

# Act on CO<sub>2</sub> quotas for electricity production

Act no. 376 of June 2, 1999.

WE MARGRETHE THE SECOND, by mercy of God the Queen of Denmark, make known:  
The Folketing has passed and We by Our Assent confirmed the following Act:

**Section 1.** The purpose of this Act is to secure a cost-effective regulation of CO<sub>2</sub> emissions and to secure reduced CO<sub>2</sub> emissions from fuels used for electricity production in this country.

*Subsection 2.* The Act applies to all producers of electricity, except those under subsection 3.

*Subsection 3.* Exempted from the Act are producers that produce electricity solely by means of CO<sub>2</sub>-free or CO<sub>2</sub>-neutral energy sources.

**Section 2.** The CO<sub>2</sub> quotas to be emitted totally from electricity production facilities covered by this Act, are fixed at:

1) 23 mill. tonnes in 2000.

2) 22 mill. tonnes in 2001.

3) 21 mill. tonnes in 2002.

4) 20 mill. tonnes in 2003.

*Subsection 2.* In the quotas under subsection 1 the CO<sub>2</sub> emission from heat production has been deducted, using a heat efficiency of 200 percent.

*Subsection 3.* The Minister of Environment and Energy can – after submission to the relevant standing Folketing committee - issue specific guidelines on the calculation of CO<sub>2</sub> emission from heat production, e.g. deviate from the heat efficiency fixed in subsection 2.

**Section 3.** On the basis of the quota fixed in section 2, subsection 1, the Minister of Environment and Energy allocates annual CO<sub>2</sub> emission permits to individual electricity producers no later than July 1, valid for the following year.

*Subsection 2.* CO<sub>2</sub> emission permits can – on request from a union of electricity producers – be allocated to such union. The obligation then lies upon the union to distribute the emission permits among the individual electricity producers. All obligations upon electricity producers under the Act then lie upon the union.

*Subsection 3.* CO<sub>2</sub> emission permits under subsection 1 and 2 are allocated on the basis of the electricity producer's or union of electricity producers' CO<sub>2</sub> emission in the period 1994-1998, taking into consideration new electricity production plants approved before the coming into force of this Act, and after consulting the affected electricity producers.

*Subsection 4.* The Minister of Environment and Energy can issue specific guidelines on the distribution of CO<sub>2</sub> emission permits under subsection 1 and 2.

**Section 4.** An electricity producer, which in the previous year had a total CO<sub>2</sub> emission from electricity production of less than 100.000 tonnes, and whose CO<sub>2</sub> emission exclusively originated from combined heat and power plants, laid out to and operated with the primary purpose of meeting a heat demand, and where the electricity production is directly linked to and derived from the heat production, is exempted from the provisions in sections 3 and 5 and must not pay the penalty tax under section 13.

**Section 5.** The Minister of Environment and Energy annually, no later than July 1, allocates a CO<sub>2</sub> saving limit to the individual electricity producers.

*Subsection 2.* The CO<sub>2</sub> saving limit can - on request from a union of electricity producers – alternatively be allocated to the union. The obligation then lies upon the union to distribute the

CO<sub>2</sub> saving limit among the individual electricity producers. All obligations upon electricity producers under the Act then lie upon the union.

*Subsection 3.* The CO<sub>2</sub> saving limit under subsection 1 and 2 is set as the share of 20 mill. tonnes of CO<sub>2</sub> corresponding to the electricity producer's emission permit's share of the total quota under section 2, subsection 1.

*Subsection 4.* If the CO<sub>2</sub> emission from an electricity producer or union of electricity producers in any year is lower than the CO<sub>2</sub> saving limit for this year, the difference can be banked and used in following years.

**Section 6.** The CO<sub>2</sub> emission permits under section 3, subsection 1 and 2, and banked CO<sub>2</sub> under section 5, subsection 4, are tradable.

*Subsection 2.* Buyer as well as seller must notify the Minister of Environment and Energy on any trade of CO<sub>2</sub>-emission permits and banked CO<sub>2</sub>, including the trade volume and price. Notification must take place no later than 4 weeks after the trade.

**Section 7.** The Minister of Environment and Energy can - after submission to the relevant standing Folketing committee, increase the total CO<sub>2</sub> quota under section 2, subsection 1, and the CO<sub>2</sub> emission permits under section 3, subsection 1 and 2, if

- 1) a sudden or unexpected increase in energy demand occurs, or
- 2) certain fuels or power plants are no longer available to the same extent as before, and this creates serious technical difficulties in compliance with the CO<sub>2</sub> quotas and the CO<sub>2</sub> emission permits.

**Section 8.** Electricity producers under this Act, must annually, no later than the March 31, report the previous year's electricity production, useful heat production, fuel consumption and CO<sub>2</sub> emission for every electricity producing plant unit to the Minister of Environment and Energy.

*Subsection 2.* In this Act, the fuel consumption for electricity on an electricity producing plant is defined as the total fuel consumption less fuel consumption for heat production, if any.

*Subsection 3.* In this Act, the fuel consumption for heat production is defined as the useful heat production divided by a heat efficiency of 200 percent; note, however, section 2, subsection 3.

*Subsection 4.* To determine the CO<sub>2</sub> content of individual fuels, the conversion factors in appendix 1 are used.

*Subsection 5.* If an electricity producer can provide adequate documentation for a CO<sub>2</sub> conversion factor in a specific fuel used by the producer, that deviates from the conversion factors in appendix 1, this conversion factor may be used.

*Subsection 6.* The Minister of Environment and Energy can issue specific guidelines on reporting under subsection 1 and on the required documentation under subsection 5.

