#### **Abbreviations**

AAU Assigned Amount Unit

BAU Business-As-Usual

CDM Clean Development Mechanism

CER Certified Emission Reduction

CFI Carbon Financial Instrument

CH<sub>4</sub> Methane

CITL Community International Transaction Log

CO<sub>2</sub> Carbon Dioxide

CO<sub>2</sub>e Carbon Dioxide Equivalents

DNA Designed National Authority

DOE Designed Operational Entity

ERU Emission Reduction Unit

EUA European Union Allowance Unit

EU ETS European Union Emission Trading Scheme

GHGs Greenhouse Gases

GIS Green Investment Scheme
GWP Global Warming Potential

HFCs Hydrofluorocarbons

IPCC Intergovernmental Panel on Climate Change

ITL International Transaction Log

JI Joint Implementation

ICER Long-term Certified Emission Reduction

LoA Letter of Approval

LULUCF Land Use, Land Use Change and Forestry

NAP National Allocation Plan

N<sub>2</sub>O Nitrous Oxide

PDD Project Description Document

PFCs Perlfluorcarbons
PIN Project Idea Note

RGGI Regional Greenhouse Gas Initiative

RMU Removal Unit

SF<sub>6</sub> Sulphur hexafluoride

tCER Temporary Certified Emission Reduction

UNFCCC United Nations Framework Convention on Climate Change

VER Verified/Voluntary Emission Reduction

# **European Climate Exchange**

# Carbon Glossary

## A:

## Additionality

A project is additional if it can be demonstrated that in the absence of the CDM (i) the proposed voluntary measure would not be implemented, or (ii) the mandatory policy/regulation would be systematically not enforced and that non-compliance with those requirements is widespread in the country/region, or (iii) the project will lead to a greater level of enforcement of the existing mandatory policy/regulation.

#### Annex I countries

Developed countries who, under the Kyoto Protocol, have accepted greenhouse gas emission reduction obligations and must submit an annual greenhouse gas inventory.

### **Assigned Amount Unit**

Allowances issued to Annex I countries which have a cap on their emissions under the Kyoto Protocol. Each AAU grants the country the right to emit one tonne of greenhouse gases during a commitment period.

### Auctioning

Distribution of emission allowances through the receipt of bids from potential buyers with allowances sold to the highest bidder.

## B:

#### Banking

The ability to carry over unused carbon credits from one commitment period of a trading scheme to another commitment period.

## **Baseline**

Under a business-as-usual scenario emissions are forecasted. Also called baseline scenario.

#### Benchmarking

Distribution of usually free of charge emission allowances on the basic of relative emissions per unit of output.

#### Borrowing

The use of carbon credits due to be allocated in the future to enable regulated entities to meet their target in an earlier time period.

#### **Business-As-Usual**

A business as usual scenario is a reference case used to estimate what future emissions would have been in the absence of a project or changes in current policies to reduce emissions.

## C:

#### Carbon

Shorthand for carbon dioxide or greenhouse gases used in phrases such "carbon trading," "carbon footprint" and "carbon emissions.".

## **Carbon Dioxide Equivalents**

It is a measurement unit used to indicate the global warming potential (GWP) of greenhouse gases. Carbon dioxide is used as the reference gas against which all other greenhouse gases are measured.

#### **Certified Emission Reduction**

Carbon credits arising from Clean Development Mechanism projects. One CER is awarded for a reduction in greenhouse gas emissions equivalent in impact to one tonne of carbon dioxide.

## Clean Development Mechanism

An arrangement under the Kyoto Protocol allowing industrialised countries (Annex I countries) with a greenhouse gas reduction commitment to invest in projects that reduce emissions in developing countries (non-Annex I countries) as an alternative to more expensive emission reductions in their own countries.

## Clean Spread

The theoretical profit made by a power plant from selling each megawatt-hour of electricity, net of the cost of the fuel required <u>and</u> the cost of the allowances needed to cover the associated emissions. Hence the "Clean Spark Spread" and the "Clean Dark Spread."

#### **Commitment Period**

It is a five-year period under the Kyoto Protocol and will last from calendar year 2008 to calendar year-end 2012.

#### Community International Transaction Log

The European Union's independent transaction log recording the issue, transfer and cancellation of EU Allowances within European Union and monitoring compliance with Kyoto Protocol rules on the issuance, transfer and cancellation of these allowances.

