



energywise

Angeliki Koulouri
energywise Project Lead, UK Power Networks



Agenda

- The challenge
- How is **energywise** helping?
- Trial design + the journey
- What we have achieved
- How is innovative?
- Learnings

Energy and fuel poverty

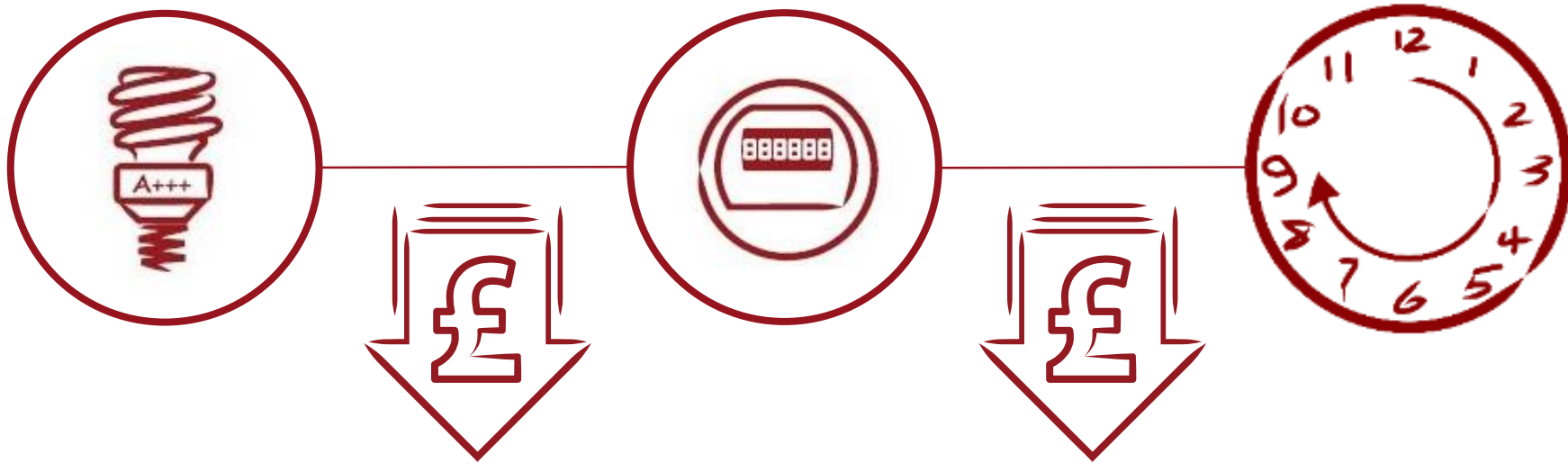
The challenge



- 4.5m households in the UK in fuel poverty
- **Little research to date** about the impact of smart technologies and Time of Use tariffs on the fuel poor
- **Marginal role traditionally played by DNOs** in delivering energy measures to these customers



Smart energy and fuel poverty



To benefit those who need them the most, the delivery of smart energy measures must be **INCLUSIVE TO ALL**, including vulnerable and hard-to-reach



energywise

in Tower Hamlets

Little things to help you save energy

Funding: **£5.49m** (£3.32m LCNF)

Duration: **4 years & 9 months** (2014 - 2018)

