MAYOR OF LONDON

Zero Carbon Accelerator

Market Assessment for Financing Solar Power on Council Housing at Scale

March 2025

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1 Introduction

1.1 Background

Third-party finance can significantly enhance the capacity of housing providers to achieve their climate change goals by providing access to capital, innovative financing solutions and expert support. This report explains the different approaches that are available to councils and housing providers who want to leverage these resources. It identifies market actors involved in delivering innovative financing solutions for solar, battery and renewable heating. The approaches set out in this report can help housing providers accelerate their sustainability initiatives and contribute to a greener future.

1.1.1 Context

Following the end of the Greater London Authority's (GLA) accelerator programmes (Local Energy, Workplaces, Homes & Social Housing), the GLA launched a subsequent programme in 2024 – the Zero Carbon Accelerator.

The Zero Carbon Accelerator aims to address key barriers to decarbonisation, including a lack of capacity, complex procurement, limited funding and supply chain challenges. It aims to support the generation of a sustainable and long-term decarbonisation pipeline and make strides towards a zero-carbon London.

Scaling solar energy is crucial to London's ambitions and the Mayor's Accelerated Green pathway, which aims for net zero carbon by 2030, and the Zero Carbon Accelerator directly supports the achievement of this goal.

Initiated by Enfield Council, one of the first projects under the Zero Carbon Accelerator programme focuses on accelerating the ability of landlords to access third-party finance for housing decarbonisation, aiming to scale low-carbon energy solutions (solar, storage, heat pumps) across London's social housing stock. Specifically, it will explore off-balance sheet finance options alongside on-balance sheet lending options to provide robust business cases and procurement routes for housing providers. The project is split into three key work packages:

WP1.1 – 'One to Many' market analysis and development of tools & catalogue Market analysis of financed approaches to energy system installation on council housing, with development of templates and tools to support London Boroughs and social housing organisations with decision making about the best approach for their homes.

WP1.2 – Enfield case study

Support Enfield Council to identify and procure an off-balance sheet solution for solar, battery and heat pumps (where relevant) on low rise flats and housing, ensuring this complements their Social Housing Fund application. Use this as a case study to feed into WP1.1.

WP1.3 – 'One to many' roll out to other users

Support London Boroughs to create portfolios of investable propositions based on the previous work packages with approval documents, business cases and decision-making tools. This report investigates and outlines the current availability of third-party finance, including its suitability for social housing landlords to leverage finance as WH:SHF cofunding.

1.2 Purpose of report

This report has been developed for social landlords. It is intended to enable social landlords to realise the opportunity for financed solar and battery, and to support them with developing their understanding of what decisions they will need to make when they are planning their own projects. It includes a summary of providers who were interviewed as part of the market analysis process in the Appendix.

1.2.1 Approach to report

We have used a similar approach to the Hackney market analysis report¹, reviewing service provider offers. Each is set out explaining the key differences in approach, how the offer works, and any resident considerations. As the focus for this project is on financed solar, battery and heat pumps, we have included an additional section which is focused on financial implications and considerations. As these offers are primarily market innovations, by their nature they are difficult to compare and contrast with one another. However, there are some groupings which have emerged during the analysis. Some of the offers are a comprehensive package, others are a component of an offer which can overcome technical, regulatory or landlord capacity challenges.

This report focuses primarily on financed solar and battery solutions. Emerging financed heat solutions (excluding District Heat Networks) will be explored further as the project progresses.

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¹ Solar Solution Assessment. London Borough of Hackney

2 Market review

2.1 Financing net zero and energy improvements in social housing

Third-party finance can play a crucial role in helping social housing providers scale up their ambitions for reducing carbon emissions from their portfolio in several ways:

- Access to capital: Third-party finance can provide the necessary capital for
 housing providers to invest in energy-efficient technologies and retrofitting homes
 without impacting on constrained landlord budgets. Grants and subsidies are
 insufficient to meet the scale of investment required. Third-party finance bridges
 the funding gap where public funds are inadequate. Private funding can come
 from various sources including private investors, banks, and green finance
 initiatives.
- Risk mitigation: Engaging with third-party financiers can help mitigate risks associated with large-scale investments in energy efficiency. By leveraging financial expertise, housing providers can structure deals that share risks and rewards, making projects more attractive.
- Innovative financing models: Third-party finance often introduces innovative finance models such as Energy Performance Contracting (EPC) or Green Bonds. These models can align payments with energy savings, ensuring that housing providers only pay for improvements that deliver measurable results.
- Technical assistance: Financial partners can offer technical expertise and support in identifying the most effective energy efficiency measures. This can include conducting energy audits, recommending technologies and helping to develop comprehensive sustainability strategies.
- **Long-term planning:** Third-party finance can facilitate long-term planning by providing funding for multi-year projects. This allows housing providers to implement a phased approach to delivering net zero projects, spreading costs over time while ensuring continuous improvement.
- **Enhanced credibility:** Partnering with reputable financial institutions can enhance the credibility of housing providers' sustainability initiatives. This can attract additional investment and support from stakeholders.
- Regulatory compliance: Third-party finance can help housing providers
 navigate complex regulations and compliance requirements related to energy
 efficiency and sustainability. Financial partners often have a deep understanding
 of the regulatory landscape and can assist in aligning projects with legal
 requirements.
- Performance monitoring: Many financial partners provide ongoing performance monitoring services to ensure that energy efficiency measures are delivering the expected results. This data can be invaluable for making adjustments and demonstrating success to stakeholders.

2.2 Financial approaches

There are multiple ways landlords can access finance for investment. This includes standard approaches which are familiar to landlords, and more innovative models. There are four main approaches considered for the purposes of financing domestic energy solutions for councils and housing providers and examples are set out in Table 2.1.

Table 1: Overview of options for financing domestic energy solutions for councils and housing providers

Financing approach	Description	Balance sheet treatment	Financing routes
Borrowing public money / subsidised finance	Debt instruments issued by public / public affiliated entities to raise capital for public projects, which are repaid over time with interest. Public debt is the most used form of financing for local authorities. The debt requires a fixed return over a specified period.	On balance sheet	National Wealth Fund (previously UKIB) Social Housing Retrofit Loan Public Works Loan Board (LAs) GLA Green Finance Fund The London Fund The Housing Finance Corporation Limited
Raising funds through bonds or borrowing from private sector	Bonds are also a debt instrument (and can be either public or private) but are issued and sold to multiple investors and are tradable with fixed interest rates and longer terms. Debt (directly borrowing from private sector) can also be issued by corporations to raise capital for projects, which are repaid over time with interest.	On balance sheet	UK Municipal Bonds Agency Other Bonds (Green Bonds) Banks
Developing a special purpose vehicle with private and / or public investment	A special purpose vehicle (SPV) can be established as a subsidiary and can isolate financial risk. SPV's can benefit from direct equity investment	Off balance sheet	Funds such as the London Efficient and Decentralised Generation of Energy ('EDGE') Fund Banks Investors

	which involves an investor providing capital directly to a project in return for an equity stake.		
Subscription or equipment lease model	A subscription model is an 'as a service' model whereby a third party develops and manages the service at no upfront cost but then pays a monthly fee for use and maintenance.	Off balance sheet	Investors

Choosing between the different approaches, and on-balance sheet and off-balance sheet financing for solar depends on the organisation's financial strategy, capacity, tax considerations and cashflow management. Each approach has advantages and disadvantages. Companies must evaluate their specific circumstances to determine the best option.

