Non-paper on the installation coverage of the EU emissions trading scheme and the interpretation of Annex I

The note is ordered under ten headings: (1) Terminology; (2) Greenhouse gas emissions from activities covered by the ET Directive; (3) Aggregation provision in the chapeau to Annex I; (4) The meaning of combustion; (5) Capacities of installations, back-up units and reserve units; (6) Municipal and hazardous waste incinerators; (7) Co-incineration of waste; (8) Combustion installations using exclusively or predominantly biomass; (9) Operators and reporting of emissions; (10) Specific points on interpretation of the ET Directive.

1) Terminology

The definitions of "installation" and "operator" in the emissions trading Directive (henceforth "the ET Directive") are identical to those in the Integrated Pollution Prevention and Control Directive 1996/61/EC (henceforth "the IPPC Directive"), with which Member States are already familiar, and are to be interpreted in the same way.

In one respect, the scope of the ET Directive is narrower than the IPPC Directive because some activities in Annex I to the latter are not covered by any of the activities in Annex I to the ET Directive. Examples of these are installations for the intensive rearing of poultry or pigs (IPPC category 6.6) and plants for the tanning of hide and skins (IPPC category 6.3).

In another respect, the scope of the ET Directive is wider than the IPPC Directive because it covers combustion installations of between 20MW and 50MW, and Member States are allowed to lower this and other thresholds further. This means that on-site combustion capacity is included if it exceeds the aggregate threshold of 20 MW (except where this is exclusively part of municipal or hazardous waste installations, which are

specifically excluded in Annex I - but to which Member States may opt to unilaterally extend emissions trading as from 2008).

As a specific example, the "Replies to some frequently asked questions the EC emissions trading proposal" (http://europa.eu.int/comm/environment/climat/emissions faq.pdf, 23 April 2002) state that "a combustion installation with a rated thermal input exceeding 20 MW operating in connection with an installation of the chemicals industry would fall into the category of energy activities." In this context, it should be clearly understood that installations in the chemical industry only come within the scope of the ET Directive in respect of their on-site combustion capacity, while emissions of other greenhouse gases from other activities are not initially covered. This contrasts with the coverage of oil refineries, where emissions of carbon dioxide from all activities (i.e. including non-combustion activities) of an oil refinery are covered.

It should also be noted that both the IPPC Directive and the ET Directive cover emissions from off-shore installations meeting any Annex I criteria.

2) Greenhouse gas emissions from activities covered by the ET Directive

The ET Directive initially covers only emissions of carbon dioxide from the activities listed in Annex I thereto. Article 14(1) requires the Commission to adopt monitoring and reporting guidelines specifying how to monitor and report emissions from the activities listed in Annex I. Member States are to require operators to report in accordance with these guidelines. The guidelines will cover emissions of carbon dioxide from Annex I activities, and not extend to other emissions that may come from other activities at the site of the installation that are not listed in Annex I.

Examples of where this distinction is relevant are (a) greenhouse gas emissions from water treatment plants linked to power plants, and (b) process emissions from chemicals production sites as these activities are not separately listed in Annex I to the Directive, and so their operators are not required to surrender allowances in respect of emissions

from non-combustion related processes that emit carbon dioxide. 1

3) Aggregation provision in the chapeau to Annex I

The aggregation provision in the chapeau to Annex I of the ET Directive is identical to that in Annex I of the IPPC Directive, and is to be interpreted in the same way. It states that: "Where an operator carries out several activities falling under the same subheading in the same installation or on the same site, the capacities of such activities are added together." This provision applies to all the activities listed in the Annex.

For clarity, the activity of combustion installations with a rated thermal input greater than 20MW includes individual boilers or other combustion units in the same installation or on the same site which cumulatively reach that threshold e.g. two 15MW combustion units on a site are covered by the Directive. The competent authority has an important role in determining the boundaries of the installation and of the site.

Where an installation comes within the scope of the Directive because of combustion taking place, emissions from the installation <u>other</u> than from combustion are <u>only</u> covered where these are covered by another activity listed in Annex I to the Directive.