**Section 9.** On the basis of reporting under section 8, subsection 1, the Minister of Environment and Energy annually, no later than the July 1, decides on the CO<sub>2</sub> emission for the previous year of electricity producers under this Act, taking into account sold or purchased CO<sub>2</sub> emission permits and banked CO<sub>2</sub>, if any, and on banked CO<sub>2</sub>, if any.

**Section 10.** The System Operator shall produce an annual report on CO<sub>2</sub> emissions from electricity production in his area. This report, to be submitted to the Minister of Environment and Energy no later than May 31 the following year, must also include information on planned and implemented CO<sub>2</sub> reduction measures.

*Subsection 2.* Electricity producers have an obligation to submit any information necessary for the System Operator to undertake reporting under subsection 1.

**Section 11.** The Minister of Environment and Energy can issue specific guidelines on payment to cover administration costs incurred as a consequence of sections 3 and 5, trading under section 6 and the making up of emissions under section 9.

**Section 12.** The Minister of Environment and Energy can issue specific guidelines on participation of Danish electricity producers in international CO<sub>2</sub> emission trading.

*Subsection 2.* The Minister of Environment and Energy can issue specific guidelines on transfer of CO<sub>2</sub> from Denmark's CO<sub>2</sub> accounting to another country having a greenhouse gas target - or vice versa - providing the receiving country includes the same amount of CO<sub>2</sub> in its national CO<sub>2</sub> accounting.

*Subsection 3.* The Minister of Environment and Energy can issue specific guidelines on increased CO<sub>2</sub> emission permits under section 3, subsection 1 and 2, as a consequence of implementing projects in a country not having a greenhouse gas target.

**Section 13.** If the decision under section 9 establishes, that an electricity producer or a union of electricity producers has exceeded the CO<sub>2</sub> emission permit under section 3, subsection 1 and 2, he is liable to pay a penalty tax to the State. The penalty tax is set at 40 kroner per tonne of excess CO<sub>2</sub> emission.

*Subsection 2.* The proceeds from the penalty tax under subsection 1 shall be used for energy saving purposes.

*Subsection 3.* The Minister of Environment and Energy can issue specific guidelines on levying of penalty tax, including rules on fees for late payment.

**Section 14.** The Minister of Environment and Energy has - at any time, against proper proof of identity and without Court order - the right to inspect electricity producers under this Act for the purpose of control of information, which the electricity producer is obliged to submit under this Act.

*Subsection 2.* The Police provide assistance in this respect. The Minister of Environment and Energy can - after consulting the Minister of Justice – issue specific guidelines on this.

*Subsection 3.* During inspection under subsection 1, the responsible and employed persons must provide adequate guidance and assistance to the Minister of Environment and Energy.

**Section 15.** Unless a more severe penalty is mandated under another Act, he who deliberately or with gross negligence submits false or misleading information, withholds information or refrains from submitting information under section 6, subsection 2, section 8, subsection 1 and section 10, subsection 2, is liable to a fine.

*Subsection 2.* In guidelines issued by the Minister of Environment and Energy under this Act, a penalty fine can be laid down for those, who deliberately or with gross negligence violate the guideline provisions.

*Subsection 3.* He who commits one of the violations in subsection 1 and 2 with intention to evade tax, is penalised with fine, mitigated imprisonment or imprisonment of up to 2 years.

*Subsection 4.* Companies etc. (legal entities) can be held responsible under chapter 5 in the Criminal Code.

**Section 16.** The Minister of Environment and Energy can issue specific guidelines on the right to complain over decisions by the Minister of Environment and Energy under this Act or guidelines issued under this Act.

*Subsection 2.* The Minister of Environment and Energy can authorise an agency under the ministry or an equivalent institution to execute the powers given to the Minister in this Act.

*Subsection 3.* The Minister of Environment and Energy can issue specific guidelines, determining that decisions by an agency under the ministry or an equivalent institution, cf. subsection 2, shall not be brought before the Minister of Environment and Energy.

**Section 17.** This Act does not apply to the Faroe Islands and Greenland.

**Section 18.** The Minister of Environment and Energy determines the timing of the coming into force of this Act. The Minister can decide that parts of the Act are coming into force before other parts of the Act.

*Subsection 2.* In the year, the Act comes into force, cf. subsection 1, the CO<sub>2</sub> emission permits under section 3, subsection 1 and 2, and the CO<sub>2</sub> saving limit under section 5, subsection 1 and 2, must be allocated no later than the December 31.

*Given on Christiansborg Castle, June 2, 1999*

Under Our Royal Hand and Seal

Margrethe R. / Svend Auken

## Appendix 1

### CO<sub>2</sub> emission factors for different fuels, referring to lower calorific value

Fuel	CO <sub>2</sub> kg/GJ
Coal	95,0
Refinery gas	56,9
LPG	65,0
LVN (Light Virgin Nafta)	65,0
Motor gasoline	73,0
Aviation gasoline	73,0
Kerosene	72,0
Jet A-1	72,0
Gas/diesel oil	74,0
Fuel oil	78,0
Orimulsion <sup>1)</sup>	80,0
Petroleum coke	102,0
Spent lubricants	78,0
Natural gas	56,9
Coke	105,0
Lignite	97,0
Town gas	56,9
Straw	0,0
Woodchips	0,0
Firewood	0,0
Wood pellets	0,0
Wood waste	0,0
Biogas	0,0
Fish oil	0,0
Waste	0,0

1) I the period 1994-1998, the CO<sub>2</sub> emission factor for orimulsion is the same as for coal.