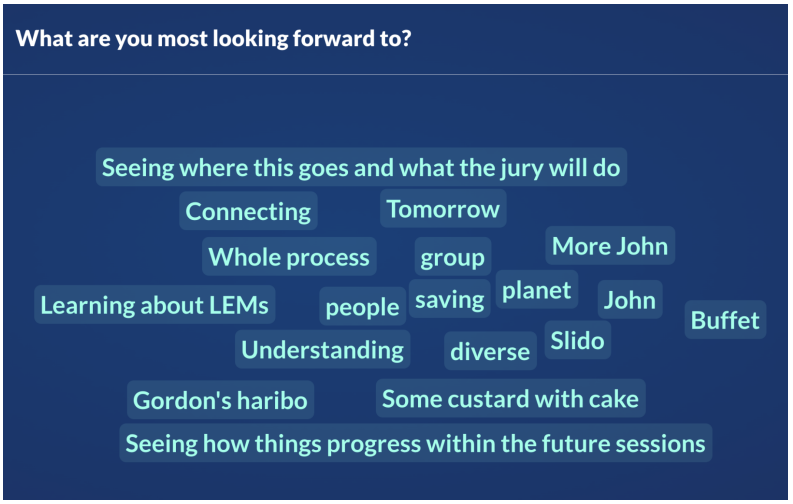
Presentation duration: 30 minutes (followed by 25 minutes for questions and answers with members of the jury).

Questions covered in expert witness presentation:

- What is energy generation?
- What is renewable energy?
- How is energy generated and who generates it?
- How is energy provided to energy users and who provides it?
- Who provides the infrastructure and who pays for it?
- What do we generally use energy for?
- What does regulation mean?
- How is energy regulated and who regulates it?
- How do we expect the energy system to change in the next 5-10 years?

The jurors then had time to chat with the critical friend to discuss some of the points raised by the expert witnesses or points that were not raised that they felt were important to consider. This included a discussion on energy efficiency and heat pumps.

To conclude the day, jurors were invited to reflect on what they were looking forward to in the jury proceedings. This was a lighthearted activity at the end of a day full of new information and people. A chance for jurors to test out the Sli.Do online voting tool that will be used later on in the jury, as well as to get to know each other better.

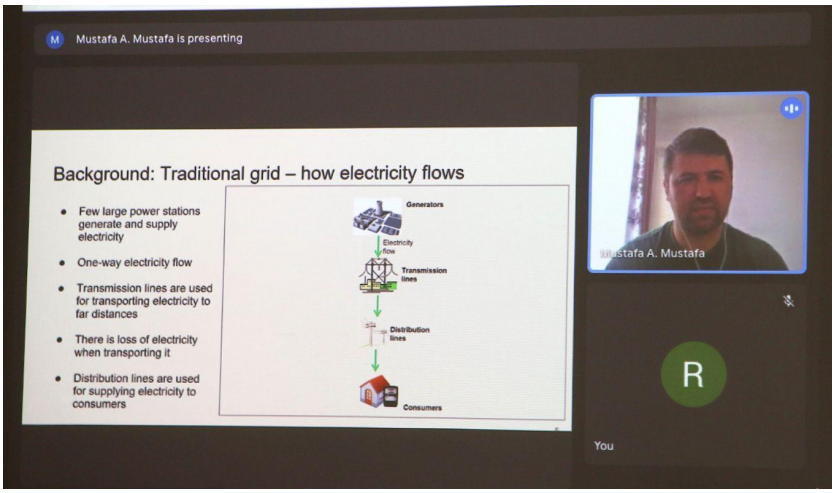


"We all very quickly came together as a group I feel" ~ Anonymous Juror

Day 2

Carbon Co-op began the day with a quick, simple warm up exercise and a reminder of the ground rules. The second expert witness then joined via a remote link.

Focus topic: What is a local energy market?



Expert witness: Dr Mustafa A. Mustafa - Dame Kathleen Ollerenshaw Research Fellow in the Department of Computer Science at The University of Manchester

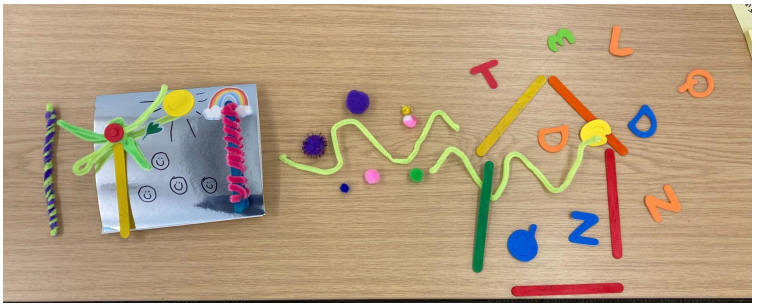
Presentation duration: This presentation was divided into four parts. Part 1,3 & 4: 3 x 20 min presentations (followed by 25 mins of questions and answers with jury members), Part 2: 1 x feedback on jury task

Part 1

Questions covered in expert witness presentation:

- What are the key features of a LEM?
- Definitions of the key features:
  - Energy Market
  - Market Operator
  - Energy Supplier
  - Energy Tariff
  - Local Generator
  - Consumer
  - Prosumer
  - Ofgem
- How does a LEM work?
  - Why does local matter?
  - What do we mean by local? (Which features are / aren't local?)
  - Who is buying?
  - Who is selling?
  - What sort of energy is bought and sold?

Part 2



In small groups the jurors created a LEM out of craft materials and were asked to label all the features and present their designs to the group. Dr Mustafa corrected any errors and provided feedback on their explanation of the LEM. The activity was designed so that it was clear jurors had been able to absorb and understand the key technical information. It was also a creative activity to break-up the delivery of a highly technical presentation.

Part 3

<u>Questions covered in expert witness presentation:</u>

- Are there any LEMs working now and if so give example(s)?
- What are the potential advantages of a LEM?
- What are the potential disadvantages of a LEM?

After lunch expert witness Dr Mustafa A. Mustafa joined for the final part of his presentation.

Part 4

Questions covered in expert witness presentation:

- What is the difference between the LEM Operator and the LEM owner?

"It worked well to have Dr Mustafa's presentation as 3 different sections. Lots of theory but very relevant and where to go from here" ~ Anonymous Juror

Before hearing from the next expert witness the jurors were asked to consider how they saw themselves interacting with a local energy market. The group wrote their suggestions on post-it notes and stuck to a sheet of flip chart paper which was displayed throughout the following days. You can read the jurors' suggestions here.

The last session on Day 2 was with expert witness Sarah Holland.

Focus topic: Why does the Greater Manchester Combined Authority (GMCA) want a local energy market for Greater Manchester?

Expert witness: Sarah Holland - Programmes and Policy Lead (Energy), Greater Manchester Combined Authority

Presentation duration: 15 minutes (followed by 15 minutes for questions and answers with members of the jury).

