(ENE3) Energy Display Devices

Technical Guide November 2010 Criteria

- 2 available credits
- Credits worth 1.17% points each
- Mandatory Element: No

Aim: To promote the specification of equipment to display energy consumption data, thus empowering dwelling occupants to reduce energy use.

Assessment Criteria:

Criteria

Where current electricity **OR** primary heating fuel consumption data are displayed to occupants by a correctly specified energy display device.

Where current electricity **AND** primary heating fuel consumption data are displayed to occupants by a correctly specified energy display device.

Default Cases

Where electricity is the primary heating fuel and current electricity consumption data are displayed to occupants by a correctly specified energy display device.
What is an Energy Display Device

As the name suggests, an energy display device is a device that is used to monitor energy consumption within the home. Energy can come in many forms such as:

**Mains Electricity** - coming in from the national grid, and used throughout your home to power your tv, computer, lamps & lights etc.

**Mains Gas** - coming into the house from the national grid and used in your home for boilers, hobs, cookers etc.

**Solar Photovoltaic Panels** - solar panels mounted in the garden or on the roof of the house generate electricity. This is typically fed back into the grid, for which you are given a rebate by your energy supplier. More can be found out about Solar PV & the feed in tariff here.

**Solar Thermal** - solar panels mounted in the garden or on the roof of the house that heat up water using the suns energy. The water can be used as hot water for the radiator or hot water for your shower etc. The system is usually used in conjunction with a backup boiler or other heating device for times when it is not sunny.

**Wind** - a wind turbine mounted to the roof of the house or in the garden that generates electricity from wind.

**Water** - although not classed as energy or required by the code for sustainable homes, some devices also allow the ability to monitor water usage.

Why use/What are the benefits of an Energy Display Device?

The primary purpose of an energy display device is to educate the occupants of a house as to how much energy is being used by a peripheral. For example, if the energy display device is used to monitor Mains Electricity, you will be able to see in real time how much electricity is used by your TV when it is turned on, and when it is on standby. Likewise when you turn the lights on in a room you will see how much energy they are using. You will be able to compare the cost of running your energy efficient lights against your older lights.

Energy display devices that allow you to input your tariff costs (required for the code for sustainable homes) will show you the actual cost of using your TV and the amount it is costing you when left turned on or turned to standby.
An example of this is the amount of electricity a kettle can use - approximately 40 pence per hour. It does not normally take long for bill payers to realise which products are more expensive to run and make behavioural changes to reduce unnecessary consumption.

Ultimately this leads to less energy being wasted which has numerous benefits for both the consumer and environment:

- Reduction of CO2 emissions
- Reduction in waste of valuable resources
- Reduction in bills for home owner
- Can help home owner find most cost effective energy tariff for their use

How does an Energy Display Device work?

**Overview** 1. The transmitter is installed next to the electricity meter and within 1.5 meters of a mains socket (which it is plugged into).
2. A CT Clip is attached to the electricity line coming into the building.
3. The other meters (water/gas/solar/wind etc) are then connected to the transmitter. If they are not close to the transmitter a bell wire can be run to the meters location.
4. The transmitter then sends the meter readings wirelessly to the energy display device where the information is displayed in real time.
Energy Display Device Installation Guide & Fitting Instructions

Download Energy Display Installation Summary

Download Energy Display Full Installation

Smart Meters

Energy Display Devices can effectively be used to turn your existing 'dumb' meters into Smart Meters today. Smart meters are due to be phased in over the coming years into our homes when standard meters are replaced.

What is a smart meter? Although the precise specification or definition of a smart meter is yet to be confirmed, smart meters are generally expected to monitor your consumption in real time (or near to real time) and keep a track of energy consumption on an hourly basis (or regular basis). The idea is that both the utility provider and the consumer will have much more information with regards to their energy usage. This in turn allows the suppliers to better manage their energy or water supply and provide more accurate billing. This is especially helpful for people on off peak or overnight tariffs etc.

Smart meters may also be beneficial to consumers, although as there is no specification at present it cannot be guaranteed that the information they provide will be available to the consumer. Assuming however that the above consumption will be available to the consumer, this will help them become more aware of just how much energy or water is being used by the house and thus helping control and save resources.

Smart Meter or Energy Display Device? As mentioned above, at present there is no exact specification for a smart meter and thus there is not guarantee for consumers that they will be able to readily access the information provided by their smart meter when it is installed into their home. There is also no exact date for
smart meter installation.

Energy Display Devices are available today and are able to be fitted to both standard and smart meters. Our energy display devices also combine up to 3 utilities on one display providing a much more elegant solution than 3 separate meters.

For further features and benefits of our energy display devices please see other parts of this page or click on the products for more information.

IHD (In Home Display)

As part of the Governments roll out programme for smart meters, the term IHD is being more frequently used. This stands for In Home Display and is an Energy Display Device that is compatible with smart meters.

The exact specification for IHD (In Home Display) has not yet been decided and as of August 2012 is entering the second stage of public consultation. It is therefore impossible at this point to see how an IHD (In Home Display) will be similar or different to the current CfSH Energy Display Devices.

Case Study

Click here to download the Energy Display Device Case Study

Accessories

Code Energy Display Device Triple - Electric / Renewable / Gas
£459.00

Item is no longer available. [Product Details...]
Code Energy Display Device Triple - Electric x 3
£459.00

Item is no longer available. [Product Details...]

Code Energy Display Device Triple - Electric / Water / Gas
£459.00

Item is no longer available [Product Details...]

Code Energy Display Device
£485.00

Energy Display Device for all utilities including electricity, gas, water & renewables. [Product Details...]