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*ESTA Nov 2009 event*  
*AMR & CRC*

# CRC Energy Efficiency Scheme

- Carbon Reduction Commitment is now known as CRC Energy Efficiency Scheme (CRC)
- Third consultation Government response 7<sup>th</sup> October 2009
- CRC will begin 1<sup>st</sup> April 2010 although considered as a 'soft start'
- Administrator (EA) will provide qualification for those billing addresses with HHM half hourly market
- The Early Action Metric is one of three metrics for CRC. The early action metric is split in two. One half based energy saving through metering. The other based on accreditation through the Carbon Trust Standard or equivalent
- Sub-metering – estimation techniques
- Feed in Tariff advantages for the future in micro generation. Up to 36.5/kWh. Additional 5p/kWh. Guaranteed up to 25 years
- The league table. Potentially 20,000 organisation participating
- Energy prices increased 125% over past 5 years. Expect a further 60% in the next 5 years.

## Core Sources Gas & Electric

- **Obligated to include in CRC. They include:**
- **all electricity consumed through HHMs (including pseudo HHMs)**
- **all electricity consumed through AMR meters**
- **all electricity consumed through profile class 5-8 meters**
- **all daily-read gas meters**
- **all gas consumed through AMR meters**
- **all non-daily metered gas consumption of more than 73,200 kWh per annum**

*Billing / fiscal meter*

# Clarification of Meters

- **Voluntary Half Hourly Meter**
- Voluntary Half Hourly (VHH) meters are the same type of meters as the mandatory 100 kW HHM described above, however as the title implies they are installed on a voluntary basis at sites below the 100kW threshold. These meters are not widespread, and in most cases were installed because an organisation wanted their electricity settled on the HH market or because they wanted to collect data on their electricity consumption for energy management purposes.
- **Pseudo Half Hourly Metering**
- Pseudo Half-Hourly Metering is a technique for calculating half hourly electricity consumption where the supply is unmetered. It is calculated using activity data for an historic period and is commonly used to monitor the electricity consumption of street furniture such as street lights, sign lighting, CCTV and traffic lights. This data can be used for settlement purposes.
- **Half Hourly Market**
- This is the half hourly electricity market used by suppliers and generators to calculate the balance or imbalance, in what is generated and consumed, using electricity consumption information that is recorded half hourly.

*Currently 4.2M CCTV cameras in the UK; one fifth of the cameras in the world. consume approximately 2.1MW; enough power to supply 1200 homes!*

## AMR Meter Definition under CRC *Electric*

- A meter is defined as an AMR meter for electricity **under CRC** if it meets the following four criteria:
- The meter needs to be capable of capturing consumption data on at least a half hourly basis;
- The meter must be the main fiscal meter for that supply and not a clip-on or sub metering device.
- The meter is read remotely;
- The electricity consumption data needs to be made available to the customer.
- The definition now reflects the fact that AMR meters might not be read directly by the customer but instead may be read by a third party organisation that makes the data available to the customer.
- As stated in the consultation, the CRC policy aim is to include meter profile class 5-8 metered sites within CRC as core sources. However rather than defining the profile classes themselves the revised CRC Order will define the functionality of these meters.
- Read remotely means that the data is not accessed at the meter itself. The remote reading may be done by the customer or a third party.

## AMR Meter Definition under CRC Gas

- A meter will be defined as an AMR meter **under CRC** if it meets the following four criteria:
- The meter together with an ancillary device is capable of capturing consumption data on at least an hourly basis;
- The meter is the main fiscal meter and not a sub-metering device;
- The meter has been read remotely;
- The gas consumption data is made available to the customer.

## Early Action Metric. *Fiscal Meters*

- *'As of 1 April 2009, Government introduced a mandate for energy suppliers to roll out AMR metering to profile class 5-8 sites and gas sites consuming more than 723,000kWh per year. This mandate applies in respect Great Britain. Where meters are installed to comply with this mandate they will still be considered as voluntary AMR meters in CRC. This is because if these meters were treated as mandatory, Participants with these meters would not have the option to install metering voluntarily, and therefore perform well in the Early Action metric..... AMR metering installed before 1 April 2011 will be treated as voluntary within CRC and count towards the Early Action metric.'*
- *'.....clarification on why AMR meters installed as sub-meters would not count towards the Early Action metric. The reason why CRC does not recognise the installation of sub-metering, or clip-on devices (for electricity) is because Participants are required to report their energy consumption data based on readings from their fiscal meters. Inclusion of both the fiscal meter and sub-metering in CRC could lead to double counting of the same energy use, for this reason sub-meters are not recognised in CRC.'*
- *'.....CRC counts electricity consumption through AMR meters towards qualification and annual reporting. For this reason it is important that the data used to assess qualification for the scheme is accurate. In order to ensure that data used for qualification and reporting is recorded using sufficiently accurate equipment, the CRC will only capture meters which are used for billing purposes. This is because all electricity meters used for billing need to be approved under Schedule 7 of the Electricity Act which guarantees the accuracy of the meter.'*
- *'Government has consistently acknowledged that using AMR as a proxy for early action was an imperfect measure, but considers that it still meets the criteria of simple, scheme-wide, easily auditable,.....'*

# What is voluntary AMR metering?

- For the purposes of calculating AMR coverage for the Early Action metric the following types of meters will count as voluntarily installed AMR:

- For electricity:
  - Non mandatory half hourly settled meters
  - Non settled half hourly meters
  - Dynamic supplies

- For gas:
  - Non mandatory daily meters
  - Hourly meters

	Year 1 (Oct 2011)	Year 2 (Oct 2012)	Year 3 (Oct 2013)
• <b>Early Action Metric</b>	100%	40%	20%

# Early Action Metric Credits

- What do you need to do to get credits:
- *Data is required over a three year period, and must demonstrate either an absolute emissions reduction, or at least a 2.5% per annum relative emissions reduction;*
- *'A high quality energy or carbon management system is required, focusing on measurement, management and reduction and that is transparent;'*

## Who will be effected?

- Types of organisation who will be affected both private and public sectors. Some organisation are:
- All English universities and their independent colleges and halls of residence
- Police section houses, Monasteries, Prisons, Hotels
- Residential care homes
- NHS Trusts
- State funded Schools in England, Scotland and Wales, Grant aided schools Northern Ireland, (Energy suppliers are required to supply energy consumption data directly to the schools)
- PFI schools where the PFI company is responsible for the energy supply
- Landlords; a CRC order requiring tenants to cooperate with landlord organisations will be applied.

*'Government will not allow transfer of responsibility from the landlord to the tenant.'*

Promotion of good practice using sub-metering so the cost and benefits can be fairly distributed

# Change Behaviour

- The scheme would become more stringent as time goes on
- Ensure you obtain *fiscal* data from your energy supplier and/or third party. You may need deploy pseudo metering and/or VHHM and/or AMR metering in the future.
- CRC will be an on going process to monitor for participation or removal
- *The Early Action metric is the only metric by which a Participant is assessed in the first year of the scheme. The weighting is reduced to 40% in the second year and 20% in the third year.*
- FITs will have a significant advantage for those organisations with renewable energy in mind
- Don't forget to look out for the up dated user guide to be published end of 2009
- And continue with your energy reduction strategy.



**Thank you**

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