2.2.1 What does off-balance sheet mean?

The terms 'Off-balance sheet' and 'On-balance sheet' refer to how an asset is recognised by an organisation in their financial statements. If an off-balance sheet approach is taken, then assets and their associated liabilities are not recognised by an organisation, which might be desirable if there are restrictions on raising debt. Off-balance sheet treatment typically requires that an organisation does not have control, ownership, and maintenance responsibilities for an asset. The term 'Off-balance sheet' is frequently used as a term to identify approaches where organisations receive the benefit of an asset, but do not use their own capital or raise finance to purchase the asset.

2.2.2 The role of an SPV (Special Purpose Vehicle)

An SPV is a company which is formed for a defined purpose. It is used to manage risk for investment and ownership of assets, as it limits the liability to that project, or those assets, so using an SPV can isolate the parent company from liabilities. As a separate company it can also streamline operations, as a different company is responsible for developing, financing and managing the assets. An SPV can be wholly owned by one organisation, or it could be a joint venture. It can make project financing easier because it is an investable vehicle or company, with the investment remaining off-balance sheet. In this context, an SPV could be fully owned or part-owned by a local authority, or it could be fully owned by a third party or third parties. An SPV arrangement can mean the

assets are deemed as off-balance sheet. This will depend on the control and ownership of the vehicle. Specialist advice may be required as part of the structuring of the vehicle to ensure that it is treated as off-balance sheet, if this is a requirement.

2.3 Revenue generation for solar and battery storage

To enable financed solar, it is necessary to understand how additional revenue is generated to pay back finance.

Historically third-party financed solar schemes such as 'rent a roof' were based on a high level of 'Feed in Tariff' which was paid per unit of energy generated, whether it was used in the home or not. This meant residents of homes could be offered significant savings on their energy bills, while there were still reasonably high returns for investors who funded the solar panels. This was also relatively straightforward. This approach is no longer an option due to the changes to the way energy pricing works, and the removal of the Feed in Tariff so other options for paying back investment are required. This section explains the different approaches to realising a revenue stream which can help to pay back investment in solar panels and batteries.

2.3.1 Overview

Solar panels generate electricity that can be used in the property to replace grid electricity. This can save the occupier significant money on their electricity bills. In addition, electricity can be sold to the grid which can generate income. The default approach for creating value from the exported electricity is called the Smart Export Guarantee (SEG), and all energy suppliers must offer an SEG tariff. There is no minimum SEG rate but typically they are in the range 4-15p/kWh. Despite its name, most of these tariffs are fixed regardless of the time of day. The average cost of importing electricity is 24.5p/kWh. With income as low as 4p vs cost of 24.5p, under a standard arrangement it is important to ensure that as much of the energy generated by the solar panels as possible is used in the home, rather than exported. This is one reason for installing battery storage alongside solar.

Compared to the SEG, electricity bill savings and income from exporting electricity can be much higher. Some suppliers offer 'time of use' tariffs (for both import and export), which reflect the actual cost of grid electricity at the time. This varies significantly at different times of day, providing further incentive to use battery storage alongside solar panels, as they can store solar electricity for the occupier to use when purchasing electricity from the grid is expensive. Controlling or optimising a battery to be able to import energy when it is cheap, and to export when it is expensive either to the house or the grid, can therefore maximise revenue. An example of a time of use tariff is the Octopus Flux tariff which offers cheap import rates between 2am and 5am each day, when a battery can be topped up, and a peak export rate between 4pm and 7pm when the battery can be discharged to the grid.

While it is possible for a third party to claim the SEG, the SEG rates are typically higher if this is contracted by the person who is in contract with the energy supplier for the home (referred to as the resident being "on-supply"). Effectively, a social housing tenant is likely to secure a higher rate of SEG than their landlord. However, the process of application is not straightforward, providing a potential barrier to the receipt of this benefit.

In addition to the occupier energy savings and income from the Smart Export Guarantee, there are other revenue streams that can be realised through contracts with grid operators or energy companies. For example, some organisations will pay for capacity in batteries which can be remotely switched on to take excess power from the grid when there is surplus. The value of these revenue streams change, and they depend on a range of factors. A third party is likely to be required to realise these additional revenues.

Table 2: Example savings / revenue for one home with 4kw peak solar & 5kw battery

	Approximate annual revenue per home
Resident energy bill saving	£480
Smart Export Guarantee average	£112
Potential grid revenue	£330

It is worth noting that all these savings and revenue streams will fluctuate based on energy costs which are impacted by policy and regulation, as well as by changes to the balance of grid supply. This is a risk when considering a long-term investment model based on these revenue streams.

2.3.2 The split incentive and revenue collection

As shown in Table 2.2, the highest value, and most reliable commercial benefit created from solar panel installation is the occupier energy cost reduction, followed by the potential grid revenues. Where the resident is the owner of the house, they can borrow and pay back the loan with the savings they make on their energy bill. In social housing, the tenant makes the saving on their energy bill, but the landlord owns the asset, so a different way of structuring revenue streams is required. There is no contract between the energy supplier and the landlord or the investor as occupiers hold the energy supply contract. This means it is more complex to find a way of capturing a proportion of the resident's financial benefits and passing this to an investor or using it to pay back borrowing.

Most landlords are unlikely to want to become an energy supplier, which means either a third-party provider needs to collect revenue from the resident, or that a landlord must use other mechanisms. Complexities include policies which prevent rents from being increased, market regulations which mean residents must have freedom to switch energy supplier, and the volume of low-income households in social housing which means greater risk of fuel poverty and therefore varying consumption patterns and realisable savings.

Several approaches are possible. Enfield has already trialled collection of a 'Comfort Plan' through an additional service charge for residents. This approach of using an increased flat rate service charge linked to a proportion of energy bill savings from solar energy could be applied for council house solar investment at scale. Alternatively, a service provider could be procured to run a service, which could move some risk from the council. An external service provider is likely to have access to grid services revenues associated with optimising solar panels and batteries. This could partially or fully offset any cost for operating the service. They could also re-sell the electricity to the tenants. To do this they would need to either be licenced as an energy company, or they may be able to operate under an exemption². Two examples of revenue collection approaches are being trialled by Camden, Clarion and Hackney, reflected as case studies below.

2.4 Case Studies

Two London boroughs and one national housing association are taking different approaches to scaling solar investment.

2.4.1 Hackney

Hackney carried out a market review at the time they developed their project. Their market report and cabinet paper are included in the footnotes^{1,3}. Hackney decided to borrow money on balance sheet. Their revenue is generated through a combination of managing and optimising the times when energy is bought and sold, and through charging the residents for electricity which is generated for free by solar panels. Residents pay less for their energy, with an expected saving of up to 15%.

