



energywise

# Engaging fuel poor and hard to reach households on energy initiatives

Lessons from trial 1  
recruitment and installation

What do you think about being part of the **energywise** project?

Welcome to the  
**energywise** project

**energywise**

I'm very satisfied with the whole project, it's all been plain sailing.

Everything has run smoothly. I think the new meters are good. I've heard the scare stories, but I wouldn't want to change it.

There was no problem whatsoever with the installation. The man was very nice and explained everything.

Someone from **energywise** came along to the installation as well. They helped to explain everything and what was happening. They made me feel at ease.

Seeing how much I was spending amazed me. Me and my son turn off all of the lights now. We never did that before.

It makes it easier to get credit. I can just phone up. The cards were a pain. It's much easier now.

**energywise** has involved recruiting social housing tenants living in part of east London to take part in a trial involving smart meters, energy efficiency devices and a time of use tariff. This booklet outlines the key achievements and lessons from the recruitment and installation phases of the project.

# Fuel poverty and the smart meter roll-out

Fuel poverty is a serious and complicated issue affecting householders (generally those on low incomes) who are struggling to pay their energy bills<sup>1</sup>. In 2013, there were estimated to be around 4.5 million poor households in the UK – 17 per cent of the total<sup>2</sup>. Around 70% of these households were also classified as vulnerable<sup>3</sup>. There are three main drivers of fuel poverty: the cost of energy, the income of the household and the efficiency of the property.

Energy efficiency initiatives are key to reducing fuel poverty and smart meters have the potential to play a key role in enabling households to be more efficient. Smart meters form part of the UK Government's plan for upgrading Great Britain's

energy system, and will lay the foundation for moving to a lower carbon economy and a secure energy supply. The UK Government is committed to 'ensuring that every home and business in the country is offered a smart meter by 2020, delivered as cost effectively as possible'<sup>4</sup>. Smart meters send data directly to energy suppliers about the amount of energy a customer is using, thus negating the need for meter readings or estimated billing.

The smart meter rollout will see 53 million gas and electricity meters installed, involving visits to 30 million homes and small businesses. The take-up of smart meters is voluntary; customers have to willingly opt-in to have one installed. Fuel poor households may face barriers to realising smart meter benefits, yet could potentially benefit the most from this technology. In order for the smart meter roll-out to be successful, it is vital that it reaches all customers, including those who are vulnerable or low income.

## Smart meter benefits to consumers



Smart energy monitor lets customers see how much energy they are using with **INCREASED CONTROL OVER ENERGY USE** giving predicted savings of 2-3%<sup>5</sup>

Facilitates access to a range of **TIME OF USE TARIFFS**



**EASIER TOP-UP OPTIONS** for prepaid customers. Almost a quarter of fuel poor customers are on prepaid meters<sup>6</sup>

## Barriers to realising smart meter benefits<sup>7</sup>

Groups less likely to accept a smart meter include those **OVER 75 YEARS**, who **CANNOT SPEAK ENGLISH** well, or who have a **DISABILITY** such as being partially sighted or blind



Groups likely to have to wait longer to be offered a smart meter include those in **ENERGY DEBT** as well as those living in **HIGH RISE BUILDINGS** which are more challenging to fit smart meters in

<sup>1</sup> Fuel poverty in England is measured using the Low Income High Costs indicator, which considers a household to be fuel poor if their income is below the poverty line and their energy costs are higher than is typical for their household type.

<sup>2</sup> DECC, 2015, Annual Fuel Poverty Statistics Report 2015

<sup>3</sup> In England a vulnerable household is one that contains the elderly, children or someone who is disabled or has a long term illness. Scotland uses a different definition, which includes the elderly or someone who is disabled or has a long term illness but does not include children.

<sup>4</sup> DECC, 2015, Fourth annual progress report on the rollout of smart meters

<sup>5</sup> DECC, 2014, Smart meter rollout for the domestic and small and medium non-domestic sectors (GB) Impact Assessment

<sup>6</sup> 22% of prepaid customers in England are fuel poor compared to 7% of direct debit customers; DECC, 2015, Annual Fuel Poverty Statistics Report 2015

<sup>7</sup> Smart Energy GB, 2015, Smart energy for all; identifying audience characteristics that may act as additional barriers to realising the benefits of a smart meter

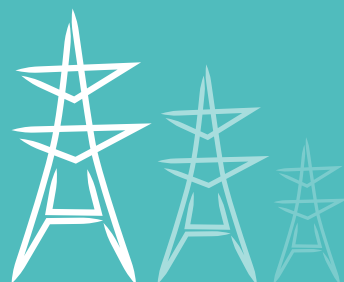
## Importance of supporting vulnerable and fuel poor households

Smart meter rollout  
**COSTS ARE SHARED**  
by all energy consumers:  
it is important that all  
households benefit



**VULNERABLE or FUEL POOR** customers can benefit greatly from energy efficiency initiatives and the smart meter roll-out but often have limited ability to access energy saving technologies

Enabling and encouraging all customers to **REDUCE AND CHANGE THEIR PATTERN** of electricity demand will help mitigate the challenge of increasing and more uncertain demand on electricity networks



# energywise

## explores

- How Distribution Network Operators (DNOs) can support fuel poor customers and allow them to participate in energy saving and demand side response (DSR) opportunities;
- The best role DNOs can play in facilitating energy efficiency measures;
- How this can ultimately benefit DNOs both in shaping their engagement strategies and managing networks using flexible alternatives.



# Introduction to energywise

energywise is a partnership between nine organisations, led by UK Power Networks, the electricity DNO for London, the south east and eastern parts of England. Ofgem awarded the project £3.3 million of funding (total project cost £5.5m) under the Low Carbon Network Fund competition in December 2013. The partners are working together to engage customers who may be fuel poor or vulnerable on energy use.

