

What Becomes of 1 Ton of Waste?

Energy	0.9 MWh
Vitrified Slag (sold as aggregate)	320 lbs
Heavy Metals and Filter Screenings	3 lbs
Water (potable water stds)	70 gallons

Based on municipal solid waste with a gross calorific value of 5900 Btu/lb.

Environmental Impact

Air Emissions

The Plasco Conversion System produces no air emissions in the creation of PlascoSyngas™. Plasco's patented technology combined with the best available gas cleaning technology ensures that the emissions associated with producing electricity meet or beat the world's toughest environmental standards.

Parameter	Units	Current Ontario Limit	Plasco	US EPA 40 CFR 60 Eb	EU	Plasco Enforcement Limit
Particulate Matter	mg/m ³	17	12	14	9	9
Organic Matter	mg/m ³	66	49	-	9	9
Hydrogen Chloride (HCl)	mg/m ³	27	19	27	9	9
Sulphur dioxide (SO ₂)	mg/m ³	55	37	56	46	37
NO _x expressed as NO ₂	mg/m ³	207	207	202	183	13
Mercury (Hg)	mg/m ³	0.020	0.020	0.035	0.046	0.005
Cadmium (Cd)	mg/m ³	0.014	0.014	0.007	0.046	0.007
Lead	mg/m ³	0.142	0.142	0.098	-	0.02
Dioxins and furans	ng/m ³	0.080	0.040	9	0.9	0.01

Values expressed at 25 degrees Celsius and 11% oxygen.

Land

The Plasco Conversion System is a compact, clean and efficient technology. A 440 ton per day Plasco facility requires 10 acres of land. Minor modifications only are required to the surface: grading the land, installing foundations, and paving.

Water

A Plasco facility will be a net producer of clean, potable quality water. A 440 tpd facility produces 27 000 gallons of water per day. This excess moisture in the waste is separated at high temperatures and cleaned to potable water standards.

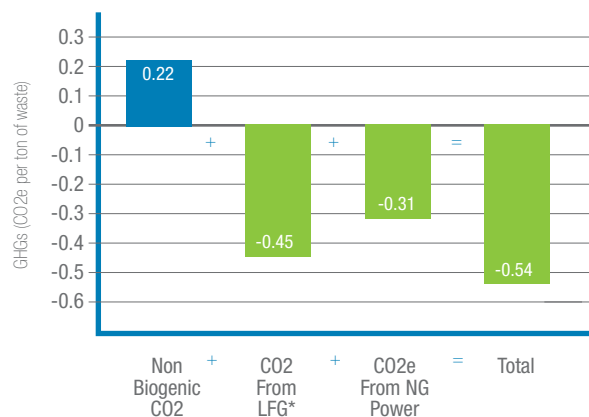
High Diversion Rates

A commercial Plasco Conversion System will convert more than 98% of the waste it processes into marketable products. Less than 3 lbs per ton of MSW converted will require solid waste disposal. This residual waste is segregated heavy metals due to improper disposal, by the public, of hazardous waste (i.e. batteries). These metals are not created by Plasco but are removed by the system to permit safe disposal.

GHG Emissions

Processing waste through the Plasco Conversion System reduces greenhouse gas emissions in two ways. First, it eliminates the methane that would form if the waste were landfilled - this is significant since methane has a global warming potential 23 times that of CO₂. Second, power generated from our process displaces power from other sources such as natural gas. The result is that a Plasco Facility reduces greenhouse gas emissions.

Greenhouse Gas Reductions per Ton of Waste



* California based landfill with landfill gas capture

Plasco Conversion System



Syngas to Electricity

Surpassing Environmental Standards, Reducing Greenhouse Gases

Waste to Syngas

Zero Air Emissions



“The Plasco Project demonstrated that the plasma gasification process is a viable choice for the treatment of municipal solid waste. SDTC is proud to have helped Plasco move its promising technology to commercialization.”

SDTC President and CEO Vicky J. Sharpe