Hackney procured a third-party expert provider, Emergent Energy, to design and install, operate and manage a microgrid solution including ensuring this is structured to meet energy regulatory requirements. The third party also carries out billing and collection of resident energy bills.

Emergent were selected due to the uniqueness of their offer. They had a derogation from Ofgem to trial an approach to operating a microgrid which had not been tested before. Emergent were procured with a works contract for installation of the equipment and a concession agreement to enable them to operate the microgrid and bill the tenants. The concession agreement requires them to pay a fee to the council. This fee is used to pay back the council's borrowing. Other investment approaches could be used alongside the Emergent approach. The model is currently aimed at flats, although they aim to expand their approach to houses in the future.

2.4.2 Camden

Camden Council have recently approved a decision to procure a Special Purpose Vehicle (SPV) which will fund, install, own and operate solar and battery storage on approximately 3,000 dwellings as the first stage in a programme of financed retrofit. The

² Selling Electricity to Consumers: What Are Your Options?

³ Hackney Light and Power Residential Solar PV Pilot - Cabinet Report

SPV will be part-funded by Camden and part-funded by an institutional investor. The structure of the SPV means it is deemed as off-balance sheet for Camden.

The SPV will generate revenue to pay back the investment, in the following ways:

- Residents will pay for the electricity generated by the solar panels. The unit cost
 of the electricity will be lower than grid energy, with residents expected to save in
 the region of 13% on their energy bills. The residents will pay a single bill which
 includes their grid electricity and their solar electricity. Because the solar energy
 is free to generate, the income from the resident payment is a new revenue
 stream for the SPV.
- The systems will be controlled to enable access to grid services revenues.
- Income is received for electricity which is exported to the grid.

To ensure the revenue streams are maximised and secure, the SPV will operate and optimise the performance of the installed systems and will carry out billing and payment collection.

The Camden cabinet paper is linked in the footnote⁴.

2.4.3 Clarion

Clarion is working with a provider and other partners to develop an approach to financed energy improvements in Bromley. The works included are solar panels, battery storage and heat pumps.

Clarion's intention is to bring in new finance to fund these types of work and they are exploring an SPV structure, similar to Camden. However, Clarion is also considering funding their early installations directly. This will enable them to focus on getting the process right for residents, and ensuring revenue is being generated. By doing this, they evidence the returns, which reduces the risk for investors, which could lead to a lower cost of finance, or a different risk profile for Clarion.

Clarion can transfer solar assets which they fund during the first phase into an SPV. By using a provider with a billing service, they have the flexibility to use different finance approaches as they progress with the project, while retaining the same resident front end service.

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⁴ Retrofit at Scale for Council Homes Procurement Strategy.pdf

3 Market Analysis

3.1 Decision making factors and priorities

Landlords have differing priorities that need to be considered before selecting a suitable finance structure. Key questions for landlords to consider are listed below as these are likely to impact on which providers will suit their requirements.

Table 3: Selection criteria

Off-balance sheet	Does the landlord need an off-balance sheet approach, or can they invest directly, or borrow cheaper finance available directly to social housing or public sector organisations? Would the landlord prefer to own the assets, or not?
Revenue collection from residents	Does the landlord want to be responsible for recovering the resident revenues, or do they want to outsource this? Would the landlord be happy to increase service charges to collect a fee from residents for this purpose? Are they happy with innovative billing approaches for resident energy? Can the landlord take the risk on non-payment of charges for solar? Are they comfortable with pre-payment meters for their residents?
Budget and cashflow	Does the landlord have any capital to invest? Do they want to provide ongoing funding to support the cost of maintenance, or to ensure resident savings?
Revenue maximisation	Does the landlord have any internal capacity to ensure that revenues can be maximised, considering issues such as managing when energy is drawn from and sold to the grid, and securing any additional revenues, or would they rather outsource this? Is the landlord prepared to take the risk on energy prices changing?
Resident service standards	What expectations does the landlord have on how their residents are engaged?

	Do they want to lead on resident engagement, or do they want another party to do this?
Resident energy bill	What level of energy bill savings do landlords want to offer their tenants, recognising this needs to be sufficient to ensure residents sign up?
savings	Would they want to guarantee the same savings if energy prices reduce?
	How much appetite does the landlord have to be involved in developing a new structure?
Contracting	Does the landlord want to outsource everything and contract with just one party, or are they happy to contract different parts of a model separately to give themselves greater control or more flexibility?
	What length of contract is the landlord willing to consider, recognising models which include off-balance sheet finance tend to be 25 – 30 years?
	How much is the landlord willing to work with a provider on developing something innovative?
Risk appetite	How much risk is the landlord willing to take for issues around voids, bad debts, right to buy?
	What volume of properties does the landlord want to include?
Project scale	Is there an opportunity to extend the number if the first project works well and does the landlord want that to be part of the initial agreement?
Return for the landlord	Does the landlord want to have the option to invest and secure a return on investment?

It is important to recognise that there may not currently be a solution which meets all landlord requirements from day one. Previous 'rent-a-roof' solar financed schemes were based on a high 'Feed-in Tariff' subsidy for solar panels, which meant returns were guaranteed at a fixed rate and did not involve charging residents. The returns under current energy market structures are more complex and less reliable. This means offers are evolving to meet client needs, which creates a new (and moving) energy market landscape. The availability of an offer that meets all criteria may also be impacted by the size of the first projects.

3.2 Summary of approaches for contracting with finance

Finance and contracts can be structured in different ways. If the landlord is seeking an off-balance sheet solution, the assets are owned and operated by either another company or a special purpose vehicle. If the landlord is borrowing on-balance sheet, they own the assets but may still wish to contract out the approach to collecting revenue, so may wish to offer a long-term contract to operate and maintain the assets they own.

Examples of different approaches are included in the table below.

Table 4: Examples of approaches

Approach	Explainer
An Energy Services Contract with an SPV	An asset owning vehicle is set up to own and operate the energy assets, which enables the landlord to have a variable role and commercial stake in the vehicle and enables other organisations to be contracted by the SPV. This can mean a packaged solution where the landlord contracts with the SPV only and other services are delivered through the SPV. An SPV can be fully owned outside of the council, or the council can have joint ownership (or even sole ownership).
	The SPV owns, operates and maintains the assets, and they contract for these services under an Energy Services Contract with the landlord. The SPV will also need a contract for revenue collection services which may be contracted via a third party, via the landlord, or directly with residents, depending on the structure.
Subscription / lease with a third-party private company owning assets	A company owns assets that they install on council homes providing value to the residents in return for a lease agreement with the council. They operate and maintain the assets. The council pays a lease or subscription fee on an annual or monthly basis. The lease can be a finance lease or an operating lease, depending on structure and this can impact on the balance sheet treatment. The company may contract separately with residents to collect revenue, or this may be the landlord's responsibility meaning the responsibility for paying back the subscription or lease cost sits with the landlord, and they have flexibility in how they recover this cost.
Concession with an operator or concession with an asset owner and operator	The landlord offers a concession arrangement for another party to operate assets and generate revenue from them. This could be structured so that the landlord offers a concession for another party to use their roofs, install and operate assets, and collect revenue. Or it could be structured so that the landlord

	offers a concession for another party to use the landlord's solar assets.
Supply and install with optional service contract for revenue collection	A landlord may decide they want to own their assets and recover revenue from residents directly. They would procure a supply and install contract and would then contract with residents for revenue collection via a service charge. The revenue collection could be outsourced if required via a services procurement, particularly if the landlord wished to use an innovative billing mechanism instead of a service charge.

