

Local space heaters (LSH), questions and answers

from the Compliance Services help desk service and the Compliance Services LSH webinar for suppliers, which took place on the 5th of November 2025

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Ecodesign requirements

Scope

1. Diesel radiant heaters

Question

Are diesel radiant heaters within the scope of this regulation?

Answer

As a general rule, diesel radiant heaters fall within the scope of the ecodesign regulation [\(EU\) 2024/1103](#), as a diesel radiant heater is considered a “liquid fuel local space heater.”

Legal references

Please find further information about the scope in art. 1, the definitions in art. 2 and Annex I of the ecodesign regulation [\(EU\) 2024/1103](#).

2. Heaters for outdoor use

Question

Is there an equivalent regulation that applies specifically to heaters intended for outdoor use?

Answer

There are no ecodesign regulations that cover heaters intended for outdoor use. However, several other EU product directives or regulations apply, depending on the specific product, for example the Gas Appliances regulation [\(EU\) 2016/426](#), the RoSH directive [2011/65/EU](#) and the Low voltage directive [2014/35/EU](#).

3. Electric radiators without built-in controls in smart homes

Question

How should electric radiators without built-in controls be classified? This question is particularly relevant in the context of smart homes, where centralised smart home systems manage heating functions. In such cases, built-in controls are not necessary, as the smart home system itself provides the control functionality. How should this be reflected in the classification or regulatory requirements for these products?

Answer

Electric radiators without built-in controls are in the scope of the ecodesign regulation [\(EU\) 2024/1103](#) as '*local space heaters placed on the market without control*'.

They need to be coupled, during installation, to a '*separate related control*' as defined in the regulation.

This control can be linked to one or more local space heaters, but in any case the pair local space heater-control must comply with the energy efficiency requirements in the regulation and with the rest of applicable measures.

Legal references

Ecodesign regulation [\(EU\) 2024/1103](#)

4. Hybrid or mixed towel electric radiators

Question

How should hybrid or mixed towel electric radiators be classified? Are there specific guidelines?

Answer

Hybrid, mixed or Dual fuel towel radiators operate as part of a central heating system but can also be switched over to use electricity and work independently. It depends on their heat output in electric mode whether they are in scope of this regulation. Note that the other function of this product being part of a central heating system does not constitute coverage of this product in another ecodesign (or energy labelling) regulation.

Legal references

Art. 1 of ecodesign regulation [\(EU\) 2024/1103](#)

5. Portable local space heaters

Question

How to classify a portable local space heater like a fan heater?

Answer

Fan heaters were unintentionally excluded from the ecodesign regulation because air heating systems are excluded. An amendment process is undergoing to include them again. In the amendment that is currently under preparation, they will be defined as electric portable LSH. This amendment is expected to be published by mid-2026.

LSH without control

6. Smart plug

Question

I understand that a plug is not permitted, as it would enable the heater to produce heat without control.

How, then, can an LSH without a control be used together with a smart plug, given that smart plugs require a plug connection?

Does this mean that the use of smart plugs is no longer allowed?

Answer

Smart plugs are allowed, but that does not mean that the LSH must not comply with the requirements in the ecodesign regulation [\(EU\) 2024/1103](#). It will normally be necessary a control for the LSH to comply with those requirements, regardless of whether it is also linked to a smart plug or not. It could be nevertheless that the smart plug incorporates control features, in which case the plug could also be considered as control as long as it allows the pair LSH-control to comply with the requirements of the ecodesign regulation.

Underfloor heating appliances

7. Controlling the room temperature

Question

There are electric underfloor heating appliances on the market whose sole purpose is to warm the surface of the floor for a short period, preventing the user from getting cold feet. These systems are not intended to heat the room, as there is always a “main” heating system—such as a central warm-water system—responsible for this function.

For reasons related to their control logic, these systems are equipped with a floor temperature sensor but not with a room temperature sensor. Controlling the room temperature would interfere with the main heating system's regulation, creating a kind of race condition.

How should such systems be treated, given that all relevant correction factors depend on the measurement and control of room temperature?

Answer

Electric underfloor local space heaters are explicitly included in the scope of the ecodesign regulation [\(EU\) 2024/1103](#) and must feature the combination of control features that, according to Annex III of the Regulation, allows it to reach the minimum energy efficiency threshold of 47.5% applicable in this case.

Low power modes

8. Idle mode and active mode

Question

In regulation 2024/1103, for electric local space heaters, the respective definitions of idle mode and active modes may lead to confusion. Our understanding is that in an active mode, when the electric LSH does not deliver heat (example: ambient temperature above the user set point), such situation corresponds to an active mode if there are ecodesign functions still running in the background. - In other words: an electric LSH that does not deliver heat is not necessarily in idle mode. Is our understanding correct?

Answer

According to ecodesign regulation 2024/1103, the 'idle mode' means a condition in which the product is connected to the mains power source and is able to automatically provide heat to the room according to the setpoint temperature, while 'active mode' means a condition in which the product is connected to the mains power source and at least one of the main functions providing the intended service of the equipment has been activated. An LSH that has a setpoint above the actual temperature does not have a main function providing the intended service of the equipment activated, as it does not produce heat. It is therefore considered as idle mode.

