Scottish & Southern Electricity Networks

SAVE

Solent Achieving Value from Efficiency

Solent Achieving Value from Efficiency

SSET206
LCNF Tier 2 SDRC 8.8:
TM4 (Community Energy Coaching Trial) - Final Reporting

University of Southampton · DNV·GL · Neighbourhood Economics · Future Solent

APPENDICES

v4.0

Contents

1 PROJECT MANAGEMENT

1.1 Governance

The SAVE Project was tightly managed with (i) all partners meeting monthly as part of the Project Planning and Review Board (PPRB), overseeing the work of the overall project under the leadership of the SSEN Project Manager, (ii) weekly conference calls to monitor Action Plan progress, (iii) identification and recording of risks through regular monitoring and updating of the SAVE Risk Register and (iv) regular updates to the TM4 learning logs to record key lessons learned at all stages.

1.2 SAVE Customer Engagement Plan

In accordance with Ofgem protocols, the overall SAVE Customer Engagement Plan, including Data Protection protocols, was formally submitted and agreed at the outset of the project in early 2014.

1.3 The TM4 Delivery Team

The TM4 delivery Team was composed (Figure A1 below) of Neighbourhood Economics (NEL) as the lead organisation for the trial, The Environment Centre (tEC), the host organisation providing the coach for Shirley Warren, and Winchester Action on Climate Change (WinACC), the host organisation providing the coach for Kings Worthy. The key changes to the team over the course of the trial were in coach deployment, with both areas seeing a change in staff during the live trial period. The transition of coach in each area went well with NEL staff providing additional support as needed on the ground to ensure a smooth process with no impairment in community contact.

Figure A1: **THE TM4 DELIVERY TEAM**

Dates	tEC	WinACC	Neighbourhood Economics
January 2015 to August 2015	Adam Goulden	Chris Holloway	Judi Sellwood John Every
September 2015 to June 2016	Adam Goulden Christabel Watts (coach)	Richard Blackman Susie Phillips (coach)	
July 2016 to December 2016	Adam Goulden Zaki Mahfoud (coach)	Richard Blackman Susie Phillips (coach)	
January 2017 to March 2018	Adam Goulden Zaki Mahfoud (coach)	Richard Blackman/Tom Brennan Alison Skillen (coach)	

The TM4 Delivery Team in combination had extensive knowledge and experience across energy, community development and coaching fields.

The coaches were afforded the opportunity to experience independent personal coaching early on in their involvement with the CEC trial to enable them to better understand the coaching approach and transferable principles which they could apply in a community setting.

1.4 Types of Learning

A range of different types of learning have been accumulated throughout the TM4 research trial reflecting the SAVE bid commitments (Main Report, para 1.2.1). A learning log has been maintained and updated quarterly as part of NEL's Quarterly Progress Reports to SSEN and this process has been invaluable in tracking the development of the project and the team's thinking over the course of the research trial.

Addressing key delivery constraints (Main Report, Section 3.4) has challenged the team to identify creative solutions in delivering on bid commitments.

The team proceeded on a consensual basis by tying in local residents and stakeholder agencies through the iterative co-design purpose, ensuring as far as possible, that all concerned were able to share the 'ownership' of accumulated learning and agreed solutions.

Main Report Reference:	**SECTION 1.1**

2 PARALLELS AND CONTRASTS BETWEEN TM4 AND OTHER TRIALS

The headline comparisons between the CEC trial and the other household trials are notably:

- Sampling Framework – the sample sizes are similar but the levels of potential statistical rigour are vastly different (Main Report, para 1.1.4);
- Governance – alongside the project partners, the CEC trial was overseen and directed by a dedicated Stakeholder Group including representation from Local Authorities, utility companies, housing agencies, third sector groups (including the 'host' organisations employing the local coaches). This was a distinctive and crucial part of the co-design process, tying other agencies in to the long-term ownership of the change process;
- Geographic Community – the CEC Trial households constitute identifiable geographic communities as compared to the household trials' groups of randomised households across the Solent region;
- Data recording – by contrast with the other 3 trial methods, there has been no recording of data linked to individual customers at the household level. Instead substation / feeder level monitoring has been put in place within the selected trial and control areas;
- Baseline monitoring – with the 2 year engagement phase for TM4 beginning in January 2016 the Delivery team already had a full year of baseline substation data with monitoring equipment having been installed within the selected trial and control areas in December 2014. For trials 1-3 this was not the case given equipment related implementation delays;
- Creative platform – during the initial planning phase generic materials and ideas were shared across the 4 trial methods but, with the de-synchronisation of the trials, this both required and allowed the TM4 team to press ahead with the development of dedicated creative material building upon the hitherto generic platform across all trials. As the CEC co-design process kicked in, more trial-specific, community focused materials were developed;
- Quantitative and Qualitative Impacts – this has been a consistent theme throughout the development and delivery of the CEC trial. It is not just about delivering quantitative demand reduction impacts but also about the relationship between demand reduction and other contingent social impacts which are more qualitative in nature and how, crucially, delivery of both sets of impacts can be mutually reinforcing;
- Formal Trial Periods – for the household trials, customer contact is limited predominantly to the set Trial Periods within the 2 year Active Engagement period, whereas for TM4, interaction with the community and key stakeholders continues right through the complete period;
- Legacy and Sustainability – building upon the last point, the alignment of demand reduction and other social impacts (of appeal to stakeholder agencies and the local community) has helped to create the conditions for lasting change. From the DNO perspective this relates to both demand management and social obligations aspects of their business;
- De-synchronisation – all 4 trials commenced and proceeded together until June 2015 when, due to re-installation of household metering equipment for TM 1-3, the trials were effectively de-synchronised. The 2 year active engagement phase for the CEC trial started in January 2016 and was completed in December 2017. The active engagement phase for other trials runs throughout 2017 and 2018. They will accordingly report in June 2019.

Main Report Reference: **SECTION 1**

3 LEARNING VISITS – THE KEY LESSONS

The team looked widely at 4 previous DNO-related demand reduction and community engagement projects. The key lessons from these projects are detailed in Figure A2 below.

Figure A2: **LEARNING VISITS – THE KEY LESSONS**

Visit / and Dates	Key Points	TM4 Design Implications
Less is More WPD / LCNF September 2014 & November 2015	• Focus upon addresses connected to an individual s/s rather than across a community • Lack of control or baseline for comparison • Challenges of s/s monitoring and background 'white noise' masking a response • Use of live data as an engagement tool and to create a sense of competition • Development of a hand held device to monitor usage/ encourage participation in 'events' • Financial incentive not a clear motivator when no shared sense of community interest to participants • Interest in looking at different approaches to cooking • Freebies as a 'hook' • Delivery through trusted local organisations • 11 months active research	• Ability to target defined set of households as compared to the opportunity to engage on a locally meaningful community level • Comparable control areas identified and 12 months of baseline monitoring • Feeder monitoring installed to complement s/s data and realistic targets set for defined interventions • Lack of dedicated data analysis support meant live data streaming as an engagement tool not possible • Use of standalone electricity monitors considered - co-design interest in an 'energy literacy' app expressed towards end of trials • Budget for Incentives limited so alternatives created around the DDS activities and by creating a sense of community 'that cares' • Looking at time and cost savings for cooking rather than energy saving • Giveaways developed with co-design groups • Confirmed Coaching approach of working with local 3rd Sector organisations • Confirmed SAVE approach of 2 year active trial period
Power Saver Challenge ENW March 2016	• 2 distinct demographic communities chosen – recruitment easier in more affluent area • Street based with a street 'team' competition approach to interventions • All signed up households given an individual energy assessment and free energy saving devices prior to challenges • Incentives of 'white goods' offered to each household for reaching collective targets – created some suspicion • Monitoring at feeder level – relatively low levels of reduction observed and challenge of statistical validity	• 2 demographically distinct trial and comparative control areas chosen – coaching approach proved successful in engaging 'harder to reach' community • All community approach but targeted interventions on identified feeders to maximise recruitment and response • No budget to allow for such blanket offering although expertise of 'host' and partner organisations utilised to support individual h/h where needed/possible • No budget for incentives and as offer of white goods seen to be a disincentive to many and not applicable in BAU alternative community based solutions identified. • Challenges of feeder monitoring acknowledged but higher levels of reduction with 95% confidence achieved
Energywise UKPN / LCNF April 2015	• Focus on vulnerable customers/fuel poor • Individual h/h targeted with energy efficiency advice/devices and ToU tariffs • 550 h/h actively targeted with 1:1 support	• One trial area less advantaged and will include fuel poor customers • Energywise approach not replicable as no budget for targeted h/h support or ability to affect tariffs so alternative community/DDS focus in place • Trial areas of approx. 2000 h/h with 1000h/h monitored
SoLa Bristol WPD / LCNF September 2015	• Behaviour change opportunity identified during periods of h/h change • Use of real time data to encourage participation/stimulate change • 'Soft' introduction to role of DNO led to greater awareness and understanding	• Opportunities to introduce manufactured change situation to prompt behaviour change as part of DDS process • Use of real time data an aspiration that was not able to be met • Similar 'soft' introduction to role of DNO as part of wider energy literacy work has led to increased understanding/enhanced reputation

Main Report Reference: **PARA 2.2.1**

4 AREA SELECTION PROCESS

4.1 Key questions

In conjunction with interested stakeholders, the following series of key questions was addressed:

- How could the SAVE research programme add value to existing sustainability related work within defined Solent communities?
- How could the SAVE research programme add value to current collaborative stakeholder agendas regarding economic / social / environmental sustainability across parts of the Solent?
- Are there communities or parts of the Solent where conspicuously little sustainability related work has been undertaken to date?
- Could the SAVE research programme serve to bring together stakeholders in new partnerships to address shared sustainability agendas?
- Which community based / locally managed organisations are particularly well-placed to benefit from additional resources in supporting neighbourhood based sustainability work?
- Which community based / locally managed organisations are particularly well-placed to take a lead in facilitating and managing community development activity within neighbourhoods?
- Are there particular lessons arising from previous / current sustainability work across the Solent area which should inform the SAVE research programme?

4.2 Competitive Process

The initial plan had been to randomly select two trial communities for inclusion in the trial from those local authority areas interested in being involved. However, the idea of a more competitive selection process arose naturally in the course of our engagement with local stakeholders as a means of formalising organisations' willingness and readiness to engage and substantiating their commitment to the project.

This more competitive approach to selection also served to reinforce partnership working within each local authority area as public, private and third sector organisations came together to formulate a joint bid. The approach offered an opportunity for groups of stakeholders within each local authority area to submit specific information to inform the selection of the trial communities – effectively providing a level playing field for selection purposes. Reflecting the enthusiasm of potential partners to have a direct role in the research project, 4 bids for potential trial / control area combinations were put forward for consideration by partner groups representing Southampton, Eastleigh, Isle of Wight and Winchester.

4.3 Profiling

Statistical profiling of the suggested areas was subsequently undertaken to assess both relative differentiation between potential trial areas and relative similarity between potential trial and respective control areas. Network engineers also reviewed the long list areas to assess the match with current substation / network infrastructure and identify potential technical issues with substation monitoring. In October 2014, based on analysis of the bids received, the community pairings selected for the Coaching trial were Shirley Warren / Townhill Park in Southampton and King's Worthy / New Alresford in Winchester.

4.4 The Host organisations

Based on the 'bidding' process, the Host Partner organisations appointed to support the operational delivery of the SAVE project within the trial areas were Winchester Action on Climate Change (WinACC) and The Environment Centre, Southampton (tEC).

The full timetable for the Area Selection process is set out in Figure A3 below.

Figure A3: **HOST / AREA SELECTION PROCESS**		
Stage / Dates	Process	Activities / Options
Feb - March 2014	Identify criteria for trial area selection	Review SAVE research aims & objectives and discuss trial area options with PPRB, project managers and key stakeholders
April – June 2014	Meet representatives of target local authority areas within the Solent region of Hampshire to gauge interest	1-2-1 Roadshow sessions with key LA and 3rd sector stakeholders within larger LA areas – Southampton, Portsmouth, Eastleigh, Winchester, Isle of White – to ascertain interest in SAVE, fit with existing local priorities and appetite/ability to engage with the research
	Deliver workshop session with all Solent Local Authorities (LAs)	Roadshow session for representatives of smaller Hampshire LA areas – Havant, Test Valley, Gosport, Fareham, East Hampshire hosted by Eastleigh BC, to assess interest, fit and interest as above
	Agree selection process to identify trial areas and host organisations	Through co-design process with key stakeholders agree 'expression of interest' format with interested LAs asked to submit an application identifying two contrasting research and control communities and a local third sector organisation with ability to act as 'host' within their boundaries
July – Sept 2014	Selection process initiated	Expression of Interest submissions process initiated with deadline extended to allow LA with smaller officer resource opportunity to submit. Completed submissions received and shortlisted.
	Short list of areas identified for network assessment	All areas assessed by SSEN network engineers for suitability for substation monitoring. Network maps with substation locations made available for all shortlisted areas.
	Area profiles prepared for shortlisted areas to inform selection process of long list areas	Detailed demographic area profiles for each area produced. Based on Index of Multiple Deprivation and other similar data sets relating to housing type, energy usage and so on these were compiled to produce a comparison table to aid selection based on those communities offering the most distinctive research opportunity, with a comparative control. Local variables, based on stakeholder discussions and on the ground visits to each area were also taken into account at this stage.
	Review short list of possible areas providing best research and monitoring potential	Short listed areas reviewed and selection criteria applied to assess distinctive nature of proposed trial community and availability of matching control areas, suitability of proposed host organisation, fit with project management capacity and resource, along with suitability for substation monitoring to allow best fit to maximise the research opportunity offered.
December 2014	Trial and control areas pairings agreed and host organisations identified	The trial and control communities pairings were selected across the neighbouring local authority boundaries of Winchester and Southampton, deliberately maximising the dissimilarity between the 2 pairings. Both submitting Local Authorities were happy that project resources were to be shared between two host organisations and two part time coaches (rather than one full time coach) in order to deliver this split authority solution.
	Substation monitoring installed	Substation monitoring put in place in 5/6 sub stations in each of the 4 areas to allow for one year (2015) of baseline monitoring.

Main Report Reference: **SECTION 2.4**

5 DESCRIPTION OF THE TRIAL AREAS

5.1 Below the Radar and Resilient Communities

Having selected the Trial communities of Shirley Warren ('relatively disadvantaged and increasingly susceptible to adverse effects in the local economy') and Kings Worthy ('relatively affluent and aspirational') it became clear through the Team's initial community mapping and engagement work that the communities were particularly polarised in terms of the relative levels of social capital. Shirley Warren was very much 'below the radar' with a dearth of community-based organisations and activities whereas Kings Worthy is a distinctly 'resilient' community with an abundance of community-based organisations and activities.

Shirley Warren presented a particularly difficult social cohesion challenge in terms of the focused efforts necessary initially to get 'underneath the radar' and bring together individuals who could make a difference.

5.2 Parallels and contrasts between Trial Areas

The comparison between the trial areas notably covers the following important points:

- Whole communities – both areas were seen as identifiable communities to those living in and serving them. This was an important factor in the selection process, building upon key learning from the 'Less is More' project;

- Similarity Indexing – for the purposes of trial area selection, the characteristics of all shortlisted sites were analysed against a set of demographic, physical and lifestyle factors, including census and energy consumption data, to identify trial communities which were deliberately very dissimilar. Likewise candidate trial areas were analysed against potential control areas in order to select those which were most similar to respective trial areas;

- Research cordon - given the relative dissimilarity between the communities, work in each area was consciously undertaken in mutual isolation for the major part of the trial engagement phase. Only towards the end of the project were crossover events involving both communities organised, comparing first hand their experience of the research process.

