

International Efforts to Counter Global Warming

The Intergovernmental Panel on Climate Change (IPCC) is the mechanism that accumulates scientific knowledge on global warming while debates on the international countermeasures have been made in the COPs (Conference of the Parties) of United Nations Framework Convention on Climate Change (UNFCCC). These two mechanisms are complementing each other.

(1) IPCC: accumulation of scientific knowledge

IPCC is a body organized by the scientists around the world. It was founded in November 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) jointly as a place to study global warming problems at a governmental level. In the report compiled for 1995, IPCC announced their analysis on the climate change since the 19th century. According to their findings, global warming had been already occurring due to the increasing amount of emitted greenhouse gases after the Industrial Revolution etc.

(2) UNFCCC: study of international countermeasures

UNFCCC discusses and performs international countermeasures to the climate change while IPCC is a place to accumulate scientific knowledge. In UNCED (United Nations Conference on Environment and Development: commonly named "Earth Summit") which was held in Rio de Janeiro in Brazil in June, 1992, a large number of nations including Japan signed UNFCCC. The purpose of this treaty is to stabilize the concentration of greenhouse gases in the atmosphere. As a result, it is required that the amount of emitted greenhouse gases should be controlled or cut down. UNFCCC was ratified by 50 countries and went into effect in March, 1994. Following its effectuation, the COP1 was held in Berlin and the COP2 in Geneva, the COP3 was held in Kyoto to adopt "Kyoto Protocol", which defined the reduction targets of greenhouse gases in the period from 2008 through 2012.

(3) IPCC report on global warming

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) by the Working Group I (WGI) published in January, 2007 concluded that the global warming is occurring in the climate system and the increase of the man-originated GHG is the cause of the climate change.

Rise of Sea Level between 2090 - 2099 (the end of 21st century)

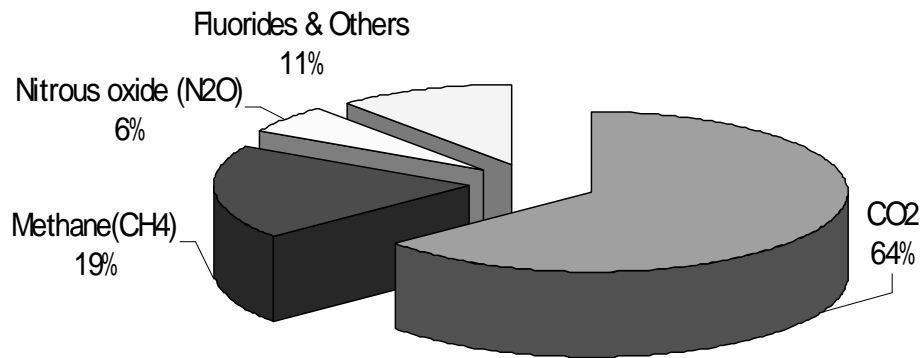
- 18-38 cm rise is estimated in the society where the environment and economic activities are projected to be globally balanced.
- 26-59 cm rise is estimated in the society where the high economic growth is achieved by recognizing fossil fuel as the important source of energy.

Rise of Average World Temperature between 2090-2099 (the end of 21st century)

- 1.8 (1.1 -2.9) rise is expected in the society where the environment and economic activities are projected to be globally balanced.
- 4.0 (2.4 -6.4) rise is expected in the society where the high economic growth is achieved by recognizing fossil fuel as the important source of energy.

Average world temperature has risen 0.74 in the past 100 years (1906-2005).

(4) Influences of greenhouse-gases on global warming (1850-1990)



Source) Prepared from “IPCC Report” (2000)

(5) History of COPs of the UN Framework Convention on Climate Change

1) COP3 outline of the Kyoto Protocol

The COP3 (the 3rd Conference of Parties) was held on December 1 - 11, 1997.

Target gases	CO ₂ , CH ₄ , N ₂ O, HFC, PFC, SF ₆
Target year	2008 - 2012
Reduction target *Base year: 1990	At least 5% for all Annex I parties -5% Croatia 0% Russia, New Zealand -6% Japan, Canada, Hungary, Poland -1% Norway -7% US +8% Australia -8% Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Portugal, Spain, Sweden, UK, Switzerland, Bulgaria, Czech, Estonia, Latvia, Lithuania, Rumania, Slovakia, Slovenia
Sinks	GHG reduction subject to afforestation is inclusive into calculation for the commitments.

38 Parties in Annex I: Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, USA, and 15 EU member states combined.

Kyoto mechanism

Emission Trading (ET)	Parties in Annex I may participate in the Emission Trading in order to achieve their commitments.
Joint Implementation (JI)	For the purpose of meeting its commitments, Parties in Annex I may transfer to or acquire from, emission reduction units, any other parties in Annex I.
Clean Development Mechanism (CDM)	The purpose of CDM mechanism is to assist Parties not included in Annex I in achieving sustainable development and to contribute to the Protocol, while Parties in Annex I may use the certified emission reductions accruing from such projects.

Enforcement and effect

Enforcement	The Convention shall become effective 90 days after 55 or more parties to the UNFCCC, incorporating Annex I parties of which total CO ₂ emission in 1990 is 55% or more of total CO ₂ emissions of all Annex I parties, ratify the Protocol.
Effect	When no Protocol exists, the global CO ₂ emission in 2010 will increase by 24% compared with 1990. When the Protocol is enforced in 2000, the global CO ₂ emission in 2010 will reduce by 5.2% compared with 1990.

2) Meetings after COP 6

The COP 6 of the UNFCCC was held in Hague, Netherlands on Nov. 13 - 25, 2000 and its Part-2 Conference was held in Bonn, Germany on July 16 - 27, 2001.

The COP 7 was held in Marrakech, Morocco on Oct. 29 - Nov. 9, 2001.

The COP 8 was held in New Delhi, India on Oct. 23 - Nov. 1, 2002.

The COP 9 was held in Milan, Italy on Dec.1-12, 2003.

The COP 10 was held in Buenos Aires, Argentina on Dec.6-17, 2004.

The COP 11 & COP/MOP 1 was held in Montreal, Canada on Nov.28-Dec.9, 2005

The COP 12 & COP/MOP 2 was held in Nairobi, Kenya on Nov.6 -17, 2006

The COP 13 & COP/MOP 3 was held in Bali, Indonesia on Dec.3 -15, 2007

(6) Background and main points of COP 14 & COP/MOP 4

The COP 14 & COP/MOP 4 was held in Poznan, Poland on Dec.1-12, 2008.

In the decision of the COP 13 & COP/MOP 3, agreements regarding the framework after 2013 will be reached at the COP 15 & COP/MOP 5 (Bali Action Plan). The COP 14 & COP/MOP 4 was regarded as the halfway point to it and as the place for sorting out the points for full-scale discussion in the next year.

The main points were 1) sorting out proposals from each country for the next framework, 2) range of the reduction of greenhouse effect gas by developed countries and 3) action plan for 2009.

The COP15 & COP/MOP 5 will be held in Copenhagen, Denmark in December 2009.

Source) http://www.mofa.go.jp/mofaj/gaiko/kankyo/kiko/cop14_gh.html
<http://www.cop14.gov.pl/index.php?lang=EN>