

NATIONAL PACKAGING PROTOCOL

1996

MILESTONE REPORT



CCME

Canadian Council of Ministers of the Environment / Le Conseil canadien des ministres de l'environnement

FROM THE NATIONAL TASK FORCE ON PACKAGING
JANUARY 1998

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National Packaging Protocol 1996 Milestone Report

Canadian Council of Ministers of the Environment (CCME)

January 1998

This report has been prepared by the Monitoring Committee of the National Packaging Task Force of the Canadian Council of Ministers of the Environment and has been approved by the Task Force. Packaging statistics were developed by Statistics Canada under the direction of the Monitoring Committee and other members of the Task Force.

EXECUTIVE SUMMARY

In 1990, the Canadian Council of Ministers of the Environment (CCME) endorsed the National Packaging Protocol, a commitment to six policies and three milestone targets for the reduction of packaging disposal from estimated 1988 levels: 20% by 1992; 35% by 1996, and; 50% by the year 2000. Since then, the National Packaging Task Force has been leading the work of implementing the Protocol and monitoring its progress. This summary describes progress in achieving the goals of the Protocol and the 1996 milestone target.

The monitoring results for 1996 show a 51.2% reduction in the weight of packaging sent for disposal relative to the 1988 baseline estimates. This exceeds both the National Packaging Protocol's milestone targets of 35% by 1996 and 50% by the year 2000.

The data used to assess this progress came from a Statistics Canada industry survey of 31 industry sectors and 32 packaging types, along with additional information derived from Statistics Canada's international merchandise trade data and a study of packaging recycling in Canada. Packaging consumption and disposal were estimated based on this data.

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.

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% of the total diversion of packaging from disposal. The 84% reduction is a result of both the increased reduction, reuse and recycling of these materials and a switch from heavier to lighter packaging materials. As well, significant gains in packaging reduction have been made on the shipping, manufacturing and distribution side, which represented 60% of packaging used in 1988, compared to 40% for consumer packaging.

The National Packaging Task Force recognizes that while the year 2000 target has been achieved four years ahead of the target date, work must continue on other aspects of the Protocol. A full analysis and interpretation of the 1996 results and increased attention to the Protocol's six packaging policies will help to provide direction for Task Force activities aimed at further reductions in the amount of packaging sent for disposal.

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INTRODUCTION

This is the second milestone report prepared by the National Packaging Task Force. It documents, reviews and discusses the progress achieved in meeting the Protocol's 1996 target of 35%, as measured by the results of Statistics Canada's 1996 packaging survey and related work. A brief historical overview of the key events leading up to this report are described below.

In April 1989, the then Canadian Council of Resource and Environment Ministers (CCREM) - now the Canadian Council of Ministers of the Environment (CCME) - stated:

“Waste management is an urgent and pressing national problem. Some jurisdictions are already running out of landfill sites, in part because Canada is one of the most wasteful nations. For this purpose, Ministers have instructed the Waste Management Committee of CCREM to develop a packaging policy for Canada within a broad review of solid waste management opportunities including government purchasing and recycling policies. It was agreed that targets and schedules for waste minimization be established, including a fifty percent (50%) reduction in waste generation by the year 2000.”

The National Packaging Task Force, comprised of representatives from the various levels of government, industry sectors, consumer and environmental groups, was established by the Canadian Council of Ministers of the Environment in 1989 with a mandate to develop a packaging policy for Canada. Through a consultative process carried out across Canada, the Task Force developed a National Packaging Protocol (NAPP) containing six policies aimed at minimizing the environmental effects of packaging and achieving a significant reduction in the amount of packaging waste sent for disposal.

The Protocol established specific milestone targets for the reduction in the disposal of waste packaging compared to the baseline year of 1988. These targets are: 20% by December 1992, 35% by December 1996, and 50% by December 2000. According to the Protocol, fifty (50) percent of these diversions shall be achieved through new source reduction and new reuse initiatives, and recycling programs should make up the remainder of these diversions. Diversion targets are to be measured by weight. Recycling programs include industrial, commercial, institutional and municipal initiatives.

The Protocol was endorsed by the Canadian Council of Ministers of the Environment in 1990. Since then, the National Packaging Task Force, chaired by Environment Canada, has coordinated a variety of activities aimed at the implementation of the Protocol, including several monitoring activities described below.

The 1988 Packaging Estimates, which formed the baseline for measuring progress towards the NAPP targets, were finalized in 1992 and were subsequently endorsed by the Task Force. Although no survey was done in 1988, the estimates were based on existing

data from Statistics Canada's 1988 Census of Canadian Manufacturers, estimates provided by industry on packaging reuse and recycling, and information derived from international merchandise trade data.

In the 1992 National Packaging Survey, which took place during 1993, Statistics Canada surveyed over 10,000 establishments and obtained a response rate of 87%. The survey data along with additional information derived from international merchandise trade data was used by the Task Force to develop the 1992 results.

The *National Packaging Protocol 1992 Milestone Report*, published by CCME in June 1994 (report CCME-EPC-NAPP-81E), documented the results of the 1992 packaging survey in which the 1992 target of 20% was exceeded - 21% was actually achieved.

1996 RESULTS

The term “packaging” refers to all materials, fabricated containers and other components used in the containment, protection, movement and display of a product or commodity. A “package” or “packaging” can also be a material or item that is physically attached to a product or its container for the purpose of marketing the product or conveying information about the product. Virtually all manufactured and processed products require packaging during one or more phases of their production, distribution, wholesaling and retailing.