The project explores how low income households who may be struggling with fuel bills can better manage their household energy usage. It involves two trials, as shown in the diagram below. Upon signing up to the project, participants were randomly split into one of two groups:

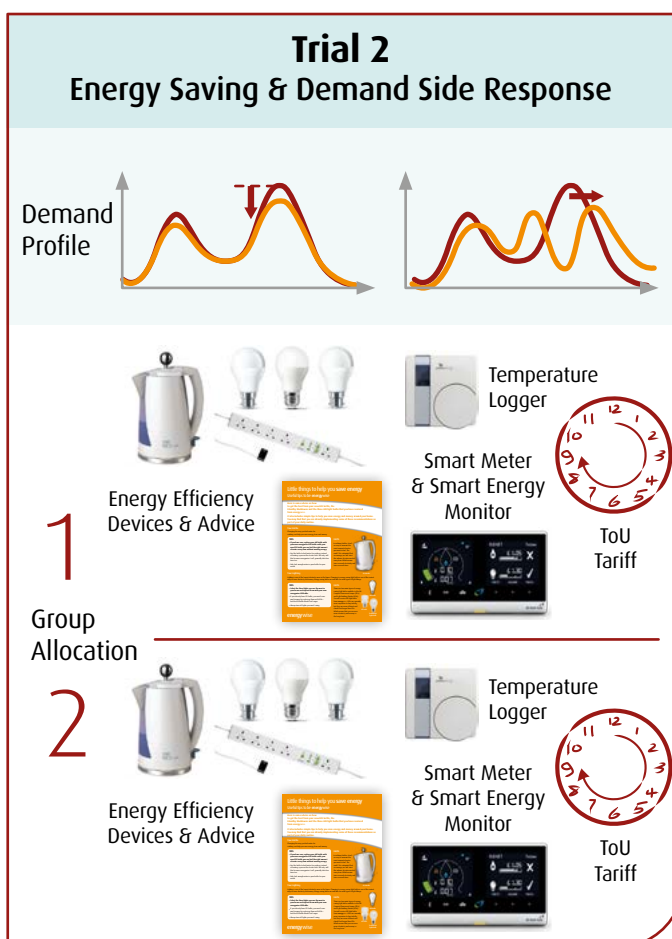
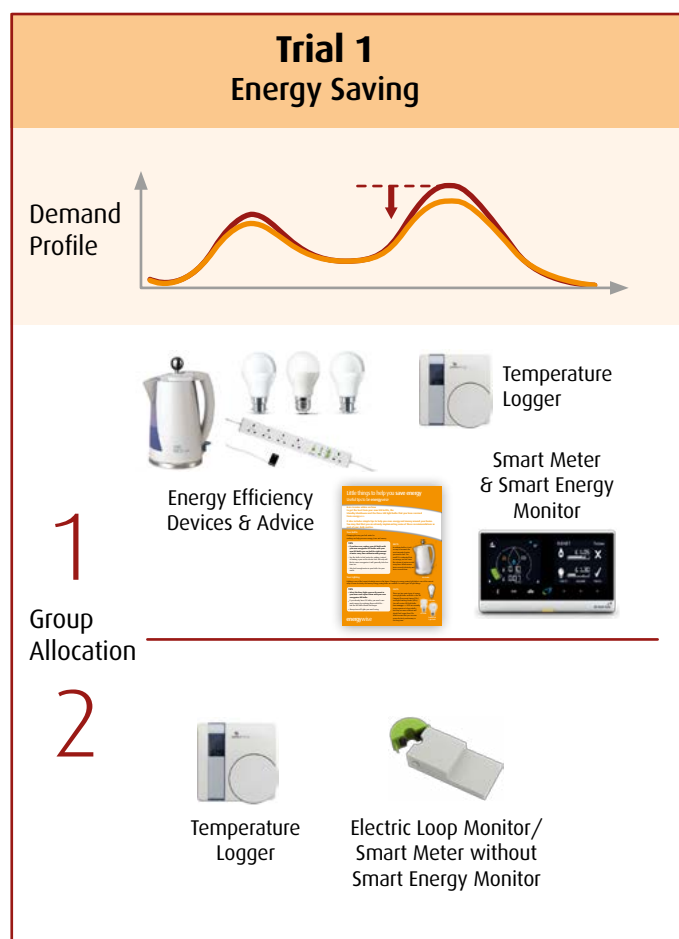
- The intervention group (group 1), who received their smart meter, smart energy monitor and devices at the start of trial 1, and are then offered a Time of Use (ToU) tariff before trial 2; or
- The control group (group 2), who will receive these items at the start of trial 2.

Participants have also had temperature monitoring equipment installed as a customer protection measure.

## energywise partners



## The project trials





Testing an innovative, collaborative approach between DNOs, energy suppliers and community members in engaging households on energy saving and DSR programme

Trialling smart meter solutions, including prepayment smart meters, and time of use tariffs with fuel poor customers

Demonstrating smart meter infrastructures for Multi-Dwelling Units, high rise buildings with difficult meter arrangements

Exploring how a change in demand from these customers may benefit the electricity network

One of the objectives of the **energywise** project was to recruit customers through working with trusted local intermediaries who have a good understanding of the local area and culture. The intention was to identify 1,650 eligible participants (British Gas customers who are also social tenants of Poplar HARCA or Tower Hamlets Homes and who live in a relatively inefficient property with Energy Performance Certificate band C or below) to invite them to take part, with the hope of getting 1 in 3 to sign up.

