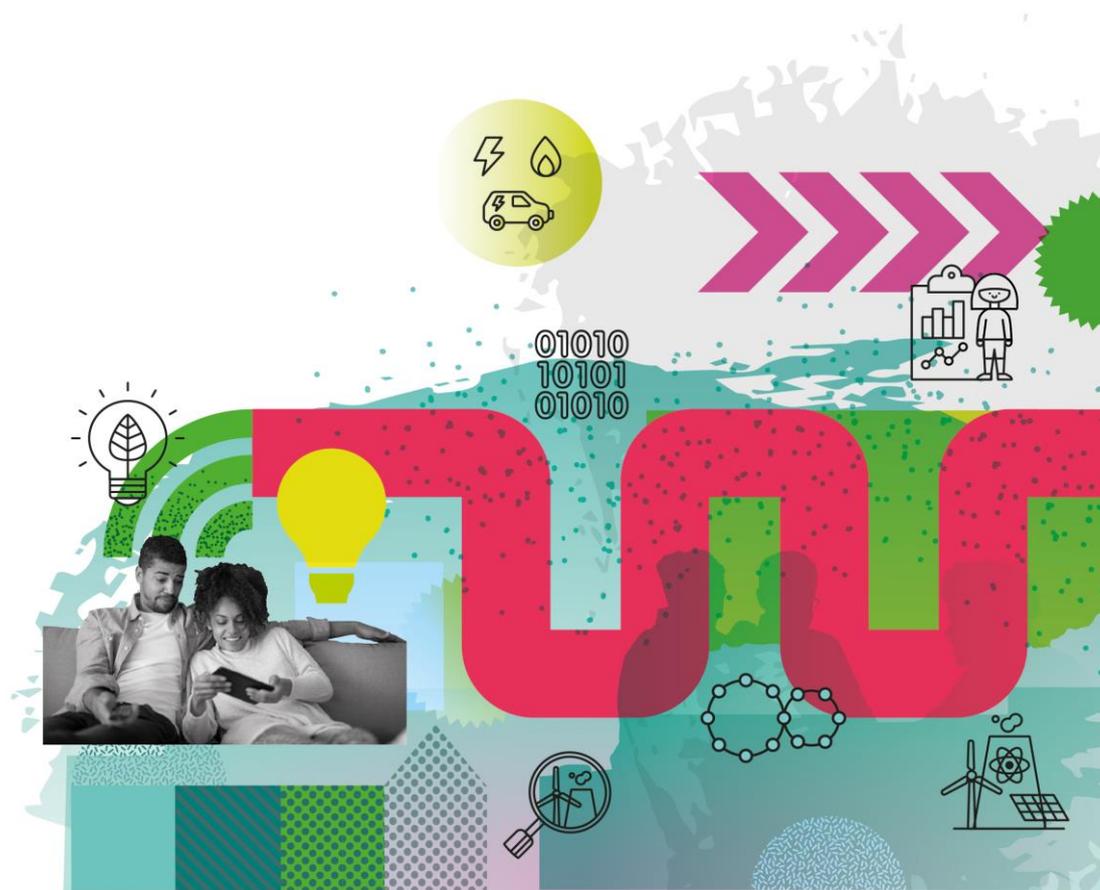


# Glossary

## Energy Data Taskforce Appendix 7

### Energy Data Taskforce

13/06/2019



<b>TERM</b>	<b>DEFINITION / DESCRIPTION</b>
<i>AI</i>	Artificial Intelligence. The theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception and decision-making.
<i>AI Ready</i>	A person or a company that is prepared and trained to benefit from the opportunities of Artificial Intelligence (AI)
<i>API</i>	Application Programming Interface. For data, this is usually a way provided by the data publisher or programs or apps to read data directly over the web. The app sends the API a query asking for the specific data it needs, e.g. the time of the next bus leaving a stop. This allows the app to use the data without downloading the whole dataset, saving bandwidth and ensuring that the data used is the most up-to-date available.
<i>AREMI Project</i>	Australian Renewable Energy Mapping Infrastructure. The purpose of the AREMI project is to better inform energy supply and infrastructure investment decisions; reduce the time and costs associated with early stage project planning; and create opportunities for value adding analytical work within the public and private sectors.
<i>Asset</i>	Physical components of the energy system, including networks, generation assets and storage assets
<i>Behind-the-meter asset</i>	An energy asset is on the consumption side of the electricity meter, i.e. not connected directly to the electricity grid.
<i>BEIS</i>	(Department for) Business, Energy and Industrial Strategy
<i>CDEI</i>	The Centre for Data Ethics and Innovation. An advisory body set up by Government and led by an independent board of expert members to investigate and advise on maximising the benefits of data-enabled technologies, including artificial intelligence (AI).
<i>CDSP</i>	Central Data Service Provider
<i>CIM</i>	Common Information Model
<i>Closed Data</i>	Data is only available within a single organisation
<i>CNI</i>	Critical National Infrastructure
<i>Code</i>	The industry codes underpin the electricity and gas wholesale and retail markets. Licensees are required to maintain, become party to, or comply with the industry codes in accordance with the conditions of their licence.
<i>Commercial Data</i>	Data that relates to the private administration of a business or data which was not collected as part of an obligation / by a regulated monopoly and would not have been originated or captured without the activity of the organisation
<i>Consumer Data</i>	Personal data is information relating to natural person who can be identified directly or indirectly from the information in question
<i>CPNI</i>	Centre for the Protection of National Infrastructure. United Kingdom government authority which provides protective security advice to businesses and organisations across the national infrastructure.
<i>CSIRO</i>	Commonwealth Scientific and Industrial Research Organisation (Australia). An independent Australian federal government agency responsible for scientific research.
<i>DAPF</i>	Data Access Privacy Framework. To protect consumers' interests, while enabling proportionate access to energy consumption data, a smart metering Data Access and Privacy Framework was established by DECC (now BEIS) in 2013.
<i>Data</i>	Information that has been translated into a form that is efficient for movement or processing.
<i>Data Catalogue</i>	A central "index" of what data is held by energy parties curated using common metadata standards.
<i>Data Governance</i>	Data Governance ensures data is being shared and used fairly and ethically across sectors. It includes Responsibility, Transparency and Challenge and Enforcement.
