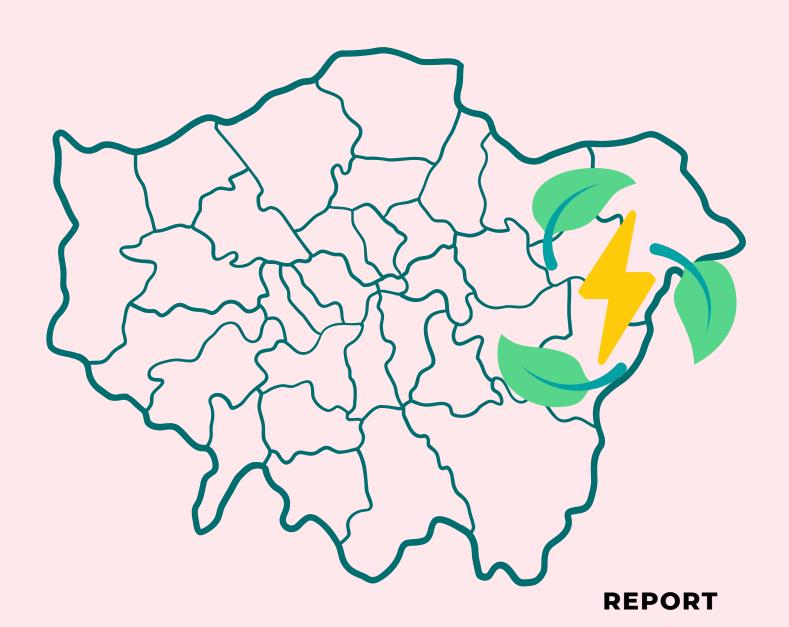


# Community Energy Now! Powering Up East London



**JULY 2025** 

# **Acknowledgements**

This report was produced by Syed Ahmed and Katherine Linsley of Community Energy London (CEL) with the support and contributions of Stokey Energy, Home Energy Action Lab (HEAL), Community Energy Newham and POWER.









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## Introduction

As part of London Climate Action Week 2025 (21 - 29 June) Community Energy London (CEL) partnered with its members to host four events across the city to present the significant work undertaken by groups to date. The events showcased the variety of projects delivered by groups to date, alongside their work with local authorities to develop new opportunities for the sector. Also highlighted was the huge potential for community-led action to decarbonise London's buildings, and the wider social and economic benefits community energy can bring.

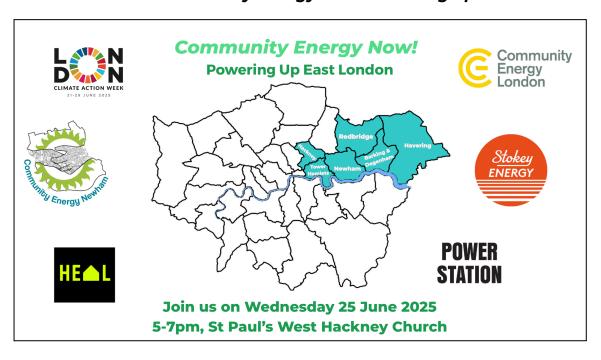
Following these events, **Community Energy Now! Powering up North/East/South and West London**, four reports have been prepared which set out for each region:

- Case studies of community energy action undertaken
- Analysis on the potential for future community energy projects
- Proposals to policy makers on how to boost growth in the deployment and scale of community energy.

This report focuses on the East London boroughs of:

- Barking and Dagenham
- Hackney
- Havering
- Newham
- Redbridge
- Tower Hamlets
- Waltham Forest

# LCAW EVENT: Community Energy Now! Powering up East London



# Speakers:

- Cllr Sarah Young, Cabinet Member for Climate
   Change, Environment and Transport, LB Hackney
- Jacob Heitland, Director of Climate Action, LB Newham
- Sue Willsher, Net Zero Carbon Programme Lead, Diocese of London
- Sal Wilson, Co-Director, HEAL
- Steve Epstein, Co-Director, Stokey Energy
- Syed Ahmed, CEO, Community Energy London
- Olawale Ajibola, Director, Community Energy Newham
- Daniel Edelstyn, POWER
- Tom Campbell, Director, Stokey Energy









## **Background**

The past few years have seen community energy activity grow at pace in London, with renewable energy and energy efficiency projects delivered by an increasing number of groups supporting the delivery of cleaner, more affordable energy in their neighbourhoods.

