

SPECIAL ENERGY SAVING EDITION

The twin crises of climate change and the cost of living are dominating public discourse in Ireland and internationally. Energy is at centre of both. While the increasing cost of heating our homes is the main concern, understanding how we create and use energy should also be considered.

Most of our homes are still heated using fossil fuels like oil and gas. However, renewable energies such as wind and solar are increasingly being used both by the grid and the private residences to produce energy.

In this special edition of the South Dublin County Council Climate Change Newsletter, we aim to help you understand the impact of your energy use. It will also identify low/no cost options that will help with both the cost of living and climate crises, as well as higher cost actions that pay you back over time.

Read on for more on how to take action.

Reduce Your Use campaign #ReduceYourUse

To help families, households, and businesses the Government and the Sustainable Energy Authority of Ireland (SEAI) published a new "Reduce your Use" campaign. The campaign features an information booklet which contains energy saving tips for your home and workplace, the booklet also informs consumers of grant sources to help improve the energy performance of your house. #ReduceYourUse. Click here for more detail.

Saving Energy At Home

There are lots of opportunities to reduce your energy use at home. Heating our homes accounts for an estimated 61% of our household energy use. So how can we reduce energy when heating our homes:

- Set the thermostat to 18°C 20°C for your living areas. Reducing your thermostat by 1°C could lower your total energy usage by an estimated 10%.
- Turn off radiators in rooms you don't use. Thermostatic radiator valves on the side of radiators can be used to turn them down or even off.
- Don't block your radiators with furniture or curtains as you'll lose the heat you create and use more energy trying to get it back. Draught excluders can help to minimise heat being lost from doors and windows, however ensure your wall vents are never blocked to ensure good air quality.
- Have your heating system serviced once a year to ensure best efficiency, meaning it will be using the lowest amount of fuel to perform properly.
- Bleeding your radiators once a year can also ensure they are heating fully and using the least amount of energy.



Hot Water

Hot water accounts for 19% of household energy use, so take a closer look at how you heat and use water.

- Water should be heated to 65°C, and we can use a timer to suit our daily routine and prevent excess energy being wasted.
- If your water is heated by the central heating boiler, a thermostat on the cylinder will allow you to set the temperature and keep the water from overheating.
- If your water cylinder isn't already insulated put a lagging jacket around it to maintain a higher water temperature for longer, helping to lower your energy spend.
- Have your boiler serviced once a year for safety and better energy performance.
- Electric showers are convenient, but as it involves heating water, they are big energy users: eliminating any extra time in the shower can help lower your bills. Baths also use a lot of energy to heat the required amount of water.

Lighting and Appliances

Our lighting and appliances account for 17% of our home's energy use while- 2% is taken up through cooking.

- LED bulbs can use up to 85% less energy than normal bulbs and light just as warmly.
- Standby mode on any of your devices and appliances still use energy, so turn them off at the wall when not in use.
- Run the dishwasher and washing machine at lower temperatures (and on eco mode) where possible and only with a full load.
- Tumble dryers are big energy users. Hang your wash out to dry when possible.
- Your oven uses lots of power so use strategically (e.g., batch cooking if possible) and minimise opening the door to avoid extra energy being used to heat it back up.
- Minimise how long you leave the fridge door open, every 10-20 seconds the door is open means approximately 45 minutes of energy use afterwards to cool it back down.
- Limit your electricity use during peak hours (e.g. 7-9am, 4-7pm). This will help reduce the demand at power stations, helping to lower national fossil fuel usage.

Transport

If you have one, your car is one of your main energy costs. Shifting some or all car journeys to those completed on foot, by bike, trains, buses, or trams will see you reduce your total energy spend.

If you have an electric vehicle, ensure you have the best electricity tariff for your needs, for example, if you charge an electric vehicle overnight, a day/night or smart tariff can reduce your costs. Explore what is available on the market and talk to your provider to see if there is a better plan for you, which will help reduce your electricity bill.



