

Building community power

How the public sector can collaborate with community energy to achieve scale in Greater Manchester

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About this report

About Carbon Co-op

Carbon Co-op is a Greater Manchester-based community energy organisation that enables people and communities to work together to tackle climate change, with a particular focus on homes, housing and the built environment. Our approach includes pioneering and delivering new approaches and models to inspire action as well as working with stakeholders and clients to support the development of broader policy interventions and approaches.

About Regen

Regen is an independent, non-profit organisation working to transform the UK's energy system for a net zero future. They provide expert advice, market insights and research on decarbonising power, heat, and transport.

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Executive Summary

The Local Power Plan (2026) and launch of Great British Energy Local constitute a significant commitment to community and municipal energy. Together, these initiatives create a unique opportunity to grow these sectors and forge new collaborations between them.

This report, commissioned by the Greater Manchester Combined Authority (GMCA), explores how the region can meet its clean energy ambitions. It was produced by Carbon Co-op and Regen, with contributions from a wide range of industry stakeholders and policymakers.

The report identifies specific energy system opportunities for community energy, highlights key barriers to realising them and formulates enabling actions to unlock potential. Recommendations are informed by real-world case studies and new and emerging approaches.

The key recommendations for support and collaboration are:

- **Technical Support** - A new Greater Manchester Community Energy support and coordination network organisation.
- **Project Origination** - A matchmaking service to broker relationships between community energy, local authority officers and site owners/developers.
- **Funding Support** - A new Greater Manchester Community Energy Fund grant to support the development of the sector.
- A social enterprise offer to support community building solar photovoltaic (PV) installations.
- **Commercial Partnerships** - Greater use of public sector power purchase agreements (PPAs) to support local clean generation.
- **Public-Commons Partnerships** - developing collaborative relationships, developing new Community Energy infrastructure to quickly scale the sector.
- Plus a range of holistic policy, convening and financial interventions.

Community Energy

The community energy sector involves local control and ownership of clean energy assets and delivery of energy services, with an emphasis on local economic benefit. Proponents highlight holistic environmental, social and economic impacts as well as the key role the sector plays in securing consent and legitimacy for the energy transition.

Greater Manchester's community energy sector is small and fairly atypical, split between a small, voluntary generation focused sector operating rooftop solar and

hydro projects, and two professionalised organisations (Carbon Co-op and People Powered Retrofit) focussing on energy services and retrofit - areas currently outside the scope of the Local Power Plan and Great British Energy.

Taken on clean generation alone, the Greater Manchester sector is small in comparison to other regions (though similar to other northern, urban conurbations), but the organisations that exist are well governed with many indicating an ambition to grow in order to exploit new opportunities. Together, these organisations are well-placed to play a role in supporting the development of entrants into clean energy from the Voluntary, Community, and Social Enterprise (VCSE) sector and beyond.

The municipal and policy context

Although a support framework for community energy exists at a national and regional level, there is a gap in coordination across the sector within the Greater Manchester city region. On the ground local authority officers are well-placed to support the sector and facilitate new projects, but lack time, capacity, and resources. GMCA can play a key role in creating a consistent support framework and maximise the effort of officers through coordination and city-region wide tools, resources, and policies.

Meanwhile, the national policy landscape is evolving quickly to support the development of clean power in general, and municipal and community energy approaches in particular. The Local Power Plan, Great British Energy, local supply, shared ownership, grid connection reform, planning reform, energy planning reform and the evolution of power purchase agreements are all likely to support the development of the GM community sector.

Generation opportunities

Regen's assessment of local community energy generation opportunities highlighted key areas, most significantly rooftop solar with a focus on (but not limited to) buildings for public good and community owned and managed buildings.

The availability of connection capacity and public land means that ground-mounted solar and wind projects under 5MW are a generation opportunity. Though recent GMCA research suggests project economics, the cost of capital and a lack of offtakers willing to pay premiums for local generation may be a limiting factor for this segment - although we continue to explore small projects through exempt supply arrangements.

National policy priorities around onshore wind and the key role of community benefit in enabling these, means that wind opportunities above 5MW are an area

of interest. Likely legislative changes to mandate shared ownership, with a focus on projects over 5MW are another significant opportunity for community energy.

Key priorities

To inform recommendations, this report has drawn on a number of examples of good practice where the public sector has successfully supported the development of the community energy sector, most significantly in London and Bristol.

Based on this learning, establishing a Greater Manchester Community Energy support network organisation and flexible Greater Manchester Community Energy Fund grant is a key enabler to coordinate activity and actively grow the sector. A service to help community buildings install PVs has the potential to overcome issues around capacity to scale rooftop PV. A matchmaking service addresses the lack of visibility of community energy which limits the ability for private, public, and community stakeholders to establish partnerships, including shared ownership, and exploit project opportunities. Finally, the huge purchasing potential of the public sector can be harnessed through increasing use of power purchase agreements within the city region.

Making the case for Community Energy

As the Local Power Plan sets out, there is now a clear rationale for the development of community energy as part of the push towards Clean Power 2030, with the sector offering a number of unique advantages:

- **Local Trust and Access** – it is well recognised that trusted, co-operative and non-profit community energy groups help unlock rooftops and gain acceptance where national players cannot.
- **Social Licence, Faster Delivery** – Local ownership helps reduce objections, speeds consenting and ensures projects are valued well after ribbon-cutting.
- **Targeted Benefits / Fuel Poverty Focus** – Surpluses stay local: warmer homes, lower bills for the hardest-hit, and local jobs. Programmes can prioritise energy advice, energy efficiency and tariffs for vulnerable households.
- **Local Flexibility and grid support** – Community schemes can coordinate heat pumps, EVs, and batteries to provide flexibility and defer costly grid upgrades.

- **Local Fundraising and participation** – Groups can raise and access local capital. Residents become owners and operators, turning the energy transition into something done *with* people, not *to* them.
- **Co-operation over competition** – Community energy augments utility-scale build-out and public programmes, multiplying impact.

A Timeframe for action

With the release of the Local Power Plan, the time for action is now. Based on research and stakeholder engagement a long list of recommendations has been prioritised into a timeline to inform implementation. Taken together these recommendations form a holistic action plan, with involvement from across the public sector to establish and grow the community energy sector in Greater Manchester.

Timeline

Groundwork and quick wins: 0–12 months

Formalising collaboration

1. Convening a community energy taskforce/working group to coordinate action and develop a strategic plan for the city region.
2. GMCA policy commitments to support the development of the CE sector and shared ownership approaches.
3. Providing seed funding and support for the creation of a support and coordination network organisation for community energy in Greater Manchester.
4. Integrating community energy targets and priorities into the Regional Energy Strategic Plan (RESP).
5. 5. Developing immediate public-commons partnership opportunities

Building an evidence base and tools for the sector

6. Commissioning a building's solar PV potential mapping exercise and making the data publicly available to CE groups.
7. Exploring the feasibility for sleeved pool PPAs to be deployed in Greater Manchester.
8. Resourcing the creation of standardised legal templates for use by community energy organisations (e.g. for PPAs, maintenance agreements, Leases etc and standard clauses to meet additional Department for Education (DfE) and Department of Health and Social Care (DHSC) requirements).

Building on the foundations and policy-dependent action around planning/shared ownership: 12–24 months

Further developing the support infrastructure

9. Commissioning an options analysis into the establishment of a city regional GM Community Energy Fund grant to support feasibility/core/start-up stage funding for the CE sector.
10. Supporting the development of a centralised, replicable support social enterprise offer around a range of community energy models.
11. Developing a matchmaking service and local authority officer support to broker relationships between community energy and site owners/developers. *The success of this recommendation may also be influenced by the solar PV potential mapping exercise.*

Unblocking planning barriers

12. Encouraging harmonised Greater Manchester-wide planning guidance to help facilitate community energy schemes & encouraging Local Authority planning policies to incorporate suggestions for developers to explore shared ownership opportunities with the community energy sector.

Longer-term goals and priorities: 24 months+

13. GMCA entering into long term, public sector PPAs with community energy groups
14. Further exploring innovation opportunities from public-commons partnerships to maximise the scale and benefits of community energy projects.

Next Steps and Immediate Opportunities

The interim findings of this research have informed the development of public-commons partnership opportunities between community energy and GMCA.

Schools Solar Joint Venture

GMCA is developing a new delivery model for school energy decarbonisation with community energy involvement. A new ESCO Special Purpose Vehicle (SPV) that will offer financed decarbonisation interventions into schools including solar, heat and energy efficiency the partnership will create a vehicle for the delivery of community funding.

Manchester Community Capital

Advocating and engaging is a key strength of community energy and leveraging this to raise funds locally that are otherwise difficult to access is a big opportunity. GMCR has been particularly successful at raising local finance. In 2026, the North

West Net Zero Hub, GMCA, Carbon Co-op and GMCR will work together to develop this capability in the form of place-based fundraising and delivery models.

1. Introduction

The UK government has recognised the importance of the community energy sector in supporting the transition to clean power. As part of this commitment, Great British Energy's Local Power Plan (LPP) will provide £1 billion of funding to support local projects that cut bills and grow community wealth.

In comparison to privately or publicly-owned energy infrastructure and services, community energy is known to bring benefits which extend beyond simply supporting the decarbonisation of the energy system. Community energy offers opportunities for communities to be directly involved in shaping future clean energy systems, building public support and acceptance for the scale and speed of change needed to meet climate targets. By prioritising social benefit community energy organisations ensure the costs and benefits of the transition are shared fairly, and help to keep wealth within communities, create jobs and provide savings through energy efficiency initiatives and cooperative purchasing schemes.¹

We also know that community energy can have a key role in bringing benefits to fuel poor households and lower income communities.² Plymouth Energy Community has supported over 11,000 households experiencing energy or fuel poverty, and Glasgow Community Energy established solar projects in two areas of high deprivation and purposely involved local VCSE and fuel poverty community organisations in its design and governance.³ At a time when fuel poverty is still rising and delivering savings on bills is a high priority within the government's agenda, approaches which can deliver for these communities and households are more important than ever.

As such, the government's ambition to boost the sector represents a major opportunity, and there is significant appetite within the community energy sector to expand to meet this challenge. Greater Manchester (GM) has the opportunity to build on its climate commitments by supporting community energy in the region - drawing on untapped streams of investment and building community wealth.

In this context, Carbon Co-op, working with energy transition specialists Regen, have been commissioned by Greater Manchester Combined Authority (GMCA) to explore opportunities for Greater Manchester's public sector to support the development of the community energy sector.

Given the range of activity delivered by community energy (as outlined in *Defining community energy* below), this research focuses on community energy within the

¹ Huggins, S. (2025). Community Energy in Action: Demonstrating the value of community-led solutions to net zero. Energy Learning Network. [Link](#).

² Samson, H. (2018). Bringing local energy benefits to deprived communities. Barrow Cadbury Trust. [Link](#).

³ Stewart, F. (2024). Community energy for a just transition: breaking the stereotype. Regen. [Link](#).

context of renewable energy generation - though many organisations take a more holistic view of energy services.

1.1 Methodology

This report is a summary of the findings from primary and secondary research conducted by Carbon Co-op and Regen during 2025. Appendix 2 and 3 contain Regen's findings from a spatial data analysis of community energy generation potential across GM and Regen's assessment of the emerging policy and regulatory reforms which may impact the sector.

Alongside the methodologies detailed within these appendices, the findings within this report were developed through:

- Extensive desk-based research.
- Eight interviews with representatives from across GM's community energy sector.
- Five interviews with GM local authority and combined authority officers.
- A short survey and a focus group of local authority officers based on initial findings from interviews.
- Eight interviews with sectoral experts involved in supporting or developing community energy organisations at a regional/national level in the UK.
- High level business case development for each recommended intervention, including further desk-based and qualitative research.

Find the interview schedule in Appendix 1.

1.2 Defining community energy

1.2.1 Definitions

There is no, single, legally agreed definition of community energy. However, the Department for Energy Security and Net Zero (DESNZ) has made a commitment within the Local Power Plan to define community energy organisations as part of a legal and regulatory review. This definition is taken from the Commons Library Research Briefing on Community Energy from 2021, and in common with most definitions it highlights community ownership and control:

“Community energy refers to energy projects that are wholly or partially owned and controlled by local communities. The projects can span generation – usually renewable or low carbon – or demand reduction such as energy efficiency.”⁴

⁴ Hinson, S. Sutherland, N. (2021) “Community Energy”. House of Commons Library. [Link](#).

1.2.2 Ensuring community control and ownership

The guidance for the Great British Energy Community Fund (GBE CF - formerly the Community Energy Fund) limits applications to organisations legally constituted as voluntary, community and/or social enterprise organisations and provides a list of eligible corporate forms. The guidance requires projects to be at least 50% community owned and sets out how communities might influence decisions about the management of generation assets and/or the distribution of benefits from that asset. Ownership models are required to ensure that a “reasonable share of ‘community benefit’ flows to the local community”.

DESNZ has indicated that it is currently working with Great British Energy (GBE) to revise and formalise the Government’s definition of community energy.⁵ With the growth of the sector, the impact of the LPP and proposed changes to planning and shared ownership, the definition of what does and does not constitute a community energy organisation and project is becoming increasingly important. This definition may prove contentious - some legal definitions (such as EU:2019/944 & EU:2018/2001 on ‘renewable/citizen energy community’) have led to accusations of corporate capture, rather than supporting community interest.⁶

1.2.3 Other energy services and demand reduction

The delivery of energy efficiency, ‘community heat’ and local energy system services are commonly included in working definitions of community energy and projects within these areas are all eligible for funding within GBE CF. Whilst not completely excluding these organisations from the research, this report has not focused on energy efficiency or community heat (including heat networks) because they do not currently fall within GBE or the LPP’s remit.