For example, across the city, community energy groups are helping schools, cultural venues, places of worship and other community and public buildings to generate their own green energy and reduce both their carbon footprint and running costs.

In 2023, CEL created a <u>Community Energy Potential Map for London</u>. Working with the Greater London Authority (GLA), who provided access to their extensive datasets and mapping tools in relation to building energy consumption and rooftop solar power potential, CEL combined data from the GLA's <u>London Solar Opportunity Map</u>, <u>London Heat Map</u> and the <u>London Building Stock Model</u> to:

- Match up this energy data to existing community buildings across the city
- Allow for this data to be explored by administrative areas (borough, Parliamentary constituency, and council ward) or for London as a whole.
- Estimate the potential of solar PV capacity that could be deployed across these community buildings.

Using this data CEL developed an innovative map that can support community energy groups to identify potential projects in their areas, as well as providing policy makers a tool to visually explore the potential of community energy in their area.

## In summary:

- We identified 20,849 community buildings in London of the type which may be of interest to community energy groups
- Up to 85% of these buildings have an Energy Performance Certificate (EPC) rating less than C. Hence, all of these buildings will need to be retrofitted if London is to achieve its Net Zero goal

- 11,508 of these community buildings could host solar PV projects, which amounts to a total capacity of 1,126MW. This level of electricity generation is equivalent to powering about 350,000 homes (around one-tenth of London homes) and would save over 200,000 tonnes of carbon annually.
- As of mid-2025, there are over 200 community energy projects in London, the majority of which are recorded on a separate <u>projects</u> map on CEL's website.

On the basis of our findings Community Energy London has set an <u>ambition</u> to have 1,000 community energy projects in place across the city by 2030 - an approximate fivefold increase over the current level of projects.

This can also be viewed as 30 projects in each of London's 33 boroughs by 2030.

"I am determined to unleash the power of community energy across the country. Through Great British Energy's Local Power Plan, this Government is supporting local authorities and community energy groups to help build local clean energy projects – from community-led onshore wind, to solar on rooftops and hydropower in rivers. The profits generated from these projects could then be reinvested into community projects or take money off people's bills."

Rt Hon Ed Miliband MP, Secretary of State, Department of Energy Security and Net Zero

<u>Power in Our Communities</u>, Labour Climate and Environment Forum (LCEF) x Co-operative Party, June 2025

# **Community Energy In London**

CEL was founded with the aim of facilitating collaboration among London-based groups to exchange experiences, resources, and knowledge, while also encouraging the formation of new groups and advocating for greater public sector support for community energy initiatives.

The past few years have seen community energy activity grow at pace in London with an increasing number of projects delivered by a growing number of groups and practitioners. The sector has been supported by the Mayor through the London Community Energy Fund (LCEF) alongside a number of boroughs who have established their own Community Energy Funds (CEFs).

Considerable work is now underway to help accelerate the deployment of projects including:

- Phase 2 of the Mayor's Community Energy Task Force which will bring together representatives from community energy groups, London boroughs, the finance and business sectors and other key institutions to unlock structural barriers to the sector's growth and identify routes to securing additional funding.
- Two projects by London Councils' Community Energy Working Group:
  - The development of a Community Energy Toolkit (LCCET) to help support the case for community energy to officers within local authorities and provide officers with a practical set of tools, resources and evidence that support their work on community energy.
  - A community energy mapping study, being undertaken by the Mayor's Zero Carbon Accelerator (ZCA) programme, will produce an individual report for every London council on the potential for community solar generation projects in their borough.
- Most importantly, the development of the Government's Local Power Plan, which "will work with local communities to empower people to generate their own energy, save money on their energy bills, and reinvest the savings where they are most needed" and is a key output of the Government's publicly owned company, GB Energy.

