

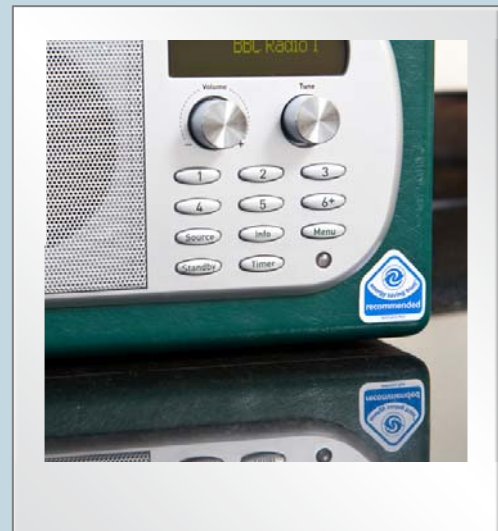
# Energy Intelligence Service Green Plug Saving Statements

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## 1 Introduction

The Energy Saving Trust uses a number of saving statements in our marketing material, website content and other mediums to illustrate the affect devices within the home have upon our energy bills and CO<sub>2</sub> footprint. By using comparative examples it allows consumers to visualise a usually abstract concept such as CO<sub>2</sub> emissions into something more tangible.

The saving statements created for Logikor's Green Plug were developed to do just that, by creating examples and scenarios for different situations the Green Plug could be used, a consumer can start to build a picture of what impact their actions have and how the Green Plug can help mitigate that impact.

The statements were calculated using Energy Saving Trust methodologies also used for our annual updates. Each statistic is tailored according to the availability of up to date research for the particular devices. Once the energy consumption figures has been established, the average Energy Saving Trust derived electricity price (Ofgem, 2010) is applied with the current electricity grid carbon intensity factor (AEA, DEFRA. 2010). In some cases we were able to create a 'CO<sub>2</sub> Equivalents' message where examples are given in regards to the volume of CO<sub>2</sub>, for example "130kgCO<sub>2</sub> is enough to fill 11 builders skips", this again is to help the consumer visualise the amount of CO<sub>2</sub> stated in more tangible terms.

## 2 Saving Statements & Assumptions

The saving statements below are broken down into different appliance types; the statement itself is in bullet points and beneath is the caveat. Please note that some statements do not show both financial and CO<sub>2</sub> emission savings; this is due to the negligible savings in which case the highest saving was used or if available an aggregated savings shown.

### TV

- Forgetting to turn off a bedtime film for the kids can cost you money and emit more CO<sub>2</sub>, using a Green Plug that turns off the TV and DVD player after a set time saves around 8p and 330gCO<sub>2</sub> every night, that's enough CO<sub>2</sub> to fill a water butt.

*(Based on the average 32" TV and DVD player energy consumption and assumes 7 hours night time duration; average electricity prices are correct as of 2010/11 based on 12.5p/kWh)*

- Leaving your TV on costs you money and adds to your carbon footprint, the Green Plug stops you from wasting energy saving you around 40gCO<sub>2</sub> every hour that you would have left it on! That's enough CO<sub>2</sub> to fill a party balloon every hour.

*(Based on the average 32" TV)*

### DVD Player

- Forgetting to switch off the DVD player after a film is easily done, but with the Green Plug you don't have to worry as it switches it off for you! Saving you 5gCO<sub>2</sub> every hour that you would have left it on. Overnight it would save you around 30gCO<sub>2</sub>.

*(Based on the average DVD player and assumes it is left on for 7 hours overnight)*

### Fan

- Forgetting to turn off your fan overnight during the summer months costs you money and emits CO<sub>2</sub>, using a Green Plug saves you around 4p and 180gCO<sub>2</sub> for every night you would have left it on! That is enough CO<sub>2</sub> to fill nearly 280 cans of coke!

*(Based on the average fan energy consumption and assumes it is left on for 7 hours overnight. Prices are correct as of 2010/11 based on 12.5p/kWh)*

## Digital Radio

- Forgetting to turn off your digital radio in the morning before work will add to your electricity bill! The Green Plug stops this, saving you a penny a day and around 40gCO<sub>2</sub>; that's enough CO<sub>2</sub> to fill 62 cans of coke!

*(Based on the average DAB radio, assumes a working day of 7.5 hours and additional commuting time of 2 hours; average electricity prices are correct as of 2010/11 based on 12.5p/kWh)*

## Electric Heater

- Did you know that electric heaters one of the most expensive ways to heat your home and on average cost around 25p and emit 1,000gCO<sub>2</sub> per hour, that's the same as driving 3 miles! The Green Plug makes sure your heater isn't on for any longer than needed saving you money and reducing your carbon footprint.

*(Based on the average electric heater including panel, fan and convection heaters; average electricity prices are correct as of 2010/11 based on 12.5p/kWh)*

- Forgetting to turn off your electric heater in the evenings will bump up your bills! The Green Plug times how long it has been on and automatically switches it off, for every 4 hours an electric heater is left on it costs you £1 and emits 4,300gCO<sub>2</sub>, that's enough to fill a red telephone box!

*(Based on the average electric heater including panel, fan and convection heaters; average electricity prices are correct as of 2010/11 based on 12.5p/kWh)*

## Game Consoles

- Kids aren't the best at switching things off, with the Green Plug game consoles will no longer waste energy by being left on! For every hour it would have been left on it would cost 2p and emit around 80gCO<sub>2</sub> or three party balloons full of CO<sub>2</sub>.

*(Based on the average energy consumption between all the major console types, average electricity prices are correct as of 2010/11 based on 12.5p/kWh)*

## Printers

- Did you know that printers use energy even when they aren't printing, this wasted energy stacks up whilst you work from home. The Green Plug cuts the waste and could save you around 630gCO<sub>2</sub> if you work at home once a week for a year, that's enough to fill a wheelie bin.

*(Based on the average printer energy consumption, assumes a working day of 7.5 hours, 9 days public holiday, 28 days annual leave)*

## **Modem**

- A lot of us use the internet but few of us use it all day long, so why keep the modem on? On average a modem costs around 2p and emits around 85gCO<sub>2</sub> every day. Why not use a Green Plug which switches off your modem when you're done surfing the net.

*(Based on the average broadband modem energy consumption, average electricity prices are correct as of 2010/11 based on 12.5p/kWh)*

## **Set Top Box**

- Set Top Boxes use energy just as your TV does, using a Green Plug you can avoid wasting energy when you're not watching the TV. For every evening you leave your box on it emits around 20gCO<sub>2</sub>!

*(Based on the average set top box energy consumption, assumes an duration of 6 hours)*

## **3 Sources**

The following main sources were used for the calculations:

AEA, DEFRA. (2010). *2010 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting*. DEFRA, DECC.

DEFRA (2010) *Market Transformation Programme MTP Briefing Notes*. DEFRA.

Ofgem (2010) *Gas and Electricity Comparison Analysis – EST Derived*. EST.



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