

APPENDIX D – EPBD RECAST

189 This section describes the modifications, to the calculation and output documents, required by the recast Energy Performance of Buildings Directive (EPBD2).

Primary energy consumption

190 A value for the total primary energy consumption by the Actual building will be calculated, based on the predicted delivered energy consumption for each fuel and the corresponding primary energy factors, as defined in Table 26, and will be reported in the BRUKL (compliance output document) summary.

Table 26 Fuel primary energy factors for non-domestic buildings	
Fuel type	kWh/kWh
Natural gas	1.02
LPG	1.06
Biogas	1.10
Fuel oil	1.06
Coal	1.02
Anthracite	1.02
Manufactured smokeless fuel (inc. Coke)	1.08
Dual fuel appliances (mineral + wood)	1.04
Biomass	1.07
Grid supplied electricity	2.92
Grid displaced electricity	2.92
Waste heat	1.20

191 When calculating the building’s primary energy consumption, any electrical energy generated by renewable technologies (principally PV systems and wind turbines) must be disregarded. Electrical energy generated by CHP generators will, however, be counted towards reductions in the primary energy use, i.e., the reported value for primary energy consumption will be net of any electrical energy displaced by CHP.

Alternative energy systems

192 Software tools will include additional questions for the user to confirm that the designers have considered in the new building design ‘alternative energy systems’, as defined in the recast EPBD (renewable energy systems, CHP, district heating/cooling, or heat pumps), and to confirm that there is documentary evidence of the feasibility assessment. They should also be asked if they have included any such systems in the proposed design solution. The answers to these questions will be reported in the BRUKL (compliance output document) summary.