# The Potential For Community Energy In East London

For East London boroughs, CEL's Potential Map sets out the following opportunity in terms of the PV solar capacity identified across community buildings. These include sites such as community centres, educational institutions, leisure centres, museums, art galleries and libraries, theatres, concert halls & cinemas and places of worship.

East London Boroughs	Number of Community Buildings	Total Solar Capacity/kWp
Barking and Dagenham	238	27,649
Hackney	410	33,054
Havering	278	32,813
Newham	461	54,766
Redbridge	342	33,031
Tower Hamlets	521	42,392
Waltham Forest	266	30,448
Total:	2,516	254,153

Table 1

However, community energy extends far beyond just solar, with groups taking a holistic approach to decarbonising buildings. Community energy organisations are delivering cleaner and cheaper energy for South London in a wide variety of ways. CEL's members are working in partnership with local authorities, businesses and the third sector, whilst securing funding from grant-giving organisations and programmes such as the Energy Redress Scheme, and raising millions of pounds of investment through community share offers.

A few example case studies follow below.

## **CEL Member Case Studies**

# **Case Study 1: Community Energy Newham**

Powering Stratford Library with Community Solar

## Introduction

2024-25. Community Energy Newham (CEN), local solar а cooperative supported by Repowering London, launched one of its first community-owned solar energy projects at Stratford Library. The installation was part of a wider mission decarbonise to public buildings, promote energy justice, and



involve residents directly in Newham's energy future.

As one of the borough's most prominent and well-used public buildings, Stratford Library was selected not only for its solar potential but also for its visibility and symbolic value. This installation served as a pilot for the community-led energy model that CEN is now rolling out across Newham.

# **Project Objectives**

The core aim of the project was to generate clean, affordable energy directly at the point of use, reducing reliance on fossil fuels and easing pressure on council budgets. CEN also set out to demonstrate how local communities can own and govern their own energy resources, reinvesting benefits back into local initiatives and building community power.

In parallel, the project functioned as a platform for engagement—helping to increase public understanding of renewable energy, cooperative ownership models, and the broader climate agenda in Newham.

## **Key Project Stats**

- 📍 Location: Stratford Library, LB Newham
- 🔆 Solar PV capacity: 19.8 kWp
- 🗲 Annual energy generation: Approx. 16,000 kWh/year
- 💷 Estimated energy cost savings: £3,000+ per year
- Carbon savings: ~3.5 tonnes CO₂ annually
- 👬 Funded by: 90+ community investors
- 🏫 Ownership: Community Energy Newham (Community Benefit Society)

## **Outcomes and Benefits**

The Stratford Library installation is now delivering real, measurable benefits. All energy generated is consumed directly on-site by the library, ensuring that maximum value is retained locally. The library service



benefits from long-term cost savings, while carbon emissions are reduced in line with the borough's net-zero goals.

The project also helped CEN to grow its visibility as a credible community energy actor. It provided a tangible, public-facing example of what's possible when clean energy is locally owned and driven by community need—not corporate profit. The success of this project has inspired further installations on other libraries and schools across Newham.

# **Community Impact**

Beyond the environmental and financial benefits, the project has had significant community outcomes. Over £120,000 was raised through a local share offer, backed by Co-operatives UK match funding. Volunteers played a leading role in community engagement, from outreach to event facilitation.

The solar panels have also been used as a learning tool in school assemblies and youth workshops, turning Stratford Library into a live demonstration site of local climate action. These events have helped to raise awareness of renewable energy and promote hands-on sustainability education among young people.

