North Kensington Community Energy



Community-owned solar panels on the Westway Sports Centre

Business Plan

This business plan has been prepared by Repowering London and reviewed by the NKCE Directors and volunteers.

Our track record

Origins and history

In 2015, the RBKC Climate Change Team initiated a community engagement exercise to assess the support and appetite for a community energy scheme in the north of the borough, with satisfactory results. Following intensive engagement with the community through events, meetings and word of mouth, local leaders, activities, and volunteers came forward to establish the Borough's first energy coop North Kensington Community Energy (NKCE). The RBKC Climate Change team worked with Repowering London and NKCE volunteers to identify sites and local schools were approached. In 2017, Repowering London secured funding from the Mayor's London Community Energy Fund (LCEF) to assess the viability of these sites and shortlisted three of them. In November 2018, NKCE launched a community share offer to install 86 kW of solar panels across three sites: Avondale Park & St Anne's Federation of schools, the Dalgarno Trust, Thomas Jones Primary school.

To date we have 144 investor members and 4 non-investor members.

Share capital

NKCE has already run one fundraising campaign which has raised £83,692 from 144 investors, enabling us to install 86kW of solar panels on the three sites mentioned above. 30% of the capital has been provided by 4 investors, investing £5,000 or more. 35% of the capital came from 22 investors providing between £1,000 and £5,000. The remaining 35% came from 118 investors.

Member share capital	Year 2019
Opening balance of member share capital	0
New share capital invested during year	81931
Share capital withdrawn during year	0
Closing balance of member share capital	81931

Membership

Membership levels	Year 2019
Number of members at the beginning of year	144
Number of new members joining	4
Number of members leaving	0
Number of members at the end of the year	148

Community benefit performance

Our sites benefit from a **long-term secure renewable energy supply**, at a discounted rate (indexed on their bills). With our first project, the sites will make joint savings of £6,931 thanks to a discounted rate of 5%. With this second project, the Westway Sports Centre will save £16,854 over its lifetime, thanks to a discounted rate of 10% (the financial model allowed for a higher discount rate as they are a larger site with high energy demand).

With the profits from our projects, we repay our investors with interest and create a **Community Fund**. This fund is spent to benefit the local community, following the priorities outlined in the section "Our long-term goals". The projected Community Fund from our two projects is £75,000 over their lifetimes.

Our projects **strengthen and empower the local community**. For our members and volunteers, we create an opportunity to gain new skills and connect with others concerned wanting to create community value. For the community of RBKC as a whole, we show local leadership on climate change, bringing together individuals and groups and creating locally based solutions.

Our projects so far save altogether 46 tonnes of carbon every year and will **save 914 tonnes of carbon emissions over their lifetime**.

Financial performance

NKCE's financial record is only one year old and we have only held one share offer so far. Our first financial year ended on 31st December 2019. Our first installation is operational and generating income. We will be paying a 2% interest to our members for 2019 (£1,639 in total), in line with the timetable set out during our first share offer. We will be setting aside £100 to the Community Fund. The detailed tables are in section *Finance summaries*.

The society and its people

Community

The NKCE community is made of:

- Residents of the Royal Borough of Kensington and Chelsea, with a particular focus on North Kensington
- Our investor members, whose majority are Londoners interested in community energy and familiar to Repowering's work.
- Local groups such as Extinction Rebellion, The Westway Trust and the Dalgarno Trust
- Our team of Directors and volunteers

More details to be found in section *Our community* of our Share offer document.

Rules

NKCE was registered with the Financial Conduct Authority. We're using Co-op UK Community Benefit Society Model Rules with the following specifications:

- The Board of Directors is elected
- At the first Annual General Meeting, all Directors shall stand down. At every subsequent AGM, one-third of the elected Directors, or if their number is not a multiple of three then the number nearest to one-third, shall retire from office
- The Society has an asset lock
- Members hold more than one share
- A quorum (minimum of members present at an AGM) shall be 3 Members or 5% of the membership, whichever is the greater

Structure and governance

We are supported by Repowering London, a Community Benefit Society specialising in co-creating community energy projects. Repowering was awarded a LCEF grant of £7,370 from the GLA in December 2018. This fund was used to conduct the technical feasibility and structural surveys, preregister the 50 kW of solar panels before the closure of the Feed-in-Tariff scheme. Repowering also supports NKCE with the fundraising work.

Part of the costs incurred by Repowering to complete the business plan and financial model, negotiate and secure the consents and legal agreements, procure and manage the installation and fundraising (£15,000) will be covered with the capital raised through the share offer.

Three of the five directors of NKCE are part of Repowering Ltd. No director receives remuneration for their role. No director will be involved in decision making where they have a direct interest outside of their role. NKCE has a group of 10 active volunteers, using consensus decision making.

NKCE is also supported by the RBKC Climate Change Team, but they are not directly involved in the governance and development of the co-op.

Directors

We have 5 directors, 4 of which are the founding members.

Toby Laurent Belson

Toby is a community artist, designer, educator and organiser from West London. He has designed and delivered over 60 community-based art and design projects across North Kensington since 2005. He was a market trader on Portobello for almost ten years, a local primary school governor for eight years and a recent trustee for a local community transport provider. He believes passionately in grass roots activism ("democracy is only as good as we make it") and has been an integral part of a number of local campaigns to protect community assets. He is responsible for various creative efforts to support those affected by Grenfell, including the Notting Hill Carnival response and the illumination of many buildings Green for Grenfell. He grew up next to one of the most polluted roads in the UK - the A40 Westway at Shepherds Bush - and wants local communities to do what they can to prevent another generation growing up and living with all of the life shortening risks associated with a polluted environment. Toby has recently taken on role of Chair for the Westway Trust.

