

October 2015

EST Policy Positions: Home Energy Efficiency & Renewable Energy

Introduction: the new government

There have recently been a number of important developments and government announcements on areas that Energy Saving Trust (EST) is involved in. Onshore wind and large scale solar PV subsidies under the Renewable Obligations scheme will close from April 2016, government support for the Green Deal Finance Company (GDFCo) has ended, the 2016 zero carbon homes commitment for new build homes has been removed and pre-accreditation has been cut under the feed-in tariff. EST is concerned about these developments. We believe that renewable energy is an important part of building a low carbon future. We are also disappointed that, through withdrawal of support for the GDFCo, effectively the Green Deal has been brought to an end.

The Energy Secretary has re-emphasised her commitment for energy efficiency and we hope that by the Comprehensive Spending Review in the Autumn, this commitment transfers into a clear policy framework that can stimulate a clean energy transformation of the English housing stock.

Background to our policy positions

EST works with citizens, businesses and governments at all levels to make our homes more energy efficient. EST has a unique dialogue with the public about their homes. We handle just over 500,000 home energy advice calls on behalf of UK and Scottish Governments. We have 5.5 million visitors annually to our website and reach 80% of the UK population through the media.

There is a huge cost-effective potential to reduce energy use and carbon emissions from homes, at the same time lowering energy bills for ordinary households. EST strongly supports the framework of the Climate Change Act and the Carbon Budgets but shares the [Committee on Climate Change's](#) concern that our current mix of policies is not sufficient to achieve the level of carbon saving needed in the long term:

"[...] the policy landscape is complex and in places inconsistent. Our assessment of existing policies is that some of these are at risk of failing to deliver, either due to design and delivery problems, or because they are currently unfunded. Even if these policies delivered in full, there would be a policy gap to achievement of the fourth carbon budget (2023-27) and the cost-effective path to the 2050 target."

This was again reiterated in an [open letter](#) sent by the Chairman of the CCC, Lord Deben, to Amber Rudd. In this letter it was also stated that:

"The uncertainty created by changes to existing policies and a lack of replacement policies up to and after 2020 could well lead to stop-start investment, higher costs and a risk that targets to reduce emissions will be missed."

A great proportion of Energy Saving Trust's customers are in fuel poverty. Energy inefficiency is the principal cause of fuel poverty and energy efficiency the best solution. We strongly support the Government's fuel poverty strategy for England and support a minimum Energy Performance Certificate C standard in England by 2025 for tackling fuel poverty. But – as with Carbon Budgets – we are concerned that there is not currently the policy mix in place to meet this target.

Energy efficiency in housing is also a health issue- many diseases are caused or exacerbated by cold, mouldy and damp homes. These illnesses cost the NHS billions a year¹. EST welcomes this year's National Institute of Clinical Excellence (NICE) guidelines on energy efficiency and its benefits for health and wellbeing and supports their recommendations that special training and awareness of the health risks associated with energy inefficiency is needed for both the public and professional bodies.

Energy efficiency as infrastructure

Our policy positions below provide a framework for action that we believe is affordable and deliverable by government even within austerity budgets.

As the CCC highlights in its [submission](#) to the House of Lords built environment select committee: *“Extensive retrofitting will be required to make the building stock more energy efficient, suitable for low carbon heat sources and resilient to even a 20 C rise in global mean temperature. This is not, however, currently happening at any scale”*

As such, we believe there is a strong case for direct government spending on home energy efficiency at scale across the UK – for the same reasons that government continues to invest in our transport network and other infrastructure projects. A major home energy efficiency programme will deliver carbon savings, lower energy bills, jobs, growth and savings for the NHS – all with a long term benefit to the Chancellor.

The Government's National Infrastructure Plan identifies several key areas and projects of national concern for which around £375 billion of funding will be allocated over the next two decades. Energy efficiency is crucially left out of the considerations and we feel this should be rectified. A recent [Frontier Economics paper](#) - commissioned jointly by EST and other partner organisations - makes a strong case for energy efficiency to be set as an infrastructure priority.