Questions covered in expert witness presentation:

Please address the following in your presentation:

- How are GMCA planning to reduce carbon emissions in Greater Manchester?
- Why does the GMCA want a LEM?

Day 3

Day 3 began with another warm up activity and a recap of what we had covered so far. The 'Car Park' of questions was also reviewed from the expert witness presentation with Dr Mustafa. Jurors were able to group questions into themes and identify where there was overlap in their areas of enquiry.

This was followed by the first expert witness presentation on governance.

Focus topic: What is enterprise governance?

Expert witness: Dr George Voulgaris - Senior Lecturer in Accounting at The University of Manchester

Presentation duration: 20 minutes (followed by 20 minutes for questions and answers with members of the jury).

Questions covered in expert witness presentation:

- What does the governance of an enterprise mean? E.g ownership, funding, accountability.
- What are the typical governance features of a medium sized publicly owned enterprise?
- What are the typical governance features of a medium-sized jointly owned (public / private) enterprise?
- What is a "golden share"?

"Dr Voulgaris didn't shy away from difficult and annoying questions!" ~ Anonymous Juror

Deliberating scenarios and voting

After lunch the jurors were introduced to the first scenario that the commissioning group had created for them to deliberate. The scenario was read aloud by Carbon Co-op with illustrations shared on screen. The jurors were then given time to read the scenario on their own and to note any questions or points for clarity. As a group, we went through any questions before asking jurors to list the most important reasons to be supportive and unsupportive of this

first scenario. Ed De Bono's Six Thinking Hats were introduced to the jury as a tool to help them consider these different reasons.

The jurors worked in small groups to generate the reasons to be supportive and unsupportive. These reasons were recorded on post it notes and collected on a sheet of flip chart paper. One juror from each group shared the reasons with the rest of the jury and there was an opportunity to discuss and comment on each group's reasons. The reasons were then typed into the online polling software Sli.Do by Carbon Co-op and the jurors ranked the reasons in order of importance using their phone or iPad. Carbon Co-op supported jurors with any technical difficulties and provided phones and laptops for those who could not access Sli.Do on their own device.

Lastly the jurors voted anonymously how supportive they were of the scenario. The results of the vote can be viewed here

Day 4

Returning from the bank holiday weekend, Day 4 began with a social activity where the jurors were asked to get together with someone they hadn't worked or spoken with so far and ask them about their weekend.

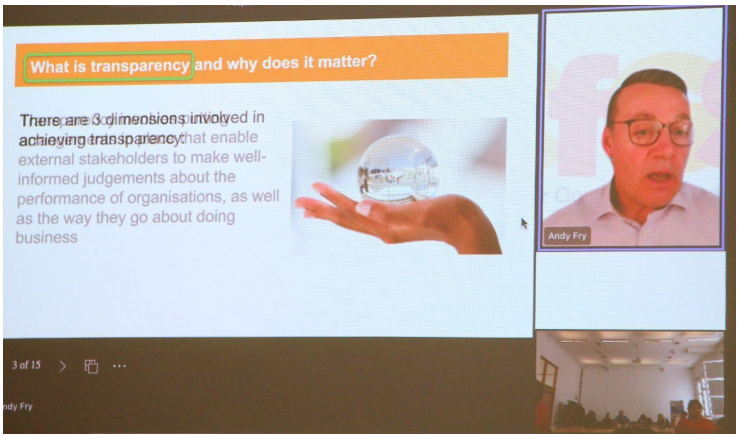
The jurors then spent some time reviewing the voting process that was used on Day 3 for the first scenario. Carbon Co-op provided the jurors with a H form framework and post-it notes to record their thoughts and identify where improvements could be made. Jurors were encouraged to also review the ground rules to see if anything could be added to support the voting process. It was agreed that no new rules needed to be added but that jurors should keep the ground rules in mind during deliberation.

The second and third scenarios were then introduced to the jurors and a similar deliberation, ranking and voting process was followed.

Most of what I learnt was from other members of the jury, a layperson perspective. I hope the commissioning group keep that in mind to form policy decisions going forward - listen to the lay community" ~ Anonymous Juror

To end the day the jurors heard from their final expert witness.

Focus topic: What is transparency and scrutiny?



Expert witness: Andy Fry - CEO, Centre for Governance and Scrutiny

Presentation duration: 20 minutes (followed by 20 minutes for questions and answers from members of the jury).

Questions covered in expert witness presentation:

- What is transparency?
- Why does it matter that enterprises are transparent?
- What is scrutiny?
- Why does it matter that enterprises are scrutinised?
- What are the potential advantages and disadvantages of being more open?
- What are the differences between publicly owned and privately owned companies when it comes to transparency and scrutiny?

'I also liked the transparency, scrutiny and governance session. At first I thought I wouldn't like it because I thought "I know all that, it's basic, and how does it relate to this topic." But as the talk went on, about half way through it all opened up and I could see how it relates.'

~ Anonymous Juror

Day 5

On Day 5 the jurors started by discussing in pairs what they had found most interesting so far from taking part in the jury. This was another opportunity for jurors to speak with someone who they hadn't spent much time with so far.

The rest of Day 5 was spent deliberating and voting on the final three scenarios. The jury voted for each scenario after deliberation before being introduced to the next scenario. Graphics were displayed on screen to illustrate the key differences between the scenarios. As with the previous scenarios the results were shared on the projector screen and the jury had a brief discussion on what they thought of the voting results.

"Whatever one person said it was taken down and it was studied and it was their opinion and it helped to enlighten everyone in the room" ~ Anonymous Juror

"Using the post-it notes were a great way for everyone to decide their opinion, and slido also made it democratic as it was a digital tool and anonymous so there was no judgement" ~ Anonymous Juror

Day 6

The day began with jurors filling in feedback forms to begin their reflection on the jury process. As a group the jurors then took part in an activity to tell the story of what they had experienced together. The anonymous quotes included in this report were taken from this activity. Carbon Co-op used a method called “Yes and…” to encourage the jurors to accept each person's perspective whilst also having their own view and adding it to the story. The jurors were not allowed to use the word ‘but’. A microphone was passed around in a circle with each juror adding to the story. Carbon Co-op asked several questions to prompt reflections on how democratic the process was and how they came to a decision. The audio was recorded and the story was also typed up by Carbon Co-op.

Writing the recommendations and statement

To record the jurors’ recommendations Carbon Co-op presented them with a template document. This was shared on the screen and the jurors were asked if they wanted to make any suggestions or adaptations to the template created.

The jury split into three groups to write up their recommendations based on the 6 scenarios. Carbon Co-op provided the jury with laptops so they could access the Google Doc template. The Carbon Co-op team supported jurors to get set up using the laptop and Google Doc. The group that finished early used the time to consider other recommendations that were distinct from specific scenarios.