#### **Success Factors**

This project succeeded thanks to strong collaboration between CEN, Repowering London, LB Newham, and the library's management team. The building's high visibility made it ideal for public engagement, and its



roof was well-suited for solar generation. Clear communication with stakeholders and the trusted track record of Repowering played key roles in delivering the project on time and with strong public support.

## What's Next

CEN is now building on the success of the Stratford Library installation to expand across the borough. Additional sites are already in progress, with more schools and community spaces in the pipeline. CEN continues to invite partnerships with building owners and community groups who share a vision of fair, clean energy for Newham.

https://www.repowering.org.uk/newham/

# **Case Study 2: Stokey Energy**

In 2024, St Paul's Church in West Hackney undertook a landmark renewable energy project, making it one of the greenest churches in Britain. In collaboration with local community energy group Stokey Energy and Hackney Light and Power — Hackney Council's dedicated team working to achieve zero-carbon in the borough — the church installed 104 solar panels (more than any other church in



London) and four 11kWp air source heat pumps on its roof. The system is supported by three 13.5kWh batteries, enabling the church to be completely off-grid for many months of the year. Stokey Energy worked closely with Alex Sheratt, a senior architect and member of the congregation, to ensure that planning was secured from both the local authority and the Diocese of London, while grants from the London Legacy Development Corporation and Hackney Light and Power helped make it possible.

This ambitious installation is expected to transform the church's energy



usage, radically reducing its annual utility bills of over £25,000. The project also served as a focal point for community engagement. It featured prominently during the church's 200th anniversary celebrations in the summer of 2024 and culminated in a ceremonial 'switching on' and carol service as part of the Christmas festivities.

Community Energy Now: Powering Up East London

Reverend Niall Weir, who championed the project from its outset and saw its completion just in time for his retirement, reflected on the success of the collaboration: "If we've learned one thing at St Paul's West over the last 20 years, it is quite simply that we underestimate what we can achieve when we work in partnership with others." The project's impact has reached beyond Hackney, gaining recognition across the Church of England and wider environmental networks. St Paul's now stands as a model of how faith groups and sustainability practitioners can work together to tackle climate change.

https://www.stokeyenergy.org/

## **Case Study 3: POWER**

While heat and energy prices continue to be high, there's an opportunity to rethink how these are produced and who owns the means to production. We are advocating that local communities should own and that every building should become a 'Power Station'. As a society, we need to radically rethink how heat and energy are produced and controlled.

We need to reimagine our entire fossil fuel infrastructure and we want our art and film production company to be at the heart of this - producing multiple works that drive cultural change and shift public imagination, discourse and action.

Art is often understood as something divorced from everyday life. The art we make and the artefacts that come from this provide a huge opportunity to create a supportive community for the work. We build a community united in the desire to get behind the production of art that makes change happen.

Millions want to participate in creating a just transition - and they will get behind projects that give them what they want. They need leadership and imagination - and that's what our work provides.

## **HOW WE STARTED**

Power Station is a scalable 'show and do' project building grassroots power whilst challenging those in power to act. Beginning in lockdown, the project has so far brought solar to 5 local schools and 16 houses on

Lynmouth Road, Walthamstow through a mixture of crowdfunding and partnership with Solar for Schools.

The inspiration for the project came from Ann Pettifor's book "The Case for the Green New Deal" and the phrase "Every Building a Power Station." Power Station is about taking control of our own energy future and investing in a decentralised network to bring down prices, improve our energy security, cut carbon and make us more resilient.

The idea of every viable building in Britain producing its own energy is a beautiful and infectious one that has underpinned this work. Importantly it has led us to a "street by street" vision for organising a transition. We have created a network of 50 streets across Britain that all want to do the same diverse communities in locations as far-reaching as Swansea, the coast of Northern Ireland, Glasgow and the South West.

Putting people and the planet above profit, we want every building, regardless of tenure, to get energy and heat from renewables, to get insulated and to get to own a part of this and to benefit from it.

