



# Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Directive	2002/0185(COD) Procedure completed
Promotion of cogeneration based on a useful heat demand in the internal energy market	
Repealed by <a href="#">2011/0172(COD)</a>	
Subject 3.60.08 Energy efficiency 3.60.10 Security of energy supply	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	<b>ITRE</b> Industry, External Trade, Research, Energy		27/08/2002
		PSE <a href="#">GLANTE Norbert</a>	
	Former committee responsible		
	<b>ITRE</b> Industry, External Trade, Research, Energy		27/08/2002
		PSE <a href="#">GLANTE Norbert</a>	
	Former committee for opinion		
	<b>ENVI</b> Environment, Public Health, Consumer Policy		04/11/2002
		PPE-DE <a href="#">GARCÍA-ORCOYEN TORMO Cristina</a>	
Council of the European Union	Council configuration	Meeting	Date
	<a href="#">General Affairs</a>	<a href="#">2558</a>	26/01/2004
	<a href="#">Transport, Telecommunications and Energy</a>	<a href="#">2507</a>	14/05/2003
European Commission	Commission DG Energy and Transport	Commissioner	

Key events			
02/09/2002	Committee referral announced in Parliament, 1st reading		
23/04/2003	Vote in committee, 1st reading		Summary
23/04/2003	Committee report tabled for plenary, 1st reading	<a href="#">A5-0138/2003</a>	
12/05/2003	Debate in Parliament		
13/05/2003	Decision by Parliament, 1st reading	<a href="#">T5-0202/2003</a>	Summary
24/09/2003	Committee referral announced in Parliament, 2nd reading		
02/12/2003	Vote in committee, 2nd reading		Summary
17/12/2003	Debate in Parliament		

18/12/2003	Decision by Parliament, 2nd reading	<a href="#">T5-0592/2003</a>	Summary
26/01/2004	Act approved by Council, 2nd reading		
11/02/2004	End of procedure in Parliament		
12/02/2004	Final act signed		
21/02/2004	Final act published in Official Journal		

### Technical information

Procedure reference	2002/0185(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Directive
	Repealed by <a href="#">2011/0172(COD)</a>
Legal basis	EC Treaty (after Amsterdam) EC 175-p1
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/5/19594

### Documentation gateway

Legislative proposal		<a href="#">COM(2002)0415</a> <a href="#">OJ C 291 26.11.2002, p. 0182 E</a>	22/07/2002	EC	Summary
Committee draft report		PE321.973	20/11/2002	EP	
Committee opinion	<b>ENVI</b>	PE319.400/DEF	28/01/2003	EP	
Amendments tabled in committee		PE321.973/AM	17/02/2003	EP	
Economic and Social Committee: opinion, report		<a href="#">CES0279/2003</a> <a href="#">OJ C 095 23.04.2003, p. 0012-0015</a>	26/02/2003	ESC	
Amendments tabled in committee		PE321.973/AM1	13/03/2003	EP	
Amendments tabled in committee		PE321.973/AM2	13/03/2003	EP	
Committee of the Regions: opinion		<a href="#">CDR0344/2002</a> <a href="#">OJ C 244 10.10.2003, p. 0001-0004</a>	09/04/2003	CofR	
Amendments tabled in committee		PE321.973/AMC	15/04/2003	EP	
Committee report tabled for plenary, 1st reading/single reading		<a href="#">A5-0138/2003</a>	23/04/2003	EP	
Text adopted by Parliament, 1st reading/single reading		<a href="#">T5-0202/2003</a> OJ C 067 17.03.2004, p. 0028-0090 E	13/05/2003	EP	Summary
Council statement on its position		<a href="#">11461/2003</a>	16/07/2003	CSL	
Modified legislative proposal		<a href="#">COM(2003)0416</a>	23/07/2003	EC	Summary
Council position		<a href="#">10345/2/2003</a>	08/09/2003	CSL	Summary
Commission communication on Council's position		<a href="#">SEC(2003)1016</a>	19/09/2003	EC	Summary