British Gas

UCL

Tower
Hamlets
Homes

POPULAR
HARCA



bromley by bow centre



communities • regeneration • sustainability

elementenergy



Action for Warm Homes

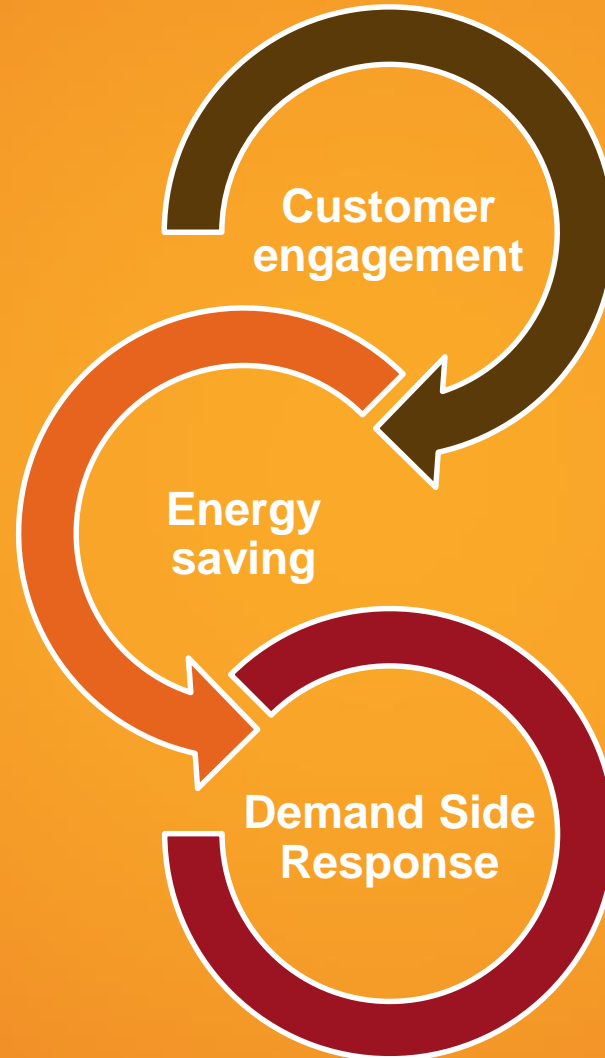
EUIA
European Utility
Industry Awards
2016

Community
Energy
Award

energywise video

Key questions

What energy savings
can people in fuel
poverty achieve?

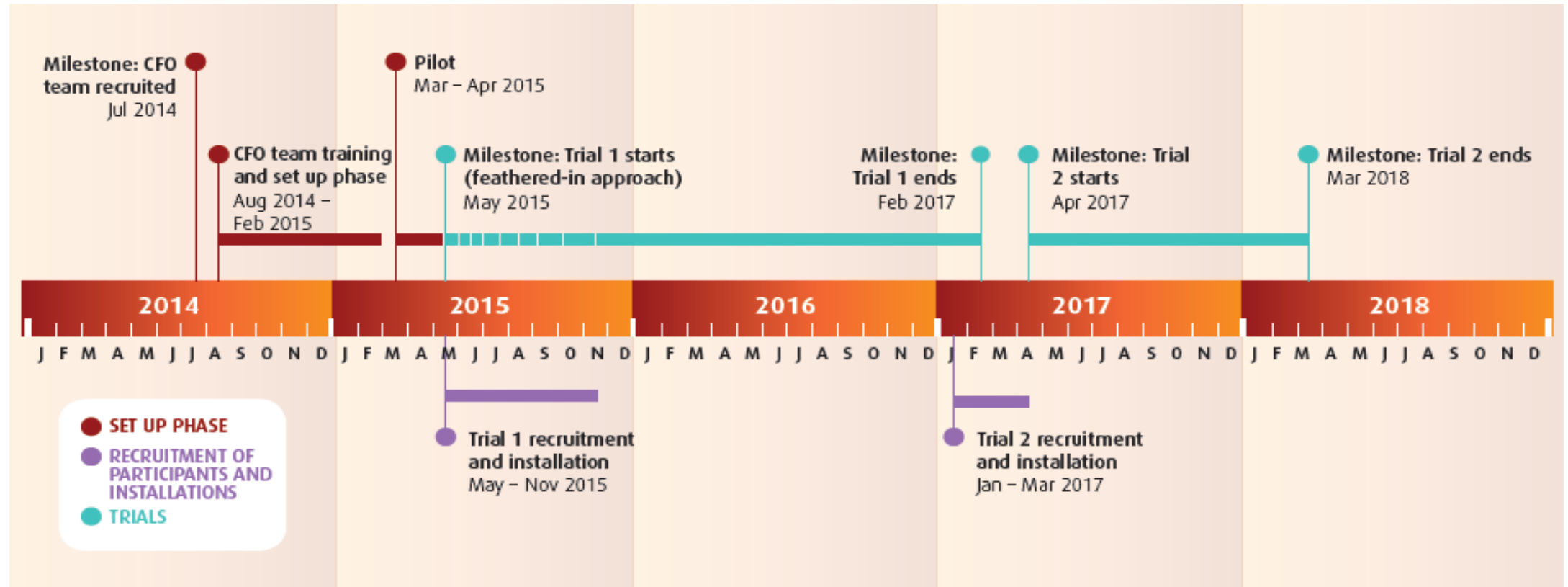


What is the best way to
engage with this customer
base?

How can they respond and
benefit from DSR
opportunities?

