



A clear market roadmap is needed – The timing of market reform in this area and the provision of demand flexibility in the market for domestic customers' needs to be mapped out so that manufacturers and the standards bodies can move forward. DECC need to take immediate action to start pinning down a timeline for this activity.

Communicating the full range of benefits from smart metering -

Smart Energy GB are tasked with developing a clear communications strategy for GB rollout. This includes articulating the additional functionality and benefits smart meters would enable. An effective communication strategy needs advance planning and it is vital that we co-ordinate the timely delivery of information to consumers on connected homes, include CAD pairing. This puts pressure on resolving the CAD pairing arrangements as well as developing a clear incentive for demand flexibility for domestic customers. This communication strategy should be delivered once a critical volume of meters have been installed.

Ensure interoperable connected homes and protect innovation in the Consumer HAN

- BEAMA supports the need to ensure open standards in the C HAN as a means to achieving interoperability and to guarantee we do not lock consumers into one technology. BEAMA members acknowledge that very few consumers purchase devices and appliances from the same manufacturer and therefore, in maintaining open standards we will ensure the interoperability and inter-changeability of devices in the home. We consequently do not need to mandate the communication infrastructure in the C HAN, if we did attempt to mandate at this stage it would be very damaging to the market⁴. Attention needs to be paid to a number of European activities, including the Eco Design preparatory study on smart appliances and the Energy Performance in Buildings Directive. Both will determine the long term future of this market. BEAMA support the drive to ensure the EPBD can provide a role in incentivising system design in buildings.

Optimise heat and hot water system design for energy efficiency and demand flexibility

- Significant potential lies in heating and hot water technologies to enable demand side response and the optimal use of distributed generation. It is vital building regulations and incentives do not result in the phase out of energy storage in buildings. Heating and hot water currently represents 80% of thermal energy use across EU residential buildings. BEAMA have recently called for a clear strategy from the European Commission for heating and cooling to drive national regulation and policy in this area, as we do not see this being effectively supported in the UK⁵. This included a call for a commitment to promote demand response tariff options across the EU by 2025, and a minimum water storage requirement providing up to 50ltrs in all new heat installations in single unit EU residential homes by 2025. Today 52% of homes have a hot water tank in the UK, due to the replacement of system boilers with combi boilers, this number is rapidly declining. Based on the decline in the last 4 years BEAMA have estimated a 1% annual decline in the number of hot water storage tanks in homes across the UK⁶, thus significantly reducing our capacity for DSR in the future.

⁴ The BEAMA Connected Homes Demonstration, Beyond Smart Metering - applications for connected homes, October 2015

⁵ Heating and Cooling – A pan European Strategy Linking Current Policies to Clear Objectives , BEAMA 2015 www.beama.org.uk

⁶ <https://www.gov.uk/government/statistics/united-kingdom-housing-energy-fact-file-2013>