

Abatement

Actions which produce a reduction in the amount or intensity of greenhouse gas emissions.

Accreditation

A procedure to establish if a business meets certain standards of management and operation. In practice the terms accreditation and certification are often used interchangeably. The International Organization for Standardization (ISO) defines accreditation as "third party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks." (ISO/ IEC 17000:2004) In other words, meeting set criteria as a business to comply with a set standard and being verified by a third party. (Refer to definition of 'certification').

Activity Measure

Benchmarking is achieved by directly evaluating the operation's performance against a relevant Activity Measure (a measure that reflects the key activity of the operation, taking into account the type of impact).

Energy Consumption, Water Consumption, and Waste Sent to Landfill are all benchmarked against an Activity Measure. For details of your particular sector/component Activity Measure, please refer to the table below and the following detailed explanation for each sector.

| Sector | Activity Measure |
|-----------------------|---|
| Accommodation | <i>Guest Nights /month</i> |
| Activity | <i>Total Customers</i> |
| Administration Office | <i>Area Under Roof (m2)</i> |
| Attraction | <i>Total Customers</i> |
| Cruise Vessel | <i>Revenue Passenger Kilometres (RPK)</i> |
| Farmstay | <i>Total Farm Area (ha)</i> |
| Restaurant / Pub | <i>Total Customers</i> |
| Spa | <i>Total Visitors</i> |
| Vehicle | <i>Revenue Passenger Kilometres (RPK)</i> |
| Vehicle Rental | <i>Vehicle Hirings</i> |
| Vineyard | <i>Total Volume of Wine Produced (L)</i> |
| Visitor Centre | <i>Total Visitors</i> |
| Winery | <i>Total Volume of Wine Produced (L)</i> |

Annual Return

Declaration that is completed by certified organisations annually, confirming ongoing commitment and stating that no new level of environmental risk has occurred.

Auditing

A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organisation, management and equipment are performing with the aim of helping to safeguard the environment by: facilitating management control of environmental practices and assessing compliance with company policies which would include meeting regulatory compliance (ICC position paper on Environmental Auditing,1989).

Auditor

An individual qualified to conduct Green Globe certification assessments and/or audits.

Award Programs

There are a range of local, state, national and international awards programs that recognise operator's contributions to sustainable tourism. These include the Tourism for Tomorrow Awards and The World Legacy Awards that "recognise leading examples in the tourism industry that are helping to protect our planet's natural and cultural heritage".

Benchmarking

Benchmarking is a means by which an operation can assess and improve its environmental, social and economic performance quantitatively. The process compares performance and processes within an industry to assess relative position against those who are 'best in class'. Successful benchmarking is more than an exchange of statistics. It is the exchange of information which enables managers to make continual performance improvements a reality and to enhance individual contributions to overall success of a company's policies (WWF, 2001).

Biodiesels

Biodiesels (ester-based) are a type of biofuel used in diesel engines. They are oxygenated fuels made from vegetable oils or animal fats. Biodiesel has similar properties to petroleum diesel (fossil fuel) and it is usually mixed at about 15% with regular diesel. It is a clean-burning, stable fuel that performs well under a variety of operating conditions with low emissions, low temperature and high conversion rate (98%).

Biofuel

Biofuel is defined as solid, liquid or gas fuel derived from recently dead biological material and is distinguished from fossil fuels, which are derived from long dead biological material. Theoretically, biofuels can be produced from any biological carbon source; although, the most common sources are plants. The carbon cycle converts sun's energy and atmospheric carbon into organic matter through plants and algae. Various plants and plant-derived materials are used for biofuel manufacturing.

Carbon

The element carbon is the chemical basis of all organic life. In the context of discussion on climate change, the term "carbon" is short-hand for carbon emissions and generally refers to the six main greenhouse gases identified in the Kyoto Protocol (see Greenhouse gases).

Carbon accounting

Carbon accounting refers to systematic measurement of the number of carbon dioxide equivalents (see Carbon dioxide equivalent) emitted or abated by an organisation or process, as undertaken in accordance with internationally and nationally recognised methodologies. Carbon accounting protocols classify emissions according to their source (see Scopes).

For more information see the World Business Council for Sustainable Development and World Resources Institutes Greenhouse Gas Protocol (www.ghgprotocol.org).

Carbon dioxide (CO₂) emissions

Carbon dioxide (CO₂) is the most abundant of the greenhouse gases (see Greenhouse gases), contributing approximately 75% of Australia's greenhouse gas emissions. Carbon dioxide is a by-product of oil and gas production, and is produced by burning fossil fuels or plant matter used for fuel (biomass). All animals, plants, fungi and micro-organisms also produce carbon dioxide. It has a global warming potential (see Carbon dioxide equivalent) of 1, because it is the reference gas from which the values of all other greenhouse gases are calculated.