Dave Fuller

Dave is a project manager, community organiser and activist. As the project manager for NKCE, Dave has been working with local schools to develop educational workshops on energy efficiency and renewable power, as well as delivering Repowering's Community Energy Training Programme. As an activist Dave has volunteered for campaigns against fracking, climate change and racism, and worked on campaigns promoting multiculturalism, renewable electricity, international aid, special needs care and access to education. This has seen Dave cook for over 100 people at a Fracking rig in Lancashire, take part in the COP21 climate demonstrations in Paris and help build an adventure playground in Senegal. In a previous life Dave was employed as a music producer and continues to write music, create sculpture and develop theatrical shows when not crossing London to share his belief in the power of community-owned assets and renewable electricity.

Afsheen Kabir Rashid MBE

Afsheen is Repowering's Co-Founder/Co-CEO. Afsheen sits as Chair of the Brixton Energy Solar Co-operatives the UK's first inner-city community-owned solar power stations; is Chair of Community Energy England and remains influential in both local and national community energy decision making. Afsheen is a Board-Member of Friends of the Earth and is an advisor to several organisations. Prior to Repowering's foundation, Afsheen pioneered Lambeth Council's Community Energy Programme and she was also previously a Senior Policy Advisor at the Department for Energy and Climate Change (DECC). Afsheen was instrumental in setting up the Muslim Women's Collective in Tower Hamlets that seeks to empower women to play an active role in improving the environment. Afsheen has a MA in Geography and MEnv in Environment, Science and Society and an Honorary Doctorate. Afsheen was awarded an MBE in the 2016 New Year's Honours List for her work in renewable energy in deprived London communities.

Felix Wight

Felix is Repowering's Technical Director and leads on Repowering's technical development and emerging business models. These include the application of new energy storage technologies, the deployment of remote metering and monitoring on our existing projects, and the development of new electricity supply arrangements that would put more power into the hands of local communities. Prior to joining Repowering, Felix was Head of Development at Community Energy Scotland and has experience of developing over 20MW of community owned generation capacity. He is a member of a number of industry fora and working groups looking at grid access and innovation in the electricity supply market. Felix's academic background is in Political Science and Electrical Engineering, with a

Master's in Energy Policy. He is looking forward to London becoming a world leader in urban community energy.

Neil Grant

Neil is a resident in North Kensington, where he is involved in community life through his church, NKCE and other environmental organisations. As a director, Neil is helping raise awareness about community energy in RBKC, so that every resident has the opportunity to be involved in tackling climate change in the borough. Neil is studying for a PhD in climate policy at Imperial College in South Kensington.

Partners

Repowering London

Repowering London is a Community Benefit Society with a mission to create resilient, empowered communities across London with greater control of their energy generation and usage.

Repowering works with local residents, businesses, community groups and local authorities to:

- Generate low-carbon decentralised energy
- Tackle fuel poverty and reduce reliance on fossil fuels
- Provide training and employment opportunities for local people
- Promote local leadership through mentoring and community ownership
- Offer ethical investment opportunities
- Encourage behaviour change and energy efficiency
- Explore new ways to produce and sell energy (peer to peer trading, micro anaerobic digestion)

Repowering has established seven award winning energy co-operatives, Brixton Energy Solar 1, 2, 3, Banister House Solar, Vauxhall Energy, North Kensington Community Energy and Lambeth Community Solar. These include both the first and largest community-owned energy projects on social housing in the UK. In total, the projects have installed 532kW of solar panels that will save 114 tons of CO2 emissions over their lifetime. They have raised £603,530 capital finance and set aside £154,500 for local communities to spend.

Royal Borough of Kensington and Chelsea

The Royal Borough of Kensington and Chelsea (RBKC) recognises that climate change is one of the world's biggest issue/challenge of the 21st century and is determined to reduce its environmental impact, and to work with everyone to make the borough greener, cleaner and a safer place. RBKC declared climate emergency in October 2019 and adopted two targets to be net zero carbon by 2030 as an organisation and for the borough to be carbon neutral by 2040.

To achieve this ambition, the Council is committed to lead by example in minimising the carbon footprint from its own estates and operations; and to work with/ encourage residents, local organisations and businesses to continue cutting their emissions at pace and create resilient, empowered communities. In 2018/2019, the Council exceeded its initial 40% carbon target and achieved a 50% reduction compared to 2007/2008 (excluding the Council's housing stock).

The development of community-owned solar projects and empowering residents to produce green and clean energy locally are key priorities for RBKC in tackling climate change at the local level and responding to the climate emergency declaration. These have been reflected within the Council's

2016-2021 joint <u>Air Quality and Climate Change Policy and Action Plan (AQCCAP)</u> and will be included in the new Carbon Neutral Action Plan/Vision Carbon Zero.

RBKC through the Climate Change Team have been one of the key partners in developing the first energy coop in North Kensington - North Kensington Community Energy (NKCE). The NKCE project is aligning with the AQCCP objectives: to reduce greenhouse gas emissions from the borough; form partnerships to engage with and empower communities to take an active role in reducing CO2 emissions and pollution; and enable the community to improve energy efficiency in their homes and reduce bills.