Following the completion of recruitment of **energywise** participants and the installation of all equipment, an evaluation was undertaken of the recruitment and installation processes. This involved analysis of recruitment data, a non-participation survey, telephone interviews with a sample of participants, participant panels involving a sub-set of participants and a workshop with project partners, recruiters and installers.

Key learning points from the evaluation of the **energywise** recruitment and installation approach are presented in this booklet, along with suggestions for how to replicate and improve upon this model.

## Evaluation workshop



These are intended for:

- Those seeking to engage vulnerable or fuel poor customers during smart meter roll-out and energy efficiency campaigns – including policy makers, energy suppliers, DNOs and other organisations.
- Other DNOs and researchers developing or running trials with residential customers.

## Targeting hard to reach customers

**energywise** offers a flexible approach to engagement that can be tailored for different groups. This has been successful in recruiting participants that are considered hard to reach in the context of the smart meter rollout, including:

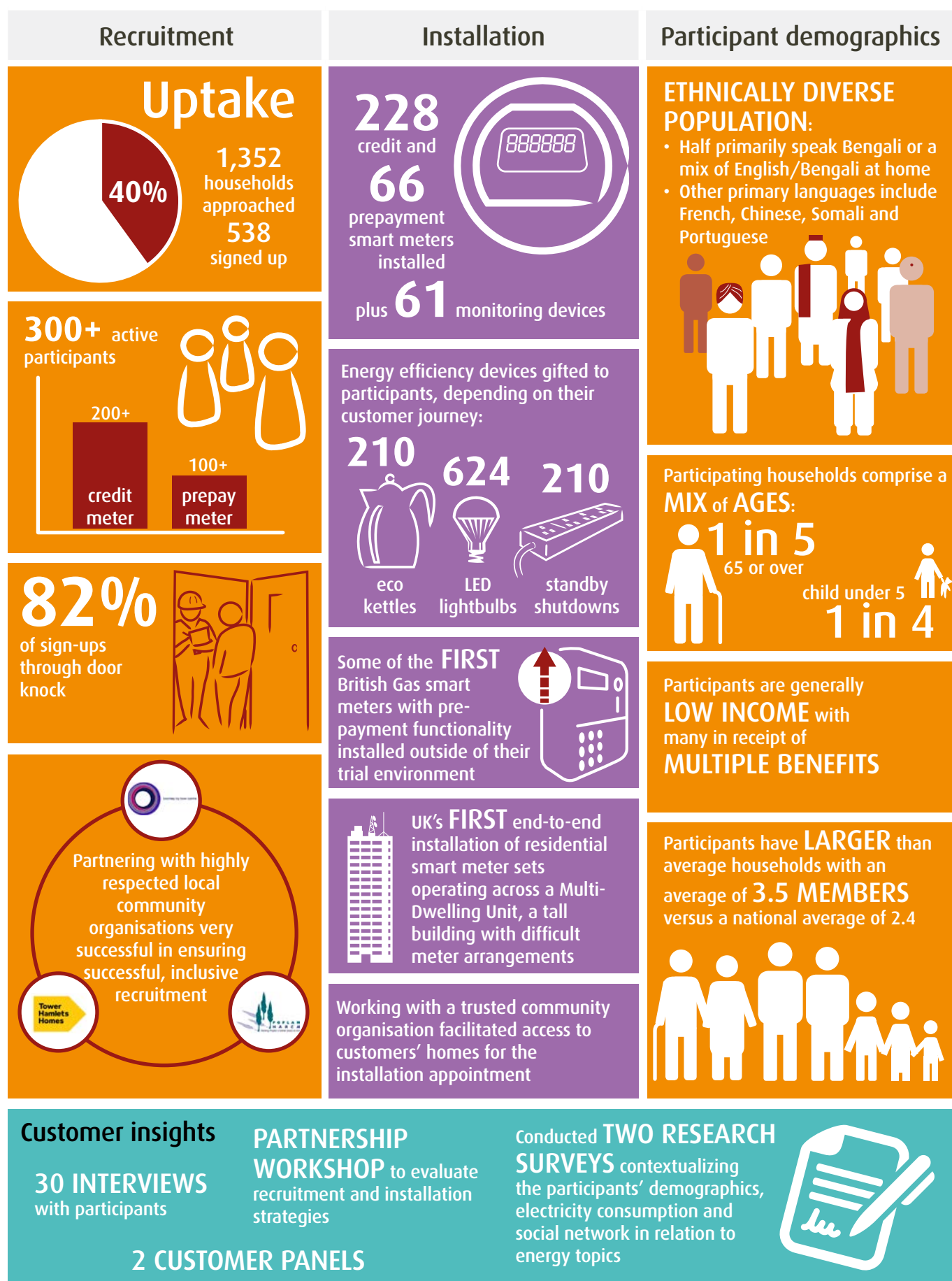
- Black or Minority Ethnic households which lack English as a first language;



- Elderly households which have been identified as hard to reach in terms of the smart meter rollout.

The outcomes from this project therefore have relevance both in terms of engaging with fuel poor households but also with hard to reach households. Given the diversity of Great Britain's population, an inclusive approach will support the Government's target to rollout smart meters by 2020.

# energywise – what we have achieved so far



# The energywise recruitment and installation approach

energywise is the first Low Carbon Network Fund project to test how a DNO, in collaboration with an energy supplier and trusted local intermediaries, can effectively engage with fuel poor customers on initiatives that can support them in the management of their energy use.

## Adopting a best practice approach<sup>8</sup>

### Research suggests that:

- Face to face communication and support is critical to recruiting and maintaining engagement of fuel poor trial participants;
- Contact should come from a trusted local organisation such as a housing provider or a well-respected local community organisation.