Despite this, it is also worth noting that community energy of different forms can tackle energy system transformation holistically. For example, solar PV and other energy innovation projects can be aligned with community led retrofit projects to deliver all round decarbonisation and energy efficiency (e.g., collaboration between MORE Renewables and Lancaster Cohousing).

1.2.4 Community energy definitions

The latest national *Community Energy State of the Sector UK* report (2024) showed 538 active groups with 85,000 members, (operating 398MWp of renewable capacity and providing 617GWh of energy).

⁵ UK Parliament. (2025). Community Energy Question for Department for Energy Security and Net Zero, tabled on 11 June 2025. [Link](#).

⁶ Cots, F. (2025). Corporate Capture of Energy Communities: A threat for a citizens energy transition in Europe. Friends of the Earth Europe. [Link](#).

Standard definitions of community energy may exclude a variety of community sector activity such as:

- UK wide organisations that raise funds nationally and don't technically meet requirements around local control.
- Voluntary, community and social enterprise (VCSE) sector that engage in various types of energy activities - such as raising awareness with beneficiaries about energy saving in the context of the cost of living crisis.
- A church hall installing solar as part of a planned maintenance approach - without involving the community in democratically controlling those assets or distributing the benefit that comes from them.

The size of the community energy sector in Greater Manchester is relatively small, but there is undoubtedly a large pool of VCSE organisations already engaged in energy-related activities. Moreover, there is a far larger number of organisations that could engage in energy-related activities if given the right opportunity and support. Beyond delivering small-scale carbon savings, these groups are vital for winning 'hearts and minds' locally, building the community support needed for larger public, private, and community energy transition projects.

2. The regional and municipal context

To identify how GMCA could best support the community energy sector, this section analyses the regional and municipal context. It reviews the potential for better coordination and examines how existing structures and institutions can foster further development.

2.1 UK community energy coordination and support

At the national level, the Local Power Plan (LPP) sets out how Great British Energy (GBE) Local will offer support to the development of the sector. Community Energy England is the community energy federal body and The Energy Learning Network is a National Lottery Climate Action Fund-backed central source for guidance, resources, and support.

At the regional level the North West Net Zero Hub is the accountable body for the GBE Community Fund (CF) and carries out capacity-building support for funded groups. While the GBE CF supports project development from feasibility to commercialisation, two funding gaps remain. There is a lack of smaller-scale targeted funding - such as micro-grants - for VCSE organisations and new entrants, as well as a lack of core funding to sustain established organisations. Capacity-building provided in connection with the GBE CF also does not currently extend to non-GBE CF funded groups. It is expected that the Regional Energy Strategic Plan (RESP) may also offer opportunities for the community energy sector to be better represented (see “Emerging policy and regulatory reforms”).

At city region level, there is a Greater Manchester (GM) environment officers forum for local authority officers involved in climate-focused project delivery. This was cited as a useful forum for coordination and to share knowledge and practice. Though there is no formal community energy sectoral organisation in GM, there is a regular community energy networking event, *Fuelling Greater Manchester*, convened by Carbon Co-op and Greater Manchester Community Renewables (GMCR). The network organised events from 2009 to 2018 and reconvened in 2024 partly in response to GBE and the LPP.

2.2 The role of GMCA - how it can act

Strategic authorities like GMCA play a key role in enabling the devolution of powers from Westminster to local government, with an ability to perform functions across a number of areas directly relevant to CE.⁷ These include coordinating local energy planning to support the development of regional energy network infrastructure and a strategic role on net zero in collaboration with national government.

⁷ UK100. (2025). English Devolution and Community Empowerment Bill Policy Brief. [Link](#).

The combined authority (CA) is already acting as a trailblazer among England's strategic authorities. As the devolution agenda progresses further there will be further opportunities to make full use of its powers to shape the energy transition in ways which deliver the most to GM's businesses and communities. Other strategic authorities (such as the Greater London Authority and West Midlands Combined Authority) are also enabling comprehensive action to support the community energy sector, which may provide inspiration for GMCA's future work in this space.

2.3 Potential GMCA support actions

Holistic approaches will be required to support the community energy sector and GMCA can act in a number of different ways to influence its development:

- **Direct delivery** - initiating projects, services, employing officer time.
- **Collaboration with the sector** - joint initiatives, delivering projects, joint ventures, establishing mayoral development corporations etc.
- **Policy** - developing combined authority policy, influencing national policy, influencing borough policy, using devolved powers, setting targets, initiating working groups, taskforces etc.
- **Convening** - in relation to local authorities and other public sector institutions in the city region
- **Financial** - offering grant funding, investing, issuing loans, purchasing power and services directly.
- **Voice** - advocating, promoting, marketing and communications
- **Political influence** - campaigning, speaking out (in particular via the mayor)

2.3.1 GM Opportunities for resource CE support

The *Places for Everyone Joint Development Plan*⁸ (adopted March 2024 by all GM local authorities except Stockport) outlines specific actions to support community energy. The plan sets out the requirements for new developments to be net zero carbon with regard to regulated operational carbon emissions (and all emissions 'in construction' from 2028). The report further states that from 2025 any residual carbon emissions that cannot be fully mitigated on-site should be 'offset', through a financial contribution to a carbon offset fund.

Carbon offset payments are likely to be distributed via the Greater Manchester Environment Fund and used to support 'local carbon reduction projects and programmes'. Similar funds in London have been used to support Community Energy London.

2.3.2 Relevant GMCA policies and initiatives

- [Greater Manchester Land Commission](#) (2024–present)
- [Greater Manchester Five-Year Environment Plan](#) (2025–2030)

⁸ Greater Manchester Combined Authority. Places for Everyone. [Link](#).

- [Places for Everyone](#) (2024)
- [GMCA PPA tender for TfGM as a 'pathfinder'](#) for other PPA agreements (2025)

2.4 Local authority support in Greater Manchester

Desk-based research was carried out to understand the role of local authorities in supporting community energy groups followed by interviews with three local authority officers and one GMCA officer. A focus group was carried out with members of the GM Environment Officers' Forum which included a confidence rating exercise.

2.4.1 Local authority capacity and capability to support community energy

Within the UK government's response to the *Barriers to community energy projects* consultation, a key barrier identified for the sector is the way in which local government is supported to engage with community energy.⁹ Within GM there is a varied approach to supporting community energy groups, some local authorities provide very involved support,¹⁰ but in other areas support is minimal or absent.

In response to a series of confidence rating exercises, local authority officers generally felt more confident in their skills, knowledge, and expertise to support community energy groups (although several participants still reported low levels of confidence). However, the majority felt they did not have the capacity within their authority to support community energy projects and felt they were not well-placed to support community energy groups in their area.

Some factors informing officers' perceptions of their ability to support community energy were:

- A lack of firm support and motivation at the senior level around Community Energy, including policy commitments and targets to support community energy.¹¹ This dictated officers' ability to prioritise supporting community energy organisations within an expansive workload.
- Lack of staff capacity, resources, and knowledge of community energy. This includes staff turnover resulting in the loss of institutional knowledge, limited understanding of community energy outside climate teams, and community energy groups having to find another contact to support them in

⁹ Department for Energy Security and Net Zero. (2025). *Barriers to community energy projects: government response*. [Link](#).

¹⁰ E.g, Oldham, Salford, Trafford, Stockport, and Rochdale.

¹¹ Of GM's 10 LAs, 1 has a commitment to CE and associated KPI (Bolton), 4 have commitments to CE with no targets or KPIs (Oldham, Rochdale, Trafford, and Stockport), 4 have commitments to renewables but no mention of CE (Manchester, Wigan, Bury, and Tameside), and Salford has aligned its strategy with the GM 5 Year Environment Plan, which commits to CE but has no associated targets or KPIs.

navigating council processes (which can be challenging).

- Difficulty identifying suitable sites and a lack of awareness of suitable sites for community energy, including on council assets.
- Lack of professional and technical support from within councils, and a lack of knowledge within councils as to where to access this.
- Lack of standardised template agreements which can support community energy generation on public-sector assets.

Officers did, however, feel they were well-supported by others in the public sector or sectoral 'expert' organisations. Several mentioned the value of GM's Energy Team, and the North West Net Zero Hub as key points of contact for more expert information to support the development of community energy projects.

2.4.2 Local authority support for community energy groups

A small group of GM local authorities have performed a key role in supporting community energy groups through:

- Climate officers taking on a critical role as key contacts within the councils. These officers help community energy groups to bridge teams and navigate internal council processes to help projects progress e.g. working with planning and legal teams. This has been particularly important in making council assets available to community energy groups for example, in schools.
- Support to finance community energy projects. This has included endorsing funding bids and supporting community energy groups to reach funders, direct investment into community shares offers, and there is interest in directing grant funding towards community energy projects.
- Facilitating connections between local stakeholders. Councils are well networked and can connect community energy organisations to the right people locally to progress projects. Oldham Council are currently playing this role in supporting the development of a prospective community energy wind project.
- Institutional memory and an internal commitment to community energy. This has made it easier for councils and community energy groups to collaborate on an ongoing basis e.g. Salford Council and GMCR have a memorandum of understanding supporting their collaborations installing renewables on council assets.

Holding skills to support "rolling" or replicable community energy programmes e.g. solar on schools, within the council was seen as more useful than developing the skills and knowledge needed for large one-off projects. It was felt by officers involved in this research that the knowledge and support required for larger scale projects or opportunities is best accessed from within the GMCA or with an alternative external support organisation.

2.5 Conclusion

The GMCA is well positioned as a strategic authority to coordinate support and action vertically between national government initiatives such as the Local Power Plan and local authorities, and horizontally by convening local stakeholders to support collaboration within the region.

Within this context, the GMCA should play a key role in supporting capacity building around CE across the region. Local authority officers are well-placed to support existing and new CE organisations and to facilitate the development of schemes. However, key issues around capacity, the types of skills and knowledge held within local authorities, and a lack of wider policy framework facilitating community energy development limit the effectiveness of this.

The GMCA has a number of 'levers' that can be pulled to support community energy development in the city region whilst also reinforcing and supporting local authority action. A coordinated, holistic and diverse set of enabling interventions will therefore be required from the GMCA (and other stakeholders) to successfully realise the community energy opportunity.

3. Emerging policy and regulatory reforms

To identify how the GMCA can best support community energy, Carbon Co-op and Regen analysed the current policy and regulatory landscape. This analysis highlights emerging reforms that will shape the region's approach; further details can be found in *Appendix 3: Emerging policy and regulatory reforms*, authored by Regen.

3.1 Local Power Plan

Great British Energy (GBE) and the associated Local Power Plan (LPP) (released February 2026) are the government's main policy mechanisms to increase the contribution of community-owned energy projects to Clean Power 2030 targets. The ambitious LPP sets out how GBE will channel funding towards the community energy sector to support the development of new projects and the development of the sector more broadly. A key commitment set out in the plan is the role of GBE in facilitating collaboration between the municipal and community sectors - affirming the underlying purpose and vision of this report. In addition to this support, the LPP sets out plans for legal, market and regulatory innovation to support the further development of the municipal and community energy sectors.

3.2 Local supply

The Government and Ofgem are exploring options to enable the 'local supply'¹² of clean electricity. Effectively implemented, these models will allow community energy groups to supply electricity directly to local consumers and members. This will help the sector develop robust business cases - a critical challenge for local generation projects in the post-Feed-in-Tariff era.

Local supply is already technically possible,¹³ but as set out in the LPP the government is seeking ways to enable local supply directly to households. There are two main challenges to doing this:

- It is too costly and complex for most community energy groups to become licensed suppliers. Where this is not possible, generators who are not licensed must partner with a licensed supplier adding costs, administration and reducing local control.

¹² When local or community-owned renewables sell electricity to local households and other consumers directly, either as a supplier or via a licensed supplier e.g. Energy Local Clubs. P18, Regen. (2024). Power of Places: A vision for local energy in the UK. [Link](#).

¹³ Via Power Purchase Agreements with public sector/commercial properties.

- Legislation and codes which govern licence exemptions are opaque and complex, making it challenging for community energy organisations to navigate.¹⁴

Exemption opportunities are being explored through code modifications and GBE will support the development of PPAs with public sector organisations.

3.3 Shared ownership

The Government believes shared ownership¹⁵ will be required to meet its targets, as most of the generation capacity needed to deliver Clean Power 2030 is already in the connections queue.

The UK government is continuing to explore mandating shared ownership arrangements with GBE playing a key role in facilitating this, potentially:

- Providing low to no-cost finance to community organisations and underwriting agreements between communities and developers.
- Playing a ‘stewardship’ role, where they take ownership of all new developments and work with communities to build capacity and finance for them to then take ownership.

The community energy sector is pushing for mandatory shared ownership, which the government has recently consulted on.¹⁶ This may be possible through a review of progress on shared ownership via the community electricity right in the Infrastructure Act (2015). It is understood that if shared ownership is mandated, it is most likely to be on a shared revenue basis.¹⁷

DESNZ have tendered for ‘*Great British Energy - Community Energy Shared Ownership document template creation*’¹⁸, which is:

“template project documentation for each community energy shared ownership model, with accompanying guidance that will together “de-mystify” legal complexity faced by community organisations, developers, and other stakeholders in the sector”.

