SAVE project

June 2019



Project planning

- Monthly Project Review Board Meetings;
- At least weekly calls to review progress;
- Establishment of offices in Southampton:
 - For local coordination of fieldwork;
 - To facilitate the logistic elements of the project (delivery of monitoring devices and associated equipment);
 - On the ground supervision and support for the field team;
 - Responsiveness to unexpected requirements (e.g. support for vulnerable householders).
- Project-specific training for the field teams, including H&S considerations;
- Collaborative approach to the development of recruitment materials;
- Full pilot.

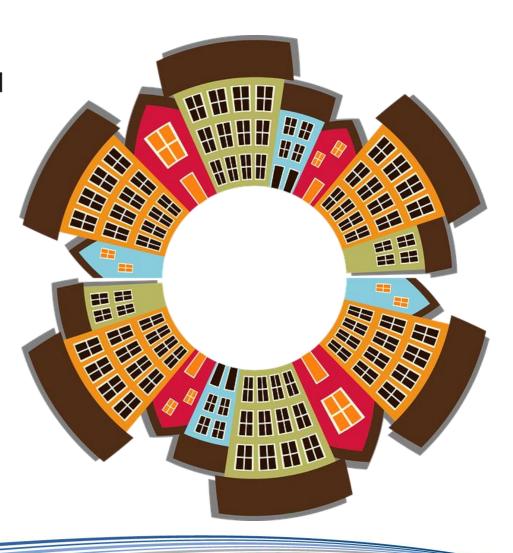






Sampling

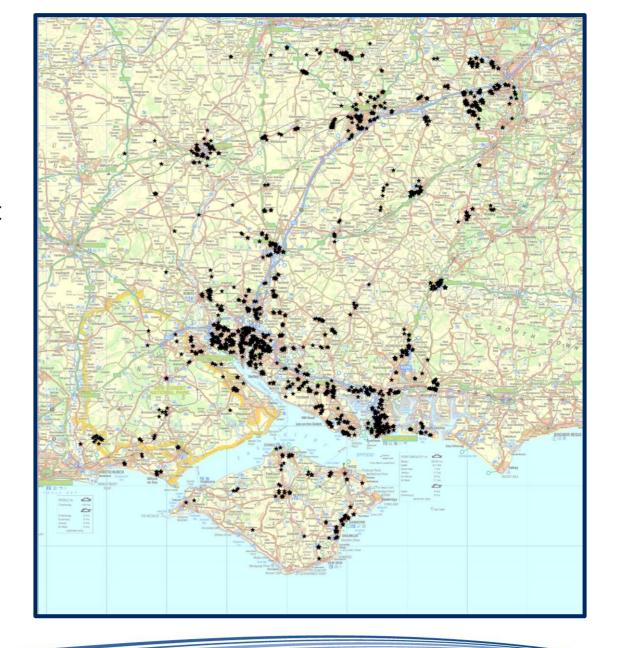
- SAVE trial households were selected for recruitment using stratified random address selection method and no households were excluded from the random sampling process with the exception of:
 - Known student or multi-occupancy (shared) housing which were excluded from this longitudinal study on the basis of transience (high turnover) and associated difficulty in obtaining appropriate informed consent over time;
 - Blocks of flats with primary (whole building) and secondary (specific dwelling) doors due to difficulties of access to randomly selected addresses (flats).
- Following stratification by Index of Multiple Deprivation 2010 (IMD 2010) and Rural Urban Classification 2011 (RUC 2011), 1,108 COAs were randomly selected, proportionate to the number of households accounted for in each stratum.
- In each of the selected COAs a random sample of up to 50 addresses was then randomly selected to give an initial sample of 50,440 households.





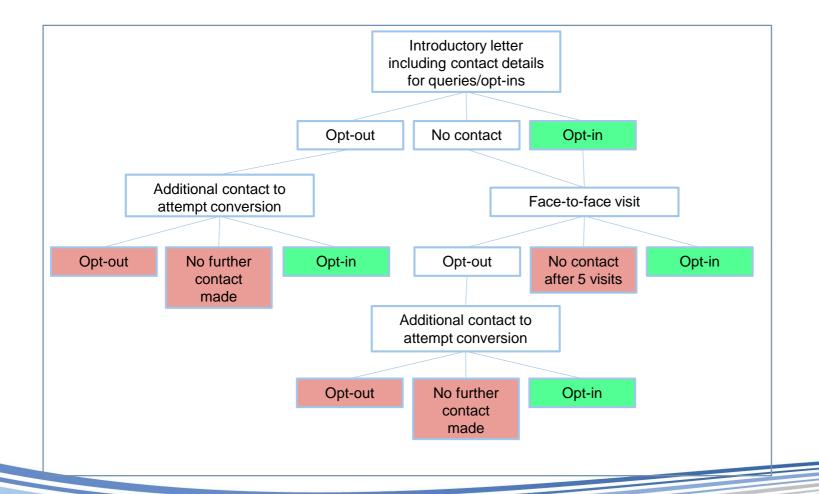
Sampling

• This map plots the locations of recruits across the Solent region.





