

Proposal 13: Working in partnership between the LG Group, Government, councils, energy suppliers and the national grid, the local government sector can facilitate the effective roll out of smart grids, electric vehicles and smart metering.

The Deal

If Government requires energy suppliers and the distribution network to work with local authorities, then councils will be able to facilitate the roll out of smart networks and meters, engaging help from local community champions to improve their acceptability and take-up. If Government provide national incentives for purchasing and using electric vehicles, then local government can introduce appropriate local incentives, such as free or differential parking rates, to further encourage their uptake. The LG Group can help by liaising with Ofgem over the roll out of smart meters and grids, bringing in leading councils, and can share innovative ideas and good practice on electric vehicles.

Scope

The LG Group proposes that local government has a significant role to play in the improving the distribution of the UK's energy supply and facilitating the transition to low carbon energy supply. This role is particularly centred on the development of smart grids, the take up and infrastructure for electric vehicles, and the roll out of smart metering.

The improvement of the current national grid to 'smart grids' is needed to support the roll out renewable energy in the UK, and to reduce the carbon intensity of the UK's energy supply by reducing the peaks and troughs in current electricity generation. Smart gridsⁱ allow energy to be distributed from central sources and received from dispersed energy generators. This is important to realise ambitions around the take up of renewable energy and the ability of householders and businesses in the UK to benefit from the FiT. Ofgem currently has a fund for organisations who want to implement smart grids, the 'Smart Grid Demonstration Fund'ⁱⁱ. The LG Group proposes that Ofgem should work more closely with the LG Group on how to ensure the roll out of smart grids can compliment local carbon reduction and renewable delivery plans, and to ensure that rural and previously disadvantaged populations who are off grid have a priority.

Linked to smart grids is the roll out of electric vehicles. Such vehicles will require electricity charging points, and these are already being integrated into local planning policy and are being delivered in some urban centres across the country. However, the policy on electric vehicles cannot be undertaken in a silo from the roll out of smart grids or smart meters, and the strategic overview of local councils can join these initiatives up.

Government recognised in their response to the Smart Metering consultation, that, "strong positive engagement among local communities will be particularly powerful in generating the necessary awareness, enthusiasm and take up"ⁱⁱⁱ.

Local councils are looked to, by their residents, to provide essential information, and this has included similar programmes to metering, such as fire alarms and carbon monoxide alarms. The roll out of smart metering will require the provision of information to residents, and reassurance that the programme is in their interests and will help them manage their homes better. Local government is an impartial and trusted source of information.

A key part of the rationale for the roll out of smart metering was enabling people to better manage their fuel bills, and reduce their overall fuel costs. This can only be achieved by giving people tools to change their behaviour, as well as access to the information smart metering can provide. This information should be available across the board, and not inhibited by language or cultural barriers, or by the vulnerability of the householder. Councils have access to local community champions who can promote the roll out of smart metering. Social services will also need to be involved to ensure their clients are protected and able to make use of the smart metering technology.

The LG Group has been working with Ofgem about the role of councils in the roll out of smart metering, and this should be built on through this agreement. Because of the behavioural change opportunities smart metering and in-home displays offer, local involvement is key to joining up smart metering with other local initiatives and plans for carbon reduction.

The value of this approach

Reducing national carbon emissions is not just about the installation of renewables, but the infrastructure to support it. This roll out of this infrastructure is likely to be disruptive. Local government can reduce this, and help roll out such infrastructure in a strategic, joined-up and coordinated manner.

This infrastructure is also needed more in rural areas of the UK, who have so far not benefitted proportionally from technological advances. Rural areas are more likely to benefit from renewable electricity and heating technologies, and as such should be considered more prominently in rolling out smart grids and smart metering.

As mentioned previously, community buy-in for new technologies is essential if they are to be successful. Electric vehicles need to be regarded as 'normal', and their charging and use needs to be easy and incentivised. Public electric vehicle charging points need to be installed, new building developments need to include electric vehicle charging points, and the public sector needs to show leadership by adopting these technologies.

Also, positive choices in the daily lives of people are essential for reducing the nation's carbon emissions. Smart meters, whilst offering savings to energy companies in enabling accurate billing, should allow people themselves to save energy and money, by identifying where they are wasting energy unnecessarily, and by using their energy intensive household appliances at low cost times. This means people need to understand how to use the smart

meters and accompanying displays and information tools – all people. The roll out of smart metering is not just about putting a piece of equipment on the wall, but telling the householder how to use it. There may be barriers to this, language, cultural, lifestyle, etc – so local community champions are a positive way to help people embrace this new technology. Councils are a good intermediary between national energy suppliers and local community champions who can help people accept and use this new technology.

Lessons learned

The UK's "Digital Switchover"^{iv} has adopted an area-based approach to roll out, to get people on board and coordinate work with local charities and community champions, particularly to help more vulnerable groups. The Digital Switchover has identified a role for councils^v in facilitating the switch over and has also produced resources to help councils understand how it may affect their services. They have produced templates for councils, articles for local papers and magazines, videos, communications, support, etc. In particular, they recognise the need for locally specific advice, and that councils are a key point of contact for local information for many people. Hampshire County Council has employed a member of staff to help the smooth transition to the Digital Switchover, including helping identify rogue traders. In West Devon, they are combining information on the Digital Switchover with other information on local services, spreading information more and reducing costs by joining services.