Carbon dioxide equivalent (CO₂-e)

Various greenhouse gases in the earth's atmosphere differ in their ability to absorb and re-emit infrared radiation, and therefore in the amount to which they contribute to global warming. The "global warming potential" (GWP) of a greenhouse gas indicates its potential to trap heat in the earth's atmosphere relative to carbon dioxide, and is expressed in carbon dioxide equivalents (CO₂-e). For example, over a period of 100 years, one tonne of methane (CH₄) will have an effect on global warming that is 21 times greater than one tonne of carbon dioxide, so the GWP of methane is 21.

For more information see International Emissions Trading Association (www.ieta.org).

Carbon footprint

The carbon footprint of an organisation, activity or event is a measure of the greenhouse gas emissions attributable to it due to energy use or other greenhouse gas-emitting processes. Carbon footprint is expressed in carbon dioxide equivalents (see Carbon dioxide equivalents).

Carbon footprint calculators

Typically delivered online, Carbon Calculators are tools for individuals, nations and organizations to conceptualize their personal (or organizational) impact on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide". These tools are often used to measure carbon footprints in calculating carbon offsets. There is no legislated methodology for the calculation of carbon footprints, you should be very clear about the assumptions used and what is not included as these results are not audited.

<http://www.greenhouse.gov.au/impacts/publications/risk-management.html>

Carbon neutral

The term used to indicate that the net greenhouse gas emission of an organisation, event, or activity is zero carbon dioxide equivalents. *The ACCC defines carbon neutral as, broadly speaking, achieved by reducing and offsetting a business or individual's carbon dioxide equivalent (CO₂-e) producing activities and requires comprehensive accounting for the carbon footprint (ACCC, 2008).*

Carbon offsetting

Carbon offsetting is the act of reducing greenhouse gas emissions relative to baseline (the organisation's usual operations). This is done by reducing the amount of emissions generated in one location to compensate for emissions generated in another location. For example, the emissions from air travel in Australia can be offset by purchasing "credits" in the form of money that will be invested in renewable energies (such as solar or wind) in other parts of Australia or in a developing country in order to reduce the use of non-renewable, carbon-emitting energy sources such as coal.

For a list of the carbon offsetting companies available in Australia follow this link: <http://www.carbonoffsetguide.com.au/providers>

Carbon offsets

Offsets are simply credits for emission reductions achieved by projects such as tree planting or energy efficient projects. By purchasing these credits you can apply them to your own emissions and reduce your net impact on the environment (ACCC, 2008)

One carbon offset represents the reduction of one metric ton of carbon dioxide equivalent (tCO₂e). Offsets are typically generated from emissions-reducing projects. The most common project type is renewable energy, such as wind farms, biomass energy, or hydroelectric dams. Other common project types include methane capture, changes in land use and forestry.

There are two primary markets for carbon offsets. In the larger compliance market, companies, governments or other entities buy carbon offsets in order to comply with caps on the total

amount of carbon dioxide they are allowed to emit. In the much smaller voluntary market, individuals, companies, or governments purchase carbon offsets to mitigate their own greenhouse gas emissions.

The Kyoto Protocol has sanctioned offsets as a way for governments and private companies to earn carbon credits which can be traded on a marketplace. Organizations that have difficulty meeting their emissions quota are able to offset by buying certified emissions reductions. Offsets are sometimes cheaper or more convenient alternatives to reducing one's own fossil-fuel consumption. Efficient use of renewable energy should be the first target, and offsets used for the remaining carbon 'footprint'.

Carbon Sequestration

Carbon sequestration refers to the capture and long-term storage of carbon in forests and soils or in the oceans, so that the build-up of carbon dioxide in the atmosphere will reduce or slow.

There are three main types of carbon sequestration:

In terrestrial ecosystems - increasing the amount of carbon stored in vegetation and soils.

In oceans - enhancing the net uptake of carbon from the atmosphere by the oceans, through fertilisation of phytoplankton with nutrients, and injecting CO₂ to ocean depths greater than 1000 metres.

Subsurface sequestration of carbon dioxide in underground geological repositories.

[EBEX21](#) provides information on carbon sequestration, the Kyoto Protocol, carbon credits and forest sinks.

Certification

The process of evaluating 'practices' against an agreed standard by an accredited independent third party is known as certification. Once compliance with the Standard is confirmed, the organisation will become 'certified'. In the context of environmental programs, certification is usually issued for a limited duration and will often only be maintained by an organisation that proves ongoing environmental improvements.

