***A***

#### **Abatement**

Reducing the degree of intensity of , or eliminating, pollution.

#### **Acid**

A corrosive solution with a Ph of less than 7 (Source: US EPA)

#### **Air pollutio**n

Air is made up of a number of gases, mostly nitrogen and oxygen and, in smaller amounts, water vapour, carbon dioxide and argon and other trace gases. Air pollution occurs when harmful chemicals and particles are emitted to the air – due to human activity or natural forces – at a concentration that interferes with human health or welfare or that harms the environment in other ways.

#### **Air quality**

A measure of the level of pollution in the air.

#### **Algae**

Simple rootless plants that grow in sunlit waters in proportion to the amount of available nutrients. They can affect water quality adversely by lowering the dissolved oxygen in the water. They are food for fish and small aquatic animals.

#### **Algal Blooms**

Sudden spurts of algal growth, which can affect water quality adversely and indicate potentially hazardous changes in local water chemistry.

#### **Alternative energy sources**

Energy that does not come from fossil fuels (such as coal, oil, gas), for example wind, flowing water, solar energy and biomass.

#### **Amenities**

Benefits of a property, such as nearby playgrounds, swimming pools, community centres or parks.

#### **Atmosphere**

The mass of air surrounding the Earth.

***B***

#### **Backyard burning**

An illegal method of getting rid of household waste, possibly in an attempt to save on bin charges, that releases levels of pollutants into the air, so harming air quality and risking the health of those burning the waste and of their neighbours.

#### **BER**

Short for Building Energy Rating, which says how much energy a home needs for heating, lighting and hot water. Homes are placed on a scale from A to G. A-rated homes need the least amount of energy while G-rated need the most. Since 1 January 2009, all homes being sold or rented must have a BER certificate. BER ratings are carried out by BER Assessors registered with the Sustainable Energy Authority of Ireland.

#### **Biodegradable waste**

Organic waste, typically coming from plant or animal sources (for example food scraps and paper), which other living organisms can break down.

#### **Biodiversity**

A short form of the phrase ‘biological diversity’, which means the variety of life on this planet and how it interacts within habitats and ecosystems. Biodiversity covers all plants, animals and micro-organisms on land and in water. See also ecosystem, habitat and organism.

#### **Bioenergy**

All types of energy derived from biomass, including biofuels.

#### **Biofuels**

Liquid transport fuels made from biomass.

#### **Biomass**

A source of fuel made from living and recently-dead plant materials such as wood, leaves and the biodegradable part of industrial and municipal waste.

#### **Biosphere**

The portion of Earth and its atmosphere that can support life (Source: US EPA)

#### **Black bin (grey bin)**

A wheelie bin used in certain local authorities to collect waste that cannot be recycled or composted.

#### **Bring bank**

A place where you can bring materials for recycling, for example glass, newspapers, heavy cardboard and textiles. See also recycling centre and civic amenity site.

#### **Brown bin**

A wheelie bin used in some local authorities to collect organic waste such as food and light garden waste (for example grass cuttings).

#### **Bye-law**

A rule made by a local authority to govern activities within the area it controls. Examples include bye-laws covering waste disposal, traffic or public events or signs.

# ***C***

#### **Carbon count**

A measure of the amount of carbon dioxide you produce through your lifestyle every day, for example through driving or using electrical appliances and lighting.

#### **Carbon credit**

A unit of carbon dioxide bought to reduce greenhouse gas emissions. See carbon offset.

#### **Carbon dioxide (CO2)**

A colourless gas that is naturally produced from animals and people in exhaled air and the decay of plants. It is removed from the atmosphere by photosynthesis in plants and by dissolving in water, especially on the surface of oceans. The use of fossil fuels for energy is increasing the concentration of carbon dioxide in the atmosphere, which is believed to contribute to global warming. See also greenhouse gases and photosynthesis.

#### **Carbon emissions**

In the context of climate change, carbon dioxide released when substances, especially oil, gas, and coal, are burned by vehicles and planes, by factories and by homes.