Committee draft report		PE322.046	29/10/2003	EP	
Committee draft report		PE322.046/REV	14/11/2003	EP	
Amendments tabled in committee		PE322.046/AM	17/11/2003	EP	
Committee recommendation tabled for plenary, 2nd reading		<a href="#">A5-0457/2003</a>	02/12/2003	EP	
Amendments tabled in committee		PE322.046/AMC	15/12/2003	EP	
Text adopted by Parliament, 2nd reading		<a href="#">T5-0592/2003</a> OJ C 091 15.04.2004, p. 0524-0628 E	18/12/2003	EP	Summary
Commission opinion on Parliament's position at 2nd reading		<a href="#">COM(2004)0049</a>	26/01/2004	EC	Summary
Follow-up document		<a href="#">COM(2008)0771</a>	13/11/2008	EC	Summary
Follow-up document		C(2008)7294	19/11/2008	EC	
Follow-up document		COM(2013)0938	08/01/2014	EC	Summary
Follow-up document		SWD(2013)0541	08/01/2014	EC	

#### Additional information

European Commission

[EUR-Lex](#)

#### Final act

[Directive 2004/8](#)  
[OJ L 052 21.02.2004, p. 0050-0060](#) Summary

## Promotion of cogeneration based on a useful heat demand in the internal energy market

**PURPOSE** : to create a framework for promotion of cogeneration based on useful heat demand in the internal energy market. **CONTENT** : this proposal, building on the dual objectives of contributing both to security of energy supply and to climate change policies, arises from the need for reinforced efforts to promote high-efficiency cogeneration<sup>1</sup> in the internal energy market. The overriding objective is to create a framework, which can support and facilitate the installation and proper functioning of electrical cogeneration plants where a useful heat demand exists or is foreseen. This overall objective translates into two specific aims: - in the short term, a cogeneration Directive should serve as an instrument to consolidate existing and, where feasible, promote new high-efficiency cogeneration installations in the internal energy market. In order to create a level playing field, regulatory certainty and in some cases financial support are vital for cogeneration. This applies to the current transitional phase of the liberalisation process, where the internal energy market is not fully completed and where internalisation of external costs is not reflected in energy prices. - in the medium to long term, a cogeneration Directive should serve as a means to create the necessary framework that will ensure that high-efficiency cogeneration, alongside other environmentally friendly supply options, constitutes a key element when decisions on investment in new production capacity are made. By creating a supportive framework, such cogeneration can contribute to the establishment of more diversified and energy efficient supply systems in the Community. In order to exploit the potential for cogeneration regulatory certainty and appropriate mechanisms that address the lack of internalisation of external costs are needed. The proposed Directive lays down a framework, which addresses these issues through a set of common principles for the promotion of cogeneration. The practical application of the framework will to a large extent be the responsibility of the individual Member States. However the Commission could have an important role in facilitating that EU objectives on cogeneration are met. The proposal covers the following main elements: - Guarantee of origin of electricity produced from cogeneration following the "disclosure" requirements on Directives concerning common rules for the internal markets in electricity and natural gas; - provisions obliging Member States to analyse national potentials for high efficiency cogeneration and barriers to their realisation; - provisions for evaluating the experiences gained with the application and coexistence of different support mechanisms for cogeneration used by Member States; - provisions laying down the principles for the interaction between cogeneration producers and the electricity grid; furthermore to facilitate grid access for cogeneration units using renewable energy sources and microcogeneration plants below 1 MW(e); - provisions requiring Member States to evaluate current administrative procedures with a view to reducing the administrative barriers to the development of cogeneration. Lastly, to remove any ambiguity arising from existing definitions and to add transparency and coherence to the internal energy market, the Commission proposal would establish a common definition of co-generation and a flexible methodology to identify high efficient co-generation.?

## Promotion of cogeneration based on a useful heat demand in the internal energy market

The committee adopted the report by Norbert GLANTE (PES, D) tabling a large number of amendments to the proposal under the 1st reading of the codecision procedure. The main amendments were as follows: - the proposed timetable should be speeded up. - two years after the directive's entry into force, and after consulting associations representing the cogeneration sector, the Commission should present an in-depth analysis on establishing general principles for comparing cogeneration with harmonised reference values for the separate production of heat and electricity. The committee proposed a list of criteria enabling fair comparisons to be made, i.e. taking account inter alia of climatic differences in the Member States, the different technologies in the Member States, security of supply and environmental aspects, etc. On the basis of this analysis, the Commission should publish harmonised reference values for determining primary energy savings by cogeneration; - the committee amended the scientific definition of electricity produced by cogeneration, deleting the efficiency thresholds of 75% and 85% proposed by the Commission, and proposed a new calculation method; - the committee introduced a new provision laying down a procedure for establishing a harmonised calculation method which could be adopted within a reasonable period; - the committee introduced a new article, entitled "Targets and timetable", stipulating that the EU and each individual Member State shall achieve a cogeneration electricity output of at least 18% of the respective EU and total electricity output by 2012; - a specific objective was introduced requiring Member States to take steps to enable them to fully exploit 20% of their national potentials by 2010; - two years after the directive's entry into force, the Commission should submit a new proposal on the promotion of electricity from cogeneration installations, taking account of climatic differences between the Member States, so that all improvements in efficiency result in eligibility for support.?