The terms 'accreditation' and 'certification' are often used interchangeably. Based on the International Organization for Standardization's (ISO) definition of certification the difference is that certification deals with products, processes, systems or persons, within a business, whereas 'accreditation' relates to the business as a whole. (ISO/ IEC 17000:2004)

Climate Change

Climate Change is any long-term significant change in the "average weather" that a given region experiences. Average weather may include average temperature, precipitation and wind patterns. It involves changes in the variability or average state of the atmosphere over durations ranging from decades to millions of years. These changes can be caused by dynamic processes on Earth, external forces including variations in sunlight intensity, and more recently by human activities (Krakatoa, 2007).

Anthropomorphic Climate Change induced rise in global temperature deemed to have occurred due to urbanization and industrialization. It relates to Global Warming and is measured by Global Warming Potential (GWP) of certain gasses, which are produced by industry, (mostly fossil fuel use and agriculture) which are deemed to have a radioactive effect in the upper troposphere which is deemed to induce an increase in global temperate (Wikipedia). These gasses include Carbon Dioxide CO₂, Methane CH₄, Nitrous oxide N₂O, Hydrofluorocarbons HFC-23 and HFC 134a and Sulphur Hexafluoride SF₆. CO₂ has a GWP of 1 because it is the unit that all other units are compared against. This unit of measurement is a carbon dioxide equivalent (tCO₂e), which is relative to breakdown of these compounds under the same atmospheric conditions over a period (e.g. over 100 years).

Codes of Conduct, Ethics, and Practice

Codes of Ethics for tourism are principles designed to guide stakeholders in tourism development including government, communities, the tourism industry and its professionals, as well as visitors, both international and domestic. Examples include the United Nations, World Tourism Organisation who developed a 10 point Global Code of Ethics for Tourism - the culmination of an extensive consultative process- was approved unanimously by the UNWTO General Assembly meeting in Santiago in October 1999.

Although not legally binding these documents provide a voluntary implementation mechanism and are often recognised by Committees to which stakeholders may refer.

Continuous improvement

Continuous improvement is a philosophy included in the Agenda 21 principles for Sustainable Development. It focuses on continuous improvement throughout all aspects of life. (Imai, M 1986)

Eco-efficiency

The efficient use of resources and lessening of impacts of an activity by the reduction of energy and water use and waste generation.

Ecolabelling

Ecolabel is a term used to describe an officially sanctioned scheme in which a product may be awarded an ecological label on the basis of its 'acceptable' level of environmental impact. The acceptable level of environmental impact may be determined by consideration of a single environmental hurdle, which is deemed to be particularly important, or after undertaking an assessment of its overall impacts. International guidelines for the development and operation of eco-labels have recently been agreed by the ISO and form the ISO 14023 standard.

Ecological Harm

Actual or potential affects on natural ecosystem processes as a direct or indirect result of a tourism organisation's activities or presence, harm may be:

an event (such as an accidental oil spill in a lake);

cumulative over time or space (such as the build up of nutrients and resultant algal blooms on a coral reef as a result of sewage discharge);

consequential (eg the creation of employment for local people swells the local population and whilst there is sewage treatment and waste management for the tourism organisation's activities, there is ecological harm from the local village or town).

Embodied carbon

Embodied carbon refers to the quantity of greenhouse gases emitted to produce (mine, manufacture, and supply to the point of use), a product, material, or service. This is calculated by measuring the carbon footprint of the product, material, or service (see Carbon footprint). Internationally, organisations are beginning to calculate the embodied carbon in products and services in order to produce Carbon Reduction Labels to help consumers make informed purchasing decisions.

For more information see Carbon Trust www.carbon-label.co.uk

Embodied energy

Embodied energy refers to the quantity of energy required to produce (mine, manufacture, and supply to the point of use), a product, material, or service. The single most effective strategy for minimising embodied energy is to design goods for long-term durability and adaptability.

Emissions intensity (carbon intensity)

Emissions intensity (also termed carbon intensity) refers to the ratio of emissions per unit of production output or other performance indicator. For example, emissions per dollar of revenue, full-time equivalent staff member, square metre of office space or unit of production.

Emissions trading scheme (Carbon Pollution Reduction Scheme)

An emissions trading scheme sets a cap on the total quantity of emissions allowable from all activities or sectors covered under the scheme. Tradable emissions permits are issued up to the total amount equal to the cap and are auctioned to liable entities. These systems allow those who reduce emissions beyond their obligations to sell their excess emission capacity to others within the same emissions trading scheme that are unable to meet their own emission reduction targets.

