Understanding the UK Energy Market

A Focus on Commodity Costs - the key terms, explained



## Introduction

The energy industry uses a lot of specific terminology and jargon. Often it's unavoidable, but when it comes to understanding the UK energy market, the sheer amount of terms and acronyms doesn't help.

We want to be as clear as possible, so that you can make informed decisions when it comes to energy, and take advantage of the opportunities it presents. So here are the definitions of some of the key terms used regularly and that you will see throughout our reports.



Brexit	British + exit, the term used to refer to the United Kingdom (UK) leaving the European Union (EU).	Commodity costs	The wholesale price of the actual amount of power we use.
British Electricity Trading and Transmission	A fully-competitive British-wide market for the trading and transmission of electricity generation.	Cost of energy	The cost of electricity, fuel oil, natural gas, or other sources of energy.
Arrangements (BETTA)		Demand	The amount of energy people want/need to buy.
Carbon allowance	An allowance, usually issued by a government, which allows for its owner to emit a specified amount of an air pollutant, such as CO <sub>2</sub> .	Emissions Trading Scheme (ETS)	The ETS is an EU cap and trade scheme that seeks to limit overall GHG emissions. All large generators, manufacturers and other installations
Carbon dioxide (CO <sub>2</sub> )	A colourless, odourless gas produced by burning carbon and organic compounds and by respiration. It is naturally present in air (about 0.03%) and is absorbed by plants in		are allocated allowances which can then be traded if emissions fall below or exceed permitted levels.
	photosynthesis.	Electricity invoice	An invoice sent monthly to consumers, detailing all the charges that are owed for electrical energy
Carbon tax	A tax levied on fossil fuel usage usually based on the carbon content – generally designed to curb use rather than raise revenue.	Energy generation	that has been used.  The process of generating one form of energy, such as electricity, from other sources.
Carbon Price Support (CPS) levy	The rate generators of electricity are responsible for charging to customers.	Energy market drivers	The factors that can influence energy commodity prices, such as supply and demand, weather,
Carbon value	The price of carbon, affecting the cost of carbon permits, for example.		politics and economics.
Climate change	The variation in the earth's global climate over time. Man-made climate change is a variation	Energy mix	The combination of different energy sources used to meet energy consumption needs of a specific geographical area, such as the UK.
Climate Change Act 2008	directly attributable to human behaviour.  A UK act of Parliament (law) which forms the legal basis for the UK's approach to tackling and responding to climate change, including the obligation to reduce Greenhouse Gas (GHG) emissions by 2050.	Feed-in Tariff (FIT)	A UK government programme designed to promote the uptake of renewable and low-carbon electricity generation technologies.
		Fixed charge	An agreed daily, monthly or quarterly charge levied by the supplier.
Coal-free generation	The process of generating electricity without using coal – a phenomenon becoming more popular as countries aim to end their dependency	Fossil fuel	An energy source formed in the earth's crust from decayed organic material. The common fossil fuels are oil, coal and natural gas.
Coal generation	on coal.  The process of turning coal into generating electricity.	Gas	Fossil energy source containing many different compounds, formed deep beneath the earth's surface.

