



Climate Change: *A Glossary of Terms*

4th Edition, December 2007



IPIECA

International Petroleum Industry
Environmental Conservation Association

Preface

The IPIECA glossary of climate change terms was first printed in June 1999 and defines and explains many of the terms used at the climate change negotiations and other meetings. This fourth edition has been updated following the UN Climate Change Conference in Nairobi, Kenya in December 2006 (COP 12 and COP/MOP 2). Some terms have been amended, and more than 200 terms and acronyms have been added.

Updated December 2007. Copyright ©IPIECA 2007

International Petroleum Industry Environmental Conservation Association
5th Floor, 209–215 Blackfriars Road, London SE1 8NL, United Kingdom
Telephone: +44 (0)20 7633 2388 Facsimile: +44 (0)20 7633 2389
E-mail: info@ipieca.org Internet: www.ipieca.org

This publication is printed on chlorine-free paper manufactured from recycled waste, sawmill residues, forest thinnings and fibre from sustainable forests.

IPIECA

Climate Change: a Glossary of Terms

AAU

See 'Assigned Amount Unit'.

Abatement

Actions resulting in reductions to the degree or intensity of GHG emissions. Also referred to as mitigation.

Accession

An act whereby a State becomes a Party to a treaty already negotiated and signed by other States; has the same legal effect as ratification.

Activities Implemented Jointly, or AIJ

The pilot phase for joint implementation (JI), as defined in Article 4.2(a) of the Convention, that allowed for project activity among developed countries (and their companies) and between developed and developing countries (and their companies). AIJ was intended to allow Parties to gain experience in jointly implemented project activities. There is no crediting for AIJ activity during the pilot phase, which has been extended indefinitely. (See also 'Joint Implementation' and 'Clean Development Mechanism'.)

Adaptation

Adjustment in natural or human systems to a new or changing environment. Adaptation refers to adjustments in natural or human systems, intended to reduce vulnerability to actual or anticipated climate change and variability or exploit beneficial opportunities.

Adaptation Assessment

The identification of options to adapt to climate change and evaluate them in terms of criteria such as availabil-

ity, benefits, costs, effectiveness, efficiency, and feasibility. In 2001, COP-7 established the National Adaptation Plans of Action (NAPAs) programme to provide a process for Least Developed Countries (LDCs) to identify and prioritize their adaptation needs.

Adaptation Benefits

The avoided damages or the realized benefits following the adoption and implementation of adaptation measures.

Adaptation Costs

Costs of planning, preparing for, facilitating, and implementing adaptation measures, including transition costs.

Adaptation Fund

Finances adaptation projects and programmes in developing countries that are Parties to the Kyoto Protocol. The Fund is financed with a 2% share of credits (CERs) from CDM project activities and can receive funds from other sources.

Adaptive Capacity

The ability of a system to adjust to climate change, variability and extremes to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.

Additionality

The Kyoto Protocol articles on Joint Implementation (Art. 6) and the Clean Development Mechanism (Art. 12) state that emissions reduction units (ERUs and CERs) will be awarded to project-based activities provided that the projects achieve emissions reductions that are 'additional to those that otherwise would occur.'

Ad Hoc Group on Article 13, or AG13

A committee created by COP-1 to establish a multilateral consultative process to resolve questions regarding the implementation of the UNFCCC. This effort was unsuccessful and the consultative process has not been established.

Ad Hoc Group on the Berlin Mandate, or AGBM

Working group established by the first meeting of the Conference of the Parties (COP-1) to develop a process aimed at strengthening developed countries' commitments to greenhouse gas reductions in the post-2000 period through the adoption of a protocol or other legal instrument. The AGBM process developed the Kyoto Protocol.

Ad Hoc Working Group, or AWG

Process established at COP/MOP-1 (Montreal, 2006) to negotiate future commitments (beyond 2012) for Annex B Parties to the Kyoto Protocol. Parties have agreed that AWG negotiations should be completed in time to ensure that there is no gap between the first and second commitment periods.

Adverse Effects/Impacts

Adverse effects or impacts, refers to the potential negative effects of human-induced climate change as well as the impacts resulting from implementation of response measures. Such effects or impacts include, e.g. sea level rise, changes in precipitation, storms or other weather patterns, and reduced demand for fossil fuels or other energy intensive products. Impacts of climate change can be positive as well as negative. (See also 'Articles 4.8 and 4.9'.)

African Group

One of the five regional groupings commonly used by the UN, and the only one working as an active negotiating group under the UNFCCC. (See Regional Groups.)

Afforestation

The act or process of establishing a forest on land that has not been forested in the past 50 years.

AG13

See 'Ad Hoc Group on Article 13'.

AGBM

See 'Ad-hoc Group on the Berlin Mandate'.

Aggregate Impacts

Total impacts summed across sectors and/or regions. The aggregation of impacts requires knowledge of (or

assumptions about) the relative importance of impacts in different sectors and regions. Measures of aggregate impacts include, for example, the total number of people affected, change in net primary productivity, number of systems undergoing change, or total economic costs.

AIJ

See 'Activities Implemented Jointly'.

Alliance of Small Island States, or AOSIS

The Alliance of Small Island States is a coalition of small island and low-lying coastal countries that share similar development challenges and concerns about the environment, especially their vulnerability to the adverse effects of global climate change. It functions primarily as an ad hoc lobby and negotiating voice for Small Island Developing States (SIDS) within the United Nations system. AOSIS has a membership of 43 States and observers, drawn from all oceans and regions of the world: Africa, Caribbean, Indian Ocean, Mediterranean, Pacific and South China Sea. AOSIS functions on the basis of consultation and consensus. The Alliance does not have a formal charter, and there is no regular budget, nor a secretariat. (AOSIS' own definition). AOSIS and other UN regional groupings are informally defined and their structure and definition can change. Under the UNFCCC and Kyoto Protocol AOSIS members are entitled to representation on Bureaus established under the agreement.

Allowances

Legally defined units that entitle the holder to emit one tonne of CO₂ or CO₂-equivalent of other greenhouse gases. Under the Kyoto Protocol the units are AAUs, ERUs (from Joint Implementation), CERs (from the Clean Development Mechanism), and RMUs (from LULUCF). For compliance, units must be surrendered in amounts equal to actual emissions over the commitment period. Under the Kyoto Protocol emissions units may be traded between countries, or banked for use in future periods.

Alternative Energy

Energy derived from non-fossil fuel sources.

Amendment

A modification by the COP to the text of the Convention, or by the MOP to the text of the Kyoto Protocol. If consensus cannot be reached, an amendment must receive three-quarters of the votes of all Parties present and casting ballots. It then must be ratified by three-quarters of the Parties, at which point it enters into effect for those parties which have ratified it.

Ancillary Benefits (IPCC definition)

The ancillary or side effects of policies aimed exclusively at climate change mitigation. Policies that address GHG emissions may have a variety of social and economic impacts, for example on resource use efficiency transportation, agriculture, land-use practices, employment and energy security. Sometimes these benefits are referred to as 'ancillary impacts', to reflect the fact that in some cases the side effects may be negative. Since few policies are implemented for climate change mitigation alone, the term co-benefits is more commonly used. (See also 'Co-benefits'.)

Annex I Countries

Annex I to the UNFCCC lists all the countries in the Organization of Economic Cooperation and Development (OECD) in 1990, plus countries with 'economies in transition' (see entry), Central and Eastern Europe (excluding Albania and most of the former Yugoslavia). By default the other countries are referred to as Non-Annex I countries. Under Article 4.2 (a and b) of the Convention, Annex I countries commit themselves specifically to the aim of returning individually or jointly to their 1990 levels of GHG emissions by the year 2000.

Annex II Countries

Annex II to the UNFCCC lists all countries in the OECD in 1990. Under Article 4.2 (g) of the Convention, these countries are obligated to provide financial resources to assist developing countries comply with their obligations such as preparing national reports. Annex II countries are also expected to promote the transfer of environmentally sound technologies to developing countries.

Annex B Countries

Annex B in the Kyoto Protocol lists those developed countries that have agreed to a commitment to control their greenhouse gas emissions in the period 2008–12, including those in the OECD, Central and Eastern Europe and the Russian Federation. The list of Annex B countries currently (2007) matches that of Annex I, with the exclusion of Turkey.

Anthropogenic Emissions

Emissions of greenhouse gases associated with human activities. These include burning of fossil fuels for energy, deforestation, land-use changes and emissions of other GHGs.

'Anyway' Tonnes

The emissions reductions achieved from projects that would have occurred anyway (irrespective of a country's policies to control GHG emissions). Some have argued that projects which are profitable would have been implemented anyway and, therefore, are not additional and should not qualify for credits under the CDM or JI.

AOSIS

See 'Alliance of Small Island States.'

AP6

See 'Asia Pacific Partnership'.

AR4

See 'Fourth Assessment Report'.

ARD Activities

Afforestation, Reforestation, Deforestation (see separate definitions). These are the three land-use change and forestry activities which are included in Article 3.3 of the Kyoto Protocol. Net changes resulting from these activities are allowed to be used by the Parties in meeting their GHG obligations under the Protocol in the first commitment period (they are required in the second commitment period). They are often referred to together as ARD. ARD Activities are the focus of Ch.4 of the IPCC *Special Report on Land Use, Land-Use Change and Forestry (LULUCF)*.

Article 3.9 (Kyoto Protocol)

Future commitments for Annex B Parties to the Kyoto Protocol are addressed in Article 3.9, which requires that negotiation of subsequent commitments (after 2012) by Annex 1 Parties should begin at least seven years before the end of the first commitment period (2006). Implementation of this article led to the formation of the Ad Hoc Working Group (AWG) at COP/MOP-1.

Articles 4.8 and 4.9 (UNFCCC)

Adverse impacts of climate change, the impact of measures taken to respond to climate change, and compensation for these impacts is referred to in Articles 4.8 and 4.9 of the Convention. This issue is also addressed under Article 3.14 of the Kyoto Protocol. In the negotiations, discussion of article 4.8 is of particular concern to small island countries and those non-Annex 1 countries whose economies are highly dependent on exporting fossil fuels. Article 4.9 refers specifically to the special situations of least developed countries (LDCs).

Articles 5, 7 and 8 (Kyoto Protocol)

Issues surrounding the preparation (methodologies), communication and review of national inventories under the Kyoto Protocol are addressed in Articles 5, 7 and 8 respectively. The main aspects of the discussions of these articles include establishing appropriate methods (or consequences for not having methods), how to account for sinks (LULUCF), how adjustments would be made to national inventories and monitoring of a country's progress against its Kyoto commitment.

Article 6 Supervisory Committee

See 'Joint Implementation Supervisory Committee'.

Article 9 (Kyoto Protocol)

Under the Kyoto Protocol the COP/MOP must periodically review the Protocol taking into account the best available information on climate change. Based on the review's findings the COP/MOP is expected to take appropriate actions. In the negotiations some Parties have attempted to use the review to argue that the ultimate objectives of the Convention are not being met necessitating deeper cuts or wider participation from

Parties. Other Parties believe that the review should focus on the progress of Annex 1 Parties in meeting their obligations on emissions, financing and technology transfer. The first review was undertaken at COP/MOP-2 with others following at regular intervals.

Asia Pacific Partnership, or AP6

A partnership of six countries, Australia, China, India, Japan, Republic of Korea, and the USA, that works with private sector partners to address clean economic development, energy security, national air pollution and climate change. The partners have established eight task forces covering: aluminium; buildings and appliances; cement; cleaner use of fossil energy; coal mining; power generation and transmission; power generation and transmission; renewable energy and distributed generation; and steel.

Assigned Amount

Under the Kyoto Protocol establishes limits on the total amount of greenhouse gas emissions that each developed country may emit in the first commitment period (2008–12). The assigned amount is calculated by multiplying total greenhouse gas emissions in 1990 by 5 (for the five-year commitment period) and then by the percentage agreed to as listed in Annex B of the Protocol (e.g. 92 per cent for EU Member State, 93 per cent for the USA). Units of the assigned amounts are referred to as AAUs (Assigned Amount Units).

Assigned Amount Unit, or AAU

Under the Kyoto Protocol participating Annex B Parties are allocated AAUs, each equivalent to one tonne of CO₂ equivalent emission, in an amount equal to the assigned emissions obligation. For compliance, at the end of the commitment period, Annex 1 Nations must surrender AAUs (and other recognized emissions allowances: see CER and ERU) in an amount equal to their actual covered emissions over the period. Annex B Parties that have ratified the Kyoto Protocol can exchange AAUs through emissions trading.

Atmosphere

The envelope of gases surrounding the earth and bound to it by the earth's gravitational attraction. The atmos-

phere is divided into layers: the troposphere (from ground level to between 8–17 km); the stratosphere (up to 50 km); the mesosphere (50–90 km); and the thermosphere which forms the transition zone to outer space.

Attribution

Climate varies continually on all time scales. Attribution of causes of climate change is the process of establishing the most likely causes for observed changes with some defined level of confidence. Attribution is complicated by natural climate variability, by uncertain data regarding actual changes in climate forcing (from greenhouse gasses, aerosols, sunlight and volcanoes) over the past century and by uncertainty in climate models regarding the response to observed changes in forcing. Discussion of attribution is an essential focus of Working Group 1 of the Intergovernmental Panel on Climate Change.