As of July, 2008, Australia's emissions trading scheme is referred to as the Carbon Pollution Reduction Scheme.

Energy efficient appliances

Energy efficient appliances are one aspect of energy saving. Appliances which are fit for use, and kept well maintained, and only used when needed save energy. Current energy efficient refrigerators use 40 % less energy than conventional models from 2001. Energy usage is commonly tested by the manufacturer under ideal, not usual conditions. Energy efficient appliances can have a large impact on an operation's energy use. However, behaviour and usage of appliances plays an equal part in reducing energy usage from appliances.

Energy efficient lighting

Energy efficient lighting is one aspect of energy saving. Energy efficient lighting includes the use of Light Emitting Diodes (LEDs) and Compact Fluorescent Lights (CFLs) to reduce energy costs. However it is important to make the most of natural light wherever possible as it is the most efficient and also free. Good lighting is more than just light levels; it's about effective lighting design. Design to exploit natural sunlight. Artificial lighting can be low wattage using compact fluorescent globes which are most energy efficient. Electronic Ballast CFL or tube uses a fraction of the energy that an incandescent light uses.

Energy efficient vehicles

Energy efficient vehicles are vehicles designed primarily for energy efficiency and to reduce costs associated with convention combustible fuel engines. This is commonly achieved by reducing vehicle weight to improve fuel economy. More advanced tires, with decreased tire to road friction and keeping tires inflated to the correct pressure can improve fuel economy by 3%. Replacing a clogged air filter can improve cars fuel consumption by as much as 10 %. Cutting-edge designs, such as the diesel Mercedes-Benz Bionic concept vehicle have achieved fuel efficiency as high as four times the current average. Also alternative engines vehicles that use biofuels can use energy in an efficient way. However, driving behaviour and sudden acceleration / deceleration will negate much of the efficiency of an energy efficient vehicle.

Energy management programme (EMP)

Energy management programme (EMP) promotes energy efficiency and the use of renewable energy resources, helping save energy, save money, and demonstrates leadership with responsible, cleaner energy choices. This can be a programme run by a government, a company or a household.

Energy management system (EMS)

Energy management system (EMS) is usually a system of computer-aided tools used by operators of electric utility grids to monitor, control, and optimize performance.

Energy source

Primary energy is energy that has not been subjected to any conversion or transformation process which is contained in raw fuels and any other forms. Primary energy includes non-renewable energy and renewable energy. (note: technically fossil fuel, biofuel, and wave energy all originated from the sun). The energy source is raw fuel or form where the energy originated. Electrical energy from a mains power generated at a hydro-power plant, then the energy sources is hydro.

Environmental impact

Any change to the environment (including ecological, social, cultural and economic), whether adverse or beneficial, wholly or partially resulting from an organisation's operations. Green Globe uses Earthcheck™ indicators to benchmark the level of key impacts of travel and tourism sectors.

Environmental Markets

Environmental Markets are those markets involved with achieving environmental objectives. This includes 'problems' but is not limited to them.

The typology of Environmental Markets by Dargush & Griffiths (2008) is also referred to. In brief these markets are:

1. Trade
2. Investment
3. Certification
4. Innovation
5. Ameliorative

This typology does not include all possible markets but provides a first step. This typology also provides a framework for environmental management professionals to organise some of the issues relevant to working with these markets.

Environmental remediation

Environmental remediation involves providing a remedy for an environmental problem. This can include the removal of pollution or contaminants from environmental media such as soil, groundwater, sediment, or surface water for the general protection of human health and the environment or from a brownfield site intended for redevelopment. Remediation is generally subject to an array of regulatory requirements, and also can be based on assessments of human health and ecological risks where no legislated standards exist or where standards are advisory.

Environmental risk

Environmental risk deals with the possibility of an event causing an undesirable environmental effect. Reliable information is used to inform of the risks and probabilities of an environmental impact, based on observations of the nature of the issue at hand. The 'precautionary principle' is linked with Environmental risk mitigation.

Environmental risk assessment

Environmental risk assessment is the process of systematically identifying credible environmental hazards, analysing the likelihood of occurrence and severity of the potential consequences, and managing the resulting level of risk.

Ethanol based fuels

Ethanol based fuels or ethyl alcohols are types of biofuel used in petrol engines. Ethanol is currently produced by fermenting plant products such as sugar and cereals. It is the most common biofuel in the world. It can be mixed or used at any percentage.

