

INCINERATION: A WASTE OF ENERGY

Incinerators waste energy and contribute to climate change in a number of ways.

Unreliability causes dramatic energy losses, as demonstrated by the company currently favored by Los Angeles. Thermosteel, a Swiss company that designs gasification incinerators, is marketed in the U.S. by Interstate Waste Technologies. In 2002 alone, Thermosteel's flagship facility in Karlsruhe, Germany consumed 17 million cubic meters of natural gas to run the incinerator. Despite the company's promises to generate energy from waste, in that same year the incinerator returned no energy to the grid.¹

Two years later, unreliability issues including operational problems and shut downs, the high energy needed to heat the waste, problems generating energy, and the resulting excessive financial losses resulted in the closure and dismantling of the incinerator. Disturbingly, these severe problems at Thermosteel's main facility are not mentioned in the same Los Angeles County report that concludes this company is the best match for Los Angeles.²

Recycling and resource conservation conserve more energy that incineration can create. Current national recycling levels, compared to landfilling/combustion disposal, conserve an equivalent of approximately 11.9 billion gallons of gasoline, and reduce greenhouse gas emissions equivalent to taking one-fifth (40 million) of all U.S. cars off the roads every year.³ Recycling should be encouraged to grow, not face increased competition with more wasteful technologies.

Recycling reduces energy use by avoiding the energy-intensive processes of extracting and processing raw materials to replace materials wasted in incinerators and landfills. By reducing energy use, recycling reduces greenhouse gas emissions that would have been generated. Incinerators also emit greenhouse gases, especially from plastics.⁴

Restrictive policies in typical incinerator contracts cause more energy to be wasted by requiring certain amounts of garbage. Cities that can't provide enough garbage to the incinerator are then obliged contractually to pay high fees to the company. This is called a "put or pay" contract and is very common with all kinds of incinerators, including gasification and pyrolysis. Many U.S. cities have faced bankruptcy because they couldn't provide enough garbage to be incinerated.⁵

These contracts are direct disincentives for zero waste, including recycling and composting. Because the contracts require continued wasting levels, cities have a disincentive to improving recycling and composting collections and waste prevention strategies. The impact is that instead of recycling and the resulting energy and greenhouse gas savings, more raw materials need to be extracted to replace the wasted materials. Incineration drives a downward spiral of energy consumption and greenhouse gas emissions.

¹ Fränkische Landeszeitung, "Natural Gas Use Should Be Halved This Year [Erdgas-Verbrauch soll dieses Jahr halbiert werden]," 29 Jan. 2003.

² URS, Conversion Technology Evaluation Report for the County of Los Angeles, August 18, 2005.

³ US EPA, "Waste Management and Energy Savings: Benefits by the Numbers," September 2005. epa.gov/mswclimate

⁴ US EPA, "Solid Waste Management and Greenhouse Gases," 2002, P. 93.

⁵ GAIA, "Waste Incineration: A Dying Technology," 2003, p. 28-29.