¹⁴ P7. Appendix 3: Emerging policy and regulatory reforms.

¹⁵ A model of ownership which involves commercial developers and community organisations entering a financial partnership over the lifetime of a renewable energy project.

¹⁶ Department for Energy Security and Net Zero. (2025). Notice: Community benefits and shared ownership for low carbon energy infrastructure. [Link](#).

¹⁷ Local Energy Scotland. What is shared ownership? [Link](#).

¹⁸ Department for Energy Security and Net Zero. (2025). Community Energy Shared Ownership document template creation tender. [Link](#).

3.4 Grid connections

Grid connections are a critical challenge for CE groups, and extensive connections reform is already underway. Most of this is targeted at streamlining the connections queue so those which are ready and needed for CP2030 are prioritised, while more speculative projects are moved down the list or removed entirely.

The introduction of a modification to the *Connection and Use of System Code* (CUSC) by the National Energy System Operator (NESO) to help community energy projects connect to the grid more quickly has raised the threshold for transmission impact assessment from 1MW to 5MW. This allows community energy projects to join the distribution network queue without the need for a lengthy transmission review, speeding up the connection process.

There is also potential for community energy to be prioritised for grid connection ahead of other, similarly-sized projects. NESO has advised the Government to create a process that fast-tracks clean power projects demonstrating unique social, economic or environmental value. While not yet confirmed, this mechanism would likely apply to post-2030 projects and require a legally robust definition of community energy.

3.5 Planning reform

Planning reform has been happening at pace over the past year, with several elements of particular relevance to local authorities. These reforms include:

- Changes to the *National Planning Policy Framework*;
- Introduction of the Infrastructure Planning (Onshore Wind and Solar Generation) Order 2025;
- The *Onshore Wind Strategy*;
- Publication of DESNZ's working paper, *Community benefits and shared ownership for low carbon energy infrastructure*.
- The Planning and Infrastructure Bill;
- Commitment to recruit 300 additional planners across the country to support the planning system.

This is significant for community energy groups, as planning often acts as a barrier in terms of both time and cost. The reforms seek to create supportive foundations within planning policy for community energy projects, and also create a framework for local planning authorities to meaningfully integrate the benefits of community ownership into their requirements for new energy infrastructure.

3.6 Energy planning reform

Energy planning reform has also been ongoing, with the introduction of Regional Energy Strategic Plans (RESP) by NESO. Within RESPs, there is an opportunity to identify opportunities for community energy projects both within technical plans and via its governance structure. Some RESP areas already have representation from community energy organisations as part of their engagement and governance process. Scotland and the Midlands are in discussion about how community energy can feature in RESP governance and in their strategic planning functions, e.g. how to capture the ambitions of community energy projects and reflect these in regional plans.

3.7 Commercial Support Mechanisms including Power purchase agreements

Power purchase agreements (PPAs), play a central role within the public sector by driving the renewable energy transition and underwriting investment. The GMCA is investigating traditional PPAs while also exploring whether the creation of local Smart Export Guarantee (SEG) or local Contracts for Difference (CfDs) offer viable alternatives for procuring power locally.

New frameworks and guidance are available to support local authority adoption.¹⁹ In contrast to short term utility supply contracts (lasting 1-3 years), PPAs are a way to secure more predictable energy supply and costs over the longer-term (averaging 15 years). On the supply side, this price security supports the development of new renewable generation ('new-to-earth' assets) providing additional renewable generation capacity.

There has been some recent controversy due to the Treasury treating PPAs as a form of public debt - pausing the rollout of solar on schools in the summer of 2025.²⁰ Through discussion, it is understood that DESNZ are confident this challenge can be resolved.

Types of PPA:

Direct PPA (AKA physical or private-wire PPA): Direct purchase of energy generated on-site. This is the simplest and cheapest form of PPA (both to establish and operate) as it involves only two parties (generator and consumer) in direct sale of energy 'behind the meter' (avoiding transmission and distribution costs).

¹⁹ Crown Commercial Service. (2020). Introduction to Power Purchase Agreements. [Link](#); Bristol City Council. (2023). Synthetic PPA toolkit for Local Authorities. [Link](#).

²⁰ Community Energy England. (2025). "Treasury blocks school solar but summer installs may go ahead. CC working on a long-term solution. [Link](#).

Sleeved PPA: A mechanism to avoid the need for co-location by using the grid, with the energy ‘sleeved’ via a third party supplier. This route is being heavily promoted by Crown Commercial Services (CCS) via the RM6289 framework launched in April 2025.

Virtual PPA (AKA synthetic PPA): A purely financial contract where no power is physically delivered; the generator and consumer settle differences against the market price. An example of this contract is the 15 year vPPA between Manchester City Council and AGR Power going live this year, supporting a significant new solar farm in Lincolnshire.

'Sleeved pool' PPA: A route developed by Bristol City Council, to use a PPA to specifically support the development of the city's own local and community generation. Formally adopted in 2024, but currently delayed following advice that setting a geographic preference may contravene procurement rules. This is an emergent model which could be applied in GM.

The greatest benefit to community energy groups in Greater Manchester would come from PPAs that support direct purchase of local community energy projects, ideally arranged through a local authority or other local institution. Direct and ‘sleeved pool’ PPAs are the most obvious routes, though standard sleeved and virtual PPAs could also be utilised.

3.8 Conclusion

The 2024 change in Government and the publication of the *Local Power Plan* have sparked a broad range of new policy proposals. Together these initiatives seek to promote and support community energy as a key mechanism for achieving the Government’s Clean Power 2030 objectives. While the GMCA’s interventions should not rely on every proposal coming to pass, they must account for the most likely reforms to maximise the potential advantage and benefits for Greater Manchester’s community energy sector.

4. Public sector and community energy collaboration exemplars

The public sector can have a range of roles supporting and collaborating with community energy, many of which are detailed below.²¹ Where these interventions have been most successful, they are brought together to deliver a system of support rather than as singular actions delivered in isolation.

Access to public sites for community energy generation

Providing access is valuable because the use of public buildings rarely changes over time, and it is a direct way for projects to benefit the local community due to cheaper energy bills.

Bristol City Council facilitated a local solar community project by leasing city council land to a community group to host the solar farm, and providing a bridging loan to the project which has subsequently been successfully paid back. Local community benefit through a share of the profits from the energy generated, and annual output is around 4300MWh, enough to power 1,000 homes.²²

Support financing community energy projects

This includes acting as a conduit for national support programmes, providing seed funding, buying community power or heat directly,²³ co-investing in jointly owned local projects, or becoming a direct member of a community energy organisation.

London's Community Energy Fund was established in 2017 and is managed by Community Energy London. Its aim is to increase the number of community energy projects and the positive impact they bring to Londoners, and by 2022 the fund led to the installation of over 2.3MW of Solar PV. Local authority community energy funds also exist in London, with Islington Council using their Carbon Offset Fund for this purpose.²⁴ Islington's original focus was to fund projects benefitting Islington residents, particularly the fuel poor. Local community energy funds enable local and regional governments to set more refined criteria than the GBE CF, facilitating a focus on local priorities and outcomes that can be delivered by community energy projects generating direct benefit to the local area.

²¹ These categories have been adapted from the [Rescoop.eu and Energy Cities 2022 "Community Energy Municipal Guide"](#), which focuses on municipal collaboration with energy communities in the European context.

²² Local Government Association. (2024). LGA sustainability briefing: community energy. [Link](#).

²³ For example through power purchase agreements to purchase locally produced community energy. Power to Change. (2023). The role of community energy in a just transition to net zero. [Link](#).

²⁴ Ainslie, E. Ahmed, S. (2023). GUIDE: Setting up a Local Authority Community Energy Fund. Islington Council, Community Energy London. [Link](#).

In 2022, Oxford City Council provided funding of £4.1m to Ray Valley Solar as a long-term loan. Ray Valley Solar is the largest community-owned ground-mounted solar park in the UK, generating 19.5GWh of electricity every year, keeping £2.6m of energy spent in the local economy.²⁵

Direct power purchase agreements are commonly used by LAs and CE groups to support directly buying community power or heat. Synthetic power purchasing agreements are an innovative model explored by Devon County Council and Devon Community Energy - a 20-year contract acting similarly to Contracts for Difference guaranteeing CE would receive an agreed strike price for the renewable energy it generates.²⁶ Bristol City Council has also explored the potential for 'sleeving pools' to bring demand and supply together.²⁷

Supporting community engagement and outreach

This includes awareness-raising campaigns, media and press support, and using local government channels to share information about the community energy sector - including community share offers.

Križevci (Croatia) supported the Green Energy Cooperative (ZEZ) in crowdfunding a micro loan campaign for two solar power plants. The total investment of €50,000 was secured in 10 days for the first power plant, and 2 days for the second. The success of this campaign was largely guaranteed by extensive national and local coverage by the media, in which the mayor and city were very present. ZEZ worked with the municipality, who held two public information sessions for residents and actively communicated the project in the local media, making sure citizens were on board.²⁸

Supporting emerging projects beyond finance

This includes providing grants, training, facilitating dialogues between local stakeholders, facilitating networking or even sharing staff and resources.

Plymouth Energy Community (PEC) was initiated by Plymouth City Council, originating within the council's Low Carbon Team. The council provided seed funding to support its establishment as a community benefit society in 2014, and through a strong relationship with the local authority PEC has accessed sites, funding and business support. Since 2014, PEC has developed and

²⁵ Low Carbon Hub. Ray Valley Solar. [Link](#).

²⁶ CAG Consultants. (2021). Devon Community Energy: Socio Economic Impact Assessment. Final Report. [Link](#).

²⁷ P17, Regen. (2021). Local authority models for developing community energy. [Link](#).

²⁸ P53, REScoop.eu. Energy Cities. (2022). Community Energy Municipal Guide. [Link](#).

generated 45,000MWh of clean power from a community-owned solar farm and 32 rooftop arrays, among a range of other services.²⁹

Developing support platforms, tools and programmes, collaborating with one-stop shops

This includes mapping community energy potential in the region, collaborating with or establishing dedicated “one-stop shops” to gather all the information and support needed to start or progress community energy projects. One-stop shops can be provided as an online platform, a dedicated role within local government, or as an external network or body supported by local government.

In 2022 Community Energy London (CEL) worked with the Greater London Authority (GLA) to access their datasets and mapping tools in relation to building energy consumption and rooftop solar power potential. CEL then used this data to develop the “Potential Map”³⁰, which visualised 11,508 solar opportunities. This enables community energy groups to identify local projects, and provides policymakers with a tool to visualise the sector’s potential in London.³¹

There are a number of examples of One-stop Shops for community energy across England. Community Energy London and Bristol Energy Network are organisations which perform this function and were initiated and established by and now staffed and led by the community energy sector. Cambridgeshire County Council and West Midlands Combined Authority have roles dedicated to the development of the sector in their areas.

These groups and posts are often complemented by a working group or taskforce which brings together local stakeholders to work on the development of the community energy sector together. London’s Community Energy Taskforce brings together representatives from community energy groups, central government, the GLA, London’s boroughs, finance and business sectors, and other key institutions to remove barriers to the sector’s growth. The Devon Community Energy Network performs a similar function but is a network of groups in Devon and the South West, working together to secure resources and deliver projects that cannot be achieved by groups acting alone.³²

Creating a favourable context for community energy

This includes setting long-term policies and objectives for the sector, alongside

²⁹ P9, Radcliffe, E. Williams, L. (2021). Part 3: Current and Emerging Practice. Toolkit: a community wealth building energy transition. The Centre for Local Economic Strategies. [Link](#).; Plymouth Energy Community. (2025). Written evidence: Unlocking community energy at scale call for evidence. [Link](#).

³⁰ Community Energy London. Potential V2. [Link](#).

³¹ Community Energy London. (2023). A Vision for Community Energy in London. [Link](#).

³² Devon Community Energy Network. About us. [Link](#).

developing memorandums of understanding (MoUs) between local authorities and community energy groups.

City of York Council has been crucial in advancing community energy in their area by integrating them into local policy frameworks. They have supported projects such as Solar for Schools, and are fostering collaboration with York Community Energy to achieve the city's decarbonisation goals.³³ Several local authorities in GM already do this, but more could be done to embed community energy into local policy frameworks.

Cambridgeshire County Council developed a Community Energy Action Plan in 2024 setting out proposed council actions to support communities seeking to develop clean energy projects. This includes a range of actions, including the establishment of a community energy co-operative, match funding for feasibility studies, a community focused Energy Development Officer, search for sites and brokering customer relationships.³⁴

Co-operative innovation to support the retention of public value from renewables.

The challenge for community energy organisations is achieving scale. The sector in GM has ambitions to scale, but they are modest in comparison to the scale of opportunity presented by Clean Power 2030. Shared ownership offers an option to achieve scale but the benefits it offers are limited. To achieve significant scale whilst retaining the benefits of the community energy approach - local democratic control and ownership, and local economic benefit - requires the use of more collaborative models. In this context, there is significant potential to be found in direct collaborations, and public-commons joint venture partnerships between the GMCA and community energy groups to deliver greater benefits from new renewable energy generation and storage.

