



HACKNEY'S 1MW RESIDENTIAL SOLAR PV PILOT

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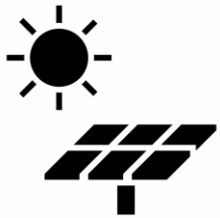
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INTRODUCTION to HACKNEY LIGHT AND POWER

Hackney Light and Power (HLP) is Hackney Council's clean energy services arm, dedicated to installing renewable energy and enhancing energy efficiency.

The HLP brand has been developed and operates as an in-house service.



KEY INITIATIVES of HLP

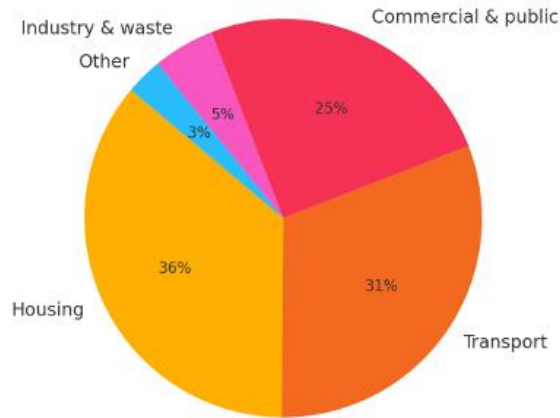


- Solar Power on Council-Owned Roofs: Installing solar panels to generate clean energy through two programmes of work:
 - Residential Solar PV Pilot
 - Corporate Buildings Solar PV
- District Heat Networks Expansion: Developing sustainable heating solutions.
- Community Energy Fund: Supporting local organisations in energy projects.
- Green Homes Programme: Providing grants for energy efficiency improvements in private homes.
- Electric Vehicle Charging Points: Expanding EV infrastructure with discounted tariffs for residents.
- Energy Advice Service: Targeted to vulnerable residents with drop-in sessions

Background



- Initiative to install **1 MW solar PV** on council-owned residential buildings - Between 500-600 individual properties.
- Installations meet Hackney's Climate Action Plan Commitments - 1MW a year from 2024/25 FY.



Background



- An investable business case was carried out - funded by the Local Energy Accelerator - GLA (£80k)
- Objective: A pilot scalable solution for Hackney
- Independent market assessment carried out
- **Microgrid Approach** - Commercially investable returns & on-site electricity utilisation.



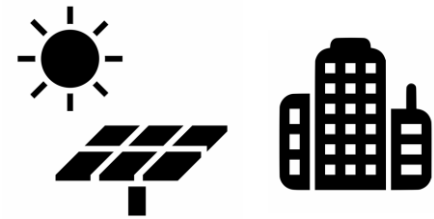
Why conventional solar fell short

- The split-incentive problem and service charges
- Landlord PV exports at wholesale price and powers communal areas – low revenue
- Tenants gain no direct savings
- Payback > 25 years – not viable for HRA
- ‘Free-solar’ offers give savings but no return to Council
- Microgrid aligns incentives: tenants save, Council repays capex



Emergent Energy microgrid model

- Private network keeps power on the estate
- Opt-in tariff \approx 15 % below SVT; residents can leave anytime
- Surplus powers lifts & lighting/export
- Grows the local renewable infrastructure



WIDER BENEFITS



Significant carbon emissions reduction

Sell solar electricity at retail prices

Generate solar panel revenue

**Electricity bill reduction for residents & the
HRA**

**Own the assets and grow the model through
Hackney Light and Power**

Local green jobs and apprenticeships



Building the business case

- £80k GLA grant funded feasibility & business case
- £1.96 m budget approved Jan 2024 for the pilot
- Funding mix:
 - Carbon Offset Fund
 - £600 k community bond via Abundance
 - Council capital



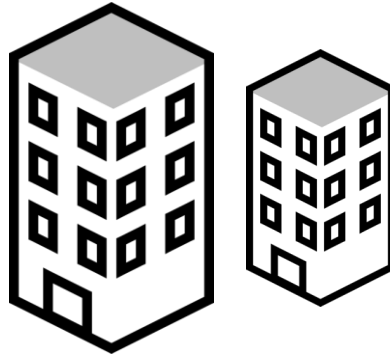
Commercial structure

- Works contract: Carbon-3 installs 2 000 panels on 28 blocks
- Concession: Emergent operates 7 + 3 yrs; Council owns assets
- Contracts drafted with Bevan Brittan to safeguard residents



Resident engagement – essential to success

- Estate workshops (evenings & weekends)
- Emergent leads engagement & carries sign-up risk
- Council oversight keeps residents central





Installation headlines

- 1 MWp across Frampton Park, Whiston & Wren's Park estates
- Ballasted frames on parapet roofs – scaffold saving \approx 20 %
- Up to 40 % of demand; avoids 180 t CO₂ each year







Social value & skills

- Apprenticeships and accredited training
- Hackney Living Wage clause keeps spend local
- Engagement co-designed with tenant groups and local energy champions





Early lessons

- Revenue stream repays installation cost within around 12 years
- Parapet archetype enables initial replication to scale up
- Robust legal & cross-department governance essential





What's next

- Funding: bids to GB Energy & other net-zero pots
- Phase 2: legacy PV, roof refurb & regeneration handovers
- Battery storage to maximise self-consumption
- Share learnings for wider rollout



Questions

Thank you

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hackney.gov.uk/HLP-solar