<i>Data Mapping</i>	Data mapping is the process of creating data element mappings between two distinct data models.

<i>Data Model</i>	A data model is an abstract model that organizes elements of data and standardizes how they relate to one another and to properties of the real-world entities.
<i>Data Triage</i>	Sorting and allocation of data for security, privacy, negative consumer impacts and commercial issues.
<i>Data Visibility</i>	Revealing what data exists across the system, its source and owner to all energy actors.
<i>DCLG</i>	Department of Community and Local Government
<i>DCMS</i>	(Department for) Digital, Culture, Media and Sport
<i>DECC</i>	Department for Energy and Climate Change (became part of BEIS in 2016)
<i>DEFRA</i>	Department for Environment, Food & Rural Affairs
<i>DFTG</i>	Digital Framework Task Group. Deliver key recommendations from the National Infrastructure Commission's 'Data for the Public Good' Report
<i>Digital Model</i>	A digital representation of physical system or object.
<i>Digital Shadow</i>	A digital model which integrates automated one-way data flow from the physical system or object
<i>Digital System Map</i>	A static map of current energy infrastructure
<i>Digital Twin</i>	Digital twin refers to a digital replica of physical assets (physical twin), processes, people, places, systems and devices that can be used for various purposes. It is a digital model which integrates automated, two-way data flow between the model and physical object or system. Making a change to one can change the other.
<i>Distributed Generation</i>	Distributed generation refers to a variety of technologies that generate and store electricity at or near where it will be used, such as solar panels and combined heat and power.
<i>DNO</i>	Distribution Network Operator. Owns the 'Low' voltage part of the UK distribution network infrastructure.
<i>DSO</i>	Distribution System Operator. Currently the DNOs control and maintain the transmission and distribution networks. Under a future DSO model, the operator will take a more active role in managing local electricity generation and use.
<i>DVLA</i>	Driver and Vehicle Licensing Agency
<i>ECO</i>	Energy Company Obligation. DECC Policy
<i>ECOES</i>	Electricity Central Online Enquiry Service
<i>EDC</i>	Energy Data Centre. The UKERC EDC hosts energy data for users in the public, private, and third sectors.
<i>EDTF</i>	Energy Data Task Force
<i>EIR</i>	Environmental Information Regulation. Allows the public release of environmental information that is held by a public authority.
<i>EIRO</i>	Energy Innovation Research Office. Provides guidance to EIB and BEIS.
<i>Energy System</i>	The infrastructure and systems which are used to generate, store, transform, trade, transport or control energy' across electricity and gas.
<i>Energy System Data</i>	Facts and statistics collected together in an accessible digital format which describe the Energy System and its operation (current, historic and forecast), including: the presence and state of infrastructure, operation of the system, associated market operations, policy and regulation.
<i>ENTSO-E</i>	European Network of Transmission System Operators for Electricity. ENTSO-E represents 43 electricity transmission system operators (TSOs) from 36 countries across Europe.
<i>EPC</i>	Energy Performance Certificate. Required for every home sold / rented / bought since 2008. The certificates contain information about the property's typical energy costs and will recommend ways to reduce energy use to make the property more energy efficient.