The basic materials of packaging include paper, ferrous metal, aluminum, glass, wood, textiles, plastics, and multi-material. Common types of packaging include such things as wraps, strapping, bags, pouches, cartons, set-up boxes, cans, bottles, pails, drums and barrels. Also included are pallets and bins made of wood, metal, paper or plastic used for shipping, which are often reused.

In determining the amount of packaging sent for disposal in Canada in 1996, the Canadian Council of Ministers of the Environment’s (CCME) National Packaging Task Force initiated the following activities. Statistics Canada was commissioned by CCME to undertake a nation-wide industry packaging survey and to derive estimates of the weight of imports and exports of in-use packaging. In addition, a consultant was retained to develop data on packaging recycled by Canadian households and packaging recycled by commercial and institutional establishments not covered by the Statistics Canada survey.

In calculating the amount of packaging sent for disposal in 1996, the Task Force employed the same general formula that was used to determine the 1992 results, that is:

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

Where:

- All units are in tonnes.
- *Use* is the reported use of packaging by industry from the Statistics Canada survey and includes domestic and imported empty packages. Use occurs when packages are filled with product and consists of both new and reused packaging.
- *(Imports - Exports)* represents the net imports of in-use (i.e. filled) packaging.
- *Reuse* is the weight of packaging reused in its current form. It consists of the packaging reuse reported by industry in the Statistics Canada survey plus the packaging reuse associated with the net imports, as calculated by Statistics Canada.
- *Recycling* consists of the packaging recycling data reported by industry in the Statistics Canada survey plus the packaging recycling done by householders and commercial and institutional establishments not covered by the survey as reported in the consultant’s study.

The nation-wide industry survey was by far the largest portion of the overall effort. The total survey frame was approximately 389,000 businesses. Statistics Canada sent out some 10,000 survey questionnaires to businesses selected from the agriculture, manufacturing, transportation, wholesale, retail and service sectors. The survey collected data (broken out by 31 industry sectors and 32 packaging types) on the weight of packaging used, reused, and sent for recycling by business establishments. The response rate was 61%.

Estimates of the weight of imports and exports of in-use packaging were derived using the survey information and Statistics Canada's 1996 international merchandise trade data on the dollar value of goods imported to and exported from Canada. "In-use" packaging is packaging filled with products.

The consulting company developed 1996 estimates of the amount of packaging sent for recycling by householders and packaging recycled by commercial and institutional establishments not covered by the Statistics Canada survey. These estimates were developed from information obtained from the major regional recycling programs across the country.

A summary of the 1996 results, in millions of tonnes, is shown below.

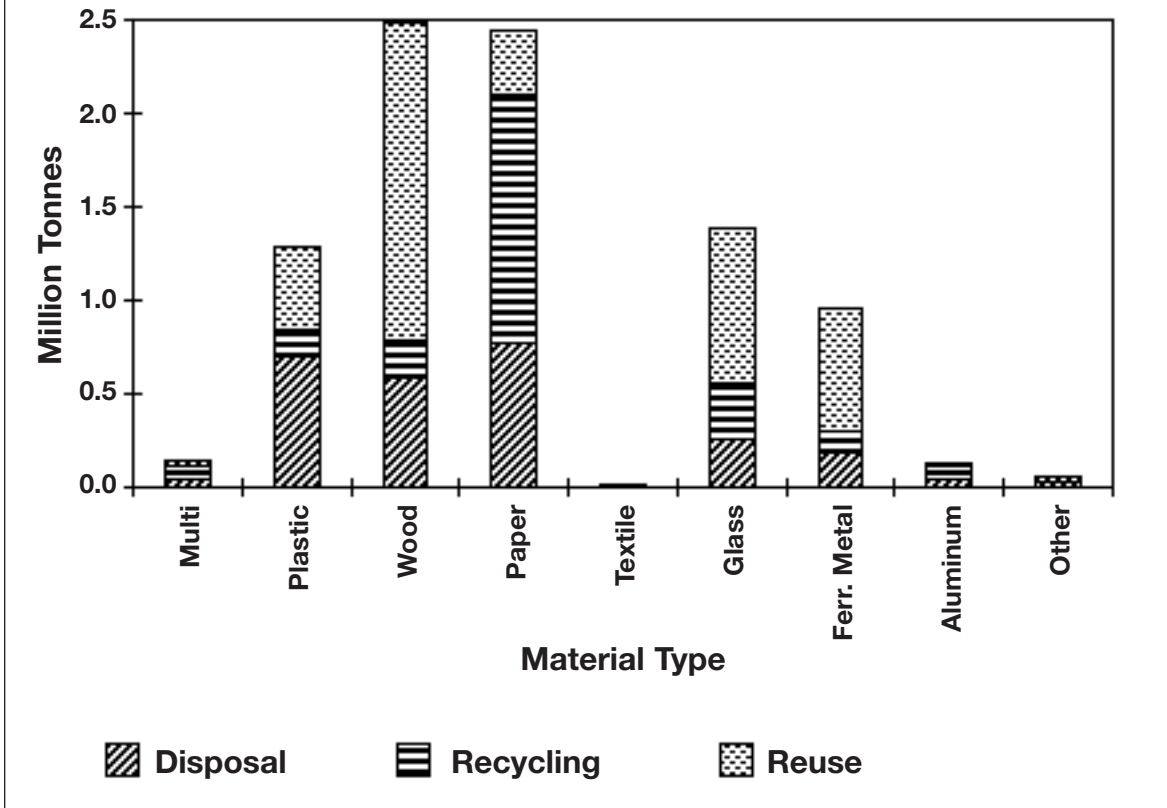
$$\begin{array}{rcccccc} \text{Use} & + & (\text{Imports} - \text{Exports}) & - & \text{Reuse} & - & \text{Recycling} & = & \text{Disposal} \\ 8.74 & + & 0.17 & - & 4.07 & - & 2.20 & = & 2.64 \end{array}$$

