



# CR-Enviro Newsletter

Vol 1.0

ENGINEERING SOLUTIONS FOR OUR ENVIRONMENT, INDUSTRY AND COMMUNITY

NEWSLETTER, JUNE 2016



## Waste to Energy – How we can help to make zero waste on Earth and producing electricity for people?

Population growth and economic development in Indonesia have increased the production of municipal solid waste (MSW) in many big cities, causing sanitary problems. The (MSW) disposal problem can be solved by applying an appropriate technology that can reduce the volume of the waste effectively and efficiently. Waste-to-Energy (WTE), or Energy-from-Waste (EFW), is one of the most effective and efficient technologies for reducing the waste volume. Energy recovered from the waste can be used for thermal or electricity generation. Incineration is a waste treatment process that involves the combustion of organic substances contained in waste materials. Incineration and other high-temperature waste treatment systems are described as "thermal treatment". Incineration of waste materials converts the waste into ash, flue gas, and heat. The ash is mostly formed by the inorganic constituents of the waste, and may take the form of solid lumps or particulates carried by the flue gas. The flue gases must be cleaned of gaseous and particulate pollutants before they are dispersed into the atmosphere. In some cases, the heat generated by incineration can be used to generate electric power. Waste can be a source of fuel in incinerators and thermal heat energy generated from the combustion is used to produce steam and drive a turbine to generate green electricity.

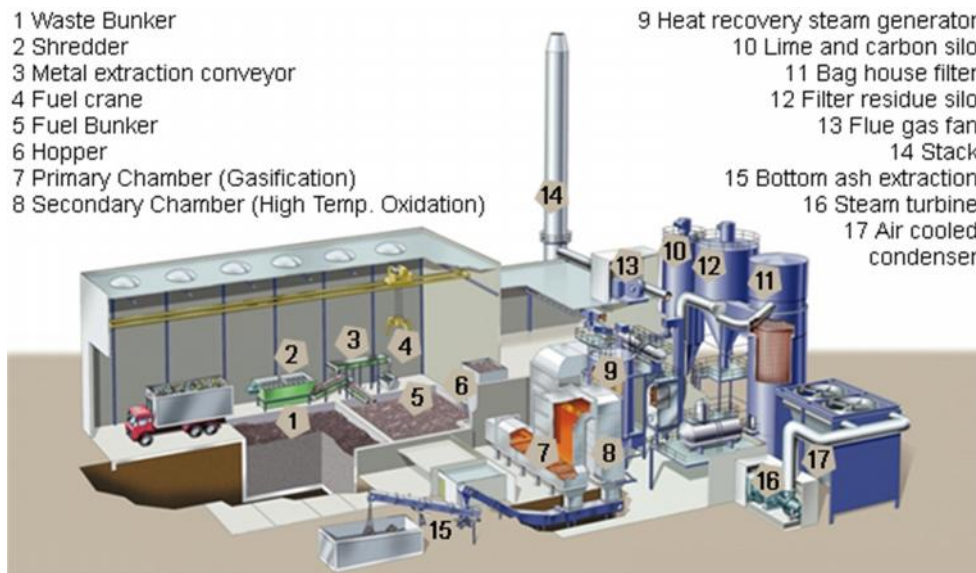


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The heat produced by an incinerator can be used to generate steam which may then be used to drive a turbine in order to produce electricity. The typical amount of net energy that can be produced per tonne municipal waste is about 2/3 MWh of electricity and 2 MWh of district heating. Thus, incinerating about 600 metric tons (660 short tons) per day of waste will produce about 400 MWh of electrical energy per day (17 MW of electrical power continuously for 24 hours) and 1200 MWh of district heating energy each day.



Waste to Energy is a clean energy and best solution for zero waste concept. Government has issued some regulations to make the WTE business more conducive. It's time to move from fossil energy to renewable energy particularly Waste to Energy.

Indonesia is the right place to develop business of Waste to Energy based power plant due to the availability of huge of Waste to Energy potential and high growth demand of electricity. More information about Waste to Energy and its implementation and reference could be obtained via our website [www.cr-enviro.com/our-product/waste-to-energy/](http://www.cr-enviro.com/our-product/waste-to-energy/)



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## Electrocoagulation Case Study.



At Centra Rekayasa Enviro, we believe that technology will develop continuously and we shall do whatever we need to make sure that our technology will meet the latest requirement by the market. The same things we do for our waste water treatment plant, we used to utilize traditional way such as chemical, biological, physical and other old fashioned way to treat our customer waste water. Since 2006 we develop the electrocoagulation system to adopt with the latest technology demand for waste water treatment plant. The result now we are one of the leader in the electrocoagulation system fabrication in Indonesia which provides economic and efficient way to treat waste water to meet government regulation parameter.

Electrocoagulation (EC), is a rapidly growing area of wastewater treatment, less well known as radio frequency diathermy or short wave electrolysis, is a technique used for wash water treatment, wastewater treatment, industrial processed water, and medical treatment. Electricity-based electrocoagulation technology removes contaminants that are generally more difficult to remove by filtration or chemical treatment systems, such as emulsified oil, total petroleum hydrocarbons, refractory organics, suspended solids, and heavy metals.

### Electrocoagulation Capabilities:

- Removes heavy metals as oxides that pass TCLP
- Removes suspended and colloidal solids
- Breaks oil emulsions in water
- Removes fats, oil, and grease
- Removes complex organics
- Destroys & removes bacteria, viruses & cysts

### Electrocoagulation Application in Industry:

- Hazardous Waste Plant
- Oil and Gas/ Petrochemical
- Automotive Industries
- Manufacturing Industries
- Etc

For more information about Electrocoagulation implementation and reference could be obtained via our website [www.cr-enviro.com](http://www.cr-enviro.com) for case study application please visit [www.cr-enviro.com/case-study/](http://www.cr-enviro.com/case-study/)



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## We Are Moving!

CR-Enviro is all set to relocate to a brand new workshop space. Owing the continued support and good will of our valuable client we are moving and expanding our service offerings as well as our operational capabilities by moving to a brand new workshop facility.

This expansion is to facilitate consistent growth and to support our continuous endeavours to improve your experience with us. Our new workshop will house a state of the engineering fabrication facility that will suite to provide our customers a real time feel of our services.

Our new workshop address:

Kawasan Industri De Prima Terra Blok E1-11,  
Jalan Raya Sapan, Bojongsong - Bandung – Indonesia  
40614

This is just one of many exciting developments. Call us to find out more.



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Dear valued Customer/Vendor,

As of March 1<sup>st</sup> 2016, our company has fully implemented the Enterprise Resource Planning (ERP) System, all of the submitted document shall be borne through the ERP system, hence we do not provide any physical signature and stamp for the document, all our document are documented at our ERP system.

Should you need any confirmation for the submitted document, please do not hesitate to contact us at [info@cr-enviro.com](mailto:info@cr-enviro.com) for further confirmation and clarification of the digitally signed and stamped document received by you or your associate.

Thank you for your kind attention and we look forward to be of service with you.

Sincerely yours,  
The Management

NB: More information about our Digital Signature sytem, please visit [www.cr-enviro.com/about-us/management/digital-signature-of-erp-system-at-pt-centra-rekayasa-enviro/](http://www.cr-enviro.com/about-us/management/digital-signature-of-erp-system-at-pt-centra-rekayasa-enviro/) or simply scan the below QR code using your smart phone:

