

GLOSSARY

Anaerobic Digestion

A biochemical process by which organic matter is decomposed by bacteria in the absence of oxygen, producing methane and other by products.

The NFFO 4 definition states: "Anaerobic digestion generating stations" means generating stations which are fuelled wholly by gas derived from anaerobic digestion of:

- (a) agricultural waste, or
- (b) agricultural waste and food-processing waste, provided that the food-processing waste used makes up no more than 20 percent of the total weight of the agricultural and food-processing waste used (on a dry-weight basis).

BETTA

British Electricity Transmission and Trading Arrangements: The introduction of NETA throughout Britain by combining English/Welsh and Scottish rules on 1 April 2005

Bio-energy

Biomass is derived from plant material and animal residues/wastes. It can be used to generate electricity and or heat and to produce transport fuel. Such energy is known as bio-energy.

A very wide range of biomass can be used for energy purposes. Examples include agricultural wastes, e.g. straw and other crop residues; crops grown specifically for energy production, e.g. willow, miscanthus, oil seed rape and wastes from a range of

sources including food production. The nature of the fuel will determine the way that energy can best be recovered from it.

Biomass generating stations

The NFFO definition states: "Biomass generating stations" means generating stations which are fuelled wholly or partially by any one or more of the following:

- (a) crops grown for the purpose of providing a source of energy;
- (b) agricultural waste;
- (c) forestry waste; and
- (d) fuel derived from any one or more of the types of crop or waste mentioned in sub-paragraphs (a) to (c) above, but excluding any such station as is partially fuelled by any one or more of the following:
 - a. gas derived from landfill site of any description;
 - b. municipal waste;
 - c. industrial waste;
 - d. gas or waste, derived from human sewage; and
 - e. fuel derived from either or both of municipal and industrial waste

Biomass GPC generating stations	As NFFO definition above, but generation stations that are driven wholly by an engine, or a gas turbine, fuelled directly by gas produced by partial combustion or partly by an engine, or gas turbine, so fuelled and partly by an engine, or any turbine, utilising steam produced using heat from the first engine or gas turbine.
BSC	The Balancing and Settlement Code: Industry code covering the rules for electricity balancing and imbalance charges in Great Britain
CCL	A tax on energy delivered to non-domestic users in the UK, aimed at providing incentives to increase energy efficiency and reduce carbon emissions. Energy generated from renewable sources is not taxed.
Climate Change Levy	Administered by HM Customs and Excise
Combined Heat and Power (CHP)	A technology where electricity is generated at or near the place where it is used, with the heat produced being used for space heating, water heating or industrial steam loads. This potentially leads to much higher efficiency than conventional generation.
Co-firing	The combustion of biomass products with fossil fuels in conventional fossil fuel power stations. The biomass element of the electricity generated can be eligible for Renewables Obligation Certificates.
DNC	Declared Net Capacity. Determined in the Electricity Act 1989 by the formula $DNC = B * X$ Where B is the highest generation of electricity which can be maintained without causing damage to the plant after deducting electricity consumed by the plant; and X is the value set out below as applicable to the generating station: Wave or tidal power - 0.33, Water power other than wave or tidal - 1.00, Wind power – 0.43 Solar power – 0.17
DNOs Distribution Network Owners	companies that are responsible for operating the networks that connect electricity consumers to the national transmission system and provide interconnection with embedded generation.
DUoS	Distribution Use of System charges Charges paid by generators and suppliers for the use of the distribution network.
Embedded Benefits	Benefits gained by smaller generators by avoiding the charges associated with use of the electricity transmission grid and becoming signatories to the BSC.

Embedded Generation	Electricity generation which is connected to the distribution network rather than the transmission network.
Energy Crops	Crops grown specifically for electricity generation, either in a dedicated biomass plant or for co-firing. They include miscanthus and short-rotation coppice.
Fossil Fuels	Non-renewable, naturally occurring fuels, such as coal, natural gas, and crude oil, that come from the compressed remains of ancient plants and animals.
Fossil Fuel Levy	A charge on domestic and industrial electricity users in England and Wales to support non-fossil fuel electricity sources, including renewables through the Non-Fossil Fuel Obligation.
Hydro Generating Stations	NFFO definition: "Hydro generating stations" means generating stations which are driven by any form of water power other than tidal or wave power.
Landfill Generating Stations	NFFO definition: "Landfill gas generating stations" means generating stations which are fuelled wholly or partially by gas derived from landfill sites on which, at any time before 22 July 1993, activities were carried on in pursuance of a licence issued under section 5 of the Control of Pollution Act 1974(b) or in accordance with conditions specified in a resolution passed by the relevant disposal authority pursuant to section 11(3)(e) of the said Act of 1974, but excluding any such station as is partially fuelled by any one or more of the following: <ul style="list-style-type: none">(a) gas derived from landfill sites of any other description(b) municipal waste;(c) industrial waste;(d) gas or waste, derived from human sewage; and(e) fuel derived from either or both of the types of waste mentioned in sub-paragraphs (b) and (c) above.
LECs	Levy Exemption Certificates: Evidence of CCL exempt electricity supply generated from qualifying renewable sources. Organisations that pay the CCL can enter into agreements with suppliers to purchase renewable electricity which is exempt from the levy.