References to the legislation

Ecodesign regulation [\(EU\) 2024/1103](#), Annex I.22 and 23

Commercial LSH

9. Low power

Question

Will the low power mode requirements also apply to commercial LSH?
I think this is not applicable.

Answer

Yes, the low power mode requirements also apply to commercial LSH.

References to the legislation

Ecodesign regulation [\(EU\) 2024/1103](#), Annex II, Ecodesign requirements, 3. Requirements for low power modes and Annex III, Measurement methods and calculations, 5. Low power modes

Spare part availability

10. Small modular subassemblies

Question

Are small modular subassemblies acceptable as replacement parts?

Answer

Spare parts do not have to be delivered as one piece as long as the spare part availability and repairability are not negatively affected.

References to the legislation

Ecodesign regulation [\(EU\) 2024/1103](#), Annex 1, Definitions, (60)

Technical documentation

11. The content

Question

What must the technical documentation for electric towel radiators include to comply with CE marking requirements under the new regulation? Which information must be provided with the product in paper form, and which information may be made available online (e.g. on the manufacturer's website)?

Answer

According to Annex II, point 4 of the ecodesign regulation [\(EU\) 2024/1103](#), the relevant information must be provided in the instructions manual for installers and users and free access websites. Therefore, the corresponding information must be included in any available information support provided by the supplier, be it physical or online.

References to the legislation

Ecodesign regulation [\(EU\) 2024/1103](#), Annex II, 4. The product information requirements and 5. Resource efficiency requirements and 6. Technical documentation.

Energy labelling

EPREL

12. Products in EPREL and inspections

Question

Are all products on the EU market registered in the EPREL database?
Who checks this?

Answer

Registration in EPREL is mandatory for all products placed on the EU market.

We are not aware if all products are registered in EPREL, but market surveillance activities for various product groups have shown that not all products which are placed on the EU market are in EPREL as they should be.

It is the national MSAs' responsibility to carry out inspections to ensure compliance with the requirement to register in EPREL.

13. Responsible for the registration of products

Question

We are an importer of electric LSHs as well as DHW boilers. The manufacturers are also based in the EU. Who is responsible for entering the product into the EPREL database — the manufacturer or the importer? At present, the products are sold under the manufacturer's name. What would be the procedure if we were to purchase the same products under an OEM arrangement? In that case, who would be responsible for registering the products in the EPREL database?

Answer

Suppliers are obliged to enter product information into EPREL as required by the EU energy labelling framework regulation (EU) 2017/1369, from the date where the product has been first placed on the market.

Supplier

A supplier means either:

- Manufacturer
A manufacturer produces products or has them produced by others and places them on the EU market under his own name/trademark.
- Authorised representative
An entity with written consent from a manufacturer outside the EU to act on their behalf.
- Importer
An entity that imports products and places them on the EU market (either for money or free of charge).

When the manufacturer places the product on the EU market under the manufacturer's name, the manufacturer is responsible for registering the product in EPREL.

If you make an OEM arrangement (stands for "Original Equipment Manufacturer", which stands for a company that manufactures parts and sells them to another company that builds the end product and brand it under its own name), you will place the product on the market under your name, and in this case you are responsible for registering the product in EPREL.

Market Surveillance

Enforcement

14. Amendment

Question

How will market surveillance authorities (MSAs) handle issues before the amendment? For example, the unintentional exclusion of portable local space heaters like fan heaters?

Answer

Since enforcement is a national competence, and given that the EU Commission has explicitly recognised a mistake by excluding fan heaters from the current ecodesign regulation, MSAs might decide to temporarily apply the Regulation on air heating appliances to fan heaters or to put their inspection activities with respect to this product on hold until the legal amendment has been adopted.

15. Product tests

Question

How many LSH were physically tested by the MSAs last year?

Answers

It is up to the national MSA if they want to inspect LSH by testing products. We do not know the total amount of LSHs being tested by the national MSAs.

In addition to this, some EU-funded projects might also include testing of LSH, such as [EEPLIANT3](#) which took place 2018-2023. In the EEPLIANT3 project, 24 MSAs participated, and inspections of documentation and physical products of LSH were part of the activities. See also <https://eepliant.eu/index.php/new-products/wp6-heaters?id=123>.

Horizontal topics

Amendment

16. Timing

Question

Will it be possible that, due to the time gap between the ecodesign and energy labelling regulations, the conversion coefficient (CC) for electricity differs between the two? If so, how can inconsistencies between the energy efficiency values shown on the energy label and those required under the ecodesign regulation be avoided?

Answer

Since the applicability of the new ecodesign regulation with a CC of 1,9 there is indeed a difference to the CC of 2,5 in the still applicable energy labelling regulation [\(EU\) 2015/1186](#), Annex I.1. However, consumers are not affected by this, because they only see the values based on the energy labelling regulation. For suppliers, indeed currently two different values are relevant. This situation will remain until a new energy labelling regulation will be applicable, which will then also include a CC of 1,9.

References to the legislation

The energy labelling regulation [\(EU\) 2015/1186](#), Annex I.1 and the ecodesign regulation [\(EU\) 2024/1103](#), Annex I.29.

Disclaimer

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