### **Crediting Period**

This period monitors and verifies a CDM or JI Implementation Project in terms of carbon credits.

# <u>D:</u>

### Dark Spread

The theoretical profit made by a coal-fired power plant from selling each megawatt-hour of electricity, net of the cost of the fuel required to produce this unit of electricity. All other costs (operation and maintenance, capital and other financial costs) must be covered from the spark spread.

## **Designated National Authority**

The government office that provides national approval for CDM participation as a project participant, whether as a project owner or as an investor. The DNA issues the Letter of Approval (LoA) required for registration of a project. Projects need both host country approval and investor country approval.

## **Designated Operational Entity**

A legal entity accredited by the CDM Executive Board to carry out the validation, verification and/or certification of CDM projects.

## <u>E:</u>

#### **Emission Reduction Unit**

Carbon credits arising from Joint Implementation projects. One ERU is awarded for a reduction in greenhouse gas emissions equivalent in impact to one tonne of carbon dioxide.

## **European Union Allowance Unit**

Allowances issued to installations which have a cap on their emissions under the EU Emission Trading Scheme. Each EUA grants the installation the right to emit one tonne of carbon dioxide during a commitment period.

## **European Union Emissions Trading Scheme**

The EU Emissions Trading Scheme commenced on 1 January 2005, creating the world's first multi-country emissions trading system and the largest scheme ever implemented. The EU ETS runs in three phases: 2005-2007 (Phase I), 2008-2012 (Phase II) and 2013-2020 (Phase III).

## <u>F:</u>

## Flexible Mechanisms or Flexibility Mechanisms

The three mechanisms of the Kyoto Protocol that enable emissions trading, namely; emissions trading (AAUs), Clean Development Mechanism (CERs) and Joint Implementation (JI).

# <u>G:</u>

## **Global Warming Potential**

The global warming potential represents the impact the emission of a particular greenhouse gas (GHG) has on global warming. Carbon Dioxide is used as the reference case, hence it always has the GWP of 1. A 100-year GWP is used for comparison purposes as recommended form the IPCC but the IPCC may adapt the official GWP over time.

Below is a list of 100-year GWPs:

Carbon dioxide (CO <sub>2</sub> )	GWP: 1
Methane (CH <sub>4</sub> )	GWP: 25
Nitrous oxide (N <sub>2</sub> O)	GWP: 310
Hydrofluorcarbons (HFCs)	GWP: 140 – 11 700
Perfluorcarbons (PFCs)	GWP: 6500 – 9 200
Sulphur hexafluoride (SF <sub>6</sub> )	GWP: 23 900

## Grandfathering

Distribution of emission allowances, usually free of charge, on the basic of historic emissions.

#### **Greenhouse Gases**

These gases contribute to the warming of the Earth's atmosphere by reflecting radiation from the Earth's surface. Some GHGs occur naturally in the atmosphere, while others result from human activities.

#### **Green Investment Scheme**

The use of revenues from the sale of "hot air" to finance additional emission reductions in seller countries.

## H:

#### Hot Air

AAUs that are available for sale due to economic collapse or declined production, usually in former communist countries, for reasons not related to intentional efforts to curb emissions.

## 1:

#### Installation

A stationary source of carbon dioxide emissions, such as a boiler or refinery stack, that is regulated under an emissions trading scheme.

## Intergovernmental Panel on Climate Change

Scientific body mandated by the UN to evaluate the risk of climate change caused by human activity. A main activity of the IPCC is publishing special reports on topics relevant to the implementation of the UNFCCC.

### **International Transaction Log**

It is a planned centralized database of all tradable credits under the Kyoto Protocol. Its purpose is to verify all international transactions and their compliance with rules and policies of the Kyoto Protocol.

# <u>J:</u>

#### Joint Implementation

A mechanism through which Annex I countries can invest in emission reduction projects (Joint Implementation Projects) in any other Annex I country as an alternative to reducing emissions domestically.

# <u>K:</u>

## Kyoto Protocol

The agreement reached in Kyoto in 1997 committing developed countries and countries making the transition to a market economy (Annex I countries) to achieve quantified targets for decreasing their emissions of greenhouse gases.

## <u>L:</u>

## Leakage

An increase of greenhouse gas emissions outside the boundaries of a project or a region that has a cap on emissions that is caused by the project or cap. Leakage effectively reduces the net greenhouse gas emissions reductions from that region or project.