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The European Parliament adopted a resolution drafted by Norbert GLANTE (PES, Germany) and made several amendments to the Commission's proposal. (Please see the summary dated 23/04/03.) In addition: - the definition of cogeneration is amended to mean the transformation of input energy simultaneously into mechanical or electrical energy and useful heat in a technical installation. There is no division into the three classes of industrial, heating and agricultural cogeneration; - Parliament inserted a definition of "micro-cogeneration" and stated that the in-depth analysis required will not apply to micro-cogeneration since the latter is regarded as an efficient process; - Member States and their regional and local planning authorities must incorporate within their planning guidelines a requirement to consider the scope for developing district heating networks with a view to utilising the useful heating production of cogeneration units and evaluating the viability of cogeneration; - Member States must ensure that support for cogeneration is provided in a non-discriminatory way, irrespective of operators and of the use of electricity, mechanical energy or heat generated in the cogeneration installation.?

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The European Commission has submitted an amended proposal, which takes into consideration many of the amendments made by the Parliament. These include the following: - the three categories of cogeneration are deleted, as they were criticised as not needed in the European Parliament as well as in the Council; - there is a new definition of "micro-cogeneration" as units below 50kWe; - there is a new definition saying that micro-cogeneration with an overall efficiency above 80% shall be regarded as high efficiency cogeneration. Thereby the route for approval as high efficiency cogeneration is eased because once proved above this threshold no further calculations for each unit is needed; - several timeframes are changed in order to speed up implementation. The Commission states that it can accept these changes in principle, but Member States will probably be opposed to the changes; - the Commission has introduced harmonised reference values for separate production. These will be used instead of national values. Using harmonised reference values will reduce market distortions and contribute to the creation of a level playing field. The harmonised values must be established based on comprehensive studies and including consultations with the sector. The study must be established by the Commission and finally adopted in accordance with a procedure including establishment of a Committee. As a consequence of introducing the harmonised reference values the paragraphs dealing with national reference values are deleted; - Member States' support programmes must be non-discriminatory; - transmission and distribution system operators will not be allowed to impose unrealistic connection fees for connecting cogeneration units below 1 MWe just as costs and administrative burdens must be reduced to an absolute minimum. Furthermore the production from these units must be guaranteed a fair price for electricity sold to the grid. This will establish reasonable conditions for the small-scale producers; - the Commission cannot accept the detailed calculation method with new notations. The original notations are maintained and that the power to heat ratio is defined as the capacity related power to heat ratio; -the Commission maintains the original formula for the calculation of primary energy savings.?

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The Council's common position incorporates in substance, partially or in principle 24 of the amendments adopted by the European Parliament, all of which are acceptable for the Commission. The main changes introduced by the Council are as follows: - Clarification of the objective of the Directive : the aim of increasing energy efficiency and improving security of supply should be reached through the promotion of "high efficiency" cogeneration. - Definitions : the common position maintains those definitions necessary for the understanding of the provisions of this proposal, and it clarifies and simplifies them in coherence with the enacting provisions. - Efficiency criteria : while the Commission proposal invited Member States to adopt efficiency reference values for separate production of heat and electricity, the common position makes clear that it is up to the Commission, based on the methodology for determining efficiency of cogeneration and primary energy savings set out in Annex III, to establish harmonised efficiency reference values for separate production of electricity and heat. - Guarantee of origin : on the basis of these harmonised efficiency reference values, Member States ensure the possibility of issuing a guarantee of origin thus enabling producers to demonstrate that the electricity is produced from "high efficiency" cogeneration. This guarantee should be mutually recognised by Member States, exclusively as proof, and does not lead in itself to commercial exchanges. Schemes for the guarantee of origin do not by themselves imply a right to benefit from national support mechanisms established in different Member States. - Grid system and tariff issues : in order to clarify the relation between this Directive and Directives 2001/77/EC and 2003/54/EC, the common position provides that for transmission and distribution of electricity from "high efficiency" cogeneration the provisions of Article 7 (paragraphs 1, 2 and 5) of the Directive on the promotion of electricity from renewable energy sources (2001/77/EC) as well as the relevant provisions of Directive 2003/54/EC shall apply, while Member States may facilitate in particular access to the grid of electricity for "high efficiency" small scale cogeneration units. - Reporting from Member States and Commission : consistency of these provisions has been improved and they have been made less burdensome. - Alternative calculations : in order to create the necessary flexibility, Member States may, under certain strict conditions, use other methods or definitions than those provided for in Annex II, or define "high efficiency" cogeneration on an alternative basis

