Proposal for combining the Ecodesign and Energy Labelling regulations for local space heaters and for air conditioners ≤ 12 kW.

General

Local space heaters and heat pumps ≤ 12 kW are different technologies serving the same purpose, i.e. space heating by means of air heating of one or more rooms in residential and commercial buildings. Therefore, following the example of the space heaters in the scope of Regulation (EU) 811/2013[1] and Regulation (EU) 2015/1187[2], we would like to facilitate the comparison of different technologies with the same application by introducing the same energy efficiency classes for the appliances in the scope of Regulation (EU) 2015/1186 and Regulation (EU) 626/2011.

Information used for rescaling

The review study for air conditioners/heat pumps ≤ 12 kW and the review study for local space heaters contain the energy efficiency information needed, to make a proposal for the revised energy label. For the local space heaters in the scope of the review study, the market has not evolved significantly in terms of energy efficiency since the entry into force of the Regulation in 2015[3], and the same is assumed for the solid fuel local space heaters.

Conversion to primary energy efficiency

To be able to compare the different efficiency values, the SCOP values of the heat pumps would be converted to primary energy as follows:

$$\eta_{s,h} = \frac{SCOP}{CC} - \mathrm{F}(1)$$

With CC, the conversion coefficient equal to 2,1, in line with amendment to Annex IV, footnote 3 of the Energy Efficiency Directive; F(1), the contribution accounting for temperature control equal to 3%.

Energy efficiency classes – initial proposal

An initial proposal for a labelling scheme is presented in the following table, along with how the best products of each product type would be labelled at entry into force and after some time with the regulation:

Energy efficiency class	Corresponding efficiency numbers	Comments	Product types in each energy efficiency class	
			At entry into force	After entry into force
A	$\eta_{s,h} \geq 292\%$	The upper A class needs to be empty at the time of entry into force of the Regulation,	None	Heat pumps

[1] Commission Delegated Regulation (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device (*OJ L 239, 6.9.2013, p. 1).*

[2] Commission Delegated Regulation (EU) 2015/1187 of 27 April 2015 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of solid fuel boilers and packages of a solid fuel boiler, supplementary heaters, temperature controls and solar devices (*OJ L 193, 21.7.2015, p. 43).*

[3] https://eco-localspaceheaters.eu/the-study

		therefore, 292% corresponds to the BNAT of heat pumps and corresponds with an SCOP value of 6.2 as determined in the review study[4] for the regulation for the air conditioners		
B	$292\% > \eta_{s,h} \geq 230\%$	230% is the BAT level for heat pumps > 6 kW, this would give incentive for those appliances to move beyond the BAT	Heat pumps	
C	$230\% > \eta_{s,h} \geq 136\%$	136% is the BAT for solid fuel local space heaters, this would give incentive for those appliances to move beyond the BAT	Heat pumps	Solid fuel local space heaters
D	$136\% > \eta_{s,h} \geq 88\%$	88% is the BAT for a gas and oil fuel local space heaters and tube local space heaters, this would give incentive for those appliances to move beyond the BAT	Solid fuel local space heaters, luminous local space heaters	Gas and oil local space heaters, tube local space heaters
E	$88\% > \eta_{s,h} \geq 76\%$	76% is the minimum requirement for tube local space heaters and around the middle between the E and the G class	Gas, oil and solid fuel local space heaters, luminous and tube local space heaters	
F	$76\% > \eta_{s,h} \geq 65\%$	65% is the BAT for open fronted gas and oil technologies, this would give incentive for those appliances to move beyond the BAT	Gas, oil and solid fuel local space heaters, tube local space heaters	Open fronted gas and oil technologies
G	$65\% > \eta_{s,h}$		Open fronted technologies	

We would welcome comments on this proposal until 8/3/2019.

[4] http://www.eco-airconditioners.eu