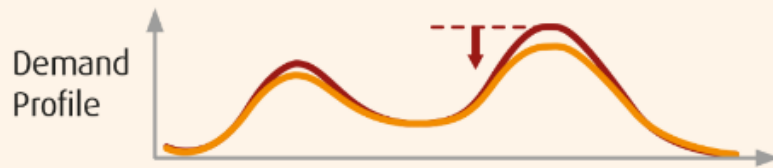
The journey

energywise overall project timeline

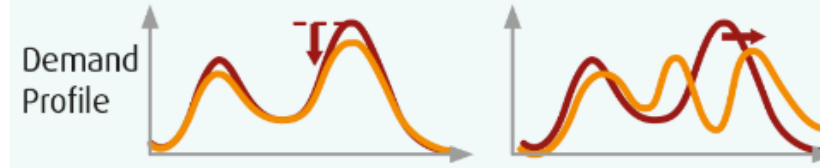


energywise at a glance

Trial 1 Energy Saving



Trial 2 Energy Saving & Demand Side Response



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



Key achievements

Identification
of trial
participants

Engagement
with
customers

Delivery of
energy
interventions

Time of Use
tariffs
offerings

Identification of eligible participants

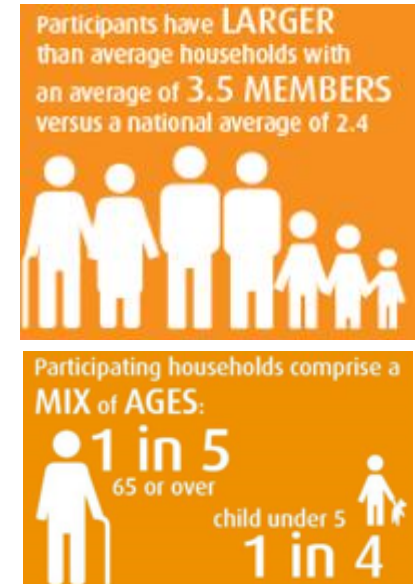
Eligibility criteria (proxies for fuel poverty)

- Social housing tenants
- Living in a less efficient property EPC band C-G
- British Gas customers
- Additional criteria

1,352 customers identified

Target 1 in 3

Trial 1 sign-up rate: **538** signed up out of 1,352 approached (40%)



Engagement with customers



- ✓ Tailored engagement strategy
- ✓ Trusted community partners
- ✓ Knowledge of local culture and languages

“The [energywise officers] were absolutely great; they came and knocked on the door, showed their IDs, they asked if I had time, they were very polite; they listened to what I said, I was really happy with them” energywise participant

“The field officer was brilliant, we were talking and laughing; he was lovely, understandable, understood my concerns, took on board my issues.” energywise participant


Delivering energy interventions

230

credit and

93

prepayment smart meter sets installed






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




336



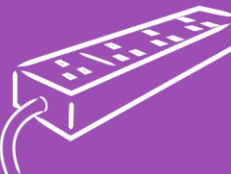
eco kettles

1207



LED lightbulbs

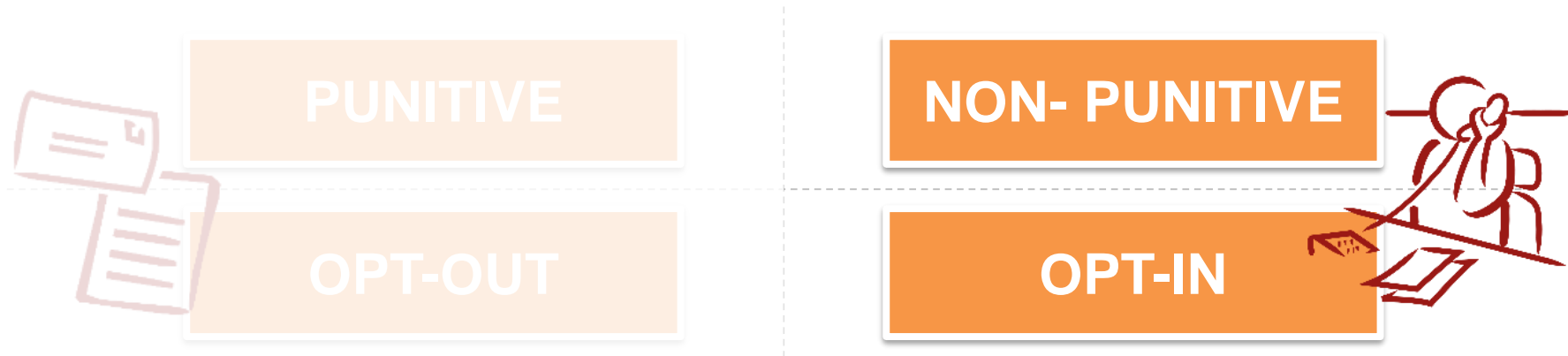
336



standby shutdowns



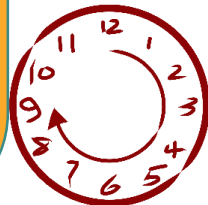
Offering suitable ToU tariffs



HomeEnergy FreeTime tariff:

offers free electricity 9am to 5pm on Saturday or Sunday (depending on customer's choice)

