



SOCIAL HOUSING ASSOCIATION



**Outline Proposal
For Group Social Housing
Solar Photovoltaic
Installation and Maintenance**

OVERVIEW

This presentation is intended to provide further detail on the following programmes:

- Energy generation using solar PV on domestic housing stock and
- Energy generation on larger/commercial buildings;

UK ENERGY POLICY UPDATE

In recent years, an established business model has developed whereby solar project companies (operators) have taken leases of social housing roof space and installed PV systems, supplying free energy for the use of the social tenant. There are estimated to be more than 50,000 such installations across England and Wales. The model has been founded on the right for the operator to register the installation for, and receive, feed-in tariff and associated export income over the life of the project (20 years or more).

Feed-in tariffs have recently been subjected to significant cuts, reducing income for operators from around 13.5p/KWh to 4p/KWh. Free solar business models are therefore no longer achievable, since 4p/KWh is insufficient to fund the operator's costs in a scenario where the social tenant is not paying for the power generated or consumed.

A new business model has emerged, known as a “power purchase agreement” (PPA). In this model, the social tenant has the opportunity to access power generated by an operator's PV system installed on the roof of their home, paying a discounted rate per KWh for their electricity which would be the lowest domestic rate in the UK marketplace.

PPA MODEL

Operator is granted lease for 20 years by Social Housing Group;

Assess Social Housing Group's properties for the suitability of Solar PV.

Assess Social Housing Group's Commercial Stock for the suitability of Solar PV.

Social Housing Group enters agreement with social tenant for them to use any power generated from the PV system, subject to an electricity payment to Social Housing Group (potentially collected monthly with rent or through a billing platform as part of the Energy Facilities package);

Operator (via contract with their chosen EPC) installs and maintains the system entirely at its own cost;

Operator provides Social Housing Group with regular readings from the PV generation meter (assume quarterly), showing power generated.

Social Housing Group collects electricity payment on monthly basis (this will be calculated on estimated generation). Assume equivalent of 10p/KWh;

Social Housing Group pays Operator a price per KWh generated (assume 8p/KWh, subject to further surveys, yields and costing)

Assumes energy yield of 950 KWh/KWp per year. This will equate to around £275 per home per year. Standard tariffs paid by social tenants across UK exceed 14p/KWh.

Note potential margin to Social Housing Group annually of £75 per home/year to reflect billing and other costs associated with providing this service.

SOCIAL HOUSING FULLY FUNDED MODEL

Installation of
solar pv on Social
Housing Group
Housing Stock

.Reduced
domestic
electricity bills
to lowest rates
in UK market
delivering
savings on their
energy bills

Provision of new
Energy
Performance
Certificates for
all eligible
properties

THE PPA OFFER

A fully funded model which covers the entire cost of project delivery:

- **Quality Assured works in the homes of your residents:**
 - Managed by an experienced project team
 - Delivered safely by operatives from approved main and subcontractors
 - Monitored and measure in line with our Health, Safety, Environmental and Quality System
- **A locally based project manager to work with you throughout the life of the project, to ensure effective stakeholder management:**
 - DNO, Planning, CDM and Building regulations
 - Resident liaison pre, during, and post construction
 - Project reporting and client liaison
- **A future proof solutions including:**
 - Warranties and maintenance for the lifetime of the system and components
 - Real time monitoring and fault finding service
- **Revenue Stream for Social Housing Group**
 - Revenue of around 2p/kwp for electricity generated
 - Around £75/property per year
- **Delivery of social investment outcomes:**
 - Job opportunities, work placements and taster sessions for Social Housing Group
 - Advice guidance on energy savings

Free Installation of solar systems

- 20 year contract term with option to renew
- Reduced electricity costs to tenants
- Approximately 75% of housing stock with a solar system

Delivering benefits to Social Housing Group

Opportunity for revenue through billing

- Improved stock SAP rating
- Carbon Reduction
- Aid to meeting CSR targets
- Jobs and placements for residents



- **KEY INCLUSIONS IN THE PACKAGE**

**A PARTNERSHIP APPROACH TO:
PROGRAMME PLANNING,
TENANT LIAISON AND
COMMUNICATIONS**

A DEDICATED TEAM FOR THE DAY TO DAY MANAGEMENT OF YOUR PROJECT

QUALITY PRODUCTS AND INSTALLERS FROM A TRUSTED, EXPERIENCED SOLAR PROVIDER

AN ALL-INCLUSIVE FINANCIAL PACKAGE REQUIRING NO COST TO SOCIAL HOUSING GROUP

TO INCLUDE:

PLANNING CONSENT, SURVEY AND DESIGN COSTS COVERED

ALL INSTALLATION, MAINTENANCE AND REPAIR COSTS ARE COVERED

PROVISION OF FREE ELECTRICITY TO TENANTS

KEY BENEFITS TO SOCIAL HOUSING GROUP

ZERO COST UPGRADE TO YOUR HOUSING STOCK-IMPROVING SAP RATINGS BY UP TO 10 POINTS PER PROPERTY

CARBON SAVINGS OF APPROXIMATELY 2 TONNES PER PROPERTY

REDUCTION IN FUEL POVERTY AND RENT ARREARS THROUGH FREE ELECTRICITY TO TENANTS, SAVING BETWEEN £200-£250 ON THEIR ENERGY BILLS EVERY YEAR

REVENUE FOR SOCIAL HOUSING GROUP OF AROUND 2PENCE KWH OF GENERATED ELECTRICITY WHICH EQUATES TO APPROXIMATELY £75 PER PROPERTY PER ANNUM

LOCAL ECONOMIC IMPACT-OPPORTUNITIES FOR RESIDENTS TO ACCESS PLACEMENT AND JOB OPPORTUNITIES THROUGHOUT THE CONTRACT TERM

SCOPE OF WORKS



Stock Assessment

- Desktop survey
- Drive by survey



Resident Liaison

- Tenant marketing
- Tenant consent



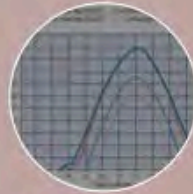
Survey

- EPC survey
- PV survey
- Design
- Technical & Commercial Assessment



Install

- Install booking
- Scaffolding
- Supply & Install system
- Fully approved contractors
- Resident support and advice
- FIT & EPC lodging



Aftercare & Maintenance

- Real time monitoring
- 20 year warranty
- Fully insured systems



System Removal

- Removal at end of contract term
- Right to buy removal
- Redevelopment removal

Seamless, quality assured service from an experienced provider you can trust

NEXT STEP

- Present findings to Board Members at Social Housing Housing Association
- Assess the Social Housing Housing stock for suitability of Solar PV
- Those that are not suitable, assess for suitability of Storage
- Offer energy switching offer to all properties to reduce rates throughout
- Communicate the project progress to Social Housing for corporate social responsibility