

Edexcel A Geography GCSE

Topic 6A: Energy Resource Management Glossary of Definitions

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Abiotic Components - Non-living environmental factors that have influence over the ecosystem (e.g. climate, light exposure, soil type).

Air Pollution - The level of toxic gases and particulates in the air.

Biodiversity - The variety of species of plants and animals within a region.

Biofuels - Fuels produced from organic material such as crops, vegetation and biomass.

Biotic Components - Living organisms that interact with the environment and other organisms within an ecosystem.

Climate Change - A distinct change in global or regional patterns of climate, such as changes in temperature or precipitation patterns.

Decommission - The process of closing and safely disposing waste from a power station. This can cost millions of pounds and take over a year to complete.

Deforestation - The permanent (and usually large-scale) removal of trees.

Degradation - The act or process of damaging or ruining the environment.

Energy Deficit - A country that generates less energy than its population needs (the supply is less than the demand).

Energy Mix - The composition of a country's energy sources.

Energy Security - When a country has ownership and control of their energy source, production and transportation.

Energy Surplus - A country that generates more energy than its population needs (the supply is greater than the demand).

Food Chain - A linear relationship showing the biotic interactions within an ecosystem, from a producer to a final consumer.

Forestry - The management of woodland and forests.

Fossil fuels - Fuels made up of the remains of organic material, such as oil, coal and gas.

Fracking - The process of releasing trapped natural gas from shale rocks. Fracking involves pushing high-pressure liquids underground to cause the shale rocks to crack.

Geothermal Energy - Water is pumped deep underground to be heated by magma plumes or radioactive rocks. The hot water creates steam, which turns turbines to generate electricity.

Greenhouse Gases - Gases in the Earth's atmosphere that trap energy and contribute to the greenhouse effect (carbon dioxide, methane, water vapour and nitrous oxides).



Hydroelectric Energy - A form of energy which uses moving water to turn turbines and generate electricity. This type of energy is usually associated with dams.

Industrialisation - The development of the industrial sector in a country or region.

Importing - Purchasing resources (i.e. food or products) from another country.

Non-Renewable Energy - A source of energy that will run out or will take thousands of years to replace such as fossil fuels.

Nuclear Fusion - The process of joining atomic nuclei together to produce energy.

Oil Spills - Accidents where oil leaks from pipes, oil rigs or even freight ships onto land or sea.

Renewable Energy - Primary energy that can be re-used to produce electricity or has a short lifetime, therefore any used can be replaced quickly e.g. hydroelectric, wind, solar.

Secondary Energy - The product of primary energy, mainly electricity.

Soil Erosion - Removal of soil particles, causing a loss of nutrients and moisture, leading to a reduced number of plants.

Solar Energy - Energy produced by solar panels absorbing sunlight.

Sustainability - Managing resources and activities in a way that meets the demands for the present, while considering the impacts this will have for future generations.

Tidal Energy - Energy which is powered by the changes of the tide. Turbines are built on the seabed which are turned by the water when the sea goes out or comes in as the tides change.

Urbanisation - The increase in the proportion of the population living in urban areas.

Water Pollution - The levels of toxic substances and litter in waterways and underground water stores.

Wave Energy - Energy created by waves. Small turbines are located in buoys which float on the surface of the sea. The waves pass through the turbines and create electricity.

Wind Energy - Energy fuelled by wind. Wind goes through wind turbines which generate electricity as they turn.

