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## Regaining the Lead

CREATING A NEW WASTE MINIMIZATION STRATEGY  
FOR MANITOBA

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A brief submitted to the  
Minister of Conservation  
Province of Manitoba

January 2005



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Founded as the Recycling Council of Manitoba, RCM was incorporated as a non-profit organization in 1985.

From its early days, the Council played a significant role in waste reduction. The Council carried out public awareness programs, advocated waste minimization at the community and provincial levels, and set up pilot recycling depots which demonstrated both the practicality of recycling and the public demand for it.

In 1996, with blue box programs established and a legislated commitment to waste reduction in place, the members of the Recycling Council voted to change the name to Resource Conservation Manitoba and set a revised mission committing RCM to public education on ecological sustainability.

RCM is directed by an elected community board. Volunteers and professional staff deliver our programs. Projects are funded by contributions from individuals, foundations, governments, and businesses. Programs include public education on composting, an environmental speakers bureau for schools, an annual waste reduction week, the Commuter Challenge, the Campus Commuter Challenge, Active and Safe Routes to School, transportation demand management services for workplaces, and a trip reduction program for secondary school students.

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## EXECUTIVE SUMMARY

### INTRODUCTION

In 1989, Manitoba's Minister of Environment, along with the Environment Ministers from all the other provinces and territories, made a commitment to reduce waste going to landfills by 50 per cent by the year 2000. In order to achieve this ambitious target, Manitoba passed the *Waste Reduction and Prevention (WRAP) Act*, created arms-length organizations to collect and recycle designated wastes, and established the Waste Reduction and Pollution Prevention (WRAPP) Fund to finance waste reduction activities.

All these initiatives have resulted in considerably less waste going to disposal. However, the Province is still far from reaching the target of 50 per cent reduction and is lagging behind many other Canadian jurisdictions. This brief describes the current state of waste minimization in Manitoba, identifies the areas where improvements could be made and recommends the development of a new Waste Reduction and Prevention Strategy by the end of 2005.

### THE STATE OF WASTE MINIMIZATION IN MANITOBA

In 1988, the average disposal rate per person in Manitoba was 1,000 kgs, making Manitoba's year 2000 50 per cent waste reduction target 500 kgs per person. However, by 2000 Manitoba's disposal rate per person was 798 kgs, a reduction of only 20 per cent, the third highest rate of disposal in the country.

The reason for Manitoba's poor performance is two-fold. First, Manitobans generate a significant amount of waste, producing 993 kgs per person in 2002, while the Canadian average was 971 kgs per person. This is the third highest rate of waste generation in the country. Second, only 22 percent of the waste generated this province is diverted from landfills, ranking Manitoba 6<sup>th</sup> in terms of waste diversion.

The current diversion rates being achieved in Manitoba for various waste materials are as follows:

Material	% Diverted from Landfill
Used Tires	100%
Printed material	91%
Corrugated Cardboard	81%
Used Oil	79%
Used Oil Filters	75%
#1 Plastics	60%
#4,5 & 7 Plastics	50%
Glass containers	40%
Boxboard	40%
Aluminum Cans	36%
Steel Cans	35%

Polycoat & Aseptic Containers	34%
#2 Plastics	30%
Industrial, Commercial & Institutional (ICI) Waste	28%
Used Oil Cans	21%
Household Hazardous Wastes (HHW)	21%
Construction and Demolition (C&D) Materials	9%
Organic Residues	8%
Consumer Electronics	0%

## MANITOBA'S WASTE MINIMIZATION INITIATIVES

Since the introduction of the WRAP Act in 1991, the Province has undertaken the following waste minimization initiatives:

**Residential Recycling.** In January 1995, the Province introduced *Multi-Material Stewardship Regulation* which created the Manitoba Product Stewardship Corporation (MPSC) to collect the levies placed on designated beverage containers and fund municipal recycling programs.

**Tires.** In March 1995, the Province introduced the *Tire Stewardship Regulation*, which created the Tire Stewardship Board (TSB) to recover and recycle used tires.

**Oil, Filters and Containers.** In 1997, the Province introduced the *Used Oil Filters and Containers Stewardship Regulation*, which created the Manitoba Association for Resource Recovery Corporation Inc. (MARRC) to collect and recycle used oil, filters and containers.

**Household Hazardous Waste (HHW).** In 1999, the Province undertook public consultations to identify how best to recover household hazardous waste. In July 2001, it introduced a draft regulation creating a product stewardship program for 11 HHW products. However that regulation was put on hold in December 2002. Currently, the Province is focusing on public education and collection events to encourage the recovery of HHW.

**Construction and Demolition (C&D) Debris.** In 2001/02, the Province prepared *Construction and Demolition Disposal Guidelines*. However, aside from a single line stating, "(d)iversion of C&D waste materials from the landfill...is encouraged", the guidelines offered no other support for the diversion of C&D waste.

**Electronic Waste.** In 2002, the Electronic Products Stewardship Organization of Manitoba (EPSOM) was established, through the leadership of the Thomas Sill Foundation, to conduct a consumer electronics stewardship research and demonstration project. The project held a one-day collection event for unwanted consumer electronics. The Province provided financial and technical assistance with

the project. In 2002/03, the Province also participated in a federal-provincial Electronics Stewardship Working Group.

**Organic Waste.** Through the WRAPP Fund, the Province has helped finance a number of composting demonstration projects and a composting education and promotion program operated by RCM. The Province also sponsored a composting conference in October 2004 and has participated in a national review of standards for compost quality and guidelines for facility operations.