Co-governance and co-ownership models between communities and municipalities have been demonstrated elsewhere, amplifying the value which can be delivered by public and community-owned renewables.³⁵

Wolfhagen, Germany took an innovative approach to developing a municipal-community partnership to achieve 100% domestic energy from renewables by 2015. The municipality took control of their Stadtwerke (municipal energy company) in 2003 and supported the establishment of a consumer co-operative to unlock finance to support renewables development in the area. This partnership led to the financing of a 12MW wind farm, a

³³ Community Energy England. (2024). Community Energy Awards 2024 - Case Studies. [Link](#).

³⁴ Cambridgeshire County Council. (2024). Community Energy Action Plan. [Link](#).

³⁵ P46, Mason, N. Radcliffe, E. Benstead, S. Murphy, C. and Tupling, J. (2024). Analysis of mechanisms and governance approaches to securing public value from natural resources. Scottish Land Commission.

5MW ground-mounted solar park, and an energy-saving foundation.³⁶ Alongside being a key shareholder of the Stadtwerke, the co-operative (BEG Wolfhagen) is also a shareholder of other wind farms in the region - acting in cooperation with other co-operatives. StadtwerkeUnion Nordhessen (SUN) is a group of Stadtwerke (including Stadtwerke Wolfhagen) which develops wind farms, obtains a building permit, and when they are sure of completion they offer shares to co-operatives to gain a level of citizen participation. As of 2020, BEG Wolfhagen is a partial owner of four wind parks.³⁷

The implementation of public-commons partnerships (also referred to as public-public partnerships) has been explored by think-tanks such as Abundance.³⁸

In Greater Manchester, there are already innovative examples of collaborative and co-operative approaches to funding and developing major infrastructure. Since 2017, an innovative co-operative approach, a 'neutral host' or 'thin layer co-operative model', has been used to facilitate the rapid deployment of new, full-fibre infrastructure in Tameside and Manchester. With this model the respective councils, NHS, local colleges, housing providers and others have constituted members of an infrastructure investment co-operative³⁹. The model has delivered £4.5m of investment whilst overcoming some common procurement challenges associated with public sector demand aggregation.⁴⁰ The proponents of this model, CNI (Cooperative Network Infrastructure) and Anthony Collins Solicitors, argue this model can be easily applied to tackle a range of energy infrastructure investment opportunities such as generation whilst retaining value for the region.

³⁶ European Commission. Empowering Municipalities to Develop and Support Rural Energy Communities. The Rural Energy Community Advisory Hub. [Link](#).

³⁷ Rural Energy Community Advisory Hub. Empowering Municipalities to Develop and Support Rural Energy Communities.

³⁸ Abundance. What is a Public-Common Partnership? [Link](#).

³⁹ Co-operative Network Infrastructure. About. [Link](#).

⁴⁰ Cooperative Network Infrastructure. (2017). Case study: How Tameside is building an advanced digital infrastructure. [Link](#).

5. State of the community energy sector in Greater Manchester

Mapping was carried out to understand the current state of the community energy sector, profiling the organisations involved and their existing energy installations. The capacity and capability of these organisations has been assessed, as have future plans and ambitions as well as an evaluation of the potential for new entrants to enter the sector.

5.1 Community energy in Greater Manchester

The Greater Manchester (GM) community energy sector is to an extent anomalous in comparison to other areas of the UK, it employs numerous staff but mainly within three organisations not primarily orientated towards renewable energy projects: Carbon Co-op (energy services - though more recently involved in renewables development), People Powered Retrofit (energy efficiency) and Greater Manchester Treestation (biomass production).

Research identified twelve active community energy organisations operating in Greater Manchester. Six of these organisations currently operate generation assets and a further three are at the feasibility stage. All are registered as Community Benefit Societies and operate exclusively within GM, except for Solar for Schools CBS which operates nationally, with one school in the region.

There is currently just over 1.1MW (1102.7kWp) of renewable capacity in community ownership in the city region, with the majority of this being rooftop solar (983.7kWp), supported by two hydro installations (119kWp). Collectively they produced over 1.2GWh (1246MWh) of energy in 2024.

This installed capacity is broadly in-line (or ahead) of other combined authority areas in the north of England, but significantly below that of areas within Scotland and southern England. For example the West of England Combined Authority (WECA) area hosts over 25 times⁴¹ the community power generation capacity, with 17MWp of capacity in Bristol alone.

⁴¹ The WECA area hosts a number of large community energy groups including Bristol Energy Co-operative (12MW solar), Ambition Community Energy Turbine (4.2MW), Bath and West Community Energy (14.3 MW) in addition to smaller groups.

5.2 Community energy clean energy generation assets in Greater Manchester

Table 1: Breakdown of sector by group, activity, and generation capacity

Community energy organisation	Primary Activity	Current installed capacity (kWp)	Latest annual generation (MWh)
CORE Projects Society Limited	Generation (new entrant)	Feasibility stage	N/A
Greater Manchester Community Renewables	Generation (solar)	730	535
Greater Manchester Treestation	Biomass production	N/A	N/A
Middleton Community Power (reg. under Middleton Co-operating)	Generation (new entrant)	Feasibility stage	N/A
Oldham Community Power Ltd	Generation (solar)	220	150
People Powered Energy Limited	Energy reduction (public sites)	-	-
People Powered Retrofit Ltd	Energy reduction (domestic)	N/A	N/A
Saddleworth Hydro	Generation (hydro)	51	317
Society for the Reduction of Carbon Limited (Carbon Co-op)	Energy reduction (domestic)	Feasibility stage	N/A
Solar for Schools CBS	Generation (solar)	30	22
St. John's Sunshine	Generation (solar)	3.7	2
Stockport Hydro Limited	Generation (hydro)	68	220
Total		1.1MWp	1.246GWh

Analysis of the most recently completed share offer in the city region, which was carried out by GMCR in 2023, shows that 83% of the 136 investors and 74% of the £350,000 share capital came from within GM.

The average interest rate paid on community investment across GM's community energy sector was 5%, in addition to this £99,538 was provided in grants to the local community in 2024, representing over 20% of the sector's annual turnover.

5.3 Community energy business models

All the GM based community organisations currently generating energy were formed in the 2010s as part of a wave of community-led schemes enabled by supportive UK Government subsidies for small scale generation. Organic growth was supplemented by infrastructural support projects such as Community Renewables Finance School (2010)⁴² and Generating Success (2012-13)⁴³. The growth of the sector since the closure of the feed-in tariff (FIT) scheme has been significantly slowed though some ‘behind-the-meter’ projects have been delivered and show potential for growth and replication.

5.3.1 FITs and ROCs

The subsidy regime in the 2010s favoured the growth of the community energy sector. Subsidies included:

- **Feed-in Tariff (FIT)** scheme (open between July 2009 and March 2019) provided a fixed payment per kWh of generation for 10–25 years.
- **Renewable Obligation Certificates (ROCs)** provided index-linked payments over a 20-year period based on MWh generation.

These subsidies provided a predictable, long-term revenue stream independent of the market price of energy, simplifying business planning and reducing the risk for community investors.

Hydro models

GM has two community-owned hydro projects one in Saddleworth and one in Stockport. Both installations provide energy directly to the grid (grid supply) with payment received via Power Purchase Agreements (PPA) with an energy supplier.

Additionally, Stockport Hydro benefits from FIT payments (31p/kWh until 2032) representing ~70% of project income. Saddleworth Hydro was not eligible for FITs (as a recipient of Defra funding), but continues to benefit from ROCs (until 2034). Both schemes were funded via a combination of grants, loans, and a community share issue, with capital repaid over a 20-year period with interest.

Solar models

Community-owned PV installations on 15 schools, 2 community centres and one church received support under the FIT scheme. The business model relies on an electricity supply agreement with a host site for the purchase of all energy generated which is used on-site at a discount vs their current energy supply contract. This income stream is augmented by FIT payments and a PPA for any remaining energy exported to the grid.

⁴² Atkinson, J. (2012). Community Renewables Finance School, project page. Carbon Co-op. [Link](#).

⁴³ Carbon Co-op. Generating Success, project page. [Link](#).

5.3.2 Post-subsidy business models in Greater Manchester

Post-FITs, the city region has not seen any further community energy installations focused solely on generating and supplying electricity directly to the grid. The current subsidy regime, combined with economies of scale favour larger generation assets. The viability of community-led grid generation at scale has been proven in other regions⁴⁴ and is being actively explored by GM community energy groups (see *Aspirations*).

Instead, post-FITs, behind-the-meter model projects have been delivered in GM, deploying solar PV on public buildings with significant offtake potential. Such subsidy-free models have been enabled by the falling cost of solar technologies combined with increased energy retail prices and rely on maximising the value of energy generated via direct sale of electricity to the site holder. Greater Manchester Community Renewables (GMCR) raised £350,000 in 2023 to fund GM's largest community-owned renewable energy installation to date (388kWp) at Wellington School in Trafford. In 2025 the organisation ran its fifth community share issue to fund four additional installations.

Under the business model adopted by GMCR, the unit cost for energy in the Energy Supply Agreement is pegged at 20% below the daytime energy rate on the site's primary supply contract. This guarantees cost savings for the sites, which to date have saved just under £200,000 in energy costs. This model is proven in GM with strong potential for scaling and replication, with the potential to unlock substantial private investment in the city region's energy transition while delivering significant public sector cost savings.

5.3.3 Post-subsidy business models elsewhere

Though new community energy grid supply projects have not taken place in GM, elsewhere, organisations have pioneered post-FIT models for a range of use cases including ground-mounted solar PV and onshore wind, operating a range of sizes. Such models are well described and available for groups in GM to use as relevant opportunities arise.

5.4 The capacity and capability of the Greater Manchester community energy sector

In order to evaluate the capacity and capability of the community energy sector in Greater Manchester, the *CE Group Assessment Matrix* has been used. This is a framework currently under active development by the Energy Learning Network (a UK-wide initiative to develop and promote the community energy sector). The

⁴⁴ Examples of large-scale community owned direct to grid generation assets include the 4.2MW Ambition Lawrence Weston wind turbine in Bristol and 19MW Ray Valley Solar Farm in Oxfordshire.

methodology is designed to help identify key strengths and weaknesses, allowing capacity building to be better targeted. The criteria underlying this assessment is available in *Appendix 4*.

This analysis was carried out for nine community energy groups currently delivering energy generation or conducting feasibility work, based on structured interviews with organisations, desktop research and analysis of recent FCA (Financial Conduct Authority) submissions.

The analysis indicates that there is a significant knowledge and skills base within the city region. The sector is providing clear benefits to the communities they serve whilst delivering significant carbon reductions, capital repayments and a return on investment.

The sector is rated low for organisational capacity due to a lack of employed staff (outside of Carbon Co-op). To date the GM CE generation sector has achieved impact via the voluntary labour of its members and directors. There are no groups rated high for project development as there has not yet been the deployment of 'large scale / multi-technology' generation assets locally. This analysis suggests that though relatively small, the organisations are healthy and with a good foundation to grow, scale and develop.

Table 2: GM CE Group Assessment Matrix
 No. of CE organisations rated low/medium/high under each category.

Category	Low	Medium	High
Knowledge and Skills (technical, regulatory etc.)	2	4	3
Organisational capacity	5	3	1
Governance	1	4	4
Finance and business development	4	4	1
Scale of project development / delivery	4	5	0
Connectedness to wider sector	4	3	2
Community involvement	1	5	3
Growth potential	3	1	5

A full outline of methodology, process, and adaptations can be found in Appendix 4.

5.5 Greater Manchester community energy sector aspirations

Interviews with community energy organisations included an assessment of future project ambitions.

Greater Manchester Community Renewables (GMCR) aimed to install four further sites in 2025, taking their installed capacity to over 1MWp. Options are being explored with a further nine schools in the mid-term for which funding is currently being assessed. Earlier this year GMCR collaborated with Middleton Community Power and Energy Local to explore the viability of an Energy Club model to facilitate local domestic supply from their installations. They are currently undertaking theory of change work internally to better plan their next stage of growth which may involve the employment of staff.

New entrants **Middleton Community Power** are currently in the early feasibility stage of a 5MW solar farm on the site of a health provider providing ~20% local offtake. Due to limited on-site offtake, the project is very sensitive to PPA price, especially given the difficulties community energy organisations experience with accessing the more supportive Smart Export Guarantee (SEG) tariffs. In a second parallel project they are assessing site options in the local area for the installation of a small wind turbine.

Community Owned Renewable Energy - CORE (registered as ‘CORE Projects Society Limited’) was constituted in early 2025 and is currently undertaking early-stage feasibility for the installation of Solar PV (and potentially storage) on two churches and a historic swimming pool in Manchester.

Carbon Co-op is leading a consortium with **GMCR** and **Energy4All** delivering a detailed feasibility of a 12MW wind farm site on United Utilities-owned land in the region. As well as pursuing the development of generation assets, Carbon Co-op has secured loan funds to invest in their capacity to act as consultants to support the development of other community energy group projects. The organisation has plans to develop its local flexibility service in order to sell flexibility into Distribution Network Operator (DNO) tenders and is developing a community building retrofit service which include support for generation. Finally, there are plans to assess the potential for extending place-based retrofit services to include energy sharing.

St. John’s Sunshine, Stockport Hydro and **Oldham Community Power** are not in an active growth phase at present and are focused on the continued delivery of existing projects and associated community benefit. The latter two groups are however keen to collaborate with and support others on new projects (for example through grant making) and are actively seeking additional volunteers.