MIW	<p>Municipal and Industrial Waste Generating Station.</p> <p>NFFO definition: "Municipal and industrial waste generating stations" means generating stations which are fuelled wholly or partially by any one or more of the following:</p> <ul style="list-style-type: none">(a) municipal waste;(b) industrial waste; and(c) fuel derived from either or both of the types of waste mentioned in sub-paragraphs (a) and (b) above, but excluding any such station as is partially fuelled by either or both of the following:-(d) gas or waste, derived from human sewage; and(e) gas derived from any landfill site which was not a landfill site on which, at any time before 22 July 1993, activities were carried on in pursuance of a licence issued under section 5 of the Control of Pollution Act 1974 or in accordance with conditions specified in a resolution passed by the relevant disposal authority pursuant to section 11(3)(e) of the said Act of 1974.
NETA	<p>New Electricity Trading Arrangements: A system of wholesale electricity trading based on bilateral contracting between suppliers and generators, introduced in England and Wales in March 2001.</p>
NFFO	<p>Non-Fossil Fuel Obligation – The Government's main policy mechanism (during the period 1990 to 2002) for supporting renewable energy. It required the regional electricity companies (PES) to contract for certain amount of generating capacity from renewable sources. The obligation continues on the supply company successors to the RECs until 2019.</p>
OFGEM	<p>OFGEM (Office of Gas and Electricity Markets) is the UK energy regulator, charged with: making gas and electricity markets work effectively, regulating monopoly businesses, securing Britain's gas and electricity supplies, meeting its increased social and environmental responsibilities. Also known as GEMA - Gas and Electricity Markets Authority.</p>
PES	<p>Public Electricity Supplier: One of the fourteen regional integrated supply/distribution companies that existed prior to liberalisation of the GB electricity market.</p>
Renewables Obligation (RO)	<p>The Government's main policy mechanism from 2002) for supporting renewable energy. The obligation placed on electricity suppliers to deliver a stated proportion of their electricity from eligible renewable energy sources.</p>

Renewables Obligation Certificates (ROCs)	Eligible renewable generators receive ROCs for each MWh of electricity generated. These certificates can be sold to suppliers. In order to fulfil their RO suppliers can present enough certificates to cover the required percentage of their output, or pay a 'buyout price' per MWh for any shortfall. All proceeds from buyout payments are recycled to suppliers in proportion to the number of ROCs they present.
Suppliers	Firms which buy electricity from generators and sell it to domestic, commercial and industrial customers. Supply companies may own electricity generating capacity.
REGOs	<p>Renewable Energy Guarantee of Origin Certificates</p> <p>REGOs are issued as evidence that the electricity was generated from a 'renewable source' (as defined in the legislation) with one REGO representing one Kilowatt/hour of electricity.</p> <p>REGOs (Renewable Energy Guarantees of Origin) were introduced on 27 October 2003 in response to the Renewables Directive - EU Directive 2001/77/EC Article 5. The purpose of this Directive is to promote an increase in the contribution of renewable energy sources to electricity production in European Member States</p>
Transmission Network	The system of high voltage power lines, which transport electricity from power stations to local distribution networks.
Wind generating stations	Generating stations which are driven by wind.
Wave generating stations	Generating stations which are driven by any for of wave or tidal power.
Units of Energy	<p>Energy is the ability to do work. 1Watt hour (Wh) is the amount of energy used by a 1W device operating for an hour.</p> <p>KWh (kilowatt-hour) 1kWh = 1,000Wh.</p> <p>MWh (megawatt-hour) 1MWh = 1,000 kWh = 1,000,000 Wh.</p>