3.3 Summary of options for revenue collection

The different approaches for revenue collection are detailed in the table below.

Table 5: Summary of options for revenue collection

Approach	Explanation	Pros	Cons
Service charge	Flat rate fee collected by the landlord as part of landlord and tenant arrangements.	Simple and low-cost. Existing mechanism for tenants to understand. Already implemented in Enfield on 10 homes.	Flat rate may not work for fuel poor residents. Risk of resident default and technically complex to incentivise payments. Likely to still need to respond to changes in energy prices. Requires formal consultation via Section 20 of the Landlord and Tenant Act.
Billing platform	Supplier re-sells or passes through grid electricity and sells solar generated electricity with one bill for tenants.	Resident pays an energy bill so lower chance of default, particularly if pre-pay meters are used. Supplier manages regulatory energy billing issues and holds relationship with resident.	Complexity in structure due to electricity regulations. Possibility that sale of solar at scale would require a licenced energy supply agreement. Innovative solution

		Savings can be split	that is still in
		across properties to	development.
		manage savings fairly.	Potential reliance on
		Supplier optimises grid	
			residents needing to
		revenues.	switch to a new
		Suited to any property	provider.
		type.	Landlord likely to
			take final risk on resident default.
Microgrid	Supplier installs new	Resident pays energy	Currently only
Wilcrogrid	metering into flats, such	bill as pay as you go, so	offered on flats.
	that residents no longer	lower risk of default.	
	have a direct		Changes to
	relationship with the	Some flexibility in how	electricity regulations
	national grid. The	prices are set and can	recently agreed to
	supplier uses these to	be adjusted.	enable this
	charge residents a	Supplier optimises	approach, so
	discounted fee for	revenues from	relatively innovative.
	electricity generated by	operating the system.	Residents are
	the solar panels and bought from the grid.	Supplier risk to manage	required to sign up
	bought from the gha.	number of sign-ups,	for a new supplier,
		void properties.	and if they later want
		Right to buy /	to opt out, they need
		leaseholders makes no	to request a new grid
		impact as contract is	meter.
		separate to landlord	
		and tenant arrangements.	
Peer-to-	Peer-to-peer trading	Can maximise the local	Currently running
peer	and billing platform	consumption of solar	under an Ofgem
trading	and billing platform	generation across	derogation, therefore
and billing		households, perfect for	risk that this won't be
platform		·	
		neighbourhood	continued or will
		projects.	change.
		Billing handled by	Question mark over
		energy supplier.	applicability to pre- pay energy meters.
Comfort	Flat rate fee recovered	Simple option for billing	Not currently a
plan	alongside energy bill,	a charge.	single bill for grid &
	covered by a consumer	Can be adjusted if	solar electricity, so
	agreement with a third-	needed although	resident has a
	party service provider	typically a flat rate to	
	verifying performance.	create simplicity for	second bill to pay.
		resident.	May result in higher
			default as difficult to
			incentivise payment.

	VAT is applied at
	20% so loses value.

3.4 Structures

The contracting arrangements and revenue collection approaches work together, although in some cases can be adopted in a modular way, to create turnkey solutions where these are required. Examples of some of the different structures are shown below along with the baseline arrangement without solar.

Figure 1: No PV finance structure

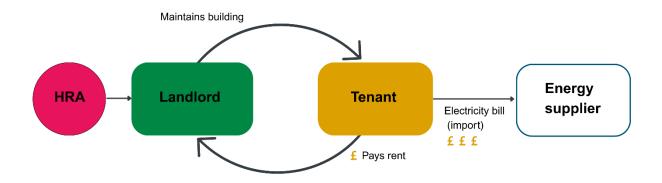


Figure 2: On balance sheet borrowing with service charge finance structure

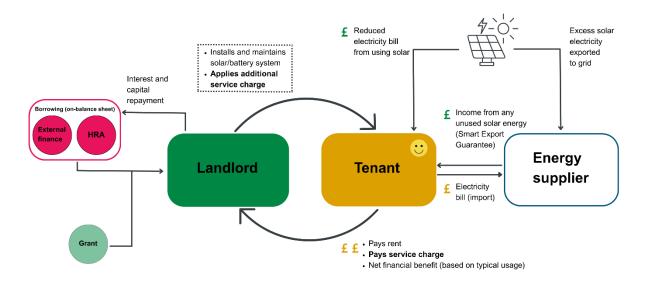


Figure 3: On balance sheet borrowing with third party finance structure

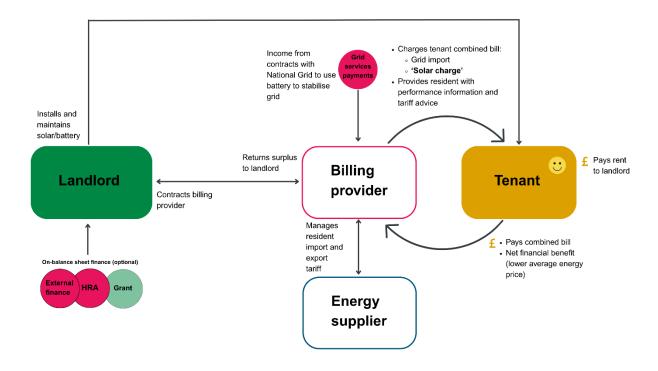


Figure 4: Off balance sheet borrowing through a company finance structure

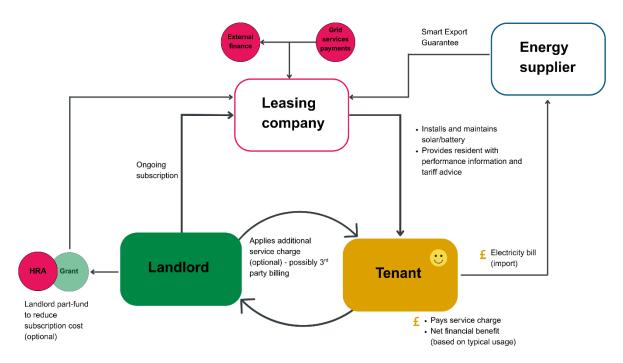
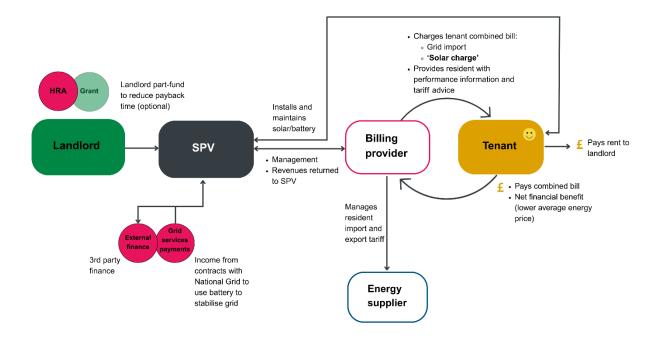


Figure 5: Off balance sheet borrowing through an SPV finance structure



3.5 Procurement

Different approaches to procurement will be required, depending on the approach selected and which organisation(s) the landlord needs to contract with.