Externality

In economics, an externality is an impact on any party not directly involved in an economic decision. An externality occurs when an economic activity causes external costs or external

benefits to third party stakeholders who cannot directly affect an economic transaction. (Pigou, 1920).

Governance

Governance is the activity of governing. It relates to decisions that define expectations, grant power, or verify performance. It consists either of a separate process or of a specific part of management or leadership processes. Sometimes people set up a government to administer these processes and systems.

Green electricity

Green energy sources are considered to be environmentally friendly and non-polluting. These sources of energy are also renewable and do not rely on finite fossil fuels to create energy. Some large energy producers claim to have green electricity because they have bought the right to offset someone else through an emissions trading scheme. There are a lot of factors to consider when deciding if an electrical energy supply is Green. Some people consider nuclear energy to be green, some believe not. If you are in a country where there are a lot of supply options, alternative without any by-product are the best. An easy way to determine if electricity is Green is to use it in the most direct way i.e.

1. Mains power from a black-coal power plant uses energy from the sun, which was captured by photosynthesis in an ancient forest, which were buried, dug up, transported, crushed, burnt, converted to electricity and sent down very long power lines to a business or home (indirect);
2. Solar Photo Voltaic simply uses energy from the sun, and converts to electrical energy which is stored in batteries (direct). Green Energy always comes from a renewable source, and is efficient and direct.

Green power

Green power is the name given to electricity generated from clean, renewable energy sources. Green power sources can include solar (photovoltaic and thermal), wind power, new hydro on existing dams, biomass, save energy and landfill gas.

For information about green power in your area visit the Green Power web site - www.greenpower.com.au

Greenhouse gases (GHG)

For the purpose of the GHG Protocol Accounting and Reporting Standard, greenhouse gases are the six gases listed under the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide N₂O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆).

Human activities, such as burning fossil fuels (oil, gas and coal), are unleashing emissions of gases, in particular carbon dioxide (CO₂), that act as an atmospheric blanket, trapping thermal radiation emitted from the Earth's surface, causing the greenhouse effect.

Greenwash

'Greenwash' is a term used to describe a deceptive use of marketing or PR that claims a commitment to environmental good practice which is false or misleading. In a time when travellers are increasingly well educated, well read, and concerned about the environment, tokenism and superficial approaches are easily detected.

Greenwashing can have legal ramifications under the 'Green Marketing and the Trade Practices Act', which begins by stating "Businesses have an obligation not to engage in any conduct that is likely to mislead or deceive customers." See the [Green Marketing and the Trade Practices Act](#) and the [Carbon Claims and the Trade Practices Act](#) for more information.

Grey water

Grey water, or sullage, is non-industrial wastewater generated from domestic processes such as dish washing, laundry and bathing. Greywater comprises 50-80% of residential wastewater.

Harmful substances

Harmful substances are substances which could harm people or local ecosystems, and include (but is not limited to): fuels, oils, greases, fats, lubricants, detergents, acids, alkalais, oxidation reagents, disinfectants, surfactants, chlorine, refrigerant gasses, asbestos, paints, solvents, fertilisers, pesticides, weedicide, lime, cement, batteries (wet and dry), radioactive hazardous material, biologically hazardous material, putrescible wastes, sewage sludges, water treatment sludges, filter cakes, filter backwash effluent, sewage treatment effluent, waste construction materials and plastics.

Interested parties

All individuals and groups that interact with an organisation's operations (eg shareholders, employees, customers, suppliers, local community, government etc.)

ISO 14001

The international standard for environmental management systems. Environmental auditing procedures are now enshrined in the ISO 14000 series of standards.

IPCC

The Intergovernmental Panel on Climate Change (IPCC) is a scientific intergovernmental body tasked to provide information on climate change by assessing and recapitulate the latest research on the topic. For more information see [IPCC](#)

Kyoto Protocol

The Kyoto Protocol is an agreement made under the United Nations Framework Convention on Climate Change (UNFCCC). Countries that ratify this protocol commit to reducing their emissions of carbon dioxide and other greenhouse gases (GHG), or engaging in emissions trading if they maintain or increase emissions. The Kyoto Protocol now covers 181 countries globally.

Legal compliance registers

Legal compliance is the process that records and monitors the legal policies, procedures and controls needed to enable compliance with legislative or industry mandates as well as internal policies. Each business or government may have its own legal compliance register.

Life Cycle Analysis

Life cycle analysis is the investigation and valuation of the environmental impacts of a given product or service caused or necessitated by its existence.

Liquefied petroleum gas (LPG)

Liquefied petroleum gas (also called LPG, GPL, LP Gas, or autogas) is a mixture of hydrocarbon gases used as a fuel in heating appliances and vehicles, and increasingly replacing chlorofluorocarbons (CFC's) as an aerosol propellant and a refrigerant to reduce damage to the ozone layer.

