



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 23.1.2008

SEC(2007) 53

**COMMISSION STAFF WORKING DOCUMENT**

*Accompanying document to the*

Proposal for a

**DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**amending Directive 2003/87/EC so as to improve and extend the EU greenhouse gas  
emission allowance trading system**

***Summary of the Impact Assessment***

{COM(2008) 16 final}

{SEC(2008) 52}

## SUMMARY

### 1. INTRODUCTION AND POLITICAL CONTEXT

Responding to Article 30 of Directive 2003/87/EC (the "ET Directive"), the Communication from the Commission "Building a global carbon market – Report pursuant to Article 30 of Directive 2003/87/EC"<sup>1</sup> identified four main subjects to be dealt with in the review of the EU Emission Trading System (EU ETS): 1) the scope of the Directive, 2) robust compliance and enforcement, 3) further harmonisation and increased predictability, 4) linking with emissions trading schemes in third countries, and appropriate means to involve developing countries and countries in economic transition. These issues have been extensively discussed in particular in the review process organised in the frame of the European Climate Change Program (ECCP) in the first half of 2007, but also by way of continuous stakeholder contacts since the EU ETS started in 2005.

The review takes place at a time when Climate Change is very higher on the political agenda. In March 2007, the European Council endorsed the new energy and climate change strategy proposed by the European Commission in January 2007, according to which under a future global agreement, the group of developed countries should cut their emissions of greenhouse gases (GHG) to 30% below 1990 levels by 2020. Irrespective of an international agreement, the EU will reduce its own emissions by at least 20% by 2020.

### 2. OVERALL OBJECTIVES

The Council has acknowledged that the EU ETS is and will remain one of the most important instruments for the EU to achieve its strategic objective of limiting the global average temperature increase to not more than 2 degrees C above pre-industrial levels.

Against this background, three overall objectives for the review can be identified:

- (1) Fully exploiting the potential of the EU ETS to contribute to the EU's overall GHG reduction commitments in an economically efficient manner
- (2) Refining and improving the EU ETS in the light of experience gathered
- (3) Contributing to transforming Europe into a low greenhouse-gas-emitting economy and creating the right incentives for forward looking low carbon investment decisions by reinforcing a clear, undistorted and long-term carbon price signal.

### 3. SCOPE OF THE DIRECTIVE

#### **Streamlining the current scope**

An inconsistent interpretation of "combustion installation" by Member States has led to distortions of competition, an insufficient coverage of process emissions as well as legal uncertainty on the scope of the Directive.

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<sup>1</sup> COM(2006) 676.

Out of the various options, codifying a broad interpretation of combustion installations, broadly in line with the Commission's Communication on further guidance on allocation plans for the 2008 to 2012 trading period of the EU ETS<sup>2</sup> underpinned by a new definition of combustion installation and supplemented by a list of activities seems to be most promising. Such an approach would allow a consistent application of the scope, including with respect to process emissions, and would provide legal certainty to Member States. Furthermore, it would contribute to the environmental effectiveness of the EU ETS by broadening its coverage.

### **Cost-effectiveness as regards small installations**

Currently, there are approximately 10800 installations included in the EU ETS. The largest 7% of installations in the EU ETS represent 60% of total emissions, while the smallest 14% of installations only account for 0.14% of emissions. This relation points to an unbalanced cost-benefit ratio. In order to increase the cost-effectiveness of the EU ETS, it was found that a conditional opt-out for combustion installations with a rated thermal input exceeding 20 MW while being below 25 MW and whose annual emissions do not exceed 10kt would be the best option as it represents the best relation between emissions excluded from the EU ETS and the number of small installations excluded.

### **Inclusion of new sectors and gases**

Based on verified 2005 emissions and the EU inventory of GHG emissions, the EU ETS covers a share of 41% of total GHG emissions of the European Union. Expanding its coverage by inclusion of new sectors and gases would enhance the environmental effectiveness of the system and would introduce new and additional abatement opportunities to the system, thereby offering a higher abatement potential and lower abatement costs.

When deciding on the inclusion of new sectors and gases, a number of technical criteria would need to be met, in order to ensure proper monitoring of GHG emissions. Furthermore, the objective of contributing to transforming Europe into a low carbon economy has also to be taken into account. While the potential and costs of abatement may play a role in this respect, its non-availability must not constitute a reason not to include a given sector within the EU ETS.

