

Thank you for your time during the recent Green Doctor home visit.

This guide brings together tips to make the most of your new technology, helping you to save money and energy.



HEAT PUMPS

What is it?

A heat pump extracts heat from the outside environment (air, ground, or water) and boosts its temperature to provide heating.

Tips for using a heat pump efficiently:

- Ensure it is regularly serviced.
- Don't switch it on and off like a traditional boiler.
- Leaving a heat pump on for longer periods doesn't increase your overall running costs because the heat pump can run more efficiently, offsetting the longer running period.
- While you can lower the temperature during unoccupied periods (e.g. at night), large temperature drops can strain the heat pump, requiring it to work harder to recover the temperature. Try to keep temperature adjustments to 1-2 degrees.
- Ensure the outdoor unit is free of debris, leaves, snow, and ice. This can hinder airflow and reduce efficiency.
- Consider heating your hot water during the day when the outside air is warmer.

Check if your energy company has a heat pump tariff, some have a tariff where the energy you use for your heat pump is kept at a lower rate than your other energy.

SOLAR PV

What is it?

Solar PV refers to solar panel electricity generating systems, also known as photovoltaic (or PV). These systems capture the sun's energy using photovoltaic cells and convert it into electricity which can be used to run home appliances and lighting.



Tips for using solar panels efficiently:

- Try to use appliances during peak solar hours (12pm - 3pm).
- Stagger your devices. Don't turn them on all at once, as the solar panels won't be able to cover all this sudden usage.
- If it's safe, use timers or delayed starts so that appliances can run during the day while you are away.
- If using electricity to heat your hot water, consider using a solar diverter to send surplus energy to the hot water tank.

Smart Export Guarantee (SEG)

This allows you to get paid for each unit of surplus energy that your solar panels have generated and hasn't been used by the household or been fed into any batteries (if you have them).

For a typical household, selling unwanted energy can generate between **£150 and £212 a year.**

Energy companies offer different tariffs depending on whether you have electric cars or batteries. The amount paid per unit can vary so it's worth checking and comparing providers. You don't need to be on the same tariff for your supplier and your exports, they can be different suppliers.

BATTERY

A home energy battery or home battery storage system stores electricity for later use, typically generated from renewable sources like solar panels. They allow you to utilise more of your own generated energy, and reduce your reliance on the electricity grid.

They can be filled up with solar panel energy or cheap off-peak energy, to be used during peak times or when demand is more than the solar panels can generate. This means you pay the lower price for your energy, even if you have to take some from the grid.

SMART HEATING

Smart heating controls can be set up once and then left to run their programmed schedule, but to get the most out of them you may need to interact with them more. It is important to have them set up so they heat your home at the right times - on when you are home, and off or on a lower temperature when you are out.

You'll also want to set the temperature correctly so that you aren't paying to heat your home more than you need. A comfortable temperature is typically between 18°C and 21°C. Even a change of 0.5°C can make a difference in comfort and cost.

Some smart controls can be controlled from your phone, which helps reduce your usage. For instance, by delaying your heating coming on if you are going to be home late, so you aren't heating an empty home. Remote control is particularly beneficial if you don't have a set weekly routine, as you can adjust your heating any time.

LOFT INSULATION

You won't need to do anything to get the benefit of loft insulation, but there are things to be mindful of. If you have had a mineral wool type loft insulation added, then avoid placing items of storage on top of it. The effectiveness of the insulation is reduced if you compress it.

It is also important to ensure the loft hatch is closed properly so heat can't bypass the insulation and escape. You may notice that you have to adjust your heating settings down as your home is now better at retaining heat.



WALL INSULATION

You won't need to do anything to get the benefit of wall insulation, but you'll likely notice a difference in temperature and will need to adjust your heating settings down to find your optimal setting.

You may want to change how you ventilate, as the draughts you had previously are no longer there, so you need to actively ventilate more.

We hope you found this guide useful!



Do you know someone who could do with our help?
Scan the QR code, call 0115 978 8212, or visit:

www.groundwork.org.uk/gwfc-green-doctor