than the one set out in Annex III. However, it is made clear that a guarantee of origin can only be issued in accordance with Annexes II and III.

- Review of threshold values : the values established for the definition of electricity from cogeneration in Annex II, as well as those used for the calculation of efficiency of cogeneration and primary energy savings (Annex III) are subject to review through a Comitology procedure.
- Committee procedure : with a view to further adaptation of reference and threshold values to i.a. technical progress, the common position provided for a Comitology procedure.
- Annex II (Definition of electricity from cogeneration): more flexibility has been given to Member States for alternative determinations of the "power to heat ratio", for the subtraction of the energy share recovered in chemicals and of the reporting periods provided for in this Annex.
- Annex III (Methodology for determining the efficiency of cogeneration production): In line with the approach establishing that cogeneration units have to be compared with reference values reflecting the best available and economically justifiable technology on the market in the year of their construction (units older than ten years being compared with values of ten years old units) the criterion for "high efficiency" cogeneration production is to provide primary energy savings of at least 10%. This Annex also sets out the formula to be used by Member States which follow alternative calculation methods. The amendments accepted by the Council : - recall that European Parliament called for incentives to encourage a shift towards efficient energy production plants, including combined heat and power;
- recall that for the improvement of the energy performance of new buildings with a surface of more than 1000 m<sup>2</sup>, the consideration of alternative systems, such as CHP, should be taken into account before the construction starts;
- specify that criteria are set up to determine and assess the energy efficiency of cogeneration;
- delete the reference to a 50MW threshold value for the possible benefit of public support measures;
- clarify that the long term objective of the Directive, i.e. the establishment of a harmonised calculation of electricity from cogeneration, should be pursued taking into account methodologies such as those under development by European Standardisation Organisations;
- delete the reference to three different categories of cogeneration defined in terms of temperature levels;
- specify that the purpose of the Directive is to increase energy efficiency and improve security of supply by creating a framework for promotion and development of high efficiency cogeneration of heat and power based on useful heat demand and primary energy savings;
- delete of the definitions of industrial, heating and agricultural cogeneration, as well as of the definitions of district heating and cooling clarifies the definition of the cogeneration process;
- clarify that the definition of "useful heat" shall mean heat produced in a cogeneration process to satisfy an economically justifiable demand for heat or cooling;
- specify that the Commission shall establish harmonised reference values for separate production of electricity and heat, in accordance with the Comitology procedure provided for in the Directive;
- delete the Member States' obligation to set efficiency reference values and principles for defining national efficiency reference values for separate production of heat and electricity;
- delete the reference to possible further harmonisation of the criteria for determining the efficiency of cogeneration;
- establish a Comitology procedure for review and adaptation purposes;
- specify details in the calculation methodology of the overall efficiency (Annex II c));
- specify the content of the analysis of national potentials for high efficiency cogeneration (Annex IV a));
- provide for an assessment of the cost effectiveness - in terms of primary energy savings - of increasing the share of high-efficiency cogeneration in the national energy mix (Annex IV, b));
- specify that the analysis of national cogeneration potentials shall be made in relation to different timeframes and include, where feasible, appropriate cost estimates for each of the timeframes (Annex IV c)).?

