A share of renewable electricity costs in fuel bills will fall on low-income households, and it’s essential that this group should benefit from the resulting subsidy payments. Supporting projects delivered by social landlords is one way to ensure social equity, and this research explores the experiences of social landlords since Feed-in Tariffs (FITs) were introduced.

Key points

- Social landlords faced a huge challenge to invest in energy efficiency. FITs provided a new and attractive source of funding.

- FITs were designed to achieve economic goals by encouraging the use of solar (photo-voltaic or PV) panels. Little consideration was given to wider social goals, such as targeting low-income households through working with social landlords, who were not involved in developing the policies.

- Resources and effort have been wasted because policies have lacked clarity and stability. Social landlords need greater certainty to plan investments in sustainable housing energy modernisation (retrofit) programmes.

- Solar panels offer social landlords a quick and relatively simple way of reaching minimum energy efficiency standards. Some landlords favoured this option over more complicated insulation improvements which could save tenants more and reduce fuel poverty.

- Social landlords should use new income, such as that from FITs, to help those tenants who will not benefit directly, for example by bringing their housing up to minimum standards.

- The full benefits of measures such as solar panels will only be realised if they are supported by efforts to encourage people to be energy efficient.

- Unless social landlords can access new sources of funding to support more expensive retrofit projects, they may be forced to sell many of their older properties. The risks and social implications of this have not been explored.

The research
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BACKGROUND

The Government has reformed how it supports household energy efficiency and renewable energy by shifting from upfront grants to subsidy payments in the form of Feed-in Tariffs (FITs). Through funding from all fuel bills, these subsidies support each unit of renewable electricity generated.

New forms of funding to promote renewable energy present opportunities and threats for low-income households. This research explores how social housing providers have sought funding for solar (photo-voltaic or PV) panels via Feed-in Tariffs (FITs). It considers the barriers they faced, focusing on the lessons for other emerging Government funding schemes.

Funding for household renewable energy and energy efficiency

The social housing sector faces challenges in finding the investment necessary for modernisation (retrofit) programmes, including renewable energy, to help protect tenants from rising fuel bills and fuel poverty. Traditionally retrofit strategies have been supported through grants. FITs are a significant change to this approach, with a shift to support payments spread over 25 years, funded through a levy on everyone’s fuel bills. The danger is that low-income households, unable to afford the upfront capital costs of solar panels, will lose out unless social landlords get a fair share of these funds. The Renewable Heat Incentive (RHI) and the Energy Company Obligation (ECO) within the Government’s flagship Green Deal policy have fairness and equity implications.

The development of FITs projects in the social housing sector

For social landlords, the investment returns from FITs mean they can improve the energy performance of their properties and meet minimum standards. Energy ratings are disproportionately boosted by solar panels because of how they score in assessments. This research revealed that installing PV panels was usually straightforward, with few social landlords reporting technical issues, although connection to the electricity grid could be problematic. Once installed, most PV systems operated as well as or better than expected. However, delays and costs while resolving the purchase, legal and grant issues were common.

As many social landlords were finalising their first PV projects, FITs rates were cut in response to an unanticipated investment boom in solar installations. Only a minority of social landlords were then able to progress. Continuing uncertainty over future rates has left most schemes either abandoned or postponed indefinitely. The Government’s initial decision to reduce payments to 80 per cent for multi-installation schemes (more than 25 houses) was particularly damaging for the sector. Significant long-term revenue has been lost through abandoned projects, and resources and staff development time wasted.

Tackling fuel poverty and emissions

The primary motivator for social landlords in installing PV schemes was fuel poverty, not climate change. Interviews, case studies (modelled and actual) and roundtable discussions with social landlord staff indicated reasonable savings on tenants’ electricity bills because of PV installations. While the benefits were not always high, they were still significant for low-income households. A well-positioned large PV installation could achieve significant savings of up to £220 per year. Encouraging tenants to behave in an energy-efficient way, in terms of timing and patterns of use for electric appliances, was significant in getting the full financial benefits. Cuts in the FIT rates have extended payback times and reduced the amount of surplus revenue available to reinvest in wider energy efficiency work.
Tenants participating in the case studies and anecdotal evidence from housing officers confirmed under-used heating and higher than expected electricity bills from appliance use. This meant the relative benefits of PVs could be underestimated, especially if tenants spent considerable time in their homes during the day and could use the free electricity generated. In this respect, PVs are almost unique for social landlords in reducing tenants’ electricity bills. Supplementing the traditional emphasis on ‘affordable warmth’, in some cases PVs might offer more immediate and real reductions in actual energy costs than fabric improvements. A further lesson is that under-heating will reduce savings gained by using RHI-supported technologies, and especially the Green Deal. Social landlords reiterated the need for adequate funding from sources such as the ECO, because many tenants have limited scope to benefit from pay-as-you-save mechanisms such as the Green Deal.