Auctioning

One approach by which emissions allowances could be distributed by governments to entities covered by emissions obligations or wishing to participate in emissions trading.

AWG

See 'Ad-hoc Working Group'.

Banking

Parties to the Kyoto Protocol may save excess emissions allowances or credits from the first commitment period for use in subsequent commitment periods (post-2012).

BAPA

See 'Buenos Aires Plan of Action'.

Baseline

A projected level of future emissions against which reductions by project activities might be determined, or the emissions that would occur without policy intervention.

Benchmarking

A process to assess relative performance among a group of peers. Benchmarking has been proposed as one means to establish allocations of emissions allowances.

Berlin Mandate

Decision of the Parties reached at the first session of the Conference of the Parties to the UNFCCC (COP-1) in 1995 in Berlin. Governments agreed that the commitments in the Convention were inadequate, and further established terms of reference for a negotiating process to prepare a protocol or other legal instrument for commitments by Annex 1 parties in the post-2000 period. The Mandate was carried out by the Ad Hoc Group on the Berlin Mandate (AGBM), which negotiated the Kyoto Protocol.

BINGO

See 'Business and Industry Non-Governmental Organization'.

Biofuel

A fuel produced from organic matter produced by plants. Examples of biofuels include alcohols (from fermented sugar), black liquor from the paper manufacturing process, wood and soybean oil.

Biomass

The total dry organic matter or stored energy content of living organisms. Biomass can be used for fuel directly by burning it (e.g. wood), indirectly by fermentation to an alcohol (e.g. sugar) or extraction of combustible oils (e.g. soybeans).

Borrowing

The Kyoto Protocol does not permit borrowing emissions credits or units from future commitment periods (i.e. from the periods after 2012) to satisfy obligations in the first commitment period (2008–12). On the other hand, carrying forward excess credits is allowed. (See also 'Banking'.)

Brazilian Proposal

A proposal by the delegation of Brazil made in May 1997 as part of the negotiations on the Kyoto Protocol. It included a formula to set differentiated emission reduction targets for Parties based on the cumulative contribution of Parties' historic emissions to the global average surface temperature change. While this approach was

not adopted in the Kyoto Protocol, it continues to be discussed as a possible means of setting targets for future commitment periods.

BTU Tax

Energy tax levied at a rate based on the BTU (British Thermal Unit) energy content of a fuel.

Bubble

Article 4 of the Kyoto Protocol allows a group of countries to meet their target listed in Annex B jointly by aggregating their total emissions under one 'bubble' and sharing the burden depending on each individual country's circumstances and agreement within the bubble. The 15 nations that comprised the EU in 1997 agreed to aggregate and share their emissions commitments under one bubble for the first commitment period. Under Article 4 all Nations under the bubble will be deemed to satisfy their emissions obligations if they are met on an aggregate basis; if not, each member will be responsible for its own compliance under the bubble. Some countries in the EU have taken on greater cuts than the 8 per cent in the Kyoto Protocol (e.g. UK -12.5 per cent and Germany -20 per cent), enabling others under the EU bubble to increase their emissions (e.g. Portugal +27 per cent) during the first commitment period.

Budget

See 'Assigned Amount'.

Budget Period

See 'Commitment Period'.

Buenos Aires Plan of Action, or BAPA

The Plan of Action agreed by governments at COP-4 held in Buenos Aires (November, 1998). The Plan of Action states the aim to resolve, by COP-6, a list of outstanding issues concerning the Convention and the Kyoto Protocol, principally on the Kyoto Mechanisms and compliance. The development and transfer of technology, compensation for adverse effects (of climate change itself and mitigation policies), and the status of projects under the Activities Implemented Jointly (AIJ) pilot programme are also included in the Plan of Action.

Agreement on the elements of the BAPA was reached at COP-7 (Marrakech, 2001) and is often referred to as the Marrakech Accords.

Bunker Fuels, or International Bunkers

A term used to refer to fuels consumed for international marine and air transport. Emissions from bunker fuels are not subject to compliance obligations under the Kyoto Protocol, but are reported separately in the greenhouse gas inventories prepared by Parties. This definition of bunker fuels differs from the general definition of bunker fuels (described as any fuel oil used by ships.)

Bureau

A body responsible for advising the COP President on the decisions before the COP and its subsidiary bodies and working groups. Its 10 members are delegates elected by each of five regional groups. The Bureau includes the COP President, six Vice-Presidents, the Chairs of SBI and SBSTA, and a rapporteur. Each of the Convention's subsidiary bodies also has a Bureau. The IPCC and its Working Groups also have Bureaux.

Business and Industry Non-Governmental Organization, or BINGO

Term used to describe observers from business and industry organizations that attend the negotiations. The Secretariat recognizes BINGOs as one group of stakeholders with observer status. In practice, representatives from BINGOs meet frequently during the negotiations to discuss developments and also meet regularly with Party delegates and the UNFCCC Secretariat.

CACAM

Negotiating coalition of countries of Central Asia and the Caucasus, Albania, and the Republic of Moldova.

Cap

See 'Emissions Cap'.

Capacity Building

A process of constructive interaction between developed and developing countries to help developing countries build the capability and skills needed to achieve envi-

ronmentally sound forms of economic development. Under current negotiations, capacity building should assist developing countries to build, develop, strengthen, enhance and improve their capabilities to achieve the objective of the Convention and their participation in the Kyoto Protocol process.

Carbon Capture and Storage, or CCS

Capture of CO₂ emitted from large point sources, compression, transportation and injection into underground geological formations for long-term storage.

Carbon Cycle

The natural processes that govern the exchange of carbon (in the form of CO₂, carbonates and organic compounds etc.) among the atmosphere, ocean and terrestrial systems. Major components include photosynthesis, respiration and decay between atmospheric and terrestrial systems (approximately 120 billion tonnes/year (gigatonnes); thermodynamic invasion and evasion between the ocean and atmosphere, operation of the carbon pump and mixing in the deep ocean (approx. 90 billion tonnes/year). Deforestation and fossil fuel burning releases approximately 8 Gt into the atmosphere annually. The total carbon in the reservoirs is approximately 2300 Gt in land biota, soil and detritus, 600 Gt in the atmosphere and 38,000 Gt in the oceans. (Figures from IPCC *Third Assessment Report* 2001.) Over still longer periods, the geological processes of outgassing, volcanism, sedimentation and weathering are also important.

Carbon Dioxide, or CO₂

A naturally occurring gas, it is also produced by natural process such as respiration, decay of vegetation or forest fires, and as a by-product of human activities including use of fossil fuels and biomass, as well as land-use changes and other industrial processes. It is the principal anthropogenic greenhouse gas that affects the earth's temperature. It is the reference gas against which other GHGs are indexed and therefore has a 'Global Warming Potential' (see entry) of 1. Carbon dioxide constitutes approximately 0.038 per cent of the atmosphere. The mass ratio of carbon to carbon dioxide is 12/44.

Carbon dioxide equivalent, or CO₂eq

A metric that allows the contribution to radiative forcing of climate by different GHGs to be compared with forcing from CO₂. The Kyoto Protocol utilizes the 100-year Global Warming Potential (as reported in the *Second Assessment Report* of the IPCC 1995) to assess relative contributions GHGs on a mass-weighted basis.

Carbon Dioxide Fertilization

Enhancement of plant growth or yield as a result of an increase in the atmospheric concentration of CO₂.

Carbon Intensity

Carbon dioxide emissions per unit of energy or economic output.

Carbon Market

A popular term for a trading system through which countries may buy or sell units of greenhouse gas emissions (not just carbon dioxide) in an effort to meet their national limits on emissions, either under the Kyoto Protocol or under other agreements, such as that among member states of the European Union. The term comes from the fact that carbon dioxide is the predominant greenhouse gas and other gases are measured in units called 'carbon-dioxide equivalents'.

Carbon Sequestration

The storage of carbon or carbon dioxide in the forests, soils, ocean, or underground in depleted oil and gas reservoirs, coal seams and saline aquifers. Examples include: the separation and storage of CO₂ from flue gases or the processing of fossil fuels to produce H₂; and the direct removal of CO₂ from the atmosphere through land-use change, afforestation, reforestation, ocean fertilization, and agricultural practices to enhance soil carbon.

Carbon Sinks

Natural or man-made systems that absorb carbon dioxide from the atmosphere and store them. Trees, plants and the oceans all absorb CO₂ and, therefore, are carbon sinks.

Carbon Tax

A tax placed on carbon emissions. It is similar to a BTU tax, except that the tax rate is based on the fuel's carbon content.

CBD

See 'Convention on Biological Diversity'.

CCS

See 'Carbon Capture and Storage'.

CDM

See 'Clean Development Mechanism'.

CDM Reference Manual

The CDM Reference Manual was to be a compendium of information for all interested in participating in CDM projects. While it was never published as a print document, the Reference section of the CDM page of the UNFCCC website (www.unfccc.int) has a comprehensive listing of CDM policies and methodologies.

CEE

See 'Central and Eastern Europe Group'.

Central and Eastern Europe Group, or CEE

One of the five regional groupings commonly used by the UN. (See Regional Groups.)

Central Group 11, or CG-11

A negotiating coalition of Central European Annex I parties.

CERs

See 'Certified Emission Reductions'.

Certified Emission Reductions, or CERs

A CER represents one tonne of CO₂-equivalent greenhouse gas emissions reductions achieved through a Clean Development Mechanism project. It can be used to meet an Annex B Party's emission commitment or as the unit of trade in greenhouse gas emissions trading systems. ICERs are long-term CERs issued for an afforestation or reforestation CDM project, that expire at the end

of the crediting period for that project. tCERs are temporary CERs issued for an afforestation or reforestation CDM project, that expire at the end of the commitment period following the one in which they were issued.

CFCs

See 'Chlorofluorocarbons'.

CG-11

See 'Central Group 11'.

CGE

See 'Consultative Group of Experts'.

CH₄

See 'Methane'.

Chlorofluorocarbons, or CFCs

Greenhouse gases covered under the 1987 Montreal Protocol used for refrigeration, air conditioning, packaging, insulation, solvents or aerosol propellants. Because they are not destroyed in the lower atmosphere, CFCs mix into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are being replaced by other compounds including hydrochlorofluorocarbons (HCFCs) which are not covered in the Kyoto Protocol (due to their inclusion in the Montreal Protocol 1992) and hydrofluorocarbons (HFCs), which are greenhouse gases covered under the Kyoto Protocol.

CHP

See 'Cogeneration'.

CITL

See 'Community Independent Transaction Log'.

Clean Development Mechanism, or CDM

Defined in Article 12 of the Kyoto Protocol, CDM projects undertaken in developing countries are intended to meet two objectives: (1) to address the sustainable development needs of the host country; and (2) to generate emissions credits that can be used to satisfy commitments of Annex 1 Parties and thus increase

flexibility in where government Parties meet their reduction commitments. Projects that limit or reduce greenhouse gas emissions can earn the investor (government or industry) credits if approved by the CDM Executive Board. A share of the proceeds from the project activities (US \$0.10 per CER for first 15,000 tonnes CO₂eq; US \$0.20 per CER thereafter) is used to cover administration costs, and 2 per cent of the credits are assessed to create an adaptation fund to assist developing countries that are particularly vulnerable to the adverse effects from climate change to take action to adapt.

Climate

The average and statistics of variations of weather in a geographical region. The averaging period is typically several decades.

Climate Change (UNFCCC definition)

A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability over comparable time periods.

Climate Convention

See 'UN Framework Convention on Climate Change', or UNFCCC.

Climate Feedbacks

Interaction between greenhouse gases and important climate mechanisms, such as vegetation, water vapour, ice cover, clouds, sea ice and the ocean. Such interactions can increase or decrease the warming produced by increased concentrations of greenhouse gases.

Climate Forcing

See 'Radiative Forcing'.

Climate Models

Large and complex mathematical computer programmes used to simulate global climate. They are based on mathematical equations that seek to represent the physical processes that govern the earth-atmosphere system. (See 'General Circulation Models'.)

Climate Sensitivity

The change in earth's average equilibrium surface air temperature following a doubling of CO₂ concentration (e.g from 275 ppm to 550 ppm). This is estimated by the IPCC Fourth Assessment Report as likely to be in the range 2 to 4.5°C with a best estimate of about 3°C. The phrase 'Climate Sensitivity' does not refer to changes in any other climate properties.

Climate Surprises

Climate surprises, also referred to as rapid non-linear climate change, are large, unexpected and relatively sudden changes in the climate system that may occur in the future. Hypothesized events under discussion include shutdown of the meridional overturning circulation (MOC), the rapid release of methane from triggered by melting tundra or methane hydrates on the seafloor, or significant melting of continental scale ice sheets.

Climate System

Major interacting components that affect climate; these include the atmosphere, land surface, hydrosphere, cryosphere, and biosphere.

CMP

See 'Conference of the Parties serving as the meeting of the Parties'.

CO₂

See 'Carbon Dioxide'.

CO₂eq

See 'Carbon dioxide equivalent'.

Co-benefits (IPCC definition)

The benefits of policies that are implemented for various reasons at the same time—including climate change mitigation—acknowledging that most policies designed to address GHG mitigation also have other, often at least equally important rationales, e.g. related to objectives of development, sustainability and equity. The term co-impact is also used in a more generic sense to cover both positive and negative side of the benefits. (See also 'Ancillary Benefits'.)

