POWER TO THE PEOPLE!

SMARTER METERING AND THE POWER TO CHOOSE

Introduction

Smart metering in the UK has reached a cross-roads. The Coalition Government is implementing a plans dictated by Ed Miliband, when he was Energy Minister, to impose smart metering on a national scale directed from the centre. The Labour Government rejected a proposal put forward by Sustainability First in 2006 for a market-led pilot, based on consumer choice.

In April 2012 the Energy Group of the Conservative Technology Forum began a review of the current situation and this note summarises our paper. We recommend changing to a market-led approach before the energy rationing plans, implicit in the Miliband approach have to be used. We need to address consumers' main concern: the cost of living while giving suppliers the incentive to invest and contribute to an export-led economic recovery.

We support the roll-out of smart meters and believe that a successful roll-out will bring positive benefits to consumers, suppliers and the Government but suggest policy is changed to deliver:

1. Clear and certain business cases for consumers and suppliers;
2. Market-led roll-out that targets those segments where the benefits are highest;
3. Contributes to our export-led recovery through jobs and new business.

The policy challenge is:

- to enable consumers to benefit from products and services that allow them to cut their bills by taking control of the energy they use for non critical tasks and when they use it.
- to deliver positive and meaningful choices for consumers rather than a threatening vision of energy austerity and centrally dictated rationing.
- to create an energy services market which creates jobs and the technology innovations that would make the UK a world leader in this sector.

Our objectives are to ensure value for consumers and for investors. This should happen whilst keeping the lights on, greening the energy sector and contributing to jobs and economic growth. The pre-conditions to success are: Consumer engagement; Investor engagement; Security and resilience.

Consumer engagement

The six key elements are:

1) Build confidence in the benefits to the consumer

2) Demonstrate and communicate the benefits received by early adopters or recipients of smart meters in terms that are meaningful financially and technically, as well as in meeting Green targets.

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3) Ensure that vulnerable and low income consumers benefit by working with target groups such as Charities, local authorities, health bodies and Housing Associations.

4) User control (including of choice) ;

5) Making devices easy to use;

6) Coherent Financial incentives (to both user and supplier)

We will not be able to create a viable market unless we begin with the interests of the customer.

1) Build confidence in the benefits through:

1. billing accuracy, fairness and cost;
2. security and control of the meter and data;
3. environmental health concerns about RF.

We need to :

- Separate meter costs from energy costs
- Mandate clear tariff structures
- Give Ofgem greater power to ensure that costs and benefits are transparent
- Test smart meters in the UK to international standards, with the results accepted globally (that will entail UK participation and leadership in the relevant standards bodies such as OSSSE)

2) Demonstrate and Communicate the benefits

- DECC to produce a communication strategy which is underway but late
- Communication strategy to involve consumer, civic and business (both small and large) groups
- Communication strategy to emphasise customer (as opposed to supplier) control as a benefit

3) Ensure that vulnerable and low income consumers benefit

- Pricing policies must demonstrably be the same for all consumers, no-one should be disadvantaged because of an impairment or low income
- DECC needs to engage with a range of community actors, including charities, health bodies, local authorities and Housing Associations to ensure that safeguards are in place and that proper education of consumers takes place.

4) User control, including of the information collected

- The information should belong to the consumer and be shared by explicit and informed consent with the supplier
- Consumer must be allowed to actively opt in to have attributable data shared with 3rd Parties or other members of the supply chain. They should not be coerced without choice.
- There should be routines to allow data to be shared up and down the supply chain ***anonymously*** and not traceable back to the individual
- The amount and frequency of data sharing should be by informed consent, with incentives for added frequency if this is desired by those in the supply chain.

5) Making devices easy to use

- Smart meter interfaces must be legible by all consumers and cater for the needs of different customers including those with impairments
- Smart meters should have interfaces that are accessible by application designers so that they can be managed remotely and by other devices under customer control (from mobile phones to “smart” heating systems or domestic appliances).
- Consumers must be able to use the interfaces to extract the energy consumption information that will enable them to become more empowered consumers.

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6) Coherent Financial incentives

- DECC should support the provision of time-limited subsidies for early adopters
- Low income consumers should t be offered long-term, affordable payback schemes to ensure they receive genuine cost-savings.

Investor engagement

1) Review the Communications Strategy in the light of the evolving and changing investment opportunities and priorities

- Improve policy co-ordination between Government Departments, (DECC, DCMS, DEFRA, DCLGe etc.) perhaps using the Cabinet Office PSN team or those organising regional PSNs via the LGA REIPs as brokers so that communications infrastructure and operations costs can be shared across applications.
- Improve information exchange between Ofgem and OfCom, at all levels, pending the creation of a merged Infrastructure Regulator, as in Germany.

