Glossary of Terms and Abbreviations

Abbreviation or Term	Definition or Meaning
AD	Anaerobic Digestion/Anaerobic Digester
Combined heat and power (or cogeneration)	The simultaneous generation in one process of: a. thermal energy and electrical energy, or b. thermal energy and mechanical energy, or c. thermal, electrical and mechanical energy
CRU	Commission for Regulation of Utilities
Economically justifiable demand	The demand that does not exceed the needs for heat or cooling and which would otherwise be satisfied at market conditions by energy generation processes other than cogeneration. Market conditions can include energy generation processes that use traditional fuels such as natural gas and oil
EED	Energy Efficiency Directive - 2018/2002/EU
Efficiency	Efficiency calculated on the basis of 'net calorific values' of fuels.
Electricity production from combined heat and power	Electricity produced from combined heat and power calculated in accordance with Schedule 1 Section 7 of the Revised Electricity Regulation Act, 1999 and the Energy Efficiency Directive (2018/2002/EU).
Full CHP mode	Occurs when the CHP unit operates with maximum heat recovery (i.e. no heat dumped, for example as turbine exhaust gas or condensed steam turbine exhaust steam).
GT	Gas Turbine - produces electricity by compressing air, mixing it with fuel, combusting the mixture to create high-temperature, high-pressure gases, and expanding those gases through a turbine connected to a generator. Hot exhaust gases pass through a heat recovery boiler.
HE CHP	High Efficiency Combined Heat Power - Heat and power production which on an annual basis: • in the case of small-scale combined heat and power and micro-combined heat and power, achieves primary energy savings calculated in accordance with paragraphs 3 and 4 of Schedule 3 of the Electricity Regulation Act, 1999, and the Energy Efficiency Directive

	(2018/2002/EU). For micro- and small-scale CHP, PES must be >0 per cent, and for large-scale CHP, PES must be >10 per cent • in the case of all other combined heat and power, achieves primary energy savings calculated in accordance with paragraphs 3 and 4 of Schedule 3 of at least 10 per cent compared with the references for separate production of heat and electricity
kWe	Kilowatt (electrical power)
MID	Measuring Instruments Directive - (2014/32/EU)
MWe	Megawatt (electrical power)
ORC	Organic Rankine Cycle - generates power by using a low-boiling-point organic fluid to efficiently convert low-temperature heat into mechanical energy and electricity.
Overall efficiency	The annual sum of electricity and mechanical energy production and useful heat output divided by the fuel input used for heat produced in a cogeneration process and the gross electricity and mechanical energy production.
PES	Primary Energy Savings
Power to heat ratio	The ratio between electricity from cogeneration and useful heat when operating in full cogeneration mode using operational data of the specific unit.
REFIT	Renewable Energy Feed-in Tariff
SH&HW	Space Heating and Hot Water
Total fuel energy	The total fuel energy based on the lower heating value (LHV) needed in a CHP plant to generate electrical/mechanical energy and useful heat in a reporting period.
Useful heat	Heat produced in a cogeneration process to satisfy an economically justifiable demand for heat or cooling.