Energy Ambassadors Guide
Energy Ambassadors Home Visit Guide

- **Instructions for use**
  This home visit guide has been developed to help non-energy professionals to identify energy related issues in their clients homes and to provide basic information to the householder. The pack can be used in two ways:
  - By the type of problem presented by the householder
  - By looking at a specific topic

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**The types of problem**
This pack covers four types of problem that a householder might experience:
- Are you at risk from the cold?
- Is your home cold?
- Are your fuel bills too high?
- Do you have a problem with damp?

**Specific Topics**
There are three specific topics covered by this guide:
- Insulation
- Heating – central heating
- Heating – electric storage heating

- **Thermometer Cards**
This pack contains a small number of thermometer cards that can be left in peoples homes. If you would like any more of these please contact us on 0800 512 012.
Symptoms checklist

If any of the following symptoms are present, your client could benefit from the improved energy efficiency in their home

Client has health problems affected by cold
- Asthma
- Heart disease
- Stroke

Client vulnerable to cold
- The very young and the very old
- Mobility Problems
- Poor circulation
- Tendency to colds and coughs

What the client tells you
- Complains that home is usually too cold
- Complains of draughts
- Says that fuel bills are too high
- Owes money for fuel
- Uses prepayment (coin, key, card or token) meter to avoid running up debt
- Stays in bed to keep warm
- Sits with hot water bottle to keep warm
- Wants to stay in hospital because it is more comfortable

What you notice when you visit
- The home feels cold
- The home feels draughty
- The home smells of damp
Heating Information

Central Heating

Central heating is designed to keep all or most of your home warm from a single central source of heat such as a gas boiler. There are some important controls to help you manage the central heating and hot water supply as efficiently as possible. Heating controls are about getting the right temperature at the right time!

How does central heating work?

- A **boiler** heats water.
- **Pipes** take the hot water to:
  A. the radiators, which in turn heat the room
  B. the hot water storage cylinder where the water that comes out of the hot tap is heated
- A **pump** helps the water travels through the whole system

Controlling your heating

- **Room thermostat**
  This switches the heating off when the set temperature is reached. You can alter this to suit your household. The higher the temperature selected the hotter your home will be and the more fuel you will use.

  Turning up the thermostat will not make the house heat up faster. It just means that the heating will switch off at a higher temperature which may be a waste of fuel and money. For most people a temperature of 20°- 21°C is comfortable.

  As the weather changes it is your programmer (timer) that you should change rather than the room thermostat.

- **Programmer or Timer**
  This sets the time for the central heating and the hot water to switch on and off.
  Some are “mechanical” where you twist a dial to set the clock and move pins or tappets to set the “on” and “off” periods. Other programmers are “digital”, these have electronic displays and buttons that you press to set the programme.

  If you have problems setting your programmer the staff at your local Energy Efficiency Advice Centre may be able to help on 0800 512 012
- **Thermostatic Radiator Valves (TRV)**

These are found on radiators, they allow you to adjust the temperature of the room.

A TRV will control the amount of hot water that flows through the radiator. It does this by measuring the temperature of the air in the room, when the set temperature is reached it stops any more hot water from flowing through that radiator. This means that when the room reaches the required temperature there will be no more hot water flowing through the radiator so it will no longer feel warm. If the temperature of the room falls the TRV will direct hot water through the radiator once again and the radiator will feel warm.

TRVs allow you to set the temperature in some rooms higher than others for example you might like to have your living room at a higher temperature than your bedroom.

- **Boiler thermostat**

This control is mainly for safety, to make sure that the hot water coming out of the boiler is not too hot. Not all boiler thermostats are visible when the boiler cover is closed. In winter it is advisable to have the boiler thermostat set between medium and maximum. Adjust down to a safe level if the radiators get too hot.

- **Cylinder Thermostat**

This controls the temperature of the hot water coming out of the hot water cylinder. When the water in the cylinder reaches the set temperature, the thermostat will switch off the supply of hot water from the boiler and will not switch it on again until the temperature of the water has dropped.

The cylinder thermostat should be set at 60°C (140°F). This protects against bugs in the water, scalding and saves energy.

**Combination boilers**

If you have a combination boiler (sometimes called a “Combi”) you will not have a hot water storage cylinder as the hot water that comes out of your taps is heated as it passes through the boiler whenever you turn on a tap.

For more information or for detailed advice contact your local Energy Efficiency Advice Centre on 0800 512 012
Electric Storage Heating

- How do storage heaters work?

Night storage heaters are designed to store heat from electricity supplied at a cheaper rate over night. They then release the stored heat the following day.

The “core” of the heater is made up of electrical elements embedded in insulating material. These elements switch on and off during the off-peak period. The insulated core stays hot after it is switched off, cooling down gradually as it gives out heat throughout the following day.

- Storage heaters and “Economy 7”

If electric storage heaters are the main source of heating in your home you should be on an Economy 7 tariff. This means that you benefit from a cheaper tariff for the electricity used over a seven hour period at night.