<i>ERP</i>	Energy Research Partnership. Bring together key funders of energy research, development, demonstration and deployment in Government, industry and academia.
<i>E-Serve</i>	Ofgem E-Serve is the administrator of the government’s Energy Company Obligation (ECO) scheme.
<i>ESO</i>	Energy System Operator. The part of the National Grid with responsibility for managing the delivery of high voltage electricity around the UKs transmission network.
<i>ESOS</i>	Energy Savings Opportunity Scheme is a mandatory energy assessment scheme for organisations in the UK that meet the qualification criteria.
<i>FIT</i>	Feed-in Tariff. A government programme designed to promote the uptake of renewable and low-carbon electricity generation technologies.
<i>Flexibility</i>	The extent to which a power system can modify electricity production or consumption in response to variability, expected or otherwise.
<i>GDN</i>	Gas distribution network. The penultimate stage in the delivery process of gas. Gas needs to travel through the high-pressure transmission system, then through the medium and low-pressure distribution networks to reach the consumer.
<i>GDNO</i>	Gas Distribution Network Operators.
<i>GDPR</i>	General Data Protection Regulation
<i>GIS</i>	Geographical Information System. Any computer system designed to read, display, analyse and manipulate geodata.
<i>ICO</i>	Information Commissioner's Office. The role of the ICO is to uphold information rights in the public interest (including data protection)
<i>Industry</i>	Commercial organisations and activities involved in the process of producing a service or product for sale. In this report, industry is used as shorthand for the energy industry unless explicitly stated.
<i>Machine Learning</i>	An application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed.
<i>MCS</i>	Microgeneration Certification Scheme
<i>MPAN</i>	Meter Point Administration Number. 21-digit reference used in GB to uniquely identify electricity supply points. Variants include Import MPAN and Export MPAN (feeding back to DNO network.) Identifies Distributer ID to Profile Class (Domestic etc.)
<i>National Grid</i>	In the electricity sector in the United Kingdom the National Grid is the high-voltage electric power transmission network covering Great Britain, connecting power stations and major substations and ensuring that electricity generated anywhere on it can be used to satisfy demand elsewhere.
<i>Negative Consumer Impact (data)</i>	Data that is likely to drive actions (intentional or otherwise) which will negatively impact consumers e.g. Modelling variables that could be used by unscrupulous actors to game a market
<i>NIC</i>	National Infrastructure Commission. Provides guidance to the government on infrastructure.
<i>Non commercial</i>	A restriction, as part of a licence, that content cannot be freely re-used for ‘commercial’ purposes. Content or data subject to a non-commercial restriction is not open, according to the Open Definition. Such a restriction reduces economic value and causes problems with licence mixing, as well as often ruling out more than is intended (for example, it is often unclear whether educational uses are ‘commercial’). The intent of a non-commercial clause may be better captured by a share-alike requirement.
<i>ODbL</i>	Open Database Licence. An attempt to create an open licence for data which covers the ‘database rights’ (see copyright) as well as copyright itself. It does this by imposing contractual obligations on the data re-user. Unfortunately contract law is fundamentally different from copyright law, since copyright is inherent in a work and binds all downstream users of the

