Smart Meters: Unlocking the Future
Contents

1) Smart Meter Update
2) Smart Meter System design
3) Unlocking the Future
>12.8m meters operating (dom/non-dom)  >250,000 SMETS2 installed

A million installed each quarter in 2018


8 out of 10 people with a smart meter would recommend them

88% of prepay customers said it had made topping up easier

More than 80% taken steps to reduce energy waste

More benefits for consumers who monitor trends and anomalies in their energy use

SEGB Smart Energy Outlook October 2018  Smart Meter Customer Experience Study 2016-18  Smart meters and energy usage December 2018
The smart metering system:

- **Energy consumers**
- **Data and Communications Company (DCC)**
  - Smart DCC Limited
    - Capita PLC
  - Communications service provider
    - North: Arqiva Ltd
    - Central & South: Telefonica PLC
  - Data service provider
    - CGI IT UK ltd
- **DCC Service Users**

The diagram illustrates the connections between the consumer access device, in-home display, smart electricity meter, smart gas meter, communications hub, and the various companies involved in the smart metering system.
There are two routes to gain access to data (given consumer consent):

<table>
<thead>
<tr>
<th>Data access route 1 - DCC</th>
<th>Data access route 2 - CAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No additional equipment required</td>
<td>• CAD is any device that supports ZigBee Smart Energy</td>
</tr>
<tr>
<td>• Companies can access data by</td>
<td>• CAD can access data once paired to the HAN (DCC Other user or Supplier)</td>
</tr>
<tr>
<td>• becoming DCC Other User themselves</td>
<td>• Data is sent to service provider via chosen connectivity option (3G/4G/wifi)</td>
</tr>
<tr>
<td>• partnering with a DCC User to access data via the DCC</td>
<td>• Data available</td>
</tr>
<tr>
<td>• Data available</td>
<td>• Near real time electricity data available</td>
</tr>
<tr>
<td>• Half hour gas and electricity consumption data available</td>
<td>• Tariff information</td>
</tr>
</tbody>
</table>
Innovation opportunities are already emerging...

- **Connected Home**: Home automation devices offer new services
- **Demand Side Management**: Aggregate & shift load
- **Smart Appliances**: Run devices when prices are low
- **Energy Efficiency**: Use data to reduce energy use
- **Switching**: Find best deals based on actual consumption
- **Heating**: Optimise according to preferences/prices
- **Community Energy & Renewables**: Solar PV; P2P trading
- **Health & Social Care**: Use data to identify patterns of behaviour
- **Security & Peace of Mind**: Integrate with appliances to detect faults
- **Smart Tariffs**: Dynamic time of use tariffs; EV tariffs

---

**Department for Business, Energy & Industrial Strategy**
Smart meter innovation funding focused on non-domestic sectors, EVs and efficiency

- £3 million of funding to demonstrate smart charging of electric vehicles
- £5 million available to develop new tools using smart meter data to measure the Thermal Efficiency of homes
- £8.8 million made available by Government to drive smart meter innovation in schools, retail and hospitality sectors
Smart Meters: Unlocking the Future
New publication highlighting how smart meters can support innovation in new consumer technologies and services. Including:

– demand side response
– time-of-use tariffs
– electric vehicles
– switching
– micro-generation
– energy efficiency
– health and social care

Smart Meter: Progress Report for 2018