Cogeneration

Also known as Combined Heat and Power (CHP), this is the simultaneous production of electricity and process heat from the same fuel, creating a more efficient process than generating the two separately.

Combined Cycle

Electricity generation where the waste heat of a gas-turbine generator is used to heat water in a boiler to drive a steam-turbine generator, thereby increasing efficiency.

Combined Heat and Power, or CHP

See 'Cogeneration'.

Commitment Period

To allow Parties some flexibility in when they meet their GHG emissions reduction obligations under the Kyoto Protocol, the first emissions target applies to a 5-year period (2008–12), known as the first commitment period. Terms governing the the second and subsequent commitment periods are subject to future negotiation. Negotiations concerning the second period are now in progress.

Commitment Period Reserve

To prevent Annex B Parties from overselling allocations from their Assigned Amount. Annex B Parties are required to maintain a 'commitment period reserve' that is equal to the lower of 90 per cent of their respective assigned amounts, or '100 per cent of five times their most recently reviewed inventories'.

Committee of the Whole, or COW

A committee created by the COP to negotiate text. Its membership includes all the members of the COP, but its formation allows a committee chair to lead the negotiations for more than a year. The COP President serves for only a year. Thus far this approach has only been used once, to negotiate the Kyoto Protocol. When the COW completed its work, it turned it over to the COP for approval.

Common Reporting Format, or CRF

Standardized format for reporting estimates of greenhouse-gas emissions and removals and other relevant information by Annex I Parties.

Community Independent Transaction Log, or CITL

Records the issuance, transfer, cancellation, retirement and banking of allowances within the EU ETS.

Compliance

Article 18 of the Kyoto Protocol relates to sanctions for non-compliance. Any binding consequences for non-compliance can only be adopted by an amendment to the Protocol (amendments can be proposed by any Party to the Protocol, but require ratification by three-quarters of the Parties to the Protocol). Saudi Arabia has proposed such an amendment, to legally bind countries to their targets. COP/MOP 3 in Bali, December 2007 will decide whether to submit the proposed amendment for ratification.

Compliance Committee

Established to facilitate, promote and enforce compliance with the provisions of the Kyoto Protocol. The committee's representation is spread among various regions, small-island developing states, Annex I and non-Annex I parties, and functions through a plenary, a bureau, and both a facilitative branch and an enforcement branch—10 members each. The Compliance Committee first met on 1–3 March 2006, and decided its rules and procedures in November 2006 at COP/MOP 2 in Montreal.

Conference of the Parties, or COP

The Conference of the Parties (to the UNFCCC) is the supreme body of the Convention, comprised of countries that have ratified or acceded to the UNFCCC. The first session of the COP (COP-1) was held in Berlin in 1995, and sessions have been held annually since then.

Conference of the Parties serving as the meeting of the Parties, or COP/MOP, or CMP

The Conference of Parties to the UNFCCC also serves as the meeting of the Parties to the Kyoto Protocol (COP/MOP), the Protocol's supreme body, but only Parties that have ratified or acceded to the Protocol may participate in deliberations and make decisions.

Conference Room Papers, or CRPs

A category of in-session documents containing new proposals or outcomes of in-session work. CRPs are for use only during the session concerned.

Consultative Group of Experts, or CGE

Expert group on national communications from Parties not included in Annex I to the Convention, a panel established to improve the preparation of national communications from developing countries. National communications are an obligation of Parties to the UNFCCC.

Contact Group

Contact groups, consisting of representatives of participating Parties, assigned to develop draft text on specific negotiating topics. Their proposals text is subject to final approval by plenary bodies. Contact groups typically are created to represent and reconcile varying points of view expressed by blocks of nations in plenary sessions. Meetings of contact groups are usually open to observers.

Contraction and Convergence

Some have promoted the idea of 'contraction and convergence' as a long-term strategy for managing global GHG emissions. Contraction refers to a declining global cap which would be set on worldwide emissions, together with a reduction trajectory over many decades. Typically, emissions entitlements would be allocated to nations by a formula that would converge over time towards equal per capita emission rights. Proponents of the system of contraction and convergence argue that it is equitable (being based on population) and that it would be truly global, involving the participation of all countries.

Convention on Biological Diversity, or CBD

One of three environmental conventions to arise from the UN 'Earth Summit' in Rio de Janeiro in 1992. (See 'Rio Conventions'.)

COP

See 'Conference of the Parties'.

COP/MOP

See 'Conference of the Parties serving as the Meeting of the Parties'.

COW

See 'Committee of the Whole'.

Credit for Early Action

Some governments and firms have proposed giving credit for actions to reduce emissions taken ahead of implementation of regulatory constraints.

CRF

See 'Common Reporting Format'.

CRPs

See 'Conference Room Papers'.

CSD

See 'UN Commission on Sustainable Development'.

DAI

See 'Dangerous Anthropogenic Interference'.

Dangerous Anthropogenic Interference, or DAI

Dangerous GHG concentration. The ultimate objective of the UNFCCC is the stabilization of atmospheric GHG concentrations at a level that would prevent dangerous human interference with the climate system. To date, dangerous remains undefined, and no official body has taken or been assigned responsibility to provide a definition. For now the IPCC has concluded that defining dangerous is a political decision. Any decision over what constitutes a dangerous GHG concentration would have major implications for the emissions control policies for all countries, as it would ultimately set an absolute budget of emissions globally.

Decision

A formal agreement that (unlike a resolution) leads to binding actions. It becomes part of the agreed body of decisions that direct the work of the COP and UNFCCC Secretariat. Decisions enter into force immediately, are binding on all Parties and do not require further ratification, accession or acceptance by Parties.

Declaration

A non-binding political statement made by ministers attending a major meeting (e.g. the Delhi Ministerial Declaration on climate change and sustainable development at COP-8).

Deforestation

The removal of forest stands by cutting and burning to provide land for agricultural purposes, residential or industrial building sites, roads, etc., or by harvesting the trees for building materials or fuel.

Demand-side Management

Policies and programmes designed to reduce consumer demand for electricity and other energy sources. When successful such programs reduce the need to construct new power facilities or develop other energy sources.

Demonstrable Progress

Paragraph 2 of Article 3 of the Kyoto Protocol states that 'Each Party included in Annex I shall, by 2005, have made demonstrable progress in achieving its commitments under this Protocol.' There is no consensus yet on the meaning of the term 'progress' (for example, is it an actual reduction in GHG emissions by 2005, the adoption of policies and measures which will enable a Party to meet its Kyoto Commitment by 2012, or in meeting financial obligations to developing countries), nor on how it will be demonstrated. This will be debated again at COP/MOP3.

Desertification

The progressive destruction or degradation of vegetative cover, especially in arid or semi-arid regions bordering existing deserts. Overgrazing of rangelands, large-scale cutting of forests and woodlands, drought, burning of extensive areas and climate changes all serve to destroy or degrade the vegetation cover.

Designated National Authority, or DNA

An office, ministry, or other official entity appointed by a Party to the Kyoto Protocol to review and give national approval to projects proposed under the Clean Development Mechanism.

Discount Rate

The implicit weighting of the present over the future is known as discounting and the rate at which the weight changes is the discount rate. The term reflects the point that today's investments generate future wealth. Individuals express preferences about when benefits and costs are desired and typically, the later a cost or benefit occurs, the less it matters. One of the major issues in economics is 'what is the appropriate discount rate to use under various circumstances'. Several values exist including both public and private rates. Private discount rates, which include profit, are typically higher than public discount rates.

DNA

See 'Designated National Authority'.

Documents

Official UNFCCC documents are available to all either in hard copy at UNFCCC meetings or on the UNFCCC website. They carry a unique document number and many are translated into all six UN languages. They carry a variety of codes indicating which Convention or Kyoto Protocol body is responsible for them and what type of document they are. (See CRPs, L Docs, and Misc. Docs.) There are also a wide variety of unofficial documents including statements from Parties, preliminary negotiating texts, and publications from observer groups. These are often difficult to obtain in hard copy and are not available on the UNFCCC website.

Drafting Group

Small group established by the President or Chair of a Convention body to meet separately and in private to prepare draft text—text which must still be formally approved later in a plenary session. Observers generally may not attend drafting group meetings.

Dynamic Targets

Emissions objectives that are adjusted according to a pre-agreed metric such as gross domestic product for an economy, or production level for an industry; also known as relative, output-based or indexed targets.

Early Crediting

Article 12 on the Clean Development Mechanism indicates that early crediting will be given for CDM projects undertaken between 2000 and 2008. These credits can be used to assist in achieving compliance in the first commitment period.

Earth Summit, or UN Conference on Environment and Development, or UNCED

A major conference held in 1992 in Rio de Janeiro at which, amongst other things, the UN Framework Convention on Climate Change (UNFCCC) was signed by more than 150 countries. (See 'Rio Conventions'.)

Earth Summit 2002

See 'World Summit on Sustainable Development'.

EB

See 'Executive Board'.

Economic Potential

The portion of technological potential for greenhouse gas emissions reductions or energy efficiency improvements that could be achieved cost-effectively through the creation of markets, reduction of market failures, or increased financial and technological transfers. The achievement of economic potential requires additional policies and measures to break down market barriers.

Economy in Transition, or EIT

Refers to Russia and the Eastern European countries that are in the transition from centrally controlled to market economies. These countries are listed in Annex I of the Convention, but not Annex II.

Ecosystem

The interacting system of a biological community and its non-living environmental surroundings.

EGTT

See 'Expert Group on Technology Transfer'.

EIT

See 'Economy in Transition'.

Eligibility

Discussion of eligibility relates firstly to the requirements for Annex B Parties to be eligible to participate in the use of the three Kyoto Mechanisms and secondly to whether a project would be eligible to qualify for credit under the CDM. In the first case, Parties are eligible to participate in the Kyoto Mechanisms if they meet certain requirements. These include: being in compliance with commitments under Articles 5 and 7 and submitting the last available national inventory report; having a national system for the estimation of GHG emissions; and having ratified the Protocol. In the second case, eligibility in the CDM refers to the type of technology or project that would qualify for credit. This may depend on the sustainable development criteria of the host country, the size of the project and the type of technology used, e.g. nuclear, fossil fuel or renewable (see 'Positive and Negative Lists').

El Niño/La Niña/ENSO

At irregular intervals, but on average about every four years, widespread warming of the east-central equatorial Pacific sea surface temperature occurs. This warming, which typically lasts for about a year, is called an El Niño event. (The term has its origins in a seasonal Christmas-time phenomenon off the South American coast that is prolonged and amplified when the pan-Pacific event occurs.) El Niño can be regarded as the warm phase of a major climate oscillation. During the cold phase, called La Niña, the equatorial Pacific sea surface temperature is cooler than normal. The sea surface temperatures are associated with widespread atmospheric shifts in winds, rainfall etc. Southern Oscillation is the term for the changes in tropical surface pressure that accompany the El Niño/La Niña cycle. The events involve strong interaction between the ocean and atmosphere, and the term ENSO (El Niño/Southern Oscillation) is often used to refer to the phenomenon as a whole. In the Pacific region the ENSO cycle produces large coherent changes in tropical ocean currents, temperature, trade winds, rainfall patterns, etc. Through atmospheric teleconnections, ENSO also influences seasonal climate in many other regions around the globe.

Emissions (UNFCCC definition)

The release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.

Emissions Cap

A mandated restraint, in a scheduled time frame, that puts a 'ceiling' on the total amount of anthropogenic greenhouse gas (GHG) emissions that can be released into the atmosphere. The Kyoto Protocol mandates caps on the GHG emissions released by developed countries listed in Annex B.

Emissions Permit

The phrase emissions permit is sometimes used to refer to the non-transferable or tradable entitlement bestowed by an administrative authority (intergovernmental organization, central or local government agency) to a regional (country, sub-national) or a sectoral (an individual firm) entity to emit a pollutant within specified constraints. In some settings, an emissions permit is required for activities that create emissions, and the operator responsible for emissions must acquire and surrender emissions allowances in amount equal to actual emissions.

Emissions Reduction Unit, or ERU

An ERU represents one tonne of CO₂-equivalent greenhouse gas emissions reductions achieved through a Joint Implementation project. It can be used to meet an Annex B Party's emission commitment or as the unit of trade in greenhouse gas emissions trading systems.

Emissions Scenarios

A plausible representation of the future development of emissions of substances that are radiatively active (e.g. greenhouse gases, aerosols), based on a coherent and internally consistent set of assumptions about driving forces (such as demographic and socio-economic development, technological change) and their key relationships. Concentration scenarios, derived from emissions scenarios, are used as input into a climate models to compute climate projections.

Emissions Trading

A market-based approach to achieving environmental objectives that allows those reducing GHG emissions below what is required to use or trade the excess reductions to offset emissions at another source inside or outside the country. In general, trading can occur at the domestic, international and intra-company levels. Article 17 of the Kyoto Protocol, allows Annex B countries to exchange emissions obligations. Domestic implementing regulations determine the extent to which firms and others may be allowed to participate. International emissions trading constitutes one of the Kyoto Mechanisms, designed to provide Annex B countries cost-effective flexibility in reducing emissions to achieve their agreed commitments.

ENGO

See 'Environmental Non-Governmental Organization'.

