Climate Policy in the European Union

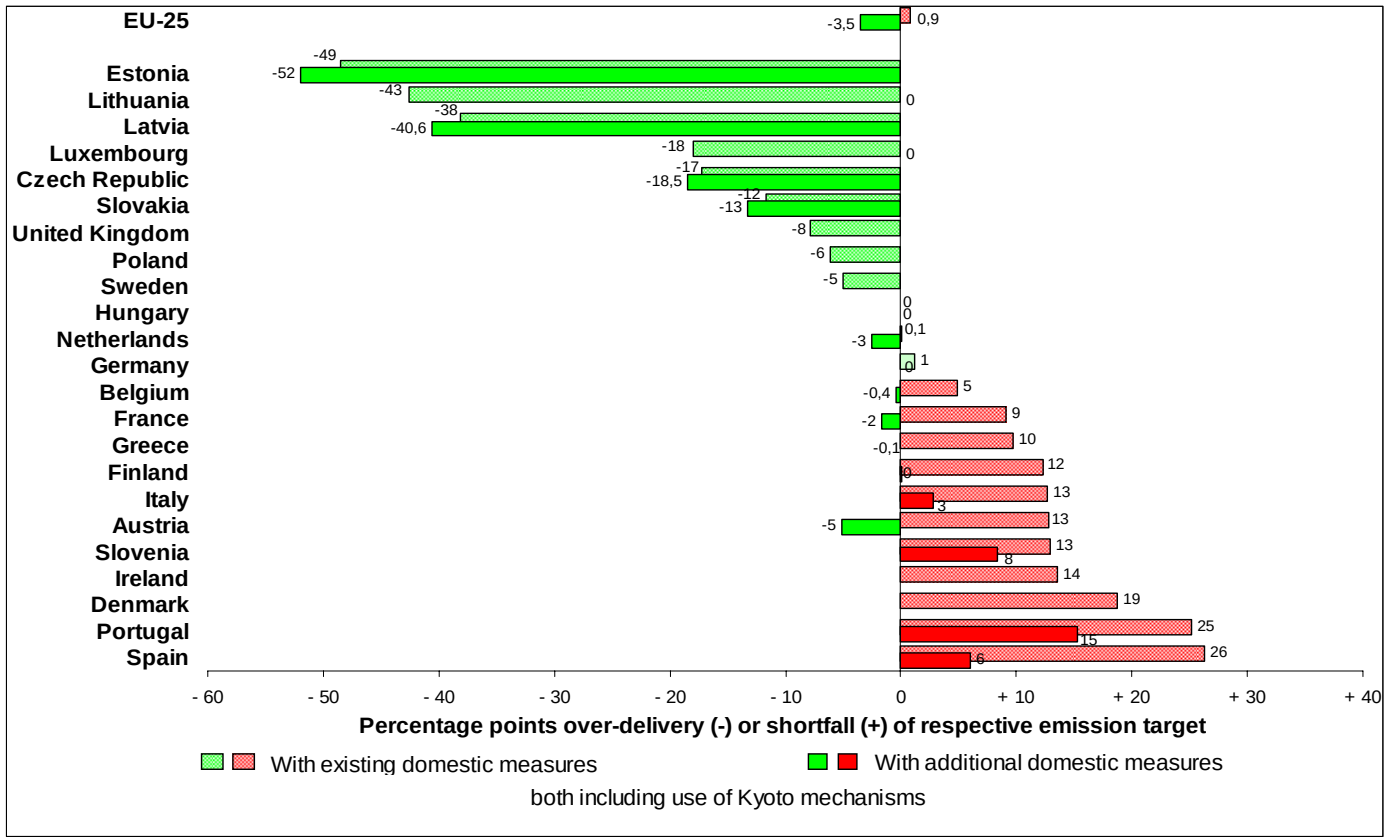
Yale, 21 October 2005

Lars-Olof HOLLNER

European Commission
Washington

Implementing climate policy within the European Union (European Climate Change Programme)

Distance-to-target in 2010 (percentage points) for the EU-25, including Kyoto mechanisms



Notes: Data exclude emissions and removals from land-use, land-use change and forestry. All EU-15 Member States provided projections assuming existing domestic policies and measures. Several countries provided projections with additional domestic policies and measures. For following Member States the additional effects of the use of Kyoto mechanisms is included: Austria, Belgium, Denmark, Finland, Ireland, Italy, Luxembourg, the Netherlands and Spain),. For EU-15 the effect of use of Kyoto mechanisms is calculated based on information from these nine countries. Projections for Poland cover only CO2 and N2O and include LULUCF. Projections for Spain cover only CO2. Projections for Cyprus and Malta are not available. **Source: EEA, 2005**