We want to scale our operations and the first step towards this is to complete our feature documentary of the Power Station story and call to action for a Spring 2025 release. We aim for it to be seen by over a million people up and down the country in cinemas, village halls, churches and online.

About Optimistic Foundation CIC Ltd and Power Station film Our work is culture-led. It deals with both imagination infrastructure and renewable energy infrastructure.

https://power.film/

# **Case Study 4: Home Energy Action Lab (HEAL)**

Retrofit study for Shoreditch Town Hall

## **Background**

Shoreditch Town Hall is a registered charity and a leading independent cultural, live events and community space housed in one of the grandest former civic buildings in the capital. Comprising over 48,000 square feet across 70 individual rooms, the



Grade II listed Town Hall is the largest multi-artform venue in Hackney and more in use than at any other point in its recent history.

It partnered with HEAL in 2024 who were successful in round 3 of the Hackney Community Energy Fund in securing a feasibility grant to deliver a retrofit assessment and phased action plan for the building, setting out opportunities for energy, cost and carbon savings through retrofit. HEAL procured professional services from local architects Buckley Grey Yeoman and Max Fordham engineers in delivering the report.

## The Challenge



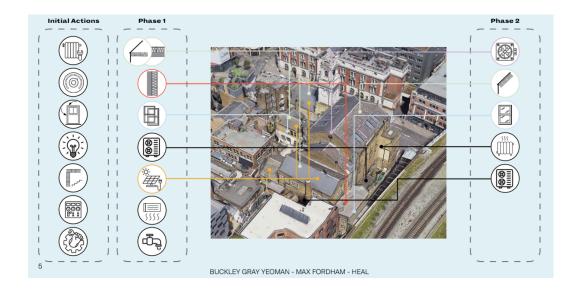
Reliance on an inefficient, costly, and carbon-intensive gas heating system and under powered plug-in portable electric heaters strains resources and undermine environmental targets.

Poorly insulated roofs, old singled glazed windows, air-gaps and unsealed doors cause significant heat loss and uncomfortable temperature extremes, while suboptimal lighting increases energy consumption and hampers productivity. These factors threaten cost-effectiveness, occupant comfort, and overall sustainability.

## The Solution

HEAL's report outlines a series of retrofit measures to decarbonise the building, based on detailed assessments of the current gas heating system, electrical consumption, building fabric, and occupant needs. By implementing strategic upgrades - such as improved insulation and glazing, operable ventilation solutions, solar PV and better lighting - carbon emissions can be reduced and energy bills minimised. The proposed measures have been phased, allowing them to either be completed sequentially as funding becomes available, or all at once.

https://uk.linkedin.com/company/home-energy-action-lab



# **Council Support For Community Energy**

In addition to the Mayor's London Community Energy Fund (LCEF), which has seven rounds of funding to date and supported around 200 projects across the city<sup>1</sup>, a number of boroughs in London have introduced specific funding programmes to support the growth of community energy activity in their area These funds are typically financed by carbon offset payments collected from developers through Section 106 (s106) legal agreements which are required to be paid under Council planning policy where applications fail to meet required carbon reduction targets set by councils' Local Plan. The relevant s106 agreements require that the contributions must be used to reduce carbon emissions. A short profile of each of these is set out below.

# **Hackney Community Energy Fund**

The Hackney Community Energy Fund (HCEF) supports public institutions and not-for-profit organisations based in Hackney, such as schools, faith groups and charities, to partner with community energy groups to improve the energy efficiency of public buildings.

The HCEF has awarded nearly £1 million in grants so far. This is one of the largest investments any council in the UK has made to community energy.

- Projects awarded in round 1 (2022) have all been successfully completed.
- Projects awarded in round 2 (2023) are due for completion by the end of 2024.
- Projects awarded in round 3 (2024) are being commissioned and are due for completion by the end of March 2025.
- Round 4 of our Community Energy Fund will open in summer 2025.

They will take formal expressions of interest in July. Formal applications will open in September.

