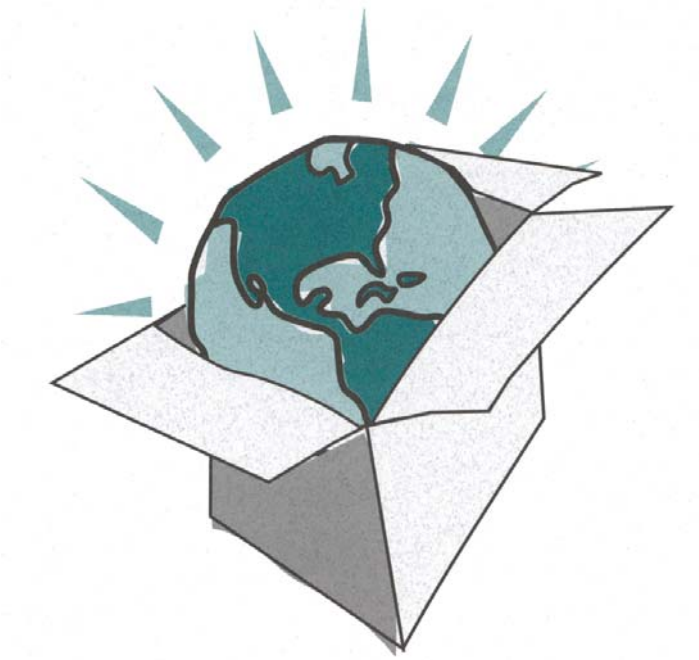
NATIONAL PACKAGING PROTOCOL

2000

FINAL REPORT



CCME

Canadian Council of Ministers of the Environment

Le Conseil canadien des ministres de l'environnement

PN 1511

FROM THE NATIONAL TASK FORCE ON PACKAGING
JUNE 2000

August 24, 2000

Dear Member;

National Task Force on Packaging Final Report, June 22, 2000

At its meeting on July 17-18, CCME's Environmental Planning and Protection Committee (EPPC) met and reviewed the Final Report prepared by the National Task Force on Packaging and discussed its response to the recommendations provided in the report.

As this is the final work to be carried out by Task Force members on behalf of CCME, we would like to commend you and your colleagues for your efforts over the past 10 years to advance the policies of the National Packaging Protocol and to reduce the amount of waste being disposed. The Final Report clearly sets out the history of the Task Force and its efforts within CCME to achieve many of the goals it set ten years ago. It is a well-written and balanced review of the Task Force's work, reminding us there is much to be proud of.

In response to the Task Force's recommendations, EPPC would like to reassure Task Force members that CCME has not abandoned solid waste management issues. Last November, Ministers indicated their interest in pursuing joint work on solid waste and, at their meeting in June, 2000, they agreed to explore two areas further in a focused manner: plastics recycled content and stewardship for consumer electronics. This work is supportive of the first two recommendations from the Task Force regarding household packaging and stewardship initiatives. There also may be an opportunity to reinforce the link to waste reduction that is implicit within the CCME Pollution Prevention Awards. Governments will consider initiatives they can pursue individually to address the Task Force recommendations on educational information about packaging and on government procurement.

On behalf of CCME and all its members, thank you again for your efforts in support of the goals of the National Packaging Protocol. You and your organization's participation on the National Task Force on Packaging have contributed to its success and helped to make the waste reduction achieved through the Protocol possible.

Sincerely,

Bill Oppen
Chair, CCME Environmental Planning and Protection Committee

EXECUTIVE SUMMARY

Background

In 1989, what is now the Canadian Council of Ministers of the Environment (CCME), called for the development of a "National Packaging Protocol which would set targets and schedules for the minimization of packaging waste and contribute to a 50% overall reduction in waste generation by the year 2000."

A broad, multi-stakeholder consultation began and in March, 1990 the Ministers endorsed the Protocol's waste diversion targets and six national packaging policies. Representatives from federal, provincial and municipal governments, industry and environmental and consumer interest groups formed the National Task Force on Packaging which would work together over the next 10 years to monitor the Protocol's implementation.

Protocol Review

The major achievement of the Protocol was reaching its "overall goal" of reducing total packaging waste by 50% by the year 2000, four years ahead of time. This was a voluntary process that gave industry the flexibility to determine how best to meet the targets. It resulted in the elimination or reduction of some packaging, the expansion or introduction of re-useable packaging or packaging systems and the expansion of recycling infrastructures. Much of the packaging not recycled in 1988 is now routinely recycled.

Provincial and municipal governments have made an enormous effort to boost recycling over the last 10 years and the focussed approach on packaging seems to have worked: in 1996 packaging was estimated to represent only 13% of total solid waste.

The Task Force brought a broad range of key stakeholders together, leading to a better understanding of each other's positions and of the issues themselves. All benefited from the "learning curve". For example, environmental impact of packaging from cradle to grave (life cycle) is far more complicated than previously thought. The Task Force also produced many worthwhile documents and reports and stimulated other environmental action outside of the Task Force itself.

While the achievements are undoubtedly beneficial, the Protocol and its implementation have revealed some shortcomings. The most significant has been the inability to deliver a harmonized approach to packaging policy. Waste management and packaging policies remain inconsistent across Canada. What has emerged, over the years, is a myriad of different approaches to packaging waste management. Whether a unified approach is in fact achievable, or indeed desirable in some cases, is a matter of continuing debate.

The debate over how to balance voluntary with regulatory approaches continues to be contentious - subject to individual provincial preferences - and has meant that a national solution in the short term is unlikely.

Consistency between and agreement among "industry" is frequently elusive, making it even harder from a public policy point of view, to move forward. And measuring diversion (whether by end-use or weight) has proven problematic, as has the slow development of tools to measure the environmental impact of packaging from design to disposal (cradle to grave).

The Task Force was originally scheduled to complete one more survey, at the end of 2000, and there are some policies and tasks that remain unfulfilled or incomplete. Due to budget constraints, and the early achievement of the 2000 milestone target, the Task Force was asked to wrap up its work. The Task Force therefore conducted a review of its efforts over its eleven year life-span and of the Protocol itself. This report is its last publication.

Recommendations

Based on the Protocol review, the Task Force **recommends** that the CCME does not abandon solid waste-resource management issues. A new solid waste, multi-stakeholder forum, perhaps under the umbrella of a reinvigorated CCME Solid Waste Task Group should be established to address a broader approach to solid waste (not just packaging). Through its work, a life cycle approach should be encouraged for the design, manufacture, use and disposal of all waste materials. This forum should also review the outstanding issues from the Protocol which include:

I. **Household packaging** - Further analysis of household packaging in order to provide better understanding and consistent development of policies affecting residential waste streams.
II. **Stewardship Initiatives** - Completion of the inventory of packaging and product waste diversion programs the Task Force has already begun, as a necessary first step towards consistent stewardship initiatives across Canada.
III. **Education and Awareness** - Further efforts be made to educate consumers on why packaging exists in its various types and quantities, what environmental impact it has through its life cycle, and what consumers can do about it in their purchasing and disposal decisions.
IV. **Government Procurement** - Governments need to implement environmentally sound purchasing policies to stimulate market development and to provide leadership to other Canadians.

Conclusion

Members of the Task Force are proud of the Protocol's achievements. While much remains to be done, the Task Force has served Canadians well and looks forward to CCME building on the work of this historic and unique initiative.

CHAPTER ONE

Introduction

In April 1989, CCREM, now called the Canadian Council of Ministers of the Environment (CCME) called for the development of:

"a National Packaging Protocol (NaPP) by early 1990, which would set targets and schedules for the minimization of packaging waste and contribute to a 50% overall reduction in waste generation by the year 2000."

As a result of this directive, the National Task Force on Packaging (NTFP) was established with broad multi-stakeholder representation and a mandate to have the proposed Protocol completed by March 1990. The Task Force first met in June 1989 and Environment Canada assumed the lead roles of chair and secretariat. A consulting team was retained to provide technical, legislative and economic expertise and to facilitate the process of developing a consensus among the many stakeholders as to the nature of the proposed Protocol.

