# Strategies For Reducing Your Winter Energy Spend

## **Optimising Your Heating System**

According to <u>Smarter Business</u>, effective heating system optimization can significantly enhance household energy efficiency. By ensuring boilers are well-maintained, upgrading heating controls, and bolstering the insulation of pipes and radiators, homeowners can achieve a more efficient use of energy for heating purposes.

#### Servicing and Maintaining Boilers

A well-maintained boiler functions more efficiently. Homeowners should arrange for an annual boiler service conducted by a Gas Safe registered engineer. This ensures the boiler operates at its optimal capacity and can prevent costly breakdowns. Regular maintenance can also extend the boiler's lifespan, and it's pivotal to check that boilers are not exhibiting any error messages or leaks, which could indicate underlying issues.

#### **Upgrading and Adjusting Heating Controls**

Incorporating modern heating controls can drastically improve the management of household heating. Installing a programmable thermostat allows residents to set specific temperatures for different times of the day. Moreover, adjusting the flow temperature on combi boilers can conserve energy without compromising comfort. Utilising thermostatic radiator valves (TRVs) enables individual control of the heat level in different rooms, preventing unnecessary heating of unoccupied spaces.

#### **Insulating Pipes and Radiators**

Proper insulation reduces heat loss from pipes and radiators, ensuring that more of the heat produced is effectively used to warm the home. Insulating hot water pipes and applying radiator panels can minimise the effort required by the heating system. It is also beneficial to bleed radiators to remove trapped air, which impedes hot water flow and effectiveness. Additionally, insulating the hot water cylinder if present, maintains the water at a steady temperature for longer periods.

By employing these practices, homeowners can significantly reduce their energy usage and enjoy a warm home more costeffectively.

## **Comprehensive Insulation Solutions**

Insulating one's home is a critical step towards achieving energy efficiency, especially during the cold winter months. Proper insulation not only retains heat but also cuts down on energy bills. This section details how one can bolster their home's insulation in key areas.

#### Improving Roof and Loft Insulation

The roof and loft are primary areas where heat can escape from a home. Ensuring that there is sufficient loft insulation is vital. The recommended depth of loft insulation is 270mm. Adding loft insulation can be straightforward, with options such as rolls of mineral wool, which is a common and effective insulating material. For those with existing insulation, it is worth checking the depth and topping up if it is below the advised level. Hiring professionals to assess and install the correct type of insulation can lead to more significant energy savings.

#### Addressing Draughts and Cavity Walls

Draught-proofing is a cost-effective method to prevent unwanted heat loss. Key areas to address include windows, doors, floorboards, and chimneys. Simple measures like sealing gaps with draught excluder tape can make a considerable difference. For cavity walls, which are found in many typical UK households, installing insulation can considerably increase energy efficiency. It's usually done by injecting insulating material into the gap between the walls from the outside, a task that should be carried out by professionals.

#### Installing Floor Insulation

Insulation beneath floorboards can prevent cold air from entering and warm air from escaping. Sealing gaps between floors and skirting boards with silicone-based fillers can also reduce draughts. In homes with suspended wooden floors, professional installation of insulation material between the floor joists is an effective strategy. For those with concrete floors, laying an insulating layer above or below the concrete can provide warmth and reduce heating costs.



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# **Energy Use Reduction Strategies**

Reducing energy consumption during winter not only helps in cutting energy bills but also supports the environment. Here are practical strategies to manage energy use effectively:

#### Appliances and Lighting:

- Ensure that all appliances are in good condition and service them regularly to maintain efficiency.
- When not in use, turn appliances off rather than leaving them on standby mode.
- Replace traditional incandescent bulbs with energysaving light bulbs such as LED bulbs. LED options use up to 90% less energy and last longer.

#### Smart Monitoring:

- Consider installing a smart metre to keep track of energy consumption.
- Use a timer to control heating systems, ensuring they operate only when needed.

#### Water Use and Heating:

- Lower the flow temperature of combi boilers if applicable, to save on gas consumption.
- Encourage shorter showers and using colder water for handwashing to reduce water use.
- Insulate the heating system and use thermostatic radiator valves (TRVs) for better control over room temperatures.

#### **Energy Saving Tips:**

- Wash clothes at lower temperatures and air dry when possible.
- Draft-proof homes to prevent heat loss and maintain warmth without excessive heating.
- Schedule regular maintenance of the heating system to ensure it's operating at peak efficiency.

By implementing these strategies, households can manage energy use more efficiently, leading to reduced costs and environmental impact during the colder months.

# Efficient Water Heating Practices

During winter, a significant portion of a home's energy use goes towards heating hot water. By adopting energy-efficient practices, households can reduce their energy consumption and lower their bills.

Insulation is key. For homes with a separate hot water tank, insulating it can prevent heat loss, ensuring water remains hotter for longer periods. Additionally, the pipes leading to and from the boiler should be properly insulated to minimise heat loss.

Modern combi boilers are more energy-efficient than older models, as they heat water directly from the mains without the need for a storage tank. However, for systems with hot water tanks, setting the tank thermostat to 60°C is sufficient for most needs and can save energy.

Water use can be reduced by fixing any leaks and installing water-efficient showerheads and taps. Limiting the duration and temperature of showers also conserves hot water and energy.

Boiler efficiency makes a difference. Regular servicing ensures boilers operate at peak efficiency. Considering the replacement of an old boiler with a more efficient model can result in significant savings.

Homes with traditional radiators can implement a practice of turning down radiators in rarely used rooms. This practice focuses on heating areas that are occupied, reducing overall energy use.

### Embracing No-Cost and Low-Cost Energy-Saving Habits

Homeowners and tenants can adopt no-cost actions that can significantly lower energy bills. One simple measure is to reduce the boiler flow temperature, which is usually adjusted on the boiler itself or through a thermostatic radiator valve. This action can lead to savings on heating without sacrificing comfort.

Managing heating wisely is a key step in increasing a home's energy efficiency. For instance, homeowners can:

- Draught-proof windows and doors to prevent heat loss.
- Use thermal curtains or blinds to insulate rooms.
- Reduce water heating temperatures.

Another effective low-cost habit to consider involves laundering:

- Wash clothes at a lower temperature (30°C is often sufficient).
- Ensure a full load before running a dishwasher or washing machine.
- Air-dry clothes rather than using a tumble dryer.

A household's carbon footprint can also be positively impacted by minor adjustments, for instance:

- Switching off lights when leaving a room.
- Unplugging chargers and devices not in use.
- Utilising energy-efficient LED bulbs.

The 'It All Adds Up' campaign illustrates how quick and easy actions can culminate in reduced energy prices and energy use. These savings contribute to the financial resilience of a typical household, particularly during periods of elevated energy price caps.

While no-cost tips can make a difference, low-cost investments in energy efficiency measures yield long-term financial support. Sealants, insulation, and smart thermostats may involve an initial outlay but offer sustained reductions in energy bills and carbon emissions. The United Kingdom's energy guidance resources further highlight these measures, reinforcing their combined effect on a macro scale, contributing to nationwide energy sustainability.