5.3 Demographic Analysis and Consumption Profiles

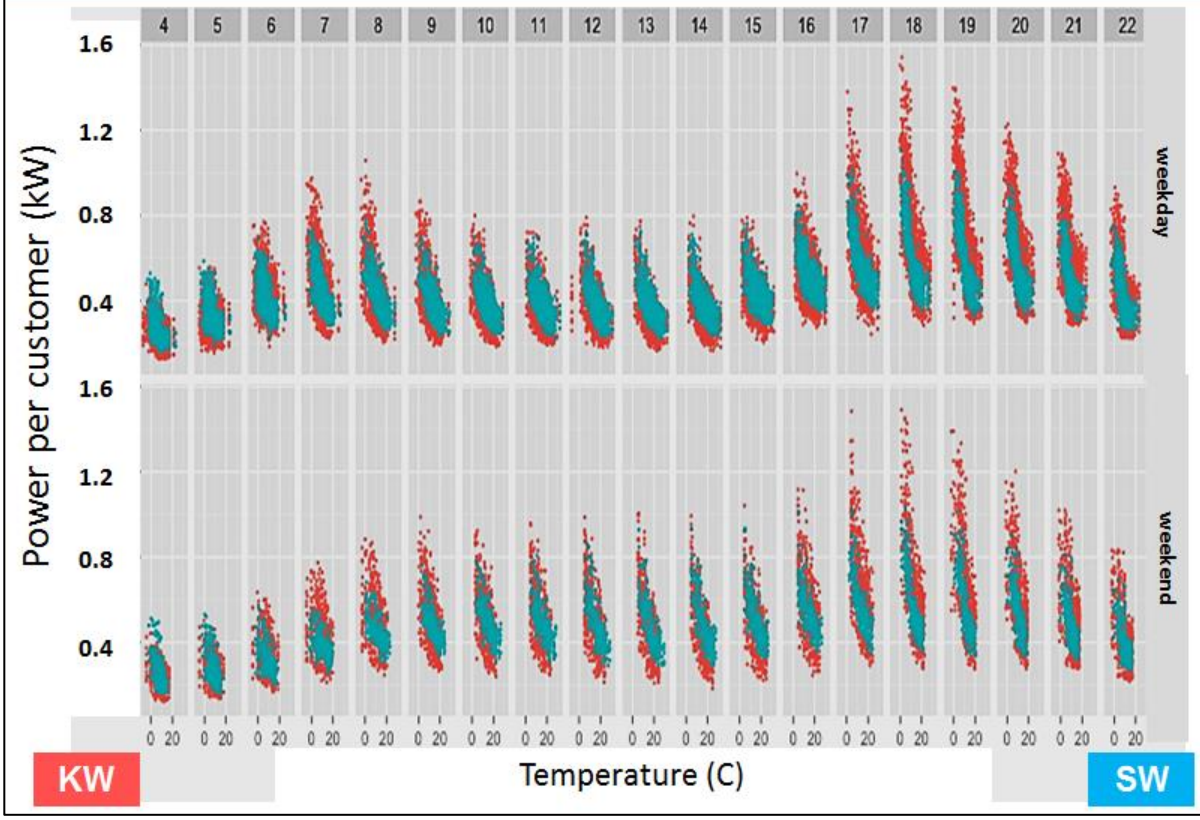
The trial areas are differentiated against key factors in similarity indexing as illustrated in Figure A4 below. This highlights the higher population density in Shirley Warren, the higher home ownership level in Kings Worthy, the relatively high deprivation level in Shirley Warren as against the national Index of Multiple Deprivation (IMD) and the higher level of educational attainment in Kings Worthy.

In initial profiling work the 2015 baseline substation consumption data undertaken through tEC and University of Southampton served to identify the key behavioural characteristics which describe and differentiate the two trial communities.

Figure A4: TM4 TRIAL AREAS – DEMOGRAPHIC PROFILE

Trial Area	LSOA		Total Pop	Pop Density	Home Owned %	Well-being Life satisfaction 1 - low 10 - high	IMD Rank (out of 32,400)	16 Plus no formal quals %	No of Standard meters / average kw/h pa	No of Economy 7 meters / average kw/h pa	Substation Monitoring	
			2011 Census	2011 Census	2011 Census	National Wellbeing Survey 2012	IMD 2010	2011 Census	Domestic Electricity Consumption 2012 / DECC		Sub-stations	House-holds
Kings Worthy	Winchester 002C	E01023238	1543	2.2	85	7.69	31,283	8.8	588 / 4,135	28 / 7,632	4/17	852
Kings Worthy	Winchester 002B	E01023237	1249	29.1	46	7.28	20,034	22.5	573 / 3,203	22 / 5,485	1/2	174
Kings Worthy	Winchester 002D	E01023239	1643	10.5	83	7.69	31,132	9.1	630 / 4,233	67 / 6,314	-	
		TOTAL							-	-		1026
Shirley Warren	Southampton 010A	E01017246	1,923	71.3	46	7.57	10,438	18.2	645 / 3,228	313 / 5,667	-	-
Shirley Warren	Southampton 010C	E01017251	1,563	41.8	52	7.2	8,484	26.8	614 / 3,246	108 / 6,221	1/4	257
Shirley Warren	Southampton 010D	E01017253	1,711	56.2	54	7.26	7,076	29.7	614 / 3,652	78 / 6,143	4/6	961
Shirley Warren	Southampton 011E	E01017254	1,656	76.1	57	7.37	12,555	16.2	631 / 3,289	68 / 7,147	-	
		TOTAL										1218

Figure A5: BASELINE CONSUMPTION PROFILING - 2015



This revealed the core differentiation between the areas as a whole with Shirley Warren displaying a characteristically high base / low peak consumption profile and Kings Worthy a lower base / higher peak profile – as illustrated in Figure A5 above. This shows the aggregated demand/ consumption in each area - Kings Worthy (KW) in red and Shirley Warren (SW) in blue - on weekdays and weekends against daily temperature and hourly time slots from 4am until 10pm. This differentiation between the trial areas reflects the higher proportion of residents in Shirley Warren at home through the day and the higher proportion of Kings Worthy residents returning home in the evening.

The Team went on to analyse the individual substation data in more depth looking at relative levels of daily consumption falling within the peak period (4-8 pm). This work was undertaken with a view to maximising the observability of impacts attributable to demand reduction interventions and, subsequently, informed the Team's decisions regarding optimal locations for additional feeder level monitoring and more granular interventions.

Main Report Reference: **SECTION 2.2**

6 THE DISTINCTIVE DEDICATED STRATEGIES (DDS)

6.1 The DDS Options – Kings Worthy

A range of one to one and targeted group meetings were held between January and March 2016 with various community leaders to introduce the project and, as part of the 'mapping and gapping' process to begin to identify issues that were of interest/concern within the community and to gauge interest in being part of the SAVE project.

In April and May 2016 organised 'workshop' sessions were held to which these community leaders were invited, with 10 attendees to the sessions in April and 12 in May. At each meeting an overview of the SAVE project was given along with feedback on perceptions gathered to date on potential topics of community interest. Attendees were invited to discuss the support available through SAVE for the community and asked to consider how this could best be delivered.

The range of options which these initial co-design workshops considered were based around single or multiple issues which had been identified through the initial mapping and gapping phase. The issues and related options are set out in Figure A6.

Figure A6: **KINGS WORTHY – DDS OPTIONS**	
A	Sustainable Kings Worthy Community hub – providing an overarching project to join up all of the activity taking place, providing better communication/promotion, volunteering and sharing of resources.
B	Safer Kings Worthy – creating a network of neighbourhood watches to encourage people to look out for each other, socialise and build community resilience
C	Healthy Kings Worthy – promoting active lifestyles, particularly waking and cycling by improving access, maintenance and signage
D	Work to create an all-weather pitch on the lower school field
E	Support the community buildings to be energy efficient and to install solar panels
F	Promote walking in and around the village
G	Create a cycle path to link two separate parts of the village
H	Develop the path along the river to Winchester to make it more accessible
I	Improve the green spaces in the centre of Kings Worthy and provide better/off road car parking
J	Create a safe crossing on Springvale Road

At a combined workshop in May 2016 the group of 20 residents considered all of the options and agreed that they preferred the idea of an over-arching umbrella to the issues they wanted to address. The recurring theme of connectivity – both in terms of Kings Worthy's physical geography and the need to connect people more easily to places within the village as well as the wider community outside - as well as connecting with each other and the wide range of groups and activities that take place was seen as the key issue to address.

Following discussion it was agreed that to add value to the current 'offer' in Kings Worthy the idea of working to create a greater sense of connectedness was the best way forward to ensure an inclusive approach to working together. Connecting Kings Worthy (CKW) was thus chosen as the umbrella theme and those present agreed to continue to work to support its' development within the community.

6.2 The DDS Options – Shirley Warren

During January – March 2016 meetings were held with a wide range of professional/organisation based staff who were connected with Shirley Warren to introduce the project, but the lack of local groups and activity meant that few people in the community were involved during this time. Shirley Warren was considered by most agencies to be 'hard to reach'.

In order to 'dig deeper' into the community project staff talked to people in their front gardens and outside the local post office and pub to try and get a feel for local issues, concerns and to discover who the key local contacts were. In May 2016, based on feedback received an informal evening 'drop in' meeting was arranged in a local pub with pizza and a drink for those attending. Also a 'join us for a cuppa' session was arranged in a local church hall asking people to come along to give their views on a possible community project. A number of people attended both sessions (4 and 8 respectively) and following on from this, two informal meetings in June 2016 were arranged to follow up in more depth on the conversations started, bringing 6 key individuals together in order to share details of the project and to discuss potential areas for support.

Based on the range of conversations that had been held to date there were a wide range of issues that local residents wanted to address. These ranged from single to multiple issues which were reflected in the options outlined in Figure A7.

Figure A7: **SHIRLEY WARREN – DDS OPTIONS**	
A	Support/activities for mother & toddlers, children and young people
B	Address litter and dog fouling on pavements and green spaces
C	Improve communication within the community to encourage participation
D	Support for volunteers and with funding for community projects
E	Support the campaign to save St Jude's Hall as a community venue
F	Set up events/fun days for local residents to encourage involvement
G	Create a community café so people have somewhere to go/meet up
H	Active Shirley Warren – provide a focus for people to get involved in doing things within the community
I	Shirley Warren Community Plan – develop a local action plan around key issues that have been identified and then seek to work with partners to deliver change
J	One Voice for Shirley Warren - create a local forum for people to express their views, listen to others and influence the services they receive
K	Shirley Warren Acting Together - create a local coordinating group to encourage joint working, sharing of resources and support for each other's issues
L	Shirley Warren Community Association – bringing together the One Voice and Acting Together strands but within an overarching organisation that can apply for funds to deliver projects of community benefit.

At a combined meeting in June 2016 the group of 10 residents discussed the various options in detail and decided to opt for an umbrella approach to combine the two key strands that members most wanted to see addressed – the need for a community voice (both within Shirley Warren and with those agencies providing services/support from the outside) and the need to actively do things to make the community a better place and restore lost pride in the community.

Despite some reservations about the ability of residents to create change due to feelings of disempowerment as a result of the withdrawal of local services and the feeling of being 'done to', it was agreed that by working together, and with the support on offer from SAVE, they had a better chance of success. They thus chose the umbrella theme of 'Shirley Warren Working Together' (SWWT) as a reflection of this shared desire to work to achieve positive change.

6.3 Specific v Generic Options

The same approach to identifying the local DDS options was used in both communities but the different starting points in each led to some local changes being made to ensure the involvement of local residents in the design, and therefore the ownership, of the DDS.

In Kings Worthy, the wide range of existing groups and activities meant that there were plenty of opportunities to talk to local residents and a ready willingness on their behalf to talk about SAVE and the potential benefits to the community. Attending formal meetings and workshops was an accepted approach and relatively little was required to encourage people to attend. There was a ready acceptance of our desire to talk with them and involve them with the SAVE research.

In Shirley Warren, on the other hand, there was a limited number of local groups or activities and a real sense of suspicion as to why we would want to talk to them or involve them in the project. Stemming from the residents' experience of being 'done to' or ignored by previous local initiatives it took some time to build a relationship of trust. A longer and less formal approach to engagement was required during these early months.

However, despite their different starting points both communities identified some very specific potential projects and activities alongside some more generically aspirational ideas. Some of these ideas were discarded on the basis that they were too big to deal with within the timeframe of the project (for example the all-weather pitch in Kings Worthy) or that other people were already working on them (for example the longer footpaths/cycle routes) or that they were considered too formal or challenging (for example the Shirley Warren Community Association or Community Plan).

Once the mapping and gapping process had been completed and the residents had the opportunity to discuss the issues identified they both readily came to the same conclusions about the need for an umbrella approach to tie together a number of individual ideas under a common banner. In both areas there was a clear consensus about the choice of 'Connecting Kings Worthy' and 'Shirley Warren Working Together'.

6.4 Shirley Warren Working Together

Figure A8 below summarises the key components of the DDS for Shirley Warren as agreed at the outset of the Active Engagement period, along with examples of activities undertaken over the course of the trial.

6.5 Connecting Kings Worthy

Figure A9 below summarises the key components of the DDS for Kings Worthy as agreed at the outset of the Active Engagement period, along with examples of activities undertaken over the course of the trial.

Figure A8: **SHIRLEY WARREN WORKING TOGETHER – KEY DDS COMPONENTS**

The overarching framework of Shirley Warren Working Together (SWWT) was chosen to accommodate the following priority areas:

- To give our community a voice
- To make our community a better place
- To use less energy and save money

A local artist designed the logo for the group.

In order to make the community a 'better place' regular litter clean ups have taken place at 6 weekly intervals. Run by volunteers, supported by Southampton City Council (SCC) who provide the safety equipment/ advice and collect the rubbish at the end, groups have been tidying up the local 'greenway' and starting to impact upon the streets and alleyways with the hire of skips to enable larger items of refuse to be tipped. Lunches provided at the local pub have ensured a social element to encourage new friendships to be created.

In order to make the community a better place a volunteer led community café was started following a pilot project in Sept 2016. The pilot project took place in a marquee at the entrance to the Shirley Warren Action Church grounds and was timed to open for parents going to and from school in the mornings and afternoons. Now an ongoing fixture within the church premises funding is being sought to create a more permanent café presence with a definite 'energy' saving focus.

In terms of a having a voice, local residents were unaware of who their local councillors were or how to discuss the services they received (or were being withdrawn). Two of the local councillors attended a number of sessions with the residents and an ongoing line of communication has been established. In addition, local service providers, such as Citizens Advice Bureau, Southampton Council for Voluntary Service have delivered local sessions, with the SWWT group receiving training in committee roles, dementia awareness and other 'hot' topics.

A range of local events have been held to raise awareness of energy issues alongside opportunities to save money, reuse and recycle as well as fundraise to continue to develop the work of the group. With their leading involvement in SWWT and a rebranding of the church to Shirley Warren Action Church and the church building to the Shirley Warren Action Centre has seen an increase of up to 50% in the numbers attending church based events, youth art group and lunch club activities with 70 attending the Christmas and 86 the Easter lunches.

SWWT became a constituted group in 2017 and held its' first Annual General Meeting in March 2018. Successful in applying for a grant from Southampton City Council to expand their ongoing clean ups and undertake some consultation work around the idea of a purpose built venue for the café, the group is going from strength to strength and aims to continue to develop the range of activities started as well as continue to build upon the network of support created with the provision of more activities as time goes on.

Figure A9: **CONNECTING KINGS WORTHY – KEY DDS COMPONENTS**

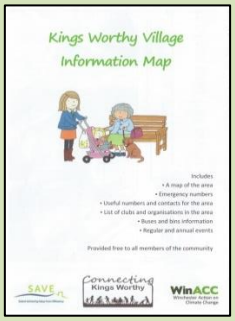
Connecting Kings Worthy (CKW) was chosen as an overarching brand to enable the delivery of a range of activities focussed upon:

- Connecting People
- Connecting Places
- Connecting Power

The logo was designed by a local artist for the group.

Due to the road design in Kings Worthy a large proportion of children were driven to school. Volunteers undertook an audit of 'sneaky shortcuts' and 'cheeky cut-throughs' to create a map that children, through a half term photography competition, were then encouraged to explore to find different routes that they could use to get to school, the shops and local community venues. As a result the school reinstated a 'walking bus' to encourage more children to walk to school with many more children now arriving on foot and playing in the school fields before school as a result.

Building on this work the community decided to create a 'welcome map' for new and existing residents to 'connect' them to the local community facilities and the many groups that exist in Kings Worthy. With the help of some grant funding the map was created and delivered to all households within the area. Feedback from across the community has been very positive and the intention, with the ongoing support of the Parish Council, is to keep this map updated and in print.



Working with the Parish Council, school and local cycling groups to continue the connecting people and places theme, support has been given to improve cycling awareness and safety which is a key issue for residents given the lack of good cycle paths between Kings Worthy and Winchester in particular. The placement of 'environmentally friendly' cycle racks outside local venues has been explored along with support for the improvement of longer walking routes in and around the Worthy's.

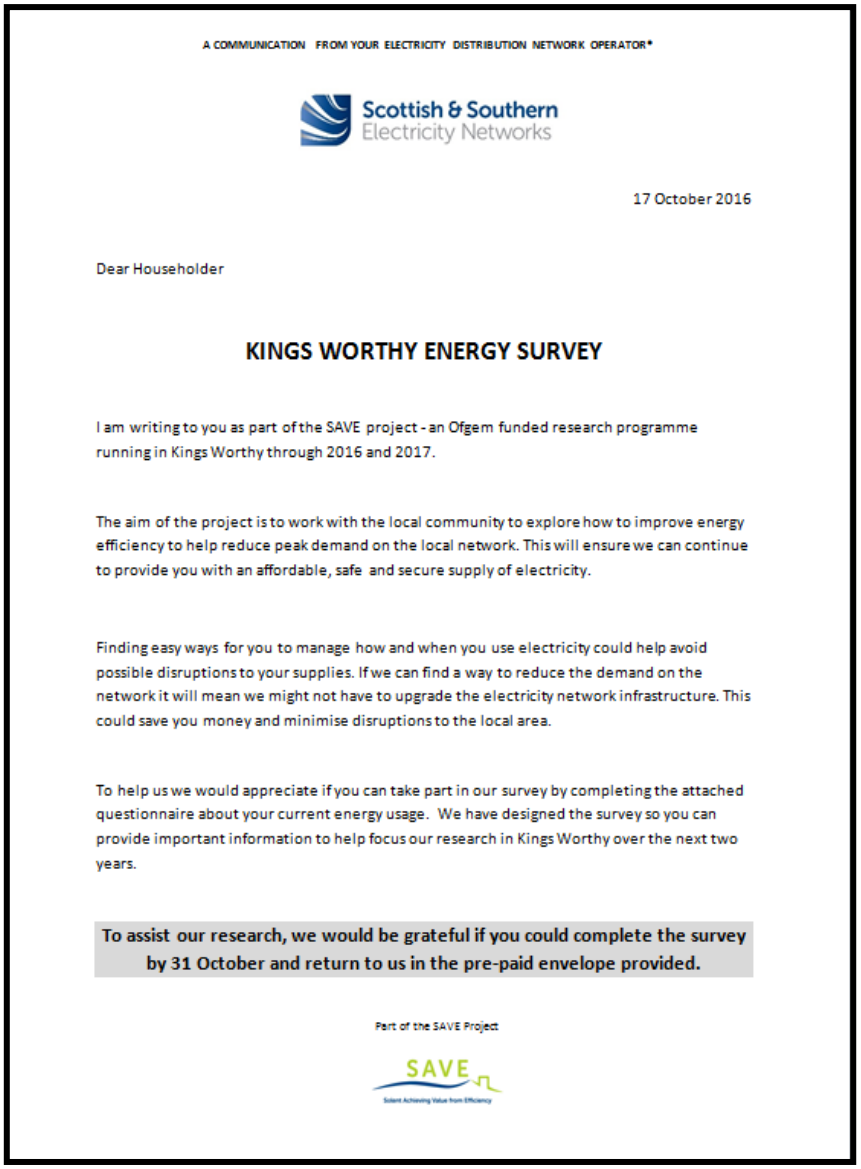
Given the wealth of community activity in Kings Worthy and the challenge of finding new volunteers to help, it was decided that support should be given to existing events to promote the group's varied energy related activities, rather than to set up new and competing ones. For the Worthy's Festival in particular extra support was given to the committee to help with the back 'office' functions of festival treasurer. Taking such an active role in support of existing groups has improved the 'connectedness' between the different groups and the energy agenda.

