

# Getting Solar Panels with En10ergy

## Briefing Paper for Senior Management and Board Members

This document acts as a short information sheet for community buildings interested in partnering with En10ergy to benefit from cleaner, greener, and more affordable solar energy. It addresses common questions you may have before proceeding with a community energy project.

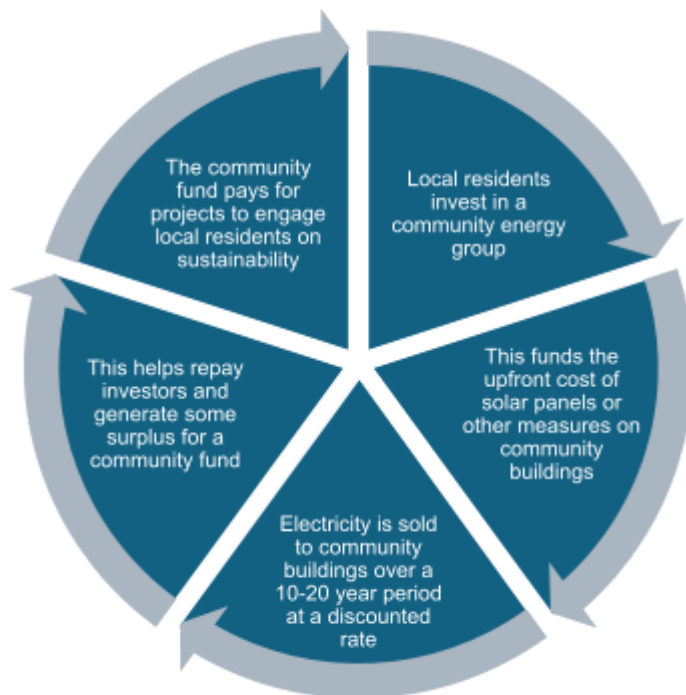
It's important to note that every community building is different, and we tailor each project to meet specific needs. This document provides useful explanations, rather than a comprehensive guide.

***If you wish to register your interest in a community solar or LED Lighting project, please [fill out our online form here](#).***

### What is Community Energy?

Community energy is about people and communities taking democratic control over their energy future, by understanding, generating, using, owning, and saving energy in their communities, as well as working together across regions and nationally.

Generally, community energy projects use the business model depicted in the chart below:



We are part of a national network of community energy enterprises. The sector is ever growing, and includes a diverse range of projects, people and directions of work and activity. There are over 200,000 people engaged in the sector, and collectively we've saved £3.35m on energy bills from activities in efficiency & fuel poverty.

### Who is En10ergy?

En10ergy is a community energy enterprise (non-profit) founded by local residents in Haringey. We help individuals, businesses, and

community organisations transition to clean energy. We also work with our sister organisation, Muswell Hill Sustainability Group to offer information on sustainability for individuals and organisations.

We own and operate solar panels on community buildings such as schools and churches, financed by local investors. En10ergy is registered as a Community Benefit Society under the Cooperative and Community Benefit Societies Act 2014. Our voluntary directors have collectively contributed thousands of hours to our initiatives.

## How Would We Finance the Solar Panels?

Where available, En10ergy will apply to grant funding programs to cover a portion of the installation cost. The remainder will be raised through a community share offer, inviting local people to invest in our organisation. We offer shares that provide a social return on investment which is usually around 3-5%. Investors generally invest to benefit their local community with green energy.

## Who Will Own the Solar PV Array?

En10ergy will own and operate the solar PV array for 20 years, maintaining, insuring, and repairing the panels to ensure peak operation. Although each project differs, typically, after the 20 year lifetime of the project, ownership of the solar array will be transferred to you at no cost. Modern solar panels are designed to operate at about 82% of their original capacity even after 20 years – any electricity generated from the panels will be free to you after this period.

## Who Will Be Responsible for Solar PV Maintenance?

En10ergy will cover all operation and maintenance costs, assuming all risks associated with ownership and operation. We will hire contractors for repairs and monitor the system remotely to ensure optimal performance. We may, from time to time, ask for access to the site, to take meter readings or conduct repairs, but we will discuss this with you ahead of time.

## Who Will Insure the Solar PV Array?

En10ergy will insure the solar installation against:

- Damage to your property directly attributable to the solar array
- Loss of revenue & business interruption
- Public liability

We expect our installer to provide a full parts and labour warranty, supported by deposit insurance and independent warranty insurance.

From your insurer's perspective the addition of solar panels may constitute a material change to the building and associated insurance risk, with most policies requiring you to notify your insurer of any installations.