In the case of an SPV, the energy services contract may need to be procured as a service, but the SPV then contracts for all works and services, so the landlord would not need to run any other procurement exercises. There are different ways to structure an SPV, ranging from SPVs that are already set up, to working with a partner who has access to investors and can set up a new fund. A supplier may need to be procured to develop an SPV which they would then be contracted by for their services.

If a social housing landlord were to collaborate with a service provider to deliver the project, beginning with a revenue collection service, the provider would need to be procured as a service supplier. The specific activities involved and the value of the contract over its duration would determine the appropriate procurement route.

For existing retrofit contractors already procured by the landlord, there is potential to work with these contractors to deliver the required services. The landlord would need to assess the compliance and cost implications of this approach, including whether the contractor acts as the main supplier or sub-contracts the work, taking into account the cost implications if the contractor were to apply a management fee.

Other procurement approaches, such as a concession arrangement, could be explored. This approach, often applied in cases where an operator pays for the opportunity to deliver a service, has been used in situations like energy companies delivering ECO-funded retrofit projects. In such cases, the energy company typically provides funding, delivers the service, and benefits in alternative ways rather than being directly paid by the council or landlord for the service. This arrangement is also used in the Hackney solar case study with Emergent.

Case studies suggest that certain procurement methods rely on market offerings being unique and innovative without comparable alternatives available. While this justification becomes more challenging as market options expand, it may still be valid for specific services, such as revenue collection or billing solutions. A direct award for a pilot project might be justifiable, however sustaining this for a long-term programme could prove more difficult, potentially affecting continuity for the remainder of the project.

None of the currently available frameworks appear to cover the types of arrangements detailed in this market review, with many solar frameworks focused on supply and install. Therefore, our analysis suggests a new framework will be required and that this should be structured to enable innovation within the framework to ensure offers can continue to evolve to meet housing owner requirements.

3.6 Conclusion of market review

3.6.1 Summary

This report explores third-party financing for decarbonising social housing to align with London's net zero goals. It highlights the emerging market of financed energy assets,

enabling landlords to scale renewable capacity without incurring additional debt. The analysis reveals crucial roles for third-party finance in bridging funding gaps and mitigating risks, showcasing various financial approaches such as SPVs and subscription models. Among other considerations, revenue generation complexities in social housing are highlighted, emphasising the need for innovative collection mechanisms. Key decision factors for landlords need to be assessed to find the most suitable offer

While this report provides an overview of current offers, further discussions with suppliers are needed to ensure suitability for diverse client needs because the market is still developing and offers frequently change to adapt to client needs, which provides opportunities for clients to procure an optimised offer that meets their requirements.

3.6.2 Next steps

To follow the GLA's ambitions to Plan, Prepare, Procure and Perform, the next steps of this project could be to develop a procurement framework that enables innovation within the framework, allowing for solution development and mini competitions. This will enable ongoing supplier engagement and adaptation of current offers to meet landlord requirements.

The Enfield case study could be used to develop and test the framework with an opportunity for other landlords to procure a suitable solution through the framework. This would be supported by a decision-making tool to help landlords prepare for the procurement. Key decision-making factors include:

- Approval process and timelines
- Off-balance sheet structuring
- Cost of finance
- Money flows
- Contracting approach and services
- Contracting of works
- Contractor insolvency
- Number of homes
- Void properties and non-payment risk
- Resident energy savings
- Energy price volatility
- Cost of administration
- Contract duration
- Right to Buy

There will be continued landlord engagement through London Councils to understand different landlord needs and build pipelines alongside emerging supplier offers.

Appendices

A Market providers

Engaging with market suppliers revealed a diverse and constantly evolving range of offers. The details below provide an overview of some of the market providers engaged during the project in early 2025. This list is not exhaustive, and services may change rapidly. However, it highlights the emerging supply chain for scaling solar through innovative measures.

A.1 Allume Energy (Solshare)

A.1.1 Approach

This is a technical solution for enabling the distribution of solar to flats, it is not applicable to individual houses. It does not bring third-party finance but may be a helpful technical solution which makes third-party finance offers viable for apartment buildings.

A.1.2 How it works

Allume energy supply a product called Solshare. This overcomes the challenge of distributing solar generated electricity into multiple flats in a building, which usually requires significant additional wiring and separate invertors for each flat or requires a microgrid. The solution distributes solar electricity behind the meter meaning residents do not need to switch their energy supplier. Energy can be allocated to different flats, which allows residents to 'opt out'. This has the potential to enable an incentivised revenue stream, enabling solar to be diverted to those residents who pay for it. Within these pre-defined allocation parameters, electricity will be distributed to flats that have demand when the solar power is being generated, meaning optimum self-consumption across the building.

A.1.3 Financial implications

This product does not come with a finance offer. However, it is potentially an important technical solution that enables solar to be distributed in flats and enables flexible control to an operator to enable them to generate and optimise revenue from energy savings.

A.1.4 Resident considerations

Historically it has been difficult to give residents in flats the benefit of rooftop solar, due to the cost of extensive wiring and kit outweighing the benefits. Much rooftop solar is wired into the communal areas, which can mean a reduction in service charge if the commercial area has a large demand for electricity. In practice, much rooftop solar on apartments has been exported to the grid and not used on site. The Solshare solution enables residents to benefit, while not requiring them to change their energy supplier which means it is simple for them. Because the Solshare solution is wired into the resident energy meters, if these are all located in one place in the building, the disruption to install this solution is also minimal. If energy meters are located in individual flats,

works can be more extensive. The amounts saved by residents on energy bills would depend on the size of roof and solar array vs the number of flats, as well as the commercial model employed to generate revenue.

A.2 EDGE Fund (The London Efficient Decentralised Generation of Energy Fund)

A.2.1 Approach

The EDGE fund is a partnership between GLA and SDCL (Sustainable Development Capital LLP) which provides finance and deployment for organisations within Greater London wanting to deliver energy efficiency and decarbonisation.

A.2.2 How it works

Finance is provided through an SPV which a local authority would contract with for services as a single agreement, with all other contracts managed by the SPV. Solar and battery are within the technologies they can fund. The minimum value project for the fund is £10m although this can be achieved through aggregation. SDCL offers end to end support to develop projects, finance them, and operate them. Case studies are large industrial or commercial projects; however, the fund is open to identify so they may not yet have an approach for capturing revenue from social housing solar projects. This could be an area they would develop, or this could be combined with one of the revenue collection approaches.