On this tariff you will pay a few pence less for each unit of electricity during the Economy 7, cheap rate period but a little more than the average per unit during the rest of the day. The exact times for the cheap rate electricity can vary so you should check with your fuel supplier.

It is important to use this cheap rate to store heat in your storage heaters and to heat your hot water with your immersion heater because they use a lot of electricity.

- Storage heater controls

Storage heaters usually have two controls that can be called “Input” and “Output”. (Sometimes the Input dial is called “Charge” and the “Output” dial is called “Boost”.)

- Input

This control is responsible for how much heat is stored during the night. The input control can be either manual or automatic.

Manual Input – you can vary the setting to store more heat when the weather is colder. It is generally recommended that you follow the seasonal changes rather than trying to re-set your storage heater on a daily basis. Set is higher in winter than in the spring and autumn.

Automatic Input – can also be called “Auto-Set” – this means that you do not need to change the input control as the seasons and weather change because the amount of heat stored is controlled by a thermostat.
* Important note: if you have extra heating in the same room as a storage heater the automatic thermostat on the storage heater may be affected. It will make the thermostat think that the weather is warmer than it actually is and so the storage heater will not store as much heat over night.

• Output
This controls the amount of heat given out by heater. The amount of heat released is regulated by a flap controlled by the output dial. When the output dial is turned up high the flap will be fully open and the stored heat will be given out quickly into the room.

It is most economical to set the output control to minimum during the night and to keep it low for as long as you can during the day. This will keep more heat in the storage heater to release later in the day when it is colder. When you begin to feel cold, turn up the output control to increase the temperature of the room.

Remember to turn the output control down to its lowest setting when you go to bed at night.

For more information or for detailed advice contact your local Energy Efficiency Advice Centre on 0800 512 012
Does Your Home Have a Problem With Damp?

There are several different types of damp that can be found in a home. They have different causes and different remedies.

Rising Damp

How to recognise:
- Only appears in ground floor rooms
- Occurs on the lower part of external walls
- Has the appearance of a “tide-mark”

Penetrating Damp

How to recognise:
- Can appear on external walls and ceilings underneath flat roofs
- Has the appearance of a “damp patch”
- Is worse in wet weather

Condensation

How to recognise:
- Water collecting on window, window sills and external walls
- Speckled, black mould growth

Who to contact

Rising Damp – as this is a problem with the main part of the building you should contact your local council and a local builder to discuss the problem. If you do not own your home you should contact your landlord.

Plumbing faults – first of all you should turn off the main stop-cock (tap) that allows water to come into your home. You should then contact a plumber to discuss the problem. If the problem is with the pipes or heating system in your home you should contact your landlord, if you have one.

Penetrating Damp – this is often a sign that there is a problem with the structure of the building so you should contact a builder or your landlord if you have one.

Condensation – many problems which condensation can be solved by changing the way things are done in the home. Contact the Energy Efficiency Advice Centre and speak to an advisor about ways to improve the situation on 0800 512 012
Insulation Information

All of the heat we generate in our homes escapes – insulation helps to keep it in our homes for longer which makes us feel warmer and more comfortable.

★ What insulation does
- Keeps warmth in your home – in the same way that we might put on a coat and a hat in winter to keep our bodies warm, insulation is a layer of material that keeps the heat in our homes for longer.
- Maintains comfort level – without insulation the temperature in your home can drop very quickly once you turn the heating off. Insulation helps to maintain a comfortable temperature for longer.
- Lowers fuel consumption – by keeping the heat in and maintaining a comfortable temperature, insulation helps to reduce the length of time you need to use your heating, which means that you will use less fuel.
- Keeps you cooler in summer – as well as keeping the heat in during the winter insulation also helps to keep the heat out during the hotter months, helping you to be more comfortable in the summer.

★ Types of insulation
- Cavity wall insulation – most homes than have been built since 1940 will have a cavity wall. This means that the exterior walls of your home are built from two thinner walls separated by a cavity. The cavity is intended to reduce the amount of heat lost through the walls. Filling this cavity with insulation makes it much more effective, especially as in many homes the walls are the largest areas for heat loss.
- Loft insulation – if you have a loft that contains little or no insulation you will be losing a great deal of your heat straight through the roof. It is recommended that homes should have 270mm (10”) of insulation.
- Pipe insulation – insulating hot water pipes will help to stop heat being lost from the water as it travels around your home.
- Hot water tank jackets – if you have a hot water storage tank it is important to make sure that it is well insulated otherwise a lot of heat will be lost and more fuel will be needed to keep the water warm.

★ Grants for insulation are available
For information on grants for insulation measures you can contact:
- Energy Efficiency Advice Centre – for local advice – 0800 512 012
- Warm Front – if you are in receipt of a qualifying benefit – 0800 316 6011
- Fuel suppliers – all major fuel companies offer insulation grants
- Local council – Decent Homes, Disabled Facilities and repair grants may be available.

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