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# Kyoto Protocol

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- The **Kyoto Protocol** is a protocol to the **United Nations Framework Convention on Climate Change (UNFCCC)** with the objective of reducing greenhouse gases that cause climate change
  - Was adopted on 11 December 1997 by the 3rd Conference of the Parties and entered into force on 16 February 2005
  - The first commitment period of the Kyoto Protocol ends in 2012
  - As of May 2008, 182 parties have ratified the protocol
  - The United States has not ratified the treaty
  - Sets binding targets for 37 industrialized countries and the European community (**Annex 1**) for reducing greenhouse gas (GHG) emissions

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# Emission Trading

# Flexible Mechanisms

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- Allow Annex I economies to meet their greenhouse gas emission limitation by purchasing GHG emission reductions from elsewhere- from financial exchanges, from projects which reduce emissions in non-Annex I economies under the **Clean Development Mechanism** (CDM), from other Annex 1 countries under the **Joint Implementation** (JI), or from Annex I countries with excess allowances.
- Only CDM Executive Board-accredited Certified Emission Reductions (CER) can be bought and sold in this manner
- CDM allows the creation of new carbon credits by developing emission reduction projects in Non-Annex I countries
- JI allows project-specific credits to be converted from existing credits within Annex I countries

# Emission Trading/Carbon Market/Carbon Credit

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- CDM projects produce **Certified Emission Reductions (CERs)**
- JI projects produce **Emission Reduction Units (ERUs)**
- These are equivalent to one **Assigned Amount Unit (AAU)**, 1 metric tonne of CO<sub>2</sub> equivalent
- **cap and trade** system that imposes national caps on the emissions of Annex I countries
- On average, this cap requires countries to reduce their emissions 5.2% below their 1990 baseline over the 2008 to 2012 period

# Emission Trading/Carbon Market/Carbon Credit

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- The EU created the **EU Emissions Trading Scheme (ETS)**
- The EU ETS uses **EU Allowance Units (EAUs)**, each equivalent to a Kyoto AAU
  
- Non-compliance Market/Voluntary Market : **VERs**(Verified Emission Reductions)

# Nord Pool emission market

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Growth in exchange trade volumes

96 million tCO<sub>2</sub> traded and cleared in 2007 and 55,5 million so far this year