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The Commission believes that the Common Position has succeeded in retaining the spirit and intention of the Commission proposal and of a substantial part of the amendments of the European Parliament. A workable and acceptable balance has been reached in defining cogeneration in order to reflect both a certain degree of harmonisation needed to contribute to a levelling of the playing field and a certain national flexibility to incorporate the very different realities cogeneration is facing throughout the Community. The Common Position has enriched the Commission proposal via inclusion of a Committee to assist the Commission on technical issues and to play an important role in reviewing aspects of the Directive, which needs to be updated in accordance with the technological development. Concerning the issue raised by the European Parliament relating to establishment of targets for further exploitation of cogeneration the Commission agrees with the intention behind this position because it is important to urge Member States to ensure and develop the role of cogeneration. The Common Position addresses this issue, as Member States are obliged to carry out analysis of national potentials for high efficiency cogeneration including a separate analysis of barriers preventing further use of cogeneration. The Commission regards these analyses as crucial for future measures and expects that the analyses will constitute de facto objectives for the national efforts. The Commission finds it also important to note that these analyses must be published and thereby the reports will inevitably be challenged and discussed within the sector. The Commission therefore recommends this Common Position to the European Parliament. ?

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The committee adopted the report by Norbert GLANTE (PES, D) amending the Council's common position under the 2nd reading of the codecision procedure. MEPs decided to retable many of Parliament's 1st reading amendments rejected by the Council. These focused on the need for harmonised definitions of CHP, support for small generation plants, and binding targets and timetables to increase use of CHP: - there should be a harmonised definition of cogeneration throughout Europe, which is essential for single market purposes; - there is also a need to define micro-cogeneration (small plants with output of less than 50 kW<sub>e</sub>), which should receive special support. The committee called for easier access, less red tape and lower costs, to enable small-scale and micro-cogeneration units to join up with their local grids; - binding targets should be laid down for the Community and the Member States. MEPs pointed out once again that without any targets no sustainable increase in cogeneration in Europe could be expected. Cogeneration should be increased to 18% of total output by 2012 and the Member States should notify the Commission of their national targets for 2015 and 2020; - alternative calculation methods should be used only until the Commission presents a uniform calculation method, with guidelines, and harmonised reference values for calculating the primary energy savings enabling cogeneration to be categorised. The deadline for establishing a harmonised method for calculating electricity from cogeneration should be no later than two years after the Directive comes into force; - regular checks on progress, without lengthy intervals between them, are needed if the targets are actually to be implemented. ?

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The European Parliament adopted a resolution based on the draft by Norbert GLANTE (PES, D), approving 20 compromise amendments agreed following intensive talks with the Council and designed to avoid Conciliation. The deal covers the definition of CHP, micro-cogeneration, timetables, calculation methods of cogenerated energy and targets. The compromise amendments replace the

amendments adopted by the Industry Committee. (Please see the previous document.) The rapporteur stated that the negotiations with the Council had been very complicated, because some Member States, who did not want a directive at all, were threatening to block negotiations. Parliament, however, made major concessions so that the directive could be adopted before the European Parliamentary elections in June 2004, thus enabling a framework to be put in place for the development of a cogeneration policy and putting CHP on the political agenda in Europe. The draft directive lays the basis for a common understanding and harmonised definition of CHP. As part of the deal, the Council finally accepted Parliament's proposed definition of micro-cogeneration as being cogeneration unit with a maximum capacity below 50kW e. Under the directive, Member States may simplify micro-plants' access to local electricity grids. The owners of small and micro-plants can use certified values instead of measured data for the calculation of primary energy savings. Thus, the administration burdens for them are reduced. One of the most important points in the negotiations related to calculation methods for cogenerated energy. Parliament was initially keen for a single harmonised calculation method to be laid down but finally agreed to the Council's wish to allow alternative calculation methods, which may now be used either until 2010 or even for an unlimited period. At the same time, Parliament endorsed the Commission's proposal for a two-step approach to defining cogenerated electricity and ensuring that the promoted cogeneration really provides primary energy savings. Parliament and Council also agreed that the Commission would, if necessary, submit proposals for further harmonisation of calculation methods. In addition, harmonised methods for the calculation of cogenerated energy should be adjustable to take account of technical progress. Instead of having binding targets, both institutions have also accepted that Member States should be obliged to evaluate their national potential for cogeneration and report to the Commission. The Commission will complete the analysis, and if necessary, submit an action plan to develop cogeneration further.?

