



## **SIAM WHITE CEMENT COMPANY LIMITED**

### **Installation of High Efficiency Fan at Cement Mill Department**

#### **SUMMARY OF THE OPTION**

Siam White Cement Co., Ltd (SWCC) is located the Saraburi, Thailand, and is the largest white cement producer in Thailand with a production capacity of 160,000 tons of white cement. SWCC's Team found that the electrical energy consumption at Cement Mill 1 was excessive due to the high separator load (i.e. kg cement/m<sup>3</sup> air). The airflow rate can be increased by installing a new efficient circulating fan, which will reduce the separator load and electricity consumption. Three new efficient circulating fans (35 kW, 35 kW and 70 kW) were selected to replace the existing circulating fans at Cement Mill 1.

At time of writing of this case study, this option was still being implemented. The implementation requires US\$ 30,000 investment and expected annual savings are US\$ 25,000 with a 1.2 year payback period. Expected electricity savings are 427,300 kWh (almost 10%) per year, which is equivalent to 264 tons CO<sub>2</sub> emission reductions per year. The installation of efficient circulating fans could also increase the cement production rate by >14%.

#### **KEY WORDS**

Cement, Thailand, Fuels and Combustion, Cement Mill

#### **FOR MORE INFORMATION**

##### ***GERIAP National Focal Point for Thailand***

Ms. Peesamai Jenvanitpanjakul  
Director of Environmental, Ecological and Energy Department  
Thailand Institute of Scientific and Technological Research  
196 Phahonyothin Rd., Chatuchak, Bangkok 10900, Thailand  
Tel: + 66 2 5791121-30 ext. 2102 / Fax: + 66 2 5796517  
E-mail: [peesamai@tistr.or.th](mailto:peesamai@tistr.or.th)  
Website: [www.tistr.or.th](http://www.tistr.or.th)

##### ***GERIAP Company in Thailand***

Mr. Syamrath Suthanukul, Managing Director  
Siam White Cement Company Limited  
28 Moo 4, Kaowong, phraputhabat,  
Saraburi 18120, Thailand  
Tel: + 66 036 351200 / Fax: + 66 036 351219  
E-mail: [syamrats@cementahi.co.th](mailto:syamrats@cementahi.co.th)

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