4) The meaning of combustion

The term "combustion" is used in a wide range of EC legislation including the ET Directive, the IPPC Directive, the Large Combustion Plants Directive 2001/80/EC, and Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels. It is logical for the meaning of combustion in the context of ET Directive to be construed by reference to other EC legislation where definitions are included. The Large Combustion Plants Directive states that "combustion plant" means

¹ In the reviews to be undertaken in 2004 and 2006, the Commission will consider proposing extension of the ET Directive to cover other greenhouse gases and other activities, which includes emissions from activities not listed in Annex I arising from installations already covered by the Directive.

"any technical apparatus in which fuels are oxidised in order to use the heat thus generated" (Article 1(7)).

Further guidance can be drawn from looking at the list of combustion plants, which are specifically excluded from the Large Combustion Plants Directive in Article 1(7), where the ET Directive does not provide for such exclusion. Certain activities that are specifically excluded by the Large Combustion Plants Directive are also excluded from the ET Directive, such as "(h) any technical apparatus used in the propulsion of a vehicle, ship or aircraft" because the ET Directive only applies to stationary technical units (Article 3(e)). The ET Directive therefore covers neither transportation in general nor greenhouse gas emissions arising from traffic on the site of an installation.

Article 1(7) of the Large Combustion Plants Directive states that it is to apply to "combustion plants designed for production of energy with the exception of those which make direct use of the products of combustion in manufacturing processes", and that it "shall not apply to the following combustion plants":

- "(a) plants in which the products of combustion are used for the direct heating, drying, or any other treatment of objects or materials e.g. reheating furnaces, furnaces for heat treatment;
- (b) post-combustion plants i.e. any technical apparatus designed to purify the waste gases by combustion which is not operated as an independent combustion plant;
- (c) facilities for the regeneration of catalytic cracking catalysts;
- (d) facilities for the conversion of hydrogen sulphide into sulphur;
- (e) reactors used in the chemical industry;
- (f) coke battery furnaces;
- (g) cowpers;
- (h) any technical apparatus used in the propulsion of a vehicle, ship or aircraft;
- (i) gas turbines used on offshore platforms;
- (j) gas turbines licensed before 27 November 2002 or which in the view of the competent authority are the subject of a full request for a licence before 27 November 2002

provided that the plant is put into operation no later than 27 November 2003 without prejudice to Article 7(1) and Annex VIII(A) and (B),"

Plants powered by diesel, petrol and gas engines are also excluded from the scope of the Large Combustion Plants Directive by Article 1(7).

Given that the ET Directive makes no similar specific exclusions, all of the above types of combustion installations are included within the scope of the ET Directive where the threshold is met or exceeded.

It should also be noted that the same definition of combustion as in the Large Combustion Plants Directive is used in Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels (Article 2(5) -"combustion plant means any technical apparatus in which fuels are oxidised in order to use the heat generated").

Any installation(s) which include one or more pieces of stationary technical apparatus in which fuels are oxidised in order to use the heat thus generated, that together on the same site have a rated thermal input exceeding 20MW, is therefore subject to the ET Directive. This includes apparatus where the heat is used in another piece of apparatus, through a medium such as electricity or steam, and apparatus where the heat resulting from medium such as electricity or steam, and apparatus, for example, for melting other Schmols afen substances.

The Commission Communication on the Council's common position on the ET Directive (SEC(2003)364) notes in its conclusion that "The Common Position incorporates many of the amendments proposed by the European Parliament at its first reading. The scope of the emissions trading scheme includes energy, heat and steam production of installations above 20MW, while Member States can extend the coverage of the scheme as from 2005

to lower thresholds".

Further guidance comes from Annex I to the ET Directive itself, because this specifically excludes municipal and hazardous waste incineration facilities from the scope of the scheme. The combustion of e.g. hazardous waste is clearly an integrated part of the normal process undertaken by hazardous waste installations. If the Directive were to be interpreted as to not apply to installations where combustion takes place as an integrated part of the installation's processes, municipal and hazardous waste installations would not have been specifically excluded as they would in any case have fallen outside its scope. Their specific exclusion is further confirmation that it is the presence of combustion with a rated thermal input exceeding 20MW that determines the ET Directive's coverage of stationary combustion installations.