The RBKC Climate Change team and Repowering London have been working in partnership to develop low carbon projects for over four years, engage with residents and the community and to identify new public buildings across the borough to extend award-winning scheme NKCE.

We are very grateful for the partnership we have with Repowering London and for the on-going support they have shown in making these community owned schemes become a reality. After the two national awards received by NKCE from Community Energy England and Climate Change Coalition, we are confident that NKCE Phase 2 at Westway Sports Centre is another innovative and unique project putting the profits back to the community and bringing so many benefits for the community besides green energy.

Greater London Authority

Repowering has received funding and support from the London Community Energy Fund (LCEF). The fund was created by the Mayor to see more communities involved in producing energy locally and helping to reduce energy use. Repowering has used the fund to conduct some of the predevelopment work for NKCE, allowing us to complete the technical due diligence on the project.

Ecolution Group

Ecolution group provides renewable energy and maintenance services and solutions to the social, residential and commercial sectors. As an award-winning leader in maintenance and installation of renewable and energy efficient technologies, they are one of the most experienced and fastest growing organisations of the kind in the UK.

Ecolution aim is to revolutionise the UK energy market by converting every home and business into a renewable energy power station as part of a sustainable solution to climate change. Where Ecolution work, their focal point is to have a positive impact on local communities and the environment and support organisations like Repowering London that strongly reflect their core values and mission. Ecolution Group has designed and installed NKCE's solar panels, and by doing so contributing to a greener future.

Membership strategies

We are confident we'll be able to raise the £106,698 before the 31^{st} December 2020. We have already received £15,000 worth of pledges individuals have already pledged on our website. Our group of local volunteers will be promoting the share offer online and leafletting the area. The communications materials are ready to go. We've learnt from our first share offer - we know the borough better and have increased awareness of our project among locals. Our Greener Living Day in February has helped us raising our profile among the community and build links with other environmental groups from the borough like XR K&C who will be helping us with the fundraising.

Our fundraising strategy involves:

- Distributing flyers and putting up posters in the local area
- Running a social media campaign on Twitter, Facebook and Instagram
- Distributing press releases to the local digital and printed press
- Updating our mailing list on fundraising progress
- Taking part in podcasts on sustainable initiatives
- Reach out to councillors, business leaders, people of influence and local activists to help us promote the share offer
- Producing a film on the project with aerial view of the solar panels and testimonies from volunteers and partners

Unfortunately, due to Covid-19 we won't be able to do any of the planned face-to-face engagement (attending fairs, festivals and other community events, staging a public share offer launch and a celebration event in a community venue in RBKC).

We want to keep our members engaged post-fundraising:

- We will communicate with them through monthly newsletters
- As soon as it is safe to do so, we will be organising more Greener Living Days, giving the members an opportunity to get involved in organising an exciting community event
- We will keep holding monthly volunteers meeting where everyone is welcome. The purpose
 of these meetings is the develop NKCE by enriching our pipeline of sites, reaching out to local
 stakeholders for partnerships, organise events and activities within the community. The
 meetings are an opportunity for volunteers to shape the project and guide its work within the
 borough.
- Our AGMs will include visioning exercises, for members and volunteers to decide how to spend the Community Fund to achieve NKCE's long term goals detailed below

Business model

The community energy sector

National context

According to Community Energy England's 2020 report, there were 300 community organisations in the UK, of which 252 are in England. The big majority of them were Community Benefit Societies. 15.4 MW of new electricity generation was installed in England, Wales and Northern Ireland, taking the total community owned capacity in the UK to 264.9 MW. 97% of the projects installed in 2019 were supported by the Feed-in Tariff scheme.

In 2019, community energy projects generated 222.3 GWh of low carbon electricity, equivalent to the annual electricity demand of 74,100 UK homes, up from 64,000 in 2018, and reducing greenhouse gas emissions by 60,000 tCO2e. Cumulatively since 2016, community energy organisations have prevented over 238,000 tonnes of carbon emissions through electricity generation.

Community energy organisations have developed new and innovative approaches to project design in response to the closure of the Feed-in Tariff scheme and further challenges faced by the community energy sector. New technologies, emerging business models and a greater focus on partnership working, are expected to lead to new and positive opportunities for the community energy sector

Local context

Where there has been little or no support from National Government, the Mayor's LCEF programme has supported the development of a total 50 new projects in the London through three rounds of funding. NKCE is one of them has received support for both Phase 1 and Phase 2. Groups within London are closely linked, through Community Energy London that is a network of community energy practitioners operating in London. Community Energy London has worked closely with the Greater London Authority (GLA) to support the sector during this challenging period.

Market opportunities and challenges

North Kensington Community Energy is the only community energy group in RBKC and we are working to develop a partnership relationship with the RBKC Council and the Westway Trust. This relationship will allow us to access a wider number of roofs to install solar panels across the borough.

The Royal Borough of Kensington and Chelsea does not have a large environmental movement and suffers from a high degree of income inequality from the North to the South of the Borough. These two factors make fundraising in the Borough a challenge, as those with a higher income tend not to use the spaces and services provided in the North of the Borough where our Community Benefit Society is based.

Competitive advantage

RBKC is one of the richest areas in the UK which means there are a lot of wealthy investors to attract. We have built a strong and invaluable relationship with the Council, and benefit from Repowering's excellent reputation and experience.