Local contractor

A local contractor is a general contractor, organisation or individual that contracts with another organisation or individual (the owner) for the construction of a building, road or other facility.

Low flow water fittings

Low flow water fittings are specially designed fitting for showerheads and taps etc which can reduce water consumption by around 50-70%, bringing the shower flow for example down to 6-9 litres a minute, without compromising on water pressure.

Low/dual flush toilets

Low/dual flush toilets are more efficient than single flush systems, and use push buttons rather than handles. They allow a main flush (long flush) of between 4 to 6 litres, with a smaller flush (short flush) button that uses around 2 litres.

Material Resources - reuse/recycle strategy

Reuse/recycle strategy is the strategy implemented to monitor material and non-material resources. Water and heat can be reused and recycled. Organic matter such as timber or food scraps can be recycled. A reuse-recycle strategy helps save material resources, money, and demonstrates leadership with responsible resource use choice. This can be a strategy run by a government, a company or a household.

Material Resources - Waste minimisation strategy

Material Resources - Waste minimisation strategy is similar to a reuse/recycle strategy but aims at reducing waste creation as well as reuse/recycling and conscious methods of disposal or wasted resources.

Material Resources - Waste recycling

Material Resources - Waste recycling is best described as resource-recovery. "A waste is a resource out of place". Material resources such as paper, plastic and timber can often be reused, but it is best to minimize consumption of these material resources in the first place.

Mitigation

See abatement.

Movement detectors

Movement detectors / motion sensors are used to detect movement in order to switch equipment on and off, usually outdoor or indoor lighting. They generally employ an infra-red detector and often include a photoelectric cell which prevents operation during daylight hours. Most units also incorporate an adjustable timer to switch off equipment after a pre-set time has elapsed. The standby energy consumption of sensor lights and motion sensors means that energy reduction and reduction of GHG can be achieved.

Natural gas

Natural gas is a gaseous fossil fuel consisting primarily of methane. Fossil natural gas is found in oil fields either dissolved or isolated in natural gas fields, and in coal beds (as coal bed methane). Natural gas is often informally referred to as simply "gas", especially when compared to other energy sources such as electricity. Before natural gas can be used as a fuel, it must undergo extensive processing to remove almost all materials other than methane.

Natural ventilation

Natural ventilation is the process of supplying and removing air through an indoor space by natural means. There are two types of natural ventilation occurring in buildings: wind driven

ventilation and stack ventilation. The pressures generated by buoyancy, also known as 'the stack effect', are quite low while wind pressures are usually far greater. The majority of buildings will rely mostly on wind driven ventilation while stack ventilation has several benefits. The most efficient design for a natural ventilation building should implement both types of ventilation.

Offsetting Carbon Dioxide emissions

See Carbon Offsetting and Carbon Offsets

Organisation

Companies, organisations, corporations; or enterprises, whether or not incorporated.

Passive Solar Design

Passive Solar Design makes use of the building components to collect, store, and distribute solar heat gains to reduce the demand for space heating and cooling. It does not require the use of mechanical equipment because the heat flow is by natural means (radiation, convection, and conductance) and the thermal storage is in the structure itself. Also, passive solar strategies provide opportunities for day lighting and views to the outdoor through well-positioned windows.

Petrol

Petrol or petroleum spirit is also known as Gasoline (gas), or petrogasoline is a petroleum-derived liquid mixture derived from fossil fuels.

Precautionary principle

When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically (Science and Environmental Health Network 2000)

Renewable energy

A renewable resource is able to be replenished by natural processes at a rate comparable or faster than its rate of consumption (by humans or other users). Renewable energy comes from renewable resources, such as fresh water, biomass. They must be carefully managed to avoid exceeding the environment's capacity to replenish them. Other forms of Renewable Energy are more direct uses of solar energy, geothermal energy, or wave energy. The more direct and fit-for-use the energy is, the more renewable it is. Gasoline, coal, natural gas, diesel, and other commodities derived from fossil fuels are non-renewable, and energy from these sources is a finite non-renewable resource.

Roof and wall insulation

Roof and wall insulation acts as a barrier to heat flow. It can make a building more comfortable by reducing the amount of warmth escaping in winter and reducing the amount of heat entering in summer. Insulation can significantly reduce heating and cooling costs and help to reduce GHG. The higher the R-value of insulation the more it slows heat flow and the more efficiently it functions. Heating and cooling for comfort is a major use of energy in businesses and homes. It is difficult to insulate the walls in buildings that are already built. Many countries have a building standard which give a mandatory rating for roof and wall insulation.