In October 1989, the Task Force convened a public workshop in Toronto to discuss the technical findings of the consultant team and to establish the selection criteria to be applied to various measures being considered for inclusion in the Protocol.[1] A Draft Protocol was prepared, and in December 1989 a series of regional consultation meetings was held in Montreal, Moncton, Winnipeg, Edmonton, Victoria and Toronto to obtain input from industry, local and regional governments, consumer and environmental groups.

A final consultative workshop, attended by 150 participants, was held in Ottawa in February 1990. The revised Draft Protocol was then presented to the CCME and was adopted as the National Packaging Protocol at the Minister's March 1990 meeting held in Vancouver. The communiqué announcing the adoption of the Protocol stated that:

"As a first step, Ministers established a 1992 interim national target of 20% reduction over 1988 levels of packaging. The savings if that target is met in 1992 in annual waste collection and disposal costs will exceed $50 million dollars. Ministers challenged the packaging industry to initiate measures voluntarily to meet the interim target. They signaled, however, that they would begin immediately to prepare compatible legislation and regulations to achieve the necessary reductions."

[1] A total of seven technical reports were prepared in conjunction with the development of the Protocol: Packaging Application in Canada; Packaging Reduction, Reuse and Recycling Technology Options and Economics; Environmental Life Cycle of Packaging; Legislative Initiatives Relating to Packaging and Implications for the National Packaging Protocol; Household Consumers and Packaging; Stakeholder Positions and Response to the Development of the National Packaging Protocol, CCME, May 1990;
and The Technical Basis for the National Packaging Protocol – The Summary Report, CCME, February 1992.

CHAPTER TWO

Summary of Task Force Activities

First Steps to Implementing the Protocol: The NaPP Action Plan

Following the adoption of the Protocol in March 1990, the CCME requested that the National Task Force on Packaging continue to meet to ensure that the Protocol – and the policies and action plan which it incorporated – were implemented.

At their April 1990 meeting in Quebec City, the Task Force agreed that the critical work ahead was to ensure that the Protocol was widely read and acted upon by industry, consumers and governments. Effective voluntary action to achieve the targets would be necessary.

Environment Canada hired additional staff to work with the Task Force and retained consultants, as appropriate, to support the various initiatives. The Task Force focused its early implementation energies on CCME-supported areas of priority including the review and development of legislation and regulations, infrastructure development, database development, the creation of a Code of Practice and communications.

The Task Force also decided to continue with the publication of *NaPP News*[2] to provide updates on Task Force activity and industry initiatives.

In addition to these priorities, the Task Force produced an ambitious list of other issues to be acted on from 1990 to 1992. Among the major issues on this list were the following:

- Development of a framework for environmental life cycle analysis
- Development of "environmental profiles" of packaging
- Review and assessment of government policies and practices which impede the achievement of the Protocol
- Development of industry action plans

Canadian Code of Preferred Packaging Practices

To support industry in meeting the Protocol waste diversion targets, a Task Force working group was established in 1990. Its mandate was to develop a Code of Practice to guide industry action. The Code was designed to recognize that packaging has essential functions including product integrity, health and safety requirements, which cannot be compromised, and to recognize the nature of waste management problems in Canada.

[2] The Task Force newsletter *NaPP News* was first published in December 1989. During the life of the Task Force, 17 issues were published. The final issue, a special edition announcing the results of the 1996 national packaging survey, was distributed in February 1998.

The *Canadian Code of Preferred Packaging Practices*[3] was officially released at the November 1991 meeting of CCME Ministers in Halifax. The widely circulated Code (over 8,000 copies were distributed through industry associations) promotes excellence in packaging by providing guidance to industry in the selection, design and production of packaging that is consistent with NaPP policies and targets.

The Code calls for companies to make a commitment to the Protocol's goals by adopting a policy statement and by taking specific actions to minimize the impact of packaging on the environment. It includes a questionnaire to help companies better understand and consider environmental implications of packaging design, and recommends that companies develop action plans to:

- identify all packages produced, used or disposed of by the company;
- adopt their own industry-specific code of packaging practice in the design, use and marketing of products and packaging;
- apply the Code within the organization, based on the 3Rs hierarchy;
- involve employees as partners in the implementation process; and
- keep records of all actions and results within the organization relating to packaging waste.

To further support the Code, the Packaging Task Force produced a set of packaging audit guidelines.[4] These guidelines are a tool to assist brand owners, whether manufacturers or distributors, in assessing and quantifying the amount of packaging used to package and market their products. They also provide companies with essential information needed to prepare packaging reduction workplans. The workplans are designed to minimize the amount of packaging used, and to maximize diversion of packaging waste that results from consumption of their product(s).

Legislation and Regulatory Development

In 1990, a Packaging Task Force subcommittee – with the assistance of Justice Canada –initiated a review of jurisdictional authority over packaging and existing packaging legislation. The subcommittee proposed the development of nationally consistent enabling legislation which would give the appropriate federal or provincial jurisdiction the authority to regulate in any of the areas covered by the packaging legislation.

The specific objectives of the NaPP legislation and regulatory development workplan were:

- to promote national uniformity and harmonization towards packaging legislation by all jurisdictions;
- to create a "level playing field" both within Canada and internationally, for packaging producers and users; and
- to ensure the NaPP packaging waste diversion targets were met.

[3] *Canadian Code of Preferred Packaging Practices*, CCME (EPC-NAPP 35E), November 1991.
[4] *Packaging Audits and Packaging Reduction Workplans: Guidelines to help industry meet the goals of the National Packaging Protocol*, CCME (EPC – NAPP 44E), June 1992.

At their May 1991 meeting, the CCME Deputy Ministers endorsed the Packaging Task Force's R*ecommendations for Federal and Provincial Elements of Packaging Legislation*[5] and agreed to incorporate the proposed elements into their respective waste management legislation. The work of the subcommittee was designed to ensure that packaging legislation should be in place by December 1992, in the event that voluntary efforts to achieve the Protocol's first target of 20% diversion by 1992 were not successful.

A second review of packaging legislation in Canada was published in March 1996. This *Packaging Legal Review*[6] undertook research on federal, provincial and territorial statutes, regulations, and guidelines or strategies which had a bearing on packaging, waste reduction, reuse, recycling and stewardship. It also compared the legislation to the earlier *Recommendations for Federal and Provincial Elements of Packaging Legislation.* A subsequent, more detailed look at federal legislation was also undertaken.[7]

The 1996 legal review showed that each Canadian jurisdiction had legislative provisions in place applicable to packaging and that a number of provinces had adopted elements of the Task Force's legislative recommendations. Some provisions reflected mechanisms to limit the environmental impacts of packaging. Others had been in force for long periods of time, perhaps predating the Protocol, and formed an integral part of the jurisdiction's waste management strategy.

[5] *National Packaging Protocol: Recommendations for Federal and Provincial Elements of Packaging Legislation,* National Packaging Task Force, February 1991.
[6] *Packaging Legal Review*, prepared by the Environmental Law Centre, Edmonton, for Environment Canada, March 31, 1996.
[7] *Federal Packaging Legislation*, prepared by the Environmental Law Centre, Edmonton, for Environment Canada, March 1997.

Establishment of the National Packaging Monitoring System (NPMS) and the 1988 Benchmark Estimates

In July 1990, a consultant was retained to develop and test a packaging database for Canada. The goals were to establish a baseline figure for 1988 packaging waste and create a monitoring program to measure progress toward the Protocol packaging diversion targets. The database would track the type, amount and value of packaging produced, used, reused, recycled and disposed of in Canada.

