NATIONAL PACKAGING SURVEY - THE 1996 RESULTS

Approach and Methodology

The Canadian Council of Ministers of the Environment (CCME) commissioned Statistics Canada to assist the National Packaging Task Force in determining the amount of packaging sent for disposal in Canada in 1996, in terms of weight. To obtain the necessary data, Statistics Canada initiated three separate activities:

- a nation-wide industry packaging survey;
- an estimation of the weight of imports and exports of in-use packaging derived from the survey and international merchandise trade data; and,
- an estimation of packaging recycled by residential, institutional and commercial recycling programs using provincial, regional and municipal recycling numbers.

Statistics Canada sent out some 10,000 survey questionnaires to businesses selected from the agriculture, manufacturing, transportation, wholesale, retail and service sectors. The response rate was 61 percent. The survey collected data on the weight of packaging used, reused, and sent for recycling.

The estimate for total packaging sent for disposal in Canada in 1996 was 2.64 million tonnes. Total packaging sent for disposal in 1988 was reported at 5.41 million tonnes in the 1988 Packaging Estimates. This corresponds to a reduction of 51.2 percent compared to 1988, exceeding the National Packaging Protocol's (NaPP) 35 percent target for 1996, as well as the 50 percent target for 2000.

The Task Force recognizes that the 1988 baseline was estimated from data sources available at the time and did not have the benefit of the more rigorous methods of data gathering and verification applied in 1996. Therefore, while there may be uncertainty as to the reliability of the absolute tonnage reductions, the trends identified are consistent with current evaluations of the data. The CCME will consider the need for a year 2000 survey using the refined survey methodology of the 1996 survey, as an opportunity to better understand the trends in diversion.

The 1996 Results

The weight of packaging sent for disposal was calculated using the following formula:

Use + (Imports - Exports) - Reuse - Recycling = Disposal

8.74 + 0.17 - 4.07 - 2.20 = 2.64
(numbers are in million tonnes)

COMPARISON OF RESULTS

Figure 1 below shows how the different results compare for 1988, 1992 and 1996.

