

- Anti-Malthusians:** also known as resource optimists; the optimists who agree that wither population growth will slow well before the limits of resources are reached or that the ingenuity of humankind will solve resource problems when they arise
- biocapacity:** the capacity of an area or ecosystem to generate an ongoing supply of resources and to absorb its wastes
- biofuels:** fossil fuel substitutes that can be made from a range of agri-crop materials including oilseeds, wheat, corn and sugar
- carbon credit:** a permit that allows an organization to emit a specified amount of greenhouse gases; also called an emission permit
- carbon footprint:** 'the total set of GHG (greenhouse gas) emissions caused directly and indirectly by an individual, organization, event or product' (UK Carbon Trust 2008)
- carbon trading:** a company that does not use up the level of emissions it is entitled to, can sell the remainder of its entitlement to another company that pollutes above its entitlement
- clean coal technology:** power plant processes that both increase the efficiency of coal-burning and significantly reduce emissions
- coal gasification:** a process that converts solid coal into a gas that can be used for power generation
- community energy:** energy produced close to the point of consumption
- conservation of resources:** management of the human use of natural resources to provide the maximum benefit to current generations while maintaining capacity to meet the needs of future generations
- ecological footprint:** a sustainability indicator which expresses the relationship between population and the natural environment. It sums the use of natural resources by a country's population
- economic optimum:** the level of population which, through the production of goods and services, provides the highest average standard of living
- energy crisis:** a serious shortage of energy which interrupts domestic supplies and has an impact on all sectors of the economy
- energy pathways:** supply routes between energy producers and consumers which may be pipelines, shipping routes or electricity cables
- environmental impact assessment:** a document required by law detailing all the impacts on the environment of an energy or other project above a certain size
- fast-breeder reactor:** a nuclear reactor in which the chain reaction is maintained mainly by fast neutrons. It is capable of producing more fissionable material than it consumes
- flow renewable resources:** resources that do not need regeneration, such as solar power
- geopolitics:** political relations among nations, particularly relating to claims and disputes pertaining to borders, territories and resources
- geothermal energy:** the natural heat found in the Earth's crust in the form of steam, hot water and hot rock
- geothermal gradient:** the rate at which temperature rises as depth below the surface increases
- global hectare:** one global hectare (gha) is equivalent to one hectare of biologically productive space with world average productivity
- Green Revolution:** the introduction of high-yielding seeds and modern agricultural techniques to developing countries
- incineration:** a waste treatment technology that involves the combustion of organic materials and/or substances. Incineration and other high-temperature waste treatment systems are described as 'thermal treatment'
- landfill:** a site at which refuse is buried under layers of earth
- microgeneration:** generators producing electricity with an output of less than 50KW
- Neo-Malthusians:** also Malthusians; the pessimistic lobby who fear that population growth will outstrip resources leading to the consequences predicted by Thomas Malthus
- oil sands:** also known as tar sands or extra heavy oil: naturally occurring mixtures of sand or clay and water which form an extremely dense and viscous form of petroleum called bitumen
- optimum population:** the one that achieves a given aim in the most satisfactory way
- optimum rhythm of growth:** the level of population growth that best utilizes the resources and technology available. Improvements in the resource situation or/and technology are paralleled by more rapid technology growth
- Organization of the Petroleum Exporting Countries (OPEC):** the current members are: Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela
- overfishing:** a level of fishing resulting in the depletion of the fish stock
- overpopulated:** when there are too many people in an area relative to the resources and the level of technology available
- overshoot:** occurs when humanity's demand on nature exceeds the biosphere's supply, or regenerative capacity
- peak oil production:** the year in which the world or an individual oil-producing country reaches its highest level of production, with production declining thereafter
- photovoltaic systems:** solar panels that convert sunlight directly into electricity
- population pressure:** when population per unit area exceeds the carrying capacity
- product stewardship:** a system of environmental responsibility whereby producers take back a product, recycling it as far as possible, after the customer has finished with it
- proved oil reserves:** quantities of oil that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions

39. **quotas:** involving agreement between countries to take only a predetermined amount of a resource. Quotas may change on an annual or longer time period basis
40. **rationing:** very much a last resort management strategy when demand is massively out of proportion to supply. For example, individuals might only be allowed a very small amount of fuel and food per week
41. **recycling:** the concentration of used or waste materials, their reprocessing, and their subsequent use in place of new materials
42. **recycling deserts:** areas where rates of recycling are well below the national or regional average
43. **repowering:** replacing first-generation wind turbines with modern multi-megawatt turbines which give a much better performance
44. **reserves-to-production (R/P) ratio:** the reserves remaining at the end of any year are divided by the production in that year. The result is the length of time that those remaining reserves would last if production were to continue at that level
45. **resource depletion:** the consumption of non-renewable, finite resources which will eventually lead to their exhaustion
46. **resources:** any aspect of the environment that can be used to meet human needs
47. **resources nationalisation:** when a country decides to place part (or all) of one or a number of natural resources (e.g. oil and gas) under state ownership
48. **reuse:** this involves extending the life of a product beyond what was the norm in the past, or putting a product to a new use and extending its life in this way
49. **Strategic Petroleum Reserve:** the USA's reserve supply oil, which should last for about three months in the event of severe interruptions to imported oil
50. **subsidy:** financial aid supplied by government to an industry for reasons of public welfare, the balance of payments etc.
51. **substitution:** the use of common and thus less valuable resources in place of rare, more expensive resources. An example is the replacement of copper by aluminium in the manufacture of a variety of products
52. **supply shock:** a significant interruption to supply due to an environmental, economic or political event
53. **total allowable catch:** the maximum quantity of fish that can be caught each year
54. **tragedy of the commons:** the idea that common ownership of a resource leads to over-exploitation as some nations will always want to take more than other nations see as their fair share
55. **unconventional natural gas:** natural gas that is more difficult to access and therefore more expensive to extract than 'conventional' reserves
56. **underpopulated:** when there are too few people in an area to use the resources available efficiently