#### **Carbon footprint**

A measure of the impact our activities have on the environment, especially climate change, often reported as the units of tonnes (or kg) of carbon dioxide each of us produces over a given period of time.

#### **Carbon monoxide**

A highly poisonous, odourless, tasteless and colourless gas that is formed when carbon material burns without enough oxygen. Carbon monoxide is toxic when inhaled because it combines with your blood and prevents oxygen from getting to your organs. If a person is exposed to carbon monoxide over a period, it can cause illness and even death. Carbon Monoxide has no smell, taste or colour. This is why it is sometimes called the “Silent Killer”. The most common causes of carbon monoxide poisoning in the home are house fires, faulty heating appliances such as boilers, blocked chimney or flues, and rooms not properly ventilated. Carbon Monoxide alarms can be used as a backup to provide a warning to householders in the event of a dangerous build up of carbon monoxide.

#### **Carbon neutral**

A situation that arises when the amount of carbon dioxide released into the air equals the amount of carbon dioxide removed from the air, for example by planting trees, or the amount saved by using renewable energy sources to produce the same amount of energy. See also renewable energy.

#### **Carbon offset**

A unit, equal to one ton of carbon dioxide, that individuals, companies or governments buy to reduce short-term and long-term emissions of greenhouse gases. The payment usually funds projects that generate energy from renewable sources such as wind or flowing water. Individuals can choose whether to buy an offset (for example to compensate for air travel), but governments and large industries are sometimes required to buy them to meet international targets aimed at reducing greenhouse gases.

#### **Carbon tax**

A tax on fuels according to their carbon content, which aims to encourage people and businesses to use fuels with less carbon and reduce the amount of energy they use.

#### **Carpooling**

Sharing a car to a destination to reduce fuel use, pollution and travel costs.

#### **CFCs**

Short for ‘chloroflurocarbons’, which are chemicals used in manufacturing and, in the past, in aerosol cans and refrigerators, which can damage the ozone layer.

#### **CFL bulbs**

Short for ‘compact fluorescent lamp’ bulbs, which are light bulbs that use a fraction of the energy of traditional filament bulbs and last up to five times longer. CFL bulbs will completely replace filament bulbs in Ireland by 1 September 2012.

#### **‘Change’ campaign**

The Government’s campaign to change how people in Ireland think about climate change and encourage us to change how we behave. which has carbon calculators that can calculate the carbon foootprint of individuals, businesses and local authorities.

#### **Civic amenity site**

A public or private facility that accepts recyclable and non-recyclable materials such as garden and household waste and certain hazardous wastes such as paints, batteries and electrical and electronic devices. See also bring bank, recycling centre and WEEE.

#### **Climate**

The pattern of weather in a particular region over a set period of time, usually 30 years. The pattern is affected by the amount of rain or snowfall, average temperatures throughout the year, humidity, wind speeds and so on. Ireland has a temperate climate, in which it doesn’t get too hot or too cold.

#### **Climate change**

A change in the climate of a region over time due to natural forces or human activity. In the context of the UN Framework Convention on Climate Change, it is the change in climate caused by higher levels of greenhouse gases in the atmosphere due to human activities as well as natural climate changes. See also global warming, and UN Framework Convention on Climate Change.

#### **Compost**

A rich soil-like material produced from decayed plants and other organic matter, such as food and animal waste, that decomposes (breaks down) naturally. Most food waste can be put into compost, but you should not include meat, bones, cheese, cooking oils and fish. These may take a long time to break down and attract unwanted pests.

#### **Compostable**

Material from plants or animals that can be used to create compost because it will decompose naturally over time.

#### **Composting**

The process of deliberately allowing food, garden and other suitable organic wastes to break down naturally over time to produce compost.

#### **Conservation**

Preserving or protecting animals and resources such as minerals, water and plants through planned action (such as breeding endangered species) or non-action (such as not letting taps run unnecessarily).

