

NOTE: THE BASE CASES REPRESENT CURRENT PRODUCTS AVAILABLE ON THE MARKET TODAY

Base Case	NAME	Description of products represented	Fuel	Nominal Power [kW]	Test Standard Efficiency (% NCV)	Estimated Net Fuel Use Efficiency* (% NCV)
BC 1	Open fireplace	Inset direct heating appliances, <15kW power output, efficiency between 30-80%, unenclosed firebed, mostly masonry material, manual fuel feeding, applicable under EN13229 testing	Wood	6	35	18
BC 2	Closed fp, stove	Freestanding direct heating appliances , <15kW power output, efficiency between 50-80%, enclosed firebed, mostly ferrous material, manual fuel feeding , applicable under EN13240 testing (roomheaters)	Wood, Hard Coal	7	73	47
BC 3	Cooker	Freestanding direct heating appliances , <15kW power output with cooking function, efficiency between 60-80%, enclosed firebed, mostly ferrous material, manual fuel feeding , applicable under EN12815 testing (cookers)	Wood	8	70	46
BC 4	Slow heat release stove	Direct heating appliances , <30kW flame power output (approx 3kW output from thermal mass - long duration), efficiency between 70-85%, enclosed firebed, mostly ferrous material, manual fuel feeding , EN15250 testing (slow heat release)	Wood	15	80	60
BC 5	Pellet stove	Freestanding direct heating appliances, <15kW power output, efficiency between 75-95%, enclosed firebed, mostly ferrous material, automatic fuel feeding, applicable under EN14785 testing	Pellets	7	88	64
BC 6	Dom. Boiler – conv.	Indirect heating appliances, efficiency between 55-90%, natural draught, upperfire technology, mostly ferrous materials, natural draft, manual fuel batch feeding, applicable under EN303-5	Wood	18	75	55
BC 7	Dom. Boiler – downdr.	Indirect heating appliances, gasifying downburning technology efficiency between 75-90%, mostly ferrous materials, forced draft, fuel 'semi automatic' gravity feed, applicable under EN303-5	Wood	20	88	65
BC 8	Retort boiler	Indirect heating appliances, efficiency between 75-90%, mostly ferrous materials, forced draft, retort auto fuel feeding, applicable under EN303-5	Hard Coal	25	80	63
BC 9	Pellet boiler	Indirect heating appliances, efficiency between 75-90%, mostly ferrous materials, forced or natural draft, auto fuel feeding, applicable under EN303-5	Pellets	25	88	70
BC 10	Industrial boiler	Indirect heating appliances, <500kW power output, efficiency between 75-90%, mostly ferrous materials, forced or natural draft, auto fuel feeding, applicable under EN303-5	Chips, Hard Coal	160	88	70

* Net fuel use efficiency is an estimate for the net efficiency of the each appliance throughout all seasons including part load operation (if applicable), transient operation, degradation of performance over time, etc. It is sometimes referred to as seasonal efficiency (though this typically only refers to boilers). It is to represent the actual net efficiency of the appliance has in converting fuel to useful heat in real life operating conditions. Net fuel use efficiency will be used to estimate environmental impacts in ECOREPORT. Test standard efficiency is used to measure and compare appliances in an equitable and repeatable fashion.