

SUPPORTING EUROPE'S
PARLIAMENTARIANS



COMBATING
CLIMATE CHANGE
MAINTAINING
MOMENTUM



8 / GLOSSARY OF TERMS

Further references, explanation and analysis can be found at www.ieep.eu/briefingsonclimate

CLIMATE SCIENCE

Adaptation – the process through which the environmental and anthropogenic consequences of climate change are managed and their impacts limited. Adaptation action will be necessary in tandem with mitigation (see **Mitigation**) in order to manage the impacts already inevitable given historical GHG emissions (see **GHG**).

GHG – greenhouse gas – Any atmospheric gas, natural or anthropogenic, contributing to the Greenhouse Effect (see **Greenhouse Effect**). The most abundant GHGs are water vapour, CO₂, methane, nitrous oxide, ozone and chlorofluorocarbons (CFCs).

Greenhouse Effect – the naturally occurring process during which the Earth's surface is heated owing to the presence in the atmosphere of gases that absorb and emit infrared radiation. Radiation from the sun is mostly absorbed by the Earth's atmosphere and re-emitted as infrared radiation. Some of this infrared radiation passes through the atmosphere but some is absorbed by GHGs (see **GHG**) causing warming of the Earth's surface.

Mitigation – a human intervention to reduce the GHG concentrations in the atmosphere, either by reducing their emission or enhancing sinks.

THE INTERNATIONAL CONTEXT

CDM – clean development mechanism – A process allowing any country with an emission reduction or emission limitation commitment under the Kyoto Protocol (see **Kyoto Protocol**) to implement an emission reduction project in developing countries. Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one tonne of CO₂, which can contribute towards a country's Kyoto target.

Copenhagen, COP15 – United Nations Climate Change Conference to be held on 7-18 December 2009. The aim of the conference is to establish a climate change agreement from 2012 onward following the expiry of the Kyoto Protocol (see **Kyoto Protocol**).

IPCC – the Intergovernmental Panel on Climate Change – A scientific intergovernmental body set up by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) in 1988 to provide decision-makers and others interested in climate change with an objective source of information. The IPCC produced its 4th assessment report in 2007 with the headline message that 'warming of the climate system is unequivocal'. Subsequently all its members received the Nobel Peace Prize for their efforts in raising awareness of climate issues. The IPCC's 5th report is scheduled to be published in early 2014.

JI – joint implementation – A process allowing any country with an emission reduction or limitation commitment under the Kyoto Protocol (see **Kyoto Protocol**) to earn emission reduction units (ERUs) from an emission reduction or emission removal project in another country. Each ERU is equivalent to one tonne of CO₂, and can contribute towards a country's Kyoto target.

Kyoto Protocol – an international agreement linked to the United Nations Framework Convention on Climate Change (see **UNFCCC**). The Kyoto Protocol sets binding targets for 37 industrialised countries and the European Community for reducing GHG emissions. These amount to an average reduction of 5% against 1990 levels over the five-year commitment period (2008-2012).

REDD – reducing emissions from deforestation and forest degradation in developing countries – This initiative is a collaboration between the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP) and the Food and Agriculture Organization of the United Nations (FAO). It was launched in 2007 to combat anthropogenic climate change through reducing deforestation and degradation in developing countries.

UNFCCC – United Nations Framework Convention on Climate Change – An international, multilateral environmental treaty produced at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992. The Convention entered into force in 1994. Under the Convention, 192 countries commit to reduce anthropogenic emissions that affect the climate and to mitigate the adverse effects of climate change.

POLICY TOOLS AND TECHNOLOGIES

Bioenergy – renewable energy created from biological matter (see **Bioliquids** and **Biofuels**).

Biofuels – liquid or gaseous fuels for transport produced from biomass.

Bioliquids – fuel produced from biomass for energy purposes other than for transport, including electricity and heating and cooling.

Biomass – the biodegradable fraction of products, waste and residues of biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste.

CCS – carbon capture and storage – A process in which carbon emitted from fossil fuel combustion sites such as power stations is re-captured and stored in geological formations.

Effort or Burden Sharing – the idea that greenhouse gas (GHG) emission reduction targets can be met through international collaboration. Under the EU Burden Sharing Agreement established in 1998, the task of achieving a uniform European emission reduction target set within the Kyoto Protocol is divided unequally between Member States based on their national circumstances.

MEASUREMENT SYSTEMS

CO₂ Equivalent – a universal standard of measurement by which the contribution of any gas to the greenhouse effect (see **Greenhouse Effect**) can be expressed relative to the same amount of CO₂.

GW – gigawatt – the unit of electric power equal to one billion watts or one thousand megawatts (MW).

GWP – global warming potential – An index, based upon radiative properties of GHGs, measuring the radiative forcing of a unit mass relative to CO₂. The GWP represents the combined effect of the differing amounts of time that gases remain in the atmosphere and their relative effectiveness at absorbing thermal infrared radiation.

INSTITUTE FOR EUROPEAN ENVIRONMENTAL POLICY

IEEP is an independent not for profit institute dedicated to advancing an environmentally sustainable Europe.

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Visit www.ieep.eu/briefingsonclimate for:

- Briefing materials translated into Bulgarian, Czech, French, German, Hungarian, Italian, Polish, Romanian and Spanish.
- A full bibliography, lists of the key organisations engaged in the development of EU climate policy and further analysis including a timetable for EU and international action on climate between 2009 and 2014.

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