

# DTE Green Waste to Fuel<sup>™</sup> for Municipalities

## THE CHALLENGE

Most mass burn, incineration and legacy waste-to-energy systems have large smoke stacks that release pollutants into our air, water and our food chain. They still require landfills for disposal of most of the end-products of their energy production. It is an impossible situation with no end in sight.

Incineration produces pollutants which are detrimental to human health and well being. Incinerator ash becomes dispersed throughout the environment, with potential negative impact to human health. Even the most modern designs for incinerators release toxic metals, dioxins, furans and acid gases. Their toxic ash and residues require substantial landfill capacity. Incineration and landfills are not sustainable solutions.

# A SUSTAINABLE SOLUTION

Delta Thermo Energy offers a sustainable and clean waste processing solutions for your community. Our patent pending technology reduces all emissions by orders of magnitude from a typical waste to energy incinerator and produces clean electric energy for your community.

Incinerators burn trash - we do not. We process trash into a fuel that burns with near zero emissions.

Delta Thermo Energy Labs

Delta Thermo Green Waste to Fuel uses a process called DTE <u>Hydrothermal Decomposition</u>. This remarkable clean process can now enable your community to process municipal solid waste and sewage sludge without the toxic byproducts of legacy waste processing solutions.

#### DELTA THERMO ENERGY FACILITIES IN YOUR COMMUNITY

- The opportunities to benefit from Delta Thermo Energy plants are considerable. Delta Thermo Energy will design, engineer, build, operate and maintain the facility.
- We will employ qualified and properly trained personnel and will maintain adequate numbers of personnel to properly operate the facility over the facility life.
- We bring good green jobs into the community in support of plant operations.

#### PROTECT THE ENVIRONMENT WITH A SUSTAINABLE SOLUTION FOR FUTURE GENERATIONS

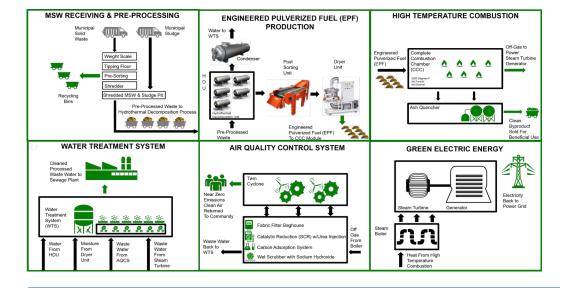
- Protect the environment and process all of your waste locally, in a clean, green and efficient facility
- Sustainable means that we can meet the needs of our current generation without compromising the ability of future generations.
- Sustainable green energy must be renewable, produced on an efficient basis, and not harm or pollute the environment.

Ready to find out more about DTE Green Waste to Fuel? Contact us via info@deltathermo.com

# DTE GREEN WASTE TO FUEL™ TO ENERGY

PROTECT OUR ENVIRONMENT

SUSTAINABLE GREEN ENERGY



### DIFFERENTIATION

Delta Thermo Energy systems do not burn trash - we convert it to a clean burning fuel. Our sustainable DTE Green Waste to Fuel process is environmentally safe for any county or municipality. We produce virtually zero waste, and Near Zero Emissions throughout the entire DTE Green Waste to Fuel process.

Processing the MSW and sewage sludge in our process reduces its mass and changes its chemical characteristics to produce a valuable commodity. We produce fuel which burns hotter and cleaner than coal. An analysis of our Engineered Pulverized Fuel (EPF) done by an independent engineering firm in support of a municipality's due diligence concluded in a summary written report that "EPF is properly classified as a fuel product rather than a solid waste."

EPF has a meaningful heating value for energy recover that is superior to coal. We contain far less pollutant precursors and carbon derived from biomass rather than fossil sources. We burn this fuel at temperatures close to 2000 degrees Fahrenheit. At this temperature using our clean EPF fuel we produce no Furans and no Dioxins. Permits for facilities stipulate that maximum limit for pollutants allowable by the various state and federal environmental protection agencies. Our numbers are usually several orders of magnitude lower than any incinerator. Our near Zero Emissions and clean, green electric energy are the only output from our DTE facility.

#### INTELLECTUAL PROPERTY

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#### KEY STEPS IN DTE GREEN WASTE TO FUEL™

- MSW is received, sorted and pre-processed.
- The MSW is converted to Engineered Pulverized Fuel (EPF) through our patented and patent pending process.
- The EPF is burned at very high temperatures to produce heat to drive the steam turbine.
- Wastewater is treated at every step in the process and returned to the public sewage processing plant.
- An air quality and control system helps produce our near zero emissions.
- Clean, green electric energy is returned to the community in this self sustaining cycle.

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