SA 8000

SA 8000 is the standard for social auditing management systems developed by The Council on Economic Affairs.

The international foundation standard produced to help organisations improve the quality of social and ethical accounting, auditing and reporting. More information is available from the Institute of Social and Ethical Accountability, <http://www.accountability.org.au>

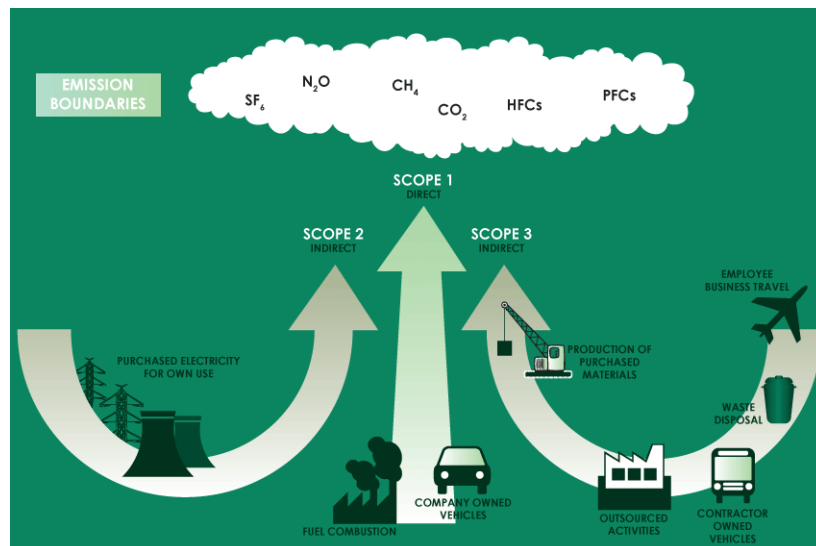
Scopes

For the purpose of carbon accounting (see Carbon accounting), greenhouse gas emissions are classified under three categories ("scopes") based on source. Emission scopes are defined so as to ensure that two or more companies will not account for the 'same' emissions.

Scope 1 – Direct Emissions are those created by you, from sources that are owned or controlled by you. These can include emissions from its combustion facilities (e.g. boilers, furnaces, burners, turbines), its vehicle fleet, and from its physical or chemical processes.

Scope 2 Indirect Energy Emissions are greenhouse emissions created by your use of purchased energy

Scope 3 emissions – Other Indirect Emissions are those greenhouse emissions as a result of your activities, but occur from sources not owned or controlled by you such as those products and services you utilise. Examples include emissions associated with the extraction, manufacture and production of purchased materials, business-related travel and transport in vehicles not owned or controlled by the company.



Self-Audit Checklists

Self-Audit Checklists are used by certification programs that do not require auditing or verification to occur. These typically membership-based programs use self-audit checklists to assess an organisations ability to meet agreed standards.

Smart control of heating and cooling appliances

Smart control of heating and cooling appliances helps avoid overheating or overcooling. 1°C difference can alter energy consumption by 10%. Thermostats with an inside room temperature of 18 - 21°C in winter and 23 - 26°C in summer is optimal. A system with a thermostat or temperature sensor can save 40% of the running cost. Only rooms that are in use are to be heated or cooled. Occupants are to dress for the weather, and in offices individual controls will ensure optimum comfort for occupants.

Species of Conservation Concern

Any wildlife species (plant or animal) which is recognised as rare, vulnerable, endangered or presumed extinct by national or international conservation agencies.

Sustainability

"To sustain" means to "hold up". It can also be stated as "enough for all, forever". Sustainability principles consider social, economic and ecological systems as interlinked. Sustainability sees management practices that ensure replacement of the resources that are used in the operation of business.

Sustainability goals

Sustainability goals are measurable, real and based on the principle of "continuous improvement". A continuous improvement process (CIP) is a management process whereby delivery processes are constantly evaluated and improved in the light of their efficiency, effectiveness and flexibility. Agenda 21 is a wide-ranging assessment of social and economic sectors with goals for improving environmental and developmental impact of each. Agenda 21 forms the basis for many companies' sustainability goals. Goals may include increasing qualitative and/or quantitative measures of both desirable and undesirable attributes. An example of a Sustainability goal would be reducing non-renewable energy use while being engaged in development of renewable energy (both qualitative and quantitative).