Our long term goals

Our objects are to carry on any business for the benefit of the community by:

the installation of community-owned solar panels, the promotion of awareness of environmental and related issues and support for educational initiatives related to renewable energy

This will be NKCE's last project benefiting from the Feed-In-Tariff as the government has decided to end this subsidy. Consequently, our main long-term goal is to develop new financial models that make our projects work without subsidy. This could mean accessing carbon offset funds or developing a corporate partnership offer. NKCE is not considering installing on further sites in the during the current Covid-19 crisis.

The NKCE team has also distinguished **three priorities** to spend our Community Fund and volunteer time on:

'Support, lobbying and campaigning for better air quality'

A report from King's College estimated that in 2010, 8.3% of early deaths in RBKC were attributable to fine particulate air pollution and a further 16.6% to nitrogen dioxide. This was the highest figure in London. The impact on children is of particular concern, and the North Kensington area is disproportionately affected. NKCE's Community Fund could be used to support, lobby and campaign for better air quality in RBKC (adopt stringent policies, encourage walking and cycling, invest in air quality initiatives in the most polluted areas of North Kensington). NKCE may be able to access match funding from external bodies to further develop this work.

'Opportunities for young people'

Many community members feel there should be more facilities and opportunities for young people, mentioning the closure of Lancaster Road Youth Centre. The Community Fund can be used in conjunction with the local youth clubs, community organisations (e.g. Dalgarno Trust) and schools to run activities such as solar panel making workshops, sessions on marketing, social media, CV writing, and inspiring day trips. The activities will provide valuable life skills and experience for young people to pursue their own educational and career ambitions.

'Access to green spaces and healthy living'

Residents have expressed a need for more green spaces, better facilities in parks, and more options to play. Young people want access to healthy eating projects such as allotments and a community fridge, as well as cleaner roads. The Community Fund can be used to help access further grant funding. This could include working with Repowering London's Energy Garden project which installs and maintains community gardens on Transport for London stations and/or with the RBKC Community Garden Team that develops, manages and supports residents with growing spaces and community kitchen gardens.

Business activities

To achieve our long-term goals, we are:

- Developing innovative financial models to fill the FIT funding gap (corporate donations, carbon offset funds)
- Providing a platform for communities and individuals to engage in renewables
- Organising community events like the Greener Living Day
- Building links with local stakeholders and businesses

In the past, we have run in partnership with Repowering London a Community Energy Training Programme. We are seeking funding to make this happen again. Repowering has also run educational climate change workshops in local primary schools.

North Kensington Community Energy Training Programme

Repowering London ran in 2018 a comprehensive training programme for sixteen young people from the local area aged between 16-20 years old. The training placement was paid at the London Living Wage, and covered themes around sustainable energy. The trainees learnt a wide range of skills involved in the development of community energy projects, including finance, legal, technical, IT and public relations.

The trainees were excited to learn new practical skills, to develop their interest in solar energy, and to receive payment for their participation. They most enjoyed the practical workshops, engaging with the community and the Power and Privilege session.

Finance summaries

Finance summary for NKCE Ltd

Profit & loss	Year 2019
Total income	£8028
Operating profit (loss) before depreciation, interest on capital and corporation tax	£5011
Net profit (loss) after depreciation, interest on capital and tax	£227

Society funds	Year 2019
Fixed assets	£78,181
Member share capital	£81931
Net current assets	£3976
Net assets	£82,158

Use of society funds	Year 2019
Interest rate on (eligible) share capital	2%
Interest paid on share capital	£1639
Community benefit spend	£100
Net profit (loss)	£227
Addition (reduction) to society reserves	£227