After the groups finished their first draft, each group read through the others' work and added comments. One member of the jury also recorded and edited a short video on their phone to capture the process of writing up the jury recommendations.

For the jury statement Carbon Co-op shared a document on the projector with questions for the jury to consider. The questions were read out and the jurors were asked to write their answers on a post-it note. The post-its were grouped into themes and the themes were typed up into the document on the screen for the jurors to agree as a group.

Once all the questions had been considered the jury divided the typed up themes between three groups to write up as a paragraph for the jury statement. This was read out to the group and asked for feedback before recording the audio. Several members of the jury had to leave early on the last day so the Jury Statement was shared for comments via email the following week.

To celebrate the hard work of the jurors Carbon Co-op presented each jury member with a certificate of participation.

Jury Statement

“When considering how we buy renewable, local energy we believe that the Greater Manchester Local Energy Market, Citizens’ Jury has been an important process for the following reasons:

- It ensures local people have been at the heart of decision making.
- It provides a direct route to the GMCA.
- It helps to make sure that the local energy market better meets the needs of the people of GM.

Over the course of 6 days we received information from expert witnesses and used a variety of formats including the online voting tool Sli.Do and deliberative discussion, to conclude our recommendations.

As a jury, we felt that this process has been very empowering, helping us feel heard and involved. At times some jurors found the process challenging and overwhelming but, overall, we felt a positive sense that meaningful change is possible for the Greater Manchester community.

There was a clear outcome from the jury on their recommendations. Some jurors commented that they have changed their views following the process. The jury were frustrated by the 2038 timeline and did not accept that this delay was needed. There was a strong consensus for the following recommendations in terms of how the LEM will be owned and governed:

- We want local control.
- We want public decisions and voices.
- High levels of transparency and scrutiny is preferable.
- We want public ownership over private profit.
- We want the LEM to be democratic.
- We want diversity and representation.

We identified the following barriers to achieving these recommendations:

- Lack of political urgency
- Resistance and mistrust of the energy industry
- The LEM having limited direct benefit for consumers
- Scale and timescale of the project - the climate change predictions precede the date of establishing a LEM

Having considered our opinions and recommendations, we feel that development of the Local Energy Market should not and cannot wait until 2038. We acknowledge there needs to be a technological, legislative and regulatory change and assert that we need an increase in political will to enact this. To this end, greater education, engagement and communication between all stakeholders is imperative, from individual residents up to commercial bodies.

The jury comprises local people from Greater Manchester and having sought our opinion, we expect our conclusions to be acted upon.”

Recommendations

Joint Public Private Ownership - Scenarios 1 & 4

The jury concluded the following recommendation for Scenarios 1 & 4

“We note that these scenarios were not as well supported as scenarios 3 and 6. We recommend these scenarios be considered with caution. While the jury noted that the business model works like the Metrolink - so has been proven to work, there was concern of risk of abuse by the commercial partner and the ability of GMCA to remove them in a worst case scenario.

While the costs in the instance of failure are split equally in theory, the commercial company will be limited so in effect, GMCA could be liable up to 100%.

Considering all of the scenarios, we found that there was a clear appetite for public ownership and a lack of trust for commercial partners and operators. There was a view that democratic processes could improve scrutiny if properly designed.

1. Considering People and Businesses in Greater Manchester

- We believe the stipulation that the partner will be outside of the local area is a wasted opportunity to create jobs, improve community engagement and confidence, and to retain local finances.
- We would venture to add a stipulation that if possible the commercial partner should be based locally - not just as a PO box or address but employing and operated by local residents.

2. Making this recommendation a reality

- The consumer panel should have a proportionate cross section of the communities within Greater Manchester, considering all socio-economic backgrounds, this is likely to require support with languages.
- More Citizen Juries should be held as an effective format to support decision making
- Elected officials will need to be involved
- Potential partners will need to be proven to be trustworthy
- The general public, working in equal partnership with specialists
- Processes should be democratic
- Appointed GMCA overseers ought to be highly trained experts in LEMs, not just general councillors

3. What good will come of this recommendation?

- Public ownership element

- Low start up costs for the public purse
- Potentially reduced cost of failure

4. What are the barriers to achieving this recommendation?

- Finding a suitable and trustworthy partner
- Convincing the public that there has been real change when tariffs are still set by the commercial partner
- Would also require some amount of public education to enable wider public to engage in scrutiny processes

5. This scenario could potentially be reconsidered if these key things were changed/guaranteed.

- A golden share to allow GMCA to veto decisions or remove the partner in instances there are serious concerns about the commercial partner
- If the partner was required to have existed and operated for several years in the specified field before entering into the partnership. Although we appreciate this may be restrictive as not many LEMs exist yet.
- Democratic processes
- Open citizen hearings should also inform regulation as well as monitoring transparency and scrutiny."

Private Ownership - Scenarios 2 & 5

The jury concluded the following recommendation for Scenarios 2 & 5

"These two scenarios were not well received by the group. In scenario 2 the main issues were: this scenario is currently how the electricity board runs, if a LEM was to be implemented we wanted something that would benefit the public. The whole LEM system would be fully owned and operated by the commercial company, the regulation aspect of this scenario was also disadvantageous as there were no local voices with OFGEM as the sole regulator.

The only advantages that we found in this scenario was the lack of risk to the local taxpayer if this was to fail as the commercial partner would be covering the costs. Though it was felt that this burden could be indirectly funnelled back to the taxpayer if, for example, there was a need for a bailout.

In scenario 5 the transparency aspect of this scenario differed from scenario 2 as there was a lot more transparency. However there was a concern that hearing decisions could be misrepresented to justify socially undesirable policies. Or that commercial companies would only agree to proposals which they were already considering in order to look like they were listening. The open hearings for the public was highly advantageous as well as a consumer panel. It is unclear how much the public would actually have a say in decisions after the panels and hearings. Detailed information on what influence these hearings would be required. Despite the

additional transparency in scenario 5 we still felt that this scenario is not how we would want the LEM to be governed - it doesn't give locals enough control or benefit.

We recommend you do not take either scenario 2 or 5 forward because they don't present enough significant change from the current status quo - if the energy market is going to be overhauled it should be a substantial change which enables local people's engagement and empowerment in the energy grid, and environmental and financial benefit. This sentiment was largely shared by the jury group – scenarios 2 and 5 created the most consensus, which was negative.

1. Considering People and Businesses in Great Manchester

We see more potential for creating new opportunities and benefits for local people and businesses in other scenarios – we don't think scenarios 2 and 5 would create any substantial change - power and profit remains with the commercial entity.

2. Making this recommendation a reality

These scenarios are not desirable – involved parties ought to be representative of local interests and as currently designed neither scenario 2 or 5 does this.