Taking on board the desire of many groups in the community to become more sustainable and for community buildings to be more energy efficient, support has been provided for the local church to achieve 'eco church' status, for the Parish Council who are considering investing in solar panels and to other groups to help them to think and act more sustainably – reflecting the desire to be seen as a community that cares about each other, the environment and their children's future.

Main Report Reference: **SECTION 3.1**

7 FULL CREATIVE MATERIAL INVENTORY

7.1 Baseline Response Letter (TP2)



A COMMUNICATION FROM YOUR ELECTRICITY DISTRIBUTION NETWORK OPERATOR*

Scottish & Southern Electricity Networks

17 October 2016

Dear Householder

KINGS WORTHY ENERGY SURVEY

I am writing to you as part of the SAVE project - an Ofgem funded research programme running in Kings Worthy through 2016 and 2017.

The aim of the project is to work with the local community to explore how to improve energy efficiency to help reduce peak demand on the local network. This will ensure we can continue to provide you with an affordable, safe and secure supply of electricity.

Finding easy ways for you to manage how and when you use electricity could help avoid possible disruptions to your supplies. If we can find a way to reduce the demand on the network it will mean we might not have to upgrade the electricity network infrastructure. This could save you money and minimise disruptions to the local area.

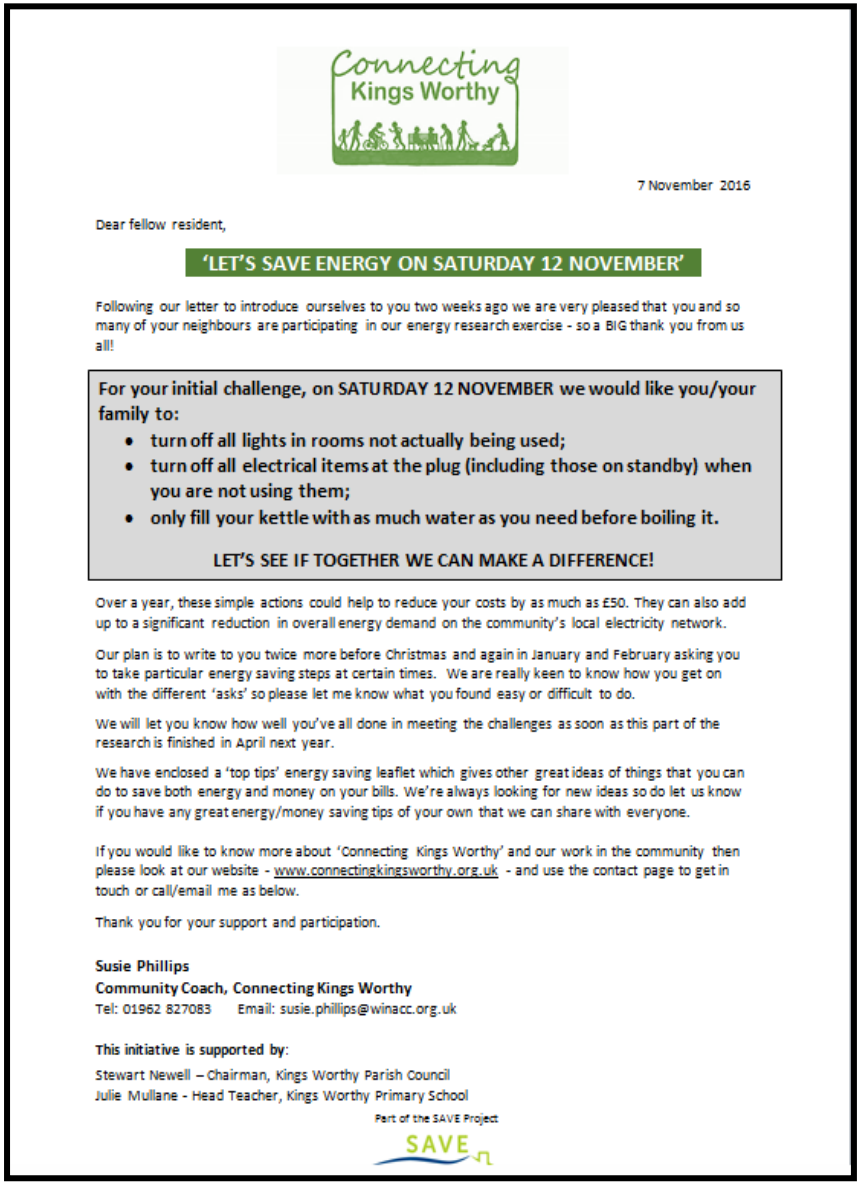
To help us we would appreciate if you can take part in our survey by completing the attached questionnaire about your current energy usage. We have designed the survey so you can provide important information to help focus our research in Kings Worthy over the next two years.

To assist our research, we would be grateful if you could complete the survey by 31 October and return to us in the pre-paid envelope provided.

Part of the SAVE Project

SAVE

7.2 Direct Asks 'Cut' Letter (TP2.0)



Connecting Kings Worthy

7 November 2016

Dear fellow resident,

'LET'S SAVE ENERGY ON SATURDAY 12 NOVEMBER'

Following our letter to introduce ourselves to you two weeks ago we are very pleased that you and so many of your neighbours are participating in our energy research exercise - so a BIG thank you from us all!

For your initial challenge, on SATURDAY 12 NOVEMBER we would like you/your family to:

- **turn off all lights in rooms not actually being used;**
- **turn off all electrical items at the plug (including those on standby) when you are not using them;**
- **only fill your kettle with as much water as you need before boiling it.**

LET'S SEE IF TOGETHER WE CAN MAKE A DIFFERENCE!

Over a year, these simple actions could help to reduce your costs by as much as £50. They can also add up to a significant reduction in overall energy demand on the community's local electricity network.

Our plan is to write to you twice more before Christmas and again in January and February asking you to take particular energy saving steps at certain times. We are really keen to know how you get on with the different 'asks' so please let me know what you found easy or difficult to do.

We will let you know how well you've all done in meeting the challenges as soon as this part of the research is finished in April next year.

We have enclosed a 'top tips' energy saving leaflet which gives other great ideas of things that you can do to save both energy and money on your bills. We're always looking for new ideas so do let us know if you have any great energy/money saving tips of your own that we can share with everyone.

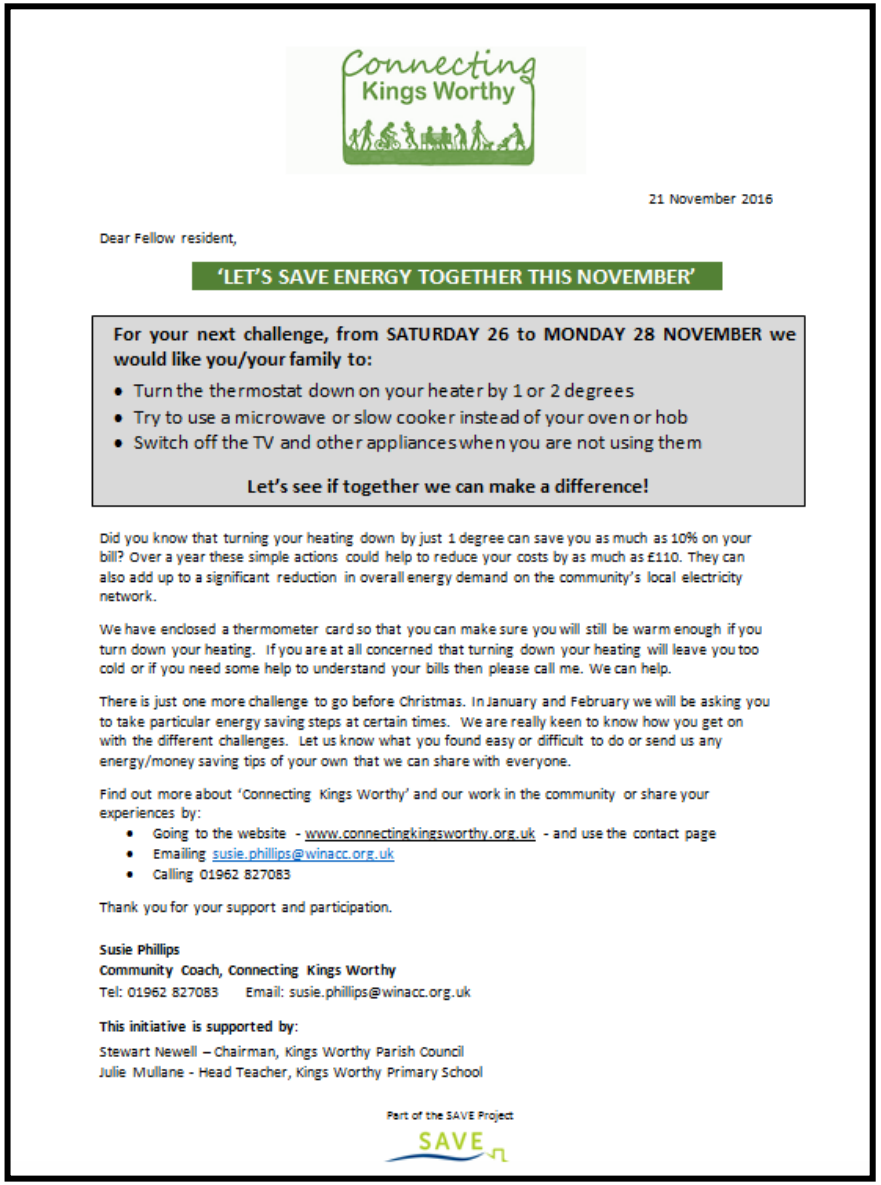
If you would like to know more about 'Connecting Kings Worthy' and our work in the community then please look at our website - www.connectingkingsworthy.org.uk - and use the contact page to get in touch or call/email me as below.

Thank you for your support and participation.

Susie Phillips
Community Coach, Connecting Kings Worthy
Tel: 01962 827083 Email: susie.phillips@winacc.org.uk

This initiative is supported by:
Stewart Newell – Chairman, Kings Worthy Parish Council
Julie Mullane - Head Teacher, Kings Worthy Primary School

Part of the SAVE Project
SAVE



Connecting Kings Worthy

21 November 2016

Dear Fellow resident,

'LET'S SAVE ENERGY TOGETHER THIS NOVEMBER'

For your next challenge, from SATURDAY 26 to MONDAY 28 NOVEMBER we would like you/your family to:

- Turn the thermostat down on your heater by 1 or 2 degrees
- Try to use a microwave or slow cooker instead of your oven or hob
- Switch off the TV and other appliances when you are not using them

Let's see if together we can make a difference!

Did you know that turning your heating down by just 1 degree can save you as much as 10% on your bill? Over a year these simple actions could help to reduce your costs by as much as £110. They can also add up to a significant reduction in overall energy demand on the community's local electricity network.

We have enclosed a thermometer card so that you can make sure you will still be warm enough if you turn down your heating. If you are at all concerned that turning down your heating will leave you too cold or if you need some help to understand your bills then please call me. We can help.

There is just one more challenge to go before Christmas. In January and February we will be asking you to take particular energy saving steps at certain times. We are really keen to know how you get on with the different challenges. Let us know what you found easy or difficult to do or send us any energy/money saving tips of your own that we can share with everyone.

Find out more about 'Connecting Kings Worthy' and our work in the community or share your experiences by:

- Going to the website - www.connectingkingsworthy.org.uk - and use the contact page
- Emailing susie.phillips@winacc.org.uk
- Calling 01962 827083

Thank you for your support and participation.

Susie Phillips
Community Coach, Connecting Kings Worthy
Tel: 01962 827083 Email: susie.phillips@winacc.org.uk

This initiative is supported by:
Stewart Newell – Chairman, Kings Worthy Parish Council
Julie Mullane - Head Teacher, Kings Worthy Primary School

Part of the SAVE Project
SAVE

Connecting Kings Worthy

5 December 2016

Dear Fellow resident,

'LET'S SAVE ENERGY TOGETHER THIS DECEMBER'

For your next challenge, from SATURDAY 10 to SATURDAY 17 DECEMBER we would like you/your family to:

- Make sure your washing machine is full before you use it
- Wash clothes at 30°C (it is both kinder to your clothes and saves money!)
- Try having a shower instead of a bath or take less time in the shower

Let's see if together we can make a difference!

Heating water is one of our biggest energy costs. Over a year these simple actions could help to reduce your bills by as much as £50 per year as well as reduce your water use. They can also make a significant reduction in overall energy demand on the community's local electricity network.

Use the enclosed sticky notes to put a note on the washing machine to remind you to fill it up before use, or to wash at 30°C, or, if you have a dishwasher, to make sure it is full before it gets switched on. You could put notes on switches to remind you to turn things off when not in use or to fill the kettle with less water. All these small actions will help to keep your costs down and reduce your bills.

Well done for all your hard work on the challenges so far! We'll be back in touch in January but meantime we are keen to know how you've got on and what was easy or difficult to do, so please get in touch to tell us. Also, if you need some help to understand your bills or would like any other energy saving advice then please call me or contact me through our website. We can help you to get a handle on this.

We are always looking for new ideas for saving money/energy so send us any great tips of your own that we can share with everyone. You can contact us by:

- Going to the website - www.connectingkingsworthy.org.uk - and use the contact page
- Emailing susie.phillips@winacc.org.uk
- Calling 01962 827083

With best wishes and Seasons Greetings from the Connecting Kings Worthy Team.

Susie Phillips
Community Coach, Connecting Kings Worthy

This initiative is supported by:

Stewart Newell – Chairman, Kings Worthy Parish Council
Julie Mullane - Head Teacher, Kings Worthy Primary School

Part of the SAVE Project

SAVE

7.3 Direct Asks 'Shift' Letter (TP2.5)

16 January 2017

Dear Fellow Resident

CAN IT WAIT 'TIL AFTER 8?

We all know that if we use less energy it will cost us less. But we don't always appreciate that a portion of our electricity bill (about a quarter) goes to our local distribution network operator*. These are the good people responsible for ensuring a reliable electricity supply day and night, come rain or shine. They maintain the cables and substations to keep the electricity flowing to our doors.

We tend to use more electricity between the hours of 4 – 8pm, especially in winter when it's cold and dark. So, if we can shift some of the demand for electricity outside of these hours it will reduce the pressure on the network, help reduce unplanned maintenance and keep the cost of our bills down.

For your next challenge, on SATURDAY 21 JANUARY 2017 between the hours of 4–8 pm we would like you/your family to use less electricity where possible by:

- avoiding using immersion heaters, showers, and charging other devices during these hours;
- turning TVs, games consoles and other appliances off when nobody is using them;
- preparing meals in advance or using a slow cooker or microwave instead of the oven;
- delaying putting on the washing machine, tumble dryer or dishwasher 'til after 8pm;
- thinking of new / different activities that use little or no electricity.

Let's see if together we can make a difference!

So for our remaining challenges until March, we would like to see if we can use less electricity at these peak demand times of 4–8pm. The attached factsheet explains more about why and how you can help by shifting your electricity consumption in this way. As before, we will be able to monitor electricity usage through our local substations to test the impact of us all working together.

If you need some help to understand your bills or would like any other energy saving advice then contact the 'Shirley Warren Working Together' team. Also we are always looking for new ideas for saving money and energy so send us any great tips of your own that we can share with everyone. You can contact us via:

- the website - www.shirleywarren.org.uk - and use the contact page
- by email: zaki.mahfoud@environmentcentre.com
- or call 023 8033 6172

With best wishes from the 'Shirley Warren Working Together' Team.

Zaki Mahfoud, Community Coach, Shirley Warren Working Together

6 February 2017

Dear Fellow Resident

CAN IT WAIT 'TIL AFTER 8?