#### **Cryptosporidium**

A tiny parasite that can infect people if it is present in drinking water.

***D***

#### **Deforestation**

The reduction of trees in a wood or forest due to natural forces or human activity such as burning or logging.

#### **Development plan**

A public plan that sets out the development objectives and policies of a local authority for its area. It covers a six-year period and states the local authority’s goals for a range of areas such as maintaining and improving roads and parks, preserving and enhancing amenities (such as playgrounds or swimming pools), zoning land for homes, businesses, factories and farming and providing services and facilities such as waste disposal and sewerage. Members of the public have opportunities to make submissions on the plan before it is agreed.

#### **Dioxins**

Highly toxic chemicals that can be formed in small amounts from forest fires or volcanoes but more often are produced unintentionally from industrial activities and from incinerating waste and burning fossil fuels.

#### **Disposal, dispose of**

In this guide, getting rid of waste by discarding it into a bin and, when it is collected, by incinerating it or sending it to landfill.

#### **Domestic charges**

Fees paid to local authorities for providing services such as collecting domestic waste.

#### **Domestic waste**

Waste produced within the home, including garden waste. See also household waste.

#### **Draught proofing**

A way to stop heat from escaping a home, for example by sealing window frames and using draught excluders under doors.

#### **Dumping**

Disposing of waste illegally by not using bins or official recycling centres, civic amenity sites or landfills.

# ***E***

#### **Ecosystem**

A community of organisms that depend on each other and the environment they inhabit.

#### **Ecotourism**

Small-scale tourism in fragile and protected areas that aims to have a low impact on the environment, benefit local communities and enable tourists to learn more about the natural and cultural history of the place. See also sustainable tourism.

#### **Effluent**

Liquid wastes such as sewage and liquid waste from industries.

#### **Electric vehicle**

A vehicle that is driven by an electric motor or battery and is generally less noisy and less polluting than common combustion engine vehicles.

#### **Emissions**

In the context of the atmosphere, gases or particles released into the air that can contribute to global warming or poor air quality.

#### **Emissions projections**

Forecast of emissions into the future taking into account current and future economic and policy developments

#### **Emissions Trading Allowance**

to emit to the atmosphere, one tonne of carbon dioxide equivalent, during a specific trading period. The allowance is only valid for the purpose of the Directive and can only be transferred in accordance with the Directive.

#### **End-of-life vehicle**

A vehicle such as a car or small van that is scrapped and sent for recycling.

#### **Energy efficiency**

Actions to save fuels, for example better building design, changing production processes, developing better transport policies, using better road vehicles and using insulation and double glazing in homes.

#### **Energy rating**

A rating given to electrical appliances such as ovens, washing machines, dishwashers and refrigerators according to how much energy they use. Ratings are on a scale from A to G, with A-rated appliances using the least energy and G-rated needing the most. The less energy an appliance uses, the better it is for the environment and the more you will save on your bill.

#### **Energy Star®**

A voluntary international label that identifies appliances that meet certain standards of energy efficiency. Within the European Union, the label relates to office equipment such as computers and photocopiers.

#### **Environmental impact statement**

A statement about the expected effects on the environment of a proposed project or development such as a new road or waste water treatment plant, including how any severe effects on the environment will be addressed.

# 

# ***F***

#### **Flora and fauna**

The plants and animals that are native to a particular area or period of time.

#### **Fossil fuels**

Fuels – such as coal, gas, peat and oil – that are formed in the ground over a long time from dead plants and animals and are used up once they are burned for energy.

#### **Fuel poverty**

Being unable to heat a home to a safe and comfortable level because of low household income or having to spend more than 10% of household income to heat a home to a comfortable level because the home is not energy efficient.

# ***G***

#### **Global warming**

The gradual increase in temperature of the Earth’s surface caused by human activities that cause high levels of carbon dioxide and other gases to be released into the air.

#### **Green bin**

A wheelie bin used in certain local authorities to collect dry cardboard, paper, tins and other recyclable waste, including certain plastics.