Total packaging sent for disposal in 1988 was reported at 5.41 million tonnes in the 1988 Packaging Estimates. As noted above, the estimate for total packaging sent for disposal in Canada in 1996 was 2.64 million tonnes. This corresponds to a reduction of 51.2% compared to 1988 and exceeds the NAPP 35% target for 1996 as well as the 50% target for the year 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.

Figure 1 shows the 1996 packaging results by material type.

Figure 1. National Packaging Data by Material Type - 1996



ASSESSMENT OF THE RESULTS

Monitoring System Methodology

The National Packaging Monitoring System is a computer program developed and approved for use in 1991 by the National Packaging Task Force as the basis to monitor progress towards the achievement of NAPP milestone goals. The System takes the results of the Statistics Canada Packaging Survey along with the in-use import-export and recycling data and generates the information required to measure progress toward the NAPP targets. The Monitoring Committee of the Task Force is responsible for ensuring that the System is used in a manner consistent with the methodology approved by the Task Force. It is important to note that, in conducting the 1996 Packaging Survey and related work, the Monitoring Committee followed the methodology rigorously, while working with a mandate to improve cost-efficiency and data quality.

Data verification

With the 1992 survey results serving as a benchmark, the Task Force was able to verify and validate the 1996 results in a more extensive and thorough manner than was possible in the previous survey.

In addition to being subjected to Statistics Canada's own quality control procedures, the 1996 data underwent a thorough verification process imposed by the Monitoring Committee. Through this process, Monitoring Committee members and other Task Force members analyzed preliminary estimates to identify any apparent anomalies. These were investigated by Statistics Canada by reviewing the response data and communicating with the respondents, where necessary, to ensure that they had correctly completed the survey questionnaire.

Accuracy of the results

It should be emphasized that the 1996 data are the result of the most extensive validation process ever undertaken in measuring progress towards NAPP targets. Because of the thoroughness of the process and the soundness of the methodology, Monitoring Committee members have a high degree of confidence in the overall results for 1996. However, the Committee recognizes that even with a sound methodology and a thorough verification process, error cannot be eliminated.

Sampling errors occur because data are collected for a part of the population only as opposed to the whole population, as would be the case in a census. Sampling errors depend on factors such as the size of the sample, variability in the population, sample design and estimation methods. Non-sampling errors are present whether a sample or a complete census is taken. Non-sampling errors stem from several sources, such as non-responding establishments, errors in the survey responses, errors in the processing of the survey data, and incomplete coverage of the population. Non-sampling errors are difficult to measure. Within the limitations of the budget, all attempts have been made to minimize this type of error.

The coefficient of variation (CV) is a common measure of sampling error which takes into account variation among estimates from all possible sample combinations. The overall survey results had acceptable CVs. It should be noted that a CV cannot be calculated for the final disposal number which used data which were not completely derived from a statistical survey (i.e. in-use packaging imports and exports and packaging recycled by householders and non-surveyed business sectors).

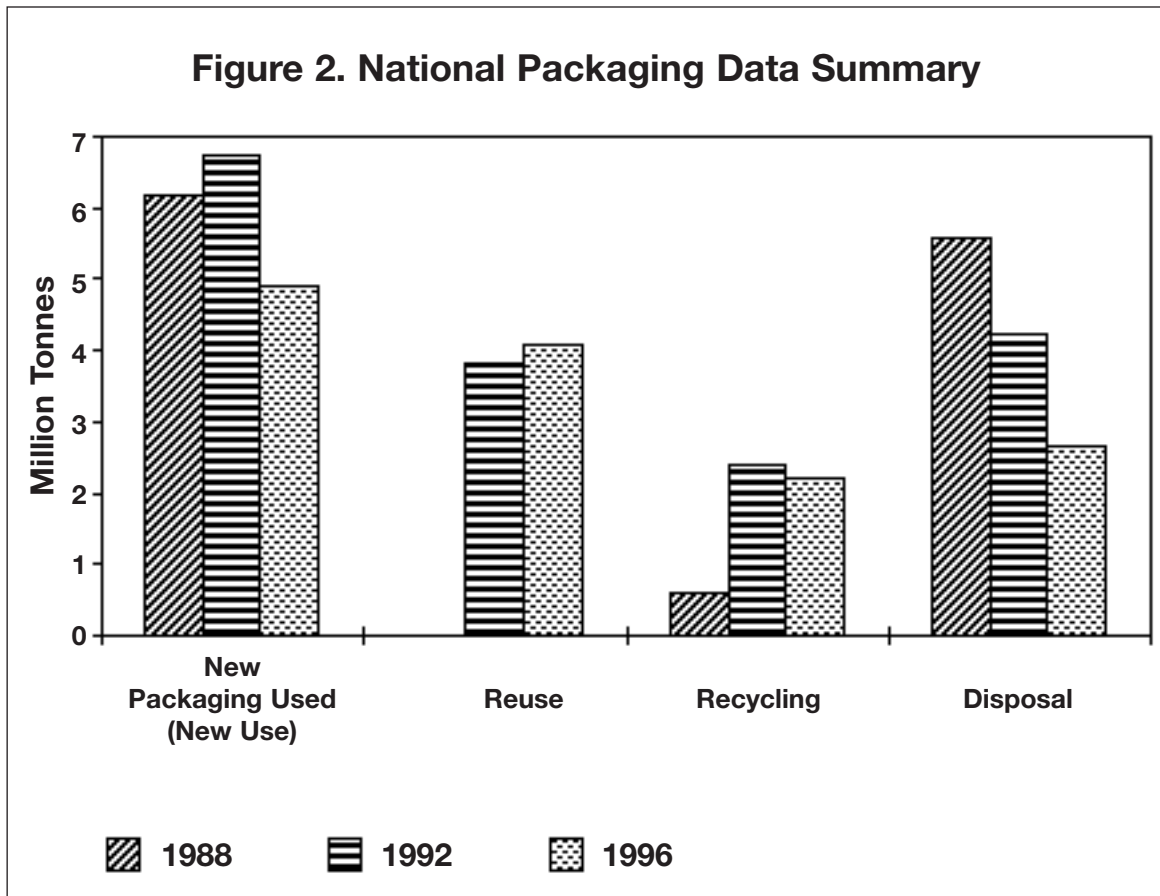
Prior to the initiation of the 1996 survey and related work, Statistics Canada produced a report for the Task Force titled "National Packaging Monitoring System Preparatory Study", dated August 2, 1996, which examined the outstanding issues from the 1992 survey, costs to replicate the 1992 survey in 1996, and looked at cost reduction scenarios. The report recommended ways to improve data quality and reduce costs while retaining the same survey methodology that was used in 1992.