We all know that if we use less energy it will cost us less. But we don't always appreciate that a portion of our electricity bill (about a quarter) goes to our local distribution network operator*. These are the good people responsible for ensuring a reliable electricity supply day and night, come rain or shine. They maintain the cables and substations to keep the electricity flowing to our doors.

We tend to use more electricity between the hours of 4 – 8pm, especially in winter when it's cold and dark. So, if we can shift some of the demand for electricity outside of these hours it will reduce the pressure on the network, help reduce unplanned maintenance and keep the cost of our bills down.

For your next challenge, on SATURDAY 11 to MONDAY 13 FEBRUARY 2017 inclusive, between 6 and 7 pm we would like you/your family to use as little electricity as you can where possible by:

- avoiding using immersion heaters, showers, laptops and other devices during these hours;
- turning TVs, games consoles and other appliances off when nobody is using them;
- preparing meals in advance or using a slow cooker or microwave instead of the oven;
- delay putting on the washing machine, tumble dryer or dishwasher 'til after 8pm;
- thinking of new / different activities that use little or no electricity.

Let's see if together we can make a difference!

We are enclosing a ***'Can it wait 'til after 8'*** fridge magnet as a helpful reminder.

For this challenge, we are concentrating on just 1 hour during the peak period to maximise our potential collective impact. As before, we will be able to monitor electricity usage through local substations to test the impact of us all working together.

If you need some help to understand your bills or would like any other energy advice then contact the 'Shirley Warren Working Together' team. Also we are always looking for new ideas for saving money and energy so send us any great tips of your own that we can share with everyone. You can contact us via:

- the website - www.shirleywarren.org.uk - and use the contact page
- by email: zaki.mahfoud@environmentcentre.com
- or call 023 8033 6172

With best wishes from the 'Shirley Warren Working Together' Team.

Zaki Mahfoud, Community Coach, Shirley Warren Working Together

27 February 2017

Dear Fellow Resident

CAN IT WAIT 'TIL AFTER 8?

Cooking is one of the biggest contributors to our peak demand between the hours of 4-8pm. If we can shift some of the load outside of these hours it will reduce the pressure on the electricity network, help reduce unplanned maintenance and keep the cost of our bills down.

Also, over a year some simple actions could not only help save you time cooking in the evening and reduce your bills, but make a significant reduction in the overall energy demand on our local electricity network. A win/win for all of us! For example, using a slow cooker can save you time in the evening and, as with a microwave, uses significantly less energy than an oven. Likewise, using a steamer, keeping lids on saucepans and if you have an electric hob, turning the rings off before you finish cooking, all help to use less energy, saving you money and taking the pressure off the electricity network.

For your next challenge, from SATURDAY 4 MARCH to SATURDAY 11 MARCH inclusive between the hours of 5–7 pm we would like you/your family to use less electricity where possible by:

- using a slow cooker, pressure cooker or microwave instead of the oven;
- using a steamer to cook all of your veg in one go rather than separately;
- keeping pan lids on to keep the heat in/turning off electric rings before finishing cooking;
- try to 'batch' cook and freeze portions for use another day.

Let's see if together we can make a difference!

We have enclosed some recipe ideas and tips for cooking using less energy - let us know how you get on with them or send us your own top tips.

We appreciate all your hard work on the challenges so far! We'll be back in touch to ask how you've got on and what was easy or difficult to do and to invite you to one of our feedback sessions. Meantime, if you need some help to understand your bills or would like any other energy saving advice then contact the 'Shirley Warren Working Together' team. You can contact us via:

- the website - www.shirleywarren.org.uk - and use the contact page
- by email: zaki.mahfoud@environmentcentre.com
- or call 023 8033 6172

With best wishes from the 'Shirley Warren Working Together' Team.

Zaki Mahfoud, Community Coach, Shirley Warren Working Together

7.4 Energy Literacy Factsheets

Shirley Warren Lightbulb Community

FACTSHEET No 1

How electricity reaches Shirley Warren

Generation

Electricity is generated using a number of different energy sources …

… coal, gas, nuclear and renewables.

Transmission

Across the UK, there are 4 transmission networks to transport large amounts of electricity over long distances at high voltage.

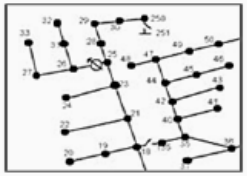
The network for England is run by National Grid.

Distribution

For each UK region, one company is appointed by the industry regulator (Ofgem) to manage the local distribution network of cables and substations. The cost of distribution accounts for about a quarter of our household bill.

For the South of England, the distribution network company is SSEN (Scottish and Southern Electricity Networks).

SSEN gets electricity to our door.



As individual customers, we then choose our supplier who connects our home to the network and sends us our bills.

Source: tEC / WinACC 2017

Together we can make a difference!
www.shirleywarren.org.uk
https://www.facebook.com/Shirley Warren/

Shirley Warren Lightbulb Community

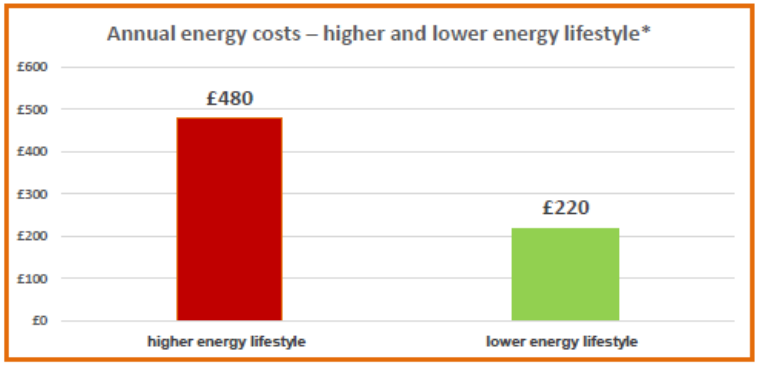
FACTSHEET No 2

What is a 'lower energy' lifestyle?

Switching to a 'lower energy' lifestyle is not as hard as we might think. If we all adopted the following simple habits, the pressure we place on the community network would be vastly reduced. Amazingly, energy costs for an average household would also be cut in half!

Some simple habits for a 'lower energy' lifestyle:

- Use a slow cooker twice a week instead of the oven (use the oven as normal on the other days)
- Use microwave and hob once a week instead of the oven
- Use a dishwasher on 'eco' instead of the standard cycle
- Reduce tumble drier use from 5 times to twice a week
- Wash at 30 instead of 40 degrees
- Swap from halogen to LED lightbulbs



* Note: not including heating or non-electricity costs – Source: tEC / WinACC 2017

Together we can make a difference!
www.shirleywarren.org.uk
https://www.facebook.com/Shirley Warren/

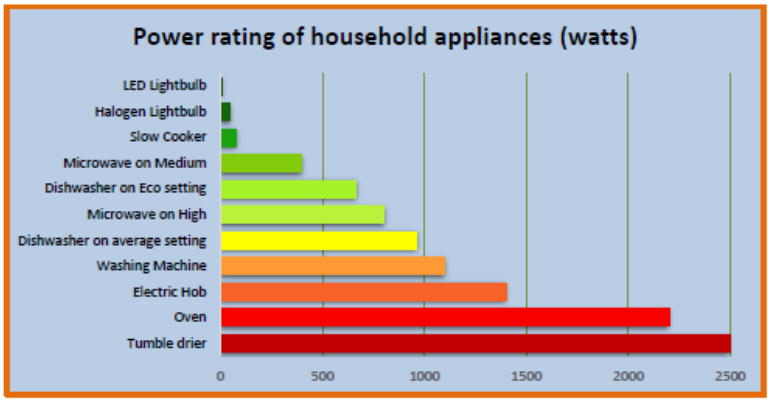
Shirley Warren Lightbulb Community

FACTSHEET No 3

Peak demand: 'Can it wait 'til after 8?'

We've all been there! You get home, stick the kettle on, switch on the TV, charge up your mobile or laptop, start cooking a meal, put some washing in the machine *... but you may not know that peak demand for electricity is from 4pm to 8pm.*

By shifting some of our usage outside of this period, we can all do our bit to reduce pressure on the local community network. This should mean less disruptive and costly upgrade work. What's more, since getting electricity to our homes via the distribution network accounts for about a quarter of our household bill, a reduction in the amount of essential maintenance will help to reduce long-term price rises. So, it's a win / win!



Source: tEC / WinACC 2017

Looking at the chart, you can see where the pressure points are!

So, please ask yourself ... 'Can it wait 'til after 8?'

Together we can make a difference!
www.shirleywarren.org.uk
https://www.facebook.com/Shirley Warren/

Shirley Warren Lightbulb Community

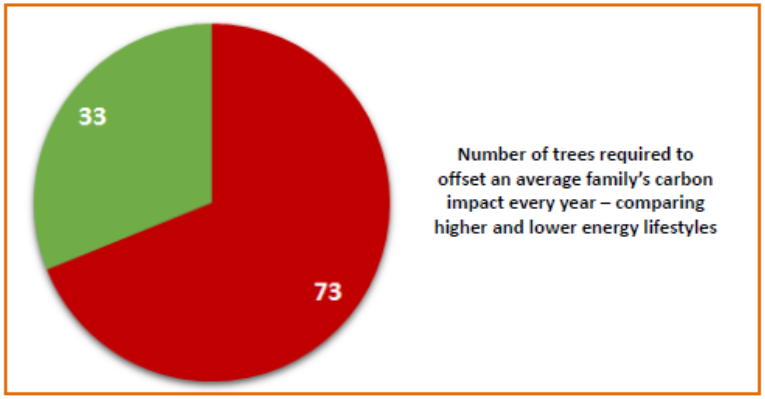
FACTSHEET No 4

Reducing our carbon impact

Using energy from fossil fuels releases carbon dioxide, one of the 'greenhouse gases' associated with climate change *– trees absorb carbon dioxide, so we can measure our 'carbon impact' by the number of trees required to offset the greenhouse gas produced.*

For an average household, switching to a 'lower energy' lifestyle* means reducing our carbon impact from 73 to 33 trees every year! Adopting some simple 'lower energy' habits can make such a difference!

- Use a slow cooker twice a week instead of the oven (use the oven as normal on the other days)
- Use microwave and hob once a week instead of the oven
- Use a dishwasher on 'eco' instead of the standard cycle
- Reduce tumble drier use from 5 times to twice a week
- Wash at 30 instead of 40 degrees
- Swap from halogen to LED lightbulbs



* Note: not including heating or non-electricity useage - Source: tEC / WinACC 2017

Together we can make a difference!
www.shirleywarren.org.uk
https://www.facebook.com/Shirley Warren/

Shirley Warren Lightbulb Community

FACTSHEET No 5

The Energy Mythbuster

When it comes to use of energy in the home, it is difficult sometimes to distinguish between myth and reality. So here are a few pointers on some of the most frequently asked questions:

Which lightbulbs are best to use?
Halogen bulbs are very expensive to run. The best bulbs are the new LEDs which light instantly, come with different shades of light and which cost on average £3 to buy and £1 per year to run compared to the old 100w bulb which cost 50p to buy and £12 per year to run

Are electric night lights expensive to run?
They vary of course but are generally low in consumption. LED versions are cheaply available and cost about 30p per year to run

Is it cheaper to leave fluorescent lights on?
Fluorescent lights have a starter to kick start them so use a little more to switch on but usually modern ones are low energy. Generally, if you are coming in and out of a room within 5 minutes then leave on, if you are out for longer turn off

What uses the most energy in the home?
Heating uses more energy than most things in your home. Try turning down the thermostat by 1 degree as this will save you money as well as use less energy – but remember don't be cold – 18-21 degrees is optimal, above is too warm and below too cold. Making sure your house is well insulated and draught proof will help to keep your house warm and help reduce usage and bills

Is it better to leave your heating on low all day or just turn it on when you need it?
This depends on how much you are at home during the day but generally better to have on for a half hour-hour or so in the morning before you get up/go out and the same in the evening

continued ...

Shirley Warren Lightbulb Community

FACTSHEET No 5

...continued

Combi boilers v Economy 7 – what it the difference and how should you use them most effectively?
Combi boilers run on gas and provide heating and hot water. They heat water as it is needed. The heating is best controlled with a programmer or a thermostat and timer. Economy 7 is an electricity tariff that costs less for 7 hours at night. It is usually paired with storage heaters and an electric immersion tank. Correct use of storage heaters makes best use of the tariff and keeps your home warm when you need it. Immersion heaters are best used on a timer

Is it better to leave water heaters on all day or turn off and heat from cold each time?
It depends on the type of system you have as combi boilers only heat water when it is needed, whilst immersion heaters are best used with a timer to ensure they are not left on for more than 1 hour or so each time

Is it best to fill a kettle with cold water or warm water from the tap to use less money?
Boiling a kettle uses a lot of energy but from a health point of view it is better to fill your kettle with cold water at the start as hot water has been circulating around your system for a while. You also need to heat the water up in the first place so will have used energy to do so. If you only fill the kettle with as much as you need you will save money and energy

Does it use less energy to have a shower than a bath?
It depends on what is heating the water, and also how much water is used. A shower running off the gas boiler will usually use less water than a bath, as long as times are reasonable. Some electric power showers can put out a huge amount of water, and consequently use a lot of energy. It is best not to use electric showers at peak time as they have a much higher power draw than all other household appliances. A 4 minute shower is the most efficient

Source: tEC / WinACC 2017

Together we can make a difference!
www.shirleywarren.org.uk
https://www.facebook.com/Shirley Warren/

7.5 Big Switch Off Promotion

Shirley Warren Working Together

THE BIG SWITCH OFF

INFORMATION PACK

First of all, a BIG thank you…

… for signing up to the Big Switch Off on Saturday 19 November!

This is the start of something BIG for our community as we explore the power of collective action … and what it is to be a 'caring community'.

Who knows what we can achieve together in the future!

Please have a look through the factsheets in this pack. These are designed to help you decide what is best for you in reducing energy consumption during peak hours.

Please keep us up to date with your thoughts and experiences about energy reduction if you can, both before and after the 19th at:

www.shirleywarren.org.uk
or on facebook – Shirley Warren Working Together

Thank you.
The SWWT Team
October 2017

Join the Shirley Warren Lightbulb Community

a community which cares

... about the environment ... about each other ... about how we use our energy resources ... about avoiding waste ... and ultimately, about the legacy we are leaving our children

Together we can make a difference!
www.shirleywarren.org.uk
https://www.facebook.com/Shirley Warren/

Our first 'lightbulb idea' is to get as many people as we can throughout Autumn 2017 to sign up to using less electricity at peak times (4-8pm) - easing the pressure on the community network.

Looking to the future, we would also like to hear your ideas about what else Shirley Warren can do to become a more caring community ... now and for future generations.

... TO GET THINGS MOVING PLEASE JOIN IN ...

'THE BIG SWITCH OFF'

6-7pm on Sunday 19 November 2017

For just one hour – sign up to saving as much electricity as we can across the whole of Shirley Warren!

Please sign up today

on our WEBSITE - www.shirleywarren.org.uk
on FACEBOOK – Shirley Warren Working Together
by 'PHONE - 02380 336172 (ask for Zaki)

Our Information Pack gives you the why/when/how – be sure to download/request yours when you sign up!

The 'Shirley Warren Working Together' initiative is part of the SAVE research project funded by Ofgem, the energy industry regulator, and led by Scottish and Southern Electricity Networks (SSEN) as the local electricity distribution network operator. It is supported by the Action Church, St Judes, the City Council, the Community Garden, local residents and the Environment Centre (tEC) and operates with the involvement of a range of other local organisations within the community. All of us are keen to work together to see the benefits of this initiative reach as many people as possible within our community. Together we can make a difference!

Check out the date …
… sign up today

Dear Fellow Residents

Connecting Kings Worthy

WE NEED YOUR HELP!

The 'Connecting Kings Worthy' initiative is part of the SAVE research project funded by Ofgem, the energy industry regulator, and led by Scottish and Southern Electricity Networks (SSEN) as the local electricity distribution network operator. It is supported by the Parish Council, the Primary School, Winchester City Council and Winchester Action on Climate Change (WinACC) and operates with the involvement of a range of other local organisations within the community. All of us are keen to work together to see the benefits of this initiative reach as many people as possible within our community. Together we can make a difference!

Connecting Kings Worthy

WE NEED YOUR HELP to reach our target of getting 1000 Kings Worthy residents signed up to …

'THE BIG SWITCH OFF'

Sunday 19 November 2017
between 6-7pm

For just one hour - saving as much electricity as we can across the whole of Kings Worthy during the evening peak time - easing the pressure on the community network.