3. What good will come of this recommendation?

Recognition of the importance of factors which make them undesirable

4. What are the barriers to achieving this recommendation?

Lack of support from the jury. Likely to not engender support from public - may even put people off LEMs

5. This scenario could potentially be reconsidered if these key things were changed/guaranteed

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

Public Ownership - Scenarios 3 & 6

The jury concluded the following recommendation for Scenarios 3 & 6

"The jury is in complete agreement that Scenario 6 should be taken forward. We are in favour of the addition of transparency and public scrutiny, not just access to the commercial report.

We came to this decision by discussing supportive and unsupportive reasons posted from the jury as a whole. The consensus of the jury lent towards having full GMCA control. The prevailing identified unsupportive reason was the risk to tax payer upon failure of the LEM.

We believe that Scenario 6 represents the views of the public not the industry - the voice of the people is coming back in. It feels like you can have your voice heard.

The opportunity for added transparency and greater public scrutiny improves public confidence in ownership and management of the scheme. It is felt that there would be more control over money and decision making. It feels that companies currently in control of our energy system have made a mess of it so it's an opportunity for local people to have more control.

1. Considering People and Businesses in Greater Manchester

In considering this recommendation we feel that it would benefit local businesses with ploughed profits. It will attract more business and investment to the area in regards to carbon reduction and building renewable structures. Therefore creating jobs and further opportunities for manchester.

We feel people will want something that will also support, and be supported by, the community of Manchester. Profit comes back into Greater Manchester.

With GMCA owning the structure, profits can be funnelled back into GMCA. The shareholders are the people. This could be used to lower tariffs and help people purchase low carbon infrastructure. It was felt that Scenario 6 also meant that it was less likely for tariffs to needlessly increase. Private companies make money from growth of profit. Local authority ownership won't need the same financial growth

2. Making this recommendation a reality

Following this recommendation will need an enormous amount of political will, resulting in huge changes to legislation. The technology is there or can be reasonably foreseen to be produced.

Moving forward in this process, the next steps of getting people involved should include talking to investors, who have an interest in developing green technologies. Spreading the concept through to people and businesses in the local area. Make the public aware that there will be a choice out there, and it will be a sustainable choice.

The concept needs more people on board to push the process into forward motion. GMCA would need to start looking for availability of the commercial partner to run the operation, which requires putting out a tender.

The physical aspects will also require a risk assessment and feasibility study.

3. What good will come of this recommendation?

- Potential for lower bills for everyone if it works,
- Will reduce carbon emissions,
- Greater local public control over energy,
- More safeguards,
- Not chasing financial growth,
- Single decision-maker,
- Easier to change the network operator,

- More incentives for consumer uptake,
- Fewer barriers than other scenarios because there is no need to find a partner,
- Established channels for the public to communicate views,
- Regional capacity building,
- Global example of local energy,
- Green job creation,
- Local job creation,
- Upskilling GM population

4. What are the barriers to achieving this recommendation?

- Politics / debates slowing down the process of regulation
- The other energy suppliers on the national grid - other energy companies could attack prices of the market just to encourage people to move away from LEM - Or lure them away after implementation of the LEM, leading to its downfall.
- Current skill capacity in region to manage, run and oversee LEM lacking
- education of general public is needed to help them understand why they would benefit from being part of GMLEM
- High effort/time demands on general public would be a barrier to automation software/systems need to be robust, simple and immediately effective
- 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
- Potential issue if trust is not adequately established

General recommendations

The jury concluded the following general recommendations for the governance of the LEM:

- LEM oversight by GMCA should be delegated to specially elected/positioned specialist experts, not just existing elected councillors who may have very minimal insight/expertise.
- It would generally be better if it was possible for the commercial partner to be Manchester-based and a social interest organisation.
- Borough-wide panels, forums - citizen's assemblies - to involve and educate the wider GM population on the potential of LEMs

The voting results in detail

Scenario 1

The following scenario was presented to the jury:

It's 2030. The Greater Manchester Local Energy Market (GMLEM) has been created. It's aim is to reduce CO2 across Greater Manchester (GM) by providing a market platform where people, businesses and energy providers can buy and sell local renewable energy.

The Greater Manchester Local Energy Market works like this:

- One large energy supplier and two small energy suppliers have agreements with the GMLEM to offer a GM Local Energy tariff to consumers and businesses in Greater Manchester
- The energy suppliers will set the details of the tariff that they bring to the local energy market
- Energy consumers can decide to choose a GM Local Energy tariff from one of these suppliers
- With these GM Local Energy tariffs there will be a guarantee that a minimum of 50% of the electricity provided will be generated from renewable sources situated within Greater Manchester
- 10% of Greater Manchester residents are purchasing their electricity through the GM Local Energy tariffs offered by these three suppliers
- The suppliers buy local energy for these tariffs from energy generators (e.g wind farms, solar panels, hydro plants) within Greater Manchester
- The suppliers will pay GMLEM an annual fee for their use of the LEM, and local energy generators will pay a small percentage of the income they receive from the energy they sell to the GMLEM
- The GMLEM will monitor that the guarantee of 50% local energy is being met by the energy suppliers
- The price of the GM Local Energy tariff will be similar to other tariffs available to consumers that don't use the GMLEM
- Only residents and businesses in Greater Manchester are allowed to choose the GM Local Energy tariff
- There will be a significant amount of private investment to fund the GMLEM

Citizens have little direct influence over the operation of the GMLEM. The GMLEM publishes an annual report which gives shareholders and other interested people information about the organisation's activities and financial performance. Citizens can access this to understand the GMLEM's operations, and then express any interests or concerns about the GMLEM via the democratic process with GMCA. Otherwise, the level of citizen involvement in the LEM is low.

The GMLEM is jointly owned by GMCA and a commercial partner organisation. The majority of investment to create the LEM came from the private shareholder, with a minority of public

funding from GMCA: half from local ratepayers and half from central government. The GMLEM is cost neutral for the GMCA.

The partner brings specialist skills (e.g. in building and operating energy markets & tech platforms) that GMCA doesn't have internally. The partner also brings financing to help develop and operate the LEM. It is not based in Greater Manchester.

GMCA has a Golden Share which allows it to have more control over decision making than the private partner. It also means that GMCA can make sure that any claims suppliers using the LEM make about their products are valid and that consumers are protected. The GMCA can ensure that energy traded on the LEM is as green and local as it claims to be.

However, in other respects, GMCA's ability to control market operations is moderated by the aims of the partner.