The policy mix

There are several policies areas that can be addressed and that EST believes are realistic and achievable in the current political climate. They are covered in greater detail below and include:

¹ *Local action on health inequalities: Fuel poverty and cold home-related health problems, Public Health England, 2014*

- Providing a roadmap to 2050
- Continued central government programmes
- An ECO that puts householders first
- Government support for home and community scale renewable energy
- Committing to community energy
- Using regulation and minimum standards to greater effect
- Exploring the Energiesprong model- deep retrofit to zero carbon level- more
- A smart meter roll out that puts the consumer first and enables innovation
- Robust housing standards for newbuild and social housing

A roadmap to 2050 for every home and community

The UK is not moving fast enough on home energy efficiency and building-integrated renewables; we need a national commitment to transforming our homes. And that means a clear policy framework that will:

- Mobilise action and finance on energy efficient home retrofit from able-to-pay owner occupiers
- Provide finance to help fuel poor owner occupiers to invest in the energy efficiency of their homes
- Support landlords investing in the energy efficiency of their stock, and empower tenants to demand energy efficient homes
- Ensure new homes are built to an ambitious near-zero-energy standard

A Government-led national discussion on better homes could culminate in a clear roadmap for energy efficiency, showing how every home and community in the UK needs to change over the next 35 years – and then bringing that together in a longer term energy efficiency plan, clearly linked to the ambitions of Carbon Budgets and the Fuel Poverty Strategy.

A national roadmap will be a key tool for policy makers and business. At local level it will work for home owners and occupiers who can understand the opportunities for their home and community. That road map will provide a long-term framework for investors and the supply chain. We need a commitment to setting and maintaining a steady direction on home energy policy.

The role for advice

An integrated long term approach has to get energy efficiency, renewable energy and energy bills policies and programmes working better together. Most importantly that has to work for the householder. Extensive experience shows that householders respond to a central website and telephone advice service with easily accessible links to local and regional energy efficiency programmes across the country, allowing the public to easily find and access the right scheme for them.

It is vital that there is an ongoing single point of contact where householders concerned about energy bills can access all types of relevant support available to reduce bills and improve energy efficiency. Under this model householders can access tariff advice, benefits advice and referral into energy efficiency schemes through a single call.

The energy efficiency delivery framework: ECO and other programmes

The current phase of ECO ends in 2017 and as such it's important that this phase of ECO is effectively managed, ensuring that offers continue to be available to householders right up to the point where the next phase takes effect.

ECO is currently supplier-led with energy companies obligated to deliver energy efficiency improvements to homes in order to reduce carbon emissions and fuel poverty. Although we expect "ECO 3" (post 2017) to work along similar lines as the current model, we do not know entirely what shape it will take.

We think that ECO could be better structured with a much greater focus on the consumer experience.

In order to deliver for consumers, ECO post-2017 should:

- Focus on improving building fabric efficiency to bring down energy bills and provide affordable warmth to the most vulnerable, supporting delivery of the Fuel Poverty Strategy for England.
- Provide a transparent and straightforward consumer journey: making it easy for consumers to get advice, providing a clear and stable consumer offer.
- Deliver high quality measures with clear, simple and effective redress if something goes wrong.
- Ensure that a wide range of households are able to access energy efficiency measures, based on effective targeting and a range of relevant, good quality, and affordable products.
- Enable effective cross tenure community-level delivery models.
- Be delivered cost effectively, minimising the impact on householder bills.
- Maximise opportunities to drive the delivery of retrofit at scale.
- Support the development of the UK retrofit market to develop higher quality, lower cost, lower hassle products that are more attractive to home owners
- Be delivered within a framework of other offers and incentives – particularly for the near-fuel poor – ECO cannot work on its own.

New financing solutions for "able to pay" householders

One of the challenges with the current energy efficiency scheme has been that the nearly fuel poor have tended to miss out on support. We believe that the pay-as-you-save approach should not end with the Green Deal finance company with an offer in place for the nearly fuel poor in particular. This is about unlocking private sector finance to help pay for energy saving measures, which is exactly what the government needs. We need to learn lessons from the Green Deal to see how new financing solutions can be developed. Those solutions also need to work for individual home owner occupiers and also for landlords and tenants (one of the issues with the Green Deal was that it didn't work for social landlords).

Ensuring effective targeting for the fuel poor with best use of big data

A crucial part of ECO will be effectively targeting and reaching those who most need help. We've made good progress in recent years in finding the cheapest to deliver home energy saving measures. One of the big costs for energy efficiency now is to find and prioritise the homes that most need help. The need is for government to be looking hard at how information collected from – for example – energy performance certificates can enable us to do

that as cost effectively as possible. In Scotland for instance, Home Analytics is available to Local Authorities to facilitate targeting the fuel poor, extending this to the rest of the UK would help improve targeting.