Sign up to the Event today:

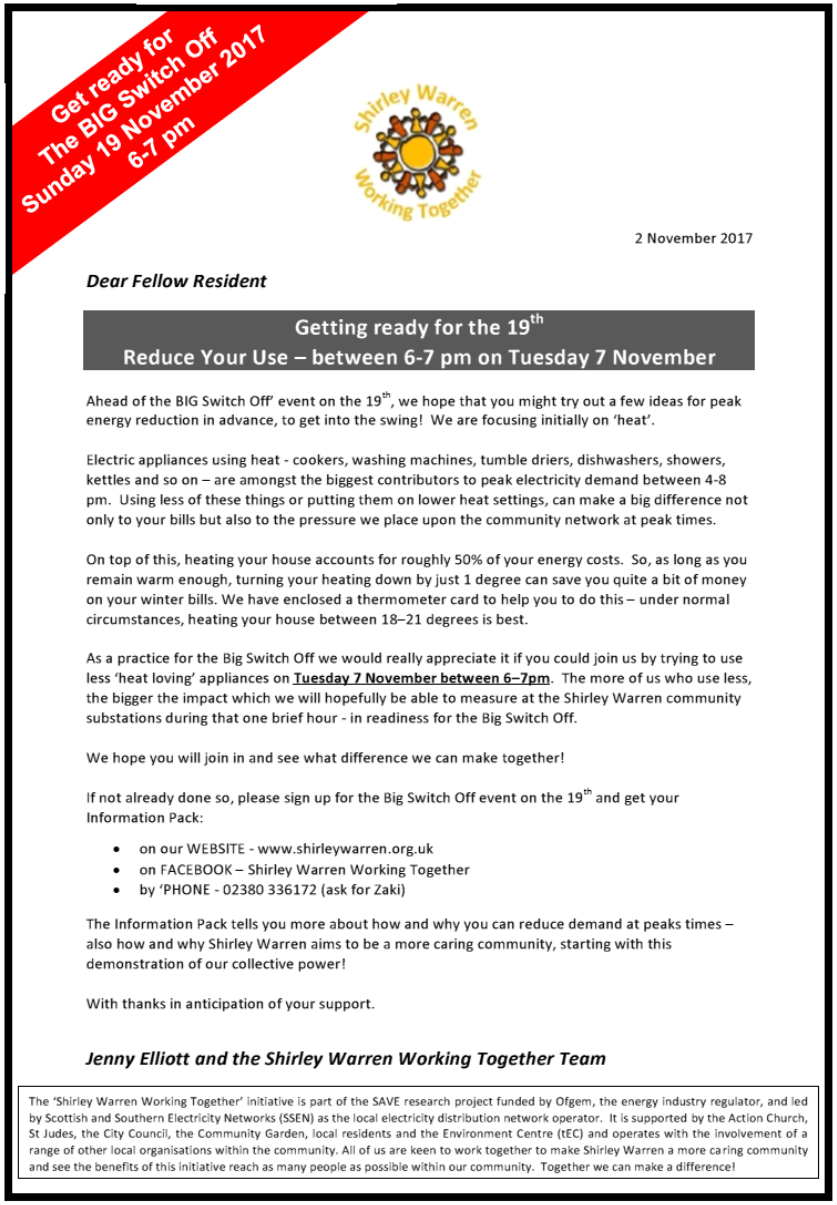
on our WEBSITE - www.connectingkingsworthy.org.uk
on FACEBOOK - Connecting Kings Worthy
by 'PHONE - 01962 827083 (ask for Alison)
at our 'Sign Up Point' in Tubbs Hall
by FREEPOST - return the attached reply slip

Our Information Pack gives you the why/when/how - be sure to download/request yours when you sign up

We want our community to be recognised as a community which cares … about the environment … about each other … about how we use our energy resources … about avoiding waste … and ultimately, about the legacy we are leaving our children. The 'BIG Switch Off' is the first step in demonstrating as a community our collective power for positive change.

Be 1 of a 1000! Together we can make a difference!

7.6 Big Switch Off 'Sign Up'



Get ready for
The BIG Switch Off
Sunday 19 November 2017
6-7 pm

2 November 2017

Dear Fellow Resident

Getting ready for the 19th
Reduce Your Use – between 6-7 pm on Tuesday 7 November

Ahead of the BIG Switch Off' event on the 19th, we hope that you might try out a few ideas for peak energy reduction in advance, to get into the swing! We are focusing initially on 'heat'.

Electric appliances using heat - cookers, washing machines, tumble driers, dishwashers, showers, kettles and so on – are amongst the biggest contributors to peak electricity demand between 4-8 pm. Using less of these things or putting them on lower heat settings, can make a big difference not only to your bills but also to the pressure we place upon the community network at peak times.

On top of this, heating your house accounts for roughly 50% of your energy costs. So, as long as you remain warm enough, turning your heating down by just 1 degree can save you quite a bit of money on your winter bills. We have enclosed a thermometer card to help you to do this – under normal circumstances, heating your house between 18–21 degrees is best.

As a practice for the Big Switch Off we would really appreciate it if you could join us by trying to use less 'heat loving' appliances on **Tuesday 7 November between 6–7pm**. The more of us who use less, the bigger the impact which we will hopefully be able to measure at the Shirley Warren community substations during that one brief hour - in readiness for the Big Switch Off.

We hope you will join in and see what difference we can make together!

If not already done so, please sign up for the Big Switch Off event on the 19th and get your Information Pack:

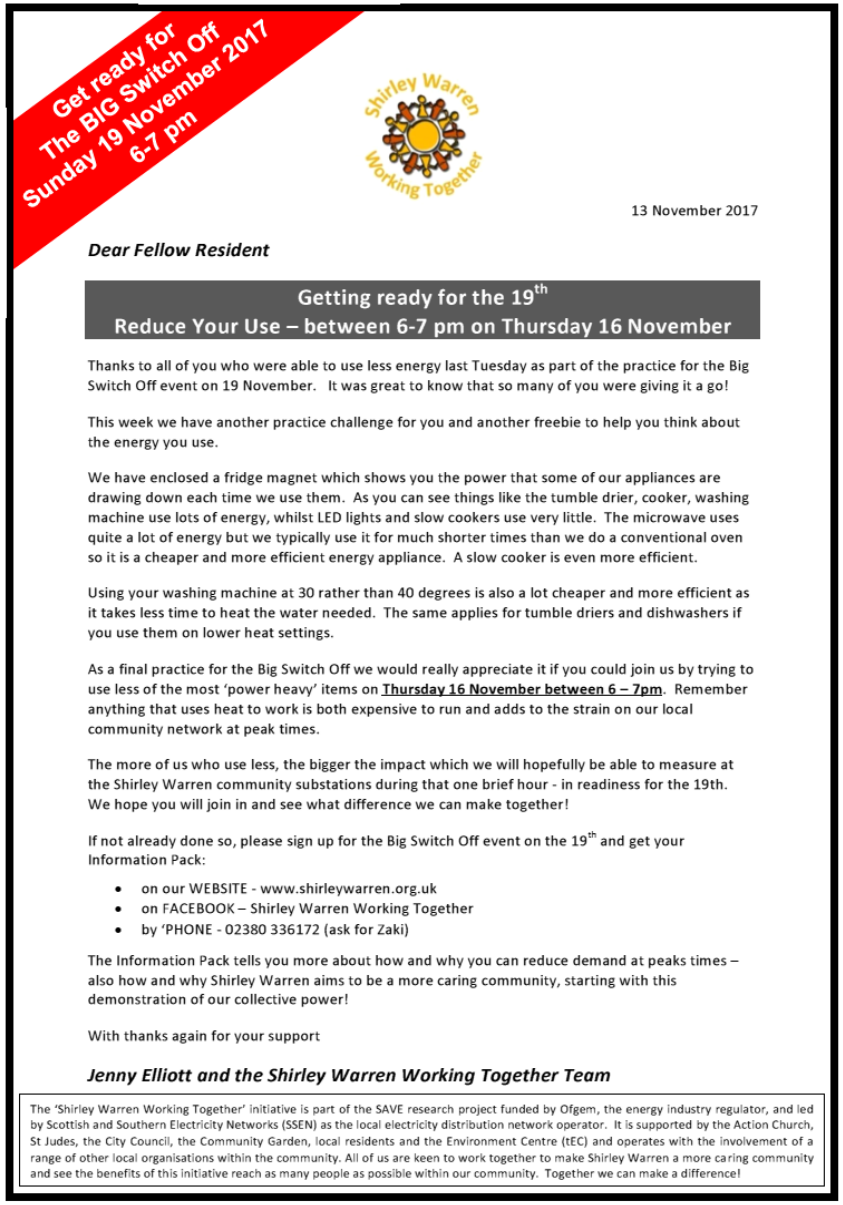
- on our WEBSITE - www.shirleywarren.org.uk
- on FACEBOOK – Shirley Warren Working Together
- by 'PHONE - 02380 336172 (ask for Zaki)

The Information Pack tells you more about how and why you can reduce demand at peaks times – also how and why Shirley Warren aims to be a more caring community, starting with this demonstration of our collective power!

With thanks in anticipation of your support.

Jenny Elliott and the Shirley Warren Working Together Team

The 'Shirley Warren Working Together' initiative is part of the SAVE research project funded by Ofgem, the energy industry regulator, and led by Scottish and Southern Electricity Networks (SSEN) as the local electricity distribution network operator. It is supported by the Action Church, St Judes, the City Council, the Community Garden, local residents and the Environment Centre (tEC) and operates with the involvement of a range of other local organisations within the community. All of us are keen to work together to make Shirley Warren a more caring community and see the benefits of this initiative reach as many people as possible within our community. Together we can make a difference!



Get ready for
The BIG Switch Off
Sunday 19 November 2017
6-7 pm

13 November 2017

Dear Fellow Resident

Getting ready for the 19th
Reduce Your Use – between 6-7 pm on Thursday 16 November

Thanks to all of you who were able to use less energy last Tuesday as part of the practice for the Big Switch Off event on 19 November. It was great to know that so many of you were giving it a go!

This week we have another practice challenge for you and another freebie to help you think about the energy you use.

We have enclosed a fridge magnet which shows you the power that some of our appliances are drawing down each time we use them. As you can see things like the tumble drier, cooker, washing machine use lots of energy, whilst LED lights and slow cookers use very little. The microwave uses quite a lot of energy but we typically use it for much shorter times than we do a conventional oven so it is a cheaper and more efficient energy appliance. A slow cooker is even more efficient.

Using your washing machine at 30 rather than 40 degrees is also a lot cheaper and more efficient as it takes less time to heat the water needed. The same applies for tumble driers and dishwashers if you use them on lower heat settings.

As a final practice for the Big Switch Off we would really appreciate it if you could join us by trying to use less of the most 'power heavy' items on **Thursday 16 November between 6 – 7pm**. Remember anything that uses heat to work is both expensive to run and adds to the strain on our local community network at peak times.

The more of us who use less, the bigger the impact which we will hopefully be able to measure at the Shirley Warren community substations during that one brief hour - in readiness for the 19th. We hope you will join in and see what difference we can make together!

If not already done so, please sign up for the Big Switch Off event on the 19th and get your Information Pack:

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With thanks again for your support

Jenny Elliott and the Shirley Warren Working Together Team

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The BIG Switch Off
Sunday 19 November 2017
6-7 pm

16 November 2017

Dear Fellow Resident

It's BIG Switch Off time!
Sunday 19 November between 6-7 pm

Thank you for your support to date, it sounds like you've been really trying to reduce your use and use less of the heavier 'energy guzzling' items during the 4-8 pm peak time - which is great!

We have now almost reached the **Big Switch Off** time when we want you to really try and use as little energy as possible between **6 –7pm on Sunday 19th November**.

Could you avoid using the cooker by maybe trying to eat a bit earlier or later, or think of alternatives to watching tv or using a computer? If you could avoid using 'power heavy' appliances - like the washing machine, tumble drier, dishwasher, shower, immersion heater – during that one brief hour, that would be great!

We don't want you to be cold so please don't turn your heating off (maybe just turn it down a little if you can) nor do we want you to sit in darkness, but if you could turn off lights (and other electrical items) in rooms you aren't using that would be a help.

If you fancy going out to 'reduce your use' at home then we would like to invite you to come along to a Supper Evening on the 19th at the Action Centre on Warren Crescent (next to the Co-op Nursery) with food and fun activities for all ages. Drop in any time from 4-6pm and we'll see you there!

Finally, with Christmas on the way we have put together an energy saving Christmas pudding recipe for you to make in the slow cooker or microwave, both of which will save you time and energy compared to conventional cooking. If you are able to give it a go we'd love to see the results on the Shirley Warren Working Together facebook page.

We do hope that you can go all out to 'reduce your use' as much as you can between 6 -7pm on Sunday – let's see if coming together as a community can really make a difference!

If not already done so, please sign up for the event on the 19th and get your Information Pack:

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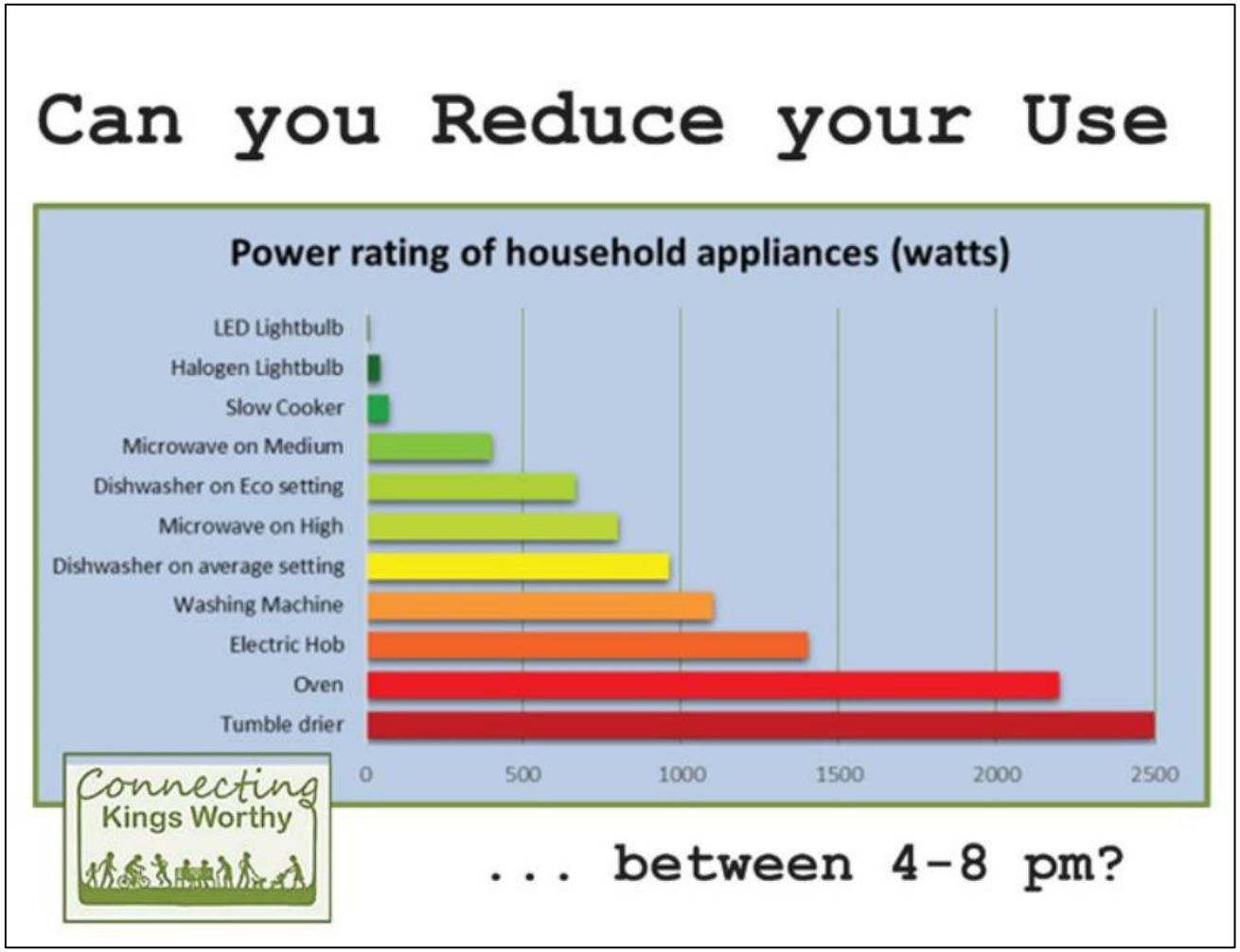
7.7 Freebies – Fridge magnets