2) Encouraging early investors:

- Encourage market-led roll-out programmes that target those most likely to reap the benefits, including easy to reach communities such as running business parks or social housing operations estates and their tenants .
- Provide practical information packs on how to use the data from smart meters and turn it into information

3) Dealing with churn

This is a disincentive for industry in that it is a brake on investment but customer choice and change of supplier should be one of the main benefits. Discounts linked to length of contract should be permitted but with routines for change of supplier which recognise the residual value of the smart meter to the new supplier. DDECC should be responsible for ensuring that these are fair to all parties.

Security and resilience

1) Standards

- Standards are key to the success of the programme and the UK Government should be active in supporting UK inputs to the relvant bodies, national and international.
- Standards cut across industries and must therefore be handled on a cross-Government departmental basis.

2) Data and communications

- The data and communications network must be recognised as a two way, customer- supplier and vice versa.
- Data and communications must be secured and access to the data strictly controlled to ensure consumer privacy.
- Subject to a positive business case and consumer protections in place, suppliers should be encouraged to make use of the data to offer dynamic tariffs to both commercial and household consumers.
- The issue of registering premises must be addressed in a cross-supplier (Gas and Electricity) manner.

3) Smart Grid

- The Smart Grid is so important that it needs a specific policy review, in conjunction with smart infrastructures such as building management systems.

4) Risk assessment

- Smart meters and the associated monitoring networks need to be seen, alongside the rest of the UK communications infrastructure as part of the UK critical national infrastructure.
- A full IT Security risk assessment should therefore be carried, covering all aspects of Smart Metering policy, if it has not been conducted already.
- Independent risk profiling and monitoring will be needed on an ongoing basis whether by DECC or by those acting on behalf of the CNI team.

5) Mitigating Approaches

- Meter installers should share common network infrastructures.
- Meters should support common Quality of Service protocols.

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6) Baseline Protection Recommendations

- Meters must continue to function in spite of an attack or outage on the data and communications network.
- CESG should be involved in designing tamper-proof standards for meters to avoid the risk of damage to networks resulting from serious abuse by customers, particularly given that what is secure now may well not be in 5 – 10 years).
- The plans for the use of encryption, including key management, to ensure secure communications across the Grid need further clarification and investigation.

Conclusion

We do not suggest any change to the commitment to the roll-out of smart meters. The route and elapsed time have, however, changed over time. The economic climate has changed and pressures on customer (business as well as consumer) budgets have increased sharply since Conservative policy was last published as part of the "Rebuilding Security" policy document. . The Coalition Agreement has also impacted the initiatives planned before the 2010 election. It is also important to remember that smart meters are not an end in themselves. Their value depends on policies for ubiquitous broadband, smart grid and smart infrastructure so that we can make effective use of the information they generate.

The full paper, of which this is a summary, presents a market-led approach which will lead to a full roll-out, ensuring that smart meters reach the population in a way that is most likely to have popular support. It copies tried and tested technology roll-outs that have brought positive changes to both consumers and enterprises over the past twenty years and answers the needs of investors for confidence in investing in this technology in the UK, as opposed to other parts of the world.

In 2004 a number of UK energy businesses wanted to work together as a consortium to establish global leadership in this field. This would have placed the UK at the centre of the emerging smart meter market and assisted our exports. That initiative was blocked by Ministers and the Regulator who wanted a "universal" solution that would cover all UK consumers. That solution, which remains the basis of current policy, gave no advantage to those who take a lead in giving smart meters to those of their customers who will get the most benefit (e.g. savings of 15% and more in energy consumption) and are most likely to be able to smooth their consumption (thus giving a return to distributors and generators). Therefore investment will not go ahead unless some-one else (Government or Consumer) pays. We believe that our policy redresses that balance and will give the market confidence to invest which in turn will give the consumer choice (of meters, tariffs, apps etc.) and help in propagating smart meter technology voluntarily.

The UK could still be at the centre of the production of smart meters, related apps and technology that could be exported to the EU and further afield, thus supporting the Government commitment to an export-led recovering which is manufacturing . The steady, market-led roll-out of smart meters will create longer term jobs for UK installers, including overseas, instead of risking the immigrant-encouraging employment bubble and bust that would accompany a mandated roll-out within a set timetable..

The CTF believes that this policy offers a more secure and economically sound methodology for turning the UK into the market leader for smart metering and looks forward to developing complementary policies for the Smart Grid, Smart Infrastructures and Broadband to complement that on Smart Meters.

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