

# Press Release



New Energy and Industrial Technology  
Development Organization

<http://www.nedo.go.jp/english/index.html.jp>

October 26, 2011

## **Contributing to Energy Conservation in the Cement Industry Through Waste Heat Recovery Power Generation –Joint Demonstration Project with the Indonesian Government–**

A completion ceremony was held on October 26, 2011 in Padang, West Sumatra, marking the completion of the installation of a system for “The Model Project for Waste Heat Recovery Power Generation in the Cement Industry”, a joint project between the New Energy and Industrial Technology Development Organization (NEDO) and the Indonesian Government.

The waste heat recovery power generation system, which has been additionally installed at PT. Semen Padang for this project, generates electricity by using steam generated from the recovery of waste heat. The electricity is subsequently used to operate the cement production processes, thereby decreasing electricity demand at the cement plant as well as reducing GHG emissions.

In addition to demonstrating the effectiveness of the system, this project aims to promote the dissemination of the system throughout Indonesia.



Additional SP boiler

## 1. Project Overview

Although Indonesia is an oil-producing country, it has been a net-importer of oil since 2004. The Indonesian government therefore enacted a new energy policy that aims to reduce its dependence on oil imports and promotes energy conservation. Furthermore, as Indonesia faces power shortages due to increasing demand, electricity-intensive industries are required to develop ways to become energy self-sufficient as a countermeasure to blackouts and voltage drops.

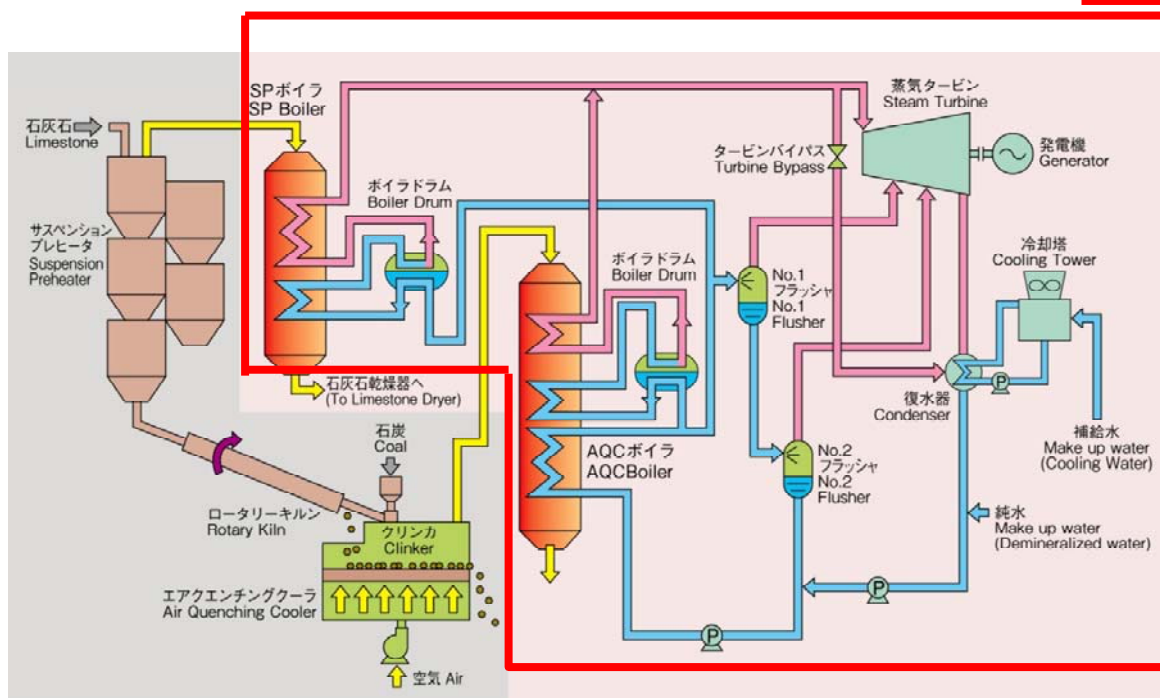
In an effort to improve the situation, under this project, a system including a waste heat recovery boiler has been installed in clinker production facilities (Indarung V: 8,500 ton/day) at PT. Semen Padang in Padang, West Sumatra. In this system, thermal energy generated through the cement pyroprocess is recovered to generate steam. A steam turbine generator converts the high-temperature steam into electricity, which is then used in cement production, thereby contributing to energy conservation and reducing CO<sub>2</sub> emissions. The effectiveness of the system will be demonstrated during the demonstration phase.

The project aims to promote specific technologies that save energy and reduce environmental burdens in the cement industry based on the results of the project.

Main components of the system:

1. Suspension preheater (SP) boiler
2. Air quenching cooler (AQC) boiler
3. Steam turbine
4. Generator
5. Instrumentation control system

System added  
in this project



## **2. Future Outlook**

In addition to the evaluation and verification of data that will be collected during the demonstration phase, this project aims to promote the dissemination of the system to Indonesia's cement industry through promotion seminars and opening the facilities to the public.

## **3. Contact Persons**

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