Financial projections of NKCE Ltd

Profit and Loss forecasts

	1	2		3 4	. 5	6	7
	2019 (actual)	2020					2025
Operating	(,						
First project	75%	100%	100	% 100%	100%	100%	100%
Westway Trust	7370	25%					100%
Westway Hust		2570	100	100%	10070	10070	10070
Income							
Generation FIT	£ 3,195.00	£ 2,981.40	£ 3,043.7	£ 3,107.32	£ 3,172.27	£ 3,238.57	£ 3,306.25
Sale of energy (on-site)			£ 5,903.57			£ 6,281.46	
Export of energy (grid)	£ -	£ 1,537.15	£ 1,569.28	•	•	£ 1,669.74	
Interest from provisions	£ -	£ 4.96		f £ 9.92		•	£ 17.36
	_						
Generation FIT		£ 413	£ 1,68	7 £ 1,722	£ 1,758	£ 1,795	£ 1,832
Sale of energy (on-site)		£ 3,094	£ 12,633		£ 13,166	£ 13,441	
Export of energy (grid)		£ 152	£ 62:		£ 648	£ 661	
Interest from provisions		£ -		2 £ 4		£ 8	£ 15
Totalincome	£ 8,028.00	£ 13,964.96	£ 25,467.00	£ 26,003.69	£ 26,551.44	£ 27,110.55	£ 27,685.42
Expenses							
Ехрепзез							
Export Meter expenses	£ 105.00	£ 307.50	£ 315.19	£ 323.07	£ 331.14	£ 339.42	£ 347.91
Insurance expenses	£ 333.00	£ 315.52	£ 323.40	£ 331.49	£ 339.78	£ 348.27	£ 356.98
Business rates	£ -	£ 442.13	£ 453.19	9 £ 464.52	£ 476.13	£ 488.03	£ 500.23
Administration espenses	£ -	£ 2,210.67	£ 2,265.94	£ 2,322.58	£ 2,380.65	£ 2,440.16	£ 2,501.17
O&M Package Expenses	£ 1,835.00	£ 55.35	£ 56.73	8 £ 58.15	£ 59.61	£ 61.10	£ 62.62
Roof rental	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Provision for inverter replacements	£ 744.00	£ 992.11	£ 992.13	l £ 992.11	£ 992.11	£ 992.11	£ 992.11
Provision decommissioning costs	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Contingency fund	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Depreciation costs	£ 3,046	£ 4,061	£ 4,06	l £ 4,061	£ 4,061	£ 4,061	£ 4,061
Export Meter expenses		£ 100	£ 410	£ 420	£ 431	£ 442	£ 453
Insurance expenses		£ 224	£ 919	9 £ 942	£ 966	£ 990	£ 1,015
Business rates		£ 173	£ 70	7 £ 725	£ 743	£ 762	£ 781
Administration expenses		£ 449	£ 1,839	9 £ 1,885	£ 1,932	£ 1,980	£ 2,030
Asset Management & Maintenance		£ 345	£ 1,41	5 £ 1,450	£ 1,486	£ 1,523	£ 1,561
Generation meter operator charge		£ 36	£ 3	7 £ 38	£ 39	£ 40	£ 41
Roof rental		£ -	£ -	£ -	£ -	£ -	£ -
Provision for inverter replacements		£ -	£ 835	5 £ 835	£ 835	£ 835	£ 2,506
Provision decommissioning costs		£ -	£ -	£ -	£ -	£ -	£ -
Contingency fund		£ -	£ -	£ -	£ -	£ -	£ -
Depreciation costs		f 1,334	£ 5,33!	5 £ 5,335	£ 5,335	£ 5,335	£ 5,335
Total avnances	£ 6,063.01	£ 11,044.60	£ 19,964.9	9 £ 20,183.52	£ 20,407.52	£ 20,637.12	£ 22,542.98
Total expenses	1 6,063.01	11,044.60	19,964.9	9 E 20,183.32	1 20,407.32	1 20,657.12	1 22,342.96
Distributions							
Rate of return to shareholders	2%	3%	31	% 3%	3%	3%	3%
Capital repayment	£ 3,072.41						
T /	0 070 44	£ 1,333.73					
Total	£ 3,072.41	£ 5,430.28	£ 9,431.4	5 £ 9,431.45	£ 9,431.45	£ 9,431.45	£ 9,431.45
Remaining shareholder capital	£ 78,858.59	£ 74,762.04	£ 70,665.49	£ 66,568.94	£ 62,472.39	£ 58,375.84	£ 54,279.29
nemaning shareholder capital	1 70,000.33	f 105,364.28					
Total	£ 78,858.59	£ 180,126.31					
7567	1 70,000.35	100,120.01	170,054.00	7 1 101,245.41	131,631.30	142,400.31	132,303.00
Shareholder interest payment*	£ 1,638.62	£ 2,365.76	£ 5,403.79	£ 5,120.85	£ 4,837.90	£ 4,554.96	£ 4,272.02
CE contributions	£ 100.00	£ 450.00	£ 150.00	300.00	£ 300.00	£ 420.00	£ 420.00
CF contributions	£ 100.00	£ 150.00 £ 500.00					
Total	£ 100.00						
Total	100.00	_ 650.00	£ 650.00	, 1,030.00	1,500.00	1,920.00	£ 670.00
Total distributions	£ 1,738.62	£ 3,015.76	£ 6,053.79	£ 6,170.85	£ 6,337.90	£ 6,474.96	£ 4,942.02
Net profit	£ 226.37	-£ 95.39	-£ 551.77	2 -£ 350.68	-£ 193.98	-£ 1.53	£ 200.42

General assumptions:

- RPI at 2.5%
- System degradation 0.4% a year
- Yield is 820 per kWp

Cash flow forecasts

		2019		2020		2021		2022		2023		2024		2025		2026
	act	tual	fore	cast	fore	ecast	fore	cast								
Opening cash balance	£	704	£	544	£	7,564	£	13,618	£	15,853	£	18,691	£	22,139	£	14,484
Net profit	£	226	-£	95	-£	392	-£	191	-£	34	£	159	£	360	£	22
Add back depreciation	£	3,046	£	5,395	£	9,396	£	9,396	£	9,396	£	9,396	£	9,396	£	5,335
Add back interest due to shareholders	£	1,639	£	2,366	£	5,244	£	4,961	£	4,678	£	4,395	£	4,112	£	2,201
Add back inverter provisions	£	744	£	992	£	1,827	£	1,827	£	1,827	£	1,827	£	3,498	£	2,506
Add back decommissioning provision	£	-	£	-	£	-	£	-	£	-	£	-	£	-	£	-
Payment inverter provision	£	-	£	-	£	-	£	-	£	-	£	-	£	-	£	-
Payment decommissioning costs	£	-	£	-	£	-	£	-	£	-	£	-	£	-	£	-
Capital repayment shareholders	£	-	-£	3,072	-£	5,430	-£	9,431	-£	9,431	-£	9,431	-£	9,431	-£	5,335
Payment of shareholders interest	£	-	-£	1,639	-£	2,366	-£	5,244	-£	4,961	-£	4,678	-£	4,395	-£	2,361
Debtors	-£	8,711	-£	3,491	-£	6,367	-£	6,501	-£	6,638	-£	6,778	-£	6,921	-£	4,147
Payment debtors	£	-	£	8,711	£	3,491	£	6,367	£	6,501	£	6,638	£	6,778	£	4,061
Creditors	£	2,796	£	-	£	-	£	-	£	-	£	-	£	-	£	-
Payment creditors	£	-	-£	2,796	£	-	£	-	£	-	£	-	£	-	£	-
Community Fund	£	100	£	650	£	650	£	1,050	£	1,500	£	1,920	£	670	£	500
Payment Community Fund	£	-	£	-	£	-	£	-	£	-	£	-	£	-	£	-
	£	-	£	-	£	-	£	-	£	-	£	-	£	-	£	-
Cash flow in year	£	544	£	7,020	£	6,054	£	2,234	£	2,838	£	3,448	£	4,066	£	2,781
Closing cash balance	£	544	£	7,564	£	13,618	£	15,853	£	18,691	£	22,139	£	26,206	£	17,265

