

Solar for social housing



The solar opportunity for social housing

Energy costs are going up across the board. Average households are now spending over 5% of their income on energy. The Office of National Statistics further reports that the poorest fifth of households spend more than double that on their energy bills.

These stark statistics can partly be explained by energy prices rising at a faster rate than incomes. As a result, between 2002 and 2012 average spend on energy rose by 51% (Office of National Statistics).

According to the Department for Energy and Climate Change (DECC), the price for residential energy is expected to rise sharply from 2014, with prices reaching 23.3p per unit (kWh) in 2024. This is an increase of 40% on the 2014 price of 13p per kWh, excluding inflation.



What does this mean?

Against a background of emerging Government fuel poverty strategy, and new responsibilities derived through the Home Energy Conservation Act, there is a significant opportunity for landlords to improve energy efficiency for low income communities through the installation of solar electricity (known as solar photovoltaics, or "PV").

How can solar PV help?

It has been suggested that the Government should introduce ambitious near and long-term minimum efficiency standards for households. These targets should be comparable with the energy efficiency standards that new homes are built to today.

65% of fuel-poor households currently live in homes rated E, F or G. Achieving a target of EPC band D or better should mean the tenants' homes won't use so much fuel for heating, having a huge impact on fuel poverty. On average, a home's EPC rating will improve a whole grade with the installation of a solar PV system.

The technology is reliable. Solar PV panels have warranties for 25 years and will produce electricity efficiently for 40 years, so it's a secure source of power for now AND for the future. It is also easy to install and maintain, and low-risk as irradiance levels fluctuate little year by year, providing consistent and predictable electricity generation.

Solarcentury has worked with over 50 housing associations and local authorities on hundreds of affordable housing projects, helping thousands of homes across the UK go solar.

Free power for your tenants

Solarcentury has the operational ability and experience to install large volumes of residential-scale solar PV over the next 12 months, which in turn would give your tenants free electricity for years to come. We already work with experienced solar investors who know the quality of our projects and are ready to invest in your sector.



The Energy Saving Trust estimates that 50% of the electricity generated by a solar system is used directly within a domestic property. The rest is exported to the national grid.

Each solar system is expected to meet around 30% of the tenants' electricity consumption, producing around 1,410 units (kWh) of electricity a year.

So a solar system size of 3kWp can save a tenant up to £200 per year. These savings should grow to £2,994 over ten years and £7,998 over 20 years* with inflation.



Added value for the landlord

Having a solar array on the roof can improve a property's EPC rating, not only saving money for your tenants but also affecting its general value. As an example, a 4kWp solar system would add around 15 points to an EPC rating. If the property was in band E, the extra points may see it move up to band D. A study, compiled by DECC in 2012, found that dwellings that were rated with an EPC of D were sold for 8% more than dwellings at band G**.

* Based on 6% annual energy inflation average

** 'An investigation of the effect of EPC ratings on house prices' – DECC, June 2013

Benefits to the local economy

A large scale solar rollout has a positive impact on the local community. It reduces bills, providing much needed disposable income to the residents, which can then be spent locally.

Our projects will also provide local employment opportunities during build stage and beyond.

A solar installation helps tenants develop a broad appreciation of energy use within the home and how energy can be better managed.



Funding

Self-funded

Housing Associations and Local Authorities can self-fund, with Solarcentury as the main contractor.

Fully or part-funded

We also offer a variety of financial options including arranging 100% finance where we take the feed-in tariff as payment over 20 years and your tenants enjoy free electricity. Or we can part-finance projects, bringing in RSLs as shareholders.

Our cost of capital is very competitive, which results in a higher number of properties benefiting from free installations.



Where we come in



Legal support

We understand the barriers that landlords may face when introducing solar projects across a portfolio of buildings. We have direct experience of making sure that all the stakeholders' interests are covered, starting with the residents but not forgetting the banks, the insurers and any other long-term service providers.

We can manage the legal negotiations within a defined timeline and structure the project in a way that minimises the need for external consents.



Pre-installation surveys

We use the latest techniques to ensure we can survey a large quantity of residential properties in a short space of time, without compromising the quality of our work. We offer this on a consultancy basis, giving you a near instant picture of what should be possible with your housing stock. To put this into context, a desktop feasibility study of 15,000 residential properties that provides data including estimated installation capacities, elevations and orientations, can be undertaken in less than a month. This means that your solar programme can go from concept to reality in a very short space of time.



Installation

We have a network of experienced MCS-approved installation professionals that we've been working with for a number of years. They are regularly audited by us to ensure they reach and maintain our high standards when installing solar on any roof. And they undertake routine refresher training, keeping their work of utmost quality, using the latest techniques.



Maintenance and monitoring

Solarcentury offers a series of operation and maintenance packages (O+M), along with monitoring services that ensure any solar investment is meeting agreed performance targets.