Maximising response rates



- All efforts taken to maximise participation;
- Multiple attempts to contact selected households;
- Opportunity provided at every stage to opt out of participation;
- Flexible approach to working with householders to accommodate their needs/requirements.

Highly experienced and skilled field team





Challenges – the original monitoring equipment

- 21 steps to install the devices taking up to an hour;
- Additional 9 steps to install smart monitoring plugs;
- Followed by an in-house survey of approximately 25 minutes.



- Necessitated a switch to CATI/CAWI data collection to avoid overburdening respondents at the initial installation visit:
 - Required scripting the survey for CATI and CAWI;
 - Less efficient process and less complete survey data.



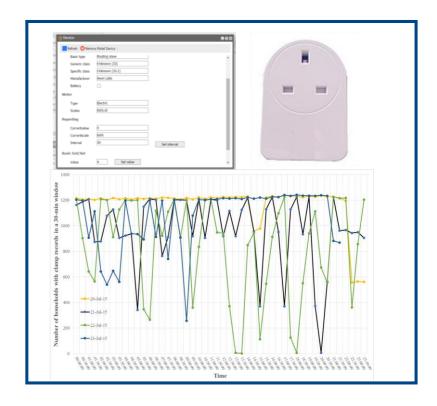




Challenges – the original monitoring equipment

- 4,068 initial monitors were installed;
- Issues with pairing of gateways;
- Issues with continuity of data received by UoS;

• Issues with smart plugs over heating/affecting appliances (most commonly kettles).





Overcoming the original monitoring equipment challenge

- Necessitated the sourcing of an alternative supplier for the monitoring equipment:
 - Required re-recruitment of existing participants with new equipment where possible:
 - Initial letter sent detailing kit replacement required
 - Kit sent along with self-install instructions, option for assistance was also provided
 - **2,370** (58%) transferred from Maingate to Navetas
 - **1,034** self installs
 - 1,336 replaced by BMG field team
 - A further **1,525** new installs were completed with the Navetas kit
 - **3,895** Navetas kits installed in total.
- Necessitated the recall of all smart plugs:
 - Required additional CATI, CAWI and CAPI resource;
 - Potential reputational risk;
 - Resulted in the removal of the smart plug element from the study.

Loop kit was much better reliability/usability





Ongoing engagement – newsletters

- The project team maintained engagement with participants through annual newsletters containing:
 - Why the project is so important
 - Electricity use and how the participant is helping
 - Insights from electricity data collected







SAVE Newsletter Summer 2017

A BIG thank you!

Firstly, we would like to thank you for your continuing participation in the "SAVE" research project. Your data is helping us to provide valuable new insights into how, and when, we use energy in our homes. By taking part you are directly helping to make the UK a more energy efficient place to live.

Why is the SAVE project important?

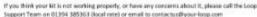
As a society we need to find new ways to better manage our overall energy consumption. We also need to try to shift electricity consumption from evening 'peak' periods when the network can become overloaded, especially in winter. To help do that the SAVE project is carrying out groundbreaking research on how and when households use electricity in the Solent region

This research is so innovative that our early results are already feeding directly in to UK Government plans for a smarter, more efficient electricity network.

As you may already know, much like yourself, each household participating in this research has a Loop Energy Saver kit which collects information on your household's electricity consumption.

This data is critical to the project, so please keep it switched on and connected, thank you.

You can view the energy data we are collecting through the Loop website or using the Loop app or your smartphone - search for 'Loop Energy' in Apple App Store or Google Play.



Why you matter!

To be able to say comething meaningful about the electricity data we are collecting we need the 4,000 households to reflect the population of the Solent region

This means it is really important that you continue as part of the project and provide our researchers with some information about your household. This will let us answer questions such as:

- Which kinds of households use most electricity and when?
- . What activities is it used for?
- . How does use change over time?

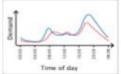
By asking questions about your household, we can find out if different households use energy in different ways, and at different times.