Figure 1. National Packaging Date Summary

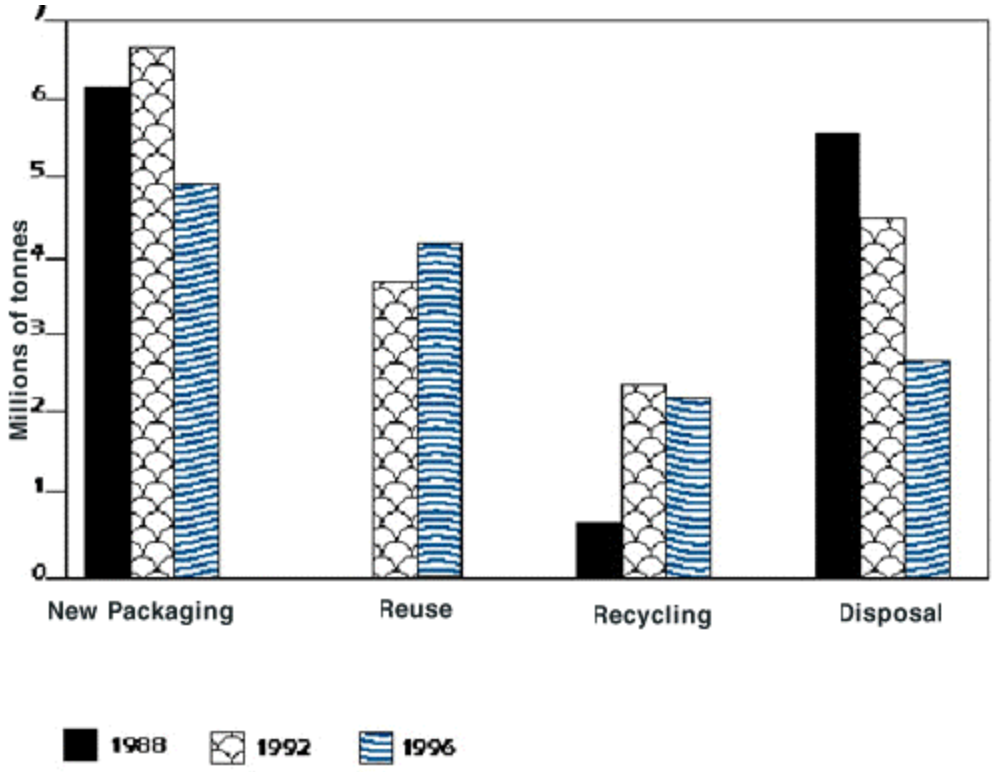

Table 1 below demonstrates the results over time using different approaches to reporting on the targets.

Table 1. Diversion Results on a Weight and Per-capita Basis

	Target	Absolute Disposal (million tonnes)	Absolute Reduction (%)	Population (million people)	Per-capita Disposal (kg)	Per -capita Reduction (%)
1988	-	5.41	-	26.895	201	-
1992	20%	4.24	21.6	28.542	149	26.2
1996	35%	2.64	51.2	29.969	88	56.2

Table 2 compares the disposal numbers of the 1988 baseline with the results from the 1996 survey.

Table 2. Disposal Numbers By Packaging Type (includes rounding of numbers)

Packaging Type	1988 Disposal (tonnes)	1996 Disposal (tonnes)	% Change
Multimaterial	112,240	42,047	-63
Plastic	1,021,800	703,689	-31
Wood	684,660	591,232	-14
Paper	1,926,810	767,854	-60
Textile	19,758	8,455	-57
Glass	675,012	255,287	-62
Ferrous	935,318	188,445	-80
Aluminum	43,688	48,109	+10
Other	0	33,703	-
Total	**5,419,286**	**2,638,821**	**-51.2**

Understanding the Results

When the National Packaging Protocol was first introduced in 1989, Canada's Resource and Environment Ministers considered waste management to be an urgent and pressing national problem, and noted that some jurisdictions were already running out of landfill sites. At that time, an estimated 30 percent by weight of municipal waste going to landfill consisted of disposed packaging.

Encouraged by the NaPP process, industries began examining more closely ways to reduce the amount of packaging used, consumed and disposed. Early gains in reducing the amount of packaging sent for disposal were achieved mostly through the expansion and introduction of new industrial, commercial and institutional recycling programs and by continuing efforts to eliminate, reduce and reuse packaging materials. Residential recycling programs also began to appear across the country.

There has been a significant decline in new packaging used in Canada while progress in reuse and recycling varied among material types. Material types that show the largest reductions in disposal from 1988 to 1996 are paper, ferrous metals and glass, which together account for 84 percent of the total diversion of packaging from disposal. The 84 percent reduction is a result of both the increased reduction, reuse and recycling of these materials and the switch from heavier to lighter packaging materials.

The Challenges Ahead

Despite the success in meeting the 50 percent reduction target four years ahead of schedule, all of the stakeholders participating in the Task Force recognize that more can be done to further divert packaging from disposal, specifically to reduce the amount of consumer packaging unnecessarily sent for disposal, and to achieve the goals of the Protocol. In light of this, the Task Force will be reviewing the detailed results of the 1996 survey more closely to identify the trends and opportunities for further improvement.

The review is part of an established evaluation process initiated upon the completion of a survey. This review will concentrate on an evaluation of the six policies of the National Packaging Protocol. For example, while progress has clearly been made in diverting packaging from disposal based on weight, further opportunities exist for making progress in areas such as evaluating and reducing the environmental impact of packaging.

Since the results do not reveal any information on the number of packaging units sent for disposal, for reuse or for recycling, additional analysis will help to better understand these trends. As well, challenges still exist in the area of packaging stewardship and in developing a framework which will facilitate the increased harmonization of approaches to post-consumer packaging across the country.

The illustration below demonstrates the use of packaging in all its phases, and highlights where the reductions in weight have occurred.