In the 1996 survey, it was decided not to produce estimates at the provincial level, in contrast to the 1992 survey. Because of this, it was possible to select a sample from more precise industry groupings than was done in the 1992 survey, where the sample was selected from industry groupings within provinces. In addition, because of improvements to the survey

questionnaire and sample design, there was significantly less reporting of “no packaging used” in the 1996 survey compared to 1992.

There was a lower response rate to the 1996 survey compared to 1992, however Statistics Canada confirmed that the 61% response rate that was achieved was consistent with other similar surveys. Although the smaller number of responses in the 1996 survey resulted in higher coefficients of variation for some estimates for the surveyed industry sectors, the overall coefficients of variation were comparable to the 1992 survey.

Figure 2 shows how the 1996 results compare to those of 1992 and 1988.



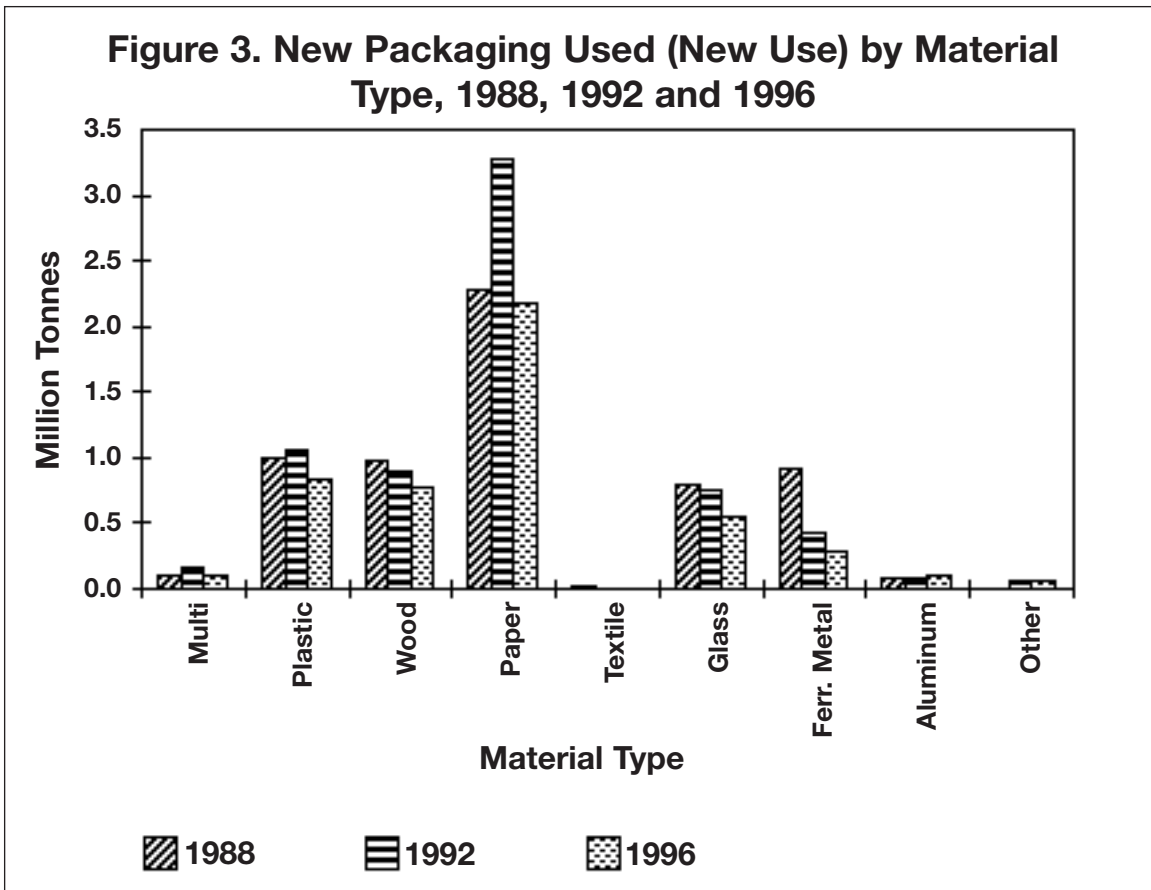
Packaging reduction