## Letter of Approval

Letter issued by a Designated National Authority authorising an entity to become a CDM project participant.

## **Linking Directive**

The EU Emissions Trading Directive 2003/87/EC and its amendment arrange the use of project credits in Phase I (2005-2007) of the EU ETS, as well as provisions relating to project approval processes and authorisation to participate in the flexible mechanisms. They also contain additional provisions relating to the establishment of the national emissions inventory.

## **Long-term Certified Emission Reduction**

CERs issued for afforestation or reforestation projects under the CDM that expire at the end of the crediting period of the project.

## N:

### **National Allocation Plan**

This plan defines the basis on which emission allowances to individual installations are allocated under the EU Emission Trading Scheme.

#### Non-Annex I countries

Developing countries who have no greenhouse gas emission reduction obligations under Kyoto but may participate in the Clean Development Mechanism.

# <u>O:</u>

#### Offsets

Carbon credits earned for a reduction in emissions from projects or activities sources that are not subject to a cap on emissions. Emission reductions are usually calculated by reference to a business as usual baseline.

# <u>P:</u>

#### Permit

Permits are often used for denoting carbon credits, since these credits grant the owner the right to emit greenhouse gases.

#### **Primary CERs**

CERs which are issued to or bought directly from a CDM project. In general, the buyer of primary CERs is exposed to the project risks.

#### **Project Design Document**

Project developers have to fill in this document to register their CDM or JI project.

## **Project Idea Note**

Is the short form for the project description providing basic information about the CDM or JI project.

## **Project Participant**

An organisation involved in a CDM project as a project owner or investor. Project participants determine the allocation of CERs issued to a CDM project.

## <u>R:</u>

## Regional Greenhouse Gas Initiative

A regional cap-and-trade programme for North-eastern and Mid-Atlantic states of the United States of America due to start in 2009.

## Registration

The formal acceptance by the CDM Executive Board of the eligibility of a project to earn CERs.

## Registry

An electronic database that acts as the official repository of carbon credits and tracking system for the transfer of such credits.

#### Removal Unit

Carbon credits relating to land use, land use change and forestry activities in Annex 1 countries that reduce or sequester emissions. Each RMU is equal to one metric tonne of CO2 equivalent.

# <u>S:</u>

#### Secondary CERs

CERs which are bought from a market intermediary on a "guaranteed delivery" basis, i.e. the seller insulated the buyer from project risks by guaranteeing to make good any shortfall from the projects in its portfolio.

### Sequestration

This term denotes a technique for the permanent storage of carbon dioxide or other greenhouse gases so that they will not be released to the atmosphere where they would contribute to the greenhouse gas effect. Examples include forestry or geologic sequestration of carbon dioxide through its injection and storage underground.

#### Sinks

Projects or activities that remove greenhouse gases from the atmosphere through land management and forestry activities.

### **Small Scale Projects**

Projects that can use a simplified process for CDM registration. Eligible projects are: renewable energy projects under 15 MW, energy efficiency projects that reduce energy consumption by up to 15 GWh per year, or project activities which emit less than 15 kilo tonnes CO<sub>2</sub> equivalent per year.

## Spark Spread

The theoretical profit made by a gas-fired power plant from selling each megawatt-hour of electricity, net of the cost of the fuel required to produce this unit of electricity. All other costs (operation and maintenance, capital and other financial costs) must be covered from the spark spread.

## **Supplementarity**

A provision in the Kyoto Protocol that requires use of the flexibility mechanisms to be supplementary to domestic action to reduce emissions.

# <u>T:</u>

## **Temporary Certified Emission Reduction**

CERs issued for afforestation or reforestation projects under the CDM that expire at the end of the commitment period following the one during which it was issued.

# U:

## **United Nations Framework Convention on Climate Change**

The UNFCCC sets an overall framework for international efforts to fight against climate change. Its main objective is "stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic (man-made) interference with the climate system". It was established 1992 at the Rio Earth Summit.

# <u>V:</u>

## Validation

An independent evaluation of a CDM project by a Designated Operational Entity to ensure its conformity with the requirements of a CDM project.

### **Verified/Voluntary Emission Reductions**

Carbon credits transacted on the basis of emission reductions achieved outside the framework of the Kyoto Protocol.