Because survey data were unavailable, the 1988 benchmark estimates[8] of packaging were based on:

- Statistics Canada's 1988 survey of Canadian manufacturers which provided information on packaging production and use based on dollar and weight values.
- Industry's data of gross production of material type by weight, and total packaging by material type that was reused and recycled.
- Custom Canada's data on the import and export of empty packaging by material type and of manufactured goods by dollars.

Statistics Canada arranged and provided data for 31 industry sectors (23 representing manufacturing users and producers, 8 representing non-manufacturers), and 8 packaging material types which were further broken down into 31 subcategories. This data became the basis for the National Packaging Monitoring System (NPMS).

In the fall of 1990, a pre-test questionnaire was sent out to 5,262 representative establishments in Canada as part of the development of the conceptual requirements of the database. The questionnaire was also supported by waste audits to verify the information collected and to help fine tune the database methodology.

Release of the 1990 National Packaging Survey Results

The first full survey of packaging conducted under the NPMS was undertaken for the 1990 calendar year. The survey tested the NPMS methodology and was designed to provide a mid-point evaluation (from the benchmark year of 1988 to the December 31, 1992 target date) of the progress being made toward the Protocol's first target of 20% diversion from disposal.

The results were released at the CCME Minister's spring meeting in 1992[9] and showed a 14% decrease in the amount of packaging waste sent for disposal in 1990 compared to 1988. This encouraging trend was reinforced by a 5% decrease in the total amount of packaging used over the same period.

[8] *National Packaging Protocol 1988 Benchmark Estimates*, prepared for the CCME by the National Task Force on Packaging, December 1992.
[9] *National Packaging Protocol Results of the 1990 National Packaging Survey*, prepared for the CCME by the National Task Force on Packaging, December 1992.

1992 National Packaging Survey Results

The NPMS survey for the 1992 target commenced in January 1993. Statistics Canada collected data from over 10,000 establishments and the results were released in a *1992 Milestone Report*[10] at the CCME Minister's meeting of November 1993. The survey reported a 21% reduction in packaging waste disposal between 1988 and 1992. On a national basis, the Protocol's1992 target was met.

While national progress was established, the degree of success across the country – and between industry and material sectors – was variable. This was identified as a function of industrial activity and status of infrastructure to collect used packaging and to process secondary materials. The *1992 Milestone Report* also noted that reduction strategies and new initiatives should target consumer packaging as well as packaging used for storage, transportation and display.

Task Force Initiatives, Tools and Campaigns

In addition to the Task Force's extensive efforts in the area of monitoring, work was also undertaken in the other priority areas to provide support and information to assist in meeting the Protocol objectives.

In 1991, NaPP set up a technical committee to investigate the amount of heavy metals used in inks, dyes and adhesives required in the production and printing of packaging. The initiative was in response to legislation being proposed by the Coalition of Northeastern Governors (CONEG) in the U.S. to limit the use of toxic substances in packaging applications. The committee confirmed that Canadian firms already met or bettered the CONEG standards.

In the area of life cycle assessment, the Task Force produced a number of reports to encourage the adoption of life cycle management approaches to packaging. *Sources of Data for Life Cycle Analyses of Canadian Packaging Products*[11] was published in 1994 to review and evaluate data for use in assessing resource and energy requirements, and waste outputs from the life cycle of six packaging materials. This was followed in December 1994 by an Environment Canada report to estimate the increases and decreases in environmental burdens associated with the packaging diversion targets achieved by NaPP.[12]

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[10] *National Packaging Protocol, 1992 Milestone Report*, CCME (EPC-NAPP –81E), November 1993.
[11] *Sources of Data for Life Cycle Analyses of Canadian Packaging Products*, CCME (EPC-NAPP- 85E), revised, March 1994.
[12] *The Estimation of the Environmental Impacts of the National Packaging Protocol*, prepared by Proctor & Redfern and submitted to Environment Canada, December 1994.

Environmental Profiles: Guidelines to Help Industry Meet the Goals of the National Packaging Protocol[13] was published in August 1994. It was distributed widely the following year with a fact sheet describing the successful use of the approach by GenPak, a Quebec plastics firm. By using the environmental profile, companies could now improve their environmental performance through reductions in the consumption of resources and the minimization of wastes.

Activities by the Task Force in the area of life cycle management and assessment were instrumental in the development of the Canadian Raw Materials Database (CRMD). The CRMD is a voluntary industry-supported initiative to document cradle to gate,[14] input and output data for five raw materials (aluminum, steel, plastics, glass and wood).

In July 1993, Industry Canada completed a guideline for the use of environmental labeling primarily to address issues in the area of recycling and recycled content labels. *Principles and Guidelines for Environmental Labeling and Advertising*[15] sets out guidelines for the use of the mobius loop recycling symbol, the use of the term "recyclable" and claims of recycled content. It was developed in partnership and consultation with associations (many of them also on the Task Force) representing public interest groups, manufacturers, distributors, retailers and advertisers.

Other Supportive Activities

Since the adoption of the Protocol in 1990, members of the National Packaging Task Force have been active in their own areas to support the packaging diversion targets. Major industry investment has been made in the areas of packaging systems, designs and materials. There has also been new capital investment in secondary market capacity and substantial growth in municipal collection infrastructure. In addition, there has been considerable indirect, supportive activity by Task Force members. The following is a profile of a number of these activities to show the breadth of support for the Protocol policies.

- The Paper and Paperboard Packaging Environmental Council (PPEC) was created in 1990 to coordinate and lead diversion activities for the paper packaging sector.
- The Environment and Plastics Industry Council (EPIC) provided technical support for the diversion of plastic packaging and has sponsored pilot programs.
- The Packaging Association of Canada (PAC) holds its annual PAC Exhibition and Conference at which awards are presented for environmentally deserving packaging.
- A municipal guide for promotion of packaging waste reduction was produced jointly by the CCME and the Federation of Canadian Municipalities (FCM).[16] The guide promotes awareness of the packaging waste issue at the local level and includes draft fact sheets, descriptions of pilot programs and a "shopper's audit". The guide was used in a Christmas

[13] *Environmental Profiles: Guidelines to Help Industry Meet the Goals of the National Packaging Protocol*, CCME (EPC-NAPP 84F), August 1994.
[14] The life cycle inventory conducted in the Canadian Raw Materials Database includes the following three stages for each material: raw materials acquisition, intermediates processing, and production of the final commodity.
[15] *Principles and Guidelines for Environmental Labeling and Advertising*, Industry and Sciences Canada, July 1993.
[16] *Municipal Guide for the Promotion of Packaging Waste Reduction*, FCM and CCME, CCME-NAPP-65E, undated (1993).

packaging waste reduction campaign in November 1993. The campaign also included a survey of consumer perceptions of packaging.

- The FCM launched a seven-point action plan funded by its Big City Mayors caucus, sponsored a major initiative to promote municipal user pay schemes[17] and published *The Packaging Waste Reduction Guide: Minimizing Solid Waste Through Efficient Procurement Practices.*[18]
- The Environmentally Sound Packaging Coalition of Canada launched a "green shopper" program in British Columbia and published fact sheets aimed at consumers about reducing packaging waste.
- Ontario Multi Material Recycling Inc.II (OMMRI II): Corporations in Support of Recycling Inc. and Collecte Seléctive Québec (CSQ) established industry sponsored support for municipal recycling programs by providing technical advice and start-up program funds.
- The Resource Recovery Fund in Nova Scotia received voluntary contributions from industry between 1991 and 1996 to support waste diversion.
- In 1992, the Grocery Products Manufacturers of Canada (GPMC) and the Canadian Council of Grocery Distributors (CCGD) led an industry coalition in the proposed Canadian Industry Packaging Stewardship Initiative (CIPSI).
- Environment Canada sponsored a Canada/Germany Packaging Waste Reduction Workshop in September 1994. The workshop was designed to learn more about the successes and trials of the German program and to build on each country's experiences in implementing packaging waste diversion initiatives.