Source reduction is the most difficult practice to quantify and the results of the survey and related work to obtain packaging disposal data can only hint at progress in source reduction through the data on packaging use. It is interesting to look at the amounts of newly manufactured packaging used (new use) from 1988 to 1996 as an indicator of source reduction over that time period. As shown in Table 1, new use in 1996 is down 27% from 1992 levels, and down 21% compared to 1988.

Table 1. Newly Manufactured Packaging Used (New Use) in 1988, 1992 and 1996.

| 1988 | 1992 | 1996 |
|---------------------|---------------------|---------------------|
| 6.18 million tonnes | 6.72 million tonnes | 4.89 million tonnes |

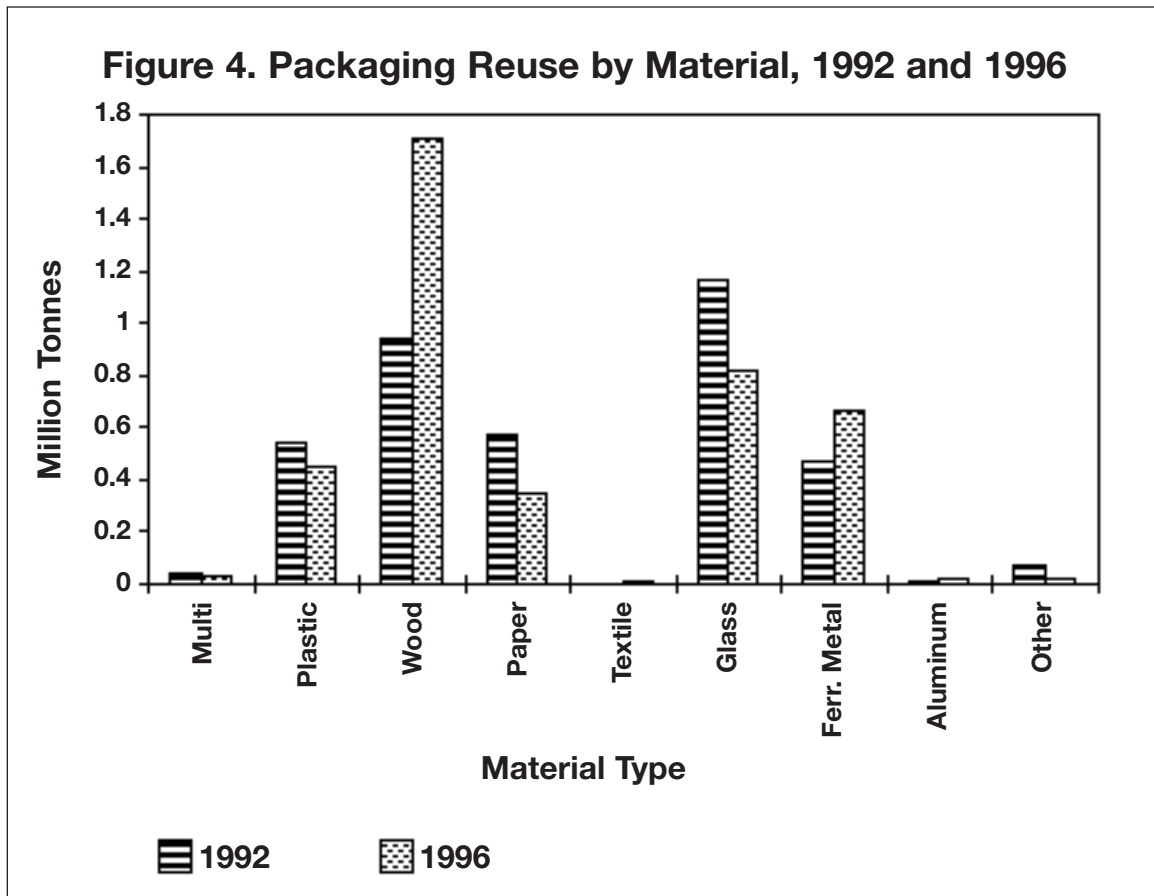
Figure 3 compares newly manufactured packaging used (new use) by material type for 1988, 1992 and 1996.



Packaging reuse

The 1988 baseline study did not provide a complete picture of packaging reuse. The 1992 and 1996 results provide the only useful information on packaging use. On a national basis, reuse activities are important to diversion of packaging from disposal, accounting for 4.07 million tonnes or 47% of packaging use in 1996. By comparison, in 1992 reuse was 3.81 million tonnes or 36% of packaging use.