5.5.1 Summary

Analysis suggests there is ambition from some existing organisations to grow, develop and innovate and that many of the current community energy groups have a good basis for development with sound governance and good levels of knowledge and expertise. This indicates that targeted support for the current sector is likely to result in growth and help these organisations achieve their ambitions. It also suggests that the existing sector can constitute effective partners for the GMCA collaboration, in the development and delivery of new initiatives and interventions.

5.6 New entrants

There are two likely routes for new entrants to enter the sector:

- Existing organisations, most likely from the VCSE sector, initiating community energy activities or projects.

- Entirely new organisations are established.

Looking at the existing sector, Carbon Co-op and GMCR were established as entirely new organisations, Middleton Community Power has emerged from the wider Middleton Co-operating initiative.

5.6.1 New entrant research

Following an initially low number of applications for the Great British Energy (GBE) Community Fund (CF), the North West Net Zero Hub (NW NZ Hub) is actively seeking to engage and support prospective new entrants. The hub has been developing connections through faith networks, Sports England and the Local Government Association amongst others. Using ‘Personas’ based research they are working to identify individual and group typologies to understand the most appropriate support interventions.

Within Greater Manchester there is a question as to how to best identify organisations and groups who fit the categories identified by the NW NZ Hub. VCSE directories and networks can be used to engage with the third sector, but the recent closure of Greater Manchester Centre for Voluntary Organisation (GMCVO) has impacted the sector’s ability to organise and build links with community energy. This raises the question of what data exists to identify these new entrants, and how this might be used to support future activity.

Some information about these new entrants can be accessed via existing networks. Manchester Community Central recently conducted research examining climate action in Manchester’s VCSE sector, which recommends the creation of a VCSE Climate Community Space for the VCSE sector to engage with or explore climate action.⁴⁵ Rochdale also has a Climate Co-operators partnership, which brings together the council, key partners and community organisations to promote climate action across the borough. Some of these community organisations have also expressed interest in community energy, but the groups require capacity building support to move forward in this area.

5.6.2 New entrant motivations

Research and interviews with community energy groups and support sector organisations have identified a number of recurring motivations from potential new entrants:

- A desire to take **practical action on climate change**
- A sense of **pride in their community** - participants were frequently involved with other groups and organisations at a community level
- **Inspiration effect**, individuals took initial inspiration from exposure to community energy examples locally, nationally and internationally

⁴⁵ Danzoll, M. (2025). Mapping Climate Action in Manchester’s VCSE Sector. Macc.

- A desire to **use their skills, experience and local connections** to effect change.

5.6.3 Enabling new entrants

Discussions with the NW NZ Hub underlined the challenges of a region-wide approach to engagement with often hyper-local citizen-led initiatives, and identified gaps in local knowledge and connections. There is a clear role for local authority officers, community, and voluntary sector support organisations and local anchor institutions in filling this gap through a community development approach.

Local authorities also shared that connecting with local **VCSE umbrella organisations** (e.g.: Salford CVS and Action Together) could open up opportunities for both new entrants and new sites for community energy.

Given the key role played by inspiring examples, **raising the profile of successful community energy initiatives is the clear first step to encouraging wider replication**. Aside from the traditional citizen-led route, a number of other key potential areas for growth are explored below.

5.6.4 New entrant initiatives

Solar for GM Faiths⁴⁶ - An initiative begun as 'Solar for Salford' by the Catholic Diocese of Salford and now formally adopted by the Faith Network for Greater Manchester (FN4M). Working in collaboration with Greater Manchester Community Renewables (GMCR) the initiative is currently seeking further expressions of interest from faith based organisations to explore the viability of wider PV rollout.

First tier councils - Many GBE CF enquiries to the NW NZ Hub were received from town and parish councils in Cheshire, after a talk given on the subject at Cheshire Association of Local Councils. While the vast majority of the GMCA area is unparished, ten rural or peri-urban parishes and four town councils are eligible for GBE CF funding.

Community Led Housing - discussions with the support organisation, Greater Manchester Community Led Homes, identified areas for potential collaboration with the community energy sector based on a strong shared vision and approach. Collaborations on larger community-led housing developments between community energy and community-led developers, could provide new generation opportunities, while increasing the affordability for residents.

Peer mentoring - A number of organisations including the Energy Learning Network and the Co-operative Business Start Up programme operate peer mentoring programmes to support the development of new entrants. New organisations are matched with experienced practitioners to deliver focused, time limited mentoring

⁴⁶ Solar for GM Faiths <https://fn4m.org/SFGMF>

and coaching, often with further wrap-around support including training and access to resources.

Centralised, replicable support approaches - Post-FIT, the requirements for community energy projects to achieve viability have increased. Technical skills and expertise, access to risk capital and above all ability to realise projects at scale mean that the step-up required by new entrants, especially those reliant on volunteer labour, has become steeper. One response to this has been the formation of nationally centralised or ‘federated’ approaches. These professional, national scale organisations - such as Thrive Renewables, Energy 4 All or Big Solar Co-op - partner with local voluntary groups to develop new projects. While this approach supports new entrants and delivers community benefits, it comes with a trade-off: because the core skills and organisational capacity are housed elsewhere in the country, the project’s overall local economic impact is reduced.

In addition, the Centre for Sustainable Energy is doing valuable work as part of the Energy Learning Network to assess how the diversity of new entrants could be encouraged.⁴⁷ The results of this work should be incorporated into the GMCA’s approach when published over the course of the next few years.

5.6.5 Summary

The research, in particular the experience of the NW NZ Hub, suggests that there are a significant number of organisations that could move into the community energy sector and routes for this to take place. The research on capacity and ambition highlights that the small number of existing community energy organisations in the area could play a key role in supporting the development of new entrants.

5.7 Conclusion

In order to support the development of the community energy sector in GM, the GMCA enabling actions should target two key areas:

- Supporting the growth and development of the existing organisations, building on existing organisational strengths, knowledge and good governance, addressing issues around capacity and project scale, and assessing opportunities for collaboration and joint working.
- Supporting the development of an environment that welcomes new entrants into the sector, working both with established organisations from adjacent sectors and entirely new groups, offering targeted support and opportunities for early stage organisational development growth.

⁴⁷ Centre for Sustainable Energy. “Energy Learning Network: Increasing the scale and impact of the community energy sector.” [Link](#).

6. Needs of the Greater Manchester community energy sector

Interviews were conducted with community energy sector representatives in Greater Manchester (GM) and elsewhere in the UK. These interviews highlighted a number of areas where support from local authorities, the combined authority and others could have a transformative impact on their activity.

6.1 Support in identification of potential sites

Interviewees highlighted the need for support, not only around identifying potential buildings and land within areas but also recruiting internal advocates within the organisations who own and run those sites - whether in the public or other sectors. Three GM based community energy organisations highlighted the key enabling role local authority officers have played in providing initial introductions as foundational to project success.

6.2 Support in navigating complexity on public sites

Local authority champions have a role navigating the often complex governance and bureaucratic challenges of securing public sector buildings or land.

Stakeholders - *“A blocker with local authority sites is that you need 5 different teams to be on side, while the energy team are on board with cost reduction and the environment team are usually in, the education team may not feel it’s core and that’s who the schools will go to if they have a question. For the property team and the legal team it is just extra work and complication... It takes significant work on our side to bring these teams together to build a sense of ownership, anything that could be done on their side to get their ducks in a row would be really helpful.”* Interview, GM community energy group.

Ownership and Governance - *“Compared to private or church land, publicly owned land is so complicated. You have to understand the governance and ownership of the property (which can be very complex) and then ensure the right consents are in place. Consents can be easy, or they can be incredibly difficult, and many councils seem to opt for the very difficult route.”* Interview, national community energy organisation

6.3 Standardisation of process and legal agreements

CE projects at sites and buildings commonly require new legal agreements such as leases, memorandums of understanding (MoUs), offtaking arrangements and other documents. Requiring new documents to be drafted for each and every project leads to significant duplication of effort and costs. Agreeing and standardising template agreements within the GM public sector would result in a significant savings.

“Legal departments are very stretched, so if some money could be invested early on to develop pre-approved agreements or standard clauses, that would speed the process, reduce costs and would also give academies more confidence to move forward on a similar model if local authorities were happy.” Interview GM community energy group

“The obvious one is you streamline the ability to install systems with legal terms that protect the landowner but don’t disadvantage the project. Like planning where ‘prior notice approval’ is standardised in terms of costs and process, if you want to scale up community installations on public buildings we need to assess ways to standardise and simplify the process.” Interview, national community energy organisation

Standardised templates for power purchase agreements (PPAs), maintenance agreements, leases, or licence to operate agreements - alongside standard clauses to meet additional DfE and DHSC requirements - would provide a valuable starting point for site-specific contracts. Paired with centralised guidance on issues such as navigating procurement, this would give local authorities and public sector sites the tools and confidence to progress community energy schemes on public land.

6.4 Greater price certainty to support scaling

Interviewees highlighted a high degree of variability in the grid export price that community energy organisations are able to access, with energy supplier PPAs running for as little as six months. This uncertainty limits potential sites to those with significant onsite offtake; for those exploring larger scale, direct-to-grid installations it is a major challenge in establishing project viability.

As a result, there is significant interest from the sector in establishing purchasing agreements with the public sector. Sleeved and synthetic PPA agreements (SPPA)⁴⁸ allow the purchase of energy generated on community energy sites via a supply intermediary and have been used in other local authority areas.

As the output of many GM community energy sites falls below that at which SPPA setup costs are justified, there is interest from the sector in aggregating purchase agreements via the ‘sleeved pool’ approach championed by Bristol City Council. Through discussions with Great British Energy (GBE) we are aware that Bristol City Council is engaging with them to address current procurement barriers⁴⁹ to this approach to assist replication.

⁴⁸ Unlike a Direct PPA (where generation and consumption are co-located), sleeved, synthetic and virtual PPAs are variations which allow the purchase of energy via the distribution grid. Further info available in: Bristol City Council. (2023). Synthetic PPA Toolkit for Local Authorities. [Link](#).

⁴⁹ The adoption of Bristol City Council’s ‘sleeved pool’ model has been delayed after legal advice that procurement rules may preclude limiting suppliers by geographical location - BBC local reporting service. [Link](#)

6.5 Community energy sector-led solutions

A recurring theme within the research and interviews was a strong preference for initiatives to be owned, managed and led by the sector itself. Interviewees noted ‘top-down’ public sector projects often lack the buy-in, robustness and longevity seen in community-led networks. In contrast, sector-led initiatives - such as Bristol Energy Network and Community Energy London - were highlighted for successfully catalysing and growing local activity.

6.6 Seed development funding and support

While the current GBE CF is undoubtedly useful, it may not always be the most appropriate route for emerging community energy groups or broader VCSE organisations interested in entering the sector. The fund does not cover initial setup, registration or core costs. Consequently, the NW NZ Hub and other support agencies have highlighted a strong need for pre-feasibility and development support to help groups prepare for GBE applications.

6.7 Increased public profile

Increasing awareness of community energy models, activities, and available support would help new groups enter the sector while driving the recruitment of volunteers, investors, partners, and beneficiaries. It would also elevate the sector’s profile among potential public and private sector collaborators.

6.8 Access to knowledge and training

Ensuring that groups have access to accurate, up-to-date information on regulatory changes, funding opportunities and best practice case studies, alongside targeted capacity building, is a recognised challenge across the sector. Significant coordination work is being undertaken by regional net zero hubs, in collaboration with national and regional support organisations, to minimise duplication and ensure effective signposting. To support this, The Energy Learning Network has committed to collate and maintain an information repository (reviewed semi-annually) as a resource for the sector.

At the city-region level, this information could be augmented by supporting local peer learning (a need highlighted by two new entrants), developing GM case studies, creating directories of key contacts, and promoting training, networking opportunities, and open days.

6.9 Conclusion

Community energy organisations highlighted a range of actions and interventions that would benefit the growth and development of the sector in GM. In addition to a series of enabling and supporting interventions from local authorities and the GMCA, a clear preference was expressed for solutions to be initiated, owned and controlled by the local community energy sector itself.

7. Assessing community energy generation opportunities in Greater Manchester

To identify potential renewable energy opportunities for the sector in Greater Manchester, Carbon Co-op's partner Regen, undertook a comprehensive analysis. This utilised datasets from sources including the GMCA, Local Area Energy Planning (LAEP), Electricity North West (ENW), Distributed Future Energy Scenarios (DFES), and the Renewable Energy Planning Database (REPD). A detailed overview of this mapping work is available in *Appendix 2*.

While the analysis sought to quantify the scale of these opportunities, such as the number of potential projects and megawatt (MW) capacity, the available data mostly allowed only for a qualitative assessment. Despite this limitation, the analysis still yielded clear conclusions on priority opportunities.

The potential for community energy development in the following areas was assessed across the following categories:

- Rooftop-mounted solar
- Ground-mounted solar under 5MW
- Ground-mounted solar over 5MW
- Onshore wind under 5MW
- Onshore wind over 5MW
- Shared ownership, in general terms, but focused in particular on solar over 5MW and large-scale storage opportunities.