Reorganization and Renewed Commitment

In spring 1994, the Task Force was reorganized into caucuses, subcommittees and a steering committee with a view to streamlining decision making and broadening the participant base. By early 1995, however, it was clear that the reorganized structure was not very effective. The Task Force had not met in over a year and there was a growing perception among many members that it had lost its focus. There was also a growing sense that some governments were less committed to both packaging and waste reduction, and that establishing a coordinated approach to packaging diversion had become less of a priority.

These issues were given more profile in spring 1995 when Environment Canada announced that, due to a federal budget and program review, it would relinquish its leadership role in the implementation of NaPP. However, in response to strong concerns expressed by members of the FCM, industry, environmental organizations and others, Environment Canada reassessed its position and resumed its chairing and secretariat roles in fall 1995.

Against this backdrop, a major three-day Task Force workshop was held in October 1995.[19] The workshop allowed a reassessment of the Task Force's activities, identification of the challenges

[17] *A Municipal Guide on Economic Instruments to Support Municipal Waste Management Programs*, Federation of Canadian Municipalities, FCM 3519E, undated (1996).
[18] *The Packaging Waste Reduction Guide: Minimizing Solid Waste Through Efficient Procurement Practices*, Federation of Canadian Municipalities, FCM3-3502B, undated.
[19] *National Packaging Task Force Workshop, October 4 - 6, 1995*, prepared by SENES Consultants Ltd. in association with M.W. Rowe and Associates, October 1995.

ahead and an opportunity to plan for measurement of the 1996 target of 35% packaging waste diversion. During the workshop, Task Force members reaffirmed the six original policies of the Protocol and the targets. In addition, the need for industry-sector action plans to meet the diversion targets was reaffirmed.

Stewardship Principles

During 1995 and 1996, the Task Force put considerable effort into the issue of packaging stewardship. A subcommittee worked for some months on building stakeholder consensus around a set of packaging stewardship principles. These principles were adopted by the Task Force at its January 1996 meeting and endorsed by the CCME Ministers at their May 1996 meeting.[20]

CCME and the Task Force viewed packaging stewardship as entailing the cooperation of industry, government and consumers to ensure that all stages in a package's life cycle have a minimum impact on the environment. Some of the broad issues covered by the principles include:

- shared responsibility for the environmental impacts of packaging wastes by consumers, industries and governments;
- the need for packaging stewardship programs which are nationally consistent and balanced with flexibility to respond to regional differences;
- the promotion of market development and the use of recovered materials; and
- the necessity of true-cost pricing so that stewardship internalizes the costs of managing packaging waste, and sends the correct signals to the consumers and producers of packaged goods.

Meeting the Target Ahead of Schedule: The 1996 Results

Prior to undertaking the 1996 NPMS packaging survey, Statistics Canada undertook a preparatory study on behalf of the Task Force to review the survey methodology and to identify cost reduction options. The study was initiated as a result of lessons learned from the 1992 survey and because of CCME budget constraints.

The study was conducted from May to July 1996 and reviewed the methodology used for the 1992 survey performed under the NPMS. The objective was to reduce costs for future surveys while maintaining data integrity and comparability. Cost reduction options, a preferred methodology, and a budget for the 1996 survey were developed.

Based on the recommendations of the preparatory study, questionnaires for the 1996 survey of packaging diversion were sent out in April and May 1997 to measure the progress in meeting the 35% target. The survey was conducted with some methodological modifications to address issues from 1992 and was subject to budget constraints. This approach, however, did not compromise the ability to compare results with previous surveys.

[20] *Guiding Principles for Packaging Stewardship*, from the National Task Force on Packaging, CCME, May 1996.

The results of the 1996 packaging survey were released by the CCME Ministers in January 1998 in the *1996 Milestone Report.*[21] The report documented that Canada had exceeded its year 2000 target of 50% diversion from disposal four years ahead of schedule. The 1996 survey showed a 51% reduction compared to the baseline estimates established in 1988. Even though it was not possible to distinguish in the survey results between industrial and consumer or household packaging, it is thought that shipping, manufacturing and distribution packaging were the areas which achieved the most significant gains in packaging waste diversion by weight. The impact this made at the front end of the process paved the way for greater progress at the consumer level, which was already realizing success through trends such as light weighting, bulk purchasing and residential recycling.

In its recommendations to the CCME, set out in the *1996 Milestone Report*, the Task Force recognized that while the 2000 goal had been achieved four years ahead of schedule, the work of implementing the National Packaging Protocol was not complete. The following areas of activity were identified as requiring attention:

- Complete a full analysis and interpretation of the 1996 results to provide direction for future activities.
- Increase 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.

Winding Down the Task Force

In spring 1996, it was announced that the CCME was facing a significant budget cut in its 1996/1997 fiscal year. Total member government contributions to CCME would fall 41.3% in 1996/1997 from the previous year. To adjust to the reduced resources, CCME reassigned the funds in the packaging reserve (which had been put aside to conduct the 2000 survey) to other priorities.

Based on the early success of meeting the 2000 target, and on a shifting of priorities at the CCME brought on by the decline in its financial resources, the Task Force was instructed to wind down its activities. To conclude almost a decade of activity, the Task Force chose to write a final report; prepare a waste characterization methodology which would facilitate ongoing tracking of packaging diversion; and put together a preliminary inventory of product and packaging waste diversion programs in Canada, funded in whole or in part by industry and consumers.

[21] *National Packaging Protocol 1996 Milestone Report*, CCME, 1998.

CHAPTER THREE

Review of the Milestone Targets and the Six Packaging Policies

The Protocol comprised three milestone targets and six packaging policies designed to contribute to the overall goal of reducing packaging waste by 50%.

The Milestone Targets
By December 31, 1990: All provinces must have in place a nationally coordinated data collection program to make possible the monitoring of the following targets.
By December 31, 1992: Packaging sent for disposal shall be no more than eighty (80) percent of the amount sent in 1988.
By December 31, 1996: Packaging sent for disposal shall be no more than sixty five (65) percent of the amount sent in 1988
By December 31, 2000: Packaging sent for disposal shall be no more than fifty (50) percent of the amount sent in 1988.
*FIFTY (50) PERCENT OF THESE DIVERSIONS SHALL BE ACHIEVED THROUGH NEW SOURCE REDUCTION AND NEW REUSE INITIATIVES. RECYCLING PROGRAMS SHALL MAKE UP THE REMAINDER OF THESE DIVERSIONS. PERCENTAGE GOALS WILL BE REVIEWED ANNUALLY. These targets are set as cumulative national goals. In some provinces, the initial target may be higher to correspond to provincial waste management goals. A regulatory framework must be in place to be implemented quickly in the event that targets are not met. Specific targets will be established for industry sectors, in order to achieve these goals. It is incumbent upon those industry sectors unable to meet these requirements to provide adequate supporting documentation and alternate targets, one year in advance of the prescribed deadline. Objectives and actions will be reviewed and enhanced during and beyond this time frame to achieve further diversion. *Diversion targets to be measured by weight. Recycling programs include commercial, industrial, institutional and municipal initiatives.

When the milestone targets (20%, 35% and 50% diversion) were drafted, it was unknown whether total packaging waste disposal could be reduced by half. The targets set were absolute and did not consider greater or less use of total packaging in changing economic circumstances. They also disregarded growth in the number of users of packaging (Canadian population).

