

Coal Combustion Products in Europe - Trends and Developments -

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ABSTRACT

In 2004, more than 95 million of Coal Combustion Products (CCPs) were produced in the European Union. The CCPs include combustion residues such as boiler slag, bottom ash and fly ash from different types of boilers as well as desulphurization products such as spray dry absorption product and FGD gypsum. The utilisation rate of the specific CCPs is different due to the different fields of application and the history in construction in different countries. For fly ash the utilisation rate in the construction industry increased over the last years to 50 % in 2004, that for FGD gypsum to 41 %.

The utilisation of CCPs in Europe is being influenced by environmental legislation and by the process of liberalisation of the European electricity market. The revised large Combustion Plant Directive (LCPD) introduces more stringent emission limit values for coal-fired power stations from January 2008. Due to this an increase of the amount of CCPs from flue gas desulphurisation is expected.

New European regulations will also impact the utilisation of CCPs. E.g., the revised European Standard EN 450-1 "Fly Ash for Concrete - Definitions", specifications and conformity criteria" and EN 450-2 "Conformity evaluation" have been published last year by most of the National Standardization Bodies in Europe. The standards include for the first time three categories of LOI, fly ash from co-combustion of biomass and waste, and processed fly ash. Furthermore, new standards for fly ash in road construction in bound and unbound mixtures were introduced. To meet the requirements of the standards and to serve customers with products of special properties processing plants have been installed.

The paper will deal with trends and developments of CCP production and utilisation in Europe.

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