For more information see the LGA's submissions on Smart Metering:

<http://www.lga.gov.uk/lga/core/page.do?pagelid=4991255>

What the sector is doing already

Westminster City Council allow 'zero-carbon' cars to park for free, after a one-off administration charge, and allow car owners to charge their vehicles at the council's electric vehicle charging points for free^{vi}. The council currently has charging points in eight of its car parks. Other councils putting in free electric vehicle charging points in car parks include **Cambridge City Council**^{vii}, **Haringey**, **Brighton and Hove**, **Coventry** and **Gateshead**.

Councils including **Lewisham**, **Sheffield City Council**^{viii} and **Exeter City Council**, are loaning out stand-alone in-home display units to help their residents learn more about their energy consumption and prepare for the roll out of smart metering.

Councils have also been involved in the smart metering trials. E.ON partnered with **Kettering Borough Council** through the 'E.ON Kettering Smart Energy Saver trial'^{ix}. The trial enabled almost 80% of participating homes to reduce their energy consumption, with an average financial saving of around £109 off the average annual gas and electricity bill. The joint venture between the E.ON and Kettering Borough Council involved the installation of dual fuel smart meters in nearly 500 homes, with an in-home monitor or online computer software. The trial participants were given an incentive to participate by Kettering Borough Council offering residents an

energy saving reward of up to £100 for reducing their energy consumption by 10% or more; with those reducing consumption by between 5% and 10% receiving a £50 reward. The reward will be paid to participants as a discount on their 2010/2011 council tax bill.

What the sector needs

Local Government needs to have its role on smart metering set out, similar to the Digital Switchover, so it can respond effectively. The sector also needs to know how energy suppliers intend to work with them.

Councils will need information and guidance on the roll out, the benefits to their local community and how they can play an active role. There will need financial support for getting community groups and champions involved.

If electric vehicles are seen as a vital way to improve the nation's electricity grid and reduce emissions through more efficient use of power stations, incentives need to be developed to encourage the public sector to invest in electric vehicles.

Local government needs more information on the smart grids programme, how they can participate and facilitate its roll out, and the benefits to their local communities.

What the Local Government Group can offer

The LG Group can offer information and support to councils on smart metering and smart grids, liaising with the large energy companies about local government involvement and contribution. The LG Group can also work with Ofgem in designing protocols and frameworks to work with the local government sector on smart metering and smart grids.

The LG Group can offer shared learning between councils on smart metering, smart grids, and electric vehicles.

Costs and Efficiencies

Reduce the cost of the smart metering roll out and the smart grid roll out.
Increase the rate of uptake of electric vehicles

Contribution to meeting 80% CO2 reduction target

Lowering the carbon intensity of the grid
Evening out the peaks and troughs in electricity supply
Making full advantage of renewables – large and small scale
Making links to behavioural change.

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- ⁱ For more information on smart grids go to http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/network/smart_grid/smart_grid.aspx (last accessed Sept 2010)
- ⁱⁱ For more information on the Ofgem Smart Grid Demonstration Fund go to http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/network/smart_grid/smart_grid.aspx (last accessed Sept 2010)
- ⁱⁱⁱ Quote on smart metering taken from "Towards a smarter future: government response to the consultation on electricity and gas smart metering Dec 2009" - http://www.decc.gov.uk/assets/decc/Consultations/Smart%20Metering%20for%20Electricity%20and%20Gas/1_20091202094543_e_@@_ResponseElectricityGasConsultation.pdf (last accessed Sept 2010)
- ^{iv} For more information on the Digital Switchover go to <http://www.digitaluk.co.uk/> (last accessed Sept 2010)
- ^v For more information on the Digital Switchover and councils go to <http://www.digitaluk.co.uk/localgov> (last accessed Sept 2010)
- ^{vi} For more information on Westminster's electric vehicle policy go to <http://www.westminster.gov.uk/services/transportandstreets/parking/masterpark/electric/> (last accessed Sept 2010)
- ^{vii} For more information on free council electric vehicle charging points go to <http://www.cambridge-news.co.uk/Home/Electric-vehicle-charging-points-set-for-green-light.htm>; http://www.haringey.gov.uk/index/environment_and_transport/travel/greentravel/electric_vehicle_charging_point_scheme.htm; <http://www.brighton-hove.gov.uk/index.cfm?request=c1217855>; <http://birminghamnewsroom.com/?p=11296>; <http://www.businesselectricityprices.org.uk/solar-powered-electric-charging-point/>, (last accessed Sept 2010)
- ^{viii} For more information on council energy display loan schemes see <http://www.sheffield.gov.uk/in-your-area/housing-services/environmental-sustainability/smart-meter-loans>; <http://www.exeter.gov.uk/index.aspx?articleid=10545> and <http://www.lewisham.gov.uk/Lewisham/Templates/General-3Column.aspx?NRMODE=Published&NRORIGINALURL=%2FEnvironment%2FCleanerGreenerLewisham%2FSustainableEnergy%2FEnergyAtHome%2FSmartMeterLoans.htm&NRNODEGUID=%7BC95B4C1D-996F-4222-B9E3-A3D1AA4C3F63%7D&NRCACHEHINT=Guest>
- ^{ix} For more information on the E.ON Kettering Smart Energy Saver Trial go to <http://pressreleases.eon-uk.com/blogs/eonukpressreleases/archive/2010/03/09/1501.aspx> (last accessed Sept 2010)