Entry Into Force

The point at which an intergovernmental agreement becomes legally binding—occurring at a pre-stated interval after a pre-stated and required number of ratifications by countries has been achieved. The UNFCCC required 50 ratifications to enter into force. It now enters into force for each new Party 90 days after that Party ratifies the Convention.

Environmental Integrity Group

A small negotiating bloc consisting of Switzerland, Mexico, South Korea, and more recently Lichtenstein and Monaco. This group seeks to maintain 'environmental integrity' during the negotiations which, for them, means minimizing the trade of hot air and the use of sinks to meet Annex B commitments. In practice the group seeks to assure that one of their members will be included in contact groups or representative deliberations on these topics.

**Environmental Non-Governmental Organization,
or ENGO**

The term used to describe observers from environmental groups that attend the negotiations. The ENGOs meet regularly during the negotiations to discuss developments and to meet with Party representatives and the UNFCCC Secretariat.

ERU

See 'Emissions Reduction Unit'.

EU Burden-sharing (see 'Bubble')

The agreement reached among the 15 states that were members of the EU in 1997 to jointly fulfil their commitments, as allowed by Article 4 of the Kyoto Protocol. The EU burden-sharing reallocated emission levels to each country, from the homogeneous 8 per cent reduction of the Protocol's Annex B. In practice if the EU meets its emissions obligations under the Kyoto Protocol, each of its member states will be deemed to have met their commitments. If the EU fails to achieve its overall target then members states will be accountable for emissions under the burden sharing agreement.

EU ETS

See 'European Union Emissions Trading Scheme'.

European Union Allowance

Emissions allowances distributed to installations by their respective governments under the EU ETS. Each allowance corresponds to one tonne of CO₂ that can be emitted during the scheme's commitment period.

European Union Emissions Trading Scheme, or EU ETS

Emissions trading programme covering large CO₂ emitting installations within the European Union. Each country within the European Union has a National Allocation Plan which provides installations in covered sectors with an allocation of tradeable allowances for their CO₂ emissions, and may also allow for auctioning of allowances.

Executive Board of the CDM, or EB

The 10-member EB supervises the CDM, under the authority and guidance of the COP/MOP and is responsible for approving new methodologies, accrediting third-party validators and verifiers, approving projects and ultimately issuing carbon credits for CDM projects.

Expert Group on Technology Transfer, or EGTT

Established at COP-7 with the objective of enhancing the implementation of Article 4.5 of the Convention, by analysing and identifying ways to facilitate and advance

technology transfer activities under the Convention. The EGTT's mandate was reviewed at COP-12. Agreement was not reached on the future mechanism for enhancing technology transfer and the EGTT's life was extended for a year. COP-13's agenda will include the future of the EGTT.

Expert Review Teams

Groups of experts, nominated by Parties, who review national reports submitted by Annex I Parties to the UNFCCC, and the Kyoto Protocol.

External Cost

Used to define the economic costs arising from any human activity, when the agent responsible for the activity does not take full account of the impacts on others of their actions. Various stakeholders may hold differing views as to how such impacts should be weighted.

Externality

See 'External Cost'.

FAO

See 'Food and Agriculture Organization of the UN'.

FCCC

See 'UN Framework Convention on Climate Change (UNFCCC)'.

Financial Mechanism

Developed country Parties (Annex II Parties) are required to provide new and additional financial resources to assist developing country Parties implement the Convention. To facilitate this, the Convention established a financial mechanism to distribute funds to developing country Parties. The financial mechanism is operated by the Global Environment Facility (GEF) under guidance from the COP.

Flexibility Mechanisms

See 'Kyoto Mechanisms'.

Food and Agriculture Organization of the UN, or FAO

United Nations organization providing a source of knowledge and information, which leads international efforts against hunger.

Fourth Assessment Report, or AR4

The fourth in a series of Intergovernmental Panel on Climate Change *Assessment Reports* which assesses the existing scientific literature on climate change. The report was finalized in 2007 and consists of three main sections: The Physical Science Basis; Impacts, Adaptation and Vulnerability; and Mitigation of Climate Change. There is also a short *Synthesis Report* which draws together the findings from the three main reports. Each report contains a short *Summary for Policy Makers* and *Technical Summary*.

Forest

Key to the identification of Kyoto lands is a definition of forest that is consistent for all Parties. This definition is critical to the accounting of sources and sinks under the Kyoto Protocol (Articles 3.3 and 3.4). There are many definitions of forest, based on land-use status (administrative/cultural records) or a minimum threshold of canopy cover and/or tree height. None, however, were specifically designed for carbon accounting as required under the Protocol. This definition and the implications of using different definitions are addressed in detail in Chapter 3 of the IPCC *Special Report on LULUCF*. The IPCC 2006 *Guidelines for National GHG Inventories* provide a broad, non-prescriptive definition of forest lands, but leave it to individual countries to decide which of their lands they will designate as forest.

Forest Management

Forest management is the application of biological, physical, quantitative, managerial, social and policy principles to the regeneration, tending, utilization and conversion of forests to meet specified goals and objectives while maintaining forest productivity. Management intensity spans the range from wilderness set-asides to short-rotation woody cropping systems. Forest management encompasses the full cycle of regeneration, tending, protection, harvest, utilization and access. (From IPCC *Special Report on LULUCF*.)

Fossil Fuels

Carbon-based fuels that have accumulated in geological deposits over very long periods, including coal, oil and natural gas.

Friends of the Chair

Delegates called upon by the Chair (who takes into account the need for political balance among various interests) to assist in carrying out specific tasks.

Fuel Cell

An electrochemical device that combines hydrogen and oxygen to produce electricity, heat and water. The source of hydrogen can be either pure hydrogen or a number of other fuels (such as methanol or other hydrocarbons) which are first converted to hydrogen and CO₂.

Fuel Switching

Supplying energy services using different fuels. Often used to refer to actions that reduce CO₂ emissions from electric utilities by switching from coal to natural gas.

Fugitive Fuel Emissions

Greenhouse-gas emissions as by-products or waste or loss in the process of fuel production, storage, or transport, such as methane given off during oil and gas drilling and refining, or leakage of natural gas from pipelines.

Full-cost Pricing

The pricing of commercial goods, such as electric power, that includes in the final prices faced by the end user not only the private costs of inputs, but also the costs of externalities created by their production and use.

Fungibility

Fungibility refers to the possibility that one unit/product, or a unit of a currency, can be exchanged for, or replaced by another. The Kyoto Protocol's procedures make AAs, CERs and ERUs fungible.

G77/China, or Group of 77 and China

Originally 77, now more than 130 developing countries that act as a major negotiating bloc. The G77 and China are also referred to as non-Annex I countries in the context of the UNFCCC.

G8, or Group of Eight

Forum of the heads of state of Canada, France, Germany, Italy, Japan, Russia, United Kingdom and

United States. The group undertakes policy research, holds conferences and meets at an annual summit. The Gleneagles Plan of Action on Climate Change, Clean Energy and Sustainable Development was launched at the 2005 summit (see also 'Gleneagles Plan of Action').

GCMs

See 'General Circulation Models'.

GCOS

See 'Global Climate Observing System'.

GEF

See 'Global Environment Facility'.

Geo-engineering

The deliberate, large-scale manipulation of the planet's environment as a potential option to stabilize the climate system by directly managing the energy balance of the Earth, thereby overcoming the enhanced greenhouse effect.

General Circulation Models, or GCMs

Large and complex computer programmes that attempt to mathematically simulate global climate. They are based on mathematical equations that seek to represent the physical processes that govern the earth-atmosphere system. (See 'Climate Models'.)

GHGs

See 'Greenhouse Gases'.

GIS

See 'Green Investment Scheme'.

Gleneagles Plan of Action

A set of measures, launched at the 2005 G8 Summit in Gleneagles, Scotland, to address climate change, clean energy and sustainable development. The Plan of Action builds on and supports existing efforts on energy efficiency improvement, reducing emissions from transportation, developing cleaner fuels, renewable energy, promoting R&D and financing of projects. The G8 is working with the IEA and other international bodies to achieve these goals (see also G8).

Global Climate Observing System, or GCOS

An international system established in 1992 to ensure that the observations and information needed to address climate change issues are obtained and made available to all users.

Global Environment Facility, or GEF

A jointly funded programme established by developed countries at the time of the Rio Summit to meet their obligations under various international environmental treaties. GEF serves as the interim financial mechanism for the UNFCCC, in particular to cover the cost of reporting by non-Annex I countries. It provides funds to complement traditional development assistance by covering the additional or 'agreed incremental costs' incurred by non-Annex I countries, when a national, regional or global development project also targets global environmental objectives such as those which address biodiversity.

Global Warming

The increase in the Earth's temperature, in part due to emissions of greenhouse gases associated with human activities such as burning fossil fuels, biomass burning, cement manufacture, cow and sheep rearing, deforestation and other land-use changes.

Suggested alternate definition: The observed increase in global average surface temperature, whether attributable to natural or human-induced causes.

Global Warming Potential, or GWP

A time dependent index used to compare the radiative forcing, on a mass basis, of an impulse of a specific greenhouse gas relative to that of CO₂. Gases included in the Kyoto Protocol are weighted in the first commitment period according to their GWP over a 100-year time horizon as published in the 1995 Second Assessment Report of the IPCC. In the 2001 TAR, the values were updated slightly, so that a kilogram of methane for example has a radiative force of about 23 times greater than that of a kilogram of CO₂. The GWP of CO₂ is defined as 1, thus methane has a GWP of 23 over the 100-year time horizon.

Grandfathering

A method used to allocate emissions credits to companies or other legal entities, typically based on their historical emission levels. Alternative emissions credit allocation methods include benchmarking (based on efficiency standards) and auctioning where allowances have to be paid for.

Greenhouse Effect

The trapping of heat by naturally occurring (water vapour, carbon dioxide, nitrous oxide, methane and ozone) and synthetic (CFCs, SF₆, HFCs, PFCs) atmospheric gases that absorb infrared radiation. The natural greenhouse effect keeps the earth about 30° C (55° F) warmer than if these gases did not exist.

Greenhouse Gases, or GHGs

Gases in the earth's atmosphere that absorb and re-emit infra-red radiation. These gases occur through both natural and human-influenced processes. The major GHG is water vapour. Other primary GHGs include carbon dioxide, nitrous oxide, methane, ozone and CFCs.

Green Investment Scheme, or GIS

Proposal that revenues earned by countries through the sale of 'hot air' are invested in projects that provide environmental benefits such as additional emission reductions, capacity building, education or social programmes that would support future reductions. Designed to allay concerns over the environmental integrity of 'hot air'.

Group of 77 and China

See 'G77/China'.

Group of Eight

See 'G8'.

GRULAC

Group of Latin American and Caribbean States—one of the five regional groupings commonly used by the UN. (See Regional Groups.)

GWP

See 'Global Warming Potential'.

HFCs

See 'Hydrofluorocarbons'.

Heat-Island Effect

Localized warming produced in cities due to the density of infrastructure, such as pavement, buildings and roads that retain heat. This effect can influence temperature readings obtained from nearby weather stations. In its *Fourth Assessment Report*, the IPCC concluded that the heat island effect had negligible impact on global average temperatures.

Hot Air

A few countries, notably Russia and the Ukraine, have emissions allocations under the Kyoto Protocol that appear to be well in excess of their anticipated emissions in the first commitment period (as a result of economic downturn since the baseline year of 1990). The potentially excess allocation is referred to as hot air. Under the Kyoto Protocol it could be traded with other Parties.

Hydrofluorocarbons, or HFCs

Among the six greenhouse gases to be controlled in the Kyoto Protocol 'basket of gases'. They are produced commercially as a substitute for Chlorofluorocarbons (CFCs) and Hydrochlorofluorocarbons (HCFCs). HFCs are largely used in refrigeration and insulating foam. Their Global Warming Potentials over a 100-year time horizon range from 12 to 1200 times that of CO₂, depending on the HFC. See 'Global Warming Potential'.

ICAO

See 'International Civil Aviation Organization'.

ICC

International Chamber of Commerce—the world business organization (www.iccwbo.org). ICC acts as the convenor of the business and industry meetings at UNFCCC and Kyoto Protocol meetings. It also develops position statements.

IDR

See 'In-depth Review'.

IEA

See 'International Energy Agency'.

IEA Greenhouse Gas R&D Programme

An international collaborative research programme studying technologies to reduce greenhouse gas emissions. The programme is funded by its members which includes member countries, the European Commission, OPEC, and industry sponsors.

IGO

See 'Intergovernmental Organization'.

IMO

See 'International Maritime Organization'.

Impact Models

Computer programmes used to estimate the impact of a specific climate change on natural, social or economic systems.

Implementation

Actions undertaken by governments to translate international accords into domestic law and policy. It includes those events and activities that occur after the issuing of authoritative public policy directives, which include the effort to administer and the substantive impacts on people and events. It is important to distinguish between the legal implementation of international commitments (in national law and regulations) and the effective implementation (measures that induce changes in the behaviour of target groups).

Implementation Costs

Costs involved in the implementation of mitigation options. These costs are associated with the necessary institutional changes, information requirements, market size, opportunities for technology gain and learning, and economic incentives needed (grants, subsidies, and taxes).

In-depth Review, or IDR

A process by which an Annex I Party's implementation of the Convention and/or the Kyoto Protocol is technically assessed by international teams of experts.