In the light of above points, there is no clear justification to limit the meaning of "combustion installation" to exclude any stationary units where combustion takes place, for example units providing heat input to chemical reactors, where these satisfy the threshold set down in Annex I to the Directive. In particular, there is no clear basis for claiming that combustion does not include the burning of fuels where the products of combustion are used directly as an integrated part of the production process. Energy produced by combustion may be in the form of electricity, heat, hot water or steam, and the distance between the production of energy and its eventual use is not relevant for competent authorities to use to decide whether or not an installation is subject to the ET Directive.

Furthermore, it is well-established that industries can fall under more than one heading of the IPPC Directive, for example, integrated steel works carry out several Annex I activities, and refineries include combustion installation of more than 50MW. Given the similarities between the IPPC and ET Directives, there is no reason to take a different approach to its interpretation. In particular, a different approach cannot be justified by the separate listing of the steel and cement industries, given that both produce substantial emissions from (chemical) processes in addition to their emissions from combustion.

5) Capacities of installations, back-up units and reserve units

References in Annex I of the ET Directive to capacities are to be understood as maximum capacities. This issue has been addressed in detail in the Commission communication "Progress in implementing Council Directive 96/61/EC concerning integrated pollution prevention and control" (COM(2003)354), where it is stated in section 5.3:

"It is important for there to be a common understanding of how the production capacity of an installation is to be calculated ... The only technically coherent meaning of "capacity" is, therefore, the capacity at which the installation is capable of being operated. That is to say, it is the rated capacity of the installation to operate 24 hours a day, provided that the equipment is capable of being operated in that way."

Following this line of reasoning, the rated thermal input of combustion installations is normally the potential thermal input, a statement of which normally comes with the installation from the manufacturer and is displayed on the technical device with the consent of an inspection body.

However, Member States may apply a legal restriction on capacity through a different permit decision on the basis that the installation does not exceed this maximum allowed capacity at any time, that the operator monitors and reports this to the competent authority regularly (i.e. at least yearly), and that the competent authority checks compliance with the restriction regularly. In these circumstances, the competent authority may consider the capacity of the installation to be limited to that allowed through the different permit decision. The capacity of the installation in these circumstances must be considered to be the same for the purposes of both the ET Directive and the IPPC Directive.

Back-up units and reserve units are included, and both the aggregation clause in the chapeau of Annex I and the paragraphs above on the capacity of installations apply in

respect of them. The <u>actual level of use of a back-up unit</u> can and should be reflected in the allocation, in which case the total quantity of allowances given to the installation would take into account the lower usage of the unit.

6) Municipal and hazardous waste incinerators

Municipal waste incinerators and hazardous waste incinerators are excluded in Annex I to the ET Directive. It is for the competent authority to determine whether a particular installation falls into one of these categories taking account the relevant definitions in Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste. This Directive defines an "incineration plant" as "any stationary or mobile technical unit and equipment dedicated to the thermal treatment of wastes with or without recovery of the combustion heat generated. This includes the incineration by oxidation of waste as well as other thermal treatment processes such as pyrolysis, gasification or plasma processes in so far as the substances resulting from the treatment are subsequently incinerated.

This definition covers the site and the entire incineration plant including all incineration lines, waste reception, storage, on site pretreatment facilities, waste-fuel and air-supply systems, boiler, facilities for the treatment of exhaust gases, on-site facilities for treatment or storage of residues and waste water, stack, devices and systems for controlling incineration operations, recording and monitoring incineration conditions"

If a dedicated installation falls into one of these two categories, then it is not subject to the ET Directive in respect of any incineration that takes place at the installation.

It should be noted that, subject to the adoption of appropriate monitoring guidelines, all waste incineration installations could be included by Member States through the unilateral inclusion provisions of the ET Directive as from 2008. The Commission will closely monitor the application of the ET Directive in respect of waste installations to ensure that there is no distortion of the internal market.

7) Other incinerators and co-incineration of fuels and waste

Combustion installations of more than 20MW that are not determined by the competent authority to fall into either of the two exempted waste incineration categories are subject to the ET Directive, and must account for all emissions from combustion including from the combustion of waste.