**A team of dedicated, locally based, community-centred customer field officers was therefore recruited and trained up to lead on the recruitment and engagement of participants.**

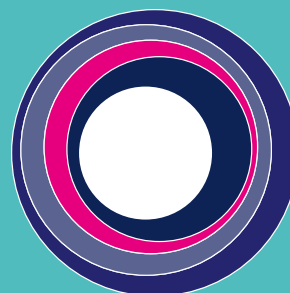


As well as leading on the recruitment of participants, the customer field officers also played a key role in the installation of equipment, working in partnership with British Gas to book installation appointments. They were also responsible for delivering the energy saving devices to participants and facilitating access to participant's properties when required.

## Introducing the energywise field officer team



- Employed by the project's recruitment partner, local community charity Bromley by Bow Centre.
- Most live in the local area and have good knowledge of local languages and cultures present within the borough of Tower Hamlets.
- Thorough training and induction programme delivered to ensure expert knowledge on the project as well as skills in identifying vulnerability, providing energy efficiency advice, engaging customers and in carrying out social research.



bromley by bow centre

<sup>8</sup> See project Communications Plan for details: [goo.gl/1FokLD](https://goo.gl/1FokLD)

# The energywise offer

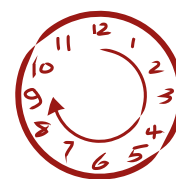
## Participants receive:



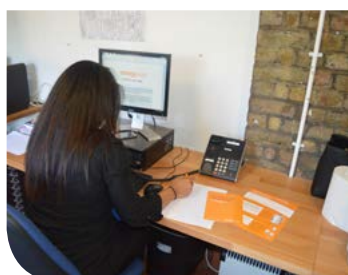
Energy efficiency devices and advice



Smart meter solution &  
Time of Use (ToU) tariff



First class book of stamps as  
a thank you with each  
Energy Social Capital Survey

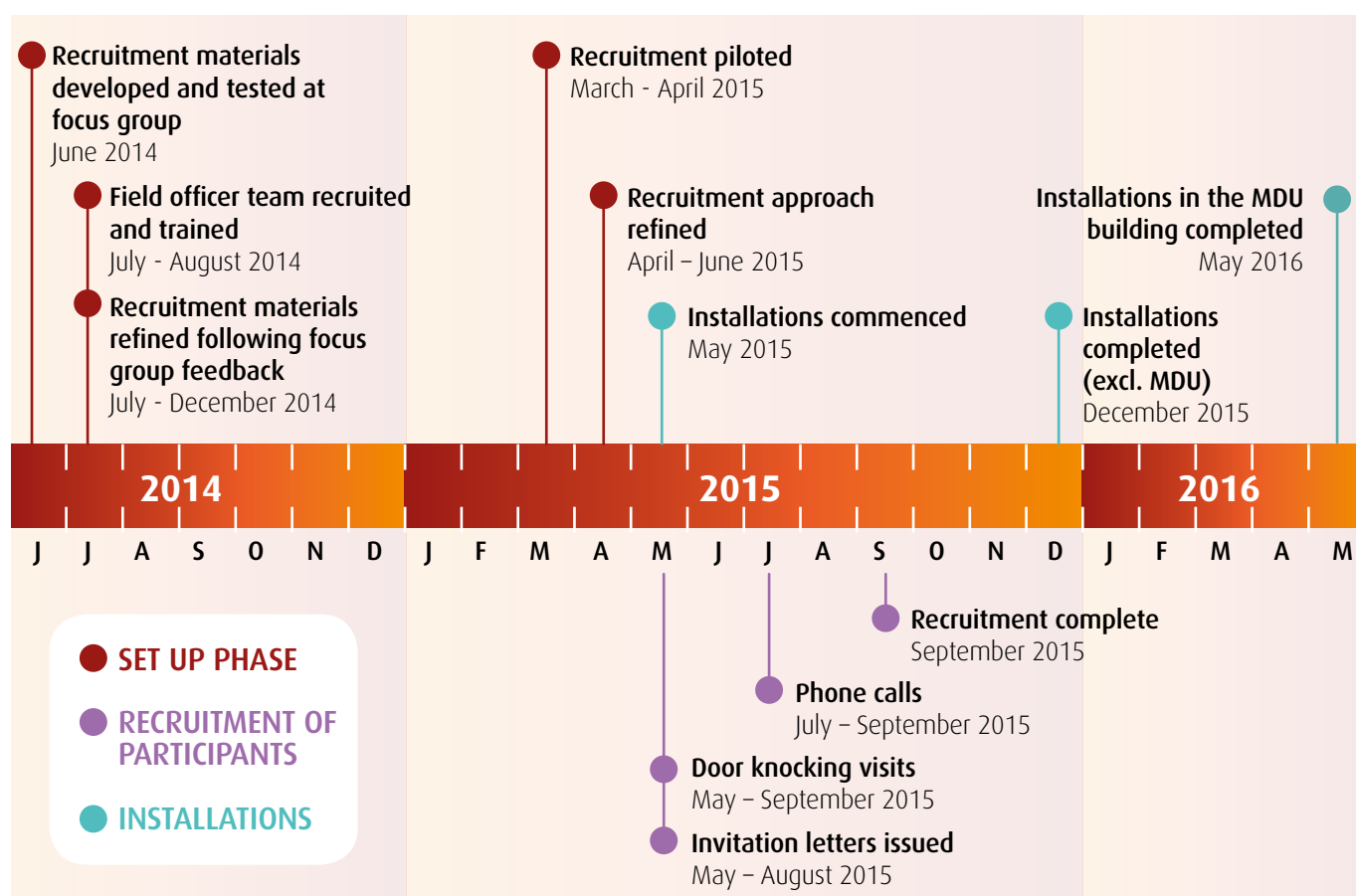


Dedicated freephone  
support line

Thank you vouchers upon  
sign-up and when taking part  
to interviews or panels –  
£20-£110 so far