## Promotion of cogeneration based on a useful heat demand in the internal energy market

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The Commission accepts all 20 amendments proposed by the European Parliament, which are in line with the objectives of the Commission's original proposal or constitute an acceptable compromise. The amendments concern the following issues: - emphasising that development of cogeneration contributes to enhancing competition on the internal electricity market; - clarifying that import dependency and raising import ratios heighten the risk of interruption or difficulties in supply; - making reference to the European Parliament's resolution of 25 September 2002 on the Commission communication on the implementation of the first phase of the European Climate Change Programme; - ensuring a harmonisation of calculation methods for calculation of electricity from cogeneration. The amendment also makes a reference to the necessity of being able to adapt the calculation methods to technical progress. Finally the amendment outlines that for micro cogeneration units the calculations can be based on values provided by a certification process; - providing a clearer understanding of the term "cogeneration unit"; - emphasising that especially for micro cogeneration units access to the electricity grid may be facilitated; - an editorial change to make the proposal consistent in order to reflect the compromises regarding micro cogeneration units; - clarifying that high efficiency cogeneration shall mean cogeneration meeting the criteria of the whole Annex III; - changing the definition of the "power to heat ratio". The amendment is in line with another amendment where the Commission is obliged to establish guidelines for the implementation of Annex II (calculation of electricity from cogeneration) via committee procedure. The amendment leaves the necessary flexibility to develop the guidelines; - defining micro cogeneration units as units with a maximum capacity below 50kWe; - emphasising that the analysis of the national potential for the application of high efficiency cogeneration should include high efficiency micro cogeneration; - emphasising that Member States also may particularly facilitate grid access for micro cogeneration units. In the Common Position this possibility was only applied to small scale cogeneration; - emphasising that the Commission - in the report to be submitted to the European Parliament and Council 4 years after entry into force of the Directive - shall consider to what extent the national potentials have been or are foreseen to be realised. If appropriate the Commission shall submit further proposals aiming at the establishment of an action plan for the development of high efficiency cogeneration. Similarly, the Commission shall consider the impact of the coexistence of the alternative calculation methods and if appropriate the Commission shall submit further proposals aiming at further harmonisation of the calculation methods; - empowering the Committee established in accordance with Article 14 of the Common Position also to review the guidelines for determining the power to heat ratio and adapt these guidelines to technical progress; - introducing the possibility for micro cogeneration units to carry out the calculations using values from a certification process. This will allow calculation of electricity from micro cogeneration units without imposing costly measurement on each individual installation; - clarifying that the default values of the power to heat ratio should only be used for statistical purposes; - obliging the Commission to establish guidelines for the implementation of Annex II (calculation of electricity from cogeneration) via committee procedure; - defining that micro cogeneration units providing primary energy savings may qualify as high-efficiency cogeneration. - introducing the possibility for micro cogeneration units to carry out the calculations using values from a certification process. This will allow micro cogeneration units to qualify as high efficiency cogeneration without imposing costly measurement on each individual installation.?

## Promotion of cogeneration based on a useful heat demand in the internal energy market

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**PURPOSE :** to create a framework for promotion of cogeneration based on useful heat demand in the internal energy market. **LEGISLATIVE ACT :** Directive 2004/8/EC of the European Parliament and of the Council on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC. **CONTENT :** The Council approved all the amendments adopted by the European Parliament in second reading. This Directive is a key component of the EU's strategy for energy efficiency and energy savings and for contributing to the reduction of CO<sub>2</sub> emissions. It also aims at improving security of energy supply. It provides for a regulatory framework for the promotion and development of the simultaneous generation in one process of heat and electrical and/or mechanical power. The Directive includes provisions concerning the electricity grid system and tariff issues, as well as on the definition of power-to-heat ratio and co-generation units. By introducing harmonised provisions throughout the Community, it aims at overcoming current divergences whereby some Member States already have support schemes and targets for co-generation whilst others still have no provisions on electricity production from co-generation. The main elements of the Directive are the following: - common definitions of cogeneration and common criteria for high efficiency cogeneration via calculation of primary energy savings; - obligations on Member States to carry out analysis of the national potential for high efficiency cogeneration; - provisions for a system of "Guarantee of origin" enabling producers of electricity from cogeneration to demonstrate that the electricity really is produced from cogeneration; - provisions for evaluating the experiences gained with the application and coexistence of different support mechanisms for cogeneration used by Member States; - provisions laying down the principles for the interaction between cogeneration producers and the electricity grid; - provisions requiring Member States to evaluate current administrative procedures with a view to reducing the administrative barriers to the development of cogeneration. **ENTRY INTO FORCE :** 21/02/2004. **DATE OF TRANSPOSITION :** 21/02/2006.?