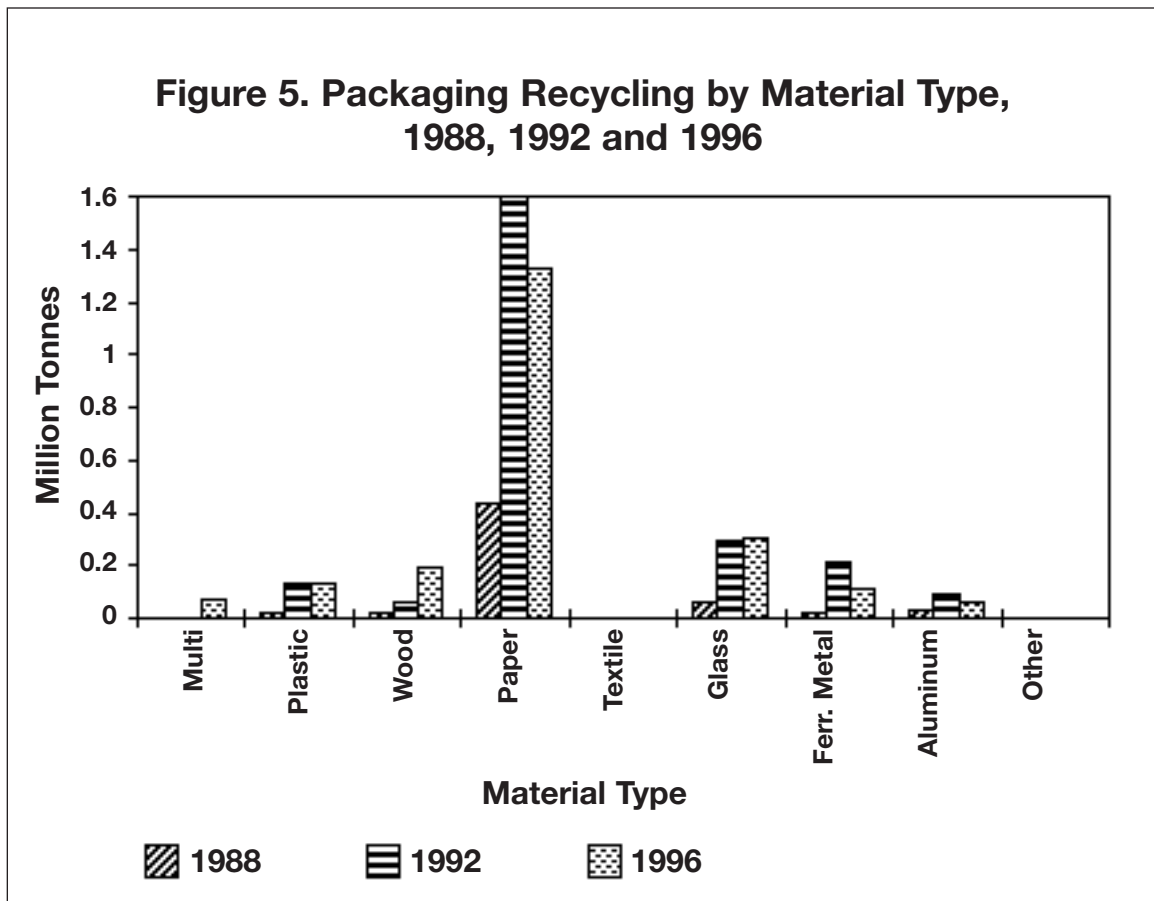
Figure 4 shows reuse by material type for 1992 and 1996.



Packaging recycling

The 1996 estimate for total packaging recycled is 2.20 million tonnes, compared to 2.4 million tonnes for 1992 and 0.59 million tonnes for 1988. Recognizing the less complete data for 1988, the 1996 recycling figure represents an increase of 273% from 1988. In 1996, the weight of packaging sent for recycling accounted for 25% of the weight of packaging used.

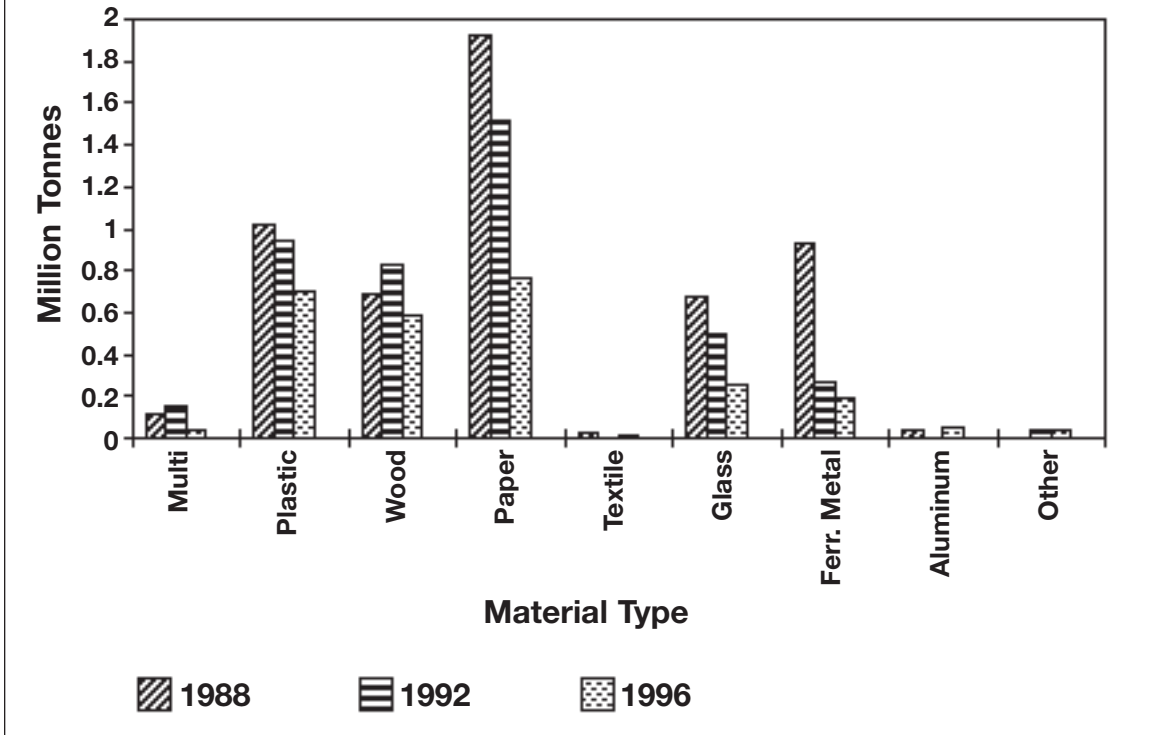
Figure 5 compares the recycling data by material type for 1988, 1992 and 1996.



