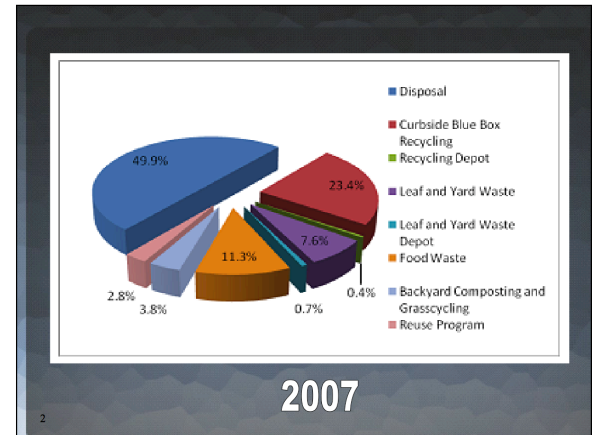


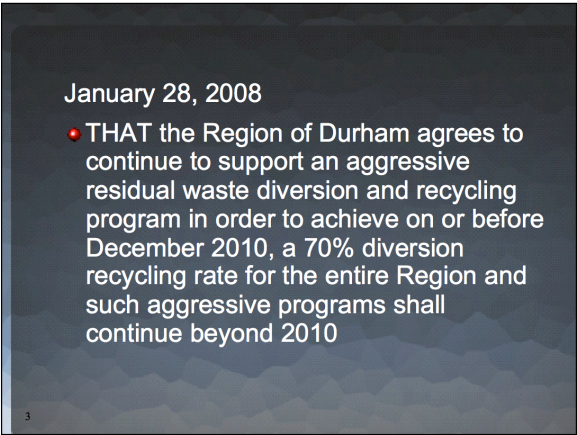
When the Regions started the EA process in 2005 Durham Region had a waste diversion rate of 36% from bluebox and other measures.

This chart is taken from the EA document itself



Two years later in 2007 we had a diversion rate of 48%.

In 2008, the latest year for which we have the numbers for, the region-wide average diversion rate was up to 51% - some of the Region municipalities were diverting 60%.



In January 2008, Regional Council passed this motion that the Region should aim for 70% diversion by 2010, but nothing was done about it until later that year when consultants were hired to map out how to achieve that figure. That report came to Council in March 2009 which didn't leave much time - nevertheless the consultants mapped out a specific plan to achieve 70% diversion by 2013. But nothing so far to implement it

Those are the facts on the ground - Durham Region residents are willing and even eager to recycle more - we lead the province in our diversion rates. To any casual observer, this is the made in Durham solution we should be pursuing.

However, working parallel to this the Region has been relentlessly pursuing its plans to build an incinerator.

Deloitte case			
Year	Diversion Rate	Residual %	Projected tonnage
2012	60	40	106,658
2017	60	40	105,338
2022	70	30	108,725
2027	70	30	118,607
2032	70	30	127,215
2037	70	30	136,369

Part of that process was a 'Business Case' produced by consultants Deloitte and Touche in June 2008.

The incinerator had to be justified, at least in theory, even after aggressive recycling measures .

The agreement with York Region calls on Durham to guarantee 100,000 tonnes of waste a year, and York 20,000 - total 120,000 - which is the bare minimum needed to keep the incinerator operating.

These are the projections that Deloitte presented. The numbers all include projected population increases

Notice that they postponed 70% diversion to 2020. They acknowledged the 2008 resolution in the text but then ignored it

Now why would they do that?

Well you'll notice that these numbers are all neatly above the minimum 100,000 tonnes

Deloitte case with 70% in 2010			
Year	Diversion Rate	Residual %	Projected tonnage
2012	70	30	79,994
2017	70	30	79,003
2022	70	30	108,725
2027	70	30	118,607
2032	70	30	127,215
2037	70	30	136,369

But if we do the same chart with 70% in 2010, you notice that the numbers for the first 10 years are substantially below 100,000. Well so much for their business case.

