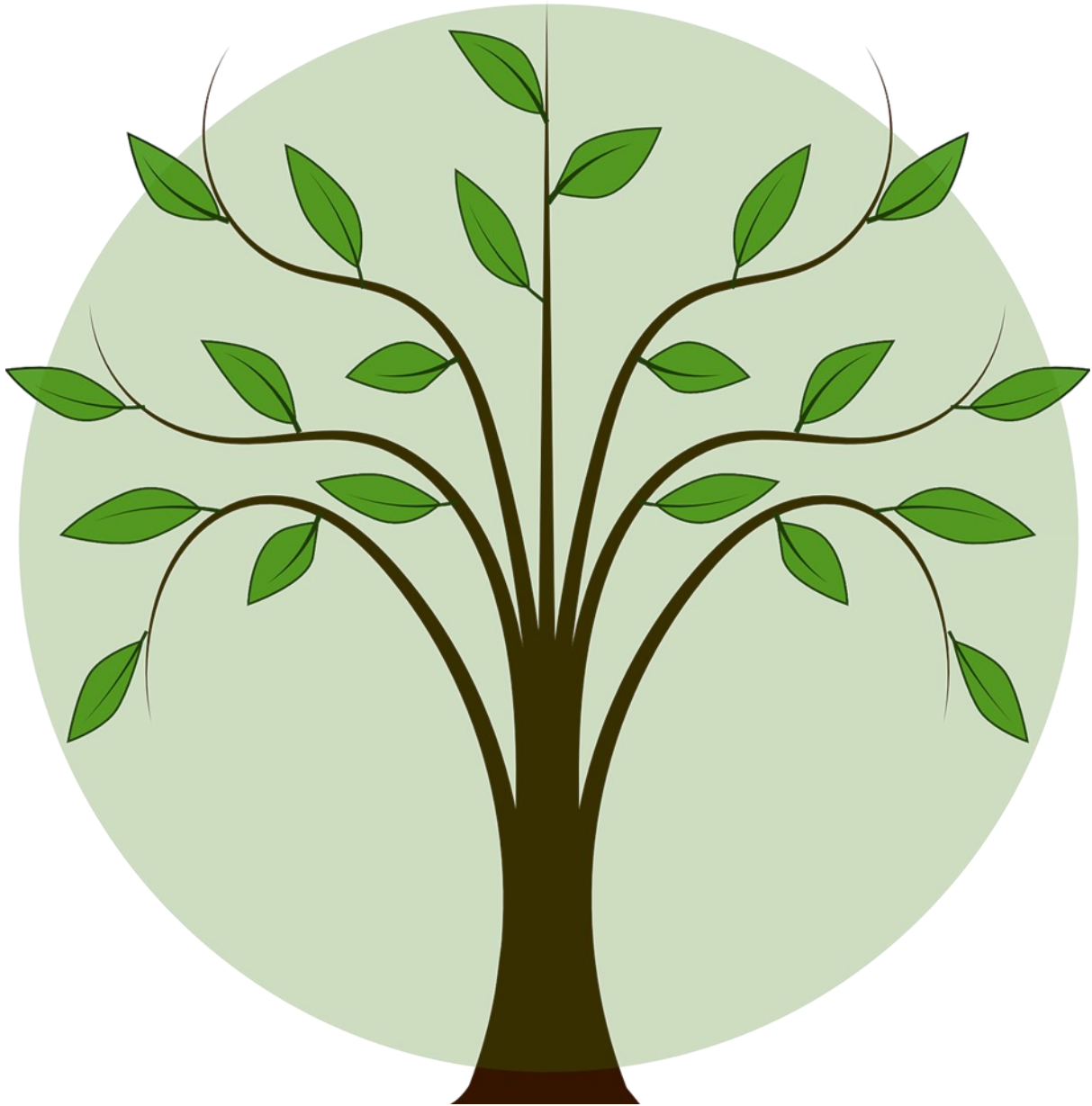


MANCHESTER ECO DIOCESE RESOURCES: JARGON BUSTER



JARGON BUSTER

Afforestation — The planting of new forests on lands that have not previously contained forests.

Biodiversity — A word coming from 'biological diversity.' It means the variety and variability of living organisms at all levels on the Earth. It relates to the ecology that a species is a component part of and therefore includes diversity within species, between species, and their host ecosystems.

Biogas — A mixture of gases (mainly comprising methane and carbon dioxide) produced during the biological breakdown of organic materials from agricultural waste, manure, etc. The process of burning effluent that is rich biogas can be used to produce energy. Such burning also decreases the amounts of these gases in the atmosphere and, as a by-product, provides nutrient-rich fertiliser.

Carbon — A chemical element common to all known life. The excessive presence of carbon in the atmosphere has led to global warming. Gases of carbon cause climate change.

Carbon dioxide (CO₂) — Carbon combined with oxygen that exists as a gas in the atmosphere and also dissolves readily in the oceans. Gaseous CO₂ is one the principal causes of global warming.

Carbon footprint — The estimated volume of emissions of greenhouse gases (especially CO₂) produced directly or indirectly by an individual, an organisation, or a population.

Carbon neutral (also called 'net zero') — The concept that any carbon dioxide released into the atmosphere from an activity is balanced by an equivalent amount being removed.