<sup>&</sup>lt;sup>1</sup> See -

https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/net-zero-energy/london-community-energy-fund

Further information at:

https://hackney.gov.uk/community-energy-fund

## **Newham Council**

Newham Council has partnered with Repowering London to co-create renewable energy projects. The first solar panel installation was launched at East Ham Library in October 2023, followed by Beckton Globe and Stratford Library. The profits will be re-invested into further projects in Newham.

The collaboration has brought together local volunteers to form Community Energy Newham, with residents becoming the key stakeholders, investors, and decision-makers through regular workshops and educational activities. This community-owned solar energy will help reduce energy costs and carbon emissions, whilst promoting community action for climate change and strengthening social connections.

Community Energy Newham launched their first Community Share Offer which is now open, and everyone is invited to help bring a cleaner and brighter future to Newham. Their goal is to raise money to bring community owned solar panels to Newham's public buildings to cut the borough's carbon emissions and raise money generated to fund community initiatives.

Further information at:

https://www.newham.gov.uk/climate-action-newham/our-climate-action-strategy/2

# **Why Support Community Energy?**

Many community energy groups' first projects involved the installation of solar PV on rooftops, responding at the time to the Government's Feed in Tariff (FiT) incentive. The FiT scheme closed to new applicants in 2019, and over time, as groups delivered more projects and increased their knowledge around different energy solutions, they have diversified their skills in areas such as energy efficiency advice, building retrofit, LED installations, heat pumps and fuel poverty alleviation projects.

Groups continue to innovate and deliver projects which:

- Reduce greenhouse gas emissions
- Re-connect people with how energy is generated and consumed supporting wider behaviour change
- Lowering energy bills and helping support programmes to help tackle fuel poverty
- Return benefits to the local economy

Community energy groups can support local organisations - including councils - by:

- Providing project development support to helping identify carbon reduction solutions
- Host energy and climate change advice and training workshops for residents
- Secure funding through routes not always open to local authorities (e.g National Lottery Climate Action Fund, Ofgem Redress Funding, etc)
- Raise finance through issuing community share offers
- Supporting local businesses involved in the building and retrofit sector
- Develop and install renewable and energy efficiency projects
- Inspiring communities and maintaining enthusiasm around climate and energy issues

# **Routes To Support The Growth Of Community Energy**

Councils can support the growth of community energy activity in their area - and help accelerate the deployment of projects via a number of routes. These could include:

- Setting out clear commitments within council climate change action plans to develop local community energy activities exploring options such as providing start up support to community energy groups, shared staffing, access to councils skills
- 2. Collaborate with groups to identify site opportunities for potential projects, including on council assets; connecting community energy groups with potential site owners/ leaseholders/ occupiers; leveraging the Council's contacts, standing and endorsement
- Examining the potential for utilising carbon offset funds, or Neighbourhood Community Infrastructure Levy (NCIL) (as LB Wandsworth did <u>earlier</u> this year) to accelerate the deployment of local community energy projects (also see CEL's '<u>Setting up a Local</u> <u>Authority Community Energy Fund</u>' guidance document for further details)
- 4. Developing partnerships with community energy groups in any funding applications the council may be applying around retrofit, such as Government Warm Homes Plan programmes
- 5. Promoting and supporting community energy group projects including share offers to the wider community and introductions to local businesses
- 6. Develop documentation and processes to support community energy project developments such as leases, licences and grant claims across departments including Procurement, Housing, Property and Legal
- 7. Providing spaces for community energy groups to support local capacity-raising opportunities and workshops for residents on energy issues.

## Conclusion

Community energy is at a pivotal moment with increasing levels of interest from communities to businesses to policy makers wanting to support the deployment of projects. However, groups remain constrained by a lack of resources, access to development sites, and the absence of a policy framework for the sector. Forthcoming outputs by the Mayor, and London Councils, should help, but the Government needs to set out their ambition for community energy in their Local Power Plan as soon as possible.