## energywise recruitment and installation timeline

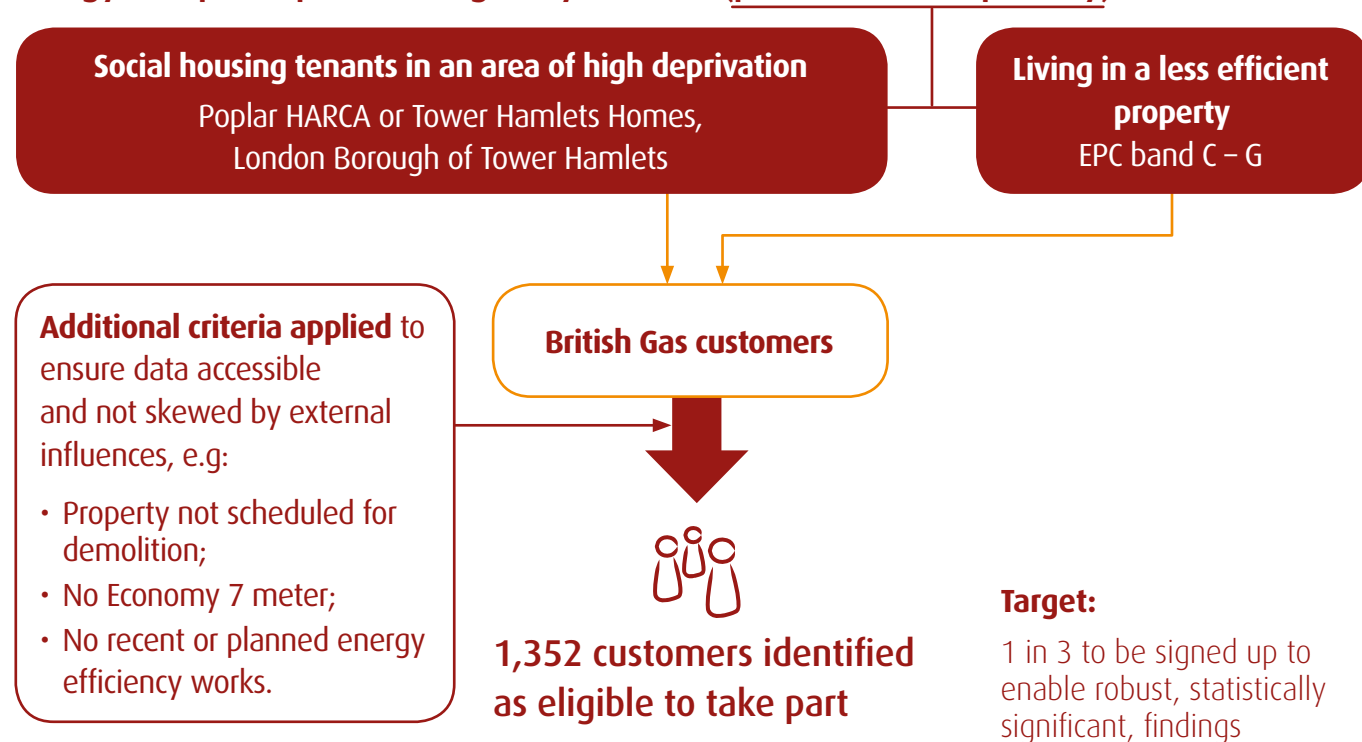


# Identifying eligible participants

energywise is intended to engage fuel poor households. Fuel poverty is very difficult to measure accurately but is primarily a combination of low income and energy inefficient housing.

The process of pulling together the list of eligible participants involved multiple partners and multiple iterations in order to reach close to the target number potential participants. As a result, a maximum of 1,352 eligible participants were identified.

## energywise participation – eligibility criteria<sup>3</sup> (proxies for fuel poverty)



## energywise learning points

### Measures to help identify eligible participants

- Where public data on income and fuel bills is not available, proxies can be used to identify fuel poor customers such as social housing tenants living in lower efficiency homes in areas of high deprivation.
- Minimise exclusion criteria to maintain the biggest possible pool of potential participants. (Restricting participants to tenants of two social housing providers limited the number of households who could be approached.)

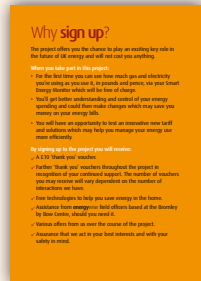


- Issue clear expectations to partners at the project outset about the data required and the format of this – reduce the number of iterations required.
- If using EPC data, consider purchasing this rather than requiring partners to supply it, as they may not have it in an easily accessible format.
- Allow for high numbers of drop-outs after sign-up. For long-duration projects take into account that people may change supplier or move house.

<sup>3</sup> The full list of selection criteria is provided in the Successful Delivery Reward Criteria reports - SDRC 9.2 and 9.3.