Packaging disposal

Figure 6 compares packaging disposal by material type for 1988, 1992 and 1996. The material types that show the largest reductions in disposal from 1988 to 1996 are paper, ferrous metals and glass, which together account for 84% of the total diversion. This is due to increases in reduction, reuse and recycling of these materials as well as a shift in packaging from heavier to lighter materials.

Figure 6. Packaging Disposal by Material Type, 1988, 1992 and 1996



Diversion results on a weight and per-capita basis

Although NAPP targets have been set on an absolute weight basis, there has been some discussion within the Task Force of reporting the results to reflect the rate of population growth. Canada’s population has increased by 11% since 1988. Table 2 compares the 1992 and 1996 results on an absolute and per-capita basis.

Table 2. Diversion results on a weight and per-capita basis.

| | Target | Absolute Disposal (Million Tonnes) | Absolute Reduction (%) | Population (Million People) | Per-Capita Disposal (kg/cap) | 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 |

RECOMMENDATIONS FROM THE NATIONAL PACKAGING TASK FORCE

Task Force members recognize that while the year 2000 goal has been achieved four years ahead of schedule, the work in implementing the National Packaging Protocol is not complete. The Task Force outlined areas of activity which still need to be pursued. These are:

- **Completion of the analysis of the 1996 data.** A full analysis and interpretation of the 1996 results should be completed in order to provide direction for future activities.
- **Increased attention to the Protocol's packaging policies.** The Task Force should renew its focus on the six packaging policies and be guided by them in the development of future work.
- **Undertake the year 2000 survey** to ensure that packaging disposal trends evident today are maintained.

APPENDIX A

National Packaging Monitoring System Industry Sectors Surveyed

| Industry Sector | Description | SIC |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1 | Agricultural industries (packers): <ul style="list-style-type: none">• Poultry and egg farms• Honey farms• Fruit and vegetable farms• Horticultural specialties• Combination farms | 0114 0121 0151 to 0159 0161 to 0169 0171 |
| Manufacturing Sectors | | |
| 2 | Meat, poultry and fish products | 1011 to 1021 |
| 3 | Fruit and vegetable products | 1031 to 1032 |
| 4 | Dairy products | 1041 to 1049 |
| 5 | Flour, prepared cereal food and feed | 1051 to 1053 |
| 6 | Bakery products | 1071 to 1072 |
| 7 | Sugar and sugar confectionery | 1081 to 1083 |
| 8 | Other food products | 1061, 1091 to 1099 |
| 9 | Non-alcoholic, carbonated beverages and mineral waters | 1111 |
| 10 | Brewery products | 1131 |
| 11 | Distillery products and wine | 1121 & 1141 |
| 12 | Tobacco products | 1211 to 1221 |
| 13 | Rubber and plastic products | 1511 to 1699 |
| 14 | Textile products and clothing | 1911 to 2499 |
| 15 | Wood, furniture and fixtures | 2511 to 2699 |
| 16 | Paper and allied products | 2711 to 2799 |
| 17 | Fabricated metal products and machinery | 3011 to 3199 |
| 18 | Transportation equipment | 3211 to 3299 |
| 19 | Electrical and electronic products | 3311 to 3399 |
| 20 | Non-metallic mineral products | 3511 to 3599 |
| 21 | Refined petroleum and coal products | 3611 to 3699 |
| 22 | Soap and toiletries | 3761 to 3771 |
| 23 | Chemical and chemical products excluding soap and toiletries | 3711 to 3799 (excluding 3761 & 3771) |

Manufacturing Sectors (continued)

| | | |
|----|-----------------------------------|--------------|
| 24 | Other manufacturing: | |
| | • Leather and allied products | 1711 to 1719 |
| | • Primary textiles | 1811 to 1831 |
| | • Printing, publishing and allied | 2811 to 2849 |
| | • Primary metal | 2911 to 2999 |
| | • Other | 3911 to 3999 |