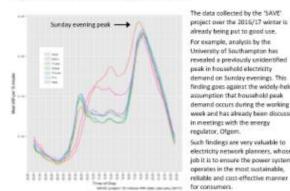




For example, this chart illustrates the different electricity demand profiles for households where the person responding is working (blue line) and retired (red, dashed line). Without this kind of information about your household, which is anonymised and held securely by the University of Southampton, we cannot make sense of the Loop Energy Saver data.



SAVE data is already providing new insights



project over the 2015/17 winter is already being put to good use. For example, analysis by the University of Southampton his revealed a previously unidentified peak in household electricity ternand on Sunday evenings. This finding goes against the widely-held assumption that household neak demand occurs during the working week and has already been discussed in meetings with the energy Such findings are very valuable to electricity network planners, whose job it is to ensure the power system operates in the most sustainable.

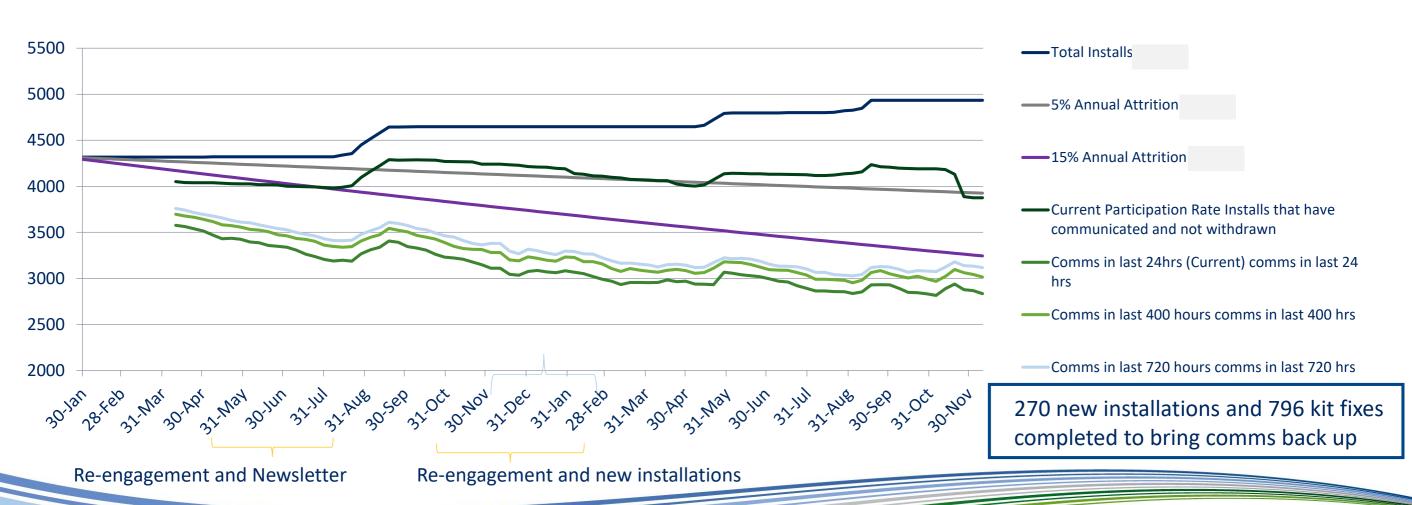
What next?

As we progress with the project, your support is critical. Please help us to continue making an impact by participating in our surveys. You will earn £5 of Love2shop vouchers for every update survey you complete. These surveys are administered by our project partner, BMG Research so if you are contacted by them, we would really appreciate it if you could spare the time to complete the survey. Alternatively, if you are contacted, you can ask BMG to send you a link to complete the survey



Attrition levels

- Attrition rates are lower than we anticipated prior to implementation (c.5% cf. expected 15%);
- But the extent of communicating devices is more in line with this estimate.





Scale of work

7,199 installations in total since the beginning of the project

796 kit fixes completed

4,727 full recruitment surveys

3,770 update surveys

2,396 time use diaries

300 closeout surveys





Customer stories

- A wide and varied selection of participants are taking part in SAVE. Here are just a few stories:
 - During installations over Halloween, an interviewer approached one house with massive pumpkins carved out
 the front drive and garden, our interviewer was a suspected trick or treater and when he explained the reason
 for his call he was welcomed into the home, residents were happy to participate and they shared recipes for
 pumpkin curries over the installation process;





One property visited was like a mini, free-range domestic animal zoo – fortunately our interviewer did
not have any phobia or allergies and so was able to successfully complete the installation;

 $^\circ$ The participant with the double-barrelled shotgun on the kitchen table that he used to shoot rats.