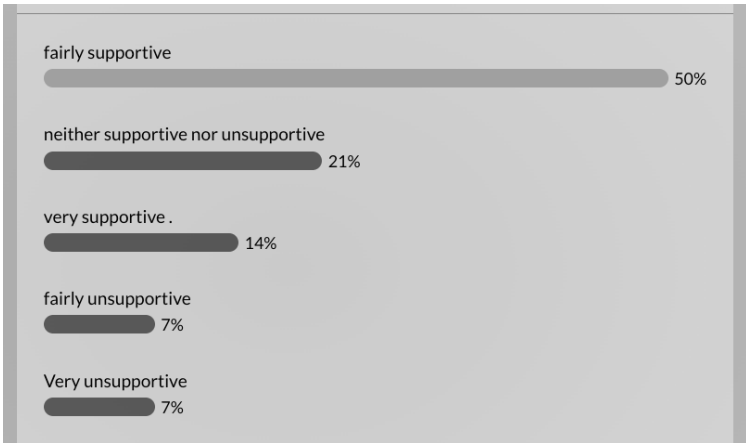
If the GMLEM were to fail or lose money, the costs would be split between the GMCA and the partner organisation. The costs for which the GMCA was responsible, would have to be paid by local taxpayers.

After deliberative discussion the jury listed the following reasons to be supportive and unsupportive of Scenario 1 and ranked in order of importance.

Reasons to be supportive		Reasons to be unsupportive
Better electricity generation in theory.		Consumers won't have any impact into the tariff charges for energy.
It's a familiar set up. It operates on basically the same model as Metrolink which while not perfect on the whole works well.		There might be a lack of market competition. We could end up with a situation like we have with water supply.
Can be replicated across the country, so you only need one design.		How can we guarantee 50% of electricity supply. It's unlikely to work.
It minimises commercial interest and control oft he energy system		Very little control. There's nothing to stop commercial companies continuing to profit and pay low feed-in tariffs.
Creates new income opportunities.		The commercial partner could be a limited company. What if it goes bust. Who pays?
It's highly regulated by the GMCA.		The taxpayer carries the burden of failure when there could be a government bailout instead.
It facilitates community involvement.		The ability of citizens to express concern with the GMLEM could be improved on.
Good for striving for self-sufficiency.		Democratic processes are unclear.
If it falls through the shareholder will also share the cost.		Varying LEM tariffs may negatively impact people with consumption restrictions and production limitations.

Supports people championing environmental ideals.		Discrepancies between districts: some districts get more sunlight than others. What if other people moved to that specific district for business reasons? Will it lead to 'GMLEM tourism'?
It could provide slightly cheaper electric in theory.		Uncertainty of the bailout: will there be a contingency fund?
It means more ways to control e.g. variable tariffs.		People who aren't part of the GMLEM might not get subsidised energy.
More direct capacity to influence energy consumption patterns, i.e. charging things at night.		Commercial partners aren't necessarily based in GM or at least aware of the area. It would be better if the commercial partners were.
Would promote civic pride in Greater Manchester.		Very little control. Nothing to stop suppliers to pay low feed-in tariffs.
Moving from flat rate charges to variability elec rates could assist with grid balancing.		Uncertain suppliers wouldn't undermine it.
Private organisations supporting social interest.		People don't adopt variable habits well.
It supports people championing ideals.		Unclear how profits will be invested.
Public annual report is good but any "democratic process" used by residents to respond must be purpose built.		Negative tariffs could lead to anti-social behaviour.
Opportunity to bring skills from outside GM.		Uncertain it will lead to meaningful change.
		Uncertain how we'd stop commercial partners avoiding participating and undermining the GMLEM.
		May negatively impact people with consumption limitations.
		No input into fees/from users/tariffs.
		Open to misuse, abuse and fraud.
		Octopus Energy is the closest model - unsure how successful.
		It needs ambitious but exacting thinking.
		Changes to battery technology could impact these models.

When asked how supportive they were of Scenario 1 the jury voted anonymously with the following outcome:



Scenario 2

The following scenario was presented to the jury:

The GMLEM is fully owned and operated by a commercial company. The GMCA provides no funding for the GMLEM and has no control over its activities.

The commercial company obtains a licence from Ofgem to operate the GMLEM. This ensures that it is subject to standard government energy regulation.

The commercial company is not based in Greater Manchester.

If the GMLEM were to fail or lose money, the costs would be paid by the commercial company and its shareholders.

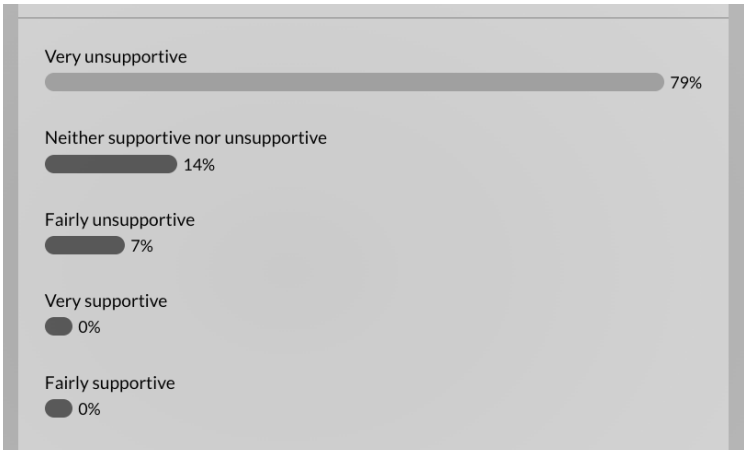
In all other respects the scenario is the same as scenario 1.

After a deliberative discussion the jury listed the following reasons to be supportive and unsupportive of Scenario 2 and ranked in order of importance.

Reasons to be supportive		Reasons to be unsupportive
Less risk to public funds in case of failure		There's nothing to mark this as different from the status quo or anything else.
Low risk, low return		Risk of price gouging, like we're seeing with gas supply.
Consumer / tax payer not forefit the bill		No empowerment of people at the ground level.
More incentive for commercial company to make it work if liable for costs		No risk, no reward.

		Possibly not as beneficial to locals in terms of social objectives.
		The partnership between the GMCA and the commercial partner would enable the public to restrict punitive profiteering which is necessary.
		Purely commercial ownership makes this model more susceptible to corruption without adequate regulatory control
		Lack of control over day to day running

When asked how supportive they were of Scenario 2 the jury voted anonymously with the following outcome:



Scenario 3

The following scenario was presented to the jury:

GMLEM is owned and controlled by the GMCA. GMCA licence a private commercial company to operate the LEM. Locally elected officials scrutinise the operation of the LEM.

The commercial company is not based in Greater Manchester.

If the GMLEM were to fail or lose money, the costs would have to be paid by local tax payers.

