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FBC UTILISATION PROSPECTS IN DECENTRALISED COGENERATION UNITS IN CAUCASUS REGION COUNTRIES

ABSTRACT

Great differences are encountered among Caucasus region countries with respect to energy resources reserves and economic conditions. Thermal power plants consist of obsolete and inefficient units, while the Soviet-type large heating systems in the area collapsed after 1992 and their reconstruction is considered uneconomic. Renovation needs of the power and heat sector, and the potential of Fluidised Bed Combustion implementations in decentralised cogeneration units were investigated, since operating oil and gas power plants exhibit high fuel consumption, low efficiency and poor environmental performance. Results showed significant prospects of Fluidised Bed Combustion utilisation in decentralised cogeneration units in the Caucasus region heat and power sector. Their introduction constitutes an economically attractive way to cover power and heat demands and promotes utilisation of domestic energy resources in all of three countries, provided that financial difficulties could be confronted.

KEYWORDS

[fluidized bed combustion](#), [co-generation](#), [fossil fuels](#), [boilers](#), [waste](#)

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