

Energy Local Roupell Park

Energy Club model offers a glimpse of a fairer energy future



At the cutting edge of low-carbon innovation

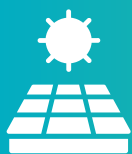
If you were walking past Roupell Park Estate in South London, you probably would not expect it to be at the forefront of low carbon innovation. Sitting just a short distance from the busy South Circular road in Brixton, the estate is made up of a cluster of low- to medium-rise flats built in the 1950s and owned by Lambeth Council. In 2013, a local community group set up a co-op to install solar panels on a number of the blocks, with the support of Repowering London.

The panels have been operating successfully since then, supplying electricity to the communal areas of the buildings, such as the lifts and lighting, and exporting any surplus to the public distribution network. The profits from the scheme are used to repay members of the co-op and create a community fund. The fund has supported a range of local initiatives such as out-of-school activities and free energy-saving advice sessions for residents.

Next step: Piloting a smart partnership

Six years later, a partnership between BioRegional, Energy Local CIC, Repowering London, Connected Response and Octopus Energy took up the challenge of using new smart technologies to enhance the existing scheme by allowing residents of the estate to benefit directly from the output of the solar panels.

ELRP in brief



Provides members with solar electricity priced at 6p/kWh, compared to 35p/kWh for grid electricity



Participants saved an average of £37 (£25) during the Phase 1 trial. This could mean savings of £97 (18%) per year



Has the potential to lower grid electricity demand by 27% per year for member households



Participants provided positive feedback to our Community Champion on the savings they received



More than 500 residents were contacted, and 18 installations completed



Demonstrates a viable business case model for the communities and tech we work with



Energy Local
Roupell Park



Unlocking urban solar potential

The aim of this next phase was to bring the systems installed on the flats into line with most solar photovoltaic installations on street-level properties, where households receive a reduction in their electricity bill whenever their consumption coincides with solar generation.

If successful, this model would help unlock new solar installations in urban communities across the UK and at the same time reduce fuel poverty by pricing the 'local' electricity at a discount in relation to standard electricity tariffs. Over time, the model could further support the transition to a low-carbon energy system by encouraging households to move some of their electricity usage to times when local renewable electricity is available. For example, this could mean running a washing machine around midday when solar energy is usually at its peak.

During the trial, an average of 40% of participants' total electricity usage was matched with the local solar generation on a half-hourly basis. Extrapolated to a full year, this would translate to 27% of demand due to the lower level of solar generation in winter.



As of July 2022, Energy Local Roupell Park has begun ongoing operations, with 16 founding members already signed up. Households decide together how to price the electricity and are in charge of their energy choices. Currently, solar electricity is priced at 6p/kWh, compared to the 35p/kWh cost for grid electricity.

With the business model proven, a second site operated by Repowering London has been identified as the next step in the wider rollout. In that next project, battery storage will also be incorporated.



ELRP: What it has achieved so far

- Proved the viability of the Energy Local model using solar generation
- Established a methodology for de-risking participation in Energy Local for potentially vulnerable households
- Successfully engaged households that had low levels of engagement and trust in the energy system
- Provided financial benefits to the groups of residents
- Incorporated a new Community Benefit Society that will operate ELRP
- Agreed to a 12-month tariff framework with Octopus Energy for ELRP members

"Energy Local Roupell Park is structured so that the participants decide through a democratic vote alongside the generator what tariffs to set for the electricity they use from the solar panels. Having actual decision-making power at a local level ... is not really part of the model at the moment. Its purpose is to benefit its members instead of someone else. The vision is that if you live in an estate like Roupell Park you are able to afford your energy needs while supporting the transition to a low-carbon economy."

– Felix Wight, Interim CEO and Technology Director, Repowering London