General assumptions:

- We pay out the shareholder interests for year *n* in year *n*+1
- A quarter of our income is cashed in the following year (appearing in *debtors*)
- We intend to pay Repowering their O&M fee in the same year so no creditors after 2020

Balance sheet forecasts

Fixed assets																
Costs	£	81,227	£	184,879	£	179,484	£	170,088	£	160,691	£	151,295	£	141,899	£	78,690
Less depreciation	-£	3,046	-£	5,395	-£	9,396	-£	9,396	-£	9,396	-£	9,396	-£	9,396	-£	5,335
Total	£	78,181	£	179,484	£	170,088	£	160,691	£	151,295	£	141,899	£	132,503	£	73,355
Current assets																
Bank accounts	£	544	£	7,564	£	13,618	£	15,853	£	18,691	£	22,139	£	26,206	£	17,265
Debtors	£	8,711	£	3,491	£	6,367	£	6,501	£	6,638	£	6,778	£	6,921	£	4,147
Current liabilities																
Interest due to shareholders	£	1,639	£	2,366	£	5,244	£	4,961	£	4,678	£	4,395	£	4,112	£	2,201
Community Fund contributions (cun	£	100	£	750	£	1,400	£	2,450	£	3,950	£	5,870	£	6,540	£	5,300
Provisions for inverter (cumulative)	£	744	£	1,736	£	3,563	£	5,391	£	7,218	£	9,046	£	12,543	£	8,353
Other creditors	£	2,796	£	-	£	-	£	-	£	-	£	-	£	-	£	-
Net current assets	£	3,976	£	6,204	£	9,778	£	9,552	£	9,483	£	9,606	£	9,932	£	5,559
Net assets	£	82,157	£	185,688	£	179,866	£	170,244	£	160,778	£	151,505	£	142,434	£	78,914
Represented by:																
Share capital	£	81,931	£	185,557	£	180,126	£	170,695	£	161,263	£	151,832	£	142,401	£	78,690
Reserves (cumulative)	£	226	£	131	-£	261	-£	451	-£	485	-£	327	£	34	£	224
	£	82,157	£	185,688	£	179,866	£	170,244	£	160,778	£	151,505	£	142,434	£	78,914

Financial projections of Westway Sports Centre project

Profit and Loss forecasts

		1		2		3		4		5		6
		2020		2021		2022		2023		2024		2025
Operating		25%		100%		100%		100%		100%		100%
Income												
Generation FIT	£	413	£	1,687	£	1,722	£	1,758	£	1,795	£	1,832
Sale of energy (on-site)	£	3,094	£	12,633	£	12,897	£	13,166	£	13,441	£	13,722
Export of energy (grid)	£	152	£	622	£	635	£	648	£	661	£	675
Interest from provisions	£	-	£	2	£	4	£	6	£	8	£	15
Total	£	3,658.79	£	14,943.11	£	15,257.47	£	15,578.35	£	15,905.89	£	16,244.41
Expenses												
Export Meter expenses	£	100	£	410	£	420	£	431	£	442	£	453
Insurance expenses	£	224	£	919	£	942	£	966	£	990	£	1,015
Business rates	£	173	£	707	£	725	£	743	£	762	£	781
Administration expenses	£	449	£	1,839	£	1,885	£	1,932	£	1,980	£	2,030
Asset Management & Maintenance	£	345	£	1,415	£	1,450	£	1,486	£	1,523	£	1,561
Generation meter operator charge	£	36	£	37	£	38	£	39	£	40	£	41
Roof rental	£	-	£	-	£	-	£	-	£	-	£	-
Provision for inverter replacement:	£	-	£	835	£	835	£	835	£	835	£	2,506
Provision decommissioning costs	£	-	£	-	£	-	£	-	£	-	£	-
Contingency fund	£	-	£	-	£	-	£	-	£	-	£	-
Depreciation costs	£	1,334	£	5,335	£	5,335	£	5,335	£	5,335	£	5,335
Total	£	2,660	£	11,497	£	11,630	£	11,767	£	11,907	£	13,721
Distributions												
Rate of return to shareholders		3%		3%		3%		3%		3%		3%
Shareholder interest payment	£	_	£	3,000.88	£	2,840.83	£	2,680.79	£		£	2,360.69
CF contributions	£	500.00	£	500.00	£	850.00	£	1,200.00	£	1,500.00	£	250.00
Total	£	500.00	£	3,500.88	£	3,690.83	£	3,880.79	£	4,020.74	£	2,610.69
Net profit	£	498.81	-£	54.86	-£	63.63	-£	69.20	-£	21.53	-£	86.90
Capital repayments												
Remaining shareholder capital	£	106,698.00	£	105,364.28	£	100,029.38	£	94,694.48	£	89,359.58	£	84,024.68
Capital repayment	£	-	£	1,333.73	£	5,334.90	£	5,334.90	£	5,334.90	£	5,334.90

