

Housing Management and Almshouses Sub Committee – 21 January 2019

Members Briefing Note

Portsocken Community Energy Proposal

Summary

The purpose of this report is to provide Members with information on the proposal to establish the City of London's first community-owned solar power station in Portsocken Ward on the Middlesex Street Estate. The proposal is led by a group of Portsocken residents working in partnership with Repowering London a not-for-profit organisation that has a strong track record of delivering community energy schemes on social housing estates. The partnership has successfully secured funding from the Mayor of London's 'London Community Energy Fund' to assess the technical and financial viability of the scheme and pre-register the scheme before the 31st of March 2019.

Repowering London is a not-for-profit organisation that specialises in creating local energy projects. Repowering has delivered five award winning community energy projects totaling 300kWp installed solar generating capacity. This includes both the first and the largest community-owned solar installations on inner-city social housing in the UK.

Recommendation

Members are asked to note the report to support the project and consider the final feasibility report that will be produced in February

1. Community Energy

Community Energy is about putting people at the heart of the energy system. It is when renewable energy assets such as solar panels are owned and managed by the local community. The systems are funded through a community share offer and the financial benefits from the sale of electricity are redistributed into the community through a return on investment and a ring-fenced community fund.

2. Strategic alignment with the City of London Corporation

The proposal is closely aligned with the City of London's ambitions to be a Low Carbon City and commitment to play its parts in reducing carbon emissions to achieve the Mayor's target of net zero emissions by 2050. The project is a step towards implementing the recommendations of the [Zero Emissions City](#) Report published in July 2018 that states City of London Corporation should

- Take steps to support and respond to the proposed decarbonisation of the national grid;
- Take a proactive role in supporting the forthcoming changes to the City's energy infrastructure;
- 'Provide support to stakeholders in delivering CO₂ savings within their estates'.

The City of London's Responsible Business Strategy – Towards A Sustainable Future , as part of its corporate objectives for 2018-2023, has identified energy resilience and the achievement of positive environmental outcomes as key issues. Furthermore, the project also offers the opportunity 'to create a future where individuals and communities flourish and the planet is healthier.

3. The Proposal

This will be the first community-owned energy project in the City of London, but it is also part of a growing movement of community energy projects in London and up & down the country. The project is a clear positive example to bring the community together, tackle climate change, generate renewable energy and cut borough-wide carbon emissions. The proposal is to

- Establish Portsoken Community Energy as an independent and financially viable Community Benefit Society (a form of Cooperative).
- Conduct a technical and financial feasibility study to install solar panels on the estate - initial desk-based assessment of the estate shows that the optimal solar generating capacity is 50 kWp consisting of 185 panels each of 250 watts.
- The installing of solar panels requires a 20 year roof lease agreement that will be held with the City of London and Portsoken Community Energy.
- The installation costs of approximately £50,000 will be raised through a community share offer at no cost to the City of London.
- The solar panels will power the Library or communal areas (to be determined through the technical feasibility).
- The solar energy will be sold at a 5% discount to commercial market prices. This will be agreed through a Power Purchase Agreement (PPA).
- Surplus income will be ring fenced for the benefit of the local residents and can be used for training and addressing fuel poverty.
- The project offers an ethical investment opportunity for residents and businesses who can benefit from an average 3% annual return on investment.
- Residents who are unable to invest can join the Society with a £1 membership fee. All members have an equal say in the Society irrespective of the amount invested.

4. Project Benefits

Key potential environmental, financial and social benefits of the project includes:

Environmental

- Installation of 50 kWp of solar generating capacity
- Generation of 800 MWh of clean renewable electricity over the 20 year life of the project
- Carbon savings of 20 tCO₂ per annum and a total 400 tCO₂ over the lifetime of the project

Financial

- Creation of a Middlesex Street Estate community fund of an estimated £10,000
- Offer residents and businesses a local ethical investment opportunity with an average 3% annual return
- Provide the City of London with nominal savings on energy bills for the Library / communal areas

Social

- Allowing the wider community to take positive action against climate change while promoting renewable energy
- Tackle fuel poverty through direct support and workshops

- Provide training and work experience for young people
- Bring the community together and inspire wider environmental activities

5. Financial Model

Adopting a Co-operative approach ensures that the financial returns are delivered back to the community, thereby creating a truly socially responsible investment opportunity. The feasibility stage of the project will ensure that a robust financially viable model is developed for the Society. Portsoken Community Energy will be an independent financially sustainable organisation and will not be dependent on the City of London for further funds and resources. Repowering recommends the following financial model based on its award-winning model for Brixton Energy.



Portsoken Community Energy will generate its income from the following sources:

- Feed-in Tariff (FIT) from the generation of renewable energy;
- Sale of renewable energy onsite to building owner/management body (at discounted rate);
- Surplus electricity (not consumed by building) will be sold to the grid at an export tariff.

