

Published on 25/06/2015

## Eco Waste Management, Satarem to set up waste-to-energy plant



ECO WASTE Management Co has set up a joint venture with Satarem (Thailand) Co to invest Bt850 million in its first waste-to-energy plant in Tha Rong Chang of Surat Thani's Phunphin district.

Via the JV, the company plans to invest about Bt11 billion to open six WTE plants over three years, with five in the South and one in the North.

Dheerasak Suwannayos, chief executive officer of Eco Waste Management, which is a specialist in finance and large-scale infrastructure analysis, said yesterday that when the Surat Thani plant is completed at the end of 2017 and its operation starts in the first quarter of 2018, it would have a daily capacity of 500 tonnes of waste and hourly capacity of 10 megawatts, which would be sold to the Provincial Electricity Authority.

The plant is expected to see a return on investment in about seven years and an internal rate of return of 16.5 per cent.

The JV will be about 50 per cent held by Eco Waste Management, 25 per cent by its technical partner Satarem (Thailand), a Switzerland-based company with strong experience and expertise in waste-to-energy management and solutions, and 25 per cent by a foreign energy fund.

For the first time in Thailand, the advanced mechanical moving-grate waste-disposal technology from Switzerland will be used to solve waste-elimination problems effectively and properly. It will also reduce pollution and environmental challenges.

This innovative technology allows a waste-burning process that completely eliminates the need to separate the wastes manually, thus reducing the risks of pollution and the contracting and spreading of commutable and infectious diseases.

The WTE project will comply with the plan for management of municipal solid waste and hazardous waste granted by the National Council for Peace and Order, which focuses on the disposal of accumulated waste residues in critical areas by reducing and sorting waste at its source. Hybrid technologies will be used in the conversion into energy or into most mutual benefits.

#### Common goal

Eco Waste Management was founded by a group of experts from various industries who shared the goal of providing effective and proper solutions for waste disposal and pollution problems. Highly advanced technology and know-how are required to tackle this challenge.

Normally, all WTE plants serve a waste-management radius of about 50 kilometres so that investing in them makes sense in terms of transport costs.

There are more than 100 locations throughout the country that generates more than 500 tonnes of waste per day on average, 147 locations that produce 300-500 tonnes and 200 points that produce less than 100 tonnes.

Torsak Chotimongkol, chief executive of Satarem (Thailand), said his company had experience and expertise in waste-to-energy management solutions. The key to reducing pollution is the incinerator, a technology that is being continuously developed based on a cement clinker plant with absolute process engineering control.

Through the mechanical moving-grate incinerator, thermal stability can be controlled for the most efficient conversion of heat to electricity. By regulating process waste, its value is under European Union standards, especially for dioxins. No sorting system is required prior to dumping in the incinerator.

Since people do not touch the municipal solid waste, infection and reproduction of pathogens are minimised.

"The types of waste differ in each region because of varying degrees of heat, so Satarem created and implemented tailor-made design and technology in building the plant to suit the types of waste in that particular region.

"The incinerator has constantly gone through an improvement process via use of mature technology and numerous freezable technologies that are the results of research in laboratories, which are not yet applicable.

"Satarem is equipped with know-how, expertise and reliable technologies that can be used to effectively tackle the waste-disposal process," he said.

Waste is considered to be the country's long-time challenge and so far standards are lacking in disposal procedures, which negatively affects the population both directly and indirectly. The management teams of Eco Waste Management and Satarem share the vision and business direction. They are ready to work together and are fully dedicated to taking the waste-management industry to the next level in Thailand, Torsak said.