A.2.3 Financial implications

The fund does not directly loan to Local Authorities, so Local Authorities would only contract with the SPV for the provision of the energy service. The SPV would take development, construction and operations risk. Equity finance provided through an SPV could be treated as off-balance sheet. The level of financial return is adjusted reflecting the project risks, value, among other factors, but is expected to be higher than onbalance sheet debt through the Mayor of London's Green Finance Fund (the other GLA driven financial mechanism).

A.2.4 Resident considerations

The EDGE fund approach could be supported by one of the revenue collection approaches, or this could be developed with SDCL.

A.3 Emergent Energy

A.3.1 Approach

The Emergent Energy model enables energy generated from rooftop solar on flats to be distributed to residents within the flats using a 'microgrid' approach. It is not currently aimed at individual houses although Emergent plan to offer the approach for houses at a later date.

Residents who sign up receive an electricity supply which is a blend of solar generated energy and grid energy provided at a discounted rate, which generates a revenue

stream to pay back the investment cost of the solar. This model aims to make new solar schemes fundable without reliance on subsidies, while at the same time addressing the complexities of distributing solar energy fairly among residents in flats.

A.3.2 How it works

The energy distribution within a building is taken over by Emergent and new industry standard meters are installed for each resident who signs up. Usage data from the meters is aggregated 'virtually' (i.e. off-site) to determine how much solar has been used by the residents and landlord supplies, as well as how much solar has been exported, and how much grid energy has been used on site.

Emergent supplies the solar and grid energy to the resident customers and landlord supplies. They do so using electricity license exemption rules that are well established in the industry. As such, they are not subject to the same regulatory provisions as a traditional national energy supplier. However, they are still regulated, meaning there are protections in place for customers.

Residents are not obliged to sign up to a scheme, and once signed up, are free to switch away if they choose. If so, they require a new meter to be installed by their new energy supplier, which is generally done for free.

Emergent adjust the cost of energy supply to residents to ensure the offer is appealing to increase uptake and to maximise the on-site consumption of solar electricity, which improves the commercial position.

Emergent's focus to date has been on evidencing the technical solution and commercial and operational models to create a robust investment proposition. As a result of this work, their first scale deployment, worth £6m with Hackney Council, is now live.

Their approach generates a revenue stream which can be used to pay back investment costs either under an SPV, or through on-balance sheet borrowing, and the management of risk may be appealing to larger investors or landlords who wish to invest. They offer off-balance sheet funding for the right projects.

A.3.3 Financial implications

Because the technical solution is simple and uses mature, vendor agnostic hardware the capital costs and project risks are kept to a minimum. This, combined with the revenue generating opportunities from selling the solar energy, enables projects to be fundable without subsidies.

Emergent offers a number of different arrangements for funding projects.

Hackney Council, who are using Emergent in their Hackney Light and Power project, have used their own investment to fund the cost of the solar panels. Emergent are paying them a income stream under a concession contract arrangement, which provides Hackney sufficient return on investment to pay their typical borrowing costs. The structure of the approach means Emergent is incentivised to optimise resident consumption and to ensure the solar systems perform well and are maintained. They are

also incentivised to secure lowest cost grid supply. The risk to Hackney is limited to Emergent's performance.

Emergent are happy to fully fund investment costs on the right projects, as well as to work on co-investment structures with partners where desired. While their priority is to enable and deliver projects that use commercial finance only (i.e. without reliance on subsidies), their solution can also be integrated into subsidy funded projects to provide leverage that helps the funds go further.

For now, Emergent's approach aims to minimise technical risk in order to maximise project fundability. In future, Emergent plans to integrate batteries, electric heating and EV charging within their solution.

A.3.4 Resident considerations

Emergent's offer is currently aimed at residents in flats who typically would not have been able to benefit from solar power.

In developing their solution, Emergent delivered a change in electricity regulation using Ofgem's regulatory Sandbox scheme, which means residents can now choose not to participate in a project and receive energy from a national supplier in the usual way. Without this change, all residents would have to be forced to sign up for the commercial model to be viable.

A.4 Energy Local

This is a peer-to-peer energy trading arrangement which could be a useful way to collect revenue; it does not offer a financed route to PV-battery installs.

A particular feature of the Energy Local model is currently that residents develop an "Energy Local Co-op" structure to allow participants to join and then collectively annually negotiate the "match" electricity price with the generator and the wider tariff with the peer-to-peer energy provider. It gives residents a clear collective voice in the arrangement. The key point is that the match tariff can be set at any level that is mutually agreeable. Hence the economics of the scheme are flexible.

Another feature is that Energy Local provide a resident portal and dashboard which provides consumption/production data for the individual and the club, and indicates (Red, Amber, Green) the best times to consume electricity in a live dashboard.

An example of this working for social housing is Roupell Park in Brixton, Lambeth, facilitated by Repowering London.

A.4.1 Approach

It is based on residents within a local area forming a local 'club' and signing up to the club-specific energy supplier and tariff. The owner/operator of the PV-Battery system also signs up to the same energy supplier's tariff, and the energy supplier then "matches" them together to allow local residents to purchase locally generated energy at a reduced cost.

A.4.2 How it works

The peer-to-peer trading platform relies on half hourly smart metering of generation and consumption to match locally. This avoids the transmission and distribution costs of exporting to the grid and allows the generator to offer the resident a much-reduced price.

Both residents' homes and the PV-Battery systems need to have separate smart meters and both be signed up with the same energy supplier.

The PV-Battery export is handled through a commercial Power Purchase Agreement, whereas the residential supply is handled through a bespoke domestic supply tariff.

A.4.3 Financial implications

Energy Local doesn't provide a financed solution to the purchase or installation of the PV-Battery systems.

It terms of revenue collection risk this would lie directly with the selected energy provider. However, there will be a corresponding Power Purchase Agreement (PPA) arrangement between the owner of the PV-Battery systems, and this may have clauses around non-payment by residents.

A.4.4 Resident considerations

The resident joins the Energy Local Club through the online portal, which includes transferring their electricity supply to the specific energy provider instead of their usual supplier⁵ for ALL their electricity needs where they only receive one consolidated electricity bill. This is how they access the benefit of the PV-Battery system. If they don't want to switch suppliers, they can simply opt out, but they won't get the benefit.

The resident then receives "matched" electricity from the PV-Battery systems at the agreed discounted rate whenever their demand coincides with its supply. This is automatically arranged through the energy provider and recorded on their monthly bill accordingly. A key benefit is that all households within a club can access the excess generation capacity of each of the PV-Battery systems to maximise local consumption and therefore resident savings (and therefore revenue potential).

When the resident needs power outside of the PV-Battery systems supply capacity, they receive it at the standard tariff provided by the Energy Local club's energy provider⁶.

⁵ This will be the particular energy supplier that Energy Local have negotiated with for this particular club (e.g. Octopus Energy Local Tariff).