Now if Deloitte had said that, well, we can't achieve 70% in that time frame, there might have been some lively discussion - but they didn't - they slipped it in quietly and Council didn't notice

The other problem with these numbers is that the 70% was a target for a particular date and Regional Council never intended it to become a static figure. That 70% diversion rate should keep going up. Council never specified by how much but let's see what a very conservative 1% per year would yield. Note that in the 20 years since recycling began we've been achieving a diversion increase of about 2.5% per year

Increasing Diversion by 1% per year			
Year	Diversion rate	Residual %	Projected residual
2012	70	30	79,994
2017	75	25	65,836
2022	80	20	72,483
2027	85	15	59,304
2032	90	10	42,405
2037	95	5	22,728

This would achieve essentially zero waste in 2037. This is conservative – it could be done much sooner

And you'll notice that these numbers are all way below 100,000 tonnes

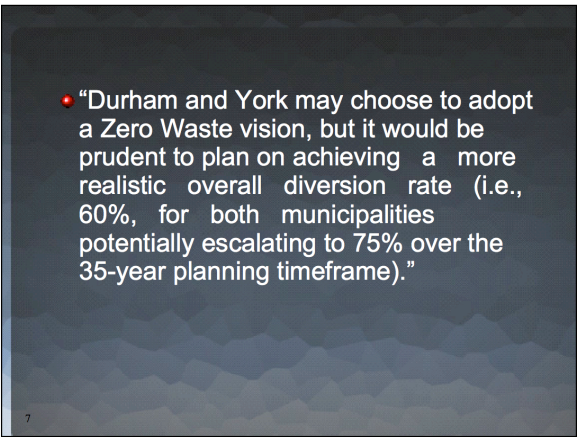
Not only do the Deloitte numbers inadvertently demonstrate that zero waste is achievable but it also demonstrates how flawed the incinerator proposal is - that the only way they could justify it was to massage the numbers to make them fit their preferred outcome.

So why didn't they consider zero-waste. That's not an easy question but zero-waste was dismissed way back in 2006 in a mere half page out of the 10s of thousands of pages of the full EA.

Consideration of alternatives is a requirement of any EA and this is one of the biggest flaws in this one. Increased diversion was given a couple of pages and the pie graphs that I showed at the beginning are from that section, but having presented basically the same numbers I have, they conclude "nope, won't work"

Landfill of any sort was eliminated even before the EA began - which is ironic because 30% of the output from an incinerator is ash and it needs to go to landfill.

That didn't leave a lot of alternatives. It sort of narrowed the options to, well, incineration.



Here is an interesting quote from their analysis of zero-waste

“Durham and York may choose to adopt a Zero Waste vision, but it would be prudent to plan on achieving a more realistic overall diversion rate (i.e., 60%, for both municipalities potentially escalating to 75% over the 35-year planning timeframe).”

How about that for aggressive diversion. 75% in 2045

We can't wait that long. And we can't afford to fuel this incinerator

Year	Diversion Rate	Residual %	Projected tonnage
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This original Deloitte scenario is the only one that works for the incinerator because incinerator contracts work on a put or pay basis – if you don't supply the garbage you pay for it anyway.

An incinerator will only works if we sharply curtail diversion at current levels.

But let's go down the path that the Region is studiously avoiding

Fall 2008

- Durham Region commissioned Golder Assoc. to map out how to achieve 70%
- Reported to Regional Council March 2009
- **70.5% in 2013**
- **72.7% in 2015**

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Reg Council commissioned Golder Assoc. late in 2008 to tell them how to achieve 70% by 2010.

Given the time frame Golder couldn't get us to 70% by 2010. But their report mapped out a detailed plan to achieve 70.5% by 2013 and 72.7% by 2015