The research also highlighted questions regarding the potential for co-located storage across both large, and small-scale generation projects. Regen's analysis of community energy potential focused primarily on wind, rooftop and ground-mounted solar (the full rationale is outlined in *Appendix 2*). Although there are several successful community hydro projects within GM, and potential for further development on the rivers Irwell and Mersey, hydro was excluded from this study. This is because the commercial viability of such projects is particularly challenging; they require significant lead times and offer only marginal profitability. Finally, insights from Locogen's *Levelised Cost of Electricity (LCOE)* study were incorporated to add financial nuance to this assessment.⁵⁰

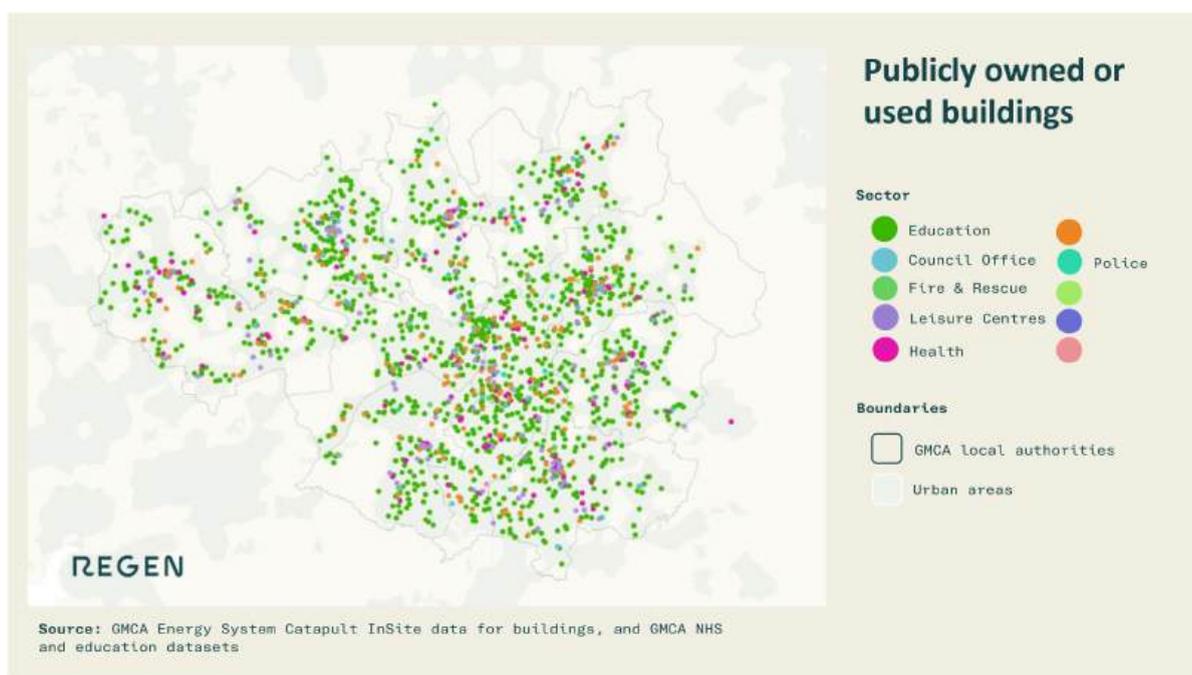
7.1 Rooftop solar

Public Sector Rooftop Solar

As set out above, urban rooftop solar using a 'behind-the-meter' business model presents a significant opportunity for the sector. While community energy rooftop solar is applicable across private, public and community-owned buildings, facilities

⁵⁰ Locogen. (2025). Levelised cost of electricity (LCOE) in GM phase 2 (GMCA 992).

serving the public good (e.g., schools, hospitals, leisure centres) and community-managed buildings should be prioritised. This is because these sites are typically high energy users and are likely to remain under the same ownership (often a local authority) for years to come. Across Greater Manchester,, there is an even distribution of these types of sites.



Caption: Map showing the distribution of publicly owned or used buildings

With 2,863 buildings in the GMCA region that are used for public good (and more community-owned and managed), this category is a significant opportunity for community-owned rooftop solar. At present there is currently no mapping data articulating the solar potential of these buildings. In comparison, this type of mapping data has been transformative for London’s community energy sector in understanding the potential of public and community buildings.⁵¹

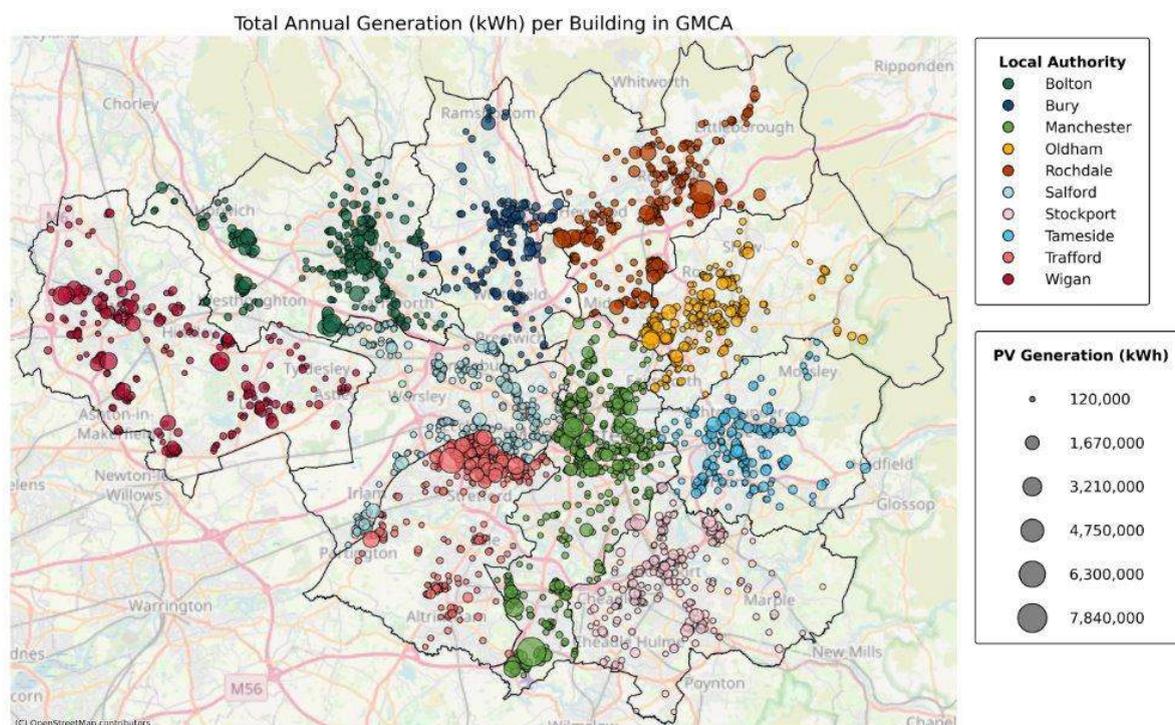
Commercial Rooftop Solar

Separate from this publication, the GMCA has recently commissioned research into the potential for rooftop solar across the private commercial estate with a particular focus on large flat roof warehouses. While the commercial private sector is not the traditional target for community energy there may be joint venture opportunities and the potential is huge.

The research showed significant opportunity with over 2,900 buildings of interest identified across Greater Manchester. Some clusters are evident (e.g. Trafford Park), but there are opportunities spread across the entire region

⁵¹ See 4. *Public sector and community energy collaboration exemplars* for further detail on the potential of mapping to support community energy development.

Using Energy System Catapult’s estimates, there is a combined potential annual generation of 986,190,140 kWh or 1 GW capacity.



7.1.1 Summary

Rooftop solar represents a significant, untapped resource across buildings of all tenures, but particularly on public and community buildings. Simple, well-understood models already exist, with project scales, timeframes, and investment costs that are highly achievable for both new and established community energy organisations.

7.2 Ground-mounted solar and onshore wind under 5MW

There are significant opportunities for community-led ground-mounted solar and onshore wind under 5MW across the city-region. Because projects under 5MW are excluded from the transmission impact assessment (TIA) and Clean Power 2030 (CP2030) renewables pots, they are not blocked by the transmission queue.

At the primary substation and bulk supply point levels (where the majority of sub-5MW projects connect), there is ample capacity for new small-scale generation. Almost 90% of primary substations are forecast to have over 5MVA of generation headroom in 2030; therefore connection constraints should not delay these renewable projects.

In the limited areas of the city region where grid capacity may be low going into 2030 (e.g., at bulk supply points in parts of Wigan, Manchester, Oldham, and

Rochdale), local authorities can work with SP Electricity North West (SP ENW) to identify the most suitable locations for new generation and explore pathways for network upgrades.

There is already community energy activity in this space; for example, Middleton Community Power and Northern Roots' plans for solar PV fall within this category and are located on local authority or publicly owned land.

However, it is important to note that while Locogen's 2025 study identified eight potential sites for solar and onshore wind in Greater Manchester, the LCOE for small projects in the region remains high. Consequently, these potential projects would struggle commercially. To overcome this, there may be opportunities to explore power purchase agreements (PPAs), or innovative transaction models, such as exempt supply, to support the sale of generated electricity.

7.2.1 Summary

Both our analysis and the experiences of existing community energy groups indicate that this category is a strong area to explore, although its financial feasibility requires further investigation. Because small-scale solar and wind projects are not restricted by the TIA or CP2030 renewables pots they present a clear opportunity. However, high Levelised Costs of Electricity (LCOE) remain a significant hurdle. Overcoming this will require innovative offtake solutions - such as direct wire arrangements with high energy users - to ensure that these projects can succeed commercially.

7.3 Ground-mounted solar over 5MW

In contrast to sub-5MW projects, there is limited potential for community-owned ground-mounted solar over 5MW. This is because the solar pot for T4 (CP2030 region that includes Greater Manchester) is nearly full, making it difficult for new projects to secure a connection agreement before 2030. While worth exploring in the longer term, this scale of generation will not immediately support the sector's development. However, for commercial projects already in the queue, there is scope to explore shared ownership opportunities between developers (see below).

7.3.1 Summary

Ground-mounted solar over 5MW is not currently a priority area for new community energy developments in Greater Manchester.

7.4 Onshore wind over 5MW

There is currently a deficit in the transmission queue for onshore wind required to meet CP2030 targets. As a result, new wind developments are highly likely to receive a grid connection offer. However, because the majority of grid supply points

across Greater Manchester are constrained, these offers will likely include the heavy cost of network upgrades. This financial burden would render most projects unviable unless the grid is independently upgraded.

Furthermore, Locogen’s study demonstrated that while several potential sites are suitable for wind, the LCOE remains a constraining factor for projects under 10MW. To support the rollout of 5-10MW wind schemes, innovative solutions will be necessary to improve commercial viability and offset these LCOE challenges.

7.4.1 Summary

Whilst previous GMCA research suggests there are limited sites for onshore wind, those that do exist are highly likely to receive a grid connection offer. However, high LCOE for projects under 10MW, compounded by expensive grid upgrade requirements, will severely compromise the commercial viability. If these financial challenges can be overcome, community energy organisations are well-placed to develop this opportunity.

7.5 Shared ownership

Shared ownership involves a community group taking a financial stake in a commercially owned renewable energy project, alongside the developer. It allows communities to benefit directly from project revenue and contribute to the local energy transition.⁵²

There is currently a significant pipeline of projects over 5MW in development in the city-region, and the majority of these pipeline projects are privately owned.⁵³ Among the projects in the pipeline, there are three solar projects (totalling 21MW) and 35 storage projects (totalling 2.4GW) in planning or the grid queue. These projects may be at an early enough stage of development for the exploration of a shared ownership model.

Table 3: Solar projects in planning/development which should be explored for potential shared ownership.

Developer name	Project name	Size of project (MW)
Whitehead Restoration Limited	Whitehead Landfill Site, Lower Green Lane - Solar Farm	10
Sas Energy - Wigan Council	Makerfield Way Depot	7
Novus Solar Development	Chamber House Farm	4

⁵² Local Energy Scotland. What is shared ownership? [Link](#).

⁵³ “In development” means a project which is in the grid connection queue but has not started construction. These projects are at various stages of the planning process and are not guaranteed to go ahead.

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There are no currently existing examples of shared ownership in Greater Manchester, however DESNZ is consulting with the sector on developing a mandatory approach to community benefits and shared ownership for low-carbon energy infrastructure,⁵⁴ using elements of the 2015 Infrastructure Act with a proposed 5MW threshold. Whilst shared ownership is currently encouraged, introducing a mandatory requirement could offer significant opportunities for the growth of the community energy sector.

Furthermore, Locogen’s study has highlighted challenges in the development of smaller-scale renewables in GM due to the high LCOE. As such, shared ownership of larger sites identified offers an excellent route to ensure communities benefit from new infrastructure, especially where it is impractical for local groups to take sole responsibility for its development.

7.5.1 Summary

Mandatory shared ownership is currently being explored within the UK Government, and could present a massive opportunity for community energy investment, involvement, and benefit on installations above 5MW. This model would work well in GM’s context, as the region’s high LCOE means that commercially viable projects will likely be larger in scale.

7.6 Co-located storage

During this research, community energy groups expressed interest in co-located storage. While most opportunities for co-located storage are linked to larger-scale projects (many of which are already past the planning stage), pairing storage with community-scale rooftop solar offers distinct advantages. It can reduce costs, flatten bills for the offtaker to secure better PPA terms, and provide flexibility to the grid. Although the wider market’s ‘rush to storage’ is already underway, the specific role of community energy in this space warrants further exploration.

7.6.1 Summary

Co-located storage represents a potential area of innovation for Greater Manchester’s community energy sector. Integrating storage into local projects should be actively explored to unlock additional, holistic benefits.

⁵⁴ Department for Energy Security and Net Zero. (2025). Community benefits and shared ownership for low carbon energy infrastructure. [Link](#).