European Climate Change Programme (ECCP) - a bottom-up 'push & pull' approach

- **Objective:** **Develop cost effective EU strategy to meet our Kyoto target**
- **Major Achievements:** **EU Measures currently "in implementation": 460-540 Mt CO_2eq./year**
- **Policy Actions: a few examples…**
  - Promotion of renewables and co-generation
  - Taxation of energy products, and promotion of biofuels
  - Energy performance of buildings
  - Research programmes
  - Emissions trading directive and linking to JI/CDM

EU emissions trading: domestic action and global cooperation

EU ETS design: Why EU emissions trading?

- Emissions trading combines environmental effectiveness with cost-efficiency, two core building blocks for a long-term, modern climate policy (no command/control)
- Need to start somewhere: international, broad trading scheme won't fall from sky
- A carbon market creates rewards for emission reductions, so there is a commercial driver to take a new technology and make it more effective and cheaper
- Early start in 2005 gives companies a chance to learn and to develop tailored carbon management strategies
- No market intervention: private sector chooses how to reduce emissions and to trade allowances.

EU emissions trading: how does it work ?

- **Start of Scheme: 1 January 2005: All covered installations must have a permit that sets out monitoring requirements for CO_2 emissions**
- **Energy intensive industry (app. 12.000 installations)**
- **CO2 emissions must be covered by allowances**
- **Community-wide trading of allowances**
- ***scarcity* determined by total CAP of allocation across EU**
- ***results-oriented*: companies decide how/where to reduce**
- ***flexible/open*: use JI/CDM and may be linked to other schemes in the future**

Developing Countries (CDM)
Developed Countries (JI, Art. 25)

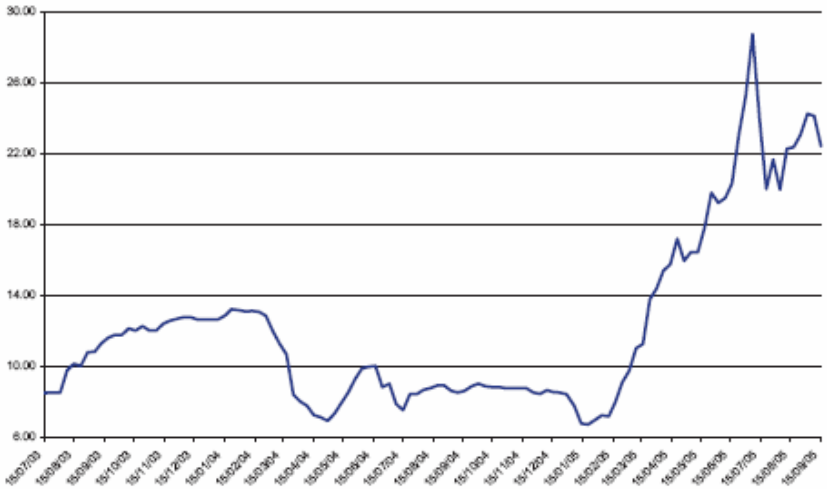
EU ETS: A company-based cap and trade emissions allowance programme

- **Currency:** "EU Allowances ", entitling emission of 1 ton of CO_2 equivalent
- **Allocation method:** National Allocation Plans, auctioning up to 5% for 2005-7, up to 10% for 2008-12
- **Common allocation criteria:** no more than is needed, on the path to Kyoto, no unfair discrimination, public consultation
- **Emissions monitoring:** In line with EU-wide installation level monitoring and reporting guidelines, independent verification
- **Registries:** Electronic systems to hold and track ownership of allowances
- **Sanctions:**
  - Penalty of €40 / €100 per non-surrendered allowance
  - Making up for shortfall in the following year