## How Much Solar Electricity Would the Panels Provide?

This depends on the roof size, orientation, shading, and your electricity usage. Solar generation peaks at the summer solstice and varies seasonally. Surplus electricity will be exported to the national grid, and conventional energy will continue to be used as normal when solar is insufficient (although capturing surplus in batteries will reduce use of electricity from the grid considerably, which we may consider if you have high night-time energy consumption).

## How Do You Ensure the Solar Does Not Damage Our Roof?

The solar industry has solutions for nearly all roof materials. For example, a lag bolt and flashing for tiled roofs, U-clamps for standing seam roofs, and ballast mounts for flat roofs. Our structural surveyor ensures your roof can support the solar panels and is in good condition.

## Who Installs the Solar Panels and How Long Does It Take?

We work with accredited installer companies for our installations. Installation dates are chosen to suit you. Installation takes one to three weeks, depending on the array size, building type and includes a full risk assessment.

## How Do You Determine the Per-kWh Price for Solar Electricity?

En10ergy will meter and charge your organisation for solar electricity, offering significant savings compared to your current energy supplier. Our financial model is open for review and we take a completely transparent approach on developing our model, so we can discuss this with you in depth should you wish to dig into the numbers.

## Do we still need to pay our energy supplier?

Yes, you will still be using energy from your energy supplier, as the solar panels cannot generate power all year round or when there is no light. Therefore, you will still purchase any extra power you need from your usual energy supplier; but will draw power from the solar panels (and cheaper rate with En10ergy), first.

## What happens if we don't use all the power generated by the panels?

Excess power will be put back into the grid, so it won't go to waste. We may sell this to the grid through schemes such as the Smart Export Guarantee, or through a Power Purchase Agreement (PPA), so your extra clean energy can be used to power British homes and buildings. For economic reasons though, we size the solar array to maximise self-consumption, rather than maximising what we put onto the grid. We may consider installing a battery, if you have high nighttime consumption, but again this depends on the project economics.

## What If We Need to Remove the Solar Panels for Roofing Work?

In previous projects, we have allowed a set amount of time for panels to be removed (as this reduces our income whilst the solar panels are not generating power, and reduces your energy savings). We do recognise that roof works may be needed, and usually the cost of removing and reinstalling the panels would lie with you, although this is something we can discuss as part of the lease agreements. Some options include:

1. En10ergy pays for removal and replacement (usually limited to once or twice).
2. You pay for removal and replacement, including it in your roofing work costs.

Option 2 keeps your solar electricity prices lower. We work to find a solution during lease negotiations.

## Why Have You Proposed Installing on Some Roofs and Not Others?

We avoid roofs that are shaded or far from a distribution board, as shading reduces efficiency and long DC cables result in voltage loss. We also avoid roofs that have structural or other technical problems. Our initial proposal will be provisional, and designs can evolve with your input.

## What Legal Agreements Are Needed?

For Solar PV projects, we require either the freeholder or long-term leaseholder agree to provide a licence for En10ergy to host the solar panels on the roof for 20 years. The licence allocates responsibilities and anticipates foreseeable circumstances. If your building is owned by Haringey Council, we have already negotiated an agreed model lease which can be used for your project.

We also arrange a Power Purchase Agreement (PPA) to set electricity charges and payment terms. These are not credit type or loan agreements.

In some cases if financially feasible, these agreements may be made shorter than the 20 year term, where both parties agree.

## What If Our Site Is Sold?

If the building is sold, you can either buy the solar panels from us or transfer the lease to the new owner.

## What Is the Community Fund?

Our primary goal is to reduce your energy costs and carbon emissions. Surpluses in the latter years of the project fund our 'Community Fund' to support the community work that organisations like Muswell Hill Sustainability Group (MHSG) deliver. This includes activities such as MHSG's Green Open Homes Events, and training programs for energy advisors working to assist fuel poor households.

## Useful links:

- [Video about LED Lighting at Glass Mill Leisure Centre](#) in Lewisham, a project by another London community energy enterprise; South East London Community Energy Co-op
- [Video on "What is Community Energy"](#), by Power 2 Change
- [Video about Community Energy London](#), showcasing projects like ours working across London
- [Playlist of videos about community energy projects across the UK](#), arranged by Community Energy England
- [Our website \(En10ergy\)](#)
- [Community Energy England website](#)
- [Community Energy London website](#)

## Any Questions?

Contact our team with any questions:

- Nadia Smith, Project Development Officer, [nadia@en10ergy.org.uk](mailto:nadia@en10ergy.org.uk)



*En10ergy is proud to be part of a national network of community groups powering a greener, fairer future. We are registered members of [Community Energy England](#) and [Community Energy London](#).*