



[Back to Incineration: a recycling killer?](#)

## Incineration: a recycling killer?

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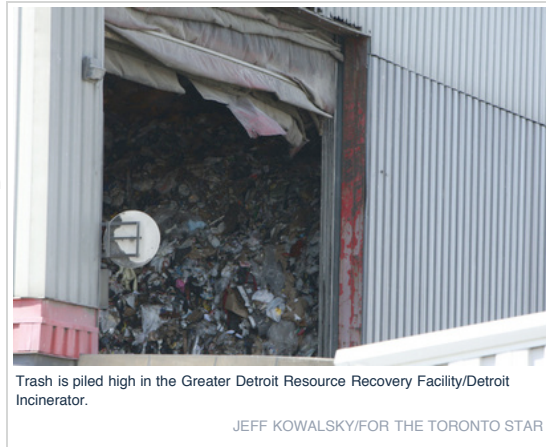
Catherine Porter

DETROIT—Just off the city's main strip, beyond a row of decaying car plants, a parade of dump trucks rumbles into a sprawling grey and red building with four smokestacks.

Inside, a Dickensian scene unfolds at the bottom of a dark pit — machines push mounds of refuse around beneath the yellow glare of overhead lights and green mist of chemical spray, before it is scooped up and jammed down a chute.

This is Detroit's incinerator, or "waste-to-energy" facility, as industry players now call them.

It has been Detroit's garbage solution for two decades. Soon, it will be Durham Region's, too. Plans for a similar plant, though built to newer pollution standards, have passed a provincial environmental assessment, and Covanta Energy Corp. has been chosen to build it on a rural site near Clarington.



Trash is piled high in the Greater Detroit Resource Recovery Facility/Detroit Incinerator.

JEFF KOWALSKY/FOR THE TORONTO STAR

"We're the largest recycler in the city of Detroit," John Waffenschmidt says from a boardroom deep inside the building. He runs environmental programs for Covanta, the world's heavyweight of incinerators. The company owns 44, including this one.

On a tour, he peers down at the dust-covered conveyor belts that shuttle trash first to crushers, then into the furnace. The moving garbage is a blur, but squint and you can make out cardboard, paper and bits of plastic — all things that in the GTA would land in a recycling bin. Here, they feed a furnace that generates heat and electricity.

You don't see red Coke cans, as powerful magnets pull them off to be resold to recyclers. At the other end, all the metal left in the ash — from children's toys, for instance — is also collected.

"Two to 5 per cent of the waste we get has recoverable metal. If it weren't for us, that would go into the landfill," Waffenschmidt says. "In the long-term picture of sustainability, there is only so much metal on the planet."

This facility is the city's biggest recycler by default. Opponents say it is actually to blame for the fact Detroit doesn't recycle.

And that's a sobering idea for Durham Region residents who would rather continue the push for a zero-waste strategy than give the region an easy out for its near-term waste disposal problems as Michigan prepares to shut its door to Canadian garbage.

Detroit is the last big U.S. city without an extensive recycling program. Buy a soda downtown, and your only option is to chuck the can in a garbage bin. From most homes, you'll have to take it to a recycling depot yourself. The first curbside program was launched only last summer, picking up recyclables in two areas that together cover only 10 percent of the city.

"You need to feed the machine," explains Brad Van Guilder, an environmental activist with the Ecology Center who has led an eight-year campaign to shut down the incinerator. "You need to feed things into the boiler that burn well — paper, plastic, wood. Those are all materials that are highly recyclable."

"It's a clash of philosophies," he says. . His message for Durham: Learn from Detroit's example and don't build it.

"If you are committed to a high recycling rate," Van Guilder says, "building an incinerator will impede that."

Detroit is a poster child for more than incineration. Once the capital of American industry, it is in deep decline, hundreds of boarded-up buildings and barren fields where houses once stood. The story of its incinerator is clouded with bad luck and bad timing.

Twenty years ago, building it seemed an enlightened idea. Protests were raging over landfills and ships carrying orphaned trash were trolling the coast, looking for places to dump.