Promoting social equity

A drawback of PVs is that, unlike most basic insulation measures, only a minority of tenants with south-facing roofs can benefit. PV panels also have a relatively high upfront cost and are highly visible. Social landlords recognised that investment decisions need to be carefully managed to promote equity and fairness. Making PVs part of wider strategies to bring all properties up to similar levels of energy performance was viewed as the best way of doing this. Part of this strategy could include ring-fencing funds generated by PVs for wider energy efficiency programmes so all tenants benefit, either directly or indirectly.

FITs were attractive to social landlords because most saw a significant funding gap for addressing fuel poverty and climate change targets. Some social landlords were interested in exploring options such as rent increases or service charges to pay for improvements where tenants could be guaranteed lower bills, but most felt this approach was not practical or desirable, as different tenants have a wide and changing range of incomes and heating needs.

Achieving lower emissions and bills in older properties came at a significant cost, as illustrated by modelling improvements to tenement flats in Edinburgh and older housing in York. How to meet retrofit costs requires consideration to avoid the risk of older social housing being sold off in some areas.

Engaging tenants and community empowerment

The level of tenant involvement in the development and implementation of PV schemes varied significantly, with very few projects either instigated or led by tenants. This was partly due to the short timescales that social landlords had to meet to get favourable FIT rates.

Social landlords reported that tenant feedback on the completed schemes was very positive. Meanwhile, evidence from York and Edinburgh showed tenants were much more focused on basic fabric improvements such as windows and draught-proofing. Knowledge and understanding of PVs seemed limited and some tenants struggled to use existing heating systems efficiently. Most social landlords were aware they needed to ensure tenants benefited from advice on how to change their energy usage to make the most of capital investments such as PVs. These issues will be even more critical with the RHI and Green Deal style pay-as-you-save funding models.

Conclusion: learning the lessons from FITs

By their focus on affordable housing, social landlords invariably direct investment towards low-income households and can therefore help to ensure social equity from funding mechanisms like FITs. The Government has not yet properly recognised or supported this role.

Early engagement with the social housing sector

The needs of low-income communities are distinct and understood by social landlords. Social landlords should therefore be involved in the design of policies and funding streams such as FITs.
The need for greater policy stability
The biggest lesson from the first two years of FITs is that policy instability has significant and usually negative implications for social landlords. They need longer lead-in times than owners of an individual property, to raise finance and engage tenants. Sudden and unanticipated cuts in the FIT rate undermined projects, resulting in a waste of effort and resources. Funding mechanisms like FITs need to be predictable over a sufficient time period so that landlords can make long-term plans about retrofit strategies with confidence.

Clarity on the implications of policies for social housing
There have been delays and legal costs because the implications of state aid and tax rules for the social housing sector have not been clear. To avoid these issues, definitive guidance relating to FITs, RHI and ECO is needed to allow investment decisions to be made.

Some level of uncertainty is inevitable: therefore social landlords need to work together more closely, sharing best practice on technical, legal and procurement issues.

Maximising the benefits
Behaviour change and training should be built into future retrofit programmes. For PVs, this means using appliances when panels are generating free electricity. The importance of under-heating and high electricity use for appliances should be factored into funding mechanisms and decisions.

Embedding social equity
FITs were designed to meet economic aims, stimulating the market in PV panels, with little consideration of wider social goals. The Government should be proactive in helping social landlords to get a proportionate share of resources from FITs, RHI and ECO. Social landlords should ring-fence surplus FIT funds to target their least energy efficient properties, so tenants have similar bills that are as low as is practical. The high costs of retrofit and the funding gap for social landlords needs to be explored, in particular the risk that social landlords will sell older properties, potentially leaving some communities.

About this project
This research was carried out by Changeworks between March 2011 and March 2012. It involved a literature review of relevant research and policy documentation, an online survey of 100 organisations, and in-depth interviews and roundtable events with social landlords. This was explored further by action-based research with social landlord staff and tenants to produce three case studies in Wiltshire, York and Edinburgh.

FOR FURTHER INFORMATION
The full report, Renewable energy: getting the benefits right for social housing by Tessa Clark and Stuart Hay, is available as a free download at www.jrf.org.uk

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