## **Technical Information Sheet**

1. Name of technology	Heat recovery system using biomass fluidized bed furnace (Biomass Boiler System)
2. Type of technology	This technology converts biomass to thermal energy and recycle it as steam or hot water.
3. Description of technology	
Objective, application, characteristics, delivery record, and price of technology	(Objective and application of the technology] This technology, using a fluidized bed combustion furnace that uses moving hot silica sand, stably burns sludge and other biomass with high water content that cannot easily be recycled and efficiently converts the biomass to thermal energy, which can be used to produce steam and hot water in combination with waste heat boilers. [Characteristics of the technology] To form a stable flow at high temperatures, the furnace is filled with silica sand and air is fed to the lower bed to cause the sand to flow rapidly. The material put in the furnace is spread by the moving silica sand, causing water to evaporate instantly. The material is exposed to high-temperature air and burned. This thermal energy is converted to steam and hot water by a waste water boiler. The furnace has no driving parts, is robust, and does not malfunction. <b>[Representative models and specifications]</b> One furnace can treat up to about 5 tons per hour. Every furnace is designed individually and larger furnaces are available. <b>[Delivery record]</b> Incinerator: Night soil sludge treatment: 40 places Biomass boiler: 3 places <b>[Price and other inquiries]</b> See below.
4. Classification of	
(1) Applicable fields	Recycling Other environment protection technology
(2) Target waste	Other (coffee grounds, wood chips, organic sludge, chicken droppings, and livestock excretion)
(3) Services provided	Plant construction, Sales of machinery and equipment
5. Countries to which this technology can be provided	China, Southeast Asia
6. Keywords	Biomass, sludge, recycling, $CO_2$ emission, palm coconut husk, thermal recovery
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