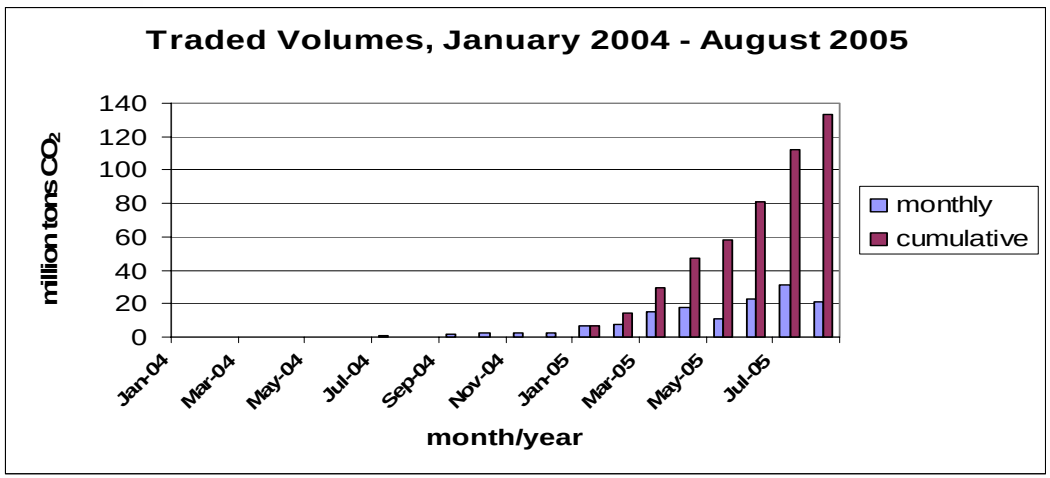
EU ETS: Facts and figures

- Approximately 6.6 billion allowances will be allocated in 2005-2007
- Total asset value: currently over € 130 billion
- Almost 140 million allowances traded on forward market since 1/1/05, spot market firming up
- 11 national registries online, all are expected to be operational by the end of 2005
- Conclusion: 1st period may be "learning by doing" but EU ETS is nonetheless an immense and very real policy

EU ETS implementation: Carbon prices & traded volumes



06 October 2005
EUA 2005 (€/tCO2)
€23.65 -0.30



Source: Point Carbon's Carbon Market Daily

EU ETS – upcoming issues

- Aviation Communication (Sept 2005)
- Actual emission reports (April 2006)
- Monitoring implementation (McKinsey)
- Review of Directive (June 2006)
- NAP2 (June 2006)
- Linking to other domestic schemes
- Bulgaria and Romania (2007)

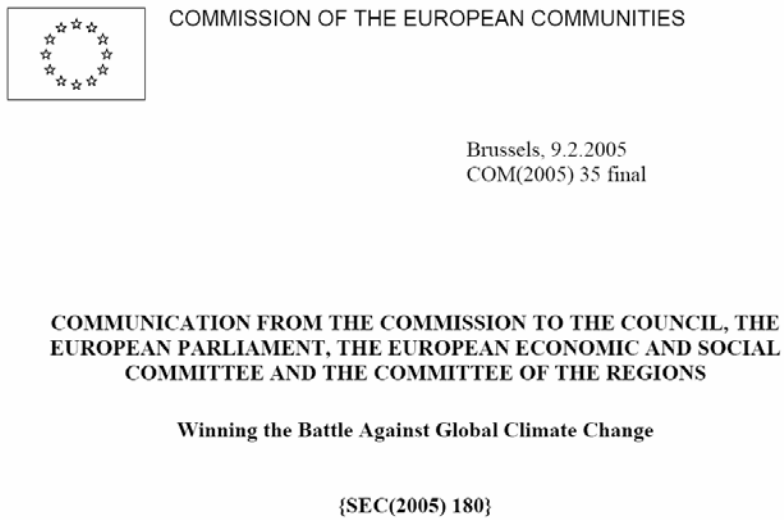
EU Climate Policy: International Leadership based on Domestic Action

The EU's post-2012 strategy

"Winning the Battle against Global Climate Change"

9 February 2005

- **The Climate Challenge**
- **Benefits & costs**
- **The Participation Challenge**
- **The Innovation Challenge**
- **The Adaptation Challenge**



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 9.2.2005
COM(2005) 35 final

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Winning the Battle Against Global Climate Change

{SEC(2005) 180}

European Council 22-23 March 2005

- **Confirmed 2°C objective**
- **Emphasized the EU's determination to:**
  - **Explore options for post-2012 regime with broad participation**
  - **"Without prejudging new approaches for differentiation between parties in a future fair and flexible framework, the EU looks forward to exploring with other Parties strategies for achieving necessary emission reductions and believes that, in this context, reduction pathways for the group of developed countries in the order of 15-30% by 2020, compared to the baseline envisaged in the Kyoto Protocol, and beyond, in the spirit of the conclusions of the Environment Council* should be considered".**