#### **Green design**

A design, usually of a building, that includes environmentally-friendly features such as solar panels, skylights or recycled building materials.

#### **Greener Homes Scheme**

A system run by the Sustainable Energy Authority of Ireland (SEI) to provide grants to homeowners who intend to install in their existing homes a new renewable energy heating system, for example heat  pumps, solar panels or wood chip or pellet boilers.

#### **Greenhouse effect**

The warming of the Earth’s atmosphere caused by increasing levels of gases, such as water vapour and carbon dioxide. These gases absorb radiation emitted naturally from the ground, so slowing down the loss of energy from Earth. The greenhouse effect has always existed; without it, Earth would be too cold for plants, animals and people to survive. But because of the increase in greenhouse gas emissions in recent years, the greenhouse effect is a lot stronger, so leading to global warming. See also global warming, greenhouse gases and radiation.

#### **Greenhouse gases**

Gases such as carbon dioxide and methane, which tend to trap heat radiating from the Earth’s surface, so causing warming in the lower atmosphere. The major greenhouse gases that cause climate change are carbon dioxide (CO2), methane (CH4) and nitrous oxide (NO2). See also greenhouse effect and global warming.

#### **Ground water**

Water that collects or flows underground in the small spaces in soil and rock. It might be a source of water for springs and wells and then used for drinking water.

# ***H***

#### **Habitat**

The area occupied by a community or species (group of animals or plants), such as a forest floor, desert or sea shore.

#### **Hazardous waste**

Waste that poses a risk to human health or the environment and needs to be handled and disposed of carefully. Examples include oil-based paints, car batteries, weed killers, bleach and waste electrical and electronic devices.

#### **Home Energy Saving Scheme**

A scheme operated by the Sustainable Energy Authority of  Ireland to provide grants to certain homeowners to improve the energy efficiency of their home.

#### **Household waste**

Waste that contains paper, cardboard, textiles (for example fabric or carpet), timber, food, garden clippings, glass, plastic and other manufactured materials.

# ***I***

#### **Incinerator**

A furnace that is designed to burn waste at very high temperatures under controlled conditions and is licensed by national regulatory authorities. Most modern and efficient incinerator generate heat and energy from burning waste.

#### **Insulation**

In this guide, material such as foam or glass wool that is used in homes and other buildings to prevent heat loss, reduce noise and improve comfort.

# ***K***

#### **Kyoto Protocol, Kyoto agreement**

An international agreement signed in Japan in 1997, attached to the UN Framework Convention on Climate Change. Under the agreement, which has been in force in Ireland since 2005, industrialised countries promised to reduce their combined greenhouse gas emissions to at least 5 percent below 1990 levels over the period 2008-2012.  See also UN Framework Convention on Climate Change.

# 

# ***L***

#### **Landfill**

A site that is specially designed to dispose of waste and operates with a licence granted by the Environmental Protection Agency (EPA). The EPA reviews licences and, with local authorities, monitors landfills around the country for emissions.

#### **Litter**

Waste that is thrown away carelessly, mainly made up of plastic, metal, glass, paper or food. Common examples are chewing gum and cigarette butts.

***M***

#### **MBT**

Short for ‘mechanical biological treatment’, which is a way of sorting and treating waste. The waste is first sorted mechanically into materials that can and cannot be recycled. Any waste that can be recycled is then broken down biologically, often through composting, while the rest is usually sent to landfill.  See also composting.

#### **Mulch**

Leaves, straw or compost used to cover growing plants to protect them from the wind or cold.

#### **Municipal waste**

Waste produced in urban areas, mainly made up of household waste but also some small commercial waste that is similar to household waste.

# ***N***

#### **Noise pollution**

Noises that disturb the environment and people’s ability to enjoy it, for example continually sounding house alarms, loud music, air conditioning or other electrical units and aircraft or motor engines.