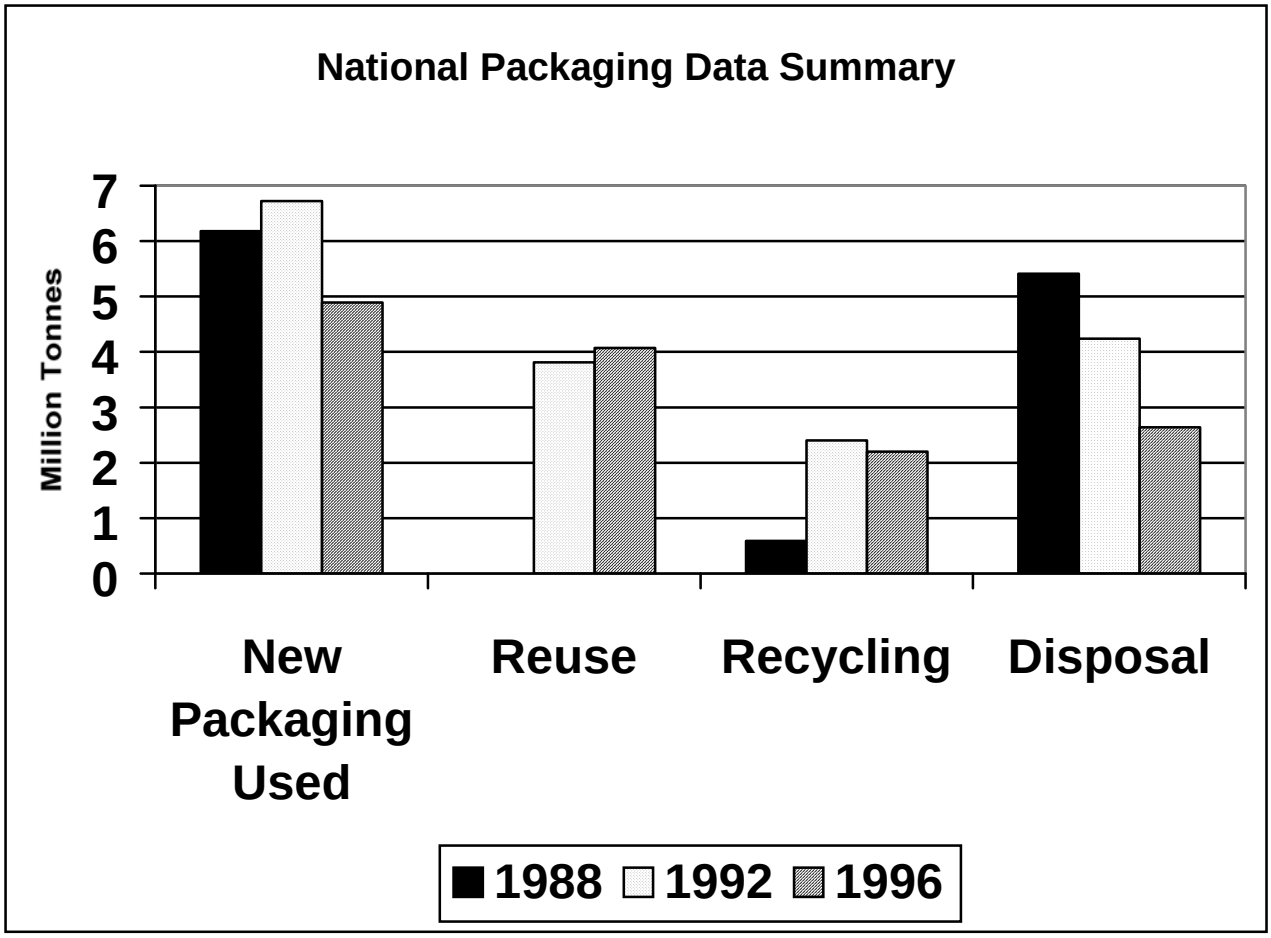
Yet, when the absolute target was met in 1996, it was found that a 56% per capita reduction in disposal of packaging had been achieved even though there had been an 11% increase in population over the period.

The Protocol also suggested a hierarchy of treatment options. Fifty percent of the diversions were to be achieved through new source reduction or reuse initiatives, with recycling accounting for the remainder.

While source reduction was difficult to measure, the surveys indicate considerable success. The use of new packaging fell 21% between 1988 and 1996, and 27% between 1992 and 1996. Reuse represented 47% of all packaging use in 1996. And recycling increased 273% since 1988 to now represent 25% of all packaging use.

A summary of the 1996 results, in millions of tonnes, taken from the *National Packaging Protocol 1996 Milestone Report*, is shown below:

Use	+	(Imports – Exports)	- Reuse -	Recycling	= Disposal
8.74	**+**	**0.17**	**- 4.07**	**- 2.20**	**= 2.64**



Issues

- While the Task Force was keen to monitor the performance of the Protocol using the milestone targets, it realized that weight measurement does not actually indicate a measure of environmental performance. So while meeting the targets was seen as a great achievement, the Task Force acknowledged that this is not a complete measure of environmental success.

- Until the national surveys were undertaken (a trial survey for 1990 and the two subsequent surveys for 1992 and 1996), it was difficult to determine whether the national targets would be met. Consequently, the Task Force did not review the percentage goals on an annual basis, although it did come to recognize the validity of also measuring waste diversion on a per capita basis, and noted this in its Milestone Reports.

- While the Protocol called for specific targets to be established for industry sectors this was not done. The Task Force was to be alerted a year in advance if these targets could not be

met. However, with diversion targets based on absolute numbers, it was extremely difficult for any of the 31 industry sectors to determine ahead of time whether the prescribed target could be met since annual sales volumes (then unknown) would significantly contribute to the results.

- While some have questioned the validity of the 1988 benchmark estimates, they were the best available at the time and were accepted by the Task Force as the reference frame for measuring progress. Comparisons between these estimates and the 1996 Survey indicate that the average Canadian family used 21% less packaging in 1996 than in 1988, and that packaging destined for landfill or incineration had been reduced from 80% to only 30%.

- Source reduction proved difficult to measure. The Task Force had to first decide how this would be done. Two main methods were possible: through waste characterization at the disposal sites or at the point of generation at the manufacturing stage. It was decided to survey at the manufacturing stage. It was also decided to measure by weight because this would provide the easiest and most consistent method of measurement.

- Completion of the 2000 survey had been planned. However, developing the survey methodology, carrying it out and analyzing the results, would be expensive. This, coupled with the fact that the milestone targets had been met, prompted the CCME to withdraw its funding of the proposed 2000 survey.

The Policies

Policy #1

All packaging shall have minimal effects on the environment.

"The environmental impact of packaging extends beyond the effect of its disposal: quantity of waste is not the only issue. Resources and energy are consumed to produce and transport packaging. Consideration of broader environmental consequences should be included in an assessment of the impact of packaging.

This will be achieved through the preparation of environmental profiles for each type of package, to be followed by product re-design which minimizes adverse environmental impacts. The policy will stimulate research and the development of new packaging products which have minimal effects on the environment."

Many of the reports commissioned concurrent with the drafting of the Protocol *(Packaging Application in Canada, Environmental Life Cycle of Packaging* and *Household Consumers and Packaging)* helped foster a fuller understanding of the environmental impacts of packaging production, usage and disposal.

The Task Force itself produced *Sources of Data for Life Cycle Analyses of Canadian Packaging Products* (March 1994), *Environmental Profiles and Guidelines* (August 1994) and an *Estimation of the Environmental Impacts of the National Packaging Protocol* (December 1994).

Prior Task Force work such as the *Canadian Code of Preferred Packaging Practices* (November 1991) and *Packaging Audits and Packaging Reduction Work plans* (June 1992) assisted in focusing attention on reducing environmental impact.

Action 1

The federal government, in consultation with a multi-stakeholder group, will undertake the development of methodologies and guidelines to be used in conducting environmental profiles of packaging, allowing users to compare packaging choices.

Policy #1

Environment Canada, with Task Force input, developed guidelines (see footnote 13) for conducting environmental profiles of packaging and promoted one case study as a model.

Action 2

Industry will undertake environmental profiles of their packaging in accordance with the above federal government guidelines, to identify the environmental impacts generated through manufacture, use and post-use management of their packaging.

Policy #1

On an individual basis, many companies have undertaken environmental profiles of their own use of packaging, including adoption of environmental management systems and International Organization for Standardization approaches such as the ISO 14000 environmental series. The Task Force did not undertake a review of these profiles.