Credit customers



Critical Peak Rebate (Bonus Time):

dynamic non-punitive ToU tariff with notifications provided via SMS (plus email upon request)
Prepay customers

66 Bonus Time events

Evening, AM, noon, and weekend events



Trial 2 material

energywise HomeEnergy FreeTime

You have chosen to be switched to the British Gas HomeEnergy FreeTime tariff. This is the second (and final) part of the energywise project.

Saturday 9am - 5pm This is the weekly period when you will receive free electricity.
1st April 2017 This is the start date of the trial

Please note, this does not apply to gas.

How can I maximise my savings on my FreeTime tariff?

Start moving household activities to your free period. Do your washing and tumble drying, do the vacuuming, run the dishwasher and then catch up on all your favourite TV shows! So long as it runs on electricity it will be free between 9am and 5pm on Saturdays.

Suggestions from the energywise team about making the most of your new tariff

The table below shows how you might be able to move activities to your free period.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

energywise

Time Shifting Advice tailored to
each offer

energywise Bonus Time

You have chosen to be notified of 'Bonus Time' periods. During these periods, you'll have the opportunity to earn credits on your meter by reducing the amount of electricity you use. This is the second (and final) energywise trial.

April 2017 You will start receiving Bonus Time notifications at the start of April by text (and email if you have also requested this).

Please note, this does not apply to gas which will be charged as normal.

We plan to notify you of these periods on the evening of the day before the Bonus Time period. Each period will last for between 1 and 3 hours.

Making the most of this opportunity

During each Bonus Time period, try to use only your electric appliances that are essential - and try to delay activities that use a lot of electricity. The table on the next page shows you how much electricity typical appliances use in units.

Here are some suggestions for how you could make the most of this opportunity:

- * Could you delay running your washing machine until the period is over? (It won't be that it completes its wash cycle before the period starts.)
- * The same applies to your tumble dryer or dishwasher, if you have them.
- * If you have an electric hob and/or electric oven, you could try to delay using these during the period, or use a microwave instead.
- * Turn off any lights you don't need.

Some changes you may be able to make:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

How much electricity do your appliances use?

The following table shows you how much electricity typical appliances use.

Activities that use a lot of electricity

Appliance	Typical electricity use in units [±] (1 unit = 1 kilowatt hour = up to 13.5p)	Typical cost	Appliance	Typical electricity use in units [±] (1 unit = 1 kilowatt hour = up to 13.5p)	Typical cost
Electric oven	2.5 units PER HOUR	34P PER HOUR	Iron	1 unit PER HOUR	13.5P PER HOUR
Tumble dryer	2 units PER CYCLE	27P PER CYCLE	Hair dryer	0.5 units PER 15 MINS	7P PER 15 MINUTES
Washing machine	1 unit PER CYCLE	13.5P PER CYCLE	Electric heating:		
Vacuum cleaner	1.2 units PER HOUR	16P PER HOUR	Oil filled radiator	1.5 units PER HOUR	20P PER HOUR
Dishwasher	1.5 units PER CYCLE	20P PER CYCLE	Fan heater	3 units PER HOUR	41P PER HOUR
Electric hob (per plate)	1 unit PER HOUR	13.5P PER HOUR	Immersion heater	3 units PER HOUR	41P PER HOUR

Working with key stakeholders



Keep informed

- Other DNOs
- Local authorities
- Media
- Energy industry

Key players

- Ofgem
- BEIS
- Project partners
- Third parties/suppliers to project
- Consumer groups

Build awareness

- Wider population

Keep satisfied

- Trial participants

What's new?