# Promotion of cogeneration based on a useful heat demand in the internal energy market

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The main objectives of this Communication are to report on the current status of the combined heat and power generation (CHP or cogeneration), and to present possibilities for its development. In doing so, the Commission also meets the reporting obligations of Directive 2004/8/EC on cogeneration, notably on cogeneration potential and progress in realising these potentials in the Member States.

Of the EU final energy consumption (FEC) in 2006, CHP represented 13.1%, a level that has not shown significant improvement. The variation between countries is significant, from nearly zero to more than 40% in Denmark and Finland. The CHP electricity capacity in EU27 is about 100 GW, representing 13.6% of the total EU27 electricity capacity. The production of CHP electricity in EU27 amounts to 366 TWh, i.e. 10.9% of the total electricity generation in 2006. The level of production varies greatly between Member States, from 0.3% in Cyprus to more than 40% in Latvia and in Denmark.

The cogeneration Directive was adopted in 2004. A major challenge has been the adoption of detailed guidelines for the cogeneration electricity calculation. These guidelines have now been developed following thorough discussions between Member States and the Commission. A crucial element of the guidelines was a Decision adopted in 2006 on harmonised efficiency reference values for separate production of electricity and heat. To date, 22 Member States have transposed parts of the CHP Directive and the related Commission Decision on reference values.

The CHP Directive requires the Member States to report on the cogeneration potential and the established administrative structures to promote combined heat and power. In addition, they have to report on the progress of cogeneration and provide relevant statistics every four years. Only 11 Member States have submitted their analysis of the national potential so far. The existing reports do not give much clear information or figures that can be meaningfully compared. It is therefore difficult to have a complete overview of the cogeneration potential in the whole of the EU.

The main conclusions of the Communication are as follows:

(1) Member States need to finalise the implementation of the CHP Directive: the implementation of the CHP Directive has not advanced as quickly as was planned. The Member States should take urgent measures to implement the legislation now. Moreover, it is of paramount importance that all countries report on the cogeneration potential and the administrative structures put in place, as defined in the legislation. Further reporting on progress and data should follow.

(2) The Commission shall monitor the implementation and provide support: the Commission will continue to fulfil its share of the responsibilities in the follow-up of the Directive. It will launch infringement procedures as necessary in order to ensure the correct implementation of this legislation. In addition, other support measures could be envisaged to assist Member States. The concerted action model has proved to be useful in many Directives. It provides Member States with the possibility to address implementation problems of legislation with other Member States and the Commission. This could also be applied here to support Member States.

(3) The Energy Efficiency Action Plan (EEAP) update will consider possible new measures:

- for micro CHP: the energy labelling and the implementing measures for boilers under the Eco-design Directive in 2009;
- for large scale CHP: the [proposal](#) to amend the Emissions Trading Scheme (ETS) Directive and the [proposal](#) for a Renewable Energy (RES) Directive which will regulate the preferential calculation of emission savings of CHP plants using fuels from renewable sources;
- the European Commission launched several studies in 2008. The outcome of these studies - the development of a system for a harmonised electronic CHP guarantee of origin, the preparation of minimum efficiency requirements for district heating and cooling systems and the definition of minimum efficiency requirements for micro-cogeneration - could help to identify the policy measures where further efforts are required;
- the Commission will evaluate the [Energy Efficiency Action Plan](#) in 2009 with a view to producing an update. Possible new proposals and ideas related to combined heat and power could be assessed in that context. The crucial role of towns and cities in the European and worldwide energy policy picture will be considered at that stage.
- the EEAP update may also consider the further role of the National Energy Efficiency Action Plans. These plans should be a leading policy tool encompassing all activities on energy efficiency, including cogeneration;
- lastly, the CHP country reports revealed some persistent barriers to the wider uptake of cogeneration. The Member States could address many of these without delay. For instance, smooth administrative processes and transparent support schemes, when applied, are essential to stimulate energy efficiency, also cogeneration. A common framework of grid access rules should be of help to all stakeholders.