	work, whereas a contract only binds the parties to the contract and has no force on a later re-user of re-published data. The ODbL remains useful nevertheless, and other attempts are being made to create open licences specifically for data.
<i>ODI</i>	Open Data Institute. Works with companies and governments to build an open, trustworthy data ecosystem.
<i>ODRE</i>	Open Data Reseaux D'energies. An online portal that contains datasets representing France's energy system
<i>Ofgem</i>	The Office of Gas and Electricity Markets. Government regulator for the electricity and downstream natural gas markets in Great Britain.
<i>ONS</i>	Office for National Statistics. The UK's largest independent producer of official statistics and the recognised national statistical institute of the UK.
<i>Open Access</i>	The principle that access to the published papers and other results of research, especially publicly funded research, should be freely available to all. This contrasts with the traditional model where research is published in journals which charge subscription fees to readers. Besides benefits like the benefits of open data, proponents suggest that it is immoral to withhold potentially life-saving and valuable research from some readers who may be able to use or build on it. Open-access journals now exist, and the interest of research funders is giving them some traction, especially in the sciences.
<i>Open Data</i>	Data is open if it can be freely accessed, used, modified and shared by anyone for any purpose - subject only, at most, to requirements to provide attribution and/or share-alike. Specifically, open data is defined by the Open Definition and requires that the data be A. Legally open: that is, available under an open (data) license that permits anyone freely to access, reuse and redistribute B. Technically open: that is, that the data be available for no more than the cost of reproduction and in machine-readable and bulk form.
<i>Open Market</i>	An unrestricted market with free access by and competition of buyers and sellers.
<i>Open Source</i>	Software for which the source code is available under an open licence. Not only can the software be used for free, but users with the necessary technical skills can inspect the source code, modify it and run their own versions of the code, helping to fix bugs, develop new features, etc. Some large open source software projects have thousands of volunteer contributors. The Open Definition was heavily based on the earlier Open Source Definition, which sets out the conditions under which software can be considered open source.
<i>OS</i>	Ordnance Survey. The national mapping agency of the United Kingdom which covers the island of Great Britain.
<i>Presumed Open</i>	The principle of "Presumed Open" for the energy system means that, by default, data are open unless there is a security, market or commercial risk.
<i>Privacy (data)</i>	The right of individuals to a private life includes a right not to have personal information about themselves made public. A right to privacy is recognised by the Universal Declaration of Human Rights and the European Convention on Human Rights. See data protection legislation.
<i>Public Data</i>	Data is made publicly available but with some restrictions on usage
<i>Public domain (data)</i>	Content to which copyright does not apply, for example because it has expired, is free for any kind of use by anyone and is said to be in the public domain. CC0, one of the licences of Creative Commons, is a 'public domain dedication' which attempts so far as possible to renounce all rights in the work and place it in the public domain.
<i>Public Good</i>	Benefits consumers, business, government and society as a whole.
<i>REC</i>	Retail Energy Code. A new dual fuel code being created by Ofgem with the aim of governing the Central Switching Service (CSS) and wider switching and registration arrangements
<i>RHI</i>	Renewable Heat Incentive. RHI is a government financial incentive to promote the use of renewable heat.

<i>RIIO</i>	Revenue = Incentives + Innovation + Outputs. Used with cost estimates to set network price controls.
<i>Sector</i>	An area of economic activity. In this report, sector is used as shorthand for energy sector unless explicitly stated.
<i>Security (data)</i>	Data that creates incremental or exacerbates existing security issues which cannot be mitigated via sensible security protocols such as physical site security, robust cyber security or buffer databases.
<i>Shared Data</i>	Data is made available to a limited group of participants possibly with some restrictions on usage
<i>SMETS</i>	Smart Metering Equipment Technical Specification. Document designated by Secretary of State forming part of SEC. Minimal technical requirements for Smart Metering equipment.
<i>SMETS1</i>	Smart Metering Equipment Technical Specification v1. First version designated 18-Dec 2012
<i>SMETS2</i>	Smart Metering Equipment Technical Specification v2. Second version
<i>TSO</i>	Transmission System Operator
<i>UKERC</i>	UK Energy Research Centre. UKERC carries out research into sustainable future energy systems.
<i>WPD</i>	Western Power Distribution. WPD is the electricity distribution network operator (DNO) for the Midlands, South Wales and the South West.
<i>Xoserve</i>	Gas industry's Central Data Service Provider (CDSP), deliver a full suite of vital services to gas suppliers, shippers and transporters, and ensure that Britain's retail gas market runs efficiently and reliably for all our customers.