Action 3

Based on profile outcomes, industry will prepare action plans and schedules to minimize environmental impacts and manage packaging through source reduction, reuse and recycling approaches.

Policy #1

Many individual companies have used environmental management systems and the Task Force's *Code of Preferred Packaging Practices* and *Packaging Audits and Packaging Reduction Work plans* to achieve their own (and collectively) the Protocol's goals.

Action 4

A multi-stakeholder group will be established to:
(a) identify research and development initiatives and priorities; and
(b) identify new business opportunities.

Policy #1

Many studies by the Task Force helped provide information to support this action. A single, multi-stakeholder group, however, was not established to solely support this action. Instead, individual sectors or companies have independently identified their own opportunities for research and development.

Industry Task Force members, with Environment Canada, have also played a key role in developing a Canadian Raw Materials Database which will help manufacturers, users and others understand the environmental consequences of their activities, and to find ways to reduce associated environmental impacts. A software waste management tool to better enable municipalities to weigh environmental and economic factors in their local decision making is also being promoted by several industry organizations represented on the Task Force.

Action 5

Government will work with industry to identify and demonstrate new technologies which minimize the environmental impacts of packaging.

Policy #1

Various levels of government have worked with industry to identify and demonstrate new technologies. Provincial governments, through tax credits, loans and grants have also subsidized new recycling facilities and technologies in their regions.

Issues

Life cycle analysis has proven to be a very difficult and complex issue. It is relatively young and only now moving towards a more harmonized approach through the International Organization for Standardization.

Individual packaging material suppliers are obviously very sensitive that any life cycle comparisons between competing materials be made on an “apples-to-apples” basis, that they are not distorted by omission of relevant data. The Task Force has played a role in stimulating the development of a Canadian Raw Materials Database .

At best, a life cycle comparison is broad and general, and built upon a series of assumptions and averages. The International Organization for Standardization, however, does not favour the loose averaging of data to draw life cycle conclusions, or for life cycle to be used inappropriately

by competing industries or governments. It is intended as an internal monitoring and continuous improvement tool.

For these and other reasons regarding confidentiality of individual company data, many companies have moved independently in commissioning their own environmental impact studies or profiles, acting upon them as they see fit.

The National Packaging Survey results, however, indicate greater reduction, reuse and recycling of packaging materials. The Task Force did make an attempt to quantify this in its report *Estimation of the Environmental Impacts of the National Packaging Protocol* (December 1994).

Policy #2

Priority will be given to the management of packaging through source reduction, reuse and recycling.

"In keeping with a policy which minimizes the environmental impacts of packaging, action will be taken to manage packaging following the hierarchy of source reduction, reuse and recycling."

Action 1

The federal government, in consultation with industry and the multi-stakeholder group, will establish a "Code of Preferred Canadian Packaging Practices" to guide industry in the design of products, and the selection and design of packaging. For the development of the code, consideration shall be given to the following hierarchy:

1) No packaging
2) Minimal packaging
3) Reusable packaging
4) Recyclable packaging and packaging containing recyclable material.

Policy #2

The *Canadian Code of Preferred Packaging Practices* was completed by the Task Force and published by CCME in November 1991.

The Code was widely circulated among industry groups and to appropriate governments.

Action 2

National minimum content standards will be developed by the federal government, in consultation with the multi-stakeholder group, for the inclusion of secondary/post-consumer material in packaging, recognizing health, safety, packaging product performance requirements and regional limitations.

Policy #2

The Task Force formed a Recycled Content subcommittee which issued a brief technical report on recycling opportunities and barriers. No further action was taken.

Action 3

Provincial and municipal governments, together with appropriate industry, will develop the infrastructure of their choice to collect and market packaging materials for reuse and recycling in order to achieve the targets of these national packaging policies.

Policy #2

Provincial and municipal governments, together with some industries, have risen to the challenge. In fact, strictly in terms of tonnage, the milestone goals would not have been achieved without these efforts.

Action 4

Industry/government partnerships will be formed to develop new and expanded markets for recycled packaging material.

Policy #2

Numerous industry-to-industry and industry/government partnerships have been formed to develop new and expanded markets for recyclable packaging materials. Over 70% of all packaging materials are now reused or recycled in Canada (1996 Survey). While the Task Force did not play an active role in addressing this action item, it did encourage market development in general.

Issues

There has been disquiet among some Task Force members over a too rigid adherence to the stated hierarchy of reduce, reuse and recycle. Many members of the Task Force favour a life cycle approach to packaging issues. Environmental/consumer interest and municipal groups argue that more should be done about source reduction and reuse.

National minimum (recycled) content standards have not been developed. This is a complex issue that has trade, economic and jurisdictional implications, and practical enforcement difficulties. While the average recycled content of individual packaging materials obviously differs in its level of achievement, the collective recycled content of all packaging materials has steadily increased over the years, averaging 45% in 1996, according to the survey of that year.

The scope and funding of various provincial recycling schemes continue to be contentious in many areas since they touch on issues such as voluntary/mandatory, taxpayer/consumer pays, municipal accountability, level playing field/free riders, and shared responsibility/extended producer responsibility.

End markets for most recyclable packaging materials have been developed. There are still some materials with little marketability. Economies of scale, proximity to markets, price, quality and access to materials from the waste stream are key issues for sustainable recycling.

Policy #3

A continuing campaign of information and education will be undertaken to make all Canadians aware of the function and environmental impacts of packaging.

"Responsibility for the management of packaging is a shared one. Achievement of these national packaging policy targets require the combined resources of government, industry, consumer and special interest groups. Education programs are necessary to both inform and motivate purchasers to make appropriate choices, and to support the development of a conserver society."

Apart from members of the Task Force, it is unlikely that Canadians in general are today any more knowledgeable about the environmental impacts or the functions of packaging than they were in 1990. Misinformation abounds regarding both the function and environmental impact of packaging.

Action 1

Provincial governments will develop, with the multi-stakeholder group, education programs for use in schools.

Policy #3

Educational programs for use in schools have not been developed through the Task Force.

Action 2

A national program will be developed by the multi-stakeholder group, to inform all Canadians of the functions and environmental impacts of packaging and to encourage environmentally sound purchasing practices.

Policy #3

While the Task Force did not develop a national education program, it did adopt a communications plan based on disseminating some information to two principal audiences – industry and the consumer. The *Code of Preferred Packaging Practices* was widely distributed and promoted in special interest journals and magazines.

A sub-committee of the Task Force also organized a Christmas public response campaign. The messaging of this campaign, however, was controversial and dropped by the Task Force. The FCM, therefore, contracted with Environment Canada and the CCME to produce their own packaging reduction guidelines, independent of the Task Force. *NAPP News* also kept interested parties aware of the Task Force's progress.

Issues

Education on packaging issues is a difficult area since viewpoints on the need for packaging, its function and its environmental impact vary widely. The lack of credible "apples-to-apples" life cycle information also made it difficult to "inform and motivate purchasers to make appropriate (packaging) choices."

Developing school curriculum is not usually a role played by governments outside their own Education Departments. Environmental Departments of the provinces, therefore, generally steered away from becoming involved in specifying a curricula focus on packaging, leaving it to schools and interest groups to promote and disseminate their own information through the school system.

Policy #4

These policies will apply to all packaging used in Canada, including imports.

"It is important that these national packaging policies be applied to all packaging, both domestic and imported. Regardless of its country of origin, all packaging used in Canada has the potential to require management in this country. This policy will ensure a 'level playing field', preventing any packaging product from gaining a competitive advantage at the expense of the environment. Efforts must be undertaken to ensure effective monitoring of border markets against entry of non-complying products."

Action 1

The federal, provincial and municipal governments will, with sensitivity to the needs of local industries, establish standards and regulations to apply these policies to all packaging used in Canada, including imports.

