Thailand needs to promote Energy-from-Waste

The Ministry of Energy targets to promote energy-from-waste production to 160 megawatts of power and 100 kilotons of oil equivalent (ktoe) of thermal by 2021.

The 10-year (2012-2021) Alternative Energy Development Plan, aiming to boost portion of alternative energy usage to 25% of overall usage, has targeted to boost energy-from-waste production to 160 megawatts of power and 100 ktoe of thermal from 44.324 megawatts at present. Of the current capacity, 22.23 megawatts are produced from gas at landfill waste, 20.06 megawatts from incineration and gasification, 2.034 megawatts from biogas generated through waste fermentation. Of the current 78.59 ktoe thermal capacity, 1.28 ktoe were from the replacement of cooking gas with biogas while 77.31 ktoe were from Refuse-Derived Fuel, or RDF. Moreover, wastes were also used as fuel at cement plant as substitution to coal.

To promote energy-from-waste production, the government has run campaigns to promote community participation in waste to energy conversion, waste sorting activities, and share knowledge with municipals, communities, the general public, and students to enhance understanding of waste management for environment and energy purposes. It has also introduced measures to promote energy-from-waste production including the adder of Bt3.50/kWh for power produced from incineration and gasification, the adder of Bt2.50/kWh for power produced from gas at landfill waste and biogas from waste fermentation. Moreover, it has also established ESCO Fund to promote energy conservation and alternative energy investment by providing investment assistance to potential operators who lack investment factors. Operators will also be eligible for investment incentives from
the Board of Investment, with waiver of machinery import tariff and 8-year exemption of corporate tax and another five-year of 50% reduction in corporate tax bill for alternative energy project.

To motivate energy-from-waste production, a Bt4.54 million budget has been allotted in 2014 to study and improve data on energy-from-waste potential. Without sufficient relevant data, potential operators lack credible information to back their investment decision. This project aims to collect data on waste generation in Thailand and analyze potential area for energy-from-waste production. Community waste sources will be categorized into those with less than 50 tons/day of waste and those with more, possessing development potential for the energy-from-waste production. The study will also gather energy-from-waste production data at present and improve data base to make them more convenience to use so that potential operators can use them in their decision-making process.