Improved consumer protections

Recently there has been some attention given to companies abusing the system and miselling energy efficiency measures on the Green Deal, ECO and other schemes. It is important that local authority trading standards offices are able to focus on protecting consumers with regard to energy efficiency, and have the necessary resources to do so. As we expect ECO to play an important role up to 2020 it is even more important to ensure that there are sufficient protections in place. This also feeds from the importance of having a clear and understandable delivery mechanism under ECO, so that the consumer knows who is paying for improvements, who is responsible for the quality of the works and who complaints should be directed at.

Government support for home and community scale renewable energy

Maintain support for the feed-in tariff and Renewables Obligation

Renewable energy has an important role to play, not only in maintaining a diverse energy mix in the UK but also to reduce household bills and decarbonise the housing stock.

The feed-in tariff (FiT) and the Renewables Obligation (RO) have led to a massive increase in renewable generation capacity in both small and larger scale deployment. We welcome the cost reductions that have been achieved in the renewables sector and we are committed to the industry becoming subsidy free. It must be recognised however that at the moment the supported technologies are not yet cost competitive and abruptly withdrawing support could do a lot of damage to a strategically important sector.

The government should keep the FiT in place, at least for this parliament. Alongside this EST calls for a measured withdrawal from subsidies, removing support gradually and in so doing give consumers, community groups, investors and the supply chain time to adjust and plan accordingly. This will provide greater stability to the sector and ensure the long term competitiveness of the renewables sector.

We call for a re-focussing of FiT to households, communities and schools. Doing so would reduce the budget and move the FiT back in line with [its original intent](#): *"[to] enable broad participation of individuals and communities, as well as energy professionals, in the "big energy shift" to a low carbon economy"*

Maintain commitment to the world leading Renewable Heat Incentive

The domestic Renewable Heat Incentive (RHI) was introduced in 2014 to encourage households to install measures like heat pumps and biomass boilers. We strongly support the RHI. It is vital to kick-starting an industry which will eventually reduce carbon emissions as well as bringing in lower bills and warmer homes for everyone. We agree with the statement in the [RHI Impact Assessment](#) highlighting the importance of preparing *"...for mass rollout of low carbon heating in the 2020s, by supporting cost reductions and improvement in performance of technologies. In the shorter-term, domestic heating also needs to make a contribution towards heat's share towards the UK's 2020 target of 15% of energy from renewable sources"* In this debate there has been little said about the importance of renewable heating technologies to overcome rural fuel poverty, prevalent in off-gas grid homes who often rely on electricity or oil for their heating. This is an important factor.

Although recent statistics show that uptake has been lower than anticipated it is important to keep the RHI in operation, altering and extending the scheme to boost uptake if necessary. It should also be recognised that the RHI has been successful in targeting off-gas grid households (representing 73% of accreditations) and in displacing expensive fuel sources: oil and electricity being the largest single fuel displaced (34% and 21%, respectively).

Addressing the heat sector and boosting low carbon heat is a crucial part of meeting our carbon budgets, as recognised by the Energy Secretary when questioned by the [ECCC on DECC's priorities](#) on low carbon heat: *"I do accept that we need to do more on heat. Heat is hard."* This was in response to the CCC's 2015 Progress Report to Parliament, where it highlighted that the UK is unlikely to meet its 12% target for renewable heat- due to a low starting point and arguably unrealistic ambitions. The CCC's cost-effective trajectory for meeting the fourth carbon budget includes 24% of heat from low carbon sources in 2025 which, based on current trends, looks increasingly difficult.

As such long term stability on low carbon heat is needed and this should start with the RHI being extended to cover the course of this parliament, this is a vital step to building a strong and sustainable low carbon heat sector in the UK. It is also clear that instead of cutting back on existing renewable heat programmes government should be seeking to ramp up its activity with more ambitious incentive schemes and a stronger central government commitment- for instance a zero interest loan scheme would be a positive step to overcome high capital costs as with the Home Energy Scotland renewables loan.

Community energy programmes

Support community renewable generation

A key part of an energy efficient economy is community-based renewables projects providing clean, cheap energy at a local level. Recent regulatory changes mean that the growing community energy movement is under threat.

The likely cuts to renewable energy subsidies will change the economics for home owners and communities. We need an urgent focus – working with business – on how new models can be developed that can drive uptake of renewable energy, particularly at the community level. This means bringing the private sector together with communities. EST wants to empower community groups to ensure that in their interactions with developers they have a strong voice.