Site-specific assumptions:

- Feed-in-Tariff rate secured is £0.04/kWh, only applicable for 50kW
- Price charged to the site per unit is £0.128/kWh
- Export price per unit is £0.0538/kWh
- 90% of the electricity is used on site (based on billing data and demand profile)

Cash flow forecasts

			2020		2021		2022		2023		2024		2025		2026
		actua	1	fore	ecast	fored	cast	fore	ecast	for	ecast	for	ecast	fore	cast
Opening cash balance		£	-	£	1,418	£	6,879	£	8,262	£	9,988	£	12,060	£	14,484
Net profit		£	499	-£	55	-£	64	-£	69	-£	22	-£	87	£	22
Add back depreciation		£	1,334	£	5,335	£	5,335	£	5,335	£	5,335	£	5,335	£	5,335
Add back interest due to shareholde	rs	£	-	£	3,001	£	2,841	£	2,681	£	2,521	£	2,361	£	2,201
Add back inverter provisions		£	-	£	835	£	835	£	835	£	835	£	2,506	£	2,506
Add back decommissioning provision	n	£	-	£	-	£	-	£	-	£	-	£	-	£	-
Payment inverter provision		£	-	£	-	£	-	£	-	£	-	£	-	£	-
Payment decommissioning costs		£	-	£	-	£	-	£	-	£	-	£	-	£	-
Capital repayment shareholders		£	-	-£	1,334	-£	5,335	-£	5,335	-£	5,335	-£	5,335	-£	5,335
Payment of shareholders interest		£	-	£	-	-£	3,001	-£	2,841	-£	2,681	-£	2,521	-£	2,361
Debtors		-£	915	-£	3,736	-£	3,814	-£	3,895	-£	3,976	-£	4,061	-£	4,147
Payment debtors		£	-	£	915	£	3,736	£	3,814	£	3,895	£	3,976	£	4,061
Creditors		£	-	£	-	£	-	£	-	£	-	£	-	£	-
Payment creditors		£	-	£	-	£	-	£	-	£	-	£	-	£	-
Community Fund		£	500	£	500	£	850	£	1,200	£	1,500	£	250	£	500
Payment Community Fund		£	-	£	-	£	-	£	-	£	-	£	-	£	-
Cash flow in year		£	1,418	£	5,461	£	1,383	£	1,726	£	2,072	£	2,424	£	2,781
Closing cash balance		£	1,418	£	6,879	£	8,262	£	9,988	£	12,060	£	14,484	£	17,265

Balance sheet forecasts

		2020		2021		2022		2023		2024		2025		2026
	forecas	t	forecas	st	forecas	t	forecast		forecast		forecast		forecas	it
Fixed assets	ĺ		1		1									
Costs	£	106,698	£	105,364	£	100,029	£	94,694	£	89,360	£	84,025	£	78,690
Less depreciation	£	1,334	£	5,335	£	5,335	£	5,335	£	5,335	£	5,335	£	5,335
Total	£	105,364	£	100,029	£	94,694	£	89,360	£	84,025	£	78,690	£	73,355
Current assets														
Bank account	£	1,418	£	6,879	£	8,262	£	9,988	£	12,060	£	14,484	£	17,265
Debtors	£	915	£	3,736	£	3,814	£	3,895	£	3,976	£	4,061	£	4,147
Current liabilities														
Interest due to shareholders	£	-	£	3,001	£	2,841	£	2,681	£	2,521	£	2,361	£	2,201
Community Fund contributions (cumulative	£	500	£	1,000	£	1,850	£	3,050	£	4,550	£	4,800	£	5,300
Provisions for inverter (cumulative)	£	-	£	835	£	1,671	£	2,506	£	3,341	£	5,847	£	8,353
Other creditors	£	-	£	-	£	-	£	-	£	-	£	-	£	-
Net current assets	£	1,833	£	5,779	£	5,715	£	5,646	£	5,624	£	5,538	£	5,559
Netassets	£	107,197	£	105,808	£	100,410	£	95,006	£	89,649	£	84,227	£	78,914
Represented by:														
Share capital	£	106,698	£	105,364	£	100,029	£	94,694	£	89,360	£	84,025	£	78,690
Reserves (cumulative)	£	499	£	444	£	380	£	311	£	290	£	203	£	224
	£	107,197	£	105,808	£	100,410	£	95,006	£	89,649	£	84,227	£	78,914

Operations

Lease and Power Purchase Agreement

The Council is the freeholder of the Westway Sports Centre. The Westway Trust is leasing from the Council, and Everyone Active (leisure operator) has a management arrangement with the Westway Trust. Everyone Active are not guaranteed to be managing the site moving forward.

NKCE Ltd is leasing from the Westway Trust and has a Power Purchase Agreement arrangement with Everyone Active. The PPA is linked to the lease. In the PPA, a clause states that it is the responsibility of the Westway Trust to ensure any new contractor signs the PPA. If not, the Westway Trust terminates the PPA which also terminates the lease and Westway Trust pays compensation to NKCE. Ultimately, most of the liabilities are held with the Westway Trust.