We can install a metering system that displays electricity consumption feedback in the resident's living space. This enables them to understand the solar production better, to see when they are exporting energy and could switch on appliances to use the free energy. Just this small change in energy use could save a typical resident in the UK £49* per year if they have this equipment.

Why Solarcentury



Solarcentury is an experienced delivery partner and has the logistical skill to install large volumes of solar PV across housing stock in the shortest period of time possible.

Founded in 1998, we have been around since the early days of the solar industry and have been part of the evolution that has made solar the attractive investment it is today. We have won multiple awards for product innovation. We are proud to have put solar on more types of roof than anyone else, including over 22,000 residential properties.

What's more, we're in it for the long-haul. This isn't just our business, it's our mission. Our commitment to making solar accessible is deep-rooted and long-term, and our solidly-established business is growing steadily worldwide.

We are a big believer in helping solar change our world for the better, and we contribute 5% of our net profits every year to SolarAid, the charity we founded, who aim to eradicate kerosene lamps from Africa by 2020.

Working with those who will benefit the most from solar is a major driver for us both in the UK and abroad.

All Solarcentury project managers working on UK social housing projects are expected to complete an Energy Awareness and Fuel Poverty course, either through National Energy Action or another such organisation.



Housing in conservation areas



We are aware that some housing stock may be within conservation areas, Areas of Outstanding Natural Beauty or listed. Solarcentury's own range of C21e solar tiles and slates are aesthetically pleasing and have been installed in all of these circumstances.



We have vast experience installing solar on all kinds of roofs and residential properties.

Our work

South Yorkshire Housing Association

System size

2.06 kWp average system size

Annual electricity savings, average per home

£202

Approximate CO₂ savings per year

850 kg

Please note all figures used are estimations, correct at time of print.

South Yorkshire Housing Association (SYHA) was looking to reduce electricity costs for their tenants and reduce their environmental impact.

They focused heavily on pre-planning including customer consultation, and rolled out the scheme in phases to ensure that the expected benefits were achieved.

The financial case included the Government's feed-in tariff, which continues to provide income to support further investment in SYHA's properties and services.



"Solar power is a fantastic way to upgrade our existing building stock. It's helping to significantly reduce energy costs for our tenants by providing free green electricity, and SYHA can use the payments we get from the feed-in tariff to re-invest in further improvements to our housing stock and services. I'd encourage other housing associations to look at the long term investment opportunities of this clean technology.

Whilst the FIT has dropped since our original Power-Roofs programme, falling installation costs and improving panel efficiency mean that PV schemes can still make good economic sense. We are currently considering how we might expand our own Power-Roof portfolio for the benefit of our customers, SYHA and the environment."



Gordon Watts, Sustainability Manager, SYHA



Brentfield Estate, London

System size

3 kWp average system size

Annual electricity savings, average per home

£200

Approximate CO₂ savings per year

1,200 kg

Please note all figures used are estimations, correct at time of print.



“This is just the beginning. We are able to reinvest in energy efficiency programmes because of the solid, sustainable income stream. We need a sustainable model to really cut CO₂ emissions and help protect our tenants from rising energy prices.”

Gerry Doherty, Chief Executive of BHP



London Housing Association tenants saw an unusual trend in their electricity bills. Rather than rise, as the case for the majority, some have seen their electricity bills cut by over a third in a year.

Residents of the Brentfield Estate near the North Circular in North West London have seen a £200 saving per property following the installation of solar electric roof tiles on their homes, with savings only increasing as electricity prices rise.

As local authorities are facing budget cuts around the country, housing providers are taking advantage of the income generated from investing in solar power.

At the same time, these solar installations are helping low-income families cope with the financial hardship caused by rising energy prices, as well as helping the environment by cutting CO₂ emissions.

Shaun Gillam, Senior Project Manager at Brent Housing Partnership said: “Solar power is a great way of investing in the future for our tenants. It is a way for us to reduce our residents’ expenditure on energy and meet energy efficiency targets whilst making a profit at the same time.”

“I am very pleased with the work; I feel it’s created a sense of community and everyone has a more positive outlook. I am also proud that my home is environmentally friendly and I am part of such a beneficial project.”

Mrs Mariam Shah, Resident of Brentfield Estate

Find out more

Call

+44 (0)20 7549 1000

Visit

www.solarcentury.com

Solarcentury is in business for a purpose

to make a big difference in the fight against climate change through widespread adoption of solar power.

We are a big believer in helping solar change our world for the better, and we contribute 5% of our net profits every year to SolarAid, the charity we founded, who aim to eradicate kerosene lamps from Africa by 2020.



solarcentury

50 Great Sutton Street
London EC1V 0DF

T +44 (0)20 7549 1000

F +44 (0)20 7549 1001

www.solarcentury.com