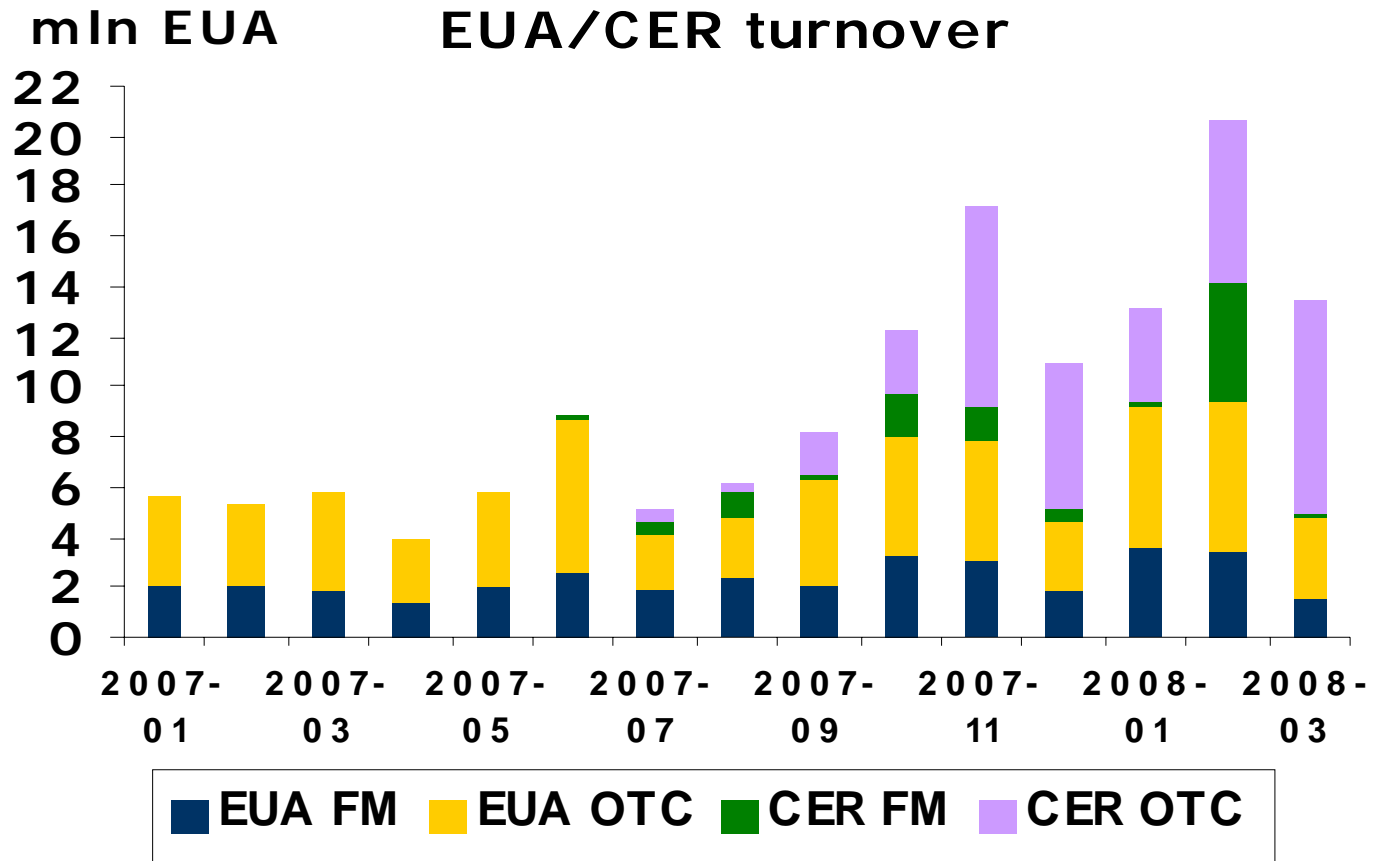
Growth in number of exchange members (37 new members since June 07, 129 in total)

Growth in tradeable products ( CERDEC 08-12; CER/EUA SWAPs and STRIPs, EUA SPOT Phase II)

Growth in CER volumes ( 26,5 tCO<sub>2</sub> mln traded and cleared YTD)

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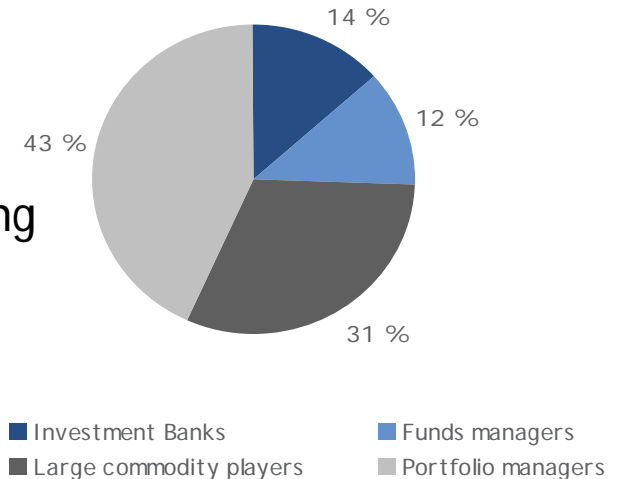
# Nord Pool emission market





# Nord Pool market structure

- Dominant market players are:
  - international investment banks
  - European power utilities
  - hedge funds and carbon funds present and emerging
  - major oil companies



- Balanced between physical and financial players