INC

See 'Intergovernmental Negotiating Committee'.

Informal Consultations, or Informal Contact Group

A group of delegates instructed by the President or a Chair to meet in private to discuss a specific matter in an effort to consolidate different views, reach a compromise, and produce an agreed proposal, often in the form of a written text. Observers generally may not attend informal consultations unless specifically permitted by the Chair.

Integrated Assessment

A method of analysis that combines results and models from the physical, biological, economic, and social sciences, and the interactions between these components, in a consistent framework, to evaluate the status and the consequences of environmental change and the policy responses to it.

Intensity Targets

A dynamic target expressed by the ratio of emissions over gross domestic product or unit of output.

Intergovernmental Negotiating Committee, or INC

A committee created to draft the Convention. The INC met in five sessions between February 1991 and May 1992. After the text of the Convention was adopted in 1992, the INC met six further times to prepare for COP-1. It completed its work in February 1995.

Intergovernmental Organization, or IGO

Organizations constituted of governments. Examples include The World Bank, the Organization of Economic Cooperation and Development (OECD), the International Civil Aviation Organization (ICAO). The Convention allows accreditation of these IGOs to attend the negotiating sessions.

Intergovernmental Panel on Climate Change, or IPCC

Panel established in 1988 by governments under the auspices of the World Meteorological Organization and the UN Environment Programme. It prepares assessments, reports and guidelines on: the science of climate change and its potential environmental, economic and social impacts; technological developments; possible national and international responses to climate change; and cross-cutting issues. It is currently organized into 3 Working Groups which address: I) Science; II) Impacts, Adaptation and Vulnerability; and III) Mitigation. There is also a Task Force to develop methodologies for GHG inventories.

International Bunkers

See 'Bunker fuels'.

International Civil Aviation Organization, or ICAO

An agency of the United Nations, codifies the principles and techniques of international air navigation and fosters the planning and development of international air transport.

International Energy Agency, or IEA

Paris-based organization formed in 1973, it now has a membership of 25 countries (OECD members). The IEA's original purpose was to manage future oil supply short-falls. They have also agreed to share energy information, to coordinate their energy policies and to cooperate in the development of energy programmes. Today the core mission of the IEA remains unchanged, but it has extended its activities to include providing energy statistics and other information and analysis worldwide, as well as reporting regularly on the energy policies of its Member States and those of selected non-Members. Through a variety of implementing agreements, the IEA is also a focal point for sharing information on emerging energy technology.

International Maritime Organization, or IMO

The IMO promotes cooperation among governments and the shipping industry to improve maritime safety and to prevent marine pollution.

International Transaction Log, or ITL

The central registry, linked to both national registries and CITL, used to record the issue, international transfer and cancellation of emissions allowances during the Kyoto commitment period. It also ensures each party registry is compliant with the Kyoto Protocol on each transaction.

Inventories

Countries are required to submit regularly an inventory of their GHG emissions. The IPCC has provided guidance on how to estimate and report on anthropogenic GHG emissions and removals, using a standardized tabular reporting format for six major sectors: energy; industrial processes; solvents and other product use; agriculture; land-use change and forestry; and waste. In addition to a sector-by-sector approach of summing carbon dioxide emissions from fossil fuel combustion, the IPCC methodology specifies that, as a check, a top-down approach be used to calculate emissions based on national fuel consumption data. A range of companies and associations are also preparing GHG inventories and the methodologies to calculate them. A number of factors need to be considered when designing a corporate GHG inventory including: emissions factors versus direct measurements; boundary definition around operations; the inclusion of emissions from contractors; and materiality. Certain sources of emissions, such as bunker fuels, are intentionally excluded from inventories for now.

IPCC

See 'Intergovernmental Panel on Climate Change'.

IPCC Special Report on Emissions Scenarios

A report issued in 2000 which defined widely used emissions scenarios. (See 'SRES Scenarios'.)

ITL

See 'International Transaction Log'.

JI

See 'Joint Implementation'.

JISC

See 'Joint Implementation Supervisory Committee'.

JLG

See 'Joint Liaison Group'.

Joint Implementation, or JI

Jointly implemented projects that limit or reduce emissions or enhance sinks are permitted among developed countries under Article 6 of the Kyoto Protocol. JI activity is also permitted in Article 4.2(a) of the Convention, between all Parties. As defined in the Kyoto Protocol JI allows developed countries, or companies from those countries, to cooperate on projects to reduce greenhouse gas emissions and share the emissions reduction units (ERUs). As JI occurs between Annex B countries (who have emissions caps), no new emissions units are generated (unlike the case with projects under the Clean Development Mechanism). JI can be viewed as an investment for ERUs swap. There is a two-track procedure for approval of JI projects. Track 1 applies if both Parties are in compliance with their Kyoto Protocol obligations, in which case JI projects are approved by the governments involved. Track 2 applies if one or both Parties are out of compliance, in which case the JI project must be reviewed by an accredited independent agency, using a process similar to that used for the Clean Development Mechanism. (See also 'Activities Implemented Jointly'.)

Joint Implementation Supervisory Committee, or JISC

Responsible for implementing JI. The JISC has 10 members from Parties to the Kyoto Protocol and these are comprised of three Annex B Parties, three non-Annex B Parties, three EIT and one SIDS. Parties that meet the predefined eligibility requirements follow a simplified procedure for the transfer and/or acquisition of ERUs—known as Track 1. Parties that do not meet these requirements have to undergo a verification procedure by the JISC—known as Track 2.

Joint Liaison Group, or JLG

A group comprised of representatives of UNFCCC, Convention on Biological Diversity, and UN Convention to Combat Desertification Secretariats set up to explore common activities to confront problems related to climate change, biodiversity, and desertification.

JUSSCANNZ

An acronym representing the non-EU industrialized countries. It included Japan, USA, Switzerland, Canada, Australia, Norway and New Zealand, which met to discuss joint positions during the negotiation of the Kyoto Protocol. After ratification of the Kyoto Protocol, JUSSCANNZ evolved into the Umbrella Group (see 'Umbrella Group').

Kyoto Basket

Under the Kyoto Protocol, Parties have committed to control emissions of a 'basket' of six GHGs. This 'basket' includes carbon dioxide, methane, nitrous oxide, HFCs, PFCs and SF₆. The arrangement is meant to give the flexibility which would enable a Party to increase emissions of any gas in the 'basket' provided commensurate reductions were made in another gas in the 'basket'.

Kyoto Lands

The Kyoto Protocol describes land use, land-use change and forestry activities that require or allow the net GHG emissions from sinks to be accounted for by Parties in meeting their emission reduction commitments. The lands on which these activities take place are designated as Kyoto lands.

Kyoto Mechanisms

(formerly known as Flexibility Mechanisms)

Procedures that allow Annex 1 Parties to meet their commitments under the Kyoto Protocol based on actions outside their own borders. As potentially market-based mechanisms they have the potential to reduce the economic impacts of greenhouse gas emission-reduction requirements. They include Joint Implementation (Article 6), the Clean Development Mechanisms (Article 12) and Emissions Trading (Article 17).

Kyoto Protocol

The Protocol, drafted during the Berlin Mandate process, that requires countries listed in its Annex B (developed nations) to meet differentiated reduction targets for their emissions of a 'basket' of greenhouse gases (see 'Kyoto Basket') relative to 1990 levels by 2008–12. It was adopted by all Parties to the UNFCCC in Kyoto, Japan, in December 1997 and entered into force on 16 February 2005.

L Docs

In-session documents that contain draft reports and texts for adoption by the COP or its subsidiary bodies. Usually such documents are available in all six UN languages.

ICERs

See 'Certified Emission Reductions'.

LDCs

See 'Least Developed Countries'.

LDCF

See 'Least Developed Country Fund'.

Leakage

That portion of reductions in greenhouse-gas emissions by Annex B Parties to the Kyoto Protocol that may reappear in other countries not bound by emission limits. For example, restrictions in developed countries may shift investment in emission-intensive activities to developing countries.

Least Developed Countries, or LDCs

An informal group of countries defined using a number of parameters including per capita GDP. Under current proposals, Least Developed Countries and Small Island Developing States would gain special consideration for adaptation and Convention funding, technology transfer, capacity building and the CDM.

Least Developed Country Expert Group, or LEG

A panel of 12 experts which provides advice to LDCs on the preparation and implementation of national adaptation programmes of action (NAPAs)—plans for addressing the urgent and immediate needs of those countries to adapt to climate change.

Least Developed Country Fund, or LDCF

A fund established to assist LDCs in developing and implementing their National Adaptation Programmes of Action (NAPAs). It is administered by the Global Environment Facility (GEF). (See 'NAPAs' and 'GEF'.)

LEG

See 'Least Developed Country Expert Group'.

Liability

Liability relates to the consequences falling on parties involved in a transaction that were the result of over-selling of some party's Assigned Amount. A number of options have been proposed, for example: the (over) seller is liable and would pay the penalty for non-compliance; the buyer is liable and the trade would be unwound, returning the AAUs to the overseller; or other hybrid options where liability is shared. The requirement for a commitment period reserve (see entry) has addressed many of these concerns.

Linking

A procedure to allow transaction between emissions trading systems in different entities, or to allow for the use of allowances from offset projects.

Lock-in Technologies and Practices

Technologies and practices that have market advantages arising from existing institutions, services, infrastructure, and available resources; they are very difficult to change because of their widespread use and the presence of associated infrastructure and socio-cultural patterns.

Long-term Certified Emission Reductions, or ICERs

See 'Certified Emission Reductions'.

LULUCF

Land Use, Land-Use Change and Forestry—see 'ARD Activities' and 'Kyoto Lands'.

Market Barriers

Conditions that prevent or impede the diffusion of cost-effective technologies or practices that would mitigate greenhouse gas emissions.

Market Impacts

Impacts that are linked to market transactions and directly affect Gross Domestic Product (a country's national accounts)—for example, changes in the supply and price of agricultural goods. See also 'Non-market Impacts'.

Market Potential

The portion of the economic potential for greenhouse gas emissions reductions or energy-efficiency improvements that could be achieved under forecast market conditions, assuming no new policies and measures. See also 'Economic Potential', 'Socio-economic Potential', and 'Technological potential'.

Market-based Incentives

Measures intended to use price mechanisms (e.g., taxes and tradable permits) to reduce greenhouse gas emissions.

Marrakech Accords

Agreements reached at COP-7 which set rules for 'operating' the more complex provisions of the Kyoto Protocol. The accords include details for establishing a greenhouse-gas emissions trading system; implementing and monitoring the Protocol's Clean Development Mechanism; and setting up and operating three funds to support efforts to adapt to climate change.

MDGs

See 'Millennium Development Goals'.

Meeting

A formal gathering that occurs during a 'session'. Each session of the COP, for example, is divided into a number of meetings. A meeting is generally scheduled from 10 a.m. to 1 p.m. or from 3 p.m. to 6 p.m.

Meeting of the Parties (to the Kyoto Protocol) or MOP

Commonly used but incorrect name for the COP/MOP. See 'Conference of the Parties serving as the Meeting of the Parties'.

Meridional Overturning Circulation, or MOC

The global density-driven circulation of the oceans. Wind-driven surface currents (such as the Gulf Stream) head polewards from the equatorial Atlantic Ocean, cooling all the while and eventually sinking at high latitudes (forming North Atlantic Deep Water). Extensive mixing therefore takes place between the ocean basins, reducing differences between them and making the Earth's

ocean a global system. The state of the circulation has a large impact on the climate of the Earth. Previously this circulation was referred to as thermohaline circulation, or THC, derived from *thermo-* for heat and *-haline* for salt, which together determine the density of sea water.

Methane, or CH₄

One of the basket of six greenhouse gases to be controlled under the Kyoto Protocol, it has a relatively short atmospheric lifetime of 10 ±2 years. Primary sources of methane are landfills, coal mines, paddy fields, natural gas systems and livestock. The Global Warming Potential of methane, over a 100-year time horizon, was revised from the SAR (1995) value of 21 to 23 in the TAR (2001), however, the SAR value is to be used for the first commitment period of the Kyoto Protocol. See 'Global Warming Potential'.

Methane Recovery

Method by which methane emissions from, for example, coal mines or waste sites, are captured and then re-used either through cost-effective management methods or through power generation.

Miscellaneous Documents, or Misc. Docs

Official documents that contain written submissions from Parties, and on occasion observers, on topics on the UNFCCC or Kyoto Protocol meeting agendas. To facilitate discussion, Miscellaneous Documents are made available on the UNFCCC website before meetings.

Millennium Development Goals, or MDGs

A set of 8 goals agreed at the United Nations Millennium Summit in 2000. Nearly 190 countries have signed up to these goals contain 18 targets which countries aim to meet by 2015.

Mitigation

Actions resulting in reductions to the degree or intensity of GHG emissions. Also referred to as abatement

Mitigative Capacity

The ability of the social, political, and economic structures and conditions to undertake effective mitigation.

MOC

See 'Meridional overturning circulation'.

Montreal Protocol

International agreement under UNEP which entered into force in January 1989 to phase out the use of ozone-depleting compounds such as CFCs, halons, methyl chloroform, carbon tetrachloride, HCFCs and methyl bromide.

