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Sweden to import 800,000 tonnes of trash to burn for energy

By [Liat Clark \(/search/author/Liat+Clark\)](/search/author/Liat+Clark) | 29 October 12 (Mon, 29 Oct 2012 16:42:00 +00:00)



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Sweden plans to import nearly 800,000 tonnes of waste each year to satisfy its waste-to-energy plants -- waste conscious Swedes have been recycling so efficiently, the country doesn't have enough of its own trash to burn. According to an environmental advisor, it could spell the beginning of a future where garbage actually becomes worth something.

"I would say maybe in the future, this waste will be valued even more so -- maybe you could sell your waste because there will be a shortage of resources within the world," said Catarina Ostlund, senior advisor for the Swedish Environmental Protection Agency. As it stands now, countries will actually pay Sweden for the service.

Sweden began incinerating its trash in the 40s and now, each year, it sends a paltry four percent of its waste to landfills. This has been made possible by the tightening of restrictions on waste disposal -- landfilling of organic waste was outlawed in 2005 -- and the fact that the incineration process has become a cleaner, greener alternative in recent years, with most harmful byproducts of the conversion destroyed.

Currently, 20 percent of Sweden's heat supply is produced by incinerating garbage -- that's 810,000 homes -- with the remaining energy providing 250,000 homes with electricity. To make up for the lack of litter generated by its diligent citizens (the country's plants can process two million tonnes of household waste), Sweden will mainly be importing trash from Norway. Not only will Norway be paying Sweden to destroy its waste, the only thing it will get back in return will be a pile of ash, rich with heavy metals and harmful dioxins that will need to be deposited in landfills. Despite this added burden, it is still the most economical way for Norway to dispose of its household waste.

Sweden is ahead of the curve when it comes to meeting the EU's 2020 sustainability directives, and well ahead of other nations when it comes to its waste-to-energy plan. According to a Eurostat report (http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/CH_11_2011



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[/EN/CH_11_2011-EN.PDF](#)), municipal waste in Sweden was landfilled at a rate of seven kilograms per inhabitant in 2009 -- compare this to figures for the UK, a hefty 260kg per inhabitant. Conversely, Sweden incinerates 235kg of municipal waste per person, and the UK, just nine kilograms. Countries like Estonia, Greece, Romania and Turkey still do not operate any waste-to-energy plants, and could present future partnerships for Sweden.

Incineration has also become far greener since the 80s in Sweden, when limits on emissions were tightened. According to a [report released \(http://www.avfallsverige.se/fileadmin/uploads/forbranning_eng.pdf\)](http://www.avfallsverige.se/fileadmin/uploads/forbranning_eng.pdf) by the country's waste management association, Avfall Sverige, since that time incineration emission levels have dropped by between 90 and 99 percent because of better waste sorting technologies.

Byproducts of incineration include ash and flue gases, which both contain harmful substances like dioxin. These are now largely cleaned out, however. Dust is passed through an electrostatic precipitator to give the particles a negative electric charge. These are then attracted to positively charged metal plates, shaken off, collected and taken to an ash silo. The gases are washed out with water that contains lime -- this reacts with the gases and removes them. This is done several times to remove different things -- first heavy metals, then acids, sulphur dioxide and the remainder. Finally, a catalytic convertor removes nitrous oxides by passing the remaining flue gases through a porous material and converting them to nitrogen. The idea is that mainly carbon dioxide and water are released and, under the terms with Norway, anything else will be deposited in landfills.

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mary jean | Nov 10th 2012

This is truly inspirational. How would it be to actually live in a country where people care more about the earth and sustainability than "stuff"? Actually taking the time to compost, reduce waste and recycle. Sigh. The sad part is that we (the United States) will likely never take their best practices and put them to functional use because of our corporate rule.

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