Policy #4

While the three levels of government have been careful to ensure that imported packaging has been treated the same as domestic packaging, a level playing field for all packaging does not exist in Canada. Packaging management requirements and funding mechanisms for disposal or recycling also vary from province to province.

Action 2

The federal government will act as a liaison with other countries to promote the policies contained within this Protocol in relation to international trade.

Policy #4

All trade missions, embassies and consulates were briefed on the Protocol and its goals, and several meetings organized between government representatives and counterparts in Germany, France, the Netherlands and the U.S.

Issues

The main barrier to completing these actions was the inability of governments to act consistently and cohesively. Uniformity is an important issue to industry since it allows beneficial economies of scale and distribution, and therefore contributes to competitiveness. As a result, one of the most common complaints by industry and other groups has been the inconsistent approach towards packaging and other waste policies by different governments across Canada. Many believe this can only be achieved if legislation is applied at the federal level. The federal government, however, does not have the jurisdictional authority to apply such measures in areas other than health and safety.

Policy #5

Regulations will be implemented as necessary to achieve compliance with these policies.

"Monitoring the progress achieved through voluntary initiatives may indicate a need for regulatory measures, to ensure that the effects of these policies are felt equally, and that targets are met."

Action 1

Federal and provincial governments will, with the participation of the multi-stakeholder group, enact regulations which are compatible across Canada, which specify performance requirements, targets and deadlines for achievement consistent with these policies.

Policy #5

The Protocol espoused a "carrot-and-stick" approach to achieving its waste diversion goals: meet the national targets or regulations will follow.

A legislative and regulatory sub-committee was formed which recommended 14 elements to be incorporated into provincial enabling legislation should the national packaging diversion targets not be met.

Issues

This policy, and its application, was by far the most contentious issue faced by the Task Force over its 10-year life. When various provinces proceeded to implement their own packaging regulations and policies, despite the fact that the national milestone targets were being met, industries claimed the provinces were violating the spirit and intent of the voluntary Protocol.

Governments, however, looked at the entire waste stream and did not always delineate between packaging waste and other wastes. They were faced with many different and locally specific concerns which could not be satisfied by a national model. As such, provincial governments went on their own to develop legislation as they saw fit to meet their own needs and their own targets.

Policy #6

All government policies and practices affecting packaging will be consistent with these national policies.

"In the environmental and other public policy areas, existing and new government policies will be reviewed to ensure consistency with these national packaging policies. Health, safety, technical and other factors will need to be assessed in order to identify conflicts or barriers to the achievement of the objectives of these policies."

Action 1

Government policies and practices which impede achievement of the objects of these packaging policies will be identified and where possible removed or modified.

Policy #6

Little work was done directly by the Task Force in support of this action. Individual industries consulted with federal and provincial governments regarding the implications of certain regulations (eg. Health and Agriculture Departments).

Action 2

Government policies and practices such as procurement, will be developed and implemented to support the achievement of the objectives of these policies.

Policy #6

Initially, Ministers gave high profile to government purchasing as a waste management tool. However, the Task Force did not actively monitor these procurement policies. With the exception of paper products, anecdotal evidence does not indicate government procurement policies have been implemented.

The FCM did produce a manual to encourage environmental procurement policies and instigated the establishment of GIPPER (Governments Incorporating Procurement Policies to Eliminate Refuse).

Issues

Task Force representatives have frequently pointed to procurement as a means to help create secondary recycling markets. Higher costs for the recycled product, however, at a time when governments were cutting expenditures, sometimes meant procurement followed the lowest cost option.

CHAPTER 4

Major achievements of the Protocol

Overall Goal Achieved

The major achievement of the Protocol was reaching its "overall goal" of reducing total packaging waste by 50% by the year 2000. The goal was achieved four years ahead of the scheduled target by all Canadians, not by any one sector acting alone.

Highlights of the achievement of the goal are as follows:

Voluntary process

NaPP was a voluntary process that gave industry the flexibility to determine how best to meet the targets in each different situation – a process with overall cost and environmental benefits for all Canadians. Canada is one of the few countries in the world that has set a packaging diversion target and essentially allowed industry to determine how best to meet it in practical terms.

Design changes

Design changes that resulted in the elimination or reduction of some packaging, the expansion or introduction of reusable packaging or packaging systems, and the expansion of recycling infrastructures, are considered major accomplishments representing perhaps $2 billion in industrial investment capital alone, according to the Packaging Association of Canada. Many of these changes are permanent, ensuring a sound base for continuous improvement. As a result of these efforts, Canadian companies have developed new export markets for both packaging and packaging machinery.

Market development

Much of the packaging not recycled in 1988 is now routinely part of the industrial, commercial, institutional and residential recycling loops.

Municipal recycling programs

The provinces and municipal governments have made an enormous effort to increase residential recycling over the last ten years. Minimal in 1988, it has come to represent over a quarter of all packaging recycling undertaken in the country according to the 1996 survey.

Focused approach

Environmental and consumer interest groups, together with municipalities, were largely responsible for focusing attention on the "packaging issue" that led directly to the drafting of the Protocol in the first place. Once endorsed by the CCME, the Protocol served as a sustained "call

to action" with measurable interim targets and progress reports. This focus on packaging created a climate for brand owners and others to more easily introduce design changes, and for provinces and municipalities to promote residential recycling. The focused approach seems to have worked: in 1996 packaging represented only 13% of total solid waste.

Bringing all sectors together - A forum for solutions

Another major achievement of the Protocol was bringing together a broad range of key stakeholders to form a Task Force. This assembly of representatives from industry, municipal, provincial and federal governments, and environmental and consumer interest groups has led to a better understanding of each other's positions and of the issues themselves. Many close networking relationships have been established that will continue long after formal termination of the Task Force itself.

The Task Force provided a forum for discussion, and helped create a willingness to cooperate and work together on practical solutions. Highlights of this achievement are as follows:

Learning curve

All benefited from the "learning curve". The measurement of total environmental impact for example is far more complicated than originally thought. Consideration must be given to the effect of specific materials, their use, and their method of disposal. Task Force members also came to recognize that packaging should not be isolated from other components of the waste stream when considering treatment options.

Documents and reports

The Task Force produced many worthwhile documents and reports. Apart from developing a means of measuring packaging consumption, reuse and recycling through increasingly sophisticated national surveys, the Task Force produced Milestone Reports in 1992 and 1996, a *Canadian Code of Preferred Packaging Practices, Guiding Principles for Packaging Stewardship* and a Waste Characterization Methodology primer.

Some Task Force members also played a key role in developing other packaging related measures such as Guiding Principles of Environmental Labeling and Advertising and the Canadian Raw Materials Database.

CHAPTER 5

Shortcomings of the Protocol

The Task Force has identified the following shortcomings of the Protocol, together with some factors that have influenced its work.

Lack of a harmonized approach

The most significant shortcoming of NaPP was its inability to deliver a harmonized approach to packaging policy. The Protocol text and statements of government commitment held out the prospect of a consistent framework of collective action across the country and an end to the "patchwork quilt" of provincial packaging regulation.

But while information has been widely shared between provinces and territorial governments, and there is some semblance of harmonization in provincial enabling legislation, each jurisdiction has effectively "gone its own way" in implementing packaging policy.

Some provinces have expanded traditional practices (deposits on beverage containers) while others have introduced new approaches based on local or regional history and circumstances. Industry made one unsuccessful attempt to achieve a harmonized national approach through the Canadian Industry Packaging Stewardship Initiative (CIPSI).

It has also been suggested that the lack of a unified approach may have affected other sub-elements of the Protocol or Task Force activities – no national government procurement policies, no national minimum recycled content standards, no national education program, and more recently, no national "stewardship" model. (Agreement was reached on guiding principles for packaging stewardship.) On the other hand, the reverse has been suggested – that the absence of these activities led to a lack of a national, harmonized approach.