7.7 Conclusion

Rooftop solar is a major opportunity for community energy in the region: grid capacity is available for this scale of project, and there are many viable long-term sites (such as schools, hospitals and community buildings), alongside proven delivery models.

Conversely, the majority of low-carbon generation in Greater Manchester is currently privately owned, including most projects in the development pipeline. For projects in the pre-planning stage, shared ownership could be explored to rapidly increase the volume of community-owned generation.

While suitable sites for onshore wind are limited, those that do exist are highly likely to receive grid connection offers. Given that onshore wind is a national priority, community energy organisations are well-placed to develop these opportunities, provided the financial barriers of grid upgrades can be overcome.

On the basis of these considerations, the recommended priority order of opportunities for the GMCA enabling interventions is:

1. Encouraging and facilitating the development of untapped **rooftop solar opportunities**
2. Facilitating **shared ownership** targeting planned projects, establishing infrastructure to support future growth, and focusing on opportunities >5MW.
3. Supporting innovative models for the development of **solar and onshore wind under 5MW** (with a focus on commercial viability)
4. Working with the community energy sector to overcome grid and financial barriers to the development of **onshore wind opportunities over 5MW**.
5. Exploring **potential models to support co-located storage** alongside community energy generation.

Moving forward, the GMCA enabling actions (below) have been designed to target the specific barriers preventing the community energy sector from exploiting these priority areas.

8. Supporting growth of the Community Energy sector - the GMCA interventions

8.1 Methodology for creating recommendations

In devising a set of recommendations for the GMCA the following stepwise process was used:

1. A set of opportunities for sector growth, across three main areas:
 - a. Community energy generation opportunities (analysed and prioritised in *Section 7*).
 - b. Ambitions to grow the sector by enabling new entrants and expanding existing organisations (set out in *Section 5*).
 - c. Ambitions to increase strategic coordination between local authorities, the Combined Authority and community energy groups (set out in *Section 2*).
2. For each category, key barriers to realising the opportunities and ambitions were identified and ranked.
3. For each barrier, a series of enabling actions were identified to overcome it, framed within the context of Potential GMCA support (set out in *Section 2*).
4. Finally, best practice examples were highlighted to evidence these enabling actions where available.

8.2 Long list of enabling actions

This process has generated a comprehensive long list of potential enabling actions the GMCA can implement to overcome barriers and realise the sector's ambitions. In total 78 individual actions were identified and grouped under 31 enablers. Each enabler was then prioritised based on its impact (ie the number of barriers it helps overcome). They are categorised below by the type of GMCA support required.

Collaboration with the sector

Interventions in which GMCA can play a collaborative and supporting role:

1. Facilitating the creation of a support and coordination organisation for community energy in Greater Manchester.
2. Facilitating the creation of a single point of contact for the sector.
3. Developing match-making service connecting the public sector, private developers and community building/landowners.
4. Creating a centralised, replicable social enterprise support offer covering a range of community energy models.
5. Supporting “Fuelling Greater Manchester” networking events.
6. Supporting the development of a community building assessment service (including retrofit and on-site generation potential).

7. Establishing peer networking between organisations to support new project development.
8. Establishing a formal peer support programme between community energy groups.
9. Supporting the development of publicly available Greater Manchester community energy case studies.
10. Signposting community energy organisations to sources of advice and training.
11. Supporting the development of specialist business advice for community energy groups.

Direct delivery or directly commissioning/procuring services

Interventions the GMCA can commission, lead or directly deliver:

12. Commissioning a buildings solar PV potential mapping exercise and making the data publicly available to community energy groups.
13. Resourcing the creation of standardised legal templates for community energy groups (e.g., for PPAs, maintenance agreements and leases, including standard clauses to meet DfE and DHSC requirements).
14. Convening a community energy taskforce or working group to coordinate action and develop a strategic plan for the city-region.
15. Exploring innovation opportunities through public-commons joint venture partnerships to maximise the scale and benefits of community energy projects.

Financial

Economic interventions the GMCA can make:

16. Commissioning an options analysis into establishing a Greater Manchester Community Energy Fund grant to support feasibility, core, and start-up costs.
17. Entering into long term, public sector PPAs with community energy groups.
18. Exploring the feasibility for deploying sleeved PPAs via the GM Net Zero Accelerator.
19. Making capital investments and/or issuing loans to enable timely project development.

Policy

Policy commitments the GMCA can make or facilitate:

20. Making policy commitments to support the sector development and shared ownership approaches.
21. Responding positively to (and awaiting the outcome of) the DESNZ consultation on mandating shared ownership.
22. Liaising with Great British Energy regarding their pending Shared Ownership legal templates.
23. Integrating community energy targets and priorities into the RESP

Convening

Interventions the GMCA can support through its regional convening power:

24. Encouraging and supporting local authority officers to broker relationships between community energy groups and site owners/developers.
25. Encouraging harmonised Greater Manchester-wide planning guidance to facilitate community energy schemes
26. Encouraging local authority planning policies to prompt developers to explore shared ownership opportunities with the community energy sector
27. Establishing a code of conduct and/or standardised MoU setting out how the public sector will work with the community energy sector.
28. Encouraging other local authorities and public sector bodies to enter into long-term, PPAs with community energy groups.

Voice

Interventions that utilise communications channels available to the GMCA:

29. Demonstrating political support and advocacy for community energy as a viable model.
30. Running a Greater Manchester public awareness campaign for the community energy sector.

Political influence

Interventions GMCA can make through mayoral advocacy:

31. Securing public mayoral support for community energy initiatives.

8.3 Commentary of selected and grouped interventions

A selection of key enabling actions are set out below. In some instances where logical to do so, actions have been grouped together. In some cases it has been possible to estimate the cost of interventions and this is set out.

Collaboration

Provide seed funding and support to create a community energy coordination network for Greater Manchester.

The research has demonstrated how impactful a single point of contact or “one-stop shop” can be at catalysing the growth of the community energy sector in a city-region. The most relevant example is Community Energy London: a coordination organisation initiated by the CE sector, but which has grown significantly through collaboration with the Greater London Authority (GLA) and local councils. Such an organisation can play a vital awareness-raising, coordination and capacity-building role, serving as the focal point for investment and sectoral development.

The lesson from places like London and Bristol is that while these organisations require close municipal partnership, they are more enduring, responsive, and dynamic when they are owned and controlled by the CE sector itself - often in the form of federated, secondary support co-operatives. The key advantage for Greater Manchester is the existing core of community energy organisations with a track record of good governance and informal collaboration, which could easily form the basis of this secondary co-operative.

We recommend that the GMCA work with existing groups to enable the creation of a Greater Manchester community energy network coordination body. This body could act as a single contact point for the city-region, coordinating networking events, delivering a peer mentoring scheme, developing promotional campaigns, and taking responsibility for delivering several interventions proposed above. Crucially, it would be well-placed to support both new entrants and the growth of existing organisations.

Several comparable organisations already exist. Bristol Energy Network and Community Energy London both established themselves with a 'lite' business model, relying on direction from a voluntary board drawn from the sector and starting with part-time paid coordination staff.

A high level estimate suggests that first-year running costs for this type of organisation could range from £20,000 to £80,000, depending on how many interventions and services it seeks to deliver and its projected speed of growth.

Developing a matchmaking service and local authority officer support to broker relationships between community energy groups and site owners/developers

A common barrier across many of the profiled opportunities is the need to actively match community energy groups with developers and site owners from the public, private, and community sectors. Too often, public officers facing a challenge that a community energy model could solve are either unaware of the sector or do not know where to find these organisations. Conversely, new and emerging community energy groups are frequently unaware of opportunities in their area.

A service facilitating these connections should focus heavily on visibility and relationship building. If an online platform is utilised, it must be complemented by active forms of matchmaking, such as a resourced member of staff with a remit to build relationships and contacts. While local authority officers currently help fulfil this role, they face severe capacity constraints. A dedicated matchmaking service would therefore complement their work and compensate for these resource gaps.

Support the development of a centralised, replicable support social enterprise offer for community energy models

This research places a particular focus on enabling new entrants and groups that have limited time, resources, and capacity but possess access to an asset or

opportunity. Examples include a voluntary community centre manager who wants to address high energy bills via on-site renewables but lacks the technical expertise, or a highly motivated local group, with excellent community links but no project development expertise.

Both these use cases illustrate the clear rationale for a new Greater Manchester-based, social enterprise that can absorb the development risk for local projects. This enterprise would deliver technical services, broker access to feasibility funding and supply chains, and offer the practical guidance required to help voluntary organisations establish projects (such as rooftop solar).

While this service will generate local economic value, it is vital to avoid creating a competitor that undercuts existing community energy organisations. A federated model (potentially linked to the coordination body mentioned above) where new and existing groups form part of the governance structure effectively mitigates this risk. A comparable service already exists via the “Solar Powered Community Buildings” project being delivered by Northumberland Community Energy Ltd.⁵⁵

A feasibility study is required to develop this social enterprise service with estimated costs in the region of £20,000 to £40,000.

Financial

Entering into long term PPAs and exploring sleeved pool models

Direct power purchase agreements (PPAs) have enabled several community energy groups in Greater Manchester to develop viable business models, providing a reliable way to secure long-term income. The potential benefits of PPAs are already well recognised within the city-region, demonstrated by the GMCA’s ‘pathway’ TfGM tender⁵⁶ and Manchester City Council’s pioneering 15-year virtual PPA for a Lincolnshire solar farm. Future steps along this pathway should link directly to local community power, creating a ‘Greater Manchester Energy Model’ where the authority buys power directly from its own citizens.

To aggregate and purchase this local power, the GMCA should explore the ‘sleeved pool model’ developed by Bristol City Council (BCC) and City Leap.

While establishing this model likely incurs significant legal fees (exact costs for BCC are not public), BCC’s options appraisal identified a £5m (13%) cost saving over a conventional grid supply contract.⁵⁷ Crucially this saving enabled further significant investment in BCCs own renewable generation portfolio.

⁵⁵ Northumberland CAN. Solar Powered Community Buildings. [Link](#).

⁵⁶ Greater Manchester Combined Authority. (2024). TfGM Power Purchase Agreement (report). [Link](#).

⁵⁷ Bristol City Council. (2024). Committee Report: Electricity Suppliers 2025. [Link](#).

Commissioning an options analysis into establishing a city regional GM Community Energy Fund grant to support feasibility/core/start-up stage funding for the CE sector.

While local groups can currently bid into the Great British Energy Community Fund, competition is fierce, and the support offered under the fund is relatively constrained. A dedicated city-region fund would guarantee support for local organisations and could be specifically targeted to local priorities, including start-up and core funding needs.

Since the GLA instigated the first round of the London Community Energy Fund (LCEF), eight other local authorities have launched similar funds. This demonstrates the ‘market-making’ power a city-region possesses. In Bristol, for example, micro-grants have been developed to assist the early stage development of new entrants into the sector.

Funding sources and the capital values for these pots vary significantly. In its latest round the LCEF provided £60,000 for administration to Community Energy London (CEL) and a total fund of £300,000. To finance these grants, Wandsworth utilised the Community Infrastructure Levy (CIL), whilst the GLA channelled carbon offset funds from development plans, and Bristol’s Community Energy Fund is financed through Bristol City Leap.

We recommend the GMCA commissions an options analysis regarding the establishment, financing, and management of a GM CEF.

Direct delivery

Commissioning a building solar PV potential mapping exercise and making the data publicly available to community energy groups

A key barrier for the development of rooftop solar is the lack of mapping for public and community buildings. Our analysis shows there is significant potential for the community energy sector in Greater Manchester, but finding suitable sites remains a critical hurdle. Other cities such as London and Glasgow have successfully carried out mapping exercises; the GMCA should follow suit, mapping the solar potential of public and community buildings and making this data freely available to the local community energy sector.

This relies heavily on data availability. To support the development of CEL’s “Potential Map”, the GLA provided data from the London Solar Opportunity Map, London Heat Map and the London Building Stock Model. The GMCA would need to ensure comparable data is available to produce this resource effectively, which could potentially be integrated into the existing Mapping GM platform if appropriate.

Based on the costs associated with the development of the London Community Energy Potential map, this would require £12,000 for delivery over 8 months, with access to relevant GMCA datasets and an Ordnance Survey licence.⁵⁸

Resourcing the creation of standardised legal templates for community energy organisations

The research identified that legal costs associated with agreements and clauses present a major barrier to numerous opportunities. Providing standardised templates for PPAs, maintenance agreement, leases, and licence to operate agreements, along with standard clauses to meet DfE and DHSC requirements available, as well as guidance on other issues such as navigating procurement guidelines would offer significant benefits.

These templates could be made available centrally, via a coordination body or local authorities. Crucially, the respective public body site owners (local authority, health, schools etc) would need to recognise the status of the templates and have no concerns about using them.

While some concerns have been raised around the need for legal inspection of every document, templates do not negate project due diligence. Notably Great British Energy is adopting a similar ‘template agreement’ approach for shared ownership agreements.

Because many required template agreements already exist, making them available would require around £1,000-5,000 of work in association with an external legal firm.

Convening a community energy taskforce to coordinate action and develop a strategic plan

As there is currently no strategic coordination of the sector in Greater Manchester the GMCA should convene local community energy stakeholders (such as those engaged in this research) to form a dedicated taskforce. This group would support regional coordination, embed community energy into the city-region’s transition discourse, and develop an implementable plan to advance the sector in partnership with local authorities. Convening this taskforce as a regional priority will galvanise stakeholders to build the sector in partnership. It might be coordinated with dedicated GMCA staff resource or commissioned to a CE sectoral organisation.