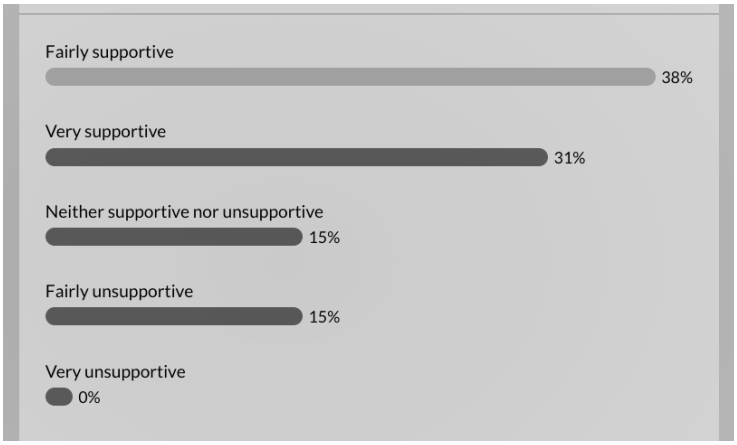
In all other respects the scenario is the same as scenario 1.

After a deliberative discussion the jury listed the following reasons to be supportive and unsupportive of Scenario 3 and ranked in order of importance.

Reasons to be supportive		Reasons to be unsupportive
It's an opportunity to elect dedicated, local specialists.		Vulnerable and low-income consumers will be hit hard if the LEM fails.
It's easier to replace the commercial operator than in both scenarios 1 and 2, particularly in cases of exploitation of the system.		It's unclear whether profit will come back into GM or whether it just goes to the private company.
Local ownership and control means optimum benefits for locals.		If the private commercial company isn't based in GM this means they're less connected to the needs of GM residents.
Greater public control.		The taxpayer will bear the entire burden of costs of failure.
Local officials give us a direct point of contact for problems.		Locally elected officials might become sway to party politics and electoral swings.
Licence for the private company to operate means constant possibility of renewing operator - this is the best possible operation and fresh ideas.		Regulation from elected officials could lead to politics/debate slowing down the process of regulation.
Regulatory officials must have the relevant expertise.		There is a lack of experience of oversight of an LEM.
Probability of local engagement is increased with financial liability		Locally elected officials means scrutiny is relevant to local issues. But it's unclear whether they'll be a whole new group or a selection of current officials.
Later phases of Local Markets could re-invest profits in GM		There might be too much risk and responsibility on the GMCA.
Regulation stands best chance with the Locally Elected Officials		It will be difficult to reach a consensus.
profit to go back to GMCA		There's a huge risk to local taxpayer money, as Robin Hood etc showed.
Elected officials for regulation is more democratic and local means they understand the needs of the area		It's unclear who will govern the locally elected officials.
GMCA has greater control over ensuring chosen commercial company remains alligned with social benefit		Robin Hood as a sample scenario was proven to fail.

Ownership		Does the GMCA have the skillset to run it?
Gives more control to local public?		It clearly states local taxpayers.
Publicly accountable, more democratic. Decision makers would all be local		Financial liability decreases possible engagement.
		Difficult to reach a consensus

When asked how supportive they were of Scenario 3 the jury voted anonymously with the following outcome:



Scenario 4

The following scenario was presented to the jury:

This scenario is the same as Scenario 1 but there is a high level of citizen involvement:

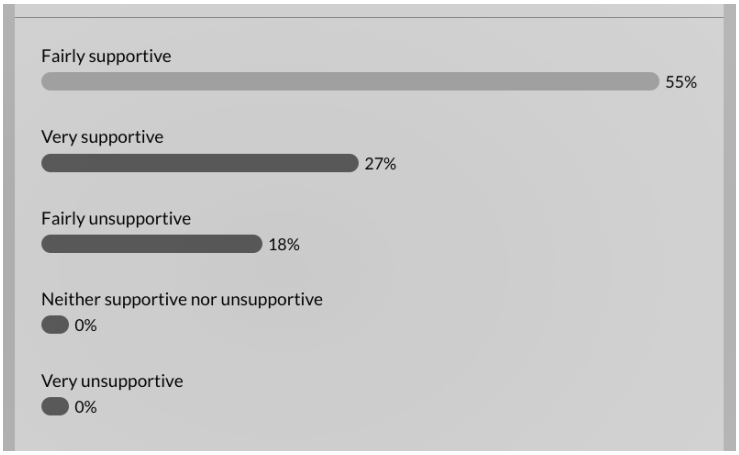
- In addition to the annual report there is an open citizen hearing where local people are invited to scrutinise the annual report and ask questions of GMLEM directors
- The GMLEM also has a consumer panel which meets twice a year with the GMLEM board where they have the opportunity to directly question the activities and finances of the LEM.

After a deliberative discussion the jury listed the following reasons to be supportive and unsupportive of Scenario 4 and ranked in order of importance.

Reasons to be supportive		Reasons to be unsupportive
It means we can hold the commercial partner to account more easily.		Still heavy private partner investment

This scenario has more control for the layman.		Annual reports are long, difficult confusing documents.
This is better than scenario 1 for transparency but then the questions remains of whether this is enough.		It's unclear whether there's actual power to change anything.
It's an opportunity to workshop objectives for the panel at the hearing.		The annual report must be in layman's terms to be completely accessible.
It's an opportunity for the hearing to consider the impact of policy which is outside of the LEM and whether it should be reviewed or parallel.		The open citizen hearing should sit under regulation.
Scenarios with commercial input reduce costs of failure for the taxpayer.		What does an invitation panel look like? Accessibility could be an issue. There's potentially barriers if it's held physically or online, which could reduce the panel's diversity and representativeness.
		The process for becoming part of the consumer panel is unclear. It can't be self-selecting.
		Jargony reports aren't always easily comprehensible.

When asked how supportive they were of Scenario 4 the jury voted anonymously with the following outcome:



Scenario 5

The following scenario was presented to the jury:

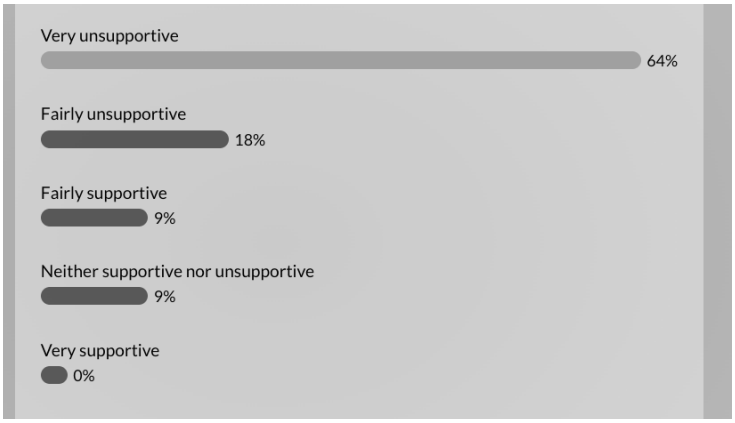
This scenario is the same as Scenario 2 but there is a high level of citizen involvement:

- In addition to the annual report there is an open citizen hearing where local people are invited to scrutinise the annual report and ask questions of GMLEM directors
- The GMLEM also has a consumer panel which meets twice a year with the GMLEM board where they have the opportunity to directly question the activities and finances of the LEM.