MOP

Meeting of the Parties—a commonly used but incorrect name for the COP/MOP. See 'Conference of the Parties serving as the meeting of the Parties'.

N₂O

See 'Nitrous Oxide'.

NAP

See 'National Allocation Plan'.

NAPA

See 'National Adaptation Plan of Action'

National Action Plans

Plans submitted to the Conference of the Parties (COP) by all Parties outlining the steps that they have adopted to limit their anthropogenic GHG emissions. Countries must submit these plans as a condition of participating in the Convention and, subsequently, must communicate their progress to the COP regularly. The National Action Plans form part of the National Communications which include the national inventory of greenhouse gas (GHG) sources and sinks.

National Adaptation Plan of Action, or NAPA

In 2001, COP-7 established the National Adaptation Plans of Action (NAPAs) program to provide a process for Least Developed Countries (LDCs) to identify and prioritize their adaptation needs.

National Allocation Plan, or NAP

Under the EU ETS, EU Member States produce a national allocation plan detailing the implementation of the scheme at the domestic level by sector and facility.

National Communication

A document submitted in accordance with the Convention (and the Protocol) by which a Party informs other Parties of activities undertaken to address climate change. Most developed countries have now submitted their fourth national communications; most developing countries have completed their first national communication and are in the process of preparing their second.

National Registry

Each Annex B Party to the Kyoto Protocol has to establish a national registry to account for the holding of allowances by the Party, as well as by any entities authorised by the Party to hold them. It also contains accounts for setting units aside for compliance purposes (retirement) and removing units from the system (cancellation). Transfers and acquisitions between account holders or between Parties will take place through these national registries. National registries are linked to the ITL which monitors the transfer of allowances between registries.

NGO

See 'Non-Governmental Organization'.

Nitrous Oxide, or N₂O

One of the basket of six greenhouse gases to be controlled under the Kyoto Protocol, it is generated by burning fossil fuels and the manufacture of fertilizer. Its Global Warming Potential, over a 100-year time horizon, was revised from the SAR (1995) value of 310 to 296 in the TAR (2001), however, the SAR value is to be used for the first commitment period of the Kyoto Protocol. (See 'Global Warming Potential'.)

No Regrets

Actions which result in greenhouse gas limitations and abatement, and which also make good environmental and economic sense in their own right.

Non-Annex I Parties

The countries that have ratified or acceded to the UNFCCC that are not included in Annex I of the Convention. In practice most Non-Annex I Parties are developing countries.

Non-Annex B Parties

The countries that are not included in the Annex B list of developed nations in the Kyoto Protocol.

Non-binding Targets

A proposed approach to develop non-binding targets that would allow a country to sell allowances if its emissions are below a target, but does not oblige it to buy allowances if emissions are above. Also known as no-lose, or one-way targets.

Non-Governmental Organization, or NGO

NGOs can include registered non-profit organizations and associations from business and industry, environmental groups, cities and municipalities, academics, and social and activist organizations. Under the UN, NGOs must be accredited to observe its activities and, to do so, they must meet certain qualifications. IPIECA has UN ECOSOC Category II Non-Governmental Organization consultative status.

Non-market Impacts

Impacts that affect ecosystems or human welfare, but that are not directly linked to market transactions—for example, an increased risk of premature death. See also ‘Market Impacts’.

Non-paper

An in-session document issued informally to facilitate negotiations. A non-paper does not have an official document symbol.

Non-Party

A state that has not ratified the Convention but attends meetings as an observer.

North/South

Following the end of the cold war, it has been suggested that the most important geopolitical axis is now between the North, or developed countries, and the South, or developing countries. At the UNFCCC negotiations developing countries coordinate under the banner of the G77 + China, which includes a number of sub-groups such as AOSIS, the African Group and the group of Latin American countries.

Observers

Agencies, non-governmental organizations, and Governments not Parties to the Convention which are permitted to attend, but not vote, at meetings of the COP and its subsidiary bodies. Observers may include the United Nations specialized agencies; other intergovernmental organizations (IGOs) such as the International Atomic Energy Agency; and accredited non-governmental organizations (NGOs).

OECD

See 'Organisation for Economic Co-operation and Development'.

OPEC

See 'Organization of Petroleum Exporting Countries'.

Operational Entities

Article 12 of the Kyoto Protocol calls for the creation of operational entities that are responsible for validating proposed CDM project activity as well as verifying and certifying the emissions reductions or removals achieved. They are accountable to the Executive Board and ultimately the COP/MOP.

Opportunity Cost

The cost of an economic activity forgone by the choice of another activity.

Organisation for Economic Co-operation and Development, or OECD

An international organization of thirty countries that accept the principles of representative democracy and a free market economy.

Organization of Petroleum Exporting Countries, or OPEC

A grouping of oil producing and exporting countries who aim to co-ordinate policy and stabilize the supply and price of oil to the international market.

Ozone

Ozone (O₃) is a greenhouse gas, but not one of the basket of gases controlled by the UNFCCC and Kyoto

Protocol. In the troposphere, or lower part of the atmosphere, O₃ can be a constituent of smog. It is created naturally and also by reactions in the atmosphere involving gases resulting from human activities, including NO_x, or nitrogen oxides, from motor vehicles and power plants. The Montreal Protocol seeks to control chemicals which destroy ozone in the stratosphere (upper part of the atmosphere) where ozone absorbs ultra-violet radiation.

PAMs

See 'Policies and Measures'.

Party

A state (or regional economic integration organization such as the European Union) that agrees to be bound by a treaty and for which the treaty has entered into force.

Perfluorocarbons, or PFCs

One of the basket of the six greenhouse gases to be controlled under the Kyoto Protocol. They are a by-product of aluminum smelting. They also are the replacement for CFCs in manufacturing semiconductors. The Global Warming Potential of PFCs ranges from 6,500–9,200 over a 100-year time horizon. See 'Global Warming Potential'.

PFCs

See 'Perfluorocarbons'.

Plenary

A formal meeting of the entire COP or one of its subsidiary bodies. Formal decisions or conclusions may only be taken during plenary sessions.

Policies and Measures, or PAMs

In UNFCCC parlance, policies are actions that can be taken and/or mandated by a government—often in conjunction with business and industry within its own country, as well as with other countries—to accelerate the application and use of successful measures to curb greenhouse gas (GHG) emissions. Measures are technologies, processes and practices used to implement policies, which, if employed, would reduce GHG emissions below anticipated future levels. Examples might

include carbon or other energy taxes, standardized fuel efficiency standards for automobiles, etc. 'Common and coordinated' or 'harmonized' policies would refer to those adopted jointly by Parties. (This could be by region, such as the EU, or by countries comprising a given classification, for example, all Annex I nations.)

Positive and Negative Lists

Some countries have argued that listing the types of projects that would qualify for CDM credit would simplify the decision making process for potential project participants. It has been proposed that the lists of projects could either be negative i.e. exclude specific technologies (e.g. nuclear or large scale hydro) or be positive i.e. include specific technologies or activities such as renewable energy or energy efficiency projects.

PPP

See 'Purchasing Power Parity'.

Precautionary Principle

The UNFCCC (Article 3.3) states: Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.

President

The official, usually the Minister of Environment, of the member government or region hosting the COP, elected by the Parties to preside over the COP.

Price Cap

A cap set on the price of traded emissions allowances. Sources have access to an unlimited supply of allowances at the price cap. Also known as a safety valve.

'Primary Market' and 'Secondary Market' Trading

In commodities and financial exchanges, buyers and sellers who trade directly with each other constitute the

'primary market', while buying and selling through the exchange facilities represent the 'secondary market.'

Project Boundary

As defined in the CDM text, the project boundary shall encompass all anthropogenic emissions by sources of GHGs under the control of the project participants that are significant and reasonably attributable to the CDM project activity. The same considerations apply in the development of corporate inventories or project inventories for other applications.

Protocol

An international agreement linked to an existing convention, but as a separate and additional agreement which must be signed and ratified by the Parties to the convention concerned. Protocols typically strengthen a convention by adding new, more detailed commitments.

Public Participation

Article 12 of the Kyoto Protocol does not mention public (or NGO) participation in the CDM project approval process, but CDM procedure allows for stakeholder input during the project review period.

Purchasing Power Parity, or PPP

Estimates of Gross Domestic Product based on the purchasing power of currencies rather than on current exchange rates. Such estimates are a blend of extrapolated and regression-based numbers, using the results of the International Comparison Program. PPP estimates tend to lower per capita GDPs in industrialized countries and raise per capita GDPs in developing countries.

QELROs

See 'Quantified Emissions Limitations and Reductions Objectives'.

Quantified Emissions Limitations and Reductions Objectives, or QELROs

The greenhouse gas emissions reduction commitments made by developed countries listed in Annex B of the Protocol. (See also 'Targets and Timetables'.)

Radiative Forcing

A change in the balance between incoming solar radiation and outgoing infra-red and short-wave radiation. Without any radiative forcing, solar radiation absorbed by the earth would continue to be approximately equal to the infra-red radiation emitted from the earth. The addition of greenhouse gases absorbs an increased fraction of the infra-red radiation in the atmosphere, re-radiating it and creating a warming influence. Radiative Forcing is computed as the change in flux at the top of the troposphere, compared to pre-industrial atmospheric conditions.

Ratification

Formal approval, often by a Parliament or other national legislature, of a convention, protocol, or treaty, enabling a country to become a Party. Ratification is a separate process that occurs after a country has signed an agreement. The instrument of ratification must be deposited with a 'depository' (in the case of the UNFCCC, the UN Secretary-General) to start the countdown to becoming a Party (in the case of the Convention, the countdown is 90 days).

Reforestation

The act or process of re-establishing a forest on land that had been deforested in the last 50 years.

Regional groups

Defined in line with UN common practice—alliances of countries, in most cases sharing the same geographic region, which meet privately to discuss issues and nominate bureau members and other officials for activities under the Convention. The five regional groups are Africa, Asia, Central and Eastern Europe (CEE), Latin America and the Caribbean (GRULAC), and the Western Europe and Others Group (WEOG).

Registries, or Registry Systems

Electronic databases that will track and record all transactions under the Kyoto Protocol's greenhouse-gas emissions trading system (the 'carbon market') and under mechanisms such as the Clean Development Mechanism.

Removal Unit, or RMU

A Kyoto Protocol unit equal to 1 metric tonne of carbon dioxide equivalent. RMUs are generated in Annex B Parties by LULUCF activities that absorb carbon dioxide. Annex B Parties can use RMUs to help meet their Kyoto Protocol commitments.

Renewables

Energy sources that are constantly renewed by natural process. These include non-carbon technologies such as solar energy, hydropower and wind as well as technologies based on biomass. Life cycle analyses are required to assess the extent to which such biomass-based technologies may limit net carbon emissions.

Research and Systematic Observation

An obligation of Parties to the UNFCCC; they are called upon to promote and cooperate in research and systematic observation of the climate system, and called upon to aid developing countries to do so.

Reservation

An exception or concern noted for the record by a Party in the course of accepting a decision of the COP. No reservations are allowed to the Convention itself, or to the Protocol.

Reservoir

A component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored (UNFCCC definition). The oceans, soils and forests are all carbon reservoirs.

Review of Commitments

Regular scrutiny by Convention Parties of the adequacy of the treaty's Article 4.2 (a) and (b) outlining developed country commitments to limit greenhouse-gas emissions. The first review took place at COP-1 and led to a finding that progress was not 'adequate'—and so to negotiations that led to the Kyoto Protocol, which has more stringent commitments for developed countries.

RINGOs, or Research and Independent Organization NGOs

A coalition of organizations that participate in the UNFCCC process and meet for information exchange.

Rio+10

See 'World Summit on Sustainable Development'.

Rio Conventions

Three environmental conventions, two of which were adopted at the 1992 'Earth Summit' in Rio de Janeiro: the United Nations Framework Convention on Climate Change (UNFCCC), and the Convention on Biodiversity (CBD), while the third, the United Nations Convention to Combat Desertification (UNCCD), stemmed from Agenda 21 and was adopted in 1994. Through a Joint Liaison Group, the secretariats of the three conventions take steps to coordinate activities to achieve common progress.

Rio Summit

See 'Earth Summit'.

RMU

See 'Removal Unit'.

Roster of Experts

Experts nominated by Parties to the UNFCCC to aid the Secretariat in work related to review of national reports of Annex I Parties, preparation of reports on adaptation technology, the transfer of technology to developing countries, and the development of know-how on mitigating and adapting to climate change.

Rules of Procedure

The parliamentary rules that govern the procedures of the COP, covering such matters as decision-making and participation. The COP has not yet formally adopted rules of procedure, but all except one (on voting) are currently being 'applied.'

Russian Proposal

A proposal by the Russian Federation that procedures be adopted to enable developing nation Parties under the Kyoto Protocol to adopt voluntary commitments.

Safety Valve

See 'Price Cap'.

SAR

See 'Second Assessment Report'.

SBI

See 'Subsidiary Body for Implementation'.

SBSTA

See 'Subsidiary Body for Scientific and Technological Advice'.

SCCF

See 'Special Climate Change Fund'.

Second Assessment Report, or SAR

Published by the IPCC in 1995 the SAR provided a comprehensive overview of the state of knowledge on climate change at that time. The Kyoto Protocol indexes the contribution of various greenhouse gasses according to the 100-year Global Warming Potentials published in the SAR.