#### **NPWS**

Short for National Parks and Wildlife Service, which works under the Department of the Environment, Heritage and Local Government to manage and maintain State-owned national parks and nature reserves and protect and preserve Ireland’s native animals and plants.

#### **NSS**

Short for National Spatial Strategy, which is the Government’s 20-year plan to balance population growth and social and economic development between different regions in Ireland. By matching where people work more closely to where they live, the strategy aims to improve people’s quality of life and sense of community, enhance local investment and create a better environment.

#### **Noxious gases**

Poisonous gases that can harm people and the environment. Some gases have a strong smell, for example sulphur dioxide and methane, while others, such as carbon monoxide, do not have any smell at all.

***O***

#### **Oil spill**

The harmful release of oil into the environment, usually through water, which is very difficult to clean up and often kills birds, fish and other wildlife.

#### **Organic food**

Plants and animals that are grown or reared without the use of synthetic fertilisers, pesticides or hormones.

#### **Organic**

In this guide, matter from living, or once-living, things.

#### **Organism**

Any living thing, from bacteria and fungi through to insects, plants, animals and humans.

#### **Ozone layer**

The thin protective layer of gas 10 to 50km above the Earth that acts as a filter for ultraviolet (UV) radiation from the sun. High UV levels can lead to skin cancer and cataracts and affect the growth of plants.

# ***P***

#### **Particulate matter**

Fine solid or liquid particles that pollute the air and are added to the atmosphere by natural and man-made processes at the Earth’s surface. Examples of particulate matter include dust, smoke, soot, pollen and soil particles.

#### **Pay by weight**

A system in which the amount you pay for bin collections depends on the amount of waste you throw away. The more waste you reduce, reuse, recycle or compost, the less you pay for waste disposal.

#### **Pesticides**

A general term for any chemicals that are used to kill weeds, fungi, insects or other pests.

#### **Permits**

In the context of waste, certificates or other documents granted by local authorities to private companies to collect and manage waste or to operate waste management facilities such as recycling centres.

#### **Planning permission**

Permission granted by a local authority for new buildings or for extensions, once nobody objects to the plans.

#### **Plastic bag levy**

An environmental tax that customers must pay when they accept a plastic or laminated bag from a retailer. There is no tax on small bags, such as those for fresh meat or loose fruit and vegetables. Money raised from the tax is put into a special fund that is used to protect the environment.

#### **Post-consumer waste**

Waste collected after a consumer has disposed of it, for example sweet wrappers or packaging from small electronic goods such as mobile phones or MP3 players.

# ***R***

#### **Radiation**

A form of energy that is transmitted in waves, rays or particles from a natural source, such as the sun and the ground, or an artificial source, such as an x-ray machine. Radiation can be ionising or non-ionising. Ionising radiation includes ultraviolet rays, radon gas and X-rays. Too much exposure to ionising radiation can be harmful, leading to increased risk of cancer. Non-ionising radiation includes visible light, radio waves and microwaves. This type of radiation is less risky to health because it contains less energy, but it can still be harmful at high levels for a long time.

#### **Radioactive**

A material is said to be radioactive if it emits radiation.

#### **Radon**

A common radioactive gas emitted from ordinary soils and rock. Radon has no smell, taste or colour and can seep into homes, building up to dangerous levels if there is not enough ventilation. Being exposed to high levels of radon gas over a long period of time increases the risk of developing lung cancer.

#### **Recycle**

To break waste items down into their raw materials, which are then used to re-make the original item or make new items.

#### **Reforestation**

The process of planting trees in forest lands to replace those that have been cut down.

#### **Refuse**

Another name for waste.

#### **Renewable energy**

Energy from renewable resources such as wind power, solar energy or biomass.

#### **Renewable resource**

A resource that can be used again and again without reducing its supply because it is constantly topped up, for example wind or sun rays.

#### **Reuse**

To use an item more than once for the same purpose, which helps save money, time, energy and resources.

#### **River basin**

The portion of land drained by a river and the streams that flow into it. The quality of a river basin affects the quality of water, so efforts to protect and improve water quality must often include plans for managing river basins.