After a deliberative discussion the jury listed the following reasons to be supportive and unsupportive of Scenario 5 and ranked in order of importance.

Reasons to be supportive		Reasons to be unsupportive
It removes some of the problems in scenario 2 (i.e. accountability).		Annual reports, citizen hearings and consumer panels will just be paying lip service to us. There's no real accountability.
It will mean greater scrutiny of the commercial company (so we can watch them rip people off).		The commercial company will still have too much control and capacity to exploit consumers.
The taxpayer isn't responsible for the costs.		It's open and transparent, but we can't compel them to act.
The taxpayer isn't supporting it.		Commercial partner ownership is not what people want.
		It's unclear whether there will still be low payments.
		Money will leave Manchester.
		It's too remote to be involved with consumers.
		The commercial partner is still removed from needs and interests of GM citizens.
		Unclear how accountable the commercial company will really be.

When asked how supportive they were of Scenario 5 the jury voted anonymously with the following outcome:



Scenario 6

The following scenario was presented to the jury:

This scenario is the same as Scenario 3 but there is a high level of citizen involvement:

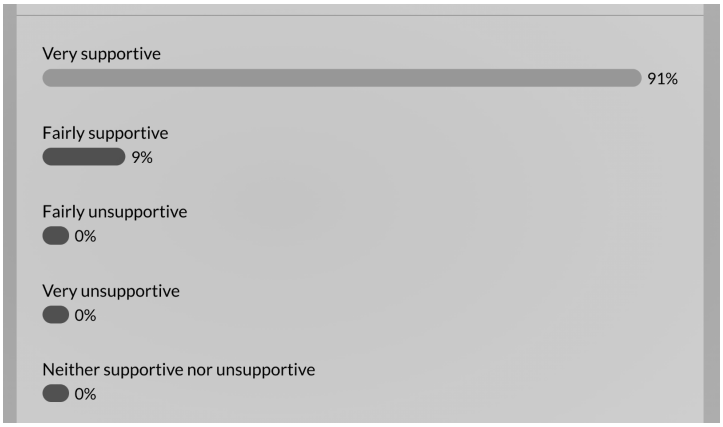
- In addition to the annual report there is an open citizen hearing where local people are invited to scrutinise the annual report and ask questions of GMLEM directors
- The GMLEM also has a consumer panel which meets twice a year with the GMLEM board where they have the opportunity to directly question the activities and finances of the LEM.

After a deliberative discussion the jury listed the following reasons to be supportive and unsupportive of Scenario 6 and ranked in order of importance.

Reasons to be supportive		Reasons to be unsupportive
It represents the views of the public, not of the industry.		Two regulators possibly overlap between Ofgem and officials could confuse and stifle the process.
Profits are likely to come back into GMCA.		There's a disadvantage to local taxpayers if it fails.
Consumer input is more likely to be listened to.		The taxpayer is responsible for the costs.
Local authorities are able to take a broader view of the issues than the private sector.		There's huge risk to taxpayers in case of failure.
Ploughed back profits. Profits put back into local people, projects and businesses.		Taxpayer burden risk (although largely offset by benefits).

The commercial company has only the operational responsibility.		
There will be confidence that the consumer panel would be listened to and have an actual impact.		
There will be more control over money.		
It will be more likely to hire local people.		
Consumers can communicate issues with the commercial company to someone other than the commercial company.		
Knowledge profitability.		
Sole ownership sharpens the mind of the owner.		
There's more power with two regulators. It's more distinct.		
It's best able to respond to consumer needs.		
Multiple points of contact for consumer issues.		
It's the best scenario.		

When asked how supportive they were of Scenario 6 the jury voted anonymously with the following outcome:



Appendix 1: Jury Questions

Jury Questions for Expert Witnesses

Session: Sean Owen, GMCA - Introduction to the jury. Why are we here?
Answered
How much resistance do you anticipate and from who?
Is there any more info on LEMs mentioned e.g. Warrington, Bristol and why they didn't make it?
Is Local Energy Market still on the national grid?
Is LEM just a council energy company like Robin Hood of Nottingham or is it more than just an energy provider?
You stated Ovo energy as one of ht eNetwork partners and Octopus energy was reference. Both these companies have gone bust so how can they still be partners?
What are the 10 districts and why are they important?
What scale is meant by 'local'?
Why is it going to take so long to implement?
Jury/decision: are we the only Jury, or is there other possible outreach?
Is this happening (policy change) in other authorities?
Will young people be involved in this change? E.g. my 10 year old daughter would be 30.
What other data will be considered alongside jury recommendations?
I'd like to know how the education sector have been approached and any outcome?
Is a local energy market actually feasible given grid systems in GB? If grid fails we all fail.
If Cornwall & Oxford already have LEMs, why are Manchester waiting until 2038?
How binding / ignorable will jury recommendations be on the final result?

Session - Steven Britton and Dan Starman, Cornwall Insight - How does the energy system work?
Answered
How can energy model be changed to encourage people to use less energy and to use energy when it is actually available? E.g. hosepipe ban on energy use.
Net zero versus absolute zero. Does offsetting with e.g. tree planting actually work?
How is 'biomass' zero carbon? It's burnt.
Which country is the closest to achieving the target?
What fraction of network costs are incurred by distribution or transmission systems?
Who will become our 'main point of contact' in the industry if we move away from suppliers and start generating more of our own energy under LEM?
Is it the case that an LEM would remove 40-60% of electricity costs (wholesale costs plus transmission network costs)?
If the LEM will stop the TRANSMISSION cost as the LEM will be using just the DISTRIBUTION system, who picks up the cost of that transmission from National Grid to MCR?
You said that 50% of our electricity comes from renewables. What was this 5 years ago? How far have we come? Can we get to 100% renewable generation?
Can you tell us any more about how industry regulations are devised and revised?
How can we as citizens leverage pressure on energy regulators while we're only consumers?
How old is the grid?
What other components are used other than uranium in the transportation of energy?
How were the FES models calculated and how accurate are they actually likely to be?
What fraction of grid losses are in the distribution system and in the transmission system?
A) What proportion /percentage of the heat pump stats are for all the Housing/council properties up and down the UK, that had heat pumps installed? B) How has the removal of heat pumps from council properties affected the heat pump install stats?

Session: Dr Mustafa A. Mustafa, University of Manchester - What is a LEM and how does it work?
Answered
What ensures LEM sale prices are higher than feed-in tariffs?

