

Supplementary Answer Form

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Project code:	NGT203	Question Number	20
Question date	3 October 2013	Answer date	11 October 2013
Submission section question relates to	Expert panel bilateral		
Topic	Learning		
Question	<p>Can you describe the added learning from the customer engagement in this project when compared to:</p> <p>(a) other LCN Fund projects' learning on customer engagement?</p> <p>(b) other existing knowledge on the impact of community approaches to energy use?</p>		
Notes on question			
Answer	<p>a) ACE will add to learning on customer engagement from other LCN Fund projects in three ways:</p> <ul style="list-style-type: none"> • ACE will trial new methods of customer and community engagement. ACE will draw on new learning from psychology and the social sciences more widely. It will be the first LCN Fund project to test the use of children as messengers and to engage with public sector I&C customers using public commitments and comparisons. ACE will also be the first large-scale trial in GB to test the use of games for DSR. LCN Fund trials to date have focused on engagement through information, education and tariffs. • ACE is aimed at a representative domestic customer base, and tested in an area representative of 86% of the population. In comparison, LCN Fund trials that have focused on non tariff-based DSR have covered limited customer groups (e.g. Ashton Hayes Smart Village and Smart Hooky are focused on affluent and environmentally motivated rural communities). • ACE will be the first LCN Fund trial to tap specifically into the potential public sector DSR resource. The LCN Fund trials that 		

focus on I&C customers (CLNR and New Thames Valley Vision trials) are focused on private sector I&C customers.

b) ACE builds on existing knowledge of community approaches, through designing the interventions to address gaps in the current literature and through building on best practice evidence and techniques. ACE incorporates this knowledge through three different avenues:

- ACE interventions extend previous learning from GB interventions on community-based approaches to energy network needs by aiming to fill some important gaps in current knowledge.
 - Trials of community-based approaches in the UK have generally focused on energy efficiency. ACE develops the use of community based trials to focus on DSR and modification of the shape of the load profile.
 - Trials of community-based approaches in the UK have generally not been structured to produce statistically robust and representative results. ACE will produce results that can be used in network planning and design, and draws from international interventions which have not yet been trialled in the UK.
 - These trials have not produced outputs that allow DNOs to quantify the potential of different techniques. However ACE will be quantitative as well as qualitative and will produce a tool that allows a DNO to assess the DSR potential in a specific geographic area.
- ACE trial design builds on best practice techniques for gaining customer response in the energy sector.
 - Feedback on behaviour and social norm information have been found to reduce energy consumption (Allcott 2011; BIT 2012; Costa and Kahn 2010; Dolan and Metcalfe 2011, 2013; Pescheira *et al.* 2010). ACE trials build on this evidence through providing feedback and social norm information through previously unexplored avenues. Feedback information and information on what actions to take to change behaviour will be provided in the schools trial through the teaching and information materials provided, and in the wider community trial, through the Gen Game league tables. Previous interventions have generally not provided social norm and feedback information in a school setting, or in an interactive online forum.
 - Using competitions and providing information through games have been shown to play an important role in encouraging behavioural change. However, these largely have not been applied in a robust setting in the UK (Geelen *et al.* 2010; Gnauk *et al.* 2010; Gustafsson and Bang 2008; Froehlich *et al.* 2009; Leonard 2010; Petkov *et al.* 2011; Reeves and Armel 2010; Shiraishi *et al.* 2009; The Gen Game 2012). ACE builds on this evidence of games to elicit behavioural change, through incorporating a competitive element in each trial: the schools trial incorporates competitions between classes and schools and the local authority I&C trial will incorporate league tables. On top of

this, the wider community trial facilitates competitions between households and communities, significantly building on the evidence that games are useful for encouraging DSR and developing this in an applied GB context with clear potential for DNOs.

- Community groups and public commitments have been demonstrated to foster a sense of team involvement, to increase incentives to act differently and to encourage co-operation through community rewards (British Gas Green Streets; Pallak *et al.* 1980). ACE builds on this evidence of team-playing and social commitments through including public commitments in the competitions of each trial - households, and public sector I&C will be ranked in the league tables. Although community groups have been used in a number of interventions in the UK, ACE builds on this evidence further through designing the trials to provide robust and widely applicable results across community and I&C customer groups.
- Trials have demonstrated that parents learn from their children, and that children can act as messengers to provoke behaviour change in households (Damerell *et al.* 2013; Heijne 2003; Leeming *et al.* 2009; Legault and Pelletier 2000; Uzzell *et al.* 1994; Vaughan *et al.* 2003). Previous trials have focused on children as messengers for energy efficiency and environmental needs. ACE extends the importance of children influencing household behaviour, through inviting children to act as messengers for DSR in the schools trial – a behavioural outcome which has not been previously explored.
- ACE trials build further on evidence through incorporating best practice learning on customer engagement and response, to ensure long-term sustained participation and quantifiable impact of community engagement interventions:
 - Evidence on the schools trial outlines the importance of a number of key elements for engagement which ACE incorporates:
 - use of participative and interactive approaches;
 - use of humour, fun and playing;
 - balancing the need to make teaching resources available, while leaving teachers enough autonomy to adapt to their own style; and
 - involving teaching staff to develop the message, to ensure the teaching materials include an appropriate level of complexity (Damerell *et al.* 2013; DG Education and Culture 2008; Heijne 2003; Leeming *et al.* 2009; Legault and Pelletier 2000; Uzzell *et al.* 1994; Vaughan *et al.* 2003).
 - Evidence on community engagement techniques has informed the design of the wider community trial to ensure participants understand why their actions are important and what it is they can do to impact on DSR and participate in the trial, in particular:

	<ul style="list-style-type: none"> ▪ Providing team atmosphere and sense of “community spirit”; ▪ allowing players to have a unique identity within the game; ▪ including interactive elements with feedback on behaviour; ▪ providing the ability to engage with the game on a simple or more complex level depending on participant preference; and ▪ ensuring that game interface and feedback site are simple with semi-automatic capabilities for easy engagement (EcoTeams; Geelen <i>et al.</i> 2010; Gnauk <i>et al.</i> 2010; Green Streets, Gustafsson and Bang 2008; Froehlich <i>et al.</i> 2009; Leonard 2010; Petkov <i>et al.</i> 2011; PlugIn; Reeves and Armel 2010; Shiraishi <i>et al.</i> 2009; The Gen Game 2012; Transition Streets Totnes). <ul style="list-style-type: none"> ○ There is little evidence on I&C public sector engagement. ACE extends the learnings on how use of community engagement techniques can impact on DSR, to local authority I&C customers focusing on the importance of: <ul style="list-style-type: none"> ▪ role of public accreditation for company-wide motivation; ▪ role of public commitments through social and environmental responsibilities policies; and ▪ centralised management of schemes for cohesive rollout (Crossley 2010; Scottish Government Social Research 2011; DG Transport and Energy 2013).
Attachments	
Verbal Clarifications (Consultants)	