- With respect to CO<sub>2</sub> emissions and following the screening analysis, CO<sub>2</sub> emissions from petrochemicals and other chemicals, from ammonia and aluminium production would be suitable for inclusion.
- As far as non-CO<sub>2</sub> GHG emissions are concerned, it is recommended that N<sub>2</sub>O emissions from the production of nitric, adipic and glyoxylic acid production and PFC emissions from aluminium be included in the EU ETS.
- CCS projects can already be recognised in the EU ETS by unilateral opt-in under Article 24 of the Directive. In view of the vast potential of this technology<sup>3</sup> and for the sake of investor confidence, up front inclusion of all CCS activities by explicit reference to CCS in Annex I of the Directive is preferred.

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<sup>2</sup> [http://ec.europa.eu/environment/climat/pdf/nap\\_2\\_guidance\\_en.pdf](http://ec.europa.eu/environment/climat/pdf/nap_2_guidance_en.pdf)

<sup>3</sup> The IPCC gives an estimated range of the economic potential for the cumulative global reduction of emissions from CCS in this century of 220-2200 GtCO<sub>2</sub> - by comparison current EU ETS emissions are of the order of 2 GtCO<sub>2</sub>/year.

- With respect to including road transport and shipping, further investigation and detailed analysis, in particular a comprehensive cost-benefit analysis including comparison with alternative measures, will need to be carried out, in order to arrive at a well-founded and substantiated conclusion on whether these sectors should be included in the EU ETS or not.
- Broadening the scope of the Directive with a view to recognizing LULUCF projects cannot be recommended.

### **Potential impact of combined policy options on the scope of the EU ETS**

Implementation of a broad interpretation of combustion installation, the inclusion of other sectors and gases as discussed as well as increasing cost-effectiveness for small installations in the manner described would lead to an additional net gain in terms of coverage of the EU ETS in the case of a 10 kt emission threshold for potential exclusion of small installations of 5.8 – 6.3% (up to 121 – 131 MtCO<sub>2</sub>eq)<sup>4</sup> with approximately 40% fewer installations without compromising the environmental effectiveness of the system, as regards installations excluded from the system.

## **4. ROBUST COMPLIANCE AND ENFORCEMENT**

### **Monitoring and reporting, verification and accreditation**

Consistent implementation of monitoring and reporting requirements is indispensable, in order to guarantee that “a tonne is a tonne”. Without credible and reliable verification of monitoring reports operators could undermine the environmental integrity of the system. Current practice of Member States and Competent Authorities, however, shows a range of different implementation and application with respect to monitoring, reporting, verification and accreditation of verifiers. As a consequence, the environmental integrity and the credibility of the system are jeopardised.

Following the analysis, the options of using a Regulation for monitoring and reporting and another one for verification and accreditation turns out to be most promising in terms of compliance. It would lead to higher consistency and transparency, improve the cost effectiveness of monitoring and reporting standards in the longer term, would ensure a consistent and comparable level in terms of verification and accreditation and create an internal market requirement for verification and accreditation services across the EU. As a consequence, the quality of verifications and their ability to determine and correct errors would be improved thus ensuring better data quality.

The development of EU wide rules could lead to significant cost savings for MS after an initial period of revising national guidance/regulations.

### **Registries**

The current registry system consisting of 27 Member State registries and the Community Independent Transaction Log (CITL) did not give reasons for complaints on technical

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<sup>4</sup> As set out in the full impact assessment, these figures have to be treated with much care, as they are based on estimates due to the lack of reliable data.

grounds. However, with the start of the first commitment period under the Kyoto Protocol in 2008, Member State registries should also be connected to the International Transaction Log ("ITL") managed by the UNFCCC for the purposes of the Kyoto Protocol. The introduction of the ITL would also mean that any trading system wanting to connect to the EU ETS would also have to transfer messages through the ITL, which is subject to the oversight of the Parties to the Kyoto Protocol. These developments introduce technical, political and administrative risks into the operations of the registries system, which could be overcome by the existing Community registry used to hold EU allowances.

## **5. FURTHER HARMONISATION AND INCREASED PREDICTABILITY**

### **Cap setting**

In phases I and II, the overall caps of the EU ETS were equal to the sum of national caps determined by the Member States and established in line with Commission decisions. While this approach allowed a large degree of flexibility for Member States to take account of specific and national circumstances, it entailed a number of problems resulting in a lack of a level playing field and of predictability and transparency as well as a high administrative burden on all parties involved.

The analysis has shown that an EU-wide cap set in the Directive best complies with the objective of increasing the effectiveness and predictability of the system. It minimises the administrative burden of cap-setting and is the simplest and most transparent way to set the cap. It therefore ranks best as regards the EU's international credibility. Finally, it is the easiest option considering the need to adjust the cap of the EU ETS to be in line with a 30% reduction target for the EU's total greenhouse gas emissions following the conclusion of an international agreement on climate change.

