

Trends of Coal Ash Production in Brazil

Geraldo Mario Rohde¹ and Oleg Zwonok¹

¹ Fundação de Ciência e Tecnologia - CIENTEC, Rua Washington Luiz, 675, Porto Alegre-RS 90010-460 Brazil

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ABSTRACT

Any attempt to make an approach of coal ashes uses in Brazil should be put in a context that takes into account that this argumentation must start in Rio Grande do Sul and Santa Catarina States, where the majority of coal-fired power plants are located. Only Rio Grande do Sul State alone has 89 percent (28 billion tonnes) of all Brazilian coal reserves which are about 32.35 billion tones (4×10^9 tEP). The higher coal ash production potential of Brazil is nowadays situated at 4 million t/year.

The existing coal-fired energy park in Brazil, that reaches 1400 MW, is planned to grow more than 2000 MW with the entry into operation of more five plants: Candiota III Plant (350 MW), Seival Plant (350 MW), the CTSUL Plant (650 MW), the finishing of Jacuí I Plant (350 MW) and the USITESC Plant (440 MW). When in full operation, this new scenario will raise the coal production to the triple of the current quantity, that is, almost 12 million t/year.

The "**Fundação de Ciência e Tecnologia**" – **CIENTEC** (**Science and Technology Foundation**) has been working for two decades on technical and environmental aspects of coal ashes uses and recycling. In fact, many environmentally sound technologies were developed: CICASOL (base pavement), CIPECAL (masonry blocks with bottom ash and lime) and CINCAL (masonry blocks with fly ash and lime).

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