In the long term there are different routes that are available to community energy groups: becoming energy suppliers in their areas, commercial partnerships to lease roof space for solar PV and sell it at a retail price and even entering into joint ownership schemes with developers or renewable energy developers. These opportunities will give community energy groups a chance to set up a viable business model with secure revenue streams that could then be used as a platform for other community projects, such as the ones described in the next section.

Support community energy efficiency schemes

An equally important part of the picture, programmes run by community groups offer an effective way to promote energy saving in local areas, so long as they are given proper backing and long term funding. With enthusiastic volunteers who can establish trust among their neighbours, community group activity can be a useful mechanism

by which to identify households that are in need of energy efficiency upgrades. Specifically, these may be hard-to-reach customers who would not otherwise respond to mass marketing campaigns. In order to maximise their potential these programmes require steady finance for marketing and an appropriate time period. We would like to see DECC and the energy companies pilot a scheme that opens up longer term, stable funding streams to these projects.

The role of regulation and improving consumer information

Energy standards of many home products have improved significantly in recent years. In large part, this is the result of regulation. The biggest success in energy efficiency policy in recent years was the 2005 decision to make high-efficiency boilers mandatory in homes. That policy has changed the way we heat our homes and has been fully accepted by householders and industry.

Minimum regulations for products, building regulations and other regulatory requirements are very effective in bringing about change. Combined with better information provision to consumers this can push consumers to the best performing products (better information) whilst getting rid of the worst performing (stronger minimum requirements). If carried out effectively, through consulting different stakeholders, we believe a substantial change can be achieved through product standards, whilst avoiding placing excessive costs on industry and consumers.

The Ecodesign directive, setting ever more stringent minimum energy performance requirements, has been the driving force behind improvements in efficiency in European product markets. The Ecodesign directive has forced the worst performing products to improve.

Alongside this, energy labelling has made manufacturers outperform each other and equipped households with greater information, driving consumers towards the best products

Existing regulations need to be better enforced - for example the consequential improvement regulations that are already in building regulations: home owners are supposed to install solid wall insulation and floor insulation at the same time as they replace floors or external wall coverings. There are health and safety regulations that are meant to protect private tenants from cold homes, but again are often not enforced.

Targeted use of product and building regulations to deliver home energy savings

Working hand in hand with ever more stringent minimum performance requirements, EST welcomes the introduction of labelling for boilers and heating systems. There are now new minimum efficiency standards for heating products comprising combination heaters and space heaters with a rated heat output of 400kW or less. The potential to improve heating efficiency and a person's engagement with their system is now far greater. These new Ecodesign regulations will allow consumers to become more aware of the energy efficiency of their heating system and builds upon the progress already made. This will drive consumers to the better performing products.

Broadly speaking, we need to keep effective regulation for home energy efficiency on the agenda.

Revise product energy labelling

The current model of rating appliances is due for a revision to be made fit for purpose for the next period of efficiency improvements however. As more products reach the top of the market, a more appropriate re-grading is

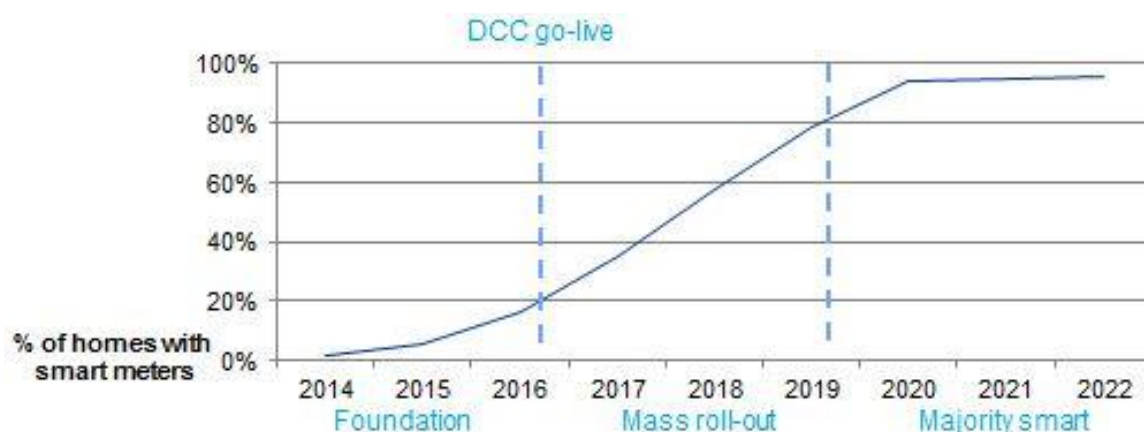
needed, and presence of extra '+' bands can be misleading for consumers. The European Commission is looking into ways to reform the system to rectify this issue and EST agrees that an overhaul is required.