# Recruiting participants

## Preparing for recruitment

FOCUS GROUP	PILOT	PILOT EVALUATION	KEY MESSAGES FINALISED
<b>June 2014</b> Draft recruitment materials and project branding tested via a focus group. Held at Bromley by Bow Centre; eight local participants. Feedback used to finalise the project's branding and key messages.	<b>Spring 2015</b> Proposed recruitment approach and updated materials were piloted with 34 households. 15 signed up. Response rate of 42% (exceeding target of 33%).	<b>Late spring 2015</b> Pilot approach evaluated. Findings included suggestion that households would only open a letter if it had their housing provider's logo on it. Recruitment approach refined in light of these findings.	<b>May 2015</b> 

## The recruitment approach

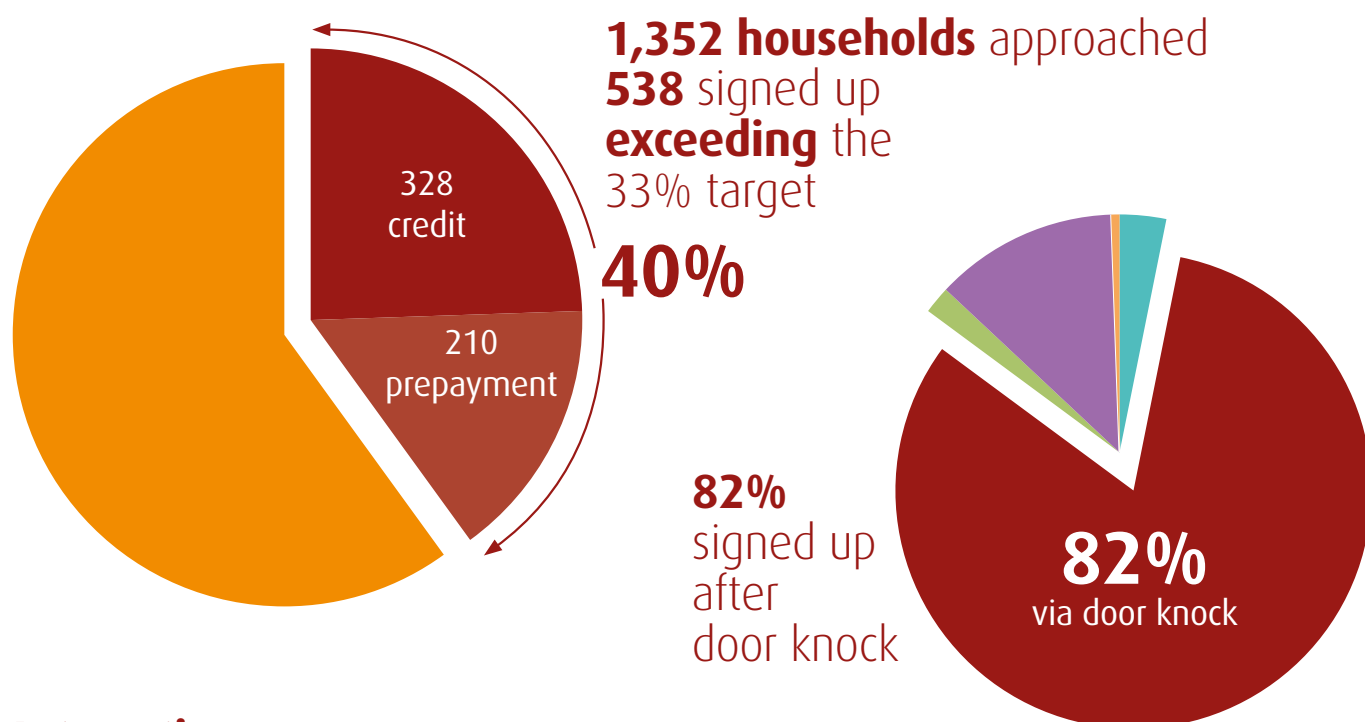
Best practice indicates that, for this target audience, face to face recruitment is the most effective. Therefore, once an invitation letter had been sent out (hand addressed, with a postage stamp rather than franking to encourage opening), the customer field officers went out to knock on the doors of invited householders, with a view to encouraging them to sign up to the project. In addition to the field officers, specialist recruiters were also brought in to help sign-up participants within the required timeframe.



### Plus:

- At any stage during this process, customers can request a booked home visit from the field officers
- 80 selected customers (living within one mile of the venue) were invited to attend a drop-in event to hear more about the project and to have the opportunity to sign-up
- Customers signing up receive a Welcome Pack with a £10 voucher, and the customer is randomly allocated to either the Control or Intervention group.

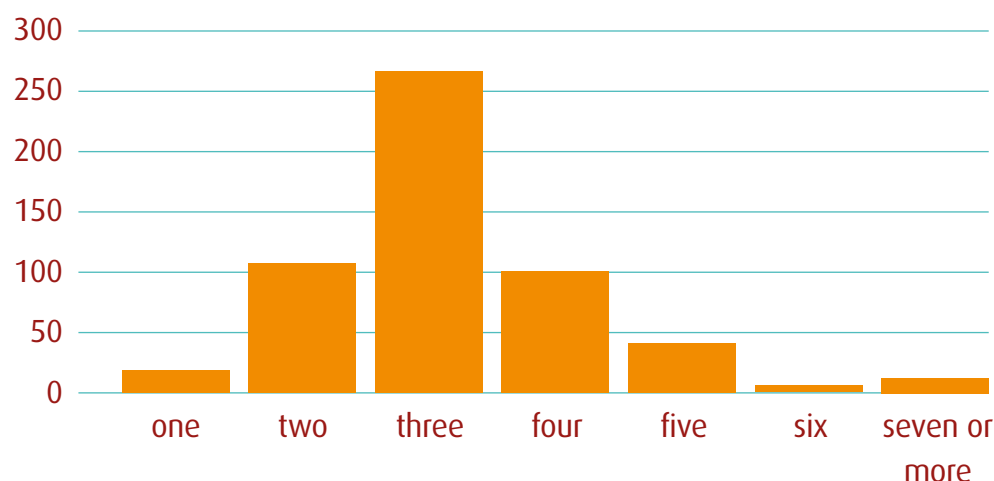
## Sign-up success



### Interactions:

**72%** signed up within three  
**91%** within four

Number of interactions before customer signed up



Diverse mix of participants –  
 local field officer approach very  
 successful in ensuring inclusive  
 recruitment



Good feedback on  
 recruitment materials  
 (professional, well designed)  
 and on the customer field  
 officer team (friendly,  
 professional and persuasive)

## Recruitment – key achievements



The energywise recruitment strategy was based on:

- Contact from a local trusted organisation with an excellent understanding of the local area and languages;
- An engagement strategy and materials tailored to the target population;
- Face-to-face communication and support.

