

8. Glossary of Terms

| Term | Description | Definition |
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| AD | Anaerobic Digestion | The process by which organic matter such as animal or food waste is broken down to produce biogas and bio-fertiliser. This process happens in the absence of oxygen in a sealed, oxygen-free tank called an anaerobic digester. |
| AHU | Air Handling Unit | An AHU is used to re-condition and circulate air as part of a heating, ventilating and air-conditioning system. |
| ASHP | Air Source Heat Pump | Technology converting heat from the air into useable heat for use in building or processes |
| BAU | Business as usual | Business as usual is a term that refers to the standard day-to-day business operations in an organisation |
| BEIS | Business, Energy and Industrial Strategy | Government Department for Business, Energy and Industrial Strategy |
| BF-BOF | Blast furnace – Basic oxygen furnace | Steel manufacturing method using oxygen |
| CCA | Climate Change Agreement | Voluntary agreements made between UK industry and the Environment Agency to reduce energy use and carbon dioxide |
| CCGT | Combined Cycle Gas Turbine | An assembly of heat engines that work in tandem from the same source of heat, converting it into mechanical energy |
| CCL | Climate Change Levy | Government tax to encourage reduction in gas emissions |
| CCM | Conservation Measure | The upgrades, retrofits, repairs and replacements that businesses can implement to become more carbon neutral. |
| CCUS | Carbon Capture Usage & Storage | The process of extracting the greenhouse gas carbon dioxide (CO ₂) from the exhaust streams of power stations or industrial processes. The CO ₂ is then either used for another purpose or stored. |
| CFD | Contract for Difference | A contract between two parties stipulating that the buyer will pay to the seller the difference between the current value of an asset and its value at contract time. |
| CFL | Compact Fluorescent Lamp | A fluorescent lamp |
| CHP | Combined Heat and Power | Also known as cogeneration, is: the concurrent production of electricity or mechanical power and useful thermal energy (heating and/or cooling) from a single source of energy. |
| CIA | Chemical Industries Association | Chemical Industries Association |
| CIP | Cleaning in Place | Refers to the use of a mix of chemicals, heat and water to clean machinery, vessels or pipe work without dismantling plant. |
| COP | Coefficient of Performance | The load capacity divided by the electrical load consumed by the equipment. |
| CO₂ | Carbon Dioxide | A Greenhouse Gas (GHG) which is colourless with a density ~53% higher than that of dry air. |
| CO₂e | Carbon Dioxide Equivalent | A standard unit for measuring carbon footprints |
| ECM | Energy Conservation Measure | The upgrades, retrofits, repairs and replacements that businesses can implement to become more energy efficient. |
| EMF | Electromagnetic Force | The rotation of the engine rotates the alternator which in turns produces an electromagnetic force. |

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| ESOS | Energy Saving Opportunity Scheme | Mandatory energy assessment and energy saving identification scheme typically delivered through an energy survey, introduced by the UK government for large organisations. |
| EU ETS | European Union Emissions Trading System | The EU ETS operates in all EU countries plus Iceland, Liechtenstein, and Norway (European Economic Area – European Free Trade Association states), limiting emissions from around 10,000 installations in the power sector and manufacturing industry, as well as airlines operating between these countries. |
| EV | Electrical Vehicle | Vehicles running on electricity rather than fossil fuels |
| FEED | Front-End Engineering Design | Basic engineering which is conducted after completion of Conceptual Design or Feasibility Study. |
| FDF | Food and Drink Federation | Food and Drink Federation |
| GGSS | Green Gas Support Scheme | GGSS will provide financial incentives for new AD biomethane plants to increase the proportion of green gas in the gas grid. |
| GHG | Greenhouse Gas | A gas that absorbs and emits radiant energy within the thermal infrared range. Greenhouse gases cause the greenhouse effect on planets. |
| GHI | Global Horizontal Irradiation | Total solar radiation incident on a horizontal surface |
| GIS | Geographic Information System | Computer system that analyses and displays geographically referenced information |
| GSHP | Ground Source Heat Pump | Technology converting heat from the ground into useable heat for use in building or processes |
| GVA | Gross Value Added | Economic productivity metric that measures the contribution of a corporate subsidiary, company, or municipality to an economy |
| HDS | Hydrodesulphurisation | Catalytic chemical process to remove any sulphur from natural gas or refined petroleum products e.g., petrol, kerosene, and diesel |
| HGV | Heavy Goods Vehicle | Vehicle that has a gross vehicle weight of over 3.5 tonnes |
| HP | Heat Pump | Technology converting heat from the renewable sources into useable heat for use in building or processes |
| HPHW | High Pressure Hot Water | A high-pressure hot water system is defined as one bar above vapour pressure, therefore greater than 10 bar and 120°C |
| HRC | Hydrofluorocarbons | Environmentally harmful gases |
| HVAC | Heating Ventilation Air Conditioning | Heating, ventilation, and air conditioning is the use of various technologies to control the temperature, humidity, and purity of the air in an enclosed space. |
| IETF | Industrial Energy Technology Fund | To help businesses with high energy use to cut their bills and carbon emissions through investing in energy efficiency and low carbon technologies |
| ICT | Information and communication technology | Extensional term for information technology (IT) that stresses the role of unified communications |

| Term | Description | Definition |
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| IoT | Internet of Things | Physical objects (or groups of such objects) that are embedded with sensors, processing ability, software, and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks |
| kWh | kilowatt-hour | A unit of energy equal to 3600 kilojoules (3.6 megajoules) and commonly used as a billing unit for energy delivered. |
| LGV | Large Goods Vehicles | Vehicle that has a gross vehicle weight of over 3.5 tonnes |
| LTHW | Low Temperature Hot Water | A low-temperature heating system is defined as one up to 90°C |
| MW | Megawatt | Unit of power equal to one million watts, especially as a measure of the output of a power station. |
| MT | Mega tonne | Unit of mass |
| m³ | Cubic metre | Unit of volume. |
| NAEI | National Atmospheric Emissions Inventory | UK Data for emissions |
| NZNW | Net Zero North West | North West industrial cluster aiming to be net zero. |
| PEM | Proton Exchange Membrane | Common electrolysis system |
| PV | Photovoltaics | Renewable energy technology that utilises irradiance from the sun to generate electricity |
| RHI | Renewable Heat Incentive | Government funding Incentive to promote use of renewable heat |
| RFI | Request for Information | Method of collecting of information |
| SECR | Streamlined Energy and Carbon Reporting | The UK Government's name for the replacement legislation to a number of existing and some soon to expire programmes covering energy and carbon reporting and taxation. Came into force April 2019. |
| SCOP | Seasonal Coefficient of Performance | Seasonal average of the ratio of heat output over the electrical input |
| SMR | Small Modular Reactors | Low carbon technology using nuclear technology |
| SMMT | Society of Motor Manufacturers and Traders | Society of Motor Manufacturers and Traders |
| SMT | Smart Metering and Targeting system | Energy monitoring and targeting systems |
| VSD | Variable Speed Drive | Devices that can vary the speed of a normally fixed speed motor. |
| VFD | Variable Frequency Drive | A variable frequency drive controls the speed of an AC motor by varying the frequency supplied to the motor |
| WSHP | Water Source Heat Pump | Technology converting heat from the water into useable heat for use in building or processes |