Gas imports	See 'Import dependency'.	Low-carbon transition plan	A national strategy in the UK for climate and energy which came into force in 2009 with the
Gas storage reserves	Gas that is stored, typically at sites such as salt caverns or depleted gas fields, for emergency or strategic purposes such as balancing fluctuations in daily or seasonal demand.	transition plan	aim of delivering emissions cuts of 18% on 2008 levels by 2020.
		Megawatt hour (MWh)	Used to measure energy output, equal to 1,000 kilowatts (KW) of electricity generated per hour.
Generation	The production of electricity at power stations from fuels such as gas, nuclear, and coal, or renewable sources such as wind.	Non-commodity costs	The other charges that make up an energy invoice that are not for energy itself, such as government
Gigawatt (GW)	An amount of energy equal to one billion watts.		levies and taxes.
Hinkley Point	Hinkley Point C nuclear power station is the construction of a 3,200 Megawatt electric (MWe) nuclear power station in Somerset, which will provide about 7% of the UK's total electricity	Non-fossil-fuel obligation	A collection of orders requiring the electricity Distribution Network Operators (DNOs) in England and Wales to purchase electricity from the nuclear power and renewable energy sectors.
Hydro	needs (once operational).  A form of energy that harnesses the power of	Nord Stream 2	A planned pipeline to transport natural gas into the EU from Russia through the Baltic Sea.
Hydro	water to generate electricity.	North Sea	A sea in the Atlantic Ocean between the UK,
Import dependency/ gas imports	The need to rely on importing energy from another country or region because of insufficient		Norway, Jutland, Germany, the Netherlands, Belgium and Hauts-de-France.
Interconnectors	domestic supply.  High voltage cables that connect the electricity	Nuclear energy	Energy that is stored in the centre of an atom and is released after the atom is split.
	systems of neighbouring countries, to be traded and shared.	Offshore wind	Wind that blows from land to water, used by offshore wind farms to generate electricity.
Interconnexion France -Angleterre (IFA)	Interconnector owned jointly by French Transmission Operator RTE and National Grid, operating the subsea electricity link between the UK and France, commissioned in 1986.	Peak	The maximum power requirement of a system at a given time, or the amount of power required to supply customers at times when need is greatest.
Landfill gas (LFG)	A mix of different gases created by the action of microorganisms within landfill sites as they decompose organic waste.	Renewable generation	Energy that is collected from renewable resources that are naturally replenishing. This includes solar, wind, hydro, and biomass.
Liquefied natural gas (LNG)	A clear, colourless and non-toxic liquid which forms when natural gas is cooled. This is often done for ease and safety, as in a liquid state, it doesn't require pressurised storage.	Renewables Obligation (RO)	A support mechanism to incentivise large-scale renewable energy projects in the UK.
		Self-sufficiency	A country or region that has the ability to fulfil its own energy needs, rather than relying on imports.
Low-carbon power	Power that is generated using a low amount of carbon emissions, such as wind, solar, or nuclear		

power.

Sizewell C A proposed project to contract a 3,200 MWe

nuclear power station in Suffolk.

**Solar energy** The harnessing of radiant light and heat from the

sun to generate energy.

Solar photovoltaics

(PV)

Solar electricity panels which capture the sun's

energy and convert it into electricity.

**Steam coal** A grade between bituminous coal and anthracite

that was once known as 'steam coal' because it was widely used as a fuel for steam locomotives.

**Supply pressure** When energy supplies are lower than expected,

creating a tight market.

**Terawatt hour (TWh)** A unit of energy equal to outputting one trillion

watts for one hour. A common way to measure the energy of power plants over the course of a

year.

Transmission and

distribution costs

The costs covering the infrastructure that is needed to get energy from its generation to the

consumer.

**Undersea pipeline** A pipeline that is laid on the seabed or below it to

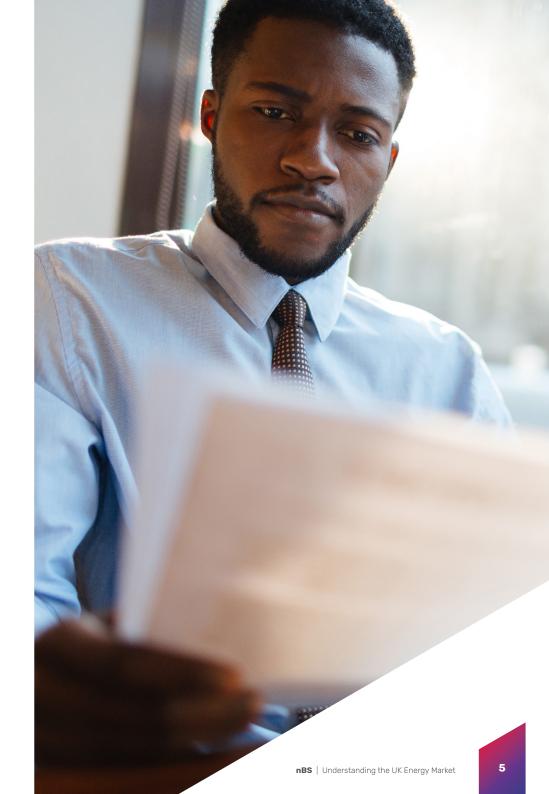
carry energy across the sea.

**Wholesale costs** The price that suppliers buy the energy at.

**Wind output** Energy that is generated using wind.

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