

POSITION STATEMENT



TOWARDS A EU-WIDE COHERENT APPROACH TO DETERMINING PRIMARY ENERGY/GREENHOUSE GAS SAVINGS FROM CHP

25 October 2002

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Input into the proposed European Directives on Cogeneration, Emissions Trading, Taxation of Energy Products, Energy Performance of Buildings, and the Internal Market for Electricity

THE NEED FOR A HARMONISED DEFINITION OF CHP ELECTRICITY AND EFFICIENCY IN THE EUROPEAN UNION

With a view to stimulate the wider use of energy-efficient CHP in Europe, several European Directives currently under development formulate the need to determine the primary energy and/or greenhouse gas savings that are realised if electricity and heat are cogenerated:

- *Emissions Trading Directiveⁱ*

The European Parliament, in its legal resolution following the first reading on the proposal, suggests two amendments to ensure carbon savings from CHP are taken into account by the emissions trading system: The Recital should state that national allocation plans should consider indirect mechanisms to reduce CO₂ such as CHP. And a new paragraph should require Member States to take account of the carbon value of savings achieved through CHP when allocating allowances to operators. This should be done on the basis of a "European Guidance on the Carbon Equivalence" which the Commission would have to prepare before the emissions trading scheme starts.
- *Energy Performance of Buildings Directiveⁱⁱ*

This Directive will define a methodological framework to calculate the integrated energy performance of buildings, where the positive influence of electricity produced by CHP and/or district-heating systems would have to be taken into account.
- *Taxation of Energy Products Directiveⁱⁱⁱ*

This Directive is likely to provide for a partial or total tax exemption of CHP production. The Danish Presidency considers it necessary to limit this to the more environmentally friendly part of the CHP generation, and therefore to calculate the primary energy savings from CHP.
- *Amended Electricity and Gas Directive^{iv}*

According to the Directive, electricity suppliers would need to specify the "relative importance of each energy source" for the production of greenhouse gases in their bills and all promotional material for final customers. Although a proposal from Parliament has been ignored, requesting specific labelling of electricity from CHP, this provision nevertheless implies that suppliers need to determine greenhouse gas savings from CHP electricity which they may supply to final customers.

There is thus a compelling case for developing a EU-wide methodological framework and harmonised approach to determine the efficiency of CHP generation compared to the separate production of heat and power. This is exactly what the proposed Cogeneration Directive tries to achieve. The proposal suggests a European-wide methodology to determine the cogenerated electricity (Annex II) and to calculate the primary energy savings from CHP compared to nationally defined reference cases (Annex III). There are good reasons to make this approach applicable to the other Directives, too:

- The Cogeneration Directive is likely to establish an EU-wide accepted and workable way of determining primary energy savings from CHP that could, once and for all, bring the long-standing controversy about this issue to an end. From the primary energy savings it is then possible to calculate CO₂ savings.
- The Cogeneration Directive is expected to oblige CHP producers to determine the efficiency of their installations for the purposes of the Directive. Making the results of this procedure also relevant for requirements set in other Directives would greatly help reduce red tape and costs for the CHP operators and the public administrations concerned alike.
- There is a need for harmonised definitions and methodologies in the internal energy markets for electricity and (soon) greenhouse gas emission allowances. The market for CHP equipment would also benefit. Widely differing national CHP efficiency definitions would act as market barriers in each of these cases.
- Establishing a harmonised approach to the various pieces of EU legislation mentioned would make EU policies more coherent, easier to communicate and implement, and give all actors involved a clear sense of direction.
- Recent case law provides strong arguments for the need to implement Community Law coherently. A judgement of the European Court of Justice from January 2002^v established that "it is settled case-law of the Court of Justice that the Commission must, as a matter of principle, avoid inconsistencies that might arise in the implementation of the various provisions of Community law". Such an inconsistency would occur if the above-mentioned Community provisions used different methods to determine the efficiency gains from CHP that are different to the approach taken in the Directive.

The definition of cogenerated electricity and a method to calculate the relative efficiency of CHP installations are therefore central elements of the forthcoming Cogeneration Directive. The importance to develop a clearly defined, plausible methodology that is applicable to all CHP installation types is underlined by the implications that it could and should have not only for the Cogeneration Directive itself, but also for other Community legislation in the energy and environment field. A good methodology would be a key mechanism for a more energy efficient Europe, whilst a bad methodology could turn out to be a major obstacle towards this goal.

PRACTICAL STEPS

In practice, how could the method to determine the efficiency of CHP in the Cogeneration Directive become relevant for the other Directives mentioned? There seem to be two principal ways:

1. Through amendments to the proposed Cogeneration Directive
2. Through amendments to the other Directives, if still possible

Both ways should be used in practice, because this enhances the chances of full transposition of the relevant provisions into national legislation, and makes the links between them clearer to all actors involved.

Amendments to the proposed Cogeneration Directive

- The Preamble could be amended with a new Recital stating that a coherent approach to determine electricity from, and the efficiency of, CHP should be taken under the Directives on cogeneration, emissions trading, taxation of energy products, energy performance of buildings, and the internal market for electricity. This point could equally be made in the existing Recital 11.
- Article 5 ("Efficiency Criteria") could be amended the other Directives through a paragraph stating that the methodology to determine CHP electricity and efficiency gain from CHP installations should be used to
 - a) calculate the carbon savings from CHP under the European Guidance on the Carbon Equivalence, according to the corresponding provisions in the emissions trading Directive
 - b) determine the positive influence of electricity produced by CHP under the methodological framework proposed in Annex A of the energy performance of buildings Directive
 - c) identify CHP that qualifies for tax exemptions under the taxation of energy products directive
 - d) calculate the CO₂ savings from CHP relevant for the disclosure/labelling requirements set out in the new electricity directive

Amendments to the other Directives

- To date it seems that only the Directives on emissions trading and the taxation of energy products are at a stage where amendments are still realistically possible, and only just.
- With regard to the Emissions Trading Directive, Amendment 97 of Parliament states that "Using the European Guidance on the Carbon Equivalence, which shall be prepared by the Commission prior to the scheme's entry into force, Member States shall take account of the corresponding carbon value of savings achieved through combined heat and power generation investments (...) to operators". This amendment could be complemented with a phrase stating that the carbon value of savings from CHP should be calculated on the basis of the methodology to determine the efficiency of CHP installations in the Cogeneration Directive. Also, Annex III ("Criteria for National Allocation Plans") could be amended with the

requirements that relative greenhouse gas emissions savings from CHP installations should be rewarded to them in accordance with provisions set out in the Cogeneration Directive.

- The Directive on taxation of energy products could be amended with a provision stating that CHP with a certain efficiency level, as defined under the Cogeneration Directive, qualifies for partial or full tax exemptions.

ⁱ Proposal for a framework Directive for greenhouse gas emissions trading within the European Community. COM(2001)581

ⁱⁱ Amended proposal for a Directive of the European Parliament and of the Council on the energy performance of buildings COM(2002)0192 final

ⁱⁱⁱ Proposal for a Council Directive restructuring the Community framework for the taxation of energy products COM(97)30 final

^{iv} Amended proposal for a Directive amending the Electricity and Gas Directives and Amended proposal for a Regulation on cross-border exchanges in electricity COM(2002)304 final

^v Article 112 of the judgement of the Court of First Instance (First Chamber) from 31 January 2001 (ECSC Treaty - Concentration between undertakings - Admissibility - State aid) in Case T-156/98, RJB Mining plc versus Commission of the European Communities