Income generated by the project is allocated towards:

- Meeting project costs e.g. ongoing administration and maintenance;
- An annual return to shareholders (to be recommended by the board of Directors and agreed by members)
- Surplus income generated will be ring-fenced for a Community Fund.

6. Technical considerations

Structural survey – in order to proceed with the project we require confirmation that the roof is structurally sound and able to take the load of the solar panels. If the roof is not structurally sound we will consider alternative sites.

Roof works – we understand that the roof will require renewals in the 20 year life of the project. As part of the feasibility analysis we will assess the costs for taking down, storing and re-instating the solar panels under such an eventuality. We will also consider financial options to cover these costs as the Society may not be able to absorb these costs.

Feed-in-Tariff (FIT) - The financial viability of the project is reliant on securing the FIT (generation and export tariff) that Government is removing from 1st April 2019. While we cannot install the solar panels before end of March 2019 Government has provided community energy projects an opportunity through the ‘pre-registration process’. This allows community energy projects to lock in the FIT and gives an extended period of a year to commission and install the solar panels that is by March 2020. However, the pre-registration process will be assessed on a first come first basis. There is a small risk that the project may not secure the tariff in which case alternative models will need to be explored.

Planning application – following confirmation of the structural assessment we will apply for planning approval.

Energy Performance Certificates – while Community Energy projects require an EPC for the registration process they are exempt from the requirement to demonstrate a high rating of A-D. Should our pre-registration application be successful the higher tariff will apply.

Ongoing operations and maintenance costs for the solar panels will be provided for in the financial model and paid for by the Society. Access will be required to meter cupboards for meter readings on a regular basis. Roof access will be required on annual basis for regular checks. Cleaning will be required once every five years. Roof securing and access will be considered as part of the technical feasibility study.

Electricity supply- At this stage we are unable to supply electricity directly to households. Repowering is currently developing trials of local electricity supply on its existing projects in Brixton and Homerton and will support Portsoken Community Energy in achieving this long-term ambition once a proven model is established.

7. Outline project plan

- Technical reports produced in Jan 19 (structural and system design)
- Outline Business case to the City of London - Feb 19
- Community Benefit Society registered with the FCA - Feb 19
- Pre-register sites to secure FIT by 31st Mar 19
- Agree Heads of Terms for roof lease agreement with the City of London – Mar 19
- Engage residents and key stakeholders – ongoing
- Agree roof lease agreement and Power Purchase Agreement with the City of London – Aug 19
- Launch share offer Sep 19 (subject to securing FIT approval and the City’s approval)
- Installation of solar panels Jan to Mar 2020

8. Next steps

We look forward to working with the City of London to develop the project and finalise the business plan. Next steps include:

- Produce structural survey
- Conduct site visits with installers to finalise system design
- Produce business case for the City’s consideration in February
- Pre-register sites by 31st March 2019

9. Appendices

- Appendix 1 – About Repowering London and the Co-operative model

Appendix 1

1. About Repowering London

Repowering London is a Community Benefit Society ('BenCom') that specialises in creating local energy. Creating local energy means that we adopt a community-led approach to delivering renewable energy projects that are owned by the community and provide benefits to local residents.

Our vision is to create resilient, empowered communities across London with greater control and ownership of their energy generation and usage. At Repowering London, we are committed to working with Local Authorities and communities, developing local solutions to local energy related problems. Through our projects, we aim to:

- Tackle fuel poverty and reduce exposure to energy price shocks
- Generate decentralised renewable / low carbon energy;
- Provide training and employment opportunities for local people;
- Promote local leadership through mentoring and community ownership
- Provide opportunities for local and socially responsible investment;
- Increase awareness about energy efficiency and encourage behaviour change.

To deliver these objectives, Repowering London has created a strong team that possess the necessary technical, financial, legal, project management and community engagement expertise to co-produce community-owned renewable energy projects.

Repowering plays a critical role in shaping the policy development of the community energy sector by playing a leading role in the following groups:

- Local Energy Contact Group a special unit that advises the Department for Business Energy and Industrial Strategy on community energy policy.
- Community Energy England a trading body set up to provide a voice for the community energy sector and help create the conditions within which community energy can flourish.
- DG Forum Steering Group which convenes representatives from the distributed generation sector and Distribution Network Operators, reporting to Ofgem.

2. Our experience

Repowering London is unique in the UK in its delivery of a programme of social works alongside each community-owned renewable energy installation. We run mentoring sessions, training and workshops for local residents, paid youth internship programme and work experience through the development of projects.

Repowering London have co-produced five community-owned solar projects, three in Brixton with the support of Lambeth Council and a fourth project in Homerton with Hackney Council. These have included both the first and largest inner-city community-owned energy projects on social housing in the UK. We have recently completed our fifth project in Vauxhall and are raising funds for sixth scheme in North Kensington working with Kensington and Chelsea Council.

