

GLOSSARY OF TERMS

Afforestation

Planting new forests on lands that historically have not contained forests.

Annex I Parties

The industrialised countries listed in this Annex to the Convention, which have sought to return their greenhouse gas emissions to 1990 levels by the year 2000 as per Article 4.2 (a) and (b). They have also accepted emissions targets for the period 2008 to 2012 as per Article 3 and Annex B of the Kyoto Protocol. They include the 24 original OECD members, the European Union, and 14 countries with economies in transition. (Croatia, Liechtenstein, Monaco, and Slovenia joined Annex 1 at COP-3, and the Czech Republic and Slovakia replaced Czechoslovakia.)

ARC

Auckland Regional Council.

ARTA

Auckland Regional Transport Authority.

Biofuels

Fuels derived from biomass – organic plant matter, in particular wood and biogas, either deliberately grown or from waste products.

Biomass

In the energy context, any recent organic matter originally derived from plants as a result of the photosynthetic conversion process.

Carbon dioxide equivalent

A measure used to compare different greenhouse gases based on their contribution to climate change. The UNFCCC currently (2005) uses global warming potentials (GWPs). The GWPs are calculated as the ratio of the radiative forcing of one kilogram of greenhouse gas emitted to the atmosphere to that of one kilogram of CO₂ over a period of time (100 years).

CNG

Compressed Natural Gas, a substitute for gasoline or diesel fuel. It is considered to be an environmentally "clean" alternative to those fuels. It is made by compressing purified natural gas, and is typically stored and distributed in hard containers.

CO

Carbon monoxide, a colourless, odourless, flammable and highly toxic gas. It is a major product of the incomplete combustion of carbon and carbon-containing compounds.

CO₂

Carbon dioxide, the main greenhouse gas emitted from the energy sector.

COP

Conference of the Parties.

COP/MOP

Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

Deforestation

The direct human-induced conversion of forested land to non-forested land.

EECA

Energy Efficiency and Conservation Authority.

EIB

Energy-intensive businesses.

Emissions trading

A mechanism under the Kyoto Protocol through which parties with emissions commitments may trade units of their emissions allowances with other parties. The aim is to improve the overall flexibility and economic efficiency of making emissions cuts.

Energy efficiency

Defined by the EECA Act 2000 to mean a change to energy use that results in an increase in net benefits per unit of energy.

EnergyWise Rally

The EnergyWise Rally, a public demonstration of the fuel efficiency and environmental friendliness of new cars, conducted over a challenging mixture of roads from one end of the North Island to the other.

EU

The European Union, an inter-governmental and supra-national organisation made up of European countries. It currently has 25 member states.

Fuel economy

Usually expressed as the amount of fuel used per unit distance; for example, litres per 100 kilometres (L/100 km). In this case, the lower the value, the more efficient a vehicle is.

GHG

See Greenhouse gas, below.

Govt³

A programme for government agencies to improve the sustainability of their activities. The “Govt” in Govt³ stands for “government” and the “3” stands for the “three pillars of sustainability”: environmental, social, and economic.

Greenhouse gas

A gas in the atmosphere that retains more energy from outgoing infra red radiation than from incoming solar radiation. These gases are responsible for causing global warming and climate change. The major greenhouse gases are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Less prevalent - but very powerful - greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

Hybrid vehicles

Fuel-electric **hybrid-fuelled** vehicles that can use conventional fuels (eg, petrol or diesel) and electricity, generally via a battery and motor. These can use either fuel in a hybrid manner, with respective conversion devices to provide propulsion. So, they are most accurately termed hybrid fuelled, which implies that they can also be hybrid powered.

International transport

For the purpose of the national inventory, any trip (carrying passengers and freight) between countries by air or sea. It does not include operations carried out within a country by foreign operators. These are considered domestic trips and are included in that country's inventory.

IPCC

Intergovernmental Panel on Climate Change.

Kyoto Protocol

An international agreement standing on its own and requiring separate ratification by governments, but linked to the UNFCCC. Among other things, the Protocol sets binding targets for the reduction of greenhouse gas emissions by industrialised countries. The Protocol entered into force on 16 February 2005.

Land use, land-use change, and forestry (LULUCF)

Refers to the impact of human land use - and changes in such land use - on greenhouse gas emissions. Expanding forests reduce atmospheric carbon dioxide; deforestation releases additional carbon dioxide; various agricultural activities may add to atmospheric levels of methane and nitrous oxide. These gases, however, are not part of the LULUCF sector.

LPG

Liquefied Petroleum Gas, a mixture of hydrocarbon gases used as a fuel in vehicles. It is also increasingly replacing fluorocarbons as an aerosol propellant and a refrigerant to reduce damage to the ozone layer.

Marrakesh Accords

Agreements reached at COP-7 that set various rules for "operating" the more complex provisions of the Kyoto Protocol. Among other things, the accords include details for establishing a greenhouse gas emissions trading system; implementing and monitoring the Protocol's CDM; and setting up and operating three funds to support efforts to adapt to climate change.

NEECS

National Energy Efficiency and Conservation Strategy.

Non-Annex I Parties

Countries that have ratified or acceded to the UNFCCC and that are not included in Annex I of the Convention (ie, developing countries).

NO_x

Generic term for a group of highly reactive gases - oxides of Nitrogen. Nitrogen oxides form when fuel is burned at high temperatures, as in a combustion process in vehicles. NO₂ (nitrogen dioxide) is one the compounds responsible for smog and is a health concern causing respiratory problems.

Note: Nitrous oxide (N₂O) is not a concern in regard to local air quality and is not regulated for as part of controlling vehicle toxic emissions. It is generally not considered to be part of the NO_x family.

OnTrack

Owner and manager of New Zealand's railway infrastructure.

Particulates

Tiny particles of solid or liquid suspended in the air. Of concern are those of 10 microns or less (PM10) in diameter, which behave like a gas entering the lungs and cause respiratory problems. Also referred to as "fine particles".

PJ

Petajoule, a unit of energy equal to 10¹⁵ joules.

Reforestation

Replanting forests on land that was previously forested but subsequently converted to other use.

Reservoir

A component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored. Trees are "reservoirs" for carbon dioxide.

RMU

Removal unit (generated among Annex I Parties by LULUCF activities that absorb carbon dioxide). Commonly referred to as "sink credits" or "carbon credits".

Road user charge

The road user charge applies to all diesel vehicles and every vehicle (regardless of motive power) over 3.5 tonnes. It is used to fund infrastructure costs that, for petrol, are covered by excise duty.

Sink

Any process that removes a greenhouse gas from the atmosphere. The major sinks are forests and other vegetation that, through photosynthesis, remove carbon dioxide. Under the Kyoto Protocol, developed countries, in their calculation of net greenhouse gas emissions, may deduct from their totals the removal of greenhouse gases through the expansion of sinks. That may help them to meet their mandatory emissions targets. However, calculating the effects of sinks is methodologically complex and the standards for doing so still need to be clarified.

Travel demand management (TDM)

Tools and programmes offering people better travel choices and encouraging them to reduce the negative impacts of their travel (including choosing not to travel if circumstances allow).

Toll NZ

A freight transport and distribution company. The Company offers an integrated national network of rail, road and sea freight transportation, distribution and logistics management services, and interisland and urban passenger services.

UNFCCC

United Nations Framework Convention on Climate Change.

Walking school bus

A fun, safe and active way for children to travel to and from school with adult supervision. Each bus walks along a set route with at least one adult “driver”, picking children up at designated stops and walking them to school. The process is reversed in the afternoons.