

TECHNICAL NOTICE ON
SHOPPING BAGS
ENVIRONMENTAL IMPACT
ASSESSMENT

[TRANSLATION]

November 2007

Analysis of Recyc's 14% Recycling Rate & 2% of Waste Generation

*“Why the recycling rate is
understated”*

The analysis has found the report inflated the generation of plastic shopping bags almost 3x's. This resulted in an overstatement of shopping bags by over 27,000 tonnes caused by including other plastic bags.

The plastic shopping bag recycling rate after analysis of the report is 44% and they are only 0.53% of the waste stream in 2007.

Post 2012 and the 52% plastic bag reduction, the data demonstrates a highly successful environmental 3R's model is working:

The 3R's & Plastic Bags for Montreal

- 52% Reduction
- 60% Reused
- 33% of total bags are Recycled
- 82% of available bags Recycled
- 93% Reuse + Recycling rate
- Approaching Zero Waste
- 7% actually wasted
- 0.27% of total waste stream
- Less than 1% of all litter

almost 20%.⁶ Last spring, the *Association des détaillants en alimentation du Québec* – ADA conducted a survey of its members in which the bag issue was raised. Results revealed a significant reduction in conventional bag use (based on purchases). Considering certain variables, including the type of business, its size and location, the reduction varied between 15 and 35%.

3. CONVENTIONAL PLASTIC BAGS

What is the environmental impact of producing conventional plastic bags?

The production of polyethylene, a key component of conventional plastic bags, requires the use of a non-renewable raw material: petroleum.⁷ Oil extraction can have a negative impact on ecosystems and on biodiversity. It also uses water and can result in degassing. In addition, transportation of oil products by ship presents a significant risk of leaks and spills that can have an impact on the environment.

On the other hand, the manufacture of plastic shopping bags represents less than 0.1% of Canadian hydrocarbon consumption.⁸ In addition, over the past 20 years, the industry has adopted measures to reduce the quantity of materials used to manufacture plastic bags by 75% while still maintaining the bag's sturdiness and durability.⁹

What is the scope of the plastic bag issue in Québec?

According to a recent characterization study of household waste¹⁰, almost 6,700 tonnes of plastic bags (mainly shopping bags) are recovered annually through curbside recycling programs, while almost 42,000 tonnes of plastic bags, including shopping bags and trash bags, are thrown out (mainly in landfills). The recovery rate is therefore 14%.¹¹ The tonnage of plastic bags represents less than 2% of all waste generated each year by Québec households (Figure 1). Thus, in terms of weight, plastic bags are only a very small part of all waste generated. It therefore appears that the issue of plastic bags relates far more to its status as the symbol of our consumer society and the effect they have on the natural environment.

Plastic bags represent less than 2% of all waste generated each year by Québec households.

⁶ Estimate based on 2.5 bags avoided each time a reusable bag is used, 3 times per week at a 25% usage rate.

⁷ Ethylene is produced when hydrocarbons are steam cracked. *Société française de chimie* (2007); Environment Australia, Department of the Environment and Heritage (2002).

⁸ Canadian Plastics Industry Association - CPIA (2007)a.

⁹ CPIA (2007)b.

¹⁰ RECYC-QUÉBEC (2007)a.

¹¹ This rate does not include the percentage of shopping bags used as trash bags.

Analysis of 14% Recycling rate & 2% Waste Generation

“Why the recycling rate is understated”

Fact #1 – Only 15,000 tonnes of Plastic Shopping Bags – Not 42,000 mt

Recyc states there are 42,000 tonnes of plastic shopping & garbage bags which overstates the shopping bag generation by almost 3 x's. The QC MDDEP & EEQ actually found 15,000 tonnes (2.2 Billion shopping bags) were generated in 2007/2008 (Source: Voluntary Code of Best Practices for the Use of Shopping Bags April 2008).

Fact #2 – Bag Recycling Rate Is 44% - Not 14%

Using Recyc's 6,700 tonne shopping bags recycled from curbside programs and the QC/EEQ 15,000 tonne plastic bag generation, results in a recycling rate of 44% of all bags recycled, not 14% found by Recyc.

Fact#3 – Plastic Bags Only 0.53% of Waste Stream in 2007 – Not 2%:

According to Statscan, Quebec's residential solid waste stream to landfill was 2,848,822 tonnes in 2008. Taking the plastic bag tonnage of 15,000 tonnes and dividing it by the total waste stream, the 0.53% of the waste stream number emerges. (15,000 tonnes of plastic shopping bags / 2,848,822 tonnes solid waste Quebec x 100% = 0.53 %)

Fact#4 – The Recyc Report of 2007 is 9 Years Old

The report does not reflect how Quebecers have successfully used the 3R's to reduce bag usage by 52% since 2007 and now have a 93% reuse and recycling rate.

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