

# **Introduction to the FCCC, the Kyoto Protocol and Carbon Trade**

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- Global scientific concern about changes in the climate in the '80s
- Certainty that something had to be done globally

# **UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE**

- Signed at the 1992 UN Conference on Environment and Development (UNCED) in Rio de Janeiro

# Objective of the FCCC:

- The ultimate objective of this Convention and any related
- legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent **dangerous** anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

# Dangerous:

- means 400ppm of CO<sub>2</sub> (IPCC)
- currently we are above 370ppm!!!

# Changes in the atmospheric concentrations of greenhouse gases due to human activities (From IPCC 2001 – Synthesis Report and IPCC 2002)

Concentration indicators	Concentration indicators
Atmospheric concentration of CO <sub>2</sub>	280 ppm (parts per million) for the period 1000–1750 to 368 ppm in year 2000 (31±4% increase).
Terrestrial biospheric CO <sub>2</sub> exchange	Cumulative source of about 30 Gt C between the years 1800 and 2000; but during the 1990s, a net sink of about 14±7 Gt C.
Atmospheric concentration of CH <sub>4</sub>	700 ppb (parts per billion) for the period 1000–1750 to 1,750 ppb in year 2000 (151±25% increase).
Atmospheric concentration of N <sub>2</sub> O	270 ppb for the period 1000–1750 to 316 ppb in year 2000 (17±5% increase).
Tropospheric concentration of O <sub>3</sub>	Increased by 35±15% from the years 1750 to 2000, varies with region.
Stratospheric concentration of O <sub>3</sub>	Decreased over the years 1970 to 2000, varies with altitude and latitude.
Atmospheric concentrations of HFCs, PFCs, and SF <sub>6</sub>	Increased globally over the last 50 years.

# What is climate change according to the FCCC:

- "Climate change" means 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 observed over comparable time periods". (FCCC Definitions)

# Kyoto Protocol

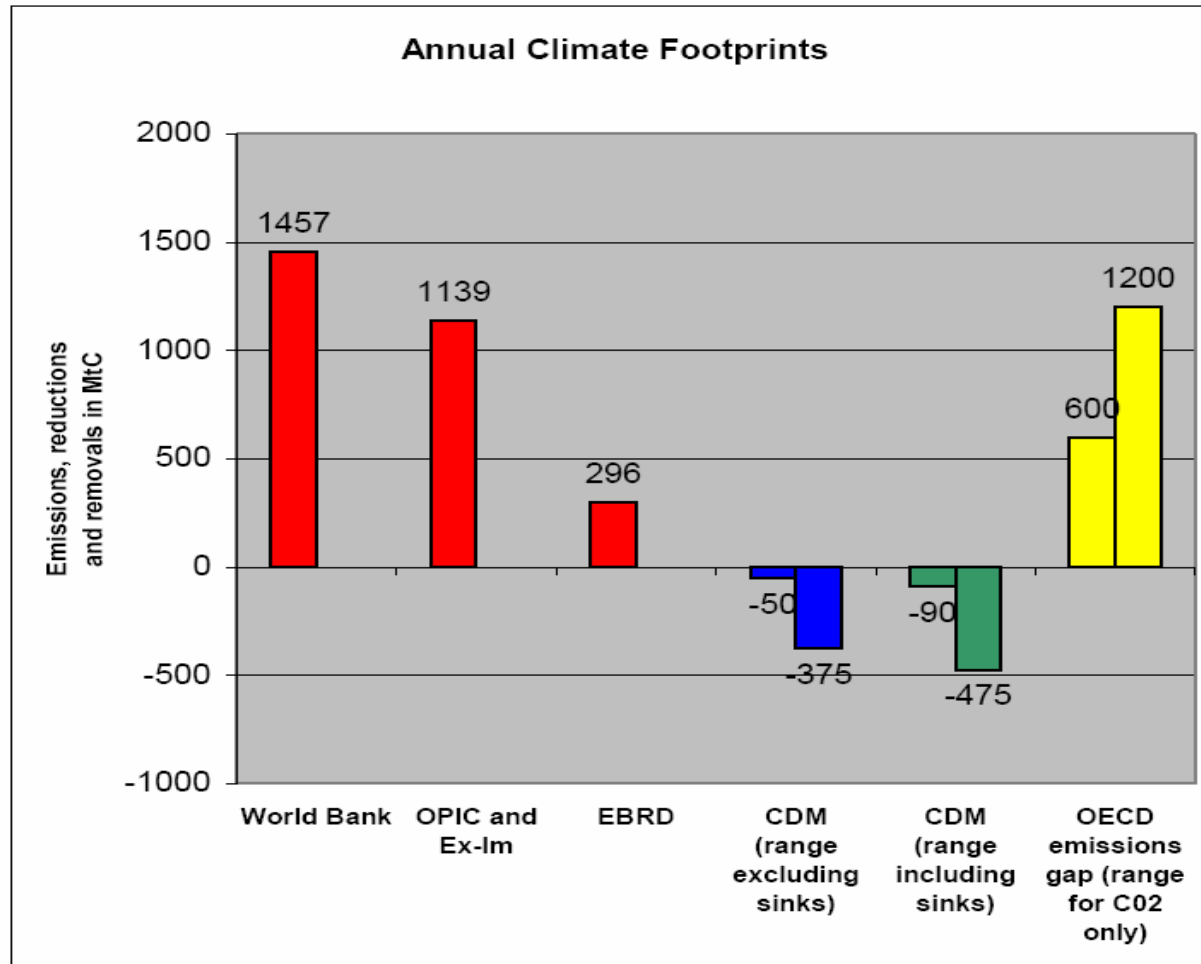
- Signed at COP3 in 1997 in Kyoto, Japan.



# Objective:

- Reduce emissions of GHGs 5% below 1990 levels

# But this what really happens:



- Global emissions are up (officially) 9% compared to 1990 levels

# How will the KP reduce emissions?

- By assigning reduction targets to Annex 1 Countries
- Through emissions trading

# Modalities

- **Joint Implementation: between Annex 1 countries**
- **Clean Development Mechanism: Annex 1 and non- Annex 1 countries (Annex 1 countries buy emission credits from projects which are cheaper than cutting emissions at source).**

# For example

- **Annex 1 country company requires reduction of 100 T/CO<sub>2</sub> = \$10million**
- **Instead company invests in non-Annex 1 country CDM project= \$1million planting a tree monoculture plantation**

# **As a result:**

- **Annex 1 company continues “business as usual” emitting 100 T/CO<sub>2</sub>**
- **Non-Annex 1 country project receives money and continues life!**
- **Emissions continue in Annex 1 as well as in non-Annex 1**
- **Climate problem is not addressed**

# **Most popular projects = cheap ones**

- **Gas flaring= oil and gas companies**
- **Methane abatement (collection and use of methane from garbage dumps)= municipal government**
- **Sinks= forestry companies and land owners**
- **(consultants always win)**



# **Investment in renewable energy only 10%**

- The main reason for the CDM was to achieve clean development, providing a source of clean energy to developing countries.
- Instead, is producing funds for consultants, utility companies, land owners and
- Climate change continues unchecked