Carbon offset — A way of decreasing greenhouse gas emissions used to compensate for emissions that occur elsewhere. Greenhouse gases mix globally in the atmosphere implying the geographical location of the offset is not particularly important. Examples include planting trees, restoring peatland, supporting projects that replace inefficient fossil fuel burning technology with more efficient and/or non-fossil-fuel burning technology. The list is long.

Carbon sink — A form of 'reservoir' in which greenhouse gases are stored. That reservoir may occur naturally (examples include forests and vegetation, because they remove CO₂ through photosynthesis) or as a result of human activity (such as afforestation or reforestation).

Carbon storage — The permanent removal of carbon-based gases from the atmosphere. In practice, the CO₂ is removed by planting trees which incorporate carbon as they grow, etc.

Climate change — Persistent or long-term changes to the weather around the Earth caused by pollution. Examples include increased global temperatures, irregular weather patterns, shrinking polar ice caps, etc.

Climate crisis — A phrase describing the devastating effective of climate change on populations and the planet.

Climate emergency — A statement expressing the enormity of the climate crisis and thereby inviting urgent action to reduce or halt that climate change.

Climate injustice — The idea that highly polluting countries are often not the same countries as those most impacted by the pollution.

Climate positive — An activity that goes beyond achieving net-zero carbon emissions to create an environmental benefit by removing additional carbon dioxide from the atmosphere.

COP — ‘Conference of the Parties’. The COP is the supreme body of world leaders that meet once per year to review progress against the climate crisis. COP26 was held in Glasgow in November 2021.

tCO₂e — A measurement of the amount of carbon emitted. This symbol stands for ‘tonnes of carbon dioxide equivalent.’

Decarbonisation — The process of decreasing the carbon footprint of a person, organisation, or population. Decarbonising the energy industry is one example.

Deforestation — The permanent removal of forests. Deforestation therefore decreases the global capacity to contain carbon in trees and adversely impacts biodiversity and habitat.

Eco — Short for ‘ecology’. This abbreviation generally implies an activity or person that seeks to improve an ecology, so ‘eco-champion’, ‘eco-church’, ‘eco-friendly’, etc.

Ecologist — A scientist who studies ecology. They study the relationship between living things and their habitats.

Ecology — The study of how organisms interact with their environment and what happens when ecosystems do not function normally.

Ecosystem — A geographic area in which organisms (the plants and animals living there) form a bubble of life in tandem with the weather and landscape.

Environment — The natural world, nature.

Extinction — The process of a species being extinguished and permanently lost.

Fossil fuel — Fuel composed of the fossilised remains of plants and other organisms. The principal examples are coal, petroleum, and natural gas. Fossil fuels comprise a high content of carbon. Their extraction, transportation, and burning contribute significantly to global warming.

Global warming — The steady rise in the average temperature of the whole world. The principal causes are the emissions of greenhouse gas by humankind.

Green — A euphemism implying an activity or person who seeks to improve an ecology, for example ‘green policy’, ‘green fuel’, etc.

Greenhouse effect — A process that occurs when gases in Earth’s atmosphere trap the Sun’s heat. This process causes the Earth’s surface to become warmer.

Greenhouse gas — A gas that contributes to the greenhouse effect by absorbing infrared radiation. They are often referred to collectively as GHG. The key gases are water vapour (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄) and ozone (O₃).

Greenwashing — A euphemism meaning the process of providing false, misleading, or unsubstantiated information to give the impression of environmental positivity.

IPCC — The *Intergovernmental Panel on Climate Change* is a United Nations body established in 1988 to assess the science of climate change.

Microplastics — Particles of plastic with a maximum average size of 5 mm. These particles are a major source of ocean pollution.

Net zero — *see Carbon neutral.*

Neutral — *see Carbon neutral.*

Non-renewable energy — Energy supplied from non-renewable sources, such as fossil fuel.

NOx gas (or NO_x) — A mixture of nitrogen-bases gases such as nitrogen monoxide NO, nitrogen dioxide NO₂).

Offsetting — *see Carbon offset.*

Paris Agreement — A shorthand term for a series of policies agreed in 2016, on the back of COP21 which occurred in Paris. It sought to avoid irreversible climate change (and concomitant consequences to the earth). Its principal recommendations included setting a target of limiting global temperature rise (from pre-industrial levels) to well below 2 °C and making all efforts to limit it to 1.5 °C by the year 2030.

Peat — A form of soil used as a carbon sink that, when burned, releases carbon back into the atmosphere and therefore contributes to global warming. Peatlands can be restored.

Pollution — The presence in, or introduction into, the environment of a substance which has harmful or poisonous effects.

Reforestation — The re-planting of forests on land that previously contained forests.

Renewable energy — Energy supplied from a renewable source. Primary sources include biomass (wood and biogas), the movement of water, geothermal (heat from within the earth), wind and solar.

Rewilding — A conservation strategy that involves the reintroduction of wildlife and species to their original habitats. The goal of rewilding is increasing biodiversity and the restoring natural processes.

Sequestration (or 'carbon sequestration') — The process of capturing and storing atmospheric carbon dioxide. It is one method of decreasing the total amount of carbon dioxide in the atmosphere with the goal of reducing global climate change.