⁶ For Energy Local this can be a range of tariff options, predominantly competitive ToU arrangements – click on any of the clubs listed to see the tariff agreed: https://energylocal.org.uk/clubs

A.5 Evergen

A.5.1 Approach

Evergen is a supplier and installer of PV-Battery systems to domestic and commercial customers. They are currently installing financed solutions to commercial customers. Evergen have also been developing an end-to-end fully financed solution for the supply, installation, maintenance and billing of PV-Battery systems for social housing and provide discounted energy to tenants. They have got to letter of intent stage with a number of housing associations and are planning to start installations in the first half of 2025.

A.5.2 How it works

The financial arrangement is through an SPV that owns and operates the PV-Battery assets. Funding is provided by Private Equity which is described as being lined up and ready to invest. The SPV signs a license arrangement with the housing asset owner for 20 years to install and operate the PV-Battery system.

A.5.3 Financial implications

The advantage of this model is that the revenue collection sits entirely with the Evergen SPV, as does the risk of non-payment and/or business model shortfall. The council does not have to provide any capital (but may do so if they wish to invest in the SPV) and has no ongoing financial liability.

Operational optimisation of the system and grid services are handled by a partnership with Passiv UK and Levelise, both of which are owned by BUUK. Any upside revenue generated by the SPV goes back to its investors.

A.5.4 Resident considerations

The SPV signs a separate PPA agreement with the housing tenant, confirming the supply of electricity from the PV-Battery at up to 20% discount against the energy Price Cap.

Any shortfall in electricity supply is purchased by the tenant through their existing energy supplier at their usual tariff rate.

A.6 GRYD Energy

A.6.1 Approach

GRYD provides smart solar systems, including solar panels and battery storage, for homes at zero upfront cost.

GRYD provides an integrated software and hardware solution to make solar energy more accessible and affordable and scalable. The system is funded by GRYD and

delivers energy through a fixed-price subscription model, eliminating any hardware costs for property owners or tenants.

The supplier partners with private developers building new homes as well as local authorities and registered providers upgrading their existing property portfolios. The solution is best suited to single-family homes or low-rise apartment builds, where the available roof space is sufficient to accommodate a system that can serve a meaningful amount of a property's energy demand.

A.6.2 How it works

Under a fixed monthly subscription model, property owners or tenants access the energy generated by the system. GRYD's intelligent software monitors energy usage within the home and encourages residents to optimise consumption, maximising the use of solar energy and minimising reliance on grid electricity.

The subscription not only covers the cost of energy but also includes comprehensive servicing and maintenance throughout the system's lifespan, including the replacement of parts as needed.

A.6.3 Financial implications

The subscription fee for each property can either be billed directly to tenants or aggregated and billed to the landlord, who can then integrate the cost into tenants' monthly rent or service charges. GRYD works closely with social landlords to align our billing structure with their operational needs, ensuring financial sustainability for both landlords and residents.

Since GRYD funds the hardware, there is no upfront cost and no consideration of a 'payback period'. As a result, residents benefit from immediate savings as soon as the system goes live. On average, residents can expect to save 20-25% on their total energy expenses (including the GRYD subscription and any residual grid usage) from day one and grow over time. Additionally, the fixed subscription price shields residents from energy price volatility, providing long-term cost predictability and security.

A.6.4 Resident considerations

GRYD's app gives residents full visibility into their energy usage, system generation, and battery storage. This allows them to optimise their energy consumption and maximise savings by relying more on solar-generated power and less on grid electricity.

GRYD also monitors energy markets to identify opportunities for participating in energy flexibility, where surplus energy from the system can be used to support the grid or surplus in the grid can be stored for later. Residents who participate in this programme are rewarded with credits, which are deducted from their next month's subscription fee.

Residents have the freedom to select their own energy tariff for any residual grid usage, though GRYD may recommend certain tariffs that take advantage of dynamic pricing, further enhancing their savings potential.

A.7 Metis

A.7.1 Approach

Metis fund solar and battery on council houses with no up-front cost. They own and operate the equipment for 25 years. The council pays them a regular subscription for the lifetime of the contract. The initial approach is data-led using tenant half-hourly usage data where available to give tailored benefit and cost quotations for each property allowing for sustainable investment and tenant engagement in the long term. This is all delivered via a bespoke platform.

A.7.2 How it works

Metis own the solar panels and battery, and optimise battery and grid interaction, as well as helping to ensure the tenant makes the maximum savings possible through switching tariffs and optimising their consumption of solar power. The landlord pays a flat rate of c.£53/month per property and receives the benefits of export and flexibility incomes. Metis's preferred approach is for the landlord to recover the cost from the tenant via a comfort charge as this reduces administration and provides lower overall costs to the tenant. Tenant revenue collection services can be provided for an additional fee.

Metis can advise the tenant on the best deals for them to switch to, and with permission can switch the tenants directly, which could increase savings and therefore the potential to maximise revenue.

Metis also provides an ongoing tenant and landlord dashboard monitoring the benefits to the tenant and landlord and making any necessary adjustments to ensure the solution is working for all parties.

A.7.3 Financial implications

There is no up-front cost to landlords, and this approach is treated as off-balance sheet. Because Metis are optimising the battery and potentially the resident tariffs and Smart Export Guarantee, they can maximise the returns for themselves and the landlord. Metis shares the grid revenues with the landlord at the end of the year. Metis suggest that this approach will be cost neutral for the landlord while saving residents up to 20% on their energy bill. This is expected to increase in future years with the implementation of mandatory half hour settlements increasing flexibility revenues allowing tenant comfort charge to be lowered. However, there is no cost for collection of revenue from residents factored into this.

A.7.4 Resident considerations

Depending on the approach to collecting revenue, residents can stay with their existing energy supplier. Metis can advise them on who to switch to in order to optimise their savings, or Metis can take control of switching on their behalf. However, the resident will retain their own energy supplier which could make this simple for residents, particularly if revenue was collected via an increased landlord service charge. Metis provides a tenant

engagement platform to allow the tenant to see how the technology is working for them and provide insights on energy cost reduction and best available tariffs based on their circumstances.

Alternatively, the Metis solution could be combined with Energy Local to enable peer-topeer energy trading, which could increase savings for residents or improve revenue / payback. The flexibility of the subscription model means that the optimisation of the assets to landlord and tenant benefit can be maximised as the energy industry evolves and new income streams become available.

A.8 Octopus Energy

A.8.1 Approach

Octopus Energy has two models available:

- 1. Octopus Energy have extended their Zero Bills tariff to now work in retrofits, with trial projects with Clarion, Suffolk Council and Climatize. This model is suitable for house owners who can benefit directly from guaranteed zero energy bills and also works for landlords who can slightly increase rents or add a charge in order to share the savings with their tenants, while offering 'bills included' rents.
- 2. Octopus Energy is also currently working with some Housing Associations on a second solution which shares the financial benefits of smart controlled solar and battery storage systems (as well as smart controlled heat pumps) between the tenant and the landlord. Octopus Energy is keen to engage with other Registered Providers on this solution.

