



Annual Report 2020

Generating renewable energy

Up to the end of December 2020, the 65.34 kWp Vauxhall Energy solar array has generated a total of 25350 kWh of electricity (31,199 kWh, 2019), enough to power 10 average UK homes for a year. This energy generation resulted in saving 6 tonnes of CO₂ emissions¹ during the year. These figures are 57% below our projections for the year due to technical issues that were raised last year and explained below. Though the issues were finally resolved it took until July 2020 to complete and hence had a negative impact on the generation and income for the coop for a second year.

As a reminder of the issues, the VE solar installation completed in Dec 2018, and the remote monitoring system went live Mar 2019. Analysis by Repowering identified that the system was not performing to specification. We raised this with our installer, Engie and while multiple site visits were undertaken by their contractor the fault was not immediately identified. A software update provided by the inverter manufacturer was applied in December 2019 but this did not fully rectify the problem. In February 2020 Engie appointed a new contractor to investigate and following their own site visit they recommended replacement of the faulty inverters, which Engie agreed to. Works were delayed during lockdown and took place in July 2020.

As we have a 2 year performance contract with Engie to ensure the system performance meets the agreed standard as specified in the tender, Engie have honoured their commitment and invested the resources to resolve the issues, at no cost to Vauxhall Energy. However, the protracted process in identifying the faults over a period of 18 months resulted in a significant impact on the generation output (47% reduction in 2019 and 57% reduction in 2020). Even though the inverters were replaced in July 2020, the performance deteriorated severely in the first 6 months of 2020, resulting in lower overall output in 2020 compared to 2019. Over the last 2 years of operations the estimated loss due to reduced FIT, export and PPA income is £4,000. The Repowering team have had positive discussions with Engie to negotiate compensation for this loss of income.

We are closely monitoring the system performance since the installation of the new equipment to ensure these are in line with the contracted yield and our forecasts.

Financial accounts and shareholder payments

The financial accounts which accompany this report show that:

- Vauxhall Energy received an income of £1829 for the electricity generated by the array via the government's feed-in tariff and deemed export tariff.
- Income from the direct sale of electricity to Lambeth Council is £1,707.
- The total income for the year was £3,535.

¹ To calculate the tonnes of CO₂ saved from the electricity generated we have used Defra's carbon factors published in 2020. As a result, the carbon savings from the projects has reduced compared to previous year as the UK electricity fuel mix is using less coal generation and more renewable electricity generation.

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020>



- The operating costs for the year is £587 that is lower than expected. We have a maintenance contract with Repowering for £1,000 per annum that includes maintaining the asset alongside shareholder administration and reporting. To support Vauxhall Energy, Repowering will invoice for this service only if the loss of income is recovered through our contractors.

The technical issues highlighted in the section above has resulted in Vauxhall Energy receiving 60% of its projected income resulting in an overall loss of £971 for the year. However, the technical issues are resolved and we are confident that we will be able to recover the loss of income (estimated £4,000).

In reviewing our performance data and income we noted that we were under paid for our generation income in 2019 and are following up with Good Energy to clarify the data and payment. Moving forward the finances should be in line with our projections.

The Directors propose

- that an interest rate of 3% (£1,513) is paid on the share capital of £50,441
- £100 is set aside for the Community Fund
- This year no capital repayments will be made due to the loss made in the year and cash flow constraints.

For the year, £306 has been donated to the Community Fund by shareholders who have waived their 2020 interest payments to benefit the Community. At the end of the year, the Community Fund stands at £789. The Directors propose that the coop builds a minimum community fund of £1,500 before distributing/ spending on project activities.

Our partner Repowering London

Vauxhall Energy is proud to be part of the Repowering family of energy co-ops. In 2020 the Repowering co-ops have collectively:

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- Installed 200 kWp of solar generating capacity that includes 62 kWp on Elmgreen School as part of Lambeth Community Solar and 138kWp on the Westway Sports Centre as part of North Kensington Community Energy. The Westway Sports Centre represents our largest installation to date.
- Saved 144 tones of CO₂ from being emitted in the atmosphere
- The NKCE share offer raise for the Westway Sports Centre has taken our cumulative fundraising total to £706,000
- Provided employment to 2 locally rooted community champions in Lambeth
- Supported an empowered network of 45 volunteers and 677 investor members
- Engaged 100 children, 176 young people through workshops and assemblies
- Supported 32 residents through direct one to one energy advice saving £4,242 on their electricity bills
- £5,000 of community funds were distributed to local groups to provide essential supplies of food and fuel vouchers to support residents through the pandemic
- Successfully installed a battery at Elmore House, Brixton Energy Solar 1. It is the first 'communal' battery to be installed in a block of flats in the UK, and the first where stored solar energy will be allocated on a virtual basis to residents



This work is only possible with your support. Thank you for investing in our vision of community energy, and for being part of the change.

Any questions?

If you have any questions about this report and the accompanying accounts, please email info@repowering.org.uk .

Alison Freeman
Elizabeth Cox
Carla Tosta

Directors, Vauxhall Energy Limited