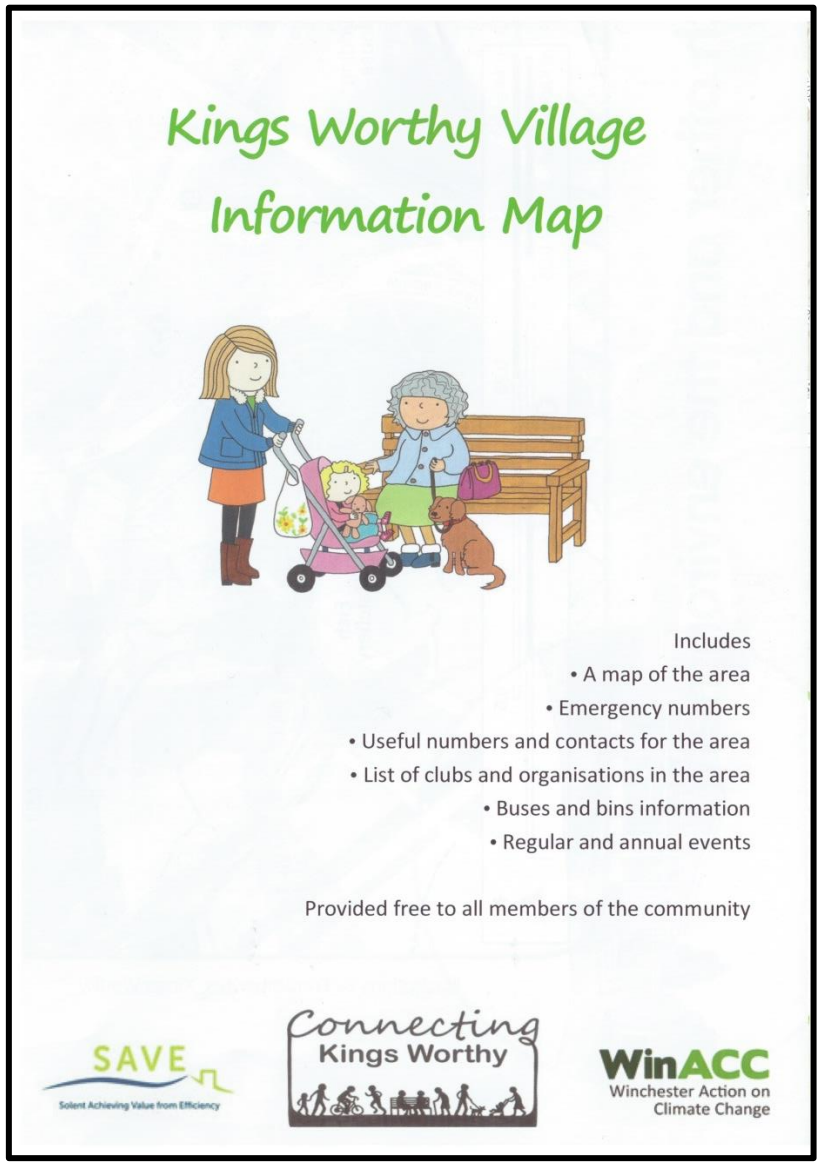
Shirley Warren
Working Together

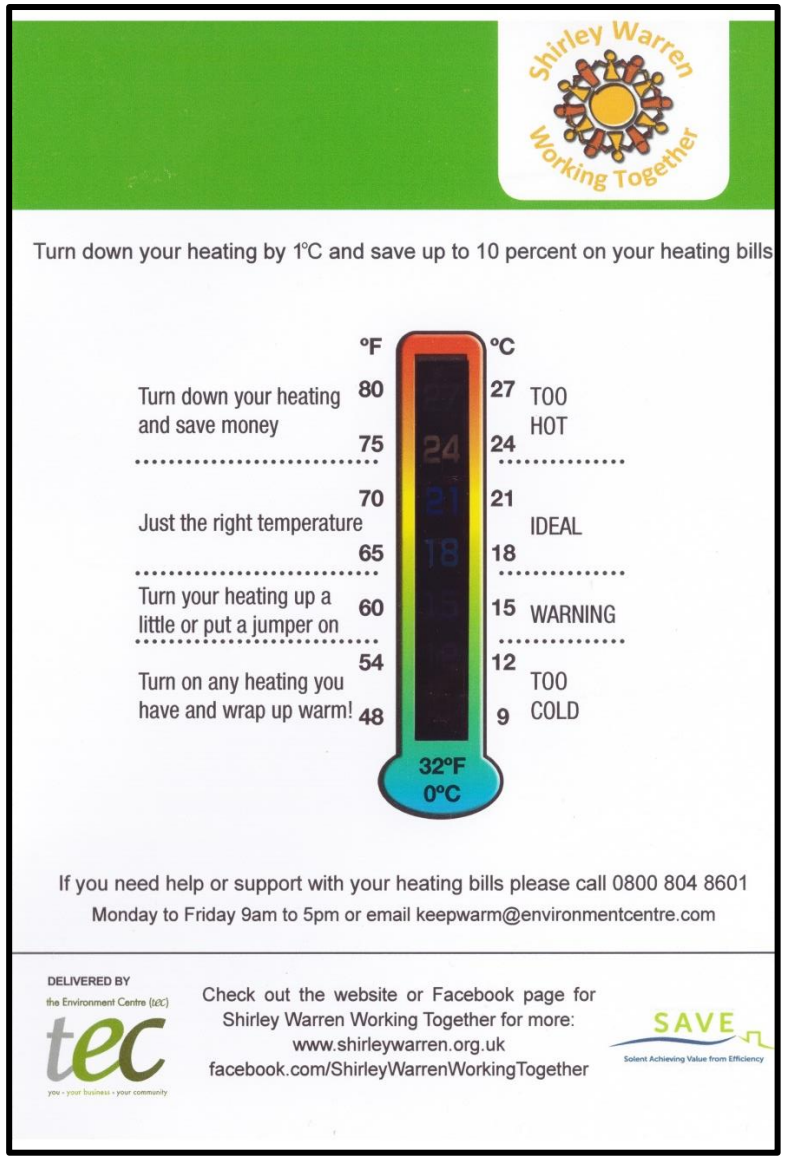
Can it wait 'til after 8?

www.shirleywarren.org.uk



7.8 Other Freebies





‘Reduce your use’ Christmas Pudding

Preparation time: 20 mins. Cooking time: 8hrs (slow cooker) or 20-25mins (microwave)

Serves: 8 You will need: a 1.5 pint pudding basin, either china or plastic, sixpence.

Ingredients

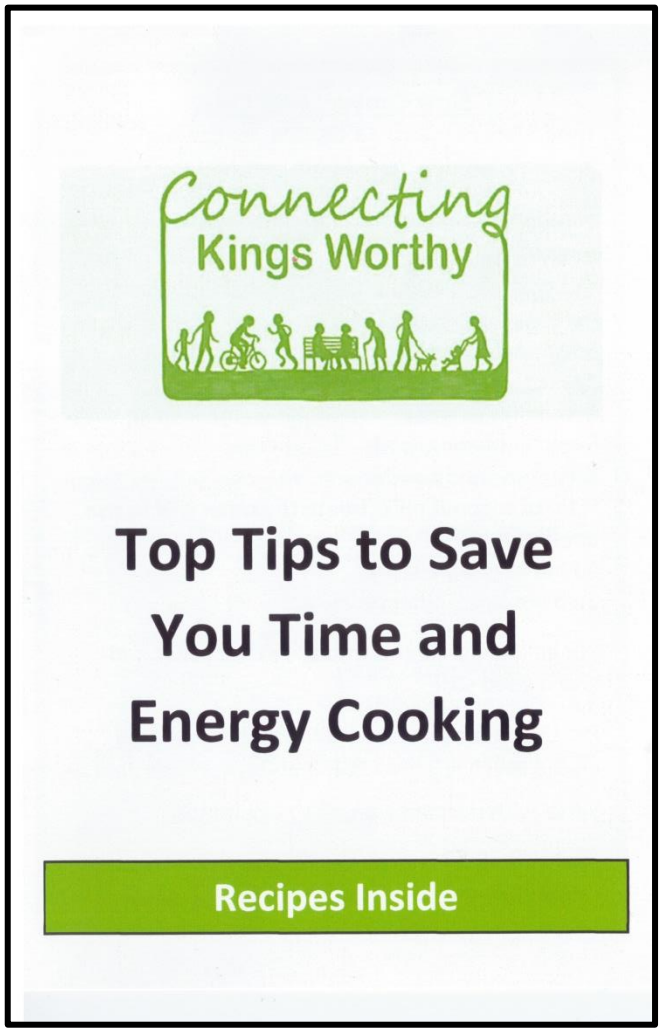
- 350g mixed dried fruit e.g. raisins, currants, figs, cranberries, prunes apricots or cherries
- 100ml alcohol to soak fruit e.g. rum, sherry or brandy
- butter for greasing
- 160g plain flour
- 2 large eggs
- 100g breadcrumbs
- 100g brown sugar
- 50g ground almonds
- 2 tbsp black treacle
- 1 tsp baking powder
- 2 tsp Mixed Spice
- 1 eating apple, diced
- grated zest of 1 orange
- 150g butter, frozen and grated

Shirley Warren Working Together

Method

1. Cut any large dried fruit into pieces and mix all the fruit together in a bowl. Pour over the alcohol and leave to soak overnight.
2. Grease the pudding basin generously with butter.
3. Mix together all the remaining ingredients and soaked fruit in a large bowl.
4. Scrape into the pudding basin and add the sixpence (wrapped in greaseproof paper).
5. Cover with a piece of greaseproof paper and then foil. Both need to have a pleat folded into them to allow for expansion. Tie with string. A string handle is useful for lifting the pudding.
6. In the slow cooker. Place the pudding in the slow cooker and pour hot water around it up to an inch below the top of the pudding. Put slow cooker onto low and cook for 8 hours. Check water levels halfway through cooking.
7. Or in the microwave. Alternatively, place on a microwave plate and cook on medium for 20-25 minutes until a skewer comes out clean.

Note: Do not use foil or the sixpence if making this recipe in a microwave oven



Main Report Reference: **SECTION 3.2**

8 DELIVERY AGAINST OUTCOMES CHAIN

8.1 The Ultimate Outcomes

The ultimate outcomes of the Community Coaching approach in an operational 'business as usual' (BAU) setting were seen as threefold:

- DNOs (for example SSEN) are able to predict peak network demand and defer (and/or plan) associated network reinforcement accordingly;
- Communities are empowered to manage positive change impacts including local energy consumption;
- Stakeholders can accrue 'value for money' benefits from positive (perhaps more qualitative) social, economic and environmental impacts matched to each organisation's particular agenda.

The Outcomes Chain model as put together at the outset of the project in June 2014, shows a theoretical progression through a series of intermediate outcomes over the course of the CEC trial.

As part of the modelling theory, a series of underlying assumptions were made, to be tested through the trial, and a series of strategic interventions identified, which it was anticipated would be required to graduate from outcome to outcome, where natural progression could not be assumed.

8.2 General progress

The Outcomes Chain diagram in Figure A10 overleaf sets out the Delivery Team's self-assessed summary of overall progress in graduation through the chain over the course of the CEC trial research.

Outcomes shown in green are assessed as achieved. Outcomes shown as amber are assessed as partially achieved with further progress required, this being predominantly dependent upon (i) delivery of specific legacy commitments as set out in Learning Outcomes LO8 / Stakeholder Collaboration, LO 9 / Engagement Protocol, LO16 / Legacy Planning (Main Report, Section 4.4) and (ii) potential rollout of a scaled 'Connected Communities' programme (as set out in Appendix 13)

Figures A11 and A12 provide respectively an assessment of the relevance of the stated assumptions in practice and the relative impact of strategic interventions in facilitating progress through the chain.

Figure A10: **THEORY OF CHANGE: OUTCOMES CHAIN**

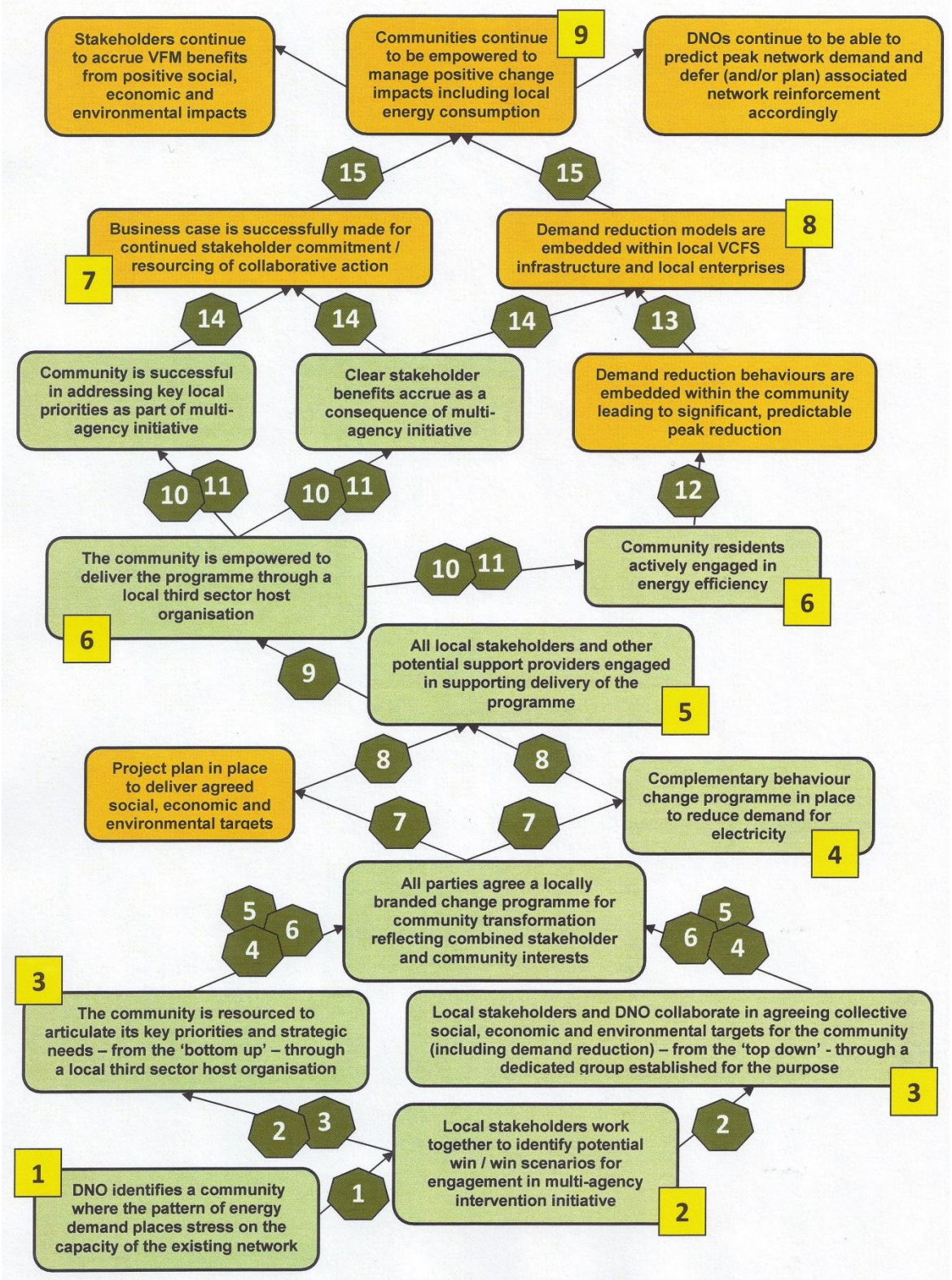


Figure A11: **OUTCOMES CHAIN – UNDERLYING ASSUMPTIONS**			
			Learning Outcome Ref: (Main Report, Section 4.4)
1	**Social intervention**	In theory, strategic intervention aimed at changing local demand behaviour patterns is a feasible and sustainable alternative to asset reinforcement in managing network capacity	
		In practice, reflecting the bid commitment to determine the merits of DNOs interacting with customers on energy efficiency measures, strategic intervention has been seen to be particularly beneficial in (i) facilitating measures aimed at improving Energy Literacy (ii) co-creation of local organisations acting on behalf of the DNO in facilitating change in peak demand behaviour and (iii) the specification of formal guidelines for potential rollout of a replicable BAU engagement programme	LO15
2	**Initial financial support**	In theory, Local Authorities and other key stakeholders will tend to see the value of collaboration in energy demand reduction but will tend not to dedicate significant resources up front	
		In practice, the stakeholders' implied aspiration that the DNO should be a catalyst for collaborative multi-agency engagement has been confirmed	LO7
3	**Common stakeholder agenda**	In theory, local stakeholders (and communities) will generally welcome the idea of multi-agency effort to empower positive change within communities - working collaboratively will reveal opportunities for mutually beneficial co-operation working to a common agenda for change	
		In practice, applying the 'Earning the Right' principle in community engagement has created the platform for a successful change programming blending community-led and agency-led agendas as part of a collective aspiration for change	LO2 LO12
4	**Fit with local aspirations**	In theory, behaviour change in terms of energy demand reduction will tend to sit naturally as part of a dedicated multi-agency strategy for improving quality of life within a community	
		In practice, the implied readiness for convergence between the community-led change strategy and the DNO-led demand reduction strategy has been affirmed through the trial with the approach being characterised as 'making the emotional connections' and with particular 'breakthrough' impacts in relation to household cooking routines	LO3 LO6 LO18
5	**Inclusive Governance**	In theory, an inclusive governance approach involving stakeholders in co-producing, designing and delivering the change programme is more likely to facilitate and sustain positive behaviour change	
		In practice, the inclusive approach has been endorsed by stakeholders in the form of potential legacy commitments including an aspiration to sustain the process of joint working, a joint engagement protocol and potential rollout of a scaled programme	LO8 LO9 LO13
6	**Community support**	In theory, a local change strategy is more likely to attract popular community support when generated and led from within the community in association with a known, trusted host organisation	
		In practice, the assumed significance of the role of the trusted local intermediary has been endorsed throughout the trial research affirming the importance of the 'messenger effect'	LO12 LO16
7	**Long-term business case**	In theory, calculations of real SROI accruing from the programme will underpin the long-term business case for ongoing resource allocation by stakeholders to sustain positive change impacts	
		In practice, calculation of 'Social Return on Investment' has been more challenging than anticipated requiring further work to substantiate the value of 'stacked' stakeholder benefits	LO13 LO14 LO17
8	**Structural change**	In theory, initial direct investment to prompt short-term change will give way to multi-agency investment to develop and sustain long-term structural change hubs / mechanisms	
		In practice, the prognosis for continued multi agency collaboration is positive with a commitment locally to sustaining the work of Shirley Warren Working Together and Connecting Kings Worthy as local change hubs – and more widely, subject to rollout of a scaled 'Connected Communities' engagement programme	LO8 LO9 LO16
9	**Retrenchment**	In theory, there will be a tendency for initial positive demand impacts to subside through natural attrition without regular reinforcement of alternative behavioural norms to sustain transformation	
		In practice, to test this, an extension to the original project phasing has been agreed to allow the NEL team to revisit the project communities and key stakeholders in November 2018 to review the durability of legacy impacts and commitments	-

Figure A12: **OUTCOMES CHAIN – STRATEGIC INTERVENTIONS**

	Intervention	Review of Progress	Section Ref: (Main Report)
1	Generate change programme budget	-	-
2	Local Stakeholder mapping / Partnership building	Intervention complete	2.2 3.1
3	Appoint / Resource local host organisation	Intervention complete	2.2
4	Establish Governance framework	Intervention complete	2.2
5	Consolidate Stakeholder objectives	Intervention complete – subsequent delivery as part of local change strategy limited by absence of sufficiently granular data monitoring	3.4
6	Establish / Co-produce Strategic change programme	Intervention complete	3.1 3.2
7	Establish data baselines / monitoring systems	Intervention complete in relation to DNO and community generated targets – monitoring of stakeholder targets limited by absence of sufficiently granular data monitoring	2.2 3.1 3.4
8	Manage / Resource Governance delivery framework	Intervention complete	2.2
9	Training / Development Programme	Intervention complete	2.2
10	Focussed behaviour change / outreach intervention programme	Intervention complete	3.1 3.2 3.3
11	Monitor and adapt outreach programme	Intervention complete	3.2
12	Review transformation levels / compliance against energy targets	Intervention complete against a background of challenges associated with observability of consumption impacts at substation / feeder level	3.4 4.1 4.2 4.3
13	Embed structural change	Completion subject to delivery of specific legacy commitments	3.3 4.3
14	Business case development	Completion subject to delivery of specific legacy commitments and next stage rollout of scaled programme	4.3 4.4
15	Multi-agency support programme	Completion subject to delivery of specific legacy commitments and next stage rollout of scaled programme	4.3 4.4

Main Report Reference: **SECTION 2.2**

9 NETWORK SCALABILITY

Building upon the CEC research in a business as usual situation, it is crucial for a DNO to understand both the tangible benefits and scalability of specific network interventions aimed at demand reduction.