A.8.2 How it works

- 1. Zero Bills: Octopus can supply and install solar and battery (and heat pumps), or can provide their zero-bill tariff if others meet their specification. The customer sets their thermostat normally and lives normally. Octopus Energy then manages the home battery, heat pump, and grid interaction to maximise their revenue and to enable them to offer zero-bills. Houses have to perform relatively well in terms of fabric performance and must be heated through a heat pump and roof sizes must be large enough to enable the Octopus solar specification to be achieved. As such, a high proportion of existing properties will not meet the zero-bills requirements due to roof size, shape, orientation etc, and there is currently no way of sharing the generated solar across more than one property, meaning some homes would be suitable for this offer, and others would not.
- 2. Full details of the second model being developed with Housing Associations have not yet been shared publicly. The model shares the financial benefits of smart controlled solar and battery storage systems (as well as smart controlled heat pumps) between the tenant and the landlord and would always provide a reduction in bills for the tenant. Octopus Energy is keen to engage with other Registered Providers on this solution.

A.8.3 Financial implications

- 1. Zero Bills: With rent reform, or with a service charge arrangement, Zero Bills could work in social housing. However, without one of these revenue collection approaches, it is reliant on grant/ECO or capital funding in social housing and all the benefit goes to the tenant.
- 2. Octopus Energy has access to finance and a track record in raising finance for similar and large scale projects. Octopus Energy is also keen to engage with other Registered Providers on this second solution.

A.8.4 Resident considerations

- 1. Zero Bills guarantees zero energy bills for residents up to a fair use allowance. In new homes, this is set at double the expected typical consumption. In retrofit, this is set around 20% above previous energy use and/or data on the performance of the home. Currently this kind of tariff is only available from Octopus Energy but customers could leave at any point should they wish to, without an exit fee, but would then pay a bill with an alternative energy supplier.
- 2. The second model shares the financial benefits of smart controlled solar and battery storage systems (as well as smart controlled heat pumps) between the tenant and the landlord and is designed to always provide a reduction in bills for the tenant. Octopus Energy is keen to engage with other Registered Providers on this second solution.

A.9 Sero

A.9.1 Approach

Sero is an energy services company focused on delivering a service for residents and landlords. They offer retrofit planning and management services at scale to social landlords but can also provide an innovative Special Purpose Vehicle (SPV) structure, funding an energy billing service which enables off-balance sheet access to finance for local authorities and landlords, coupled to long-term revenue generation. They can offer their operation, management and billing service, either in conjunction with the SPV, or without finance, for example if the landlord wishes to self-fund retrofit or raise finance through alternative routes.

A.9.2 How it works

Sero offer a combined billing service which includes billing residents for both solar, battery and grid energy. Sero actively manages the battery, optimising its performance around complex smart energy tariffs and grid flexibility markets. This enables them to generate a revenue stream from the solar energy sale, which can be used to repay finance, in addition to bill savings for residents. Residents are shielded from the complexity of the time-of-use tariff structure and battery operation, leaving the resident with a simplified, discounted electricity tariff. They charge a flat rate fee rather than a profit share for delivering this service. This is a flexible approach which can work with other finance mechanisms, so could be used with the EDGE fund for example, and the finance mechanism could change over time. With their SPV structure, this can be fully off-balance sheet and light touch for the landlord, or the landlord can be an investor (or even the only investor). They are not tied to any funder, nor to any contractor, nor to any energy supplier or equipment manufacturers which they suggest enables them to

maximise revenues and reduce costs. They are limited by working with partnering energy suppliers as they need to be enabled to pass through their grid costs as part of a single electricity bill. They have two energy company partners currently but are working to increase this.

A.9.3 Financial implications

Sero offer flexible services which could be plugged into other approaches, or that can be expanded to offer finance as part of the service. In future, Sero may be able to own the equipment fully and bring their own finance. However, their experience to date has shown that landlords are keen to have some level of control, which is why the SPV arrangement has been developed. The SPV is primarily a way of managing risk and provides a single point of contact for the landlord, via an energy services contract. The contract deals with how different risks are managed. The on or off-balance sheet treatment is therefore flexible, depending on the way the finance is arranged, and the way the SPV is structured. However fully off-balance sheet is possible.

A.9.4 Resident considerations

Sero believes that providing an excellent service for the resident is fundamental to the success of its projects. They provide digital solutions for more tech-savvy residents while also maintaining a UK-based customer contact centre for those who prefer or need more personal forms of communication. They can split energy charges depending on the landlord's objectives, offering greater savings to the tenants, or focussing more on spreading the benefits of a limited budget to a wider pool of residents.

Residents receive a single electricity bill which includes solar, battery and grid-supplied energy. This does mean they need to change their energy supplier to the Sero partner energy supplier; a process which is managed by Sero.

If the landlord is the sole funder, they have the ultimate say on how much discount the residents receive on their electricity tariff. If there is an SPV model owned or partly owned by an investor, return on investment is also a consideration, and resident savings could therefore be lower. Sero have carried out research with around 2,000 responses, which showed that with energy bill savings of around 20%, around 80% of people would opt in.

A.10 Tallarna

A.10.1 Approach

Tallarna have developed an innovative SPV and legal structure which enables landlords to borrow off-balance sheet to fund investment in energy efficiency and decarbonisation. They bring value additionality through insuring the returns generated, which gives confidence to both residents and the funder on the bill savings and financeable income streams. This enables lower cost finance over a longer period, thereby making projects viable.

A.10.2 How it works

The SPV or AssetCo is set up which provides a single contracting party and point of contact for a landlord. As the project owner, the SPV manages the procurement, installation, operation and optimisation of the equipment. Through Tallarna's partners, AssetCo will manage the collection of revenue from residents through a subscription agreement.

A.10.3 Financial implications

Tallarna can deploy two approved financial structures which have been used and approved by the sector and can both be treated off-balance sheet for Local Authorities. The first is an AssetCo structure owned by the funder, with the project finance serviced from energy income streams through the resident subscription agreement, which in turn delivers a guaranteed resident saving. The second utilises an SPV within the Local Authority group which provides a payment guarantee, with energy income streams subsidising the cost of funds and delivering a guaranteed resident saving. In both cases, the costs of borrowing will be lower as a result of the performance insurance.

A.10.4 Resident considerations

Tallarna guarantee the resident saving through performance insurance and will work with an experienced partner to manage the resident interface and revenue collection.

A.11 UrbanChain

UrbanChain enables councils and housing associations to access third-party finance for renewables at scale. Unlike small-scale community pilots, the model creates bankable, private energy markets, matching local generation with institutional funding and demand aggregation - unlocking funded rooftop solar, large-scale renewable assets, and energy-sharing opportunities.

As a regulated energy supplier, UrbanChain's platform operates within existing frameworks, ensuring compliance, scalability, and investment-grade structuring. By pooling council demand and enabling funded models, they provide a viable, structured pathway to decarbonisation - removing the financial and regulatory barriers that have limited local renewable adoption.

For local authorities, this is more than a procurement exercise - it's about creating long-term, self-sustaining energy markets that reduce costs, drive investment, and accelerate the transition to net zero.