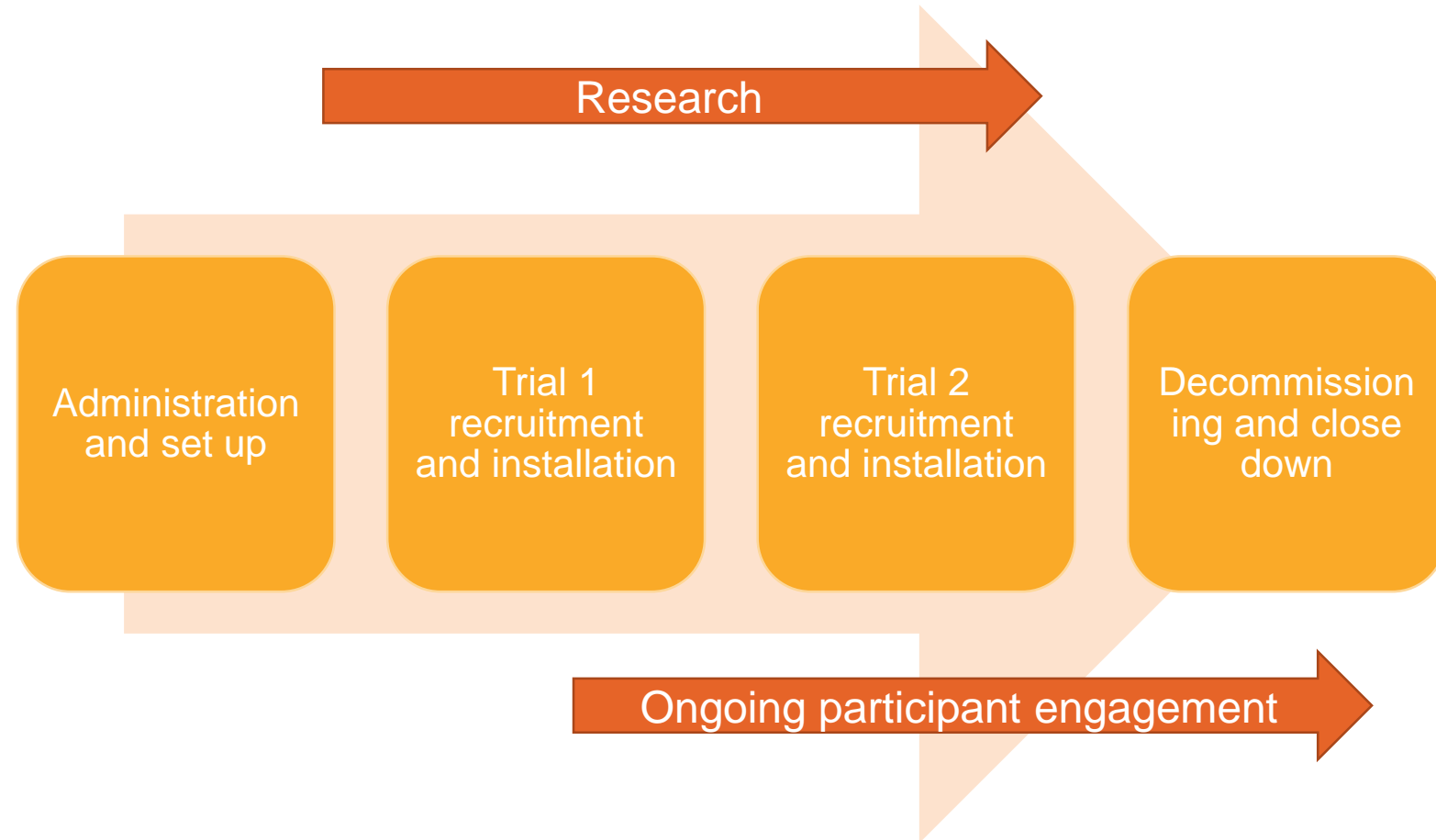


- ✓ Tested an innovative, collaborative approach between distribution network operators, energy suppliers and community members in engaging households on energy saving and shifting times when energy is used
- ✓ Trialled smart meter solutions including prepayment smart meters and new energy tariffs in a local community
- ✓ Demonstrated smart meter infrastructures for high rise buildings with difficult meter arrangements
- ✓ Explored how much households can benefit from these solutions and how a change in demand may benefit the electricity network

energywise- project learnings

Next sessions will cover learnings from:

- **Recruitment and engagement of participants** (CAG Consultants & Bromley by Bow Centre)
- **Electricity saving and shifting: the customer perspective** (UCL)
- **Electricity saving and shifting: the network perspective** (Element Energy)
- **Overall project learnings** (UCL and Element Energy)



Thank you!

Contact us:

Innovation@UKpowernetworks.co.uk