Crucially EST would like to see a system whereby the efficiency of an appliance is simple to understand, easy to compare and that ideally that gives consumers personalised running costs estimates. Digilabelling- a prototype project that EST is working on at the moment- has a lot of potential on this front as it could provide consumers with up to date efficiency ratings, running costs and lifetime costs. This could entail a QR code that can be scanned by a smartphone for instance but also linking to a website for up-to-date costs and regulations.

At the moment it is difficult to compare actual running costs of appliances. Improved awareness and better information provision to consumers in a simple and understandable way should be the basis of the labelling system.

Smart meters

Smart meters are another example of a change mandated by government with the private sector responsible for implementation. The ongoing smart meter rollout offers several opportunities to promote energy saving and efficiency.



It is important that access to the Data Communications Company (DCC- that provides the secure communications network) should be made as straightforward as possible, to promote innovation in the services offered to households and so that smaller companies are not shut out of this process. We also believe it is important that those customers that have had SMETS1 meters installed during the extended 'Foundation phase' are able to share their data as soon as possible. Currently, this is likely to reach over 2 million meters, plans to enrol them onto the DCC are unclear and the earliest it is likely to happen is mid-2017.

In order to fully reap the benefits of smart meters customers have to be able to fully access their own data and share it with whomever they choose. That will allow organisations providing energy saving and energy demand management services to innovate and provide a range of services. For example, EST developed a pilot called the Smart Meter Advice Programme that used homes' smart meter data to provide personalised energy saving advice by email, in-home and over-the-phone.

Rented housing standards

Set a clear strong minimum energy efficiency standard for private rented homes

We should encourage landlords to invest to improve the efficiency of their stock. This is a win-win ensuring warmer homes and lower bills for tenants and improving the value of the stock for landlords. We believe that F and G banded homes should not be on the rental market and landlords of these properties should be required to invest to bring them up to a decent standard.

Investment in social housing

The fuel poverty situation remains significant in social housing: to tackle the coldest homes nationally and in individual housing associations we need to move from an average SAP to a minimum SAP standard in measuring progress in these homes. Government should support social housing providers to include energy efficiency investment in their long term planning considerations as a way of improving their stock value and ensuring tenants are able to pay rents.

New build homes

A nearly zero-energy New Homes Policy back on the agenda as soon as possible

In 2008, the Government made a commitment to achieve zero carbon new homes in England by 2016 along with an “allowable solutions” mechanism which allowed for some emissions from a zero carbon home’s emissions as long as these are offset by carbon reduction activities off-site. EST supported this commitment and was disappointed when it was scrapped in July 2015.

It seems unlikely that the Government will do a U-turn on this but it is important to bear in mind that nearly zero energy new homes are the most efficient and productive choice. They deliver much lower cost and carbon homes that are more comfortable and better for homeowners. The additional construction cost is only a small fraction of the cost of a new home. We're pleased that Amber Rudd has said that she sees the axing of the zero carbon homes policy as only a postponement.

Energiesprong

Energiesprong is an innovative programme that delivers whole house retrofits to net zero energy levels via an off-site manufactured building envelope and funded by savings delivered via a contractor-guaranteed energy performance contract

In the Energiesprong model, suppliers of the retrofit product (insulation, heating system, renewable energy systems) work together and take responsibility for achieving a given level of energy saving, The model relies on leveraging investment in energy efficiency from the resulting energy cost savings with occupiers paying back the investment cost rather than an energy bill and as such the energy saving guarantee is a crucial component.

To enable Energiesprong to work, housing providers and governments will need to develop a successful pay-as-you-save financing approach, including changing benefit rules to allow the upgrade costs to be integrated with rent charges for low income residents. This will require the development of a successful pay-as-you-save model which incorporates the lessons learnt from the Green Deal.

Householder behaviour is another component of the Energiesprong model. To achieve net-zero-energy householders will need to agree to limit their consumption within reasonable kWh limits. Engaging householders to take control of their energy use will require householders to engage in new ways with their energy meter – linking to the smart meter and smart home energy technology agenda.

Key elements that will be important to make Energiesprong a success:

- A stable policy framework
- A role for city regions as the brand and guarantor.
- Central policy support for market development.

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