

# Ecodesign Explained

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You may have been made aware recently of the Governments intentions to better promote the use of clean-burning solid fuels, appliances and operation techniques through its [Clean Air Strategy](#), in order to continue to reduce the impacts of solid fuel appliance use on the UK's air quality.

One question that continues to arise amongst installers, retailers and manufacturers surrounds the new Ecodesign Regulations that solid fuel roomheater appliances will need to meet by the 1<sup>st</sup> January 2022, but what exactly does this new legislation require, and how will it affect the industry after the 2022 implementation date?

## What is Ecodesign?

In simple terms, the Ecodesign Regulations set new minimum seasonal efficiency and maximum emission requirements for solid fuel burning roomheater stoves, roomheater stoves with boilers and cooker appliances. Only those appliances that have been tested and verified as meeting these new limits will be able to be sold. The emission limits include those for Particulate Matter (PM), Organic Gaseous Compounds (OGC), Carbon Monoxide (CO) and Nitrogen Oxides (NOx).

appliance installation does not significantly reduce the properties overall energy usage and performance. Where pellet roomheater appliances are concerned, this efficiency limit is increased to 70%, in most cases due to the higher levels of controllability associated with pellet burning appliances.

The only emission performance limits for appliances are prescribed with the Construction Products Regulations, which currently stipulate a maximum emission limit for CO at 12,500mg/m<sup>3</sup>. Current manufacturing standards do not at present stipulate a maximum emission requirement for PM, OGC's or NOx.

## So, what exactly will change after 1<sup>st</sup> January 2022?

After 1<sup>st</sup> January 2022, all solid fuel burning roomheater appliances will be required to have been independently tested to show that they meet the seasonal efficiency and four emission limit provisions as laid down within the Ecodesign regulations. This will include a dramatic reduction in the CO minimum emission limit stipulated above, with the other new prescribed limits summarised as follows;

## Solid Fuel Roomheater Appliances

Appliance Type	Fuel	Seasonal Efficiency (%)	PM (mg/m <sup>3</sup> )	OGC (mg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	NOx (mg/m <sup>3</sup> )
Open Fire	Wood	30	50	120	2000	200
Open Fire	Smokeless	30	50	120	2000	300
Closed Appliance	Wood	65	40	120	1500	200
Closed Appliance	Smokeless	65	40	120	1500	300

Cooker	Wood	65	–	120	1500	200
Cooker	Smokeless	65	–	120	1500	300

As you can see, the introduction of these new efficiency and emission limits go a long way supporting the governments intended strategy of improving the way in which solid fuel appliances perform under everyday use in terms of their overall efficiency and emission level performance.

All appliances sold will include performance criteria within both sales and marketing literature, to allow consumers to make more informed choices on selection of the more highly efficient and clean-burning appliances, as well reference in the appliance manufacturer installation instruction, for installers to make reference against during the installation design stages.

## Will existing legacy installations be affected?

No. The new regulations proposed only cover those newly produced roomheater appliances that are “placed on the market” and made available for sale on the UK market after 2022. Installers should ensure any products placed on the market after this date have been independently tested and verified as meeting the new provisions within Ecodesign legislation, and are accompanied with the necessary technical and performance information to confirm this within appliance manufacturer literature or sales websites. Those appliances that meet all current and future UK performance requirements can be accessed in the HETAS guide, or by using the search facility on the HETAS website [here](#).

## I’ve been informed of earlier implementation dates by 1<sup>st</sup> January 2020

This is correct, in that independent boiler appliances are required to meet the Ecodesign legislation 2 years earlier than the implementation date of 2022 for roomheater stove appliances. Independent boilers are those classified as not providing heat into the room in which they are installed, and are those appliances that simply link to an existing or new hot water heating system, the majority of which are installed in a type of boiler room.

The efficiency and emission limits for independent boilers are slightly different

# Independent Boilers

Appliance Type	Operation	Fuel	Output	Seasonal Efficiency (%)	PM (mg/m3)	OGC (mg/m3)
Independent Boiler	Manual	Biomass	≤20kW	75	60	30
Independent Boiler	Manual	Smokeless	≤20kW	75	60	30
Independent Boiler	Manual	Biomass	≤20kW	77	60	30
Independent Boiler	Manual	Smokeless	≤20kW	77	60	30
Independent Boiler	Automatic	Biomass	≤20kW	75	40	20
Independent Boiler	Automatic	Smokeless	≤20kW	75	40	20
Independent Boiler	Automatic	Biomass	≤20kW	77	40	20
Independent Boiler	Automatic	Smokeless	≤20kW	77	40	20

## HETAS Cleaner Choice

HETAS Cleaner Choice Product Approval Scheme is focused on raising industry standards and driving consumers towards the cleanest burning biomass and solid fuel appliances proven to go above and beyond in minimising harmful





proven to meet the most stringent emissions criteria, going further than any other industry scheme and exceeding Ecodesign and Defra Exemption requirements. In fact, products listed under the HETAS Cleaner Choice scheme achieve a 50% improvement on particulates against currently recognised requirements within UK Smoke Control Areas.

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