# ***S***

#### **Sewage**

Liquid wastes from communities, which may be a mixture of domestic effluent from homes and liquid waste from industry.

#### **Smog**

Air pollution consisting of smoke and fog, which occurs in large urban and industrial areas and is mainly caused by the action of sunlight on burned fuels, mostly from car exhausts. Smog can cause eye irritations and breathing problems and damage plant life.

#### **Smokeless fuel**

Solid fuel, such as charcoal, that does not release smoke when it is burned.

#### **Solar panel**

A panel fixed to the roof of a building that uses special cells to collect energy from the sun and convert it to electricity to heat the building and/or power the lights, appliances or equipment.

#### **Standing charges**

Fixed fees that must be paid for a certain period, often a year, to continue receiving a service.  Examples include standing charges for bin collections or gas supply. Other charges may apply depending on the use of the service over a given period of time.

#### **Surface water**

Water that is collected on the ground or in a stream, river, lake, wetland or ocean.

#### **Sustainable development**

Development using land or energy sources in a way that meets the needs of people today without reducing the ability of future generations to meet their own needs.

#### **Sustainable tourism**

A form of tourism that meets the needs of current tourists and host communities while protecting and enhancing tourism for the future by balancing economic and social needs with a respect for different cultures and the environment. See also ecotourism.

# ***T***

#### **Toxic**

Poisonous or harmful to the body (ecotoxic relates to damage to the environment).

#### **Toxin**

A poisonous substance that can either be natural (produced by plants, animals or bacteria) or manufactured.

#### **Traffic calming, traffic management**

Policies, rules or actions by a local authority designed to reduce traffic speed or limit the amount of traffic in an area at certain times of day.

#### **Tidy towns**

An annual competition run by the Department for the Environment, Heritage and Local Government to reward large and small towns around the country for their efforts to maintain and improve their area. Towns can choose whether to take part and are given marks under a number of headings, such as landscaping, litter control, roads and footpaths, wildlife and natural amenities and residential areas.

# ***U***

#### **Utility (public)**

A company that provides the public with essentials such as electricity or water.

#### **UN Framework Convention on Climate Change**

An international treaty joined by 192 countries that has the goal of preventing ‘dangerous’ human interference with the climate system and sets general rules for tackling climate change.

# ***V***

#### **Ventilation**

In this guide, the movement of air between the inside and outside of a building usually through windows, doors and air vents built into the building’s walls or ceilings.

# ***W***

#### **Warmer Homes Scheme**

A scheme, run by Sustainable Energy Ireland, that aims to improve the energy efficiency of private owned or rented homes occupied by low income households. The scheme trains and offers grants to community organisations to carry out work such as attic insulation, draught proofing, installing lagging jackets and so on.

#### **Waste management**

The management of waste collection, handling, processing, storage and transport from where it is produced to where it is finally disposed. See waste prevention.

#### **Waste prevention**

An aspect of waste management that involves reducing the amount of waste we produce and minimising the potential harm to human health or the environment from packaging or ingredients in products.

#### **Water vapour**

Water in its gas form – instead of liquid or solid (ice).

#### **WEEE**

Short for Waste Electrical and Electronic Equipment (WEEE), which are any unwanted devices with a plug or battery – from a remote control or digital camera to a vacuum cleaner or fridge freezer. These devices must be disposed of carefully to avoid damage to the environment. To get rid of an unwanted device, you can bring it to a civic amenity site or leave it with a retailer when you are buying a new device. All WEEE left in retail outlets and civic amenity sites are collected for recycling.

#### **Wind energy**

Energy harnessed from the wind at wind farms and converted to power.  See also wind turbine.

#### **Wind turbine**

An engine or machine, usually mounted on a towe, that captures the force of the wind and converts it to electricity.

# ***Z***

#### **Zero emissions**

An engine, motor or other energy source that does not produce any gas or release any harmful gases directly into the environment.