

Repowering London Roof-spotter's guide



Welcome! We've put together this short guide to help volunteers identify and propose potential roofs that would be good sites for new solar installations. Repowering London is aiming to install 5MW of community-owned rooftop solar capacity over the next five years – enough to power 2,000 London homes. To do this, we need roofs to develop and people to get involved in our community-energy co-operatives. Becoming a solar roof-spotter is a great way to help!

Think about:

- Schools
- Colleges & universities
- Theatres
- Hotels
- Care homes
- Hospitals & medical centres
- GP surgeries
- Leisure centres
- Community centre
- Conference centres
- Police and fire stations
- Local authority buildings
- Libraries
- Food manufacturers
- Office buildings
- Buildings occupied by companies using refrigeration or machinery year-round
- ... for example

The kind of buildings to look for:

- ✓ **Large** - We aim for a minimum area of approximately 300m² (about the size of a tennis court)
- ✓ **Flat or sloped metal**
- ✓ **Easily accessible** - So we can carry out works and maintenance
- ✓ **Good condition** - So they can bear the weight of the solar panels
- ✓ **Cover an energy-hungry business** - Buildings that use a significant amount of electricity all year round, particularly during the summer
- ✗ **Not heavily shaded** (by other buildings, trees, a flyover or the like) or north-facing
- ✗ **Not too tall** - Six to eight stories is the maximum height we like to work with
- ✗ **Not cluttered** (for instance with telephone masts, air con units, skylights, etc.)
- ✗ **Not tiled**

Some other things to consider

Roof shape and materials - We love to find a metal, sloped roof with ridges (sometimes referred to as a trapezoidal or standing seam roof) because these are very easy to install on. However, roofs that are pitched at multiple angles are expensive to install on and so not right for us at the moment. We would also need to know if there was a risk of asbestos being present.

Roof condition - The state of repair of the roof is important. The photos on this page show some examples of roofs we would rate poor in terms of the quality of a roof surface. (With thanks to Bath and West Energy for sharing some images.)

Watch out for clutter - In general, the roof should be clear. If there's too much equipment already on it (telephone masts, air con units, skylights, etc.) it will be difficult to install solar panels. Using Google Earth to get a view of the building can help you see if this is likely to be a problem.

Shading - Avoid roofs that are heavily shaded by things such as tall trees or other nearby buildings.

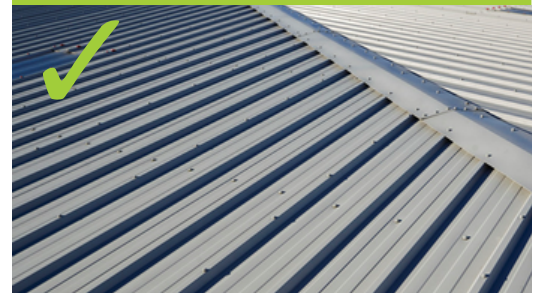
Listed buildings - Listed buildings are longer-term projects with heritage planning considerations, so we would not consider installing on these right now.

Electricity usage - We don't expect you to be able to calculate exactly how much electricity a building uses, but bear in mind we are looking for sites that use enough power for us to make a significant income from the panels we install. Every Repowering London co-op generates a Community Fund from the money it makes by selling electricity, once running costs have been met. This is why we're interested in schools, care homes, hospitals, companies using refrigeration, and the like. However, if you know the site owner of a building you are interested in and can ask them for 12 months of half-hourly data from their electricity supplier this would be ideal to help us decide whether the site would be a viable opportunity.

Examples of suitable roofs

Here are just a few images to give an idea of the type of roofs we are looking for:

Trapezoidal (metal)



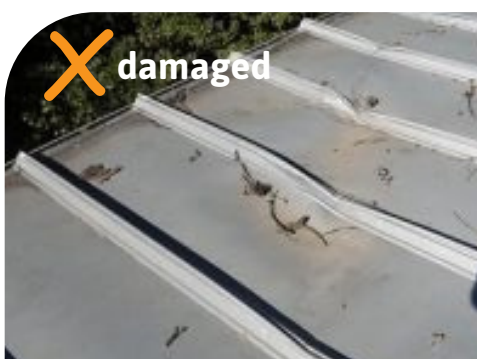
Standing seam (metal)



Flat roof



Examples of unsuitable roofs:



Who we want to work with

- Owners who are willing to engage in a **long-term lease** of their roof space and are happy for the community to own the solar panels that are installed. Our usual project lifetime is 20 years so we don't want to install on buildings that are in danger of being sold, changing ownership, or being demolished. We may be able to work around future refurbishment.
- **Engaged business owners** with strong, proactive Green activities and who actively participate in the community are ideal. We would like to build a strong, long-lasting relationship so that we can find ways to extend opportunities on the site.
- They should be **accessible**. We will need regular access for maintenance so if the building is owned by someone that is hard to contact, that isn't ideal.
- **Stable, single occupants** (long-term) with an energy-hungry business that uses electricity all year round.

What to do if you find a potential roof

- Try to identify the roof on **Google Earth** and measure its size, check for clutter, or look at the **London Solar Opportunity Map** to assess its suitability. You can also use the **Community Energy London Potential Map**, which has been specially developed to help community energy groups find suitable sites.
- If you have identified a site you think is a great fit, get in touch with Repowering London's Solar Development Manager, Etta, at henrietta.dale@repowering.org.uk and we can guide you through the next steps of the process, including contacting the site owner if we agree the site has potential.
- Or if you have a connection to a site owner through your own network, feel free to have an informal chat to see if they are interested and explain why installing solar panels is a great thing to do (see the panel on this page for some ideas). If they are interested, please let us know and we can then help you follow up.
- Finally, if you have any questions or need any support at all, call us on 020 3674 7519 or email henrietta.dale@repowering.org.uk

Good luck with your research and thanks for your help!

Find out more at repowering.org.uk



Why install community-funded solar panels?

Some of the benefits that might bring a building owner on board:

- It is a way to take practical action to fight the climate crisis and increase the positive impact that solar energy can have for London.
- It is a way to support the local community. The solar co-operatives supported by Repowering London return part of their earnings to the community they are located in to pay for local priority projects of their choice.
- They could get solar panels for free. Using a proven model, the money for the installation and its maintenance will be raised from the community. Where there are any related costs, for instance related to assessing the roof, Repowering London can help identify any grant-funding that might be available to help.
- It's an opportunity to invest and earn an annual return. Their organisation can have a direct stake in the success of the installation, alongside other community investors.



Creating Local Energy