PEW CENTER ON Global CLIMATE CHANGE

European Commission's Proposed
"Climate Action and Renewable Energy Package"
January 2008

On January 23, 2008, the European Commission proposed a series of EU-wide policies to implement the major energy and climate decisions taken by the European Council in March 2007. The Council decisions included:

- A commitment to reduce the EU's greenhouse gas (GHG) emissions 20% below 1990 levels by 2020, and 30% below if other developed countries agree to comparable reductions and economically advanced developing countries contribute according to their respective capabilities and responsibilities.
- A mandatory target to increase renewable energy to 20% of the EU's overall energy mix by 2020, including a minimum of 10% biofuels in overall fuel consumption.

The new measures proposed by the Commission to achieve these goals across the EU's 27 Member States will be taken up by the European Parliament and the European Council, with the aim of final adoption by 2009.

Overview

Major elements of the "Climate Action and Renewable Energy Package" include:

1. An expansion of the EU Emissions Trading Scheme (ETS) and new EU-wide rules to harmonize the allocation of emission allowances across Member States;
2. Emission reduction targets[1] at the Member State level for sectors not covered by the ETS, including buildings, transport and waste;
3. Legally enforceable renewable energy targets for Member States; and
4. New rules on carbon capture and storage and environmental subsidies.

EU-27 emissions are currently 6% below 1990 levels. To achieve the target of 20% below 1990 levels by 2020, emissions must be reduced 14% below 2005 levels. Under the proposed package, the 2020 target would be distributed between the ETS and non-ETS sectors as follows:

[1] These emission reduction targets for non-ETS sectors use a 2005 baseline.

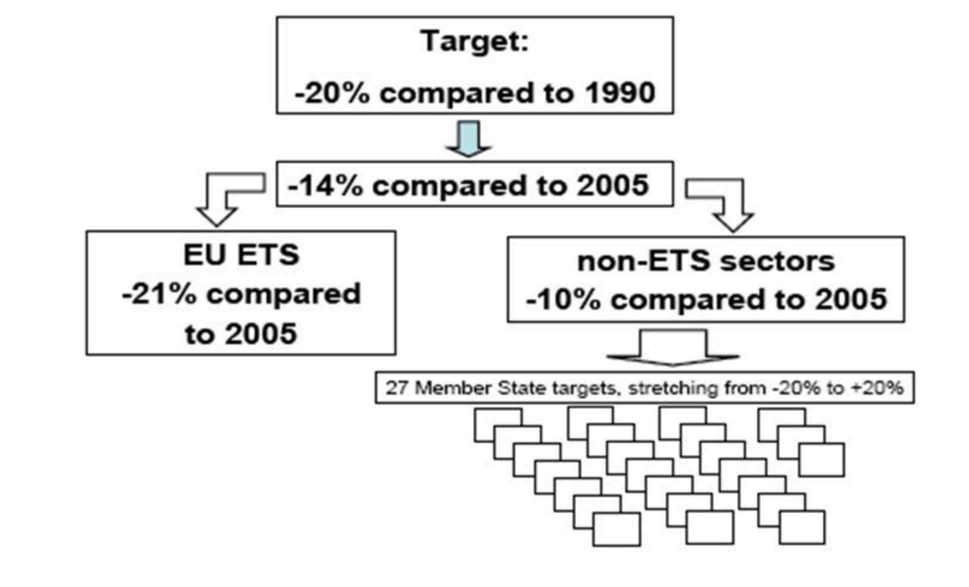

Figure: Breakdown of EU's 2020 target

The EU's target of 20% below 1990 levels by 2020 is equivalent to a 14% reduction from 2005 levels. Under the Commission's proposal, this will be achieved through a 21% reduction (from 2005) in sectors covered by the EU Emissions Trading Scheme (EU ETS) and a 10% reduction (from 2005) in other sectors. In the non-ETS sectors, targets will vary among the 27 Member States, ranging from +20% to -20%.

Renewables currently comprise 8.5% of the energy mix, requiring an increase of 11.5% by 2020.

The estimated cost of implementing the proposed package is 0.5% of GDP in 2020, or about 3 euros per person a week.

EU ETS

The ETS, launched in 2005 and now in its second phase (2008-2012), is the cornerstone of EU climate policy. The following changes are proposed for Phase III (2013-2020):

Coverage

At present, the ETS covers carbon dioxide (CO_2) emissions in ten sectors: power stations and other combustion installations, oil refineries, coke ovens, iron and steel, cement, glass, lime, bricks, ceramics, and pulp, paper and board. Coverage would be expanded to include CO_2 emissions from petrochemicals, ammonia, aviation[2] and aluminum, nitrous oxide (N_2O) emissions from acid production, and perfluorocarbon (PFC) emissions from the aluminum sector.

[2] Discussions are currently underway to determine whether aviation will be introduced from 2011 or 2012.

Cap
In phases I and II, individual Member States set their own target levels. For phase III, the Commission is proposing an EU-wide cap for sectors covered under the ETS. It would be set at 9% below 2005 levels in 2013[3], and decrease linearly to 21% below 2005 levels in 2020.

