

Fact sheet:

Heating homes



What it means to choose a green star product

Products marked with the green star are designed to help customers identify items within our ranges with a focus on reducing environmental impacts. Customers can use the information provided to filter and understand more about the products they're interested in or have purchased.

Why heating at home matters

More energy is used for space heating than for any other purpose in our homes. For the EU, it's estimated that <u>62.8% of a home's energy is used on space heating</u>. A further 15.1% is used on water heating.

Using efficient heating products can help to keep energy bills under control.

Understanding how much difference an appliance's settings can make to energy use is also important. Work <u>done by the University of Salford</u> in 2022 examined setting combination (combi) gas boiler flow temperatures to 60°C in homes. Using a room thermostat, timer or programmer and thermostatic radiator vales can help to improve heating efficiency depending on use.

Choosing the right size appliance is also important. The <u>Agence de la Transition Ecologique</u> (<u>Ademe</u>) estimates that a third of water heated is not used by homes, so opting for a water heater with a smaller capacity can help to reduce hot water waste.

Criteria 1:



How we assess green star products

Before assessment, every green star product must meet:

All relevant legal requirements

All Kingfisher policy requirements

You can access the <u>Kingfisher policies here</u>. These include Human Rights, Supply Chain Workplace Standards and Sustainable Packaging.

Products are also checked against a Watch List. The watch list contains several criteria or features, relevant to the product type, that if present disqualify the product from being marked with a green star. The relevant Watch List can be found at the end of this factsheet. The Watch List is reviewed and revised annually.

Life cycle assessments have not been completed for every green star product, but by employing policies and the Watch List Criteria in Kingfisher's Sustainable Home Product Guidelines, many factors in the life cycle of a product are considered.

The green star 'Heating Homes' assessment focuses on the in-use phase of the product's life cycle. This is where the product can bring the biggest benefit to the user across its utilisation, however green star excludes products that may have other environmental aspects that are harmful either as a result of manufacture or end of life disposal.

Criteria 2:



Green star programme entry

The criteria for heating homes is:

Heat pumps:

- A heat pump works a bit like a fridge in reverse, taking heat from outdoors into the home. Although electricity is used to move the heat, it requires significantly less electricity than, for example, directly heating the same space with an electric heater:
 - Air source heat pumps
 - Ground source heat pumps
 - Heat pump accessories

Micro combined heat and power systems (Micro-CHP):

 These <u>can generate heat and electricity simultaneously</u> from the same energy source. For example, generating electricity while heating water.

Mechanical heat recovery systems:

• Based on ventilation, this type of system uses heat from the air being removed from the home to warm up incoming air.

Central heating:

- Electric boilers with an energy label rating of D or higher:
 - The higher the energy rating, the more efficient the boiler.
 - Energy ratings for electric boilers use a scale of A to G.
- Central heating pumps with an Energy Efficiency Index (EEI) of 0.18 or lower:
 - An efficient circulation pump can help ensure that heating works efficiently.
 - This measurement is defined in the Ecodesign regulations for circulation pumps.

Radiators:

- Wet type underfloor heating:
 - Wet type underfloor heating heats a space effectively using less energy than what's needed for a traditional wall-hung radiator. This is because it has a larger surface area so can operate with water cooler than 45°C.





- This type of heating works well with air source or ground source heat pumps, as well as with conventional boilers.
- Please note, there is another form of underfloor heating that uses electric wires instead of hot water pipes. The wired version is energy intensive and is Watch Listed.

• Radiator foil:

 Placed behind a radiator on an external wall, radiator foil can help reflect heat back into the room instead of escaping the home.

Radiator keys:

 Radiator keys are used to maintain radiators, 'bleeding' air out of the heating system. This helps keep radiators working efficiently.

Electric heaters:

• Electric heaters fitted with an integrated thermostatic control and timer or programmer that use either a radiant panel or inertia technology.

Hot water:

- Electric water heaters with an energy label A rating or higher:
 - Choosing an efficient water heater can help reduce energy consumption.
 - The Agence de la Transition Ecologique (Ademe) also highlights the importance of choosing the right size water heater for your needs – the agency estimates that a third of water heated is not used.
- Hot water insulation:
 - Cylinder jackets:
 - These should be considered for water heaters, as well as hot water storage cylinders.
 - Insulated hot water cylinders
 - Pipe insulation

Please note, there is also related criteria in the green star 'Controlling energy use' and 'Insulating at home' factsheets. For heating, controlling boilers, radiators, heaters and water heaters can be key to managing these devices' energy consumption.

Providing Criteria 1 and 2 have been met, a product can marked with the green star.

Reviewing and confirming green star status

- All products nominated and that meet criteria 1 and 2 are assessed internally by our sustainability team and submitted to NGO Bioregional for external validation.
- Once the external review is conducted, the product can then be confirmed and marked with the green star.
- A full review is conducted annually to ensure all products continue to meet the selection criteria.

To find out more about NGO Bioregional, click here



Watch List Criteria relevant to heating at home

This list includes features or aspects of products that make them unsuitable to be marked with the green star:

- Products supplied with single-use disposable batteries
- Wired underfloor heating because this is an energy-intensive form of heating
- Outdoor heating products
- Products powered by coal, peat, paraffin, or oil
- Products powered by burning wood (air pollution concerns)
- Components made from paper or wood that do not meet Kingfisher's Forest Positive policy
- Recycled plastic products where the source of the plastic is unknown and/or cannot be confirmed as being safe
- Products where the packaging contains PVC or expanded polystyrene.
- Products containing palm oil, cotton, rubber or leather with no evidence that the materials have been responsibly sourced.