



## Smart Meters

Smart meters will have replaced almost all existing electricity and gas meters in GB homes by 2020. Smart meters measure electricity and gas consumption and can send this information direct to a customer as well as 'submitting' automatic meter readings to suppliers. Smart meters can also receive information remotely e.g. tariff changes. The cost of the smart meter roll-out will ultimately be paid for through energy bills.

Smart meters are linked to a communications hub, which is installed in a home at the same time as the electricity/gas meters themselves. The communications hub links in turn to a wireless network run by the Data and Communications Company (DCC), which is responsible for establishing and managing the smart metering communications infrastructure. DCC manages all communications between smart meters and energy suppliers.

Customers will receive an in-home display (IHD) device when a smart meter is installed. The IHD will show how much energy is being used and how much it is costing, with information shown in kilowatt hours and pounds/pence. It might also indicate whether consumption is low, medium or high (though it is not yet clear who will decide what constitutes low/medium/high use for a particular household, nor whether there will be any 'tailoring' to take household need into account).

Smart meters mean an end to estimated fuel bills. Householders will no longer have to take readings themselves or wait for a meter reader. Smart meters and IHDs are intended to give customers greater control by letting them see how much energy is being used (and how much it is costing) at different times of the day, week, month or year, which could help aid decisions about energy usage. It is estimated that this will save householders an average of £33 a year. However, whether it is possible to save money will depend on customers being able to understand and use the information from IHDs to work out where energy use could safely be reduced.

Smart meters work in both credit and prepayment (PPM) form. PPM customers may have more flexible payment options available to them with smart meters, including remote top-up facilities. Smart metering enables **remote switching** between credit and PPM mode. Suppliers will also be able, if necessary, to implement **remote disconnection**. The Ofgem rules and licence conditions protecting customers that currently govern pre-payment and disconnection also apply to remote switching and remote disconnection.

Energy suppliers are responsible for supplying and installing smart meters, with each supplier devising its own delivery schedule. Smart Energy GB is the national campaign for smart metering – they provide information about what each supplier is doing – see <http://www.smartenergygb.org/get-a-smart-meter/energy-suppliers>. Some suppliers are already fitting smart meters, and the industry and Government are working to ensure technology compatibility and interoperability as the roll-out progresses.

Ofgem has enacted the Smart Metering Installation Code of Practice (SMICoP), which protects consumers by prohibiting sales attempts during installation (unless previous consent has been given by the household). The SMICoP also allows customers to make choices on how much data an energy supplier can collect from the smart meter and whether they can share details about energy consumption with other organisations. Licence conditions allow suppliers to access monthly consumption data for billing and other regulatory purposes without needing consent. There will be a clear opt-out for daily collection of data, and an opt-in will be required for use of the most detailed half-hourly consumption data.

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Suppliers must offer their customers a smart meter, but it is not compulsory for a customer to accept. Customers cannot refuse a meter replacement if this is being carried out for safety reasons, for example, but they can request that the 'smart' functions are not activated.

Customers can request a smart meter from their supplier, though installation timescales may vary according to the supplier's own schedule.

Examples of smart meters/IHDs.