Equipment

The equipment installed includes the following:

System 1

Panels 175 x Eurener 285W Polycrystalline panels	1 x CT export meter
50kw Solis Inverter	2 Rotary AC Isolators, 9 Rotary DC Isolators
3ph generator meter	Van der Valk trapezoidal fixing

System 2

Panels 310 x Eurener 285W Polycrystalline panels	1 x CT export meter
50kw Solis Inverter, Solis 40K Inverter	4 Rotary AC Isolators, 17 Rotary DC Isolators
3ph generator meter	Van der Valk trapezoidal fixing + Van der Valk
	Standing seam Clamp

Installation and generation

We have received planning permission from the RBKC on 19/02/2019 for a duration of three years.

The panels are wired to inverters within the buildings which convert the low voltage DC output from the panels into AC power. This electricity will feed into the main electrical distribution point for the Westway Sports Centre where it will be used. We expect the Westway Sports Centre to use 90% of the electricity generated. The electricity will be sold under the PPA agreed between Everyone Active and NKCE. The surplus will be exported to the national grid.

We estimate that a 138-kW solar array will generate approximately 113,160 kWh of electricity in the first year. In fact, in average UK weather conditions, you can expect 1 kW of panels to generate between 700 and 900 kWh of electricity per year. We are using an estimate of 820 kWh per year.



Operations and maintenance

Solar photovoltaic panels are solid-state technology with no moving parts. As such, they tend to be robust and reliable, requiring a minimum of maintenance once installed and commissioned. They can remain operational for decades although their efficiency and output declines over the years. In our financial model we have allowed for 0.4% drop in output per year, which is in line with industry norms.

The inverters have a shorter lifetime and generally need to be replaced every 10-15 years. The cost of replacing the inverters has been included in the running costs for the project. Warranty of the equipment and its installation will be provided by the manufacturers and the installers, respectively.

Insurance is included in the annual running costs, covered by income from the panels. The roofs are being leased to NKCE by Westway Trust for a peppercorn rent. NKCE will remain the owner of the panels throughout the 20-year life of the project, after what the panels will be donated to Westway Trust.

Repowering London has been contracted by the Board of Directors of NKCE to deliver the following services: asset management and maintenance, administration and governance. The contract is for an initial term of five years. Repowering will charge an annual fee of £1,380 for asset management and maintenance and £1,794 for administration and governance. The service agreement renews automatically every five years, and the parties review the annual fee amount at each renewal.

Workforce

NKCE Ltd has no paid workforce, but is supported by Repowering Ltd.

Equalities and diversity

NKCE are committed to inclusion and equal opportunities. We operate in a borough with high diversity and we want this diversity to be reflected in our membership and volunteers' group. We will work on promoting our £1-membership to this purpose.

Capital

Funding requirements	
Purchase of fixed assets	£91,698
Technical feasibility costs	£7,370
Development and Fundraising costs	£15,000

Funded by	
Community shares	£106,698
Loans	£125,000
Grants & Gifts	£7,370

- The technical feasibility costs were covered by the LCEF fund, £7,370. We commissioned Structa to undertake the technical feasibility study.
- We have taken a loan from the Esmée Fairbairn Foundation (£125,000) to cover the purchase and install of the solar panels including VAT as well as Repowering's development and fundraising costs.
- After a competitive tendering, Ecolution came out as the best option for the installation.

Loan arrangements with Esmée Fairbairn Foundation

- In the initial terms, the loan has to be repaid no later than twelve months from the date of drawdown. The rate of interest is 0% for the first nine months and 2% for the last three months.
- The Foundation have agreed to extend the loan for an additional 6 months, as the installation was delayed due to Covid-19.

The NKCE sites

- Avondale Park & St Anne's Federation of Schools (13.86 kW)
 - o 11% of annual electricity needs
- The Dalgarno Trust (42.66 kW)
 - o 52% of annual electricity needs
- Thomas Jones Primary School (29.75 kW)
 - o 35% of its annual electricity needs
- Westway Sports Centre (138 kW)
 - o 30% of its annual electricity needs

In total the four sites above save 46 tonnes of carbon emissions every year.

Risk analysis

In the Risk factors section of our share offer document, we have detailed the risks related to the project (policy, technical, financial, operations). Not all risks can be mitigated ('Acts of God') but we have planned some mitigation strategies detailed below.

Changes in legislation

- Historically the UK government has never removed a mechanism like the FiT to those with agreements.
- We have explored alternative financial models without the Feed-In-Tariff, involving a carbon offset fund donation or a reduction of the Community Fund.

Lower revenues than expected

- Our forecasts use conservative figures (yield rate, inflation rate). To forecast future
 electricity consumption of the Westway Trust we have analysed its historical consumption
 data.
- We will monitor the solar panels' performance regularly to make sure any issues are quickly dealt with.
- The installation will be fully insured for risks such as accidental and malicious damage.
- Our business model will be generating surpluses to cover any unforeseen expenses.

Reliance on PPA with Everyone Active

- The Feed-in-Tariff payments have decreased since our first project, where 55% of our income comes from the sale of electricity on site, and 30% from the Feed-in-Tariff. For the Westway Trust project, the FiT payments make up 12% of our total income, while the sale of electricity make up 84% of our income.
- The project income is therefore heavily reliant on the Power Purchase Agreement with Everyone Active. However, arrangements are in place to ensure the Westway Trust has the liability to ensure the continuity of the PPA, even if it chooses not to renew their contractor arrangement with Everyone Active. If the Westway Trust is not able to ensure the continuity of the PPA, it will have to pay compensation to NKCE Ltd.