The intervention affects across all substations on the day of the Big Switch Off (BSO) event are summarised in Figure A13 below showing the change in demand as a result of the BSO 'Promotion' intervention[1] (measured using temperature adjusted regression analysis), highlighting also those feeders subject to the more targeted BSO 'Sign Up' intervention.

Figure A13: **BSO PROMOTION EVENT – INTERVENTION EFFECTS**

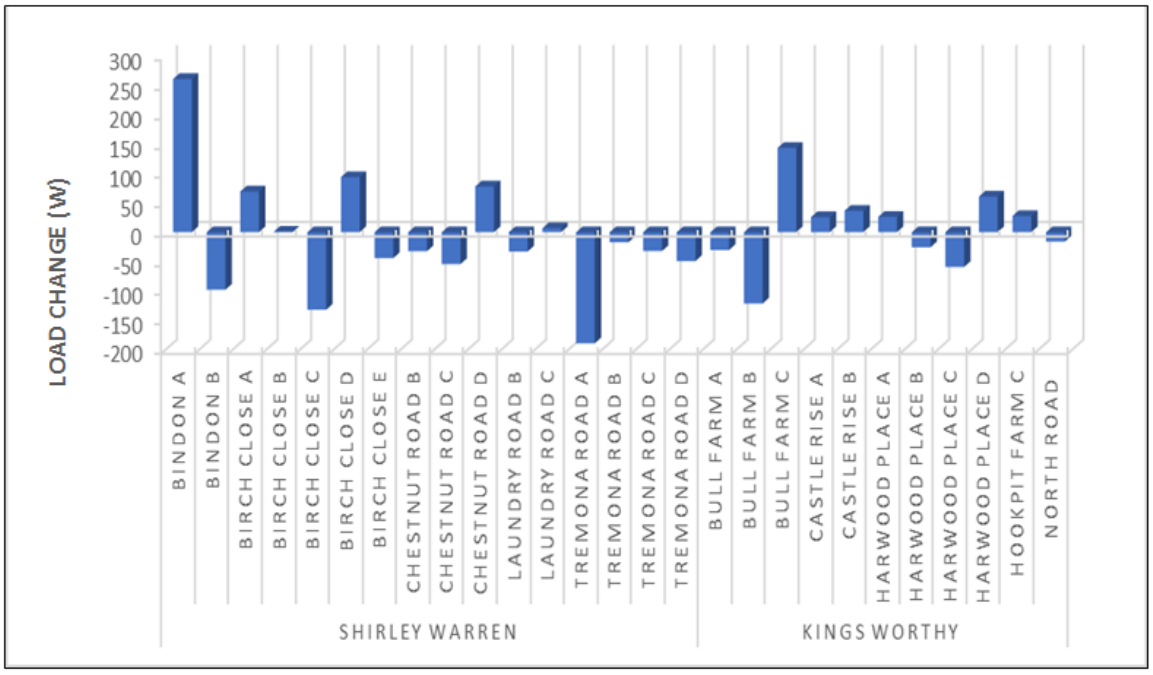
Town	Feeder	Load Change (%)	Load Change kW	No of Customers	Load Change per customer (W)
Shirley Warren	Bindon 1	16	4.4	17	260.8
	Bindon 2	-18	-9.9	101	-97.8
	Birch Close 1	13	4.3	62	69.1
	Birch Close 2	0	0.0	25	0.7
	Birch Close 3	-10	-8.8	67	-132.0
	Birch Close 4	9	3.5	37	93.7
	Birch Close 5	-7	-2.6	59	-44.0
	Chestnut Road 2	-12	-1.6	50	-32.3
	Chestnut Road 3	-19	-4.4	82	-54.1
	Chestnut Road 4	3	1.9	25	77.7
	Laundry Road 2	-6	-2.5	77	-32.7
	Laundry Road 3	1	0.1	22	6.8
	Tremona Road 1	-21	-7.8	41	-189.2
	Tremona Road 2	-3	-1.0	57	-17.0
	Tremona Road 3	-6	-2.0	62	-32.0
	Tremona Road 4	-10	-4.3	87	-49.1
Kings Worthy	Bull Farm 1	-3	-1.7	56	-30.1
	Bull Farm 2	-16	-9.0	74	-121.2
	Bull Farm 3	21	4.3	30	143.4
	Castle Rise 1	3	1.5	59	25.6
	Castle Rise 2	4	2.4	67	36.4
	Harwood Place 1	2	1.6	62	25.9
	Harwood Place 2	-5	-2.9	114	-25.5
	Harwood Place 3	-19	-3.4	58	-59.1
	Harwood Place 4	14	4.5	74	60.5
	Hookpit Farm 3	2	1.4	51	27.5
	North Road	-2	-2.6	167	-15.7

[1] Note some figures appear to show a positive impact on load as a result of imperfections of the base-lining process. As averages are used for this exercise the positives are left in. It is not anticipated the CEC trials would have caused any increase in consumption.

Targeted Feeders – BSO Sign Up					
Shirley Warren	Bindon 3	-19	-20.93	130	-160.9
	Bindon 4	8	6.85	60	114.1
Kings Worthy	Hookpit Farm 1	-11	-10.78	64	-168.3
	Hookpit Farm 2	-14	-7.11	26	-273.6
	Hookpit Farm 3	-21	-16.35	78	-209.6

Using this data, it is possible to estimate the reduction per customer as a result of the CEC trials, averaging this out across all feeders to depict an estimated mean reduction per customer. This can then be scaled geographically based on customer numbers.

Figure A14: **LOAD CHANGE PER CUSTOMER**



As such, the average reduction per customer as a result of wider CEC engagement is 3.8W (0.5% reduction) or at targeted level: 139.7W (10.6% reduction). The scalability of these results is shown in Figure A15 below.

It is clear that the impact of the CEC interventions is inherently different across areas and across different 'types' of customer. It is the aim of the SAVE Project modelling work to understand how different customers interact with smart interventions in different manners and to map this to the network. For the community energy coaching trials this analysis materialises in the community model (main Report, para 1.1.6). The community model will ultimately look to use census information to understand the demographics of customer on different areas of the network and how this resultantly impacts load reduction. Scaling this, the DNO can start to anticipate more accurately

how a given intervention may perform in an area given the demographics of those customers being engaged.

Figure A15: **ESTIMATED CO2 SAVINGS BASED ON THE CEC BSO EVENT**				
Area	**Est. CEC reduction**	**Est. Carbon Savings per 1 hour event**[2]	**Targeted CEC reduction**	**Est. Carbon Savings per 1 hour event**
LV rural (100-200 customers)	0.38kW – 0.76kW	0.2 - 0.4kg	13.97 – 27.94kW	7.5 - 15kg
LV urban (200-400 customers)	0.76 – 1.52kW	0.4 -0.8kg	27.94 – 55.88kW	15 - 30kg
Primary Substation (5000 – 10000 customers)	19 – 38kW	10.2 - 20.4kg	698.5 – 1397kW	375.1 - 750.2kg
Solent region (1.3 million customers)	4.94MW	2652.8kg	181.61MW	97,524.6kg
SSEN Network (3.7 million customers)	14.06MW	7550.22kg	516.89MW	277,569.7kg
Great Britain (26 million customers)	98.8MW	53055.6kg	3.63GW	1,949,310kg

Given the community model's continuing development to fit the final network investment tool (due June 2019) such data is not available as yet, however proof of concept can be illustrated by looking at the split in interaction effects across King Worthy (rural, relatively affluent) and Shirley Warren (urban, relatively deprived) independently. When comparing the average anticipated impact of a high-level CEC engagement approach across Shirley Warren the project sees an anticipated load reduction of 10W, whilst Kings Worthy sees no anticipated load reduction.[3] Looking at the targeted interventions however average reduction per customer increases to 23.4W and 217.2W in Shirley Warren and Kings Worthy respectively. This hints that the trial's urban, relatively deprived area interact comparatively better with whole community based interaction, whilst the rural more affluent area interacts better with a more targeted community based intervention. The community model will look to further quantify and detail these results in due course, tying into the reporting timetable for the other household based trials.

Main Report Reference: **SECTION 4.1**

[2] British Gas Carbon Calculator notes CO_2 (kg) = kWh x 0.537

[3] Average shows an increase of 6W, as highlighted above it is not anticipated that CEC trials would have a positive impact on load, hence it is assumed this is noise in data and hence, no affect.

10 LOCAL COACHING ACTIVITY LEVELS

Main Report Reference: SECTION 3.1

Figure A16: **INDICATIVE LOCAL COACHING ACTIVITY LEVELS IN SHIRLEY WARREN (SW) AND KINGS WORTHY (KW)**

Activity	Definition	Jan-Mar 16		Apr-Jun 16		Jul-Sept 16		Oct-Dec 16		Jan-Mar 17		Apr-Jun 17		Jul-Sep 17		Oct–Dec 17	
Individual engagements through coaches (no. of individuals)		**SW**	**KW**	**SW**	**KW**	**SW**	**KW**	**SW**	**KW**	**SW**	**KW**	**SW**	**KW**	**SW**	**KW**	**SW**	**KW**
Non-resident contacts – newly acquired	Through formal meetings and/or substantive engagement with individuals or groups	18	25	4	1	11	4	11	0	13	3	25	3	10	4	50	0
Non-resident contacts – established		3	2	0	0	9	12	9	5	5	10	15	7	20	23	20	11
Resident contacts – newly acquired		14	78	39	2	12	14	5	9	20	47	30	600+	20	100	40	1442
Resident contacts – established		0	1	10	87	8	74	15	78	30	43	35	85+	30	53	50	627
Local Meetings (no. of meetings + no. of individuals attending)																	
SAVE – General/Strategy/Co-design planning & development	Meetings linked to DDS	10 (18)		9 (56)	5 (46)	1 (10)	3 (46)	2 (15)	3 25)	5 (19)	2 (10)	3 30)	2 11)	4 (33)		2 (19)	4 (30)
SAVE – Energy related Co-design development & action planning	Linked to Energy agenda						1 (5)	1 (9)		1 (10)	2 (8)		2 10)	2 (22)	3 (8)	1 (12)	3 (12)
SAVE – Awareness raising /promotion/relationship building/activity based	Work with schools, Parish/local council, other local groups and ad hoc meetings	15 (25)	5 (69)	7 (25)	2 29)	4 (25)	5 (46)	1 (7)	6 (37)		19 (61)	1 (12)	7 (469)		3 (19)	1 (15)	4 (15)
Local Events (no. of events + no. of individuals attending)																	
Participation in non-SAVE events			5 (89)				1 (8)		1 (24)							2 (220)	
One-off events inspired / organised by SAVE – non energy focus					5 (46)		3 (41)	1 (30)		1 (30)		2 (50)	2 (1050)	3 (100)	1 (100	1 (20)	
One-off events inspired / organised by SAVE – energy focus							2 (13)									2 (120)	1 (27)

11 PROJECT COST BREAKDOWN

Main Report Reference: 4.2

Figure A17: **PROJECT COST BREAKDOWN**

PROJECT MANAGEMENT		Costs directly attributable to setting up and managing Trial Method 4 as a research project - these costs are seen as constituting a one-off, non recurring investment to secure research outcomes which might subsequently underpin a BAU community enegagement programme		
1	Research Set up	Compliance systems / Project Manual / Targets & Milestones / Financial Planning / Best Practice Review / Host Engagement / Coach training / Learning visits	13%	
2	Area Selection / profiling	Establishing selection criteria / strategic engagement activity / running bidding process / demographic analysis and profiling / Pre Active Engagement period activities	9%	
3	PPRB Reporting	PPRB meetings / Ad hoc Reports / Weekly Calls / Contribution to SDRCs & 6 monthly Reports / general dissemination	5%	
4	Stakeholder Group	Strategic development / Complementary target setting / Research oversight	7%	
5	QPR reporting	Formulation of Quarterly Reports including Learning Log and Outcomes Chain	4%	
6	Final Reporting/dissemination	Post Active Engagement period activities / Final SDRC	5%	42%
GENERATED LEARNING		Costs directly attributable to generating tailored learning outcomes designed to inform BAU activities - these costs are seen as constituting a one-off, non recurring investment to secure research outcomes which might subsequently underpin a BAU community engagement programme	0%	
1	Substation data analysis	including baseline and test-related analysis / exploration of quantitative v qualitative learning options and capacity to input to Network Modelling	0%	
2	Baseline Response/Surveys	Initial usage profiling and awareness questionnaires / face to face and online / formal TP1 messenger impact testing	4%	
4	Direct Asks & Feedback	Design and delivery of formal TP1 (cut) and TP2 (shift) interventions / door to door feedback	3%	
5	Messaging Focus Groups	Post TP1 informal feedback sessions / Inter TP2 and TP3 set piece intervention sessions / including design of materials and freebies costs	5%	
6	Convergence Focus Groups	TP3 set piece intervention sessions / including design of materials and freebies costs	2%	
7	Lightbulb Community Sign Up	TP3 design and delivery including materials	2%	
8	Big Switch Off	Design and delivery of TP3 Community wide sign up to BSO	3%	
9	PSR take up	Liaison with SSEN SECV team and local operational teams / baseline awareness surveys / Locally branded promotion	3%	24%
BAU STARTER PROTOTYPE		Elements of research cost which might be expected to be incurred in delivering a subsequent BAU engagement programme building upon learning generated through the research trial - this constitutes a baseline for further refinement / reduction in subsequent rollout cost calculations around BAU cost/benefit	1%	
1	Host Recruitment/ Management	NEL apportioned costs	0%	
2	Local Stakeholder Engagement	Routine local activity with wide range of organisations	4%	
3	Mapping / gapping	Trial area profiling / Pre Active Engagement phase and during TP1	3%	
4	Community Engagement	Pre TP1 activity / Activity during Active Engagement phase in support of promotion and development of local DDS	6%	
5	Website / Comms	Initial specification and ongoing maintenance / 3rd party Development Work	4%	
6	Co-design / Dedicated Strategy	Focussed co-design/development group work during Active Engagement period	1%	
7	Feeder Reconciliation	NEL apportioned costs	7%	
8	Lightbulb' Promotion	Generic promotion and awareness raising over and above formal interventions	1%	
9	Legacy & Sustainability	Supporting post project outcomes for each trial area over and above dedicated Focus Group sessions / including work with local BAU teams	1%	34%

12 MAKING THE EMOTIONAL CONNECTIONS

As it has evolved over the trial's 2 year active engagement period, the essence of the coaching approach has become characterised as - *'making emotional connections'* - among and between organisations and individuals and with particular environmental and ethical issues.

An indication of some of the potential benefits is set out in Figure A18 below.