With respect to the *level of the cap*, an efficiency approach would be the only one that complies with the requirement of achieving the overall emission reduction at least cost. In order to *increase predictability*, setting up a trend-line with an 8-year trading period stands out, since it creates more certainty and predictability as regards reductions after 2020. The trend-line would also be most effective when it comes to increasing the EU's credibility vis-à-vis third countries.

### **Allocation**

In the 1<sup>st</sup> and 2<sup>nd</sup> period most allowances were given for free. Member States applied a wide variety of specific allocation rules, which gave rise to a number of problems, such as a negative impact on economic efficiency, distortions of competition across Member States, undesirable distribution effects and a lack of transparency.

The new allocation rules should avoid these problems, but also take into account the "polluter-pays" principle and the principle of internalisation of external cost.

#### *Auctioning versus allocation for free*

On most accounts, the option of full auctioning best ensures efficiency, transparency and simplicity of the system and avoids undesirable distributional effects. Auctioning would also fully comply with the polluter-pays principle and reward early movers, and would therefore be in line with the overall objectives of the review.

### *Allocation for free in the transition period: benchmarking*

Allocation for free may be necessary, until a system of full auctioning is reached, but it should be undertaken with a view to minimising potential adverse effects. According to the underlying analysis, Community-wide benchmarks are likely to deliver the best results.

### *Trade related measures: hedging against potential carbon leakage*

In the absence of an international agreement on climate change, and for certain energy intensive industries exposed to international competition from countries taking less action to reduce GHG emissions, there may be a risk of carbon leakage. In order to address this, a number of trade related measures have been examined. However, as an international agreement is expected, it is recommended that a clear signal be given now and that the implementation of measures will only be considered at a later stage to allow for relevant and adequate commitments to be taken by third countries.

## **6. LINKING WITH EMISSION TRADING SCHEMES IN THIRD COUNTRIES AND APPROPRIATE MEANS TO INVOLVE DEVELOPING COUNTRIES AND COUNTRIES IN ECONOMIC TRANSITION**

### **Linking to other systems**

Any link of the EU ETS with another emission trading system would need to be established taking into account the detailed modalities of that system. Against this background, a separate impact assessment is likely to be made. For this reason, reference is made to the full impact assessment for some general deliberations.

### **Use of offsets**

#### *Entitlements*

The use of foreign offsets could prevent the EU from making real domestic changes, which in turn would increase future domestic abatement costs and costs for achieving the 2020 domestic emissions and renewable targets. A lack of EU domestic reductions would undermine the case for convincing large-emitting developing countries to take on any emission reduction commitments post-2012. Allowing third countries to make money from the EU ETS without signing up to a new international agreement would also give them a perverse incentive not to agree to a new agreement. Finally, un-harmonised access to credits in Member States could distort the level playing field between companies competing in the internal market.

Entitlements for use of offsets in the EU ETS will therefore need to be fixed with reference to the degree of incentive needed for EU ETS operators to reduce emissions domestically, and be made flexible to allow for the evolution of international negotiations.

#### *Standards*

Providing access to the EU ETS for projects types which do not undermine the environmental or social integrity of the system seems to strike the right balance between a high level of environmental effectiveness, on the one hand, and loss in economic efficiency on the other. This could, however, be complemented by other measures such as the use of use criteria in

combination with discounting (based on the difference in project benchmarks and EU benchmarks), but the trade-off between higher environmental integrity and higher administrative costs would be higher.

### *Transition and predictability*

Clarity has to be provided on how credits acquired prior to 2012 (banking) or expected to be issued post 2012 from projects registered before 2012 will be treated in the EU ETS. Because of the uncertainty about the international architecture post-2012, the revised EU ETS also needs to provide adequate structures and procedures to cope with the different situations post-2012, in particular with respect to achieving the 20% or 30% targets. The EU ETS Directive guarantees that EU allowances can be banked beyond 2012. The Kyoto Protocol puts limits on the banking of ERU/CER credits and it is left to the discretion of Parties who over-achieve their reduction commitments. Among the options assessed, adopting EU-wide harmonised provisions for recognition of banking ERU/CER credits after 2012 scored highest against the assessment criteria as it allowed for a more level playing field and increased market transparency.

With respect to the use of pre-2012 JI/CDM credits after 2012, the analysis suggests a combination of options. The EU can have a system of approving and/or rejecting certain projects or project types, establish bilateral or multilateral agreements to recognise JI and CDM projects from certain hosts between 2012 and the date when an international agreement is concluded, or commit to accepting credits from continuing projects in countries that will support a post-2012 agreement. The relevance of all three options is contingent on the progress of international negotiations.

## **7. MONITORING AND EVALUATION**

Implementation of the Directive will be monitored and evaluated by means of Article 21 requiring annual reports by Member States on the application of the Directive.