

EURACOAL Position Paper

on the adoption of heat benchmarks for the EU Emissions Trading Scheme from 2013 to 2020

During the third trading period of emission allowances under the Emissions Trading Scheme (ETS) Directive, from 2013 to 2020, allowances will be auctioned, for the most part, to enterprises included in the scheme. Industrial plants will receive partial free allocations. All sectors with potential for carbon leakage will receive 100% free allocations. Sectors with no risk of carbon leakage, including heating and cooling plants, will receive 80% of their allocations in 2013 free of charge. This percentage will be decreased annually, to 30% by 2020. These free allocations during the third trading period will be based on product-specific benchmarks for industrial plants, or heat benchmarks for heat-generating plants.

For heat-generating plants, a common heat benchmark based on natural gas is rumoured to be under consideration by the European Commission, with a value of 217 kgCO₂/MWh.¹ Such a benchmark could not be reached by plants using coal or coal products (*e.g.* lignite briquettes).

The danger of establishing a common heat benchmark based on natural gas is that heat-generating plants using coal or coal products, despite a partial free allocation of certificates, would be under-allocated compared to gas-fired installations, and therefore be at a distinct competitive disadvantage during the third trading period. As a result, consumers connected to district heating systems would be faced with higher costs and would likely switch to individual heating boilers that are outside the scope of the ETS Directive. In many cases, these would be small coal-fired boilers or room heaters. The efficiency loss of such an outcome is obvious, and it would be accompanied by a rise in pollutant emissions since smaller individual heating appliances are not subject to the same pollution control measures as district heating and combined heat and power (CHP) plants. Many EU countries enjoy the clear efficiency benefits of CHP, *e.g.* Czech Republic, Denmark, Finland, Germany, Poland and other Eastern European and Scandinavian countries. Indeed, the EU promotes the greater use of CHP. It would therefore be contrary to EU energy policy if the ETS was implemented in such a way as to disadvantage coal-fired plants that supply heat economically and efficiently.

¹ For natural gas with a calorific value of 50 MJ/kg, this value implies a heating plant efficiency of 91%.

From an energy security perspective, the primary energy mix for the heat sector included in the Emissions Trading Scheme would further shift towards natural gas, much of which would have to be imported. A common heat benchmark would act against the advantages of coal, i.e. security of supply and affordable prices: it would increase price and supply risks in the field of heat production. In addition, displacing indigenous sources of primary energy on the heat market would reduce the overall economic value added in the European Union. Frustratingly, this economic cost would bring with it no environmental benefit since CO₂ reduction targets are set in the ETS Directive and will be achieved regardless of implementation details such as heat benchmarks.

In legal terms, different heat benchmarks should be required, depending on the fuels employed. Although the ETS Directive 2009/29/EC foresees the calculation of benchmarks for *products*, not for *inputs* to production processes (Art. 10a, §1, subpara. 4), the Directive expressly foresees the free allocation of certificates for the supply of heat (and cooling) from district heating and high-efficiency CHP plants for “economically justifiable demand” (Art. 10a, §4). This implies that heat benchmarks must distinguish between fuel types, since a common benchmark would not reflect the “economically justifiable demand” of heating or cooling plants using coal.

In the opinion of EURACOAL, the European Union should not discriminate against sources of primary energy by means of a common benchmark based on natural gas. When adopting benchmarks for heating and cooling plants, the European Union must distinguish between different fuels, notably between competitive solid fuels and other fuels. EURACOAL calls on the European Commission and Member States to agree a particular benchmark for coal-fired plants of 400 kgCO₂/MWh,² this being based on IPCC default emission factors for coal.

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Reference

IPCC (2006), *2006 IPCC Guidelines for National Greenhouse Gas Inventories, prepared by the National Greenhouse Gas Inventories Programme*, H. S. Eggleston, L. Buendia, K. Miwa, T. Ngara and K. Tanabe (eds.), Institute for Global Environmental Strategies, Hayama, Japan.

² Default IPCC emission factors for stationary combustion in the energy industries are 94.6 kgCO₂/GJ for bituminous coal and 101.0 kgCO₂/GJ for lignite (IPCC, 2006). If a 98% oxidation factor is assumed, and an overall plant efficiency of 85%, then the corresponding emissions per unit of heat supplied are 393 kgCO₂/MWh for bituminous coal and 419 kgCO₂/MWh for lignite.