Can we hear more about existing ‘ebay’ models or similar? Are there any?
Will there be any forms of saturation?
How does peer to peer trading function? How much infrastructure setup is required?
Could a LEM sell energy commercially? E.g a charging point for electric cars?
Is the required physical generation and exchange infrastructure or the trading system set up the bigger obstacle? What is required to establish these systems?
What happens if LEM owner and LEM operator are not the same organisation? Does this increase costs?
What kind of commands might grid operators send to generators / consumers in a smart grid?
Why would the market owner and market operator ever be different?
Can suppliers help consumers become prosumers? E.g pay for solar panels on a roof and split any profit (60 / 40)
What level of involvement would pro/consumers have in the LEM? Would it be automated or would they be able / have to choose when to offer energy and flexibility? How involved / time consuming is this? Are there different levels of involvement?
How established / widespread are existing smart grids?
When answering our questions how many answers are based on existing regulation? How much is based solely on academic models?
Is economy 7 an example of ‘selling local flexibility’?
How readily can establishing a LEM work in lockstep with transitioning from gas to renewables? Will it restrict development of large scale renewable generation? Is that necessarily a bad thing if power storage remains inefficient?
If people are incentivized to buy batteries or PV etc through financial benefits, does this just transfer wealth from people without capital to enter the market to those who can enter the market?
What are the benefits / detriments of one tariff for all consumers vs. different tariffs for different consumers?
Can the prosumer know the immediate price of energy at any time?
What happens if local supply isn’t meeting local demand in terms of tariffs and supply energy source?
Cornwall LEM trial - what didn’t work?
Does the current grid system need overhaul to transition to a smart grid/ LEM?
What is the direct benefit for local domestic consumers? (The average household, without generation capability)
On a sunny day, with many houses with PVs, there could be more providers than consumers on the grid. How is the balance managed?

Is the LEM tariff guaranteed to be lower price if they are required to buy LEM electricity to fill their obligations? What if LEM electricity is more expensive at that time?
How much will the LEM Market Apparatus cost to run?
How much is flexibility?
How are meter readings automated / measured in a smart grid system? Who by? Supplier? Consumer? Smart meter?
What are the risks of suppliers still exploiting consumers under LEM system?
Could prosumers significantly impact the need for industrial generation? What share of energy market can it occupy?
What happens if prosumers don't adhere to flexibility commitments / requests?
How do you see it working commercially? How would tariffs be defined?
What is your personal opinion of LEMs?
Will consumers who generate their own energy be subject to 'new' complex ofgem regulations?
If both prosumers and suppliers can request IN or OUT power, how is this mediated?
How easy will those legal barriers be to overcome? Is there a lot of resistance to change, or is it just a case of it not having been done yet?
How does the consumer alter their supply?
How is meeting local flexibility agreements managed / monitored at the household and LEM level? How is it activated?
How much choice would homeowners have over the origin of the energy they get - 'local (GM) or ward - local?
If a LEM was introduced, would that be affecting everyone in GM or would it start as an op-in-type system? Who gets to choose?
Would it place extra work / responsibility / risk on energy consumers?
What benefits are there for people less motivated by carbon reduction?
Are there any innate restrictions to an LEMs capacity to meet local demand?

Session: Sarah Holland, GMCA - Why does the GMCA want a LEM?
Answered
We are now in year 4 of the project. Where will we be in 2, 4, 6 years time in terms of LEM?
How long do you think it will take to set up a LEM and what year?

How do you identify who is in need of retrofit for private building as an integratory feature?
What funding is available to support inclusivity? Enabling the lower income earners to turn into a LEM?
Is there a plan to fund individuals to get their homes solar panelled or other incentive etc?
How to get LEMs an retrofit to move forward in lockstep?

Session: Dr. George Voulgaris, University of Manchester - What is governance?
Answered
Are there any limits to the kind of private rights secured by golden shares or is it simply standard contract law? (i.e whatever both parties are willing to agree?)
In any business / firm, who controls the processes described in the presentation? The law? The constitution? The CEO?
How can private industry influence / power be balanced with public interest?
From your expertise how do you think the LEM should be governed?
If a LEM has never existed how much private sector expertise actually exists?

Session: Andy Fry, Centre for Governance and Scrutiny - What is transparency and scruitiny?
Answered
Is there a risk of placebo effect? Is there now too much info to scruinise?
The ability of the citizens to express concern with the LEM: Can this be improved?
By doing this will we be saving money through being transparent? From experience CSR often attracts right candidates but those values don’t carry over into hiring policies - so right candidates aren’t always hired. HR aren't always aware of CSR initiatives. What's the best way to address this?
How is scrutiny measured?
How is transparency measured? How do you ascertain that something is balanced / understood?

Jury Questions for Critical Friend

Critical Friend - Matt Fawcett, Carbon Co-op
Answered
In the oxford and Cornwall LEMs, who were the operators. Were either publicly owned?
Is there a way to get energy cheaper?
Over supply of generation could be stored. Does battery tech exist for this?
Have any studies been done on the amount of energy use in domestic settings that can be used flexibly?
How can we save more energy?
Is there an optimum size of LEM? Local village? England?
Can excess energy be funnelled to recipients of winter fuel allowance for example instead of paying people to use more energy?
Do we have to have heat pumps?
Why not have PVs on all homes - better than increasing national generation?
Anyone thought about reducing the demand?
How close are we to creating the new tech to facilitate carbon capture?
Will steps be taken to educate / support citizens with retrofit e.g insulation so that energy production methods like heat pumps are installed efficiently?
What has the war in Ukraine got to do with this?

Appendix 2: How can you take part in a LEM?

Session - How can you take part in the LEM?
Look out for local council schemes subsidising renewable energy
Be smarter when using appliances
Consider becoming flexible alongside neighbours
Become a local domestic producer
Buy from local energy suppliers
Promote it. Tell people about the benefits :-)
Putting household appliances etc. on timed switches
Learn about best tunes to consume power
Have a lie in to wake after peak morning demand
Set up community energy generation
Educate others!
Change your energy usage. Change your device charging habits - maybe sync them for use when energy is cheaper.
Use energy at times where not a lot of people using it
Invest in solar panels and become a prosumer

Appendix 3: Recruitment sites

- Northwards Housing Community Event - Crumpsall Park - Crumpsall
- Northwards Housing Community Event - Scottland 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)

Appendix 4: Jurors Story Audio Recording

GMLEM Citizen Jury | Jurors Experiences
Audio

Appendix 5: What is a Citizens' Jury?

Like much public policy, assessing major data sharing initiatives is complex with a lot of information and many arguments to consider. Surveys and focus groups provide useful information about what the public thinks, but they are not mechanisms to inform people. A citizens' jury can tell decision makers what members of the public think once they become more informed about a topic or problem.

In a citizens' jury, a broadly representative sample of people are selected to come together for a period of days, hear expert evidence, deliberate together, and reach conclusions about questions they have been set. The method was devised by Dr Ned Crosby in 1971.

Citizens' Juries are a form of "deliberative democracy", based on the idea that individuals from different backgrounds and with no special prior knowledge or expertise can come together to discuss and answer a public policy question. [1]

[1] Cited from Dr Malcolm Oswald, Director of Citizen Juries CIC, with permission