*** ENV Council 10 March 2005: 15-30% by 2020 and 60-80% by 2050**

The Climate Challenge

- 1996 EU Environment Council stated that it "believes that global average temperatures should not exceed 2°C above pre-industrial level" (Confirmed by European Council in 2005)
- Concentration level of 550 ppmv CO_2eq offers at most a chance of one in six to reach the 2°C target
- Non-action is not an option
- The more action is postponed, the greater the risk of irreversible change
- Global emissions likely to grow within next two decades and then reduce by at least 15 % by 2050 compared to 1990
- "Keeping the door open" strategy

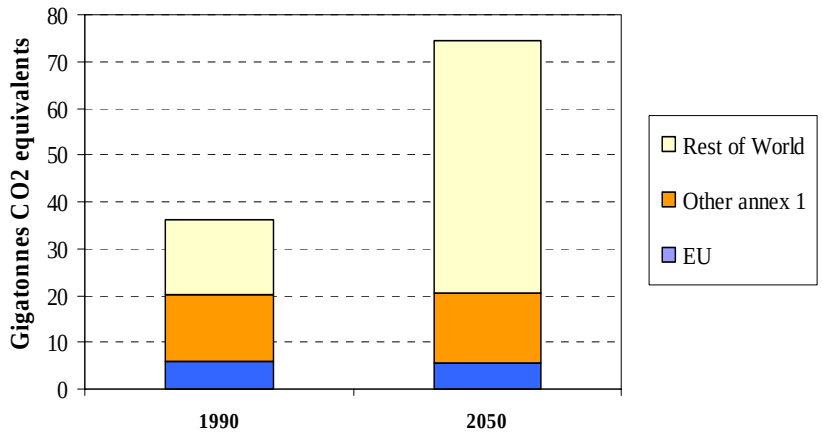
Benefits & Costs

- **Benefits: hard to quantify….**
  - **Avoid (economic) losses due to extreme weather events**
  - **High-impact, low probability events**
  - **Avoid uneven distribution of benefits**
  - **Co-benefits (air pollution, energy security)**
- **Costs:**
  - **Annual reduction of 1.5% of EU 25 emissions after 2012 would reduce GDP in 2025 by about 0.5% compared to BAU – assuming gradual participation of all countries**
  - **Global costs of mitigation can be minimised if:**
    - All sectors and gases are included
    - All major emitters participate
    - Full and unrestricted use of flexible mechanisms
    - Synergies with other EU policy objectives (Lisbon)

The participation challenge

- The EU cannot do it alone
- Other developed countries must participate (e.g. cooperation with China and India)
- Developing countries must participate through climate policies that contribute to their development goals, realising co-benefits and further incentive mechanisms
- Important to bring in key emitters (EU, US, Canada, Russia, Japan, China and India cover 75% of global emissions)

Figure 1: Projected development of greenhouse gas emissions in different regions of the world



Source: Greenhouse gas reduction pathways in the UNFCCC process up to 2025, CNRS/LEPII-EPE, RIVM/MNP, ICCS-NTUA, CES-KUL (2003).

The innovation challenge: development and deployment of new technologies

PUSH FACTORS

- Subsidise new technologies (e.g. guarantee demand, set standards, large scale demos, public-private partnerships for technology development, tax reductions)

PULL FACTORS

- Emissions trading
- Level playing field (carbon taxes, feed in tariffs and abolition of fuel subsidies)
- Co-benefits (air quality, security of supply, rising oil prices)

Other EU initiatives complementing efforts of tackling climate change

- Follow up to the Gleneagles Plan of Action
- China-EU Partnership on Climate Change
- India-EU Initiative on Clean Development and Climate
- Cooperation with Russia (energy efficiency, implementation of the KP).
- Building and strengthening institutional capacity on Climate Change in Brazil, China, India and South Africa (BASIC)

Building momentum for Montréal…

- **Greenland Ministerial Dialogue on Climate Change, Ilulissat, Greenland, 16-19 September**
- **Ministerial informal preparing for COP-11&COP/MOP-1, Ottawa, 23-24 September**
- **UNFCCC COP-11 & Kyoto Protocol COP/MOP-1, Montréal, 28 November – 9 December**

Start of formal discussions on Post-2012 multilateral climate regime?

get to grips with
climate change

http://europa.eu.int/comm/environment/climat/home_en.htm

More information on EU climate change policy