Sustainability indicators

Indicators are simplified measures that best represent key elements of a complex system. The best known and most widely used indicators used by policy-makers are economic indicators. Sustainability Indicators are used to measure sustainable systems. The Australian Government uses indicators such as economic capacity, living standards and biodiversity. The indicator for climate change is total net greenhouse gas emissions (measured in tCO₂e).

Sustainability Policy

Sustainability policy outlines the social, economic and ecological values to provide a framework for environmentally sustainable and responsible practices, activities, and operations. The aim of the Sustainability Policy is to document the overall commitment to achieving sustainability. The policy demonstrates leadership in sustainable development and works towards developing an organisation that will foster sustainability values.

A Sustainability Policy is produced and endorsed at the highest managerial level of the organisation. This is to be a full planning document, and abbreviated into a summary document (see example of summary document). A Sustainability Policy is a central document in any organization; to be fostered at all levels within the organization.

Sustainable development (SD)

In 1983, when the UN set up the World Commission on Environment and Development, environmental degradation, which had been seen as a side effect of industrial wealth with only a limited impact, was understood to be a matter of survival for developing nations. The "Brundtland Commission" put forward the concept of sustainable development as an alternative approach to one simply based on economic growth — one "which meets the needs of the present without compromising the ability of future generations to meet their own needs". The first principle of Agenda 21 (Rio Earth Summit 1992) is that "Human beings are at the centre of concerns for sustainable development".

Sustainable Procurement (also 'Green Procurement')

Sustainable procurement is a spending and investment process typically associated with public policy, although it is equally applicable to the private sector. Organisations practicing sustainable procurement meet their needs for goods, services, utilities and works not on a private cost-benefit analysis, but with a view to maximising net benefits for themselves and the wider world.

When buying goods and services, consideration might be given to the following:

- Strategies to avoid unnecessary consumption and manage demand;
- Minimising environmental impacts of the goods and services over the whole-of-life of the goods and services;
- Suppliers' socially responsible practices including compliance with legislative obligations to employees; and
- Value for money over the whole-of-life of the goods and services, rather than just initial cost.

Sustainably, Sustainable

Ensuring ecosystem processes and the local social and cultural character continue without environmental impact or ecological harm.

The National Greenhouse and Energy Reporting Act 2007

The Australian Government established the National Greenhouse and Energy Reporting Act 2007 as a mandatory national reporting system for greenhouse gas emissions in Australia and energy consumption. The Act was effective from July 2008.

Third-party Auditing

A management tool comprising a systematic, documented, periodic and objective evaluation of by an independent third party on how well an organisation is performing with the aim of achieve more sustainable practices. This includes a range of self assessment programs by which your property could be certified following a desktop audit conducted by the certifying organisation. For example the AAA Tourism, Green STAR Accreditation program has a self complete checklist that once audited by AAA Tourism, your property is awarded a Green STAR. An Assessor then conducts a Green STAR audit at the time of your cyclical STAR Rating assessment applying standards linked to the Green Globe certification scheme established by the Sustainable Tourism Cooperative Research Centre.

Tipping point

The levels at which the momentum for change becomes unstoppable (Gladwell, M 2000).

Treated waste water

Treated waste water such as grey water (dishwashing, laundry or bath) can easily be used with little treatment for fit-for-use purposes such an irrigation and toilet flushing. Black water needs tertiary treatments which can be done on-site or off-site

United Nations Environment Programme (UNEP)

UNEP is the voice for the environment within the United Nations system. UNEP's mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

Water consumption

Water consumption is the amount of water used per volume per unit per time, for example per person per day (litres / per person / per day) or (megalitres / per m² / per annum). It is a measurement used to monitor and manage our water use.

Water efficient appliances

Water efficient appliances can have low flow water fittings, or be designed specifically of low use of water. A front-loading washing machine is designed to be water efficient.

Water maintenance schedule

Water maintenance schedule is a routine schedule for checking that all appliances and fittings including pipes and seals are in good order. Any leaks that are detected in between the routine schedule need to be fixed promptly. Any improvements can be incorporated into the schedule, such as installation of a rainwater tank, or checking insulate hot water pipes to shorten the time you have to leave the tap running before you get hot water.

Water management plan

Water management plans outline policies such as only planting native plants and grasses that require less water, behaviour requirements for water savings. How often the maintenance schedule will be run and who is responsible for implementing changes are outlined in the management plan. The management plan will include areas to record measurements, monitoring and management, and improvements to the water system.

Water minimal land irrigation

Minimal land irrigation refers to water use which is prudent to environmental considerations. Trees need to be deep watered using drip irrigation. Plants that are suited to the climate are best of water conservation. Reusing water such as grey water, or roof runoff is a good way to utilize water that may have otherwise been lost.