Allocation of Allowances
In phases I and II, allowances were allocated by Member States as specified in their national allocation plans, with the result that facilities within a given sector sometimes faced significantly different allocations across countries. To ensure a more harmonized approach to allocation and to address other concerns, the Commission is proposing that in phase III allocation be decided at the EU commission level rather than at the Member State level, as follows:

- In the power sector, 100% of allowances[4] will be auctioned starting in 2013. In all other sectors, 80% of allowances will be allocated for free in 2013, phasing down each year to full auctioning by 2020.
- Auctions will be carried out independently by each Member State. Ninety percent of the allowances to be auctioned will be distributed in proportion to the Member States' 2005 emissions. The remaining 10% will be redistributed toward Member States with lower per capita incomes. Member States must use at least 20% of the auction proceeds for climate mitigation and adaptation measures.
- Allowances to be allocated for free will be distributed according to EU-wide rules to ensure harmonization. These rules will be developed at a later stage through a committee procedure.
- Specific allocation rules will depend on a review by the European Commission of potential carbon leakage from the EU's energy-intensive industries. The review, to be submitted by June 2011, will take into account the outcome of post-2012 climate negotiations. Options to be considered, if carbon leakage is determined to be a significant risk, include 100% free allocation for affected sectors and a carbon equalization system (for example, requiring emission allowances for imports of carbon-intensive goods).

Use of credits

- If there is no new international agreement for the post-2012 period, use of credits from the Clean Development Mechanism (CDM) and Joint Implementation (JI) will be limited to leftover credits from projects approved before 2012. These credits can be used only through 2014 and only from project types approved by all Member States. Additional credits will be accepted only from countries with which the EU has signed bilateral or multilateral agreements.
- If a new international agreement is reached, additional use of CDM/JI credits will be allowed. Member States will be permitted to use credits to achieve half of the additional reduction required to meet the EU's 30% emission reduction commitment (i.e., if an *additional* reduction of $100tCO_2$ is agreed upon, the limit on the use of credits will be increased by $50tCO_2$). To provide additional incentive for countries to

[3] This percentage is based on the scope of phase II of the EU ETS.
[4] Phase II (2008-2012) allows each Member State to auction a maximum of 10% of allowances.

join the new agreement, credits will be accepted only from those countries that have ratified it (as was the case with the Kyoto Protocol).

- In a significant change from the current scheme, the proposal introduces the use of domestic offset credits from sectors not covered by the ETS. These credits will be governed under common EU provisions to ensure that policies covering the non-ETS sectors are not affected and there is no double counting of reductions.

Miscellaneous

- Five percent of the total quantity of allowances will be set aside for new entrants (except in the electricity sector, where allocation of allowances is by auction only). Allowances that have not been used in the new entrants reserve in 2020 will be auctioned.
- New regulations will establish stricter monitoring, reporting and verification procedures to ensure the integrity of the ETS.

Non EU ETS Sectors

Phase III of the EU ETS will cover less than half of the EU's emissions. Member States also will have national targets for sectors that are not covered by the ETS, including transport, waste and buildings (non-ETS sectors account for about 60% of EU GHG emissions). Targets for the non-ETS sectors for Member States will average about 10% below 2005 levels.

The Commission is proposing individual targets for Member States based on per capita GDPs, allowing increases above 2005 levels for those with low per capita GDPs, and requiring reductions for those with high per capita GDP. The targets range from +20% to -20% relative to 2005 (see proposed targets in Appendix).

These targets will be achieved in part by EU-wide policies, such as CO_2 standards for autos and fuels proposed by the Commission in December 2007 and January 2008, respectively. It is anticipated that individual Member States will adopt additional measures to fully achieve their targets.

Renewable Energy

To meet the target of 20% renewables by 2020, the Commission is proposing individual targets for Member States ranging from 10% to 49%. The targets take into account Member States' starting points, potentials, energy mixes, and per capita GDPs. (See Appendix for individual targets). The renewable energy sector includes electricity, heating and cooling, and transport, and it is left to each Member State to determine the manner in which each will contribute based on their national circumstances. The proposal calls for expanding the existing Guarantee of Origin (GO) Scheme, which allows Member States to trade renewable energy "credits" in order to meet their targets cost-effectively.

The 10% minimum target for biofuels is the same across all Member States to ensure availability and consistency in transport fuels. To address concerns related to the use of biofuels, the Commission is proposing sustainability criteria, which would require that biofuels be produced on lands without "high carbon stock or a high biodiversity value" and result in a minimum GHG savings of 35%.

Carbon Capture and Storage

- For CO_2 emissions that are geologically stored, no allowances will need to be surrendered (i.e. emissions captured and stored through CCS technologies will not require allowances for compliance). CCS will receive no free allocation.
- A legislative framework is to be developed to provide certainty to industry and remove barriers for safe deployment of CCS.

Additional Information

European Commission, 2008. "Climate Action and Renewable Energy Package", Available at http://ec.europa.eu/environment/climat/climate_action.htm

Appendix

Legally binding targets for Non EU ETS Sectors and Renewable Energy for Member States in 2020

Member State	Reduction target in sectors not covered by the EU ETS compared to 2005	Share Renewables in the final energy demand by 2020
Austria	-16%	34%
Belgium	-15%	13%
Bulgaria	20%	16%
Cyprus	-5%	13%
Czech Republic	9%	13%
Denmark	-20%	30%
Estonia	11%	25%
Finland	-16%	38%
France	-14%	23%
Germany	-14%	18%
Greece	-4%	18%
Hungary	10%	13%
Ireland	-20%	16%
Italy	-13%	17%
Latvia	17%	42%
Lithuania	15 %	23%
Luxembourg	-20%	11%
Malta	5%	10%
Netherlands	-16%	14%
Poland	14%	15%
Portugal	1%	31%
Romania	19%	24%
Slovakia	13%	14%
Slovenia	4%	25%
Spain	-10%	20%
Sweden	-17%	49%
United Kingdom	-16%	15%