The projects installed a total solar PV capacity of 300kW through community share offers raising £375,500 largely from local investors. Shareholders of the co-operative receive a 3-4% return on investment and historically have also benefited from 30-50% tax relief. The projects will also generate a Community fund of £75,000 for further training opportunities and tackling fuel poverty in some of London's most deprived estates.

To date 84 young people have benefited from Repowering's training programme. **The Repowering London youth training programme** is a paid scheme covering sustainable energy, social enterprise and community development. The programme is offered to young people (16-19 year olds), who are lacking opportunities and role models and who may feel alienated from greater society, disengaged with education and uncertain of the future.

Repowering also runs training and workshops to help people understand the simple changes they can make to reduce their energy bills, for example through draught proofing their homes and switching to different energy tariffs that match their energy usage. Through our fuel poverty programme delivered in 2017-2018 we have provided direct advice and support to 972 London residents saving them a total £6,732.

We are also delivering an innovative project called 'Energy Garden' the world's first citywide community energy and gardening project. delivered through a partnership between Repowering London and TfL and is funded by the People's Postcode Lottery.

3. The Co-operative approach

Delivering a project according to the principles of our award winning Co-operative model requires the following:

- 3.1. Each project is housed in an individual **Community Benefit Society**, which is run by its members and has a board of directors (three to four directors) who come from the local community. This body is supported by Repowering London.
- 3.2. A Community Benefit Society is a specific form of co-operative whose primary purpose is to provide benefit to a defined community. This means that financial benefit is not limited to members who have invested in the BenCom. There is also the option of an 'asset lock' which ensures that all assets are protected for community benefit.
- 3.3. As a form of Co-operative, Community Benefit Societies adhere to the core Co-operative principles, for example each member has one vote, regardless of the amount they invest.
- 3.4. Each Community Benefit Society is registered with the Financial Conduct Authority (FCA) that approves the model rules and objects of the co-operative.
- 3.5. Residents or businesses can choose to invest £250 to £20,000 in the Society thereby becoming shareholders and members. Shareholders will receive a competitive return on their investment, anticipated to be approximately an average 3% per annum.
- 3.6. The minimum shareholding for residents from the social housing estate is set at a significantly reduced threshold, making membership in the Community Benefit Society more accessible for the immediate community. This threshold is estimated at £50.

- 3.7. Local residents who are unable to invest are invited to join the Society as a member for a nominal £1 membership fee. Following co-operative principles all members will have one vote irrespective of the size of shareholding.
 - 3.8. The Council or other local stakeholders can also invest in the Community Benefit Society taking advantage of the return on investment but also to be involved in the ongoing management and governance of the Society.
 - 3.9. The lease agreement for each of the projects will be held between the building owner and the Community Benefit Society.
 - 3.10. The energy generated will be used on site to power communal supplies such as lighting, lifts and community offices, shops or outreach centres.
 - 3.11. The Community Benefit Society will sell the renewable energy generated on site to the Council or energy user at a discount compared to commercial market prices. This will be included in a Power Purchase Agreement.
 - 3.12. A proportion of the income generated from the Community Benefit Society will be reinvested in the community through a ring-fenced fund to address fuel poverty and raise awareness on energy efficiency.
 - 3.13. In summary, the approach developed by Repowering is designed to align the interests of all key local stakeholders:
 - Local residents have the opportunity to have a direct financial stake in the project.
 - Residents that can't afford to invest will still be able to join the Society through a £1 membership fee. All members have an equal vote and say in the business of the Society.
 - Local residents can also benefit directly by applying to the Community Fund.
 - The property owner (e.g. Local Authority) benefits from reduced running costs for buildings where solar panels are installed, as the cost of electricity for communal services is reduced.
 - Where a Residents' Management Organisation (RMO) is in place, the project will be developed with their input and support, and aligned with their priorities.
 - The creation of a new, legally constituted and incorporated community organisation provides a vehicle for future projects, such as community broadband or energy efficiency measures, and a single point of contact for external organisations such as electricity suppliers to work with residents.
 - Each Repowering Community Benefit Society joins a network of other similar projects, providing a mechanism for learning and skills beyond renewable energy development to be shared.
- 4. Repowering London credentials: Awards and achievements**
- In July 2012, BES1 was selected by KPMG as one of the Top 100 Innovative Urban Infrastructure projects globally.

- In October 2012 Repowering received further recognition, winning the Inside Housing Sustainable Finance award for the innovative financial model developed for the Brixton Energy projects.
- In July 2013 Repowering won the Renewable Energy Association Community Awards.
- In August 2013 Repowering was ranked top 20 UK Social Enterprise by ReEconomy.
- In September 2015 Repowering was highly commended for the National Community Energy Awards.
- In June 2016 Repowering won the Ashden Sustainable Communities Award with Low Carbon Hub.
- In November 2016 Repowering won the European Solar Prize 2016 Local Organisation of the year
- In September 2018, Repowering won the award for Healthier Cities for our Energy Garden Project and 'Overall Winner' at the 2018 Sustainable Cities Awards

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