**Waste Minimization Projects.** Since the mid-1990s, through the SDIF and WRAPP Fund, the Province has supported a wide range of waste minimization projects, including composting, recycling and integrated waste management.

## SHORTCOMINGS IN MANITOBA'S WASTE MINIMIZATION EFFORTS

A review of the WRAP Act, related regulations, and annual reports has revealed the following shortcomings of Manitoba's waste minimization efforts:

- While the WRAP Act requires the tabling of an annual strategy report with the Legislature, the November 1996 *Waste Reduction and Prevention Strategy (WRPS) Report* has been the only strategy report introduced over the last fourteen years.
- Given its limitations under provincial regulation and its exclusive reliance on beverage container levies, the MPSP has not achieved a number of the objectives established for the program in the 1996 WRPS Report.
- MPSC and the TSB face significant financial challenges and will not be financially sustainable without key changes to their revenue base.
- The current system of HHW depots is not meeting demand and is not resulting in acceptable diversion rates.
- There are no programs in place for recycling consumer electronics waste.
- Very few municipalities and ICI institutions have integrated composting practices into their waste management systems.
- There is only passive support for the recycling of C&D waste.
- There are no active measures aimed at reducing the amount of waste *generated* by households and the ICI sector.

## OPTIONS FOR IMPROVING MANITOBA'S PERFORMANCE

To address these shortcomings, Manitoba needs to develop programs that are effective in diverting materials from the waste stream. While it can borrow from its own successes in the areas of tires and used oil and packaging, other Canadian jurisdictions offer solutions to diverting materials from the waste stream. Successful programs that should be reviewed include *British Columbia's Industry Product Stewardship Business*

## **REQUIRED NEXT STEPS**

In order for Manitoba to achieve the goal of a 50 per cent reduction in waste going to disposal, a new Waste Reduction and Prevention Strategy is required, by the end of 2005, that clearly sets out the following:

- a time frame for achieving the 50 per cent reduction of waste going to disposal;
- the types of materials that will be targeted;
- the mechanisms for achieving and exceeding the 50 per cent target; and,
- a system for measuring and publicly reporting on progress in achieving the desired reductions.

Regarding the above bulleted points, RCM makes the following recommendations:

***Time Frame for Achieving the Waste Minimization Goal.*** RCM feels that a target date of 2010 would provide sufficient time to achieve the 50 per cent target. With aggressive programs in place to deal with those materials not being diverted in sufficient volumes, five years would provide ample time to achieve the target.

***Types of Materials.*** RCM recommends the following materials be given a high priority in such a strategy: consumer electronics, organic residues, construction and demolition waste, household hazardous wastes, ICI wastes, and a range of food and beverage containers that continue to have low diversion rates.

***Mechanisms for Achieving Waste Minimization.*** RCM believes that the extended producer responsibility (EPR) model is required for most of these materials to achieve and exceed the 50 per cent goal. This model is consistent with the principles embedded in the WRAP Act and experience with EPR initiatives has shown them to yield substantial environmental benefits as well as conferring economic advantages. For those materials for which designated producers or stewards are difficult or impossible to identify, such as organics and C&D waste, RCM recommends that alternative best practice collection and recycling systems be adopted.

Accordingly, prior to designing programs to achieve high diversion rates of specific materials, the Province should undertake a thorough review of best practices in place in other jurisdictions in Canada, the U.S. and Europe, and engage in a public consultation about proposed programs prior to implementing them. Particular attention should be paid to identifying the best types of governance and funding structures for achieving high diversion rates.

***Measuring Progress in Achieving Waste Minimization Targets.*** The Province should develop the capacity to monitor the composition of waste streams on a regular basis particularly as it pertains to household hazardous wastes, consumer electronics and the ICI sector, and to track the waste diversion efforts of the ICI sector and households. In addition, the Department of Conservation should establish a set of

outcome indicators for its pollution prevention programs and annually report on how well they are being attained.

Achieving a 50 per cent reduction in waste going to landfills should be seen as an interim or short-term target only. RCM believes that Manitoba's longer-term waste reduction policies should reflect a 'zero waste' approach. This will require more attention to the first 'R' – Reduce – in order to reduce the generation of waste. RCM sees the attainment of a 50 per cent waste diversion rate as a reasonable intermediate target along the way to the more ambitious and sustainable zero waste goal.

## **CONCLUSION**

When Manitoba first enacted the WRAP Act in 1991, the province was considered a Canadian pioneer in the area of waste management. The creation of the TSB, MARRC and MPSC in the mid-1990's put in place fairly effective tools for diverting materials from landfills. The consultations of the late 1990's around HHW created the basis for achieving further reductions in waste going to landfills. However, since then, comparatively little has been done to further reduce the amount of waste going to landfills. MPSC and the TSB are facing growing deficits unless levies are increased to reflect the growing costs. Too little is being done to promote composting in the Province and, apart from one pilot project in 2002, nothing has been done to address the growing consumer electronic waste. As a result, Manitoba no longer leads the country in waste minimization efforts. It stands in 6th place in terms of the rate of waste diversion.

To regain the high ground, the Department of Conservation needs to develop, by the end of 2005, a second *Waste Reduction and Prevention Strategy Report*, through a review of best practices in other jurisdictions and consultation with stakeholders, that sets out a timeframe and the mechanisms needed to achieve the 50 per cent