



North Kensington Community Energy

Annual Report 2020

During 2020, North Kensington Community Energy (NKCE) successfully delivered against its objectives of: generating renewable energy, engaging with the local community, becoming an exemplar for green projects in London.

1. Generating renewable energy

During 2020, NKCE generated renewable electricity from phase 1 sites (Avondale Park Primary School, Thomas Jones Primary School and the Dalgarno Community Centre) throughout the year, and from the phase 2 site (Westway Sports and Fitness Centre) for the last three months of the year. NKCE generated 81,595.149 kWh of electricity in 2020, enough to power 33 average London homes for 1 year. This generation resulted in 19 tonnes avoided CO₂ emissions¹ during the year.

The Covid-19 pandemic has impacted all of the buildings that NKCE have installed solar assets on. The pandemic has seen the sites change their operating patterns, including having to close for large portions of the year. These closures have affected the amount of NKCE generated electricity each site has consumed, which has had a knock-on effect to the coop's finances. On-site electricity consumption is a large part of NKCE's income - the on-site sale price for electricity is roughly 3x times the amount NKCE receives for exporting electricity to the grid.

Below is an outline of the performance for each of the NKCE solar arrays:

Phase 1 - Avondale Park Primary School – 13.86kWp generating capacity:

- The yield (actual amount of electricity generated) for the solar panels is higher than forecast at 961kWh/kW/year
- On-site usage of solar electricity has remained high for the school at ~85%. The onsite usage has remained high during Covid because of the small size of the solar array, meaning there is less electricity generated to be used.
- The grid purchase electricity tariff is higher than forecast @ 13.17p/kWh. NKCE sell electricity to the school at a 5% discount

Phase 1- Dalgarno Community Centre – 42.66kWp generating capacity:

- The yield for the solar panels is higher than forecast at 965 kWh/kW/year
- On-site usage of solar electricity is much lower than forecast. 2020 saw an average of 35% on-site usage, in comparison to 71% forecast

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 grid purchase electricity tariff is higher than forecast @ 15.85p/kWh. NKCE sell electricity to the school at a 5% discount
- Repowering London is exploring ways to generate income from the solar electricity which is not being used on site. This includes the installation of an export meter to sell electricity to the local grid and investigating the feasibility of creating an energy club to supply local residents with the excess power

Phase 1 - Thomas Jones Primary School – 29.75kWp generating capacity:

- The yield for the solar panels has been lower than forecast at 728 kWh/kW/year. After multiple investigations this has been due to animal damage to the cabling. The damage has been repaired and the yield for 2021 is now forecast at 900kWh/kW/year.
- On-site usage of the solar electricity over 2020 has risen from 43% to 60%. This is lower than the 75% on-site usage pre-lockdown. If on-site usage does not increase over 2021 Repowering London will investigate the installation of an export meter on behalf of NKCE
- The grid purchase electricity tariff is higher than forecast @ 13.17p/kWh. NKCE sell electricity to the school at a 5% discount

Phase 2 - Westway Sports and Fitness Centre – 138kWp generating capacity:

- The solar array initially suffered from installation errors that led to underperformance of the solar panels. These have been resolved and the forecast yield for 2021 is 940kWh/kw/year
- During the lockdown period on-site usage has been much lower than forecast at 60%. Since gyms reopened in April 2021 on-site usage is 85%, which is in line with our forecast for the solar array.
- The grid purchase electricity tariff is higher than forecast @ 13.17p/kWh. NKCE sell electricity to the Sports Centre at a 10% discount
- Due to the size of the solar array, an export meter has already been installed. The meter is working correctly, and excess electricity is being sold to Octopus Energy

2. Engaging with the local community

At the beginning of the year in February, we organised at Bay20 our first Greener Living Day. The aim of this educational and eco-positive event was to provide North Kensington residents with tools for a greener living through knowledge, connections, and inspiration. We invited local sustainability groups to talk about their work and offered a wide range of activities and discussions. We had a fantastic turnout (about 100 attendees), a diverse audience with many parents coming with their children, great participation and enthusiasm for the activities and an [amazing feedback](#) from attendees.

The COVID-19 crisis hit straight after and consequently this was our only in-person engagement event in 2020. As we moved online, we organised bi-weekly volunteer meetings to focus on our fundraising campaign for the Westway Sports Centre project. It was wonderful to see the volunteer group growing significantly, with 6 new volunteers joining in. Together we developed an all-online fundraising strategy. We reached out to various community organisations, talked on a local radio, made a film, wrote in blogs and newspapers, increased our social media presence, designed flyers and posters, and organised online events.

We closed our community share offer after three months and raised £87,000 from the community. We were awarded match-funding by Power to Change, which helped us reach our target of £103,000.

Our percentage of local investors has increased from 32 to 40%, and we have grown our membership from 144 to 222 investor members.

3. Becoming an exemplar for green projects in London

In March, NKCE won the [Inspirational community project award](#) from the Climate Coalition. Across the year and during our share offer, we have been featured in various blogs and reports including:

- A [blog post in Climate Four](#), written by our volunteer Melisa
- A [blog post for the Civil Service Environment Network](#), written by our volunteer Mark
- A [blog post in Carbon Copy](#), written by our volunteer Melisa
- A [blog post for Co-ops UK](#), written by Eva from Repowering

NKCE has also been featured in the report from Co-operatives UK, [Understanding a maturing community shares market](#).

Our volunteers spread the word about our work on various platforms, such as a webinar with Carbon Copy and talk on London Hott Radio.

4. Financial accounts and shareholder payments

The financial accounts which accompany this report show that:

- NKCE received an income of £4,087 for the electricity generated by the array via the government's feed-in tariff and deemed export tariff.
- Income from the sale of electricity to the Dalgarno Centre, Thomas Jones and Avondale School is £2,281. The income is lower than we forecasted due to onsite usage being lower than expected as explained in section 1. We also issued a credit note to Thomas Jones for an invoice charged in 2019 due to the meter issues that were caused by the contractors, Ecolution at the time of installation. We are currently in discussions with Ecolution about the recovery of this loss of income.
- The total income for the year is £6,368 that is lower than 2019 (£8,028) and our projected income for the year £13,964. The reduced income is largely due to the reduced sale of electricity income.

Our expenses for the year are

- A total £15K development fees was built into our share offer for the completion of the technical and legal due diligence and community share offer raise for the Westway Sports Centre. During 2020 £10,000 was paid to Repowering as part of this cost and a further £5,000 will be paid in 2021 on completion of the share offer. While these costs have negatively impacted our accounts for the year, these are one off costs and have been provided for in our fundraising total for Westway. This does not affect NKCE's cash flow.
- Operating costs of £1,837 includes provisions set aside for inverter replacements for the Phase 1 sites only. As the Westway site solar panels were installed towards the end of the year we have not made provisions for inverter replacements in 2020 but will do so from 2021 onwards.
- The management fees of £3,029 includes Repowering's service to maintain the assets, manage and administer the coop.

- The value of the solar PV arrays is depreciated over the 20-year life of the project. During 2020 we have included pro rata value for the Westway solar PV array for the 3 months of operation only.

On reviewing the financial performance, the Directors propose

- that an interest rate of 3% (£2,366) is paid on the share capital of £78,859
- £150 is set aside for the Community Fund
- £4,097 Members share capital is to be repaid for the year

During the year 2020, NKCE has made a loss of £16,000 due to factors explained above. However, NKCE's cash flow is healthy and the system performance is strong. We expect the financial position to be closer to our forecasts for 2021.

For the year £312 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 £809.

5. Our partner Repowering London

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

- 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 Sport 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.

6. Any questions?

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

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