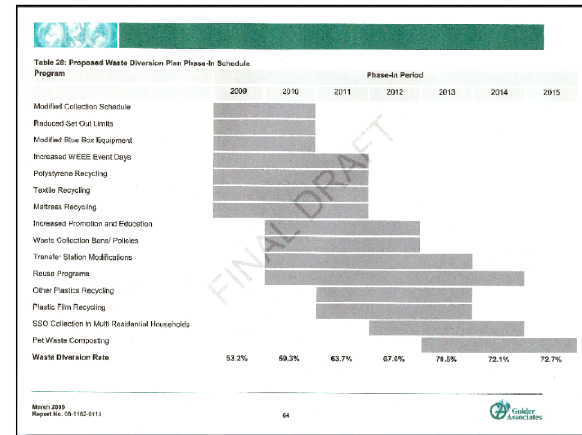


Table 27: Proposed Waste Diversion Plan Implementation Schedule

Program	Capital Cost to Implement	Annual Incremental Cost (\$/yr)	Increase in Waste Diversion	Cumulative Waste Diversion	Implementation Date
Status Quo 50% Waste Diversion					
Increasing Capture in Existing Program					
Modified Collection Schedule			1.7%	51.7%	2009
Reduced Set Out Limits			1.2%	52.9%	2009
Modified Blue Box Equipment	\$630,000		2.0%	54.9%	2010
Increased Promotion and Education	\$50,000	\$80,000	2.0%	56.9%	2010
Waste Collection Best Practices	\$69,000	\$122,000	2.0%	58.9%	2010
Increased WEEE Event Days	-	EPD	1.6%	61.4%	2010
Transfer Station Modifications	\$2,000,000	\$200,000	1.9%	63.3%	2010/2011
New Waste Diversion Opportunities					
Polystyrene Recycling	\$36,000	-	0.3%	63.6%	2009
Tire Recycling	\$38,000	\$40,000	0.2%	63.8%	2009
Metals Recycling	\$38,000	\$110,000	0.2%	64.2%	2009
Reuse Programs	\$3,000,000	\$300,000	3.6%	67.8%	2010/2011
Other Plastics Recycling	\$500,000	\$670,000	0.8%	68.4%	2011
Plastic Film Recycling	\$500,000	\$3,466,000	1.6%	70.0%	(Pending Plastics Recycling Initiative) 2011
SSO Collection in Multi Residential Households	\$680,000	\$460,000	0.9%	70.9%	(Pending Plastics Recycling Initiative) 2012
Pet Waste Composting	?	?	1.8%	72.7%	(Pending further investigation) 2013

March 2008
Report No. 0811820110

Golder Associates

72.7% diversion by 2015

- Capital cost - \$7.5 million
- Annual Operating cost - \$6 million

Compared with incinerator:

- \$272 million capital cost
- \$8 million annual operating cost
- Plus approx \$6 million in annual carrying charges

Capital cost - \$7.5 million
Annual Operating cost - \$6 million

Compared with incinerator:

\$272 million capital cost
\$8 million annual operating cost
Plus approx \$6 million in annual carrying charges

However the Golder report has gone nowhere – the focus was clearly on the incinerator and I'm sure that the Works dept realized that the Golder proposals were incompatible with the incinerator

Compared with incinerator:

- \$272 million capital cost
- \$8 million annual operating cost
- Plus approx \$6 million in annual carrying charges

LOCKED IN

- For 25 years
- 100% of Federal gas tax allowance

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 \$272 million capital cost
 \$8 million annual operating cost
 Plus approx \$6 million in annual carrying charges

LOCKED IN
 For 25 years
 100% of Federal gas tax allowance

Provincial Engagement

- October 2008 – Ministry of Environment Discussion Paper “Towards a Zero-Waste Future: Review of Ontario’s Waste Diversion Act”
- 2009 - **FROM WASTE TO WORTH: The Role of Waste Diversion in the Green Economy**

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Back in the summer of 2008 I made a point of engaging our regional politicians in one-on-one face-to-face meetings on the waste issues and one of the strongest sentiments coming back at that time is that the province needed to become engaged.

Well in October 2008, the province answered their call

Provincial Engagement

October 2008 – Ministry of Environment Discussion Paper “Towards a Zero-Waste Future: Review of Ontario’s Waste Diversion Act”
 2009 - **FROM WASTE TO WORTH: The Role of Waste Diversion in the Green Economy**

Extended Producer Responsibility

- New framework proposed for waste management
- Producers and importers responsible for their products 'cradle-to-cradle'
- Province intends to have all products come under EPR – timeline in the order of 5 - 20 years depending on the product

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Extended Producer Responsibility

New framework proposed for waste management

Producers and importers responsible for their products 'cradle-to-cradle'

Province intends to have all products come under EPR – timeline in the order of 5 - 20 years depending on the product

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EPR 2

- Big incentive to produce products which are easily recycled or reusable
- Producers of less wasteful products have a competitive advantage over those that don't
- Could dramatically reduce the waste stream

16

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Big incentive to produce products which are easily recycled or reusable

Producers of less wasteful products have a competitive advantage over those that don't

Could dramatically reduce the waste stream

This potentially puts the Region and producers on a collision course

16

Stabilized Landfill / Storage

- EPR implies that all waste will need to be sorted
- So
- Start now
 - Sorting waste applies a cost which provides an incentive to produce recyclable products
 - Creates jobs
 - Sorted waste would be stored in segregated landfills where they would be readily available to anyone with the technology to recycle it
 - No chemical interactions, no emissions

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- If the Region builds incinerator, it puts itself on a collision course with
 - Producers
 - Provincial government
 - Its citizens
 - Reality

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If the Region builds incinerator, it puts itself on a collision course with

•Producers

•Provincial government

•Its citizens

•Reality

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