This is relevant in particular to so-called RDF (refuse derived fuels) and other wastes co-fired in cement manufacture. Emissions from the combustion of municipal or hazardous waste, where this is (co-)incinerated in an installation outside of the two exempted categories, are covered. It should be noted that biomass-based waste is "zero-rated" and so there should neither be allowances allocated by Member States, nor allowances surrendered by operators in respect of emissions from the combustion of any biomass. The draft monitoring and reporting guidelines will give further details of what constitutes biomass, and more information on this is given below.

8) Combustion installations using exclusively or predominantly biomass

Combustion installations of more than 20MW using exclusively or predominantly biomass are covered by the ET Directive, and need greenhouse gas emissions permits. The rated thermal input of an installation is <u>not</u> affected by the use of biomass as a fuel. Annex IV of the ET Directive stipulates that "the emission factor for biomass shall be zero". However, as biomass-based fuels are accounted as carbon-dioxide neutral, operators must monitor and report their emissions from the combustion of biomass but do not have to surrender allowances in respect of those emissions. The draft monitoring and reporting guidelines will give further details of what constitutes biomass, by defining it and giving an indicative list of materials, which are considered biomass for the purposes of the ET Directive.

9) Operators and reporting of emissions

The definition of "operator" in the ET Directive is identical to the IPPC Directive (Article 2(12). There will always be an operator of an installation, and the identification of the operator is a task for the competent authority. In case an installation is co-owned by several legal entities, it is for the competent authority to determine one single operator based to a large extent on national legislation and administration. Article 6(1) of the ET Directive makes clear that one operator can hold a single greenhouse gas emissions permit in respect of more than one installation on the same site. Thus, an installation cannot have more than one operator, and all installations under a single permit must have the same operator.

In order to facilitate companies' administration, competent authorities can accept single "composite" reports from companies which operate a number of installations on different sites, as long as the installations operated by each permit holder are distinct within that composite report. Likewise, composite reports can be submitted on behalf of a number of different companies, which may be of interest to any small and medium size enterprises participating in emissions trading.

Furthermore, any operators of installations participating in a formal pool pursuant to Article 28 of the ET Directive may have the trustee put in one compilation report on their behalf with distinct elements for each installation. This may be of use to simplify administration where there are multiple small installations participating in the scheme.

10) Specific points on interpretation of the ET Directive

One installation can fall under several categories of the ET Directive, in the same way as one installation can fall under several categories of the IPPC Directive. Examples of this are installations that wash wooden fibres in order to use them for paper or board production. These come under both category 6.1 (Industrial plants for the production of: (a) pulp from timber or other fibrous materials, and (b) paper and board) and category 6.2 (Plants for the pre-treatment of fibres) of the IPPC Directive, but are registered under the main category of pulp and paper production.

It has been suggested that the ET Directive might be construed as excluding categories of installation that are listed as a category (other than combustion) in Annex I to the IPPC Directive but not listed in exactly the same way as a category in Annex I to the ET Directive. Such a construction would mean that the scope of the ET Directive would be determined by a separate, and different, legal instrument. Only an explicit reference in the ET Directive itself to the need to cross-refer to the IPPC Directive in order to determine its scope would have been valid, but there is no such reference.

It has also been suggested that the aggregation clause in the ET Directive ("The threshold values given below generally refer to production capacities or outputs. Where one operator carries out several activities falling under the same subheading in the same installation or on the same site, the capacities of such activities are added together") might not apply in respect of combustion installations, because for them the threshold is expressed in terms of "rated thermal input" rather than "capacity". This is very far fetched, because "rated thermal input" is in fact a way of expressing capacity. A more precise definition ("rated thermal input") than "capacity" was considered necessary in order to clarify that the threshold is defined on the input side, rather than the output side.

Identical language is used in the IPPC Directive, and some of its other categories use other more precise words than "capacity" while expressing the same meaning. For example, category 6(6) refers to "places for production pigs (over 30kg)" and category 2(6) refers to "the volume of treatment vats". In all these cases, it would be far fetched to construe the aggregation clause as not applying because of the use of a more precise parameter for capacity.

This note has been prepared in response to requests by Member States for practical guidance on the application of the emissions trading Directive. It takes into account that the Directive has been agreed between the European Parliament and the Council and only

the European Court of Justice can give definitive judgements concerning its interpretation. This note is intended as a tool to assist Member States and their competent authorities in implementing the Directive, and to achieve consistency in its interpretation.