Exploring innovation opportunities from public-commons partnerships As part of a commitment to innovation, the GMCA should work with the community energy sector to explore co-operative and co-ownership approaches for new renewables.

⁵⁸ The Greater London Authority provided Community Energy London with the London Solar Opportunity Map, London Heat Map and the London Building Stock Model.

Taking inspiration from public-commons partnerships elsewhere, this approach can retain wealth in the Greater Manchester economy and drive further benefits directly into local communities.

Specifically, the GMCA should explore how the work of Co-operative Network Infrastructure, Tameside Council and Anthony Collins Solicitors, who applied a 'thin model' co-operative to leverage superfast broadband investment, can be applied for public-common joint ventures delivering large-scale renewables and storage.

Policy

Making policy commitments to support the development of the community energy sector and shared ownership

The GMCA should incorporate a commitment to growing the community energy sector within the 5-Year Environment Plan. Furthermore, the GMCA should actively encourage developers to adopt shared ownership models and urge local authorities to make this a planning requirement. Concurrently, the authority should closely monitor DESNZ's progress towards mandated shared ownership, ensuring the local community energy sector is fully supported to take advantage of this.

Integrating community energy targets into the RESP

GMCA should leverage its involvement in the Regional Energy Strategic Plan (RESP) to advocate to NESO for the inclusion of community energy targets within the RESP's technical plans and governance structures.

This could be achieved by pushing for direct representation of the community energy sector on the RESP board. Additionally, the GMCA should work with Carbon Co-op and Regen to share this research with the North West RESP, exploring methods for implementation of community energy data in RESP methodology.

Convening

Harmonising planning guidance to facilitate community energy schemes and shared ownership

Navigating the planning system is frequently a costly and time-consuming barrier for community energy groups. Although the UK Government is implementing reforms to support the sector, prioritising community energy and shared ownership within local planning frameworks would create a highly favourable environment for the community energy sector in Greater Manchester.

For example, Cornwall achieved this by creating a Renewable Energy Supplementary Planning Document (SPD).⁵⁹ Similarly, to address its high concentration of listed buildings in the area (3,800), the Royal Borough of

⁵⁹ Forster, R. (2015). Cornwall Council becomes first in the UK to prioritise community owned renewable energy. Cities Today. [Link](#).

Kensington and Chelsea, introduced a listed building consent order to streamline solar panel installations on Grade II listed buildings.⁶⁰ In Greater Manchester, a similar order could unlock renewable generation across 2,952 Grade II listed buildings (subject to solar feasibility).

This harmonisation of planning policy should be driven through the GMCA's convening remit, working in close collaboration with the Greater Manchester planning coordination group and local local authorities.

8.4 Distribution Network Operator collaboration

In addition to collaboration between the community energy and municipal sectors, the role of the regional distribution network operator, in this case SP Electricity North West (SP ENW) is crucial in supporting the development of the sector. Following discussions with Social DSO Manager Katherine Horne and Energy Strategy and Policy Manager Rebecca Drakeford, a number of supporting DNO actions and policies are outlined in *Appendix 6*.

8.5 Framework for delivery

Prioritisation will be key to effectively deliver the recommendations outlined above. While the timelines provided are estimates, the framework demonstrates the logical sequence for action and how enabling interventions should be grouped. These interventions must be viewed holistically, and the goal should be to deliver the comprehensive package, as leaving single blockers unaddressed will continue to stunt the sector's development.

Timeline

Phase 1: Groundwork and quick wins (0–12 months)

Formalising collaboration

15. Convening a community energy taskforce/working group to coordinate action and develop a strategic regional plan.
16. Making GMCA policy commitments to support community energy sector development and shared ownership approaches.
17. Providing seed funding and support to create a community energy coordination network for Greater Manchester.
18. Integrating community energy targets and priorities into the Regional Energy Strategic Plan (RESP).
19. Developing immediate public-commons partnership opportunities

Building an evidence base and tools for the sector

⁶⁰ Royal Borough of Kensington and Chelsea. (2022). Listed building consent order for the installation of solar panels on Grade II listed buildings in the Royal Borough of Kensington and Chelsea. [Link](#).

20. Commissioning a building solar PV potential mapping exercise and making the data publicly available to community energy groups.
21. Exploring the feasibility of deploying sleeved pool PPAs in Greater Manchester.
22. Resourcing the creation of standardised legal templates for use by community energy organisations (e.g., for PPAs, maintenance agreements, and leases, including standard clauses to meet additional Department for Education (DfE) and Department of Health and Social Care (DHSC) requirements).

Phase 2: Building on the foundations and policy-dependent action around planning/shared ownership (12–24 months)

Further developing the support infrastructure

23. Commissioning an options analysis to establish a Greater Manchester Community Energy Fund to support feasibility, core, and start-up funding.
24. Supporting the development of a centralised, replicable social enterprise support offer for a range of community energy models.
25. Developing a matchmaking service and local authority officer support to broker relationships between community energy sector and site owners/developers (*the success of this recommendation will be aided by the solar PV mapping exercise*).

Unblocking planning barriers

26. Encouraging harmonised Greater Manchester-wide planning guidance to facilitate community energy schemes and encouraging local authority policies to prompt developers to explore shared ownership opportunities with the community energy sector.

Phase 3: Longer-term goals and priorities (24 months+)

27. Entering into long term, public sector PPAs with community energy groups.
28. Further exploring innovation opportunities from public-commons partnerships to maximise the scale and benefits of community energy projects.

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Appendices

Appendices which can be found as separate documents include:

- Appendix 2: The potential
- Appendix 3: Emerging policy and regulatory reform.
- Appendix 5: Opportunities, barriers, enablers, examples.

Appendix 1: Interview schedule

Sector	Organisation	Interview date
GM Community Energy	Middleton Community Energy	22/4/2025
GM Community Energy	Groundwork GM	24/4/2025
GM Community Energy	Solar for Schools CBS	24/4/2025
GM Community Energy	Community Owned Renewable Energy	06/05/25
GM Community Energy	Stockport Hydro	09/05/25
GM Community Energy	Greater Manchester Community Renewables	20/05/2025
GM Local Government	Rochdale Borough Council	6/5/2025
GM Local Government	Salford City Council	7/5/2025
GM Local Government	GMCA	9/5/2025
GM Local Government	Oldham Metropolitan Borough Council	9/5/2025
GM Local Government	LA Officers Focus Group	19/5/2025
GM Local Government	Tameside Council	21/7/2025
Outside GM CE	Greater Manchester Community-Led Housing	14/5/2025
Sectoral experts/support orgs	Energy 4 All	23/04/25
Sectoral experts/support orgs	North West Net Zero Hub 1	14/05/25
Sectoral experts/support orgs	Local Energy, Great British Energy	16/05/25
Sectoral experts/support orgs	North West Net Zero Hub 2	04/06/25

Appendix 4: Criteria for CE Capacity and Capability Assessment.

Category	Low	Medium	High
Knowledge and Skills (technical, regulatory etc.)	Limited understanding in some key areas.	Some knowledge but requires external support.	Strong technical expertise, able to provide guidance to others.
Organisational capacity	- Fully volunteer-run, no paid staff.	- Some paid staff but reliant on volunteers.	- Well-staffed with clear roles and responsibilities.
Governance*	- No formal structure or business model.	- Basic governance in place but needs strengthening.	- Robust governance and policies.
Finance and business development	Limited or no access to investment or financial models.	Some access to funding but lacks long-term sustainability.	- Secure financial backing, diverse income streams. - well-established business models
Project development	Focused on small-scale projects with limited scope.	Developing projects with moderate complexity.	Successfully delivering multi-technology, large-scale projects.
Connectedness	- Minimal engagement with peer networks or industry groups. - Little to no connection with other energy sector actors.	- Some networking but not actively leveraging relationships. - Some engagement with energy networks but not fully integrated or strategic - Some engagement and relationships with energy suppliers and networks but lacks a strategic approach.	- Strong peer mentoring and CE sector collaboration. - Strong integration with energy networks, active participation, and collaboration with key stakeholders. - Strong working relationship with energy suppliers and network operators
Community	Weak connection to the local community. Minimal local support or benefits derived.	Some community engagement but lacks a clear mandate or consistent economic benefits to the community.	Strong community mandate, clear economic benefits, and active local involvement in decision-making.
Growth **	Steady state - Organisation is managing existing generation assets with no current plans for expansion.	Open to new installations, no sites yet identified.	Sites identified and at some stage of feasibility work.

* Separation of original “Organisational capacity & governance” section using same criteria.

** The original ‘EDI’ section was replaced with ‘Growth’ due to an incomplete dataset on EDI criteria and a desire to better reflect growth potential.

Appendix 5: Future Plans, Case Studies and Example Models

Public Sector SPV/ESCO CE Partnership Model

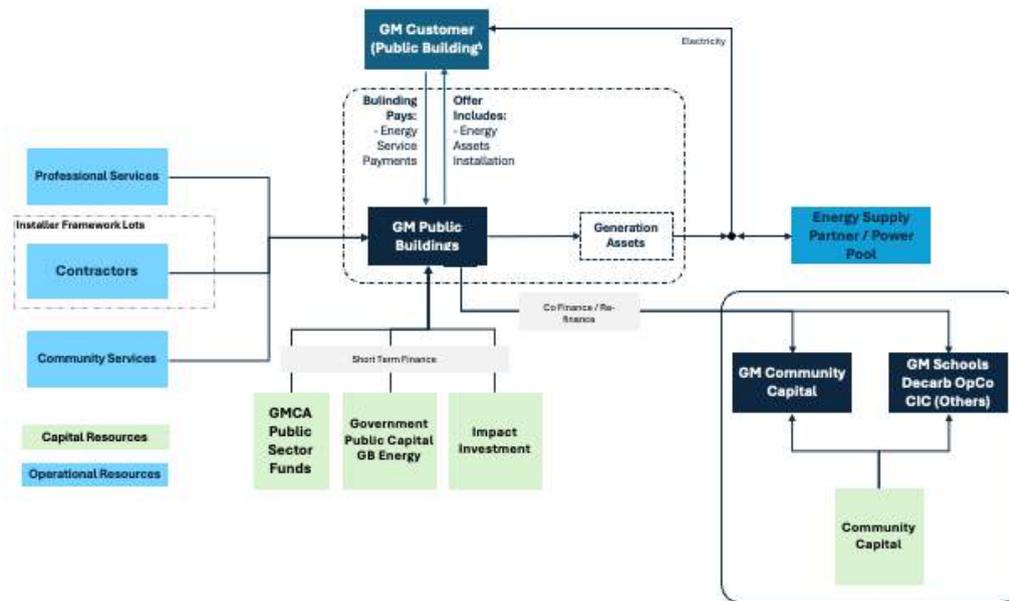
GMCA is working in partnership with community energy stakeholders and others to develop an innovative delivery model for the decarbonisation of schools that will create joint venture partnership opportunities with the community sector.

GMCA has been working with the schools sector for the past 2 years to develop a sustainable delivery vehicle for solar through the 'Powering Our Schools' programme. The first phase was a bulk procurement service with accompanying technical and contract support for schools, facilitated by the authority, for solar only. The second phase, currently under development, will be a complete solar plus finance proposition for schools and will extend provision to other interventions including lighting, heating and building controls.

This will be delivered through a new dedicated regional schools decarbonisation works procurement framework and powered by an investment fund comprising public and private funding. This investment vehicle will provide finance to school customers in the form of PPA/EaaS or loans.

The aim is to have this delivery vehicle driven through a dedicated Special Purpose Vehicle (SPV) governed by the GMCA and other stakeholders. The opportunity for the community sector in this model is to act as a funder and/or services provider. As a founder, CE could supply funding into the SPV (as shareholder or similar) or could buy-out / re-finance portions of the portfolio. As a services provider, the CE sector could focus on strengths in providing advocacy and awareness raising into the community.

GMCA Decarb Special Purpose Vehicle– Funding Structure Ideas



Greater Manchester Community Capital - Fundraising/Delivery Collaboration Model

Recognising the sector's strengths in local campaigning, engagement and activity and applications to local fundraising, GMCA and local partners are developing a project in collaboration with the North West Net Zero Hub to create a local, community finance raising entity.

A place-based fundraising entity for Greater Manchester, exclusively for community energy and social-impact share raising, coupled with local campaign insight and networks with the ability to guide and support groups in fundraising and hosting offers.

Many community energy groups are passionate about community participation and ownership and with strengths around advocacy, fundraising, engagement and benefit/impact distribution.

National finance and fundraising routes retain and re-circulate less financial value locally and tend away from the local organisation - local membership relationship that otherwise maximises community control, ownership, and benefit. Creating a local Community Capital entity enables hyper-local campaigning, priority for local investors and hands-on support for local community energy issuers - tapping into local capital.

Building community power: How the public sector can collaborate with community energy to achieve scale in Greater Manchester

The GM Community Capital entity is an example of a Public - Commons partnership, a GM/North West-only platform that can host local community energy/social-impact share offers (e.g. GMCR, Middleton), draw in larger institutional social investors and couple them with a local campaign support from the CE group issuers: eg., with borough-level events, geo-targeted social ads, local radio/billboards/public transport, employer payroll-saver pilots, and simple priority allocation for local investors. The partnership will further explore co-development opportunities to extend its function beyond finance and fundraising.