Figure A18: **MAKING THE EMOTIONAL CONNECTIONS**

Connections between:	Potential benefits
Stakeholder Agencies	• A counter to single issue/organisation approaches • Combined cost efficiencies through 'stacking' of benefits • Common purpose underpinning multi-agency work • Multi-utility solutions • Co-design approach ensuring local 'buy in' • Aligning public and private sector investment in communities
Stakeholders and community organisations	• Integrating 'top down' and 'bottom up' agendas • Co-design of more cost effective solutions • Local intermediary organisations delivering more durable solutions • Enhanced agency reputation • Investment focused on shared priorities • Development of trusted relationships to aid delivery of local solutions
Local organisations active in the community	• Common 'community-centric' vision • Shared resourcing / networking • Opportunity to identify 'gaps' for shared local action to take place • Shared sense of community • Catalyst for change
Local organisations and 'hard to reach' groups	• Coordinated support for the most vulnerable • Inclusive services • Increased formal volunteer engagement • Ability to bring in/tie in external support as required
Residents	• Social media support networks • Friendship groups • Informal care networks • Informal volunteering • Enhanced skills and confidence
Connections with:	
Environmental concerns	• Raising awareness and a willingness to engage • Establishing ethical behaviours • Generating Active caring support • Distinctive community image
Ethical issues	• Providing opportunities to open/widen debate at a local level • Addressing the issue of 'what we do' versus 'what we say we are going to do' • Distinctive community branding

Main Report Reference: **SECTION 4.3**

13 ROLLOUT OF CONNECTED COMMUNITIES PROGRAMME

13.1 Building on the Prototype

With a view to scaling up the CEC trial research to a viable BAU programme, the Learning Outcomes from the Coaching trial offer a lot to build on, notably:

- The value of the 'Connected Community' concept as a compelling driver for collective behaviour embracing both physical and emotional connections;
- Clear buy-in at the community level to peak demand reduction based on increased levels of energy literacy and the associated 'earning the right' principle of co-design;
- Demonstrable reductions in peak electricity demand as an incentive for a DNO to take the lead in focused community engagement – with an associated need to review lower cost peak monitoring options;
- The generation of 'stackable' social impacts to underpin more cost-effective multi-agency collaboration – with an associated need for clearer quantification of benefits;
- The potential for sustained transformation of communities with demand reduction (and other positive impacts) embedded in locally branded change strategies;
- An engagement protocol which can underpin the co-creation of trusted local intermediary organisations able to support and embed change.

The CEC trial has effectively served to create a prototype for non-traditional, DNO led engagement blending the change agendas of the DNO, other stakeholder agencies and the community itself. Building on the prototypes created, the delivery team has identified an opportunity for further proof of concept work to develop a replicable, multi-agency 'Connected Communities' Coaching Programme – effectively the CEC trial 'in a box'. This would build more widely on the learning established through the research trial and the positive knowledge, insights and understanding regarding peak demand reduction and added social value as achieved through the collaborative process.

As a key next step, the team has designed a Beta rollout stage to test whether a scaled programme can be delivered within a strict enough budget to ensure a cost-effective return on investment for all stakeholders. A Stepped Guide setting out how the DNO might go about this along with stakeholder partners is included in this Appendix at para 13.3.

13.2 Connected Community

A 'connected community' as it has evolved through the research trial can be described as:

> *'a community where the DNO, other utilities, key public, housing and environmental agencies are working together with local residents in a targeted way to build a community which cares … about the environment, about each other, about how we use our energy resources, about avoiding waste … and ultimately about the legacy we are leaving our children'.*

Looking back over the experience of the research trial, Community Energy Coaching has demonstrated positive change in both peak demand reduction and related social impacts. However, the trial outcomes for just 2 research communities may not be readily or predictably transferrable to other specific communities in an operational setting. So, on one hand, the results must necessarily

be treated as indicative rather than conclusive. On the other, given the strength of the Learning Outcomes, the enthusiasm of participants and legacy commitments already established, there is room for optimism that further exploration through a Beta rollout building on the prototype established through the trial, could serve to generate a viable, albeit very streamlined 'business as usual' (BAU) programme.

Such a programme would be designed to offer:

- For the DNO – greater energy literacy across a community; a programmatic response to the challenge of peak demand reduction; alignment with social obligations in the care and support of vulnerable customers; more resilient communities better able to respond effectively to adverse climate and network events;

- For other stakeholder agencies – a multi-agency approach to community engagement with the DNO as the leadership catalyst; specific cost-effective outcomes accruing to individual agencies as part of an integrated programme delivering stackable benefits; enhanced organisational reputation linked to increasing trust relationships with local leadership groups;

- For a community – a branded programme with established creative material to underpin a process of managed behaviour change; resource support to local individuals and organisations to facilitate coordination and cohesion in improving community well-being; an opportunity for distinctive re-branding in creating the conditions for long-term, sustainability.

13.3 Stepped Guide

In the event that a DNO wishes to develop the research trial prototype further, the following stepped Guide sets out how the DNO might go about this along with stakeholder partners. It has been put together to address the key considerations in scaling up to a Beta rollout and beyond. Assumptions as to scale and focus have necessarily been made as indicated at each of the 5 steps.

Crucially, a Beta rollout would serve to test whether a scaled programme can be delivered within a strict enough budget to ensure a cost-effective return on investment for all stakeholders.

The Guide builds directly upon the Learning Outcomes identified through the trial research.

13.4 STEP 1: Which areas and how many?

For the purposes of this Guide, a notional multiplier of +5 has been applied in progressive scaling from the 2 prototype sites to a nominal 10 Beta sites and then to a nominal 50 BAU sites.

Looking at the full BAU programme, choice of sites could be driven feasibly by:

- the DNO focusing on communities where the electricity network is currently under stress or through expected demand shifts is forecast to be so;

- multi-agency consensus taking into account relative socio/economic disadvantage using Vulnerability Mapping and related indicators, presumably with an implicit focus on 'below the radar' communities;

- a combination of both, with the option also of self-selection as part of an open application programme, presumably with an implicit focus on 'resilient' communities.

For the more immediate next stage Beta rollout, it would make sense to include both 'below the radar' and 'resilient' types of community as part of the further testing / validation process. For both types of area, the process would accordingly look further at relative predictability and measurable cost-effectiveness in achieving positive peak demand reduction and related social impacts.

The choice of sites will have a bearing on resource implications, not least in response to the need for more intensive cohesion work in 'below the radar' communities.

13.5 STEP 2: What are the likely delivery costs?

It is assumed that the programme at both Beta and BAU stages would provide for 2 year coaching support in each community. Reflecting the experience of the research trial, the first year is envisaged as a 'Foundation Year' establishing a trusted intermediary organisation and clarifying current norms against a series of key indicators. The second year would accordingly be a 'Challenge Year' seeking through the intermediary organisation to create new norms.

The unit cost for each rollout site is calculated at £50k and £25k respectively for Beta and BAU rollout stages as detailed in Figure A19 below. This is set against the equivalent unit cost per prototype site of £100k (Main Report, para 4.2.4) giving an effective budget multiplier of -0.5 through the successive stages.

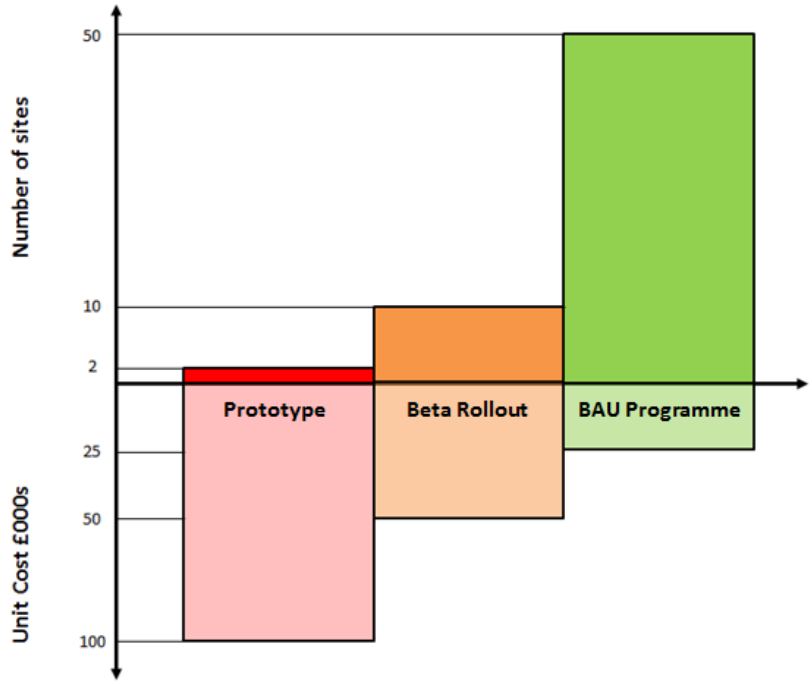
Figure A19: **CONNECTED COMMUNITIES – PROVISIONAL ROLLOUT COSTS**

10 BETA SITES		**£000s**
Per site over 2 years	• Community Grant	10
	• 2 FTE Coaches overall / time allocated pro rata per site	14
	• Materials / Local Promotion	10
	• Substation peak alarm monitoring	8
	• Overheads / recharges	8
	TOTAL: 2 year costs / site	**50**
50 BAU SITES		
Per site over 2 years	• Community Grant	10
	• 4.5 FTE Coaches overall / time allocated pro rata per site	6
	• Materials / Local Promotion	5
	• Overheads / recharges	4
	TOTAL: 2 year costs / site	**25**

On this basis, the allocation of Coach time reduces progressively from 1 FTE for 2 Sites at Prototype stage to 2 FTE for 10 sites at Beta rollout stage to 4.5 FTE for 50 sites at BAU Programme stage.

Alongside the site multiplier of +5, this progressive scaling is summarised in Figure A20 below in terms of site numbers and unit costs combined.

Figure A20: **CONNECTED COMMUNITIES: PROGRESSIVE SCALING**



This progression presents a 'starter for 10' ahead of any further formal work to develop the programme in more detail.

13.6 STEP 3: What would the targeted outcomes be?

The definition of a 'Connected Community' for the purposes of the rollout programme is assumed to be along the lines of the standardised aims as set out in Figure A21 below. This sample group of indicators is by no means fixed, but it does reflect the range of positive impacts attributable to the work of the CEC trial over the past 2 years. It also embraces the interests of other potential stakeholders working alongside the DNO, building upon the multi-agency approach piloted through the trial.

Reflecting the value of the co-design experience, it is also assumed that initial engagement with each community would serve to generate a number of individualised priorities to be incorporated in a customised local change strategy.

Figure A21 also gives an indication of the positive quantifiable outcomes that might be sought in any community as part of the programme.

This sample group of indicators provides a basis of assumption for calculating the 'stacked benefits' which could accrue collectively through the Connected Communities Coaching Programme. Final decisions on the implied description of a 'connected community' would accordingly take into account the declared priorities of all stakeholders involved. As such a wider range of economic and/or health related indicators could also be envisaged. In any event, it would be important that the 'Challenge Year' targets are aspirational yet realistic.

Figure A21: **PROGRAMMATIC DEFINITION OF 'CONNECTED COMMUNITIES'**		
A Connected Community aims to:	'Foundation Year' sample norm	'Challenge Year' sample target options / 1000 h/h
Standardised		
1. Promote PSR awareness	• 10% awareness level • 10% of forecast eligibility (Cats 1 & 2) signed up (tba)	• 50% awareness level and/or • 50% of forecast eligibility (Cats 1 & 2) signed up (tba)
2. Volunteer more	• 25% formally volunteer once / month+ • Regular volunteers average 10hrs / month	• 33% h/h formally volunteer once / month
3. Encourage use of Carbon Monoxide (CO) alarms	• 50% of h/h with alarm installed	• 80% of h/h with alarm installed
4. Walk not drive to school	• 50% Primary School children travel by car • As per survey level	• 25% Primary School children travel by car and/or • Uplift in walking rate per travel plan
5. Use less water	• 150litres / person / day • 350 litres / h/h / day	• 50% of h/h reduced to 280 litres / day • Equivalent 10% h/h reduction overall
6. Reduce peak electricity usage	• X% of daily usage between 4-8pm • Measured % at or above agreed % capacity	• Reduced % of daily usage between 4-8pm • 50% reduction in measured % at or above agreed % capacity
Individualised		
A modest number of additional aims to be agreed locally		

13.7 STEP 4: Who would fund the rollout?

It is assumed that any further rollout of a Connected Communities Coaching Programme would be undertaken on a multi-agency basis building upon the collaborative, co-design engagement approach piloted through the CEC trial and the emerging Community Engagement Protocol.

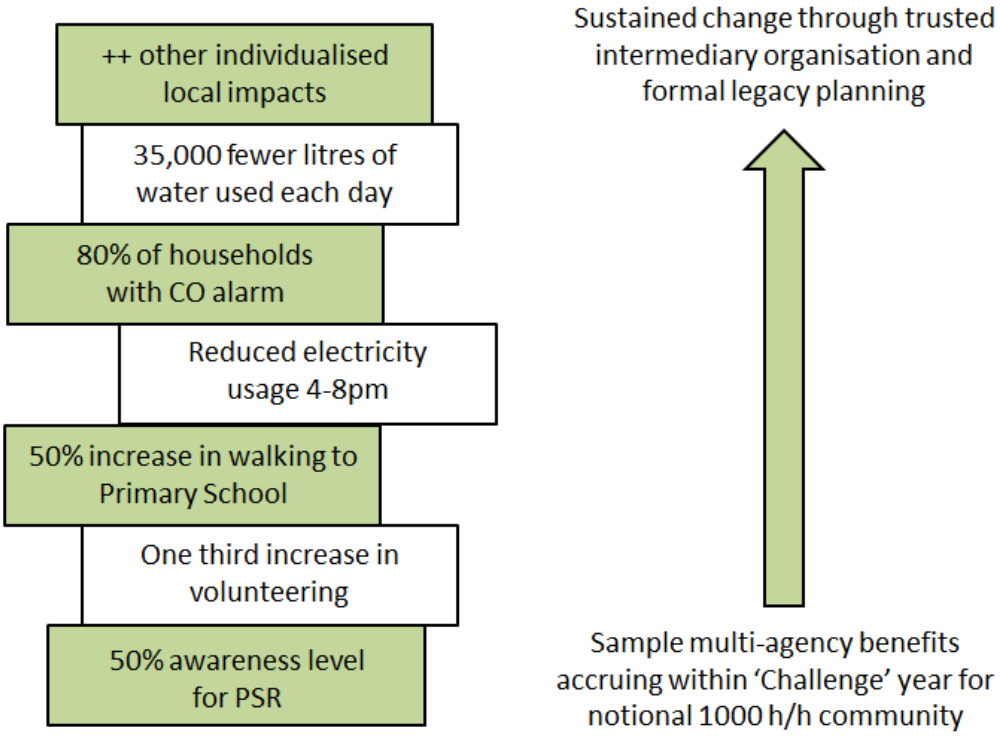
Stackability of benefits will be key to long-term cost effectiveness of the Programme, the idea being that, through collaborative funding each agency can derive greater benefit than it could by working alone. Indeed, not all agencies would necessarily be able to prioritise resource allocation to community engagement other than on such a multi-agency funding basis.

Based on the sample 'Challenge year' targets options (set out in Figure A21) the diagram below in Figure A22 gives an indication of the collective benefits which could accrue to stakeholder agencies involved.

Based on assumptions about site numbers and unit costs, the provisional rollout budget estimates are (i) 500K for the Beta stage (10 x £50k) and (ii) 1.25m for the BAU Programme stage (50 x £25k).

As part of any further work to develop the programme in more detail, it is assumed that other resource opportunities would be explored in order to secure this funding, especially for the next stage Beta rollout.

Figure A22: **'STACKABLE' PROGRAMME BENEFITS**



13.8 STEP 5: How would success be measured?

Success at the Beta rollout stage would usefully be assessed against 3 types of measure:

- Cost-effectiveness – looking, for example, at the ratio of 'Equivalent Total Value' (ETV) as derived by 'stacking' benefits together and relating collective impact to likely operational cost. This would allow stakeholders, prior to making any commitment, to review whether the predicted ratio between unit cost per site and 'stacked' value overall could be deemed value for money from an individual and/or multi-agency perspective. As recommended in this report, if there is an opportunity for further research to look at a more granular 'Equivalent Unit Value' (EUV) assessments, then the ratio of cost to value could be calculated for each individual social impact. Whichever value base is used, any progression from Beta to BAU rollout would accordingly be subject to validation of the value for money potential against actual performance in delivering social impact targets per rollout site through the Beta stage;

- Peak Reduction – looking, for example, for a different, low cost monitoring solution as recommended in this report (Main Report, Section 4.4, Learning Outcome 4). Given that the key issue in an operational setting is the frequency with which a capacity ceiling on a substation transformer is breached, it is suggested that as part of any Beta rollout, equipment be installed which can issue an alert whenever demand exceeds a set proportion of operational capacity. Measuring achievement in reducing peak demand might then be a matter more simply of recording in-house the number of 'breach' events against a set percentage of transformer capacity. In the event that the demand reduction potential of a

streamlined trial programme can be validated at the Beta stage, for the fuller BAU rollout peak demand monitoring might be seen as unnecessary other than on a sample basis;

- Threshold indicators – looking specifically at more qualitative success factors building upon the experience of the CEC trial, critically (i) the creation of a trusted intermediary organisation as the catalyst for local change during the 2 year engagement period and beyond and (ii) formal Legacy Planning for sustaining positive change beyond the 2 year engagement period.

In addition to these 3 success measures, consideration might also be given in due course to establishing a network of 'connected communities'. Such a network could facilitate the sharing of good practice in delivering peak reduction and contingent social impacts with, potentially, some form of awards programme to recognise specific achievement.

Main Report Reference: **SECTION 4.4**

NEL / June 2018