Secretariat of the UN Framework Convention on Climate Change

United Nations administrative and clerical staff, based in Bonn, Germany, assigned the responsibility of providing technical and logistical support for the UNFCCC.

SF₆

See 'Sulphur Hexafluoride'.

Sectoral Approach

Mitigation actions, such as emissions caps and intensity targets, applied to an entire global sector. Proponents of sectoral approach suggest that they limit the competitive distortions within an industry that may occur when a sector operates in a number of countries with differentiated national actions on climate change.

Seepage

The escape of injected CO₂ from a storage reservoir during CCS operations.

Session

A set of 'meetings' held by the UNFCCC. Two sessions are held each year, although Parties may agree to hold an inter-sessional if the work plan cannot be completed during the biannual sessions.

SIDS

See 'Small Island Developing States'.

Sinks (UNFCCC definition)

Any process or activity or mechanism which removes a greenhouse gas or a precursor from the atmosphere.

Small Island Developing States, or SIDS

Small Island Developing States is a subset of AOSIS in that it includes only developing country islands (AOSIS also includes some low-lying countries). This group is considered to be especially vulnerable to the impacts of climate change. Under current proposals, Small Island Developing States and LDCs would gain special consideration for adaptation/convention funding, technology transfer, capacity building and the CDM. SIDS, and other UN regional groupings, are informally defined and their structure and definition can change.

Social Cost

Cost of an activity that includes the value of all the resources used in its provision. Some of these are priced and others are not. Non-priced resources are referred to as externalities. It is the sum of the costs of these externalities and the priced resources that makes up the social cost. Decisions on social cost are value-weighted and require public policy decisions.

Socio-economic Potential

The socio-economic potential represents the level of greenhouse gas mitigation that would be approached by overcoming social and cultural obstacles to the use of technologies that are cost effective. See also 'Economic Potential', 'Market Potential' and 'Technology Potential'.

SOGE

See 'Symposium of Government Experts'.

Source (UNFCCC definition)

Any process or activity which releases a greenhouse gas or a precursor GHG to the atmosphere.

SO₂ Trading

See 'Sulphur Dioxide Trading'.

Special Climate Change Fund, or SCCF

The SCCF was established by the Marrakech Accords to fund projects on adaptation, technology transfer, capacity building, and economic diversification in developing nations. It is administered by the GEF and should be complementary to the other financial mechanisms of the UNFCCC and Kyoto Protocol.

Spill-over Effects

Economic impacts in developing countries caused by actions taken by developed countries to cut greenhouse-gas emissions. For example, emissions reductions in developed countries could lower demand for oil and thus international oil prices, leading to more use of oil and greater emissions in developing nations, partially offsetting the original cuts. Current estimates are that full-scale implementation of the Kyoto Protocol may cause 5 to 20 per cent of emissions reductions in industrialized countries to 'leak' into developing countries.

SPM

See 'Summary for Policy Makers'.

Square brackets

Typographical symbols [—] placed around text under negotiation to indicate that the language enclosed is being discussed but has not yet been agreed upon.

SRES Scenarios

Emissions scenarios developed in the IPCC *Special Report on Emissions Scenarios* (2000) and used, among others, as a basis for the climate projections in the IPCC WGI contribution to the TAR and AR4. These scenarios extend to 2100 and do not include additional climate initiatives or implementation of the UNFCCC or Kyoto Protocol.

Stabilization

The achievement of stabilization of atmospheric concentrations of one or more greenhouse gases (e.g. carbon dioxide or a CO₂-equivalent basket of greenhouse gases).

Stern Review

Study commissioned by the UK Chancellor of the Exchequer in which Sir Nicholas Stern examined the economics of climate change. Nicholas Stern presented his findings at the second Dialogue workshop.

Subsidiary Body for Implementation, or SBI

Established as a permanent standing body of the UNFCCC, the SBI develops recommendations to assist the Conference of the Parties in assessing and reviewing the implementation of the Convention.

Subsidiary Body for Scientific and Technological Advice, or SBSTA

Established as a permanent standing body of the UNFCCC, SBSTA serves as the link between the policy-oriented needs of the COP and the scientific, technical and technological assessments and information provided by various external groups, such as the Intergovernmental Panel on Climate Change.

Sulphur Dioxide (or SO₂) Trading

To mitigate the US acid rain problem in a cost-efficient manner, the US government, under its Clean Air Act, mandated an SO₂ emissions trading programme. This trading system is often cited as the model for an international Emissions Trading Programme proposed under the Kyoto Protocol to curb the world's anthropogenic greenhouse gas emissions.

Sulphur Hexafluoride, or SF₆

One of the six greenhouse gases to be curbed under the Kyoto Protocol. It is largely used in heavy industry to insulate high-voltage equipment and to assist in the manufacturing of cable-cooling systems. Its Global Warming Potential was assessed in the TAR to be 22,200 times that of CO₂ over 100 years (See 'Global Warming Potential').

Summary for Policy Makers, or SPM

The IPCC *Special Reports*, and each of the four main sections of the *Assessment Reports* (Working Groups I, II, III and the *Synthesis Report*), include a short *Summary for Policy Makers* as well as *Technical Summaries*. SPMs require word-by-word review and approval by member governments of the IPCC.

Supplementarity

The Kyoto Protocol states that Emissions Trading and Joint Implementation activities are to be supplemental to domestic actions (e.g. energy taxes, fuel efficiency standards, etc.) taken by developed countries to reduce their greenhouse gas emissions. The agreements implementing the Kyoto Protocol have left the definition of supplementarity vague.

Sustainable Development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Symposium of Government Experts, or SOGE

A seminar held in May 2006 to allow Parties to exchange information on existing and possible future actions to support commitments under the UNFCCC and Kyoto Protocol. The symposium was held without prejudice to future negotiations but marked the start of the process to determine future commitment periods to follow the Kyoto Protocol's first commitment period.

TAR

See 'Third Assessment Report'.

Targets and Timetables

A target is the reduction of a specific percentage of greenhouse gas (GHG) emissions (e.g. 6 per cent) from a base year (e.g. 'below 1990 levels') to be achieved by a set date, or timetable (e.g. 2008–12). For example, under the Kyoto Protocol's formula, the EU has agreed to reduce its GHG emissions to 8 per cent below 1990 levels by the 2008–12 commitment period. These targets and timetables are, in effect, a cap on the total amount of GHG emissions that can be emitted by a

country or region in a given time period. (See also 'QELROs'.)

tCERs

See 'Certified Emission Reductions'.

Technological Potential

The amount of mitigation that a technology can achieve without taking cost or other barriers into account.

Technology Cooperation/Technology Transfer

A process of constructive interaction with local, national and international partners to select and apply appropriate technology systems to achieve economic development. It includes both 'hard' (equipment) and 'soft' technology (software, management assistance, training). The current negotiations focus on Article 4.5 of the Convention in which developed country Parties (in particular those in the OECD) commit to take steps to promote, facilitate and finance as appropriate, access to environmentally sound technologies in developing countries to enable them to implement the provisions of the Convention. While recognizing the important role of the private sector in technology transfer and the need to enhance the enabling environment for investment in developing countries, much of the emphasis in the discussion is on the role that developed country governments should play in providing financial resources and technology to developing countries.

Technology Transfer Information Clearing House, or TT:Clear

Web-based technology information clearing house developed by the UNFCCC secretariat to improve access to, and quality of, information on the development and transfer of environmentally sound technologies.

Temporary Certified Emission Reductions, or tCERs

See 'Certified Emission Reductions'.

THC

See 'Meridional Overturning Circulation'.

The Dialogue

Dialogue on Long-Term Cooperative Action to Address Climate Change by Enhancing Implementation of the Convention, a series of four workshops over two years agreed at COP-11. Established to promote an exchange of views between Parties and to analyse approaches for future long-term cooperative actions. The workshops are held without prejudice to future negotiations.

Thermohaline Circulation, or THC

See 'Meridional Overturning Circulation'.

Third Assessment Report, or TAR

The third in a series of *Assessment Reports* prepared by the Intergovernmental Panel on Climate Change which review the existing scientific literature on the subject. Published in 2001, it contains three main sections: Science; Impacts, Adaptation and Vulnerability; and Mitigation as well as a *Synthesis Report*, which draws upon the three main sections and other IPCC *Special Reports* to answer nine policy-relevant scientific and technical questions (asked by UNFCCC SBSTA and refined by the IPCC Plenary).

Total Cost

See 'Social Cost'.

Trace Gas

A minor constituent of the atmosphere. The most important trace gases relevant to the greenhouse effect are carbon dioxide, ozone, methane, nitrous oxide, CFCs, HFCs HCFCs, PFCs, and SF₆. Other trace gases with less importance include, ammonia, nitric acid, ethylene, sulphur dioxide, nitric oxide, methyl chloride, carbon monoxide and carbon tetrachloride. Some trace gases, especially sulphur dioxide, contribute to aerosol formation, which has a cooling effect on the climate system.

TTClear

See 'Technology Transfer Information Clearing House'.

Umbrella Group

A set of non-EU developed countries who occasionally act as a negotiating bloc on specific issues. This group

IPIECA

Climate Change: a Glossary of Terms

evolved from the JUSSCANNZ, and includes Australia, Canada, Iceland, Japan, New Zealand, Norway, the Russian Federation, Ukraine and the United States.

UN Commission on Sustainable Development, or CSD

The Commission oversees the implementation of Agenda 21, the action plan adopted at the Rio Summit which is a blueprint for environmentally sustainable development for the 21st century. The CSD consists of representatives from more than 50 nations. It also monitors progress made by governments and UN agencies in reaching their commitments to the UNFCCC.

UN Conference on Environment and Development, or UNCED

See 'Earth Summit'.

UN Conference on Trade and Development, or UNCTAD

Established in 1964 by the UN General Assembly, UNCTAD is the principal organ of the UN General Assembly in the field of trade and development. Its main goals are to maximize trade, investment and development opportunities of developing countries. UNCTAD pursues its goals through research, policy analysis, IGO deliberations, technical cooperation and interaction with the business sector. UNCTAD has had a long-standing programme that is examining international emissions trading. Since 1991 it has produced publications on key parameters such as cost-efficiency, equity, monitoring certification and enforcement, and legal and institutional aspects.

UN Convention to Combat Desertification, or UNCCD

One of the three conventions to stem from the Rio de Janeiro 'Earth Summit' in 1992. (See 'Rio Conventions'.)

UN Development Programme, or UNDP

The purpose of UNDP is to assist countries (particularly those with a low per capita income) to achieve sustainable development. UNDP focuses on poverty elimination, environmental regeneration, job creation and the advancement of women. It also assists in promoting sound governance and market development. Its work is achieved with a core budget of about US\$800M used to fund projects in developing countries. UNDP is a manag-

ing partner of the Global Environment Facility, along with UNEP and the World Bank.

UN Environment Programme, or UNEP

The UN agency, established in 1972, to coordinate the environmental activities of the UN. It aims to help reinforce and integrate the large number of separate environmental efforts by intergovernmental, non-governmental, national and regional bodies. UNEP has fostered the development of the UNFCCC and the Convention on Biological Diversity.

UN Framework Convention on Climate Change, or UNFCCC

A treaty signed at the 1992 Earth Summit in Rio de Janeiro by more than 150 countries. Its ultimate objective is the 'stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic [human-induced] interference with the climate system'. While no legally binding level of emissions is set, the treaty states an aim by Annex I countries to return these emissions to 1990 levels by the year 2000. The treaty took effect in March 1994 upon the ratification of more than 50 countries; over 180 nations have now ratified. In March 1995, the UNFCCC held the first session of the Conference of the Parties (COP) the supreme body of the Convention in Berlin. Its Secretariat is based in Bonn, Germany.

UN Industrial Development Organization.

The organization's primary objective is the promotion and acceleration of industrial development in developing countries and countries with economies in transition.

UN Regional Groups

Under the UN system, countries are divided into five informally defined Groups: Africa; Latin America; Asia; Russia and Central and Eastern Europe; and the Western Europe and Others Group (WEOG—including the USA, Japan, Australia, New Zealand and Canada). Many UNFCCC functions, including the Bureau, the CDM Executive Board, and the Kyoto Protocol Compliance Committee, have equal representation from the UN Regional Groups, plus one SIDS representative.

UNCCD

See 'UN Convention to Combat Desertification'.

UNCED

See 'Earth Summit'.

UNCTAD

See 'UN Conference on Trade and Development'.

UNDP

'See UN Development Programme'.

UNEP

See 'UN Environment Programme'.

UNFCCC

See 'UN Framework Convention on Climate Change'.

UNIDO

See 'UN Industrial Development Organization'.

Uniform Report Format

A standard format through which Parties submit information on activities implemented jointly under the Convention.

Voluntary Commitments

A draft article considered during the negotiation of the Kyoto Protocol that would have permitted developing countries to voluntarily adhere to legally binding emissions targets. The proposed language was dropped in the final phase of the negotiations. At COP-11 (Montreal, 2005), Russia introduced a proposal on voluntary commitments which has been on the COP agenda ever since.

Vulnerability

The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity.

WEOG

See 'Western Europe and Others Group'.

Western Europe and Others Group, or WEOG

One of the five regional groupings commonly used by the UN. 'Others' include Australia, Canada, New Zealand, Turkey and the United States. (See 'Regional Groups'.)