Whether these goals are, in fact, actually achievable given the political or jurisdictional relationship between federal and provincial governments on waste management issues, or indeed desirable in some cases, is a matter of continuing debate.

Voluntary or regulatory approaches?

As previously discussed, the Protocol espoused a "carrot and stick" approach to achieving its waste diversion goal: meet the national target or regulations will follow.

Despite this approach, several provinces still expanded or introduced their own packaging regulations – even though the national target continued to be met. Some interpreted these actions as running against the voluntary nature of the Protocol and undercutting efforts to harmonize packaging policies across Canada. Others, however, feel that these regulations have helped Canadians to achieve the targets.

The debate over how to balance voluntary with regulatory approaches continues to be contentious – subject to individual provincial preferences – and has meant that a national solution in the short term is unlikely.

Industry Division

Consistency between and agreement among industry ranks is frequently elusive. "Industry" is not one single united body of opinion but comprises a multiplicity of players along the distribution chain (material suppliers, converters, packers/fillers, brand owners, wholesalers, retailers, waste haulers, processors and recyclers). Coordinating public policy and actions among such a disparate group of sometimes competing interests can result in mixed benefits and detriments for different industry groups.

Measuring Environmental Gain

While the goal of the Protocol was to improve environmental benefits, its actual measurement has been hard to quantify. Some of the factors which contributed to this problem are outlined in the following discussion.

(i) *Industrial versus household packaging*

The Protocol clearly stated that its focus was *all* packaging (whether "industrial, commercial (or) household"). In recent years, however, some have claimed that too little was being done about consumer or household packaging.

Given that most packaging is used to ship raw materials and products within the industrial, commercial and institutional sectors of the economy, it is not surprising that diversion of so-called industrial packaging played a major part in the achievement of the Protocol's 50% diversion target.

The amount of new packaging used in Canada fell 27% between the 1992 and 1996 surveys. How much of this was due to reduced industrial packaging and what success has been achieved in consumer packaging is not discernible from the 1996 Survey. Statistics Canada was asked to assess, but could not determine, a breakdown of industrial versus household packaging performance.

ii) *The weight factor*

The Protocol set diversion targets based on weight of packaging material. While the drafters of the document had no practical alternative approach, basing targets on weight means diversion of heavier packaging materials can have a disproportionate effect on the overall result. As the Task Force has learned in its work with life cycle analysis of packaging materials, weight does not necessarily equal environmental impact.

iii) *Too narrow a focus*

The federal and provincial environment ministers who initiated the Protocol (at that time called the Canadian Council of Resource and Environment Ministers or CCREM) instructed their Waste Management Task Group to develop a packaging policy for Canada "within a broad review of solid waste management opportunities."

While the Protocol was initiated as part of this review, the efforts of the Packaging Task Force served to single out packaging for special attention and perhaps served to isolate it from the larger waste stream. Many of the Packaging Task Force members believe that the packaging issue must be considered from a total solid waste perspective in order to be managed effectively.

While the CCME was responding to budgetary pressures when it reassigned funds designated for the 2000 survey, the winding down of the Packaging Task Force has been interpreted by some as an implicit acknowledgment that solid waste management is also no longer considered a high priority.

iv) *Life Cycle thinking and methodologies*

The development of tools to measure the environmental impacts of packaging has proven problematic. At the outset of the Task Force in the early 1990s there were no nationally or internationally agreed upon methodologies or standards for life cycle management policies or tools. Life cycle thinking was only at the very earliest stages of development and the Task Force's interest in the topic could be regarded as somewhat "ahead of the curve". However, over the past decade there has been a lot of development in the field, including the work on the Canadian Raw Materials Database. Despite this, it is only in the past year that the International Organization for Standardization has published standards for life cycle analysis under its 14,000 series and that more sophisticated understanding has become more widely accessible, too late for the Task Force to act upon it.

CHAPTER 6

RECOMMENDATIONS

While the multi-stakeholder National Task Force on Packaging represents a wide range of sometimes conflicting views, there is a general consensus on four major issues:

- Household Packaging. While the overall goal of 50% diversion of packaging waste has been achieved, there is a lack of sufficient and comparable data on residential consumption and disposal patterns. The Task Force began to address this issue by compiling a waste characterization methodology primer that can be applied in any community in the country. This methodology should be tested and promoted widely so that valid comparisons can be made, understanding of the issues broadened and practical solutions implemented.

- Stewardship Initiatives. While the Task Force has agreed to the concept of shared responsibility between industry, governments and consumers, there is continuing and sometimes rancorous debate over who pays, how much and when. This debate often focusses almost entirely on the costs of residential recycling. The Task Force initiated the compilation of an inventory of packaging and product diversion programs funded in whole or in part by industry and consumers. It believes the completion of this inventory is a necessary first step towards consistent stewardship initiatives across Canada.

- Educational Information About Packaging. Most consumers do not know why packaging exists in its various types and quantities, what environmental impact it has through its life cycle, and what they can do about it in their purchasing and disposal decisions. All stakeholders should promote and encourage the use of the life cycle approach to design, manufacture, use and disposal of packaging and products.

- Government Procurement. Governments can help lead the marketplace by ensuring purchasing decisions include sound environmental choice. Templates and goals should be developed and adopted by all government bodies.

Based on this consensus, the National Task Force on Packaging recommends that the CCME does not abandon solid waste issues. A coordinated and broader approach to solid waste (not just packaging) should be implemented.

This initiative, perhaps under the umbrella of a reinvigorated CCME Solid Waste Task Group, should be spearheaded by an advisory multi-stakeholder forum. The forum should address the items mentioned above, but in a wider perspective, in order to help in the development of consistent waste management practices by provinces, and more effectively address the impact waste generation and disposal have on climate change and the environment in general.

APPENDIX A

Members of the CCME National Task Force on Packaging

Name	Affiliation
Doug Archer	City of Regina
Damien Bassett	Corporations Supporting Recycling (CSR)
Donald Bielby	Food Bureau
Adrian Bradford	Canadian Importers Association Inc.
Tom Brown	Ontario Ministry of the Environment
Ron Burke	Health Canada
Duncan Bury	Environment Canada
Louise Comeau	Federation of Canadian Municipalities
Jim Dickson	Alcan Rolled Products Co-Recycling
Meinhard Doelle	Clean Nova Scotia Foundation
Ken Dominie	Newfoundland Department of Environment and Labour
David Douglas	BC Ministry of Environment, Lands and Parks
Joey Ducharme	Canadian Pulp and Paper Association
Linda Dunn	Industry Canada
Larry Dworkin	Dworkin Communications Inc.
Fred Edgecombe	Canadian Plastics Industry Association
Robert Eno	NWT Dept. of Resources, Wildlife & Economic Development
Jim Ferguson	Manitoba Conservation
Barry Friesen, Chair	Nova Scotia Department of the Environment
Joanne Glynn	New Brunswick Department of the Environment
Gregg Hallsworth	Saskatchewan Environment and Resource Management
Jay Jackson	Industry Canada
John Jackson	Citizens' Network on Waste Management
Jean-Marc Jalbert	Ministère de l'Environnement du Québec
Belinda Junkin	Canadian Pallet Council
Patrick Kane	Alberta Environment
Diane Kunec	Canadian Council of Ministers of the Environment
Bryan Levia	Yukon Territorial Government
Sandra Levy	Canadian Council of Grocery Distributors (CCGD)
Ruth Lotzkar	Consumer Association of Canada
Heather MacDonald	Environment Canada
John Mullinder	Paper and Paperboard Packaging Environment Council
Glenn Parker	Procter & Gamble Inc.
John Paulowich	Canadian Steel Can Recycling Council
Alan Robinson	Packaging Association of Canada
Frank Stewart	Quaker Oats Company of Canada
Doug Symington	Consumers Glass
Anthony van Heyningen	Canadian Soft Drink Association (CSDA)
Sherri Watson	Federation of Canadian Municipalities
Don Wedge	The Environment Group STOP