Grants To Help Reduce Your Energy Spending

Many of the tips highlighted in the article "Saving energy at home" are low/no cost options. However, to make significant savings on your energy costs you may need to invest in bigger changes in your home. The Sustainable Energy Authority of Ireland (SEAI) manages a range of grants to help with insulation, heat pumps, solar panels, and technical advice. A new one-stop-shop service offers homeowners all the services required for a complete home energy upgrade. Grants are also available for one-off measures.

Grants are available for:

Insulation

Most buildings in Ireland, especially older ones, are not well insulated. A badly insulated home may lose 30% of its heat through the roof and a further 30% through the walls, with 10% through windows and doors. Insulating gives us a more comfortable home, with a more consistent temperature.

Insulating is not a difficult process, but it is important to work with registered consultants and contractors that meet the necessary standards. Each home is different and will need its own solution.

Heat Pumps

When our homes are well insulated, it might be time to consider a heat pump. There are different types of heat pumps but the most common in Ireland is an air-to-water heat pump, which takes energy contained in the air outside your home and uses an electrically powered compressor to turn it into a higher heat suitable for your radiators and water.

For every 1 unit of electricity used, heat pumps produce 3 to 4 units of heat, meaning they use low amounts of energy for what you get. As the electricity grid becomes less reliant on fossil fuels, the electricity used by heat pumps becomes more and more sustainable.

Solar Panels

Solar panels are an increasingly common site on the roofs across Ireland. There are two types of solar panels: Solar Thermal Collectors and Solar Photovoltaic (PV). Both take the sun's light and convert it to energy we can use.

Solar Thermal Collectors turn the sun's energy into hot water and will typically provide up to about 60% of your annual hot water needs.

Solar PVs generate electricity when exposed to the sun's light.

Solar PVs will cover a portion of the electricity needs of your home, and savings depend on certain factors. Your home's position in relation to the sun and roof angle will influence the amount of savings available, with south facing optimal, as will what portion of the day you typically spend at home.

Browse the grants at the Sustainable Energy Authority of Ireland dedicated webpage.



Home Energy Saving Kits

South Dublin County Council, in partnership with Codema, Dublin's energy agency, offer Home Energy Saving Kits to help householders understand their energy use, including where energy is lost or wasted at home.

Whether you own or rent accommodation, the kit helps you to identify important energy improvements at home.

The kit contains a:

- Temperature and Humidity Monitor: The monitor measures both temperature and humidity levels in any room of your house. For living areas, aim for a temperature of 18°C 20°C. For all other rooms aim for 15-18°C. Ideal humidity is 40-60%. If your humidity is too high, it means there is too much moisture which will lead to mould formation.
- Thermal Leak Detector: The detector will show where you are losing heat in your home, helping you to identify where you need insulation and draught proofing.
- Plug-in Energy Monitor: The monitor will show you any appliances' energy use as you use them, or when they are in standby mode. This real time information can help you to understand what is driving up your energy bills.
- Fridge Thermometer: The thermometer shows you if your fridge or freezer is too cold or too warm. If too cold, it means your fridge is using more energy than needed. The fridge should be 3 to 5 degrees, the freezer -15 to -18 degrees.
- Radiator Key: The key can be used to bleed radiators to ensure they use the least amount of energy possible when heating up, helping to reduce your bills.

Currently there are 15 kits available across the 7 South Dublin libraries, if you are interested in renting a kit, please contact your local library below.

Ballyroan Library Tel: +353 1 4941900 / ballyroan@sdublincoco.ie Castletymon Library Tel: +353 1 4149203 / castletymon@sdublincoco.ie Clondalkin (Village) Tel: +353 1 4593315 / clondalkin@sdublincoco.ie

Lucan Library Tel: +353 1 6216422 / lucan@sdublincoco.ie North Clondalkin Tel: +353 1 4149269 / ncl@sdublincoco.ie Tallaght Library Tel: +353 1 4620073 / talib@sdublincoco.ie

This newsletter will examine more closely some of the actions we are working on, keeping readers informed on what we are delivering and how we are delivering them.

To sign up for our Climate Action Newsletter please click here.