Heat from Detroit's burners would feed into an existing underground loop, bringing steam heat to 200 downtown buildings, as well as generate power for 60,000 homes, replacing even dirtier coal-fired plants.

Even today, more than a dozen U.S. states, including Michigan, classify incineration as "renewable energy" — though it was not included as such in the Obama administration's stimulus bill.

Just as the \$500 million facility began operating in 1990, amendments to the Clean Air Act cranked up restrictions. The city had to add an array of filter bags and scrubbers, adding an unexpected \$170 million to the cost. The city took on debt, issuing bonds to cover it. At the same time, its population was fleeing to the suburbs, meaning garbage trucks arrived at the incinerator without enough trash to keep the furnaces going around the clock.

A year later, Detroit was forced to sell the incinerator and lease it back. Last summer, it made the last payment on its bonds — totalling more than \$1 billion — and opponents hoped to get the incinerator shut down for good. Politicians had pledged to improve recycling efforts and divert the rest to landfill. But thanks in part to the city's financial crisis, it continues to send its trash there, based on the operator's agreement to lower the price to less than the cost of landfill space.

For residents, the expense has been doubly painful. Since Detroit never delivered the waste required by its "put-or-pay" contract, the facility had to buy it from other municipalities at lower cost. Detroiters made up the difference. Haulers from surrounding cities were paying tipping fees as low as \$15 a tonne, while Detroiters had to pay \$150 to burn that garbage, according to Van Guilder. The city burns about 800,000 tonnes a year.

The debt meant no money for expensive recycling programs, which would have put the city even deeper in debt.

"To divert tonnage, you are going to spend money twice," says Jeffrey Morris, a professor of environmental economics at Evergreen State University who was hired by Toronto in 1996 to study the conflict between recycling and incineration. "That's the financial bind."

Detroit is not alone. Other cities with large incinerators followed a similar pattern, including Indianapolis, where residents must subscribe to recycle, and Nashville, where recycling was introduced only after an incinerator was shut down. The classic example is Smithtown, N.Y. When a garbage hauler started to sift out paper, metal and wood for recycling before waste arrived at the incinerator, the city threatened a lawsuit, Morris' report states.

"A landfill is a bowl. The logic is to send as little as you can because you have to make it last or find a new bowl," says Toronto Councillor Gord Perks, a former environmental activist who helped fight off a proposed incinerator in Niagara. "An incinerator is a drain."

But there are exceptions. Germany claims a whopping 64 per cent diversion rate, and sends the rest to incinerators. Closer to home, the New York region of Onondaga both incinerates and recycles well.

Durham Region chair Roger Anderson figures his region will fit that mould. Unlike rapidly emptying Detroit, the region's population is booming. Durham expects to pay down its debt on the \$272 million facility quickly using federal gas-tax funding, according to the business plan. It has set a waste diversion goal of 70 per cent, and existing green-bin and recycling programs put that rate at 50 per cent now.

The region has signed a "put-or-pay" contract with Covanta. But, given that Michigan is about to close access to the landfill where much of southern Ontario's waste currently goes, Anderson has no doubt enough garbage will arrive. The plant will be capable of burning 140,000 tonnes a year, but could be expanded to incinerate up to 400,000 tonnes. (In 2008, after removing blue-box material, compostables and other recyclables, Durham was left with nearly 120,000 tonnes of garbage.)

York Region is a 20 per cent partner in the facility, and there are rumbles about Simcoe County sending its garbage there too, having scrapped its plans for a new landfill site over residents' concerns about water contamination.

"I don't think we'll have a problem meeting our targets," Anderson says. "The biggest problem will be meeting our 70 per cent diversion target."

Local incinerator opponents say it should aim even further — to the "zero-waste" plans of places such as Oakland, Calif.

"We've gone from 0 per cent recycling to 50 per cent recycling in 20 years without a lot of effort," says Doug Anderson, publisher of the *Whitby Free Press*. "If we really got on this, we could do this."