This approach proved to be very successful in achieving the impressive 40% sign-up rate while ensuring inclusive recruitment. Around a third of participants are on prepay meters.

The vast majority of participants signed up when they received a door-knock from the customer field officers. Many participants said that the invitation letter was an important precursor to this, but not enough on its own to persuade them to sign up; only 17 signed up directly after receipt of the letter. These participants said that it was talking to the customer field officers when they visited that persuaded them to take part.

Most felt the recruitment materials were well designed and easy to understand. However, some participants had initially assumed the letter was about switching energy provider and had discarded it; it was only when they received a door-knock from the customer field officers that they understood what the project was about.

Recruiters were instructed to clearly explain the difference between the intervention and control group and that participants would be randomly allocated to one group or the other. However, some participants in the control group felt that the distinction between the two groups could have been made even clearer at the point of recruitment.

Participants were very favourable in their comments about the customer field officers, with the team's friendly and professional approach praised. A high proportion of participants are Bangladeshi; many of this cohort appreciated being able to speak to the customer field officers in their main language (of Bengali), and others stated that they felt most comfortable when the door-knocking team included a woman.

## Why did customers choose to take part?



### Top reasons for signing up

- 1 Opportunity to save money
- 2 Better visibility of energy bills
- 3 Offer of free devices
- 4 Easier top up for prepay customers
- 5 Taking part in an interesting project

### Top reasons for not signing up



- 1 Not interested in the project; too much hassle or too busy
- 2 Ineligible; e.g. changing supplier or moving home
- 3 Sceptical of, or not interested in, potential benefits of smart meter



What did you think about the recruitment approach?

It (the invitation letter) was quite straightforward and easy to understand. The leaflet in particular – it was all very clear.

I ignored the letter – I thought it was an ad for switching. I would have read it if it had been from British Gas.

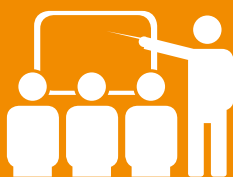
I wasn't sure of the offer when I read the letter, and had never heard of energywise, but an amazing lady came and explained in detail the process and that it would fit around my schedule.

They (the customer field officers) explained what the project was about clearly and in a professional manner.

I wouldn't have chosen to take part just from the letter; I needed to speak to someone too. The person I spoke to was polite and professional and persuaded me to take part.

## energywise learning points

### Ensuring effective recruitment



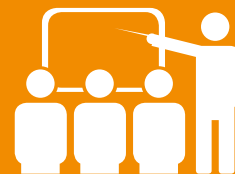
#### Staffing

- Locally based field officers with knowledge of local culture and languages can be very effective in recruiting hard to reach groups. Involving housing providers in engaging their tenants can also be effective.
- Having recruiters working in pairs, involving a diverse team, is effective. (Some customers are more comfortable talking to a woman.) Having a field officer working alongside a British Gas engineer worked well in terms of persuading people to sign up. Where possible, have pairs working together throughout the recruitment period in the same neighbourhood so they can develop a rapport with their targeted households.
- In addition to project badges, use of uniforms can increase recognition and trust.
- Bringing in specialist recruitment organisations can be effective in getting people to sign-up. However, the local team may have a deeper understanding of the community and may result in more effective long term customer engagement. Where specialist recruiters are employed, it is important to ensure coordination between the local customer field officers and the recruiters as well as consistency of key messages.
- Keep the team of recruiters small with regular refresher training, meetings to share learning and quality assurance of the door knocking.
- Staff should be well briefed on the project and trained in engagement techniques.
- Door-knocking is effective but time consuming, particularly when a project is not area-based. Evenings and weekends work particularly well.
- The recruitment partner should have excellent data management and analytical skills to enable high levels of data accuracy and the ability to amend the recruitment schedule as necessary based on the success of different approaches.
- An appropriately skilled field officer manager should be in post for the full duration of the recruitment and installation phases to ensure effective management of these critical phases, including efficient coordination between team members and consistency in the communication of key messages.



## energywise learning points

### Ensuring effective recruitment



#### Message and materials

- Low income customers are likely to be primarily motivated by the prospect of saving money on their bills. The offer of free energy saving devices and shopping vouchers can also encourage people to take part. In the case of smart meters, better visibility of energy costs and easier top up methods for prepay customers are the key features that make them attractive.
- Professional, well designed materials are essential. Customers in this group like highly visual materials with limited text.
- Clear indication about an energy supplier's involvement will limit any misconception that a project is about energy switching. The choice of an appropriate name for the project may also help.
- Test the messages and materials through focus group(s) before finalising.

## Installing equipment

### The installation approach

The customer field officer team was responsible for booking appointments and providing access and support to installers where required (e.g. translation skills to overcome language barriers).

Installation and delivery of the equipment was carried out by different organisations as per the table opposite. The intention was to ensure a coordinated approach with all parties attending the customer property at the same time. However this was found difficult to implement from an operational point of view.

As a general rule, at least 48 hours' notice should be provided to caretakers of when meter access will be needed. British Gas found that the customer field officers were helpful in aiding access to properties for the temperature monitoring installations (which were carried out by British Gas' subcontractors, PassivSystems).

Furthermore, they found there was a slight increase in the appointment booking success rate as a result of the customer field officers having previously engaged with householders. Based on the **energywise** experience, it is recommended that the installation process is best managed by energy suppliers; for harder to reach customers, third parties can play a useful role in terms of initial recruitment and engagement and any necessary additional support.

### Installation – key achievements



- 228 credit and 66 prepayment smart meters plus 61 monitoring devices installed in participants' homes.
- 1,044 energy efficiency devices delivered.
- Successful installation of some of the first Smart Metering Equipment Technical Specifications 1 compliant prepay smart meters outside British Gas's testing environment.
- UK's first end-to-end installation of residential smart meter sets operating across a tall Multi Dwelling Unit building with difficult meter arrangements.
- Participants who are still involved in the project have generally been very positive about the installation process and were happy with the installation teams.

energywise

## trial 1 equipment installation



Electricity and gas smart meters



Intervention group plus control group credit customers

Only smart meters (without a smart energy monitor) were installed for the control group to capture consumption data.



Navetas loop electric monitor (to provide consumption data)



Control group prepay customers



Temperature monitoring equipment



All participants



Delivery of energy efficiency devices



Customer field officer team

Intervention group



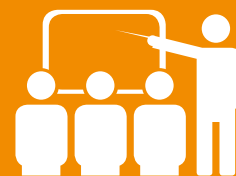
Follow up call to check satisfaction with installation



Those who had a British Gas installation

## energywise learning points

## Ensuring effective installation



- Involving a community partner can increase appointment booking success rate.
- Pilot the installation phase before rollout.
- Having the energy supplier manage the installation process will ensure that customers have a single point of contact.
- Minimise customer disruption by liaising with third parties to ensure meter access (where necessary) and coordinating installation and equipment delivery into one appointment if possible. (The latter was challenging for **energywise** as a different organisation was responsible for installing the temperature monitoring equipment.)
- Urge households present at the point of install to brief others living in the household about the smart meter and smart energy monitor, otherwise the benefits from the smart meter technology will be limited.
- For complex projects involving different installation partners, provide clear information to participants about what will be installed, by whom and how long it will take.
- Train up the customer field officer team to install and demonstrate equipment where possible (e.g. the kettle and the standby shutdown).
- Planning should take into consideration any locally relevant festivals or traditions, such as Ramadan.
- Customer field officers can aid access to properties and can provide translation where necessary.



# Participant drop-outs and ongoing engagement

The project has experienced a higher number of participants dropping out than was envisaged; it is important to understand the reasons for this in order to inform future projects and options for improving the project's engagement strategy. At the time of writing (September 2016), **227** participants who originally signed up to the project had left, split into those opting to leave (**116**) and those who were disengaged by the project team (**111**). There are **over 300 participants still active in the project**.

There is an ongoing programme of participant engagement. This includes providing thank you vouchers in recognition of ongoing participation, issuing regular project newsletters and organising participant panel meetings, which involve a small number of participants from each group who meet every 3-4 months. These meetings generate valuable feedback on the project and provide an opportunity to test any planned communications or surveys, thus allowing processes to be continually improved to ensure that participants' experiences on the project are optimised.

## Participant drop-outs

### Top reasons for participants leaving the project



- 1 Changed their mind about wanting to be in the project or wanting a smart meter
- 2 Perceived hassle of installation process

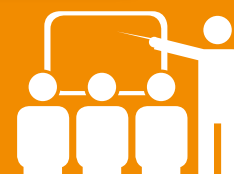
### Top reasons for disengagement by project



- 1 Changed supplier or moved house, becoming ineligible
- 2 Technical problems with install, e.g. meter was inaccessible or a signal could not be established
- 3 Customer failed to respond to requests for install appointment or did not provide access at time of appointment

## energywise learning points

### Minimising dropouts and ensuring effective ongoing engagement



- Provide very clear messages about what is involved in the project, possibly including a video, and ensure consistency of messages across different recruiters to effectively manage participants' expectations.
- Avoid equipment that is outside the scope of the project, which may cause further disruption to the participants. In the case of energywise, issues with the temperature monitoring equipment caused unwelcome disruption for some participants.
- Streamline the installation process to reduce the number of interactions with customers.
- Minimise the number of unexpected interactions with customers in general.
- Keep participants as a whole informed of what is happening in the project.
- Provide participants with an opportunity to get together to share their experiences and learn from each other. Listen to participants about their experiences and take action based on their feedback.
- Keep in regular communication with participants to remind them of how useful their involvement is and to thank them for their time – with vouchers where appropriate (e.g. where customers have faced disruption).

## Further information

# energywise

energywise is currently assessing the extent of energy savings achieved through smart metering and energy efficiency measures. Looking ahead, the project is preparing for the second trial, which will aim to understand households' appetite to change their behaviour when on a time-of-use electricity tariff.

The insights presented here will be continually reassessed and refined based on learning through the project. Further findings from the customer engagement strategy will be reported in the SDRC 9.4 report in 2017.

For further information on the energywise project, please click on the following links:



**UK Power Networks Tier 2 energywise project**

To find out more about customer recruitment and the energywise communication plan, the following documents are also available on the project website:



**energywise communications plan**



**SDRC 9.2 customer recruitment**

## Detailed energywise recruitment and installation evaluation report

A more detailed evaluation report is available on request.



elementenergy



Campaigning for Warm Homes

UK Power Networks Holdings Limited  
Registered office: Newington House  
237 Southwark Bridge Road  
London, SE1 6NP  
Registered in England and Wales  
Registered number: 7290590