Non-manufacturing Sectors

| | | |
|----|-----------------------------------------------------------------------|------------------------|
| 25 | Transportation: | |
| | • Air | 4511 to 4512 |
| | • Railway | 4531 |
| | • Water | 4541 to 4542 |
| | • Other | 4561, 4562, 4841, 4842 |
| 26 | Food, beverage, drug and tobacco industries, wholesale | 5211 to 5241 |
| 27 | Other wholesale: | |
| | • Farm products | 5011 to 5019 |
| | • Petroleum products | 5111 |
| | • Apparel and dry goods | 5311 to 5329 |
| | • Household goods | 5411 to 5439 |
| | • Motor vehicle parts and accessories | 5511 to 5529 |
| | • Metals, hardware and plumbing, heating and building materials | 5611 to 5639 |
| | • Machinery, equipment and supplies | 5711 to 5799 |
| | • Other products | 5911 to 5999 |
| 28 | Food, beverage and drug industries, retail | 6011 to 6032 |
| 29 | Other retail industries | 6111 to 6921 |
| 30 | Accommodation, food and beverage, amusement and recreational services | 9111 to 9699 |
| 31 | Other industries (Laundries and cleaners) | 9721 to 9729 |

APPENDIX B

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

3 Phases of Packaging Use



Packaging Materials

- cans, bottles, jars,
- barrels, drums, tanks
- wood, plastic and metal pallets
- corrugated boxes
- plastic film, wrap, liners and strapping

- wood, plastic and metal pallets
- corrugated boxes
- plastic film, wrap, and strapping

- bags, hangers, boxes
- cans, jars, plastic, foam
- paper

Areas of Reduction

- reduced packaging
- reusable packaging
- switch to lighter materials
- thin walling
- concentrated formats
- recycling

- reduced packaging
- reusable packaging
- recycling

- bulk purchase
- reuse
- recycling
- composting

APPENDIX C

Members of the CCME National Packaging Task Force

| Name | Affiliation |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Beverley Alder | Ontario Ministry of the Environment |
| Susan Antler | Food and Consumer Products Manufacturers of Canada (FCPMC) |
| Doug Archer | Federation of Canadian Municipalities |
| Adrian Bradford | Canadian Importers Association |
| Ron Burke | Bureau of Food Regulatory, International and Interagency Affairs - Food Directorate, Health Protection Branch, Health Canada |
| *Duncan Bury | Environment Canada |
| George Cornwall (Chair) | Environment Canada |
| Jim Dickson | Alcan Rolled Products Co-Recycling |
| David Douglas | BC Ministry of Environment, Lands and Parks |
| Ken Dominie | Newfoundland Department of Environment and Labour |
| Joey Ducharme | Canadian Pulp and Paper Association |
| *Larry Dworkin | Packaging Association of Canada (PAC) |
| Fred Edgecombe | Canadian Plastics Industry Association |
| Jim Ferguson | Manitoba Environment |
| *Barry Friesen | Nova Scotia Department of the Environment |
| Joanne Glynn | New Brunswick Environment |
| Gregg Hallsworth | Saskatchewan Environment and Resource Management |
| Ron Harper | Industry Canada |
| Jay Jackson | Industry Canada |
| John Jackson | Citizen's Network on Waste Management |
| Jean-Marc Jalbert | Ministère de l'Environnement et de la Faune (Québec) |
| *Martin Janowitz | The Clean Nova Scotia Foundation |
| Belinda Junkin | Canadian Pallet Council |
| Patrick Kane | Alberta Environmental Protection |
| *Diane Kunec | Canadian Council of Ministers of the Environment |
| Arlene Lannon | Canadian Council of Grocery Distributors (CCGD) |
| Bryan Levia | Yukon Territorial Government |
| Ruth Lotzkar | Consumers' Association of Canada |
| John Mullinder | Paper & Paperboard Packaging Environmental Council |
| *Joan O'Neill | Federation of Canadian Municipalities |
| Glenn Parker | Food and Consumer Products Manufacturers of Canada (FCPMC) |
| John Paulowich | Dofasco |
| Alan Robinson | Packaging Association of Canada (PAC) |
| Frank Stewart | Quaker Oats Company of Canada Limited |
| *Gerry Stewart | Prince Edward Island Department of Fisheries and Environment |

| | |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Lynn Stewart | Food Bureau, Agriculture and Agri-Food Canada |
| *Doug Symington | Consumers Glass |
| *Kathy Thompson | Federation of Canadian Municipalities |
| *Anthony van Heyningen | Canadian Soft Drink Association |
| Don Wedge | STOP, Montréal |
| Chris Wolnik | Northwest Territories - Environmental Protection Service - Department of Resources, Wildlife and Economic Development |

* Indicates membership on the Task Force's Monitoring Committee

APPENDIX D

Glossary (as used to describe the 1996 data)

Disposal

Defined as: $Use + (Imports - Exports) - Reuse - Recycling$.

(Imports - Exports)

Represents the net imports of in-use (i.e. filled) packaging.

In-use packaging

Packaging that contains products.

New Use

New packaging used (new use) as reported by survey respondents.

Packaging

The term “packaging” refers to all materials, fabricated containers and other components used in the containment, protection, movement and display of a product or commodity. A “package” or “packaging” can also be a material or item that is physically attached to a product or its container for the purpose of marketing the product or conveying information about the product. Virtually all manufactured and processed products require packaging during one or more phases of their production, distribution, wholesaling and retailing.

Recycling

Consists of the packaging recycling data reported by industry in the Statistics Canada survey plus the packaging recycling done by householders and commercial and institutional establishments not covered by the survey, as determined by the consultant’s study.

Reuse

Represents that portion of packaging which is reused in its current form. It consists of the packaging reuse reported by industry in the Statistics Canada survey plus the packaging reuse associated with the net imports, as calculated by Statistics Canada.

Use

The reported use of packaging by industry from the Statistics Canada survey and includes domestic and imported empty packages as well as *Reuse*. Use occurs when packages are filled with product and consists of both new and reused packaging.