WHO

See 'World Health Organization'.

WMO

See 'World Meteorological Organization'.

World Health Organization, or WHO

A specialized agency of the United Nations (UN) that acts as a coordinating authority on international public health.

World Meteorological Organization, or WMO

An intergovernmental organization with a membership of 188 Member States and Territories, which is now part of the UN.

World Summit on Sustainable Development, or WSSD

A special meeting of the UN General Assembly in 2002 which highlighted the tenth anniversary of the Rio Summit (see 'Earth Summit'). The meeting was held in South Africa. The Millennium Development Goals (MDGs) were one of the major outcomes of this meeting.

WSSD

See 'World Summit on Sustainable Development'.

Additional terms

(Record below any new definitions established since the publication of this Glossary.)

IPIECA

Climate Change: a Glossary of Terms

IPIECA

Climate Change: a Glossary of Terms

IPIECA

Climate Change: a Glossary of Terms

Index of terms

AAU	'Anyway' Tonnes
Abatement	AOSIS
Accession	AP6
Activities Implemented Jointly, or AIJ	AR4
Adaptation	ARD Activities
Adaptation Assessment	Article 3.9 (<i>Kyoto Protocol</i>)
Adaptation Benefits	Articles 4.8 and 4.9 (UNFCCC)
Adaptation Costs	Articles 5, 7 and 8 (<i>Kyoto Protocol</i>)
Adaptation Fund	Article 6 Supervisory Committee
Adaptive Capacity	Article 9 (<i>Kyoto Protocol</i>)
Additionality	Asia Pacific Partnership, or AP6
Ad Hoc Group on Article 13, or AG13	Assigned Amount
Ad Hoc Group on the Berlin Mandate, or AGBM	Assigned Amount Unit, or AAU
Ad Hoc Working Group, or AWG	Atmosphere
Adverse Effects/Impacts	Attribution
Afforestation	Auctioning
African Group	AWG
AG13	Banking
AGBM	BAPA
Aggregate Impacts	Baseline
AIJ	Benchmarking
Alliance of Small Island States, or AOSIS	Berlin Mandate
Allowances	BINGO
Alternative Energy	Biofuel
Amendment	Biomass
Ancillary Benefits (<i>IPCC definition</i>)	Borrowing
Annex I Countries	Brazilian Proposal
Annex II Countries	BTU Tax
Annex B Countries	Bubble
Anthropogenic Emissions	Budget

IPIECA

Climate Change: a Glossary of Terms

Budget Period	CG-11
Buenos Aires Plan of Action, or BAPA	CGE
Bunker Fuels, or International Bunkers	CH ₄
Bureau	Chlorofluorocarbons, or CFCs
Business and Industry Non-Governmental Organization, or BINGO	CHP
CACAM	CITL
Cap	Clean Development Mechanism, or CDM
Capacity Building	Climate
Carbon Capture and Storage, or CCS	Climate Change (<i>UNFCCC definition</i>)
Carbon Cycle	Climate Convention
Carbon Dioxide, or CO ₂	Climate Feedbacks
Carbon dioxide equivalent, or CO ₂ eq	Climate Forcing
Carbon Dioxide Fertilization	Climate Models
Carbon Intensity	Climate Sensitivity
Carbon Market	Climate Surprises
Carbon Sequestration	Climate System
Carbon Sinks	CMP
Carbon Tax	CO ₂
CBD	CO ₂ eq
CCS	Co-benefits (<i>IPCC definition</i>)
CDM	Cogeneration
CDM Reference Manual	Combined Cycle
CEE	Combined Heat and Power, or CHP
Central and Eastern Europe Group, or CEE	Commitment Period
Central Group 11, or CG-11	Commitment Period Reserve
CERs	Committee of the Whole, or COW
Certified Emission Reductions, or CERs	Common Reporting Format, or CRF
CFCs	Community Independent Transaction Log, or CITL
	Compliance

Index of terms (continued) ...

Compliance Committee	Drafting Group
Conference of the Parties, or COP	Dynamic Targets
Conference of the Parties serving as the Meeting of the Parties, or COP/MOP, or CMP	Early Crediting
Conference Room Papers, or CRPs	Earth Summit, or UN Conference on Environment and Development, or UNCED
Consultative Group of Experts, or CGE	Earth Summit 2002
Contact Group	EB
Contraction and Convergence	Economic Potential
Convention on Biological Diversity, or CBD	Economy in Transition, or EIT
COP	Ecosystem
COP/MOP	EGTT
COW	EIT
Credit for Early Action	Eligibility
CRF	El Niño/La Niña/ENSO
CRPs	Emissions <i>(UNFCCC definition)</i>
CSD	Emissions Cap
DAI	Emissions Permit
Dangerous Anthropogenic Interference, or DAI	Emissions Reduction Unit, or ERU
Decision	Emissions Scenarios
Declaration	Emissions Trading
Deforestation	ENGO
Demand-side Management	Entry Into Force
Demonstrable Progress	Environmental Integrity Group
Desertification	Environmental Non-Governmental Organization, or ENGO
Designated National Authority, or DNA	ERU
Discount Rate	EU Burden-sharing
DNA	EU ETS
Documents	European Union Allowance
	European Union Emissions Trading Scheme, or EU ETS

IPIECA

Climate Change: a Glossary of Terms

Executive Board of the CDM, or EB	Gleneagles Plan of Action
Expert Group on Technology Transfer, or EGTT	Global Climate Observing System, or GCOS
Expert Review Teams	Global Environment Facility, or GEF
External Cost	Global Warming
Externality	Global Warming Potential, or GWP
FAO	Grandfathering
FCCC	Greenhouse Effect
Financial Mechanism	Greenhouse Gases, or GHGs
Flexibility Mechanisms	Green Investment Scheme, or GIS
Food and Agriculture Organization of the UN, or FAO	Group of 77 and China
Fourth Assessment Report, or AR4	Group of Eight
Forest	GRULAC
Forest Management	GWP
Fossil Fuels	HFCs
Friends of the Chair	Heat-Island Effect
Fuel Cell	Hot Air
Fuel Switching	Hydrofluorocarbons, or HFCs
Fugitive Fuel Emissions	ICAO
Full-cost Pricing	ICC
Fungibility	IDR
G77/China, or Group of 77 and China	IEA
G8, or Group of Eight	IEA Greenhouse Gas R&D Programme
GCMs	IGO
GCOS	IMO
GEF	Impact Models
Geo-engineering	Implementation
General Circulation Models, or GCMs	Implementation Costs
GHGs	In-depth Review, or IDR
GIS	INC
	Informal Consultations, or Informal Contact Group

Index of terms (continued) ...

Integrated Assessment	LDCs
Intensity Targets	LDCF
Intergovernmental Negotiating Committee, or INC	Leakage
Intergovernmental Organization, or IGO	Least Developed Countries, or LDCs
Intergovernmental Panel on Climate Change, or IPCC	Least Developed Country Expert Group, or LEG
International Bankers	Least Developed Country Fund, or LDCF
International Civil Aviation Organization, or ICAO	LEG
International Energy Agency, or IEA	Liability
International Maritime Organization, or IMO	Linking
International Transaction Log, or ITL	Lock-in Technologies and Practices
Inventories	Long-term Certified Emission Reductions, or ICERs
IPCC	LULUCF
IPCC Special Report on Emissions Scenarios	Market Barriers
ITL	Market Impacts
Jl	Market Potential
JISC	Market-based Incentives
JLG	Marrakech Accords
Joint Implementation, or JI	MDGs
Joint Implementation Supervisory Committee, or JISC	Meeting
Joint Liaison Group, or JLG	Meeting Of the Parties (<i>to the Kyoto Protocol</i>) or MOP
JUSSCANNZ	Meridional Overturning Circulation, or MOC
Kyoto Basket	Methane, or CH ₄
Kyoto Lands	Methane Recovery
Kyoto Mechanisms	Miscellaneous Documents, or Misc. Docs
Kyoto Protocol	Millennium Development Goals, or MDGs
L Docs	Mitigation
ICERs	Mitigative Capacity
	MOC

IPIECA

Climate Change: a Glossary of Terms

Montreal Protocol	Party
MOP	Perfluorocarbons, or PFCs
N ₂ O	PFCs
NAP	Plenary
NAPA	Policies and Measures, or PAMs
National Action Plans	Positive and Negative Lists
National Adaptation Plan of Action, or NAPA	PPP
National Allocation Plan, or NAP	Precautionary Principle
National Communication	President
National Registry	Price Cap
NGO	'Primary Market' and 'Secondary Market' Trading
Nitrous Oxide, or N ₂ O	Project Boundary
No Regrets	Protocol
Non-Annex I Parties	Public Participation
Non-Annex B Parties	Purchasing Power Parity, or PPP
Non-binding Targets	QELROs
Non-Governmental Organization, or NGO	Quantified Emissions Limitations and Reductions Objectives, or QELROs
Non-market Impacts	Radiative Forcing
Non-Paper	Ratification
Non-Party	Reforestation
North/South	Regional Groups
Observers	Registries, or Registry Systems
OECD	Removal Unit, or RMU
OPEC	Renewables
Operational Entities	Research and Systematic Observation
Opportunity Cost	Reservation
Organisation for Economic Co-operation and Development, or OECD	Reservoir
Organization of Petroleum Exporting Countries, or OPEC	Review of Commitments
Ozone	RINGOs, or Research and Independent Organization NGOs
PAMs	

Index of terms (continued) ...

Rio+10	SRES Scenarios
Rio Conventions	Stabilization
Rio Summit	Stern Review
RMU	Subsidiary Body for Implementation, or SBI
Roster of Experts	Subsidiary Body for Scientific and Technological Advice, or SBSTA
Rules of Procedure	Sulphur Dioxide (or SO ₂) Trading
Russian Proposal	Sulphur Hexafluoride, or SF ₆
Safety Valve	Summary for Policy Makers, or SPM
SAR	Supplementarity
SBI	Sustainable Development
SBSTA	Symposium of Government Experts, or SOGE
SCCF	TAR
Second Assessment Report, or SAR	Targets and Timetables
Secretariat of the UN Framework Convention on Climate Change	tCERs
SF ₆	Technological Potential
Sectoral Approach	Technology Cooperation/ Technology Transfer
Seepage	Technology Transfer Information Clearing House, or TT:Clear
Session	Temporary Certified Emission Reductions, or tCERs
SIDS	THC
Sinks (<i>UNFCCC definition</i>)	The Dialogue
Small Island Developing States, or SIDS	Thermohaline Circulation, or THC
Social Cost	Third Assessment Report, or TAR
Socio-economic Potential	Total Cost
SOGE	Trace Gas
Source (<i>UNFCCC definition</i>)	TT:Clear
SO ₂ Trading	
Special Climate Change Fund, or SCCF	
Spill-over Effects	
SPM	
Square Brackets	

IPIECA

Climate Change: a Glossary of Terms

Umbrella Group	UNCTAD
UN Commission on Sustainable Development, or CSD	UNDP
UN Conference on Environment and Development, or UNCED	UNEP
UN Conference on Trade and Development, or UNCTAD	UNFCCC
UN Convention to Combat Desertification, or UNCCD	UNIDO
UN Development Programme, or UNDP	Uniform Report Format
UN Environment Programme, or UNEP	Voluntary Commitments
UN Framework Convention on Climate Change, or UNFCCC	Vulnerability
UN Industrial Development Organization	WEOG
UN Regional Groups	Western European and Others Group, or WEOG
UNCCD	WHO
UNCED	WMO
	World Health Organization, or WHO
	World Meteorological Organization, or WMO
	World Summit on Sustainable Development, or WSSD
	WSSD

Acknowledgements

This *Glossary of Climate Change Terms* has been prepared by the International Petroleum Industry Environmental Conservation Association (IPIECA).

This fourth edition builds on previous editions, and includes new contributions from:

Lenny Bernstein

Nick Campbell (Arkema)

Brian Flannery (ExxonMobil)

Haroon Kheshgi (ExxonMobil)

Jean-Francois Larive (CONCAWE)

Bill Thompson (BP)

Disclaimer

Whilst every effort has been made to ensure the accuracy of the information contained in this publication, neither IPIECA nor any of its members will assume liability for any use made thereof.

IPIECA

IPIECA is the single global association representing both the upstream and downstream oil and gas industry on key environmental and social issues, including: global climate change; fuels, operations and products; oil spill response; biodiversity; health; social responsibility and sustainability reporting.

Founded in 1974 following the establishment of the United Nations Environment Programme (UNEP), IPIECA provides a principal channel of communication with the United Nations. IPIECA Members are drawn from private and state-owned companies as well as national, regional and international associations. Membership covers Africa, Latin America, Asia, Europe, the Middle East and North America.

Through a Strategic Issues Assessment Forum, IPIECA also helps its members identify emerging global issues and evaluates their potential impact on the oil industry. IPIECA's programme takes full account of international developments in these issues, serving as a forum for discussion and cooperation, involving industry and international organizations.

5th Floor, 209–215 Blackfriars Road
London SE1 8NL, United Kingdom

Tel: +44 (0)20 7633 2388 Fax: +44 (0)20 7633 2389

E-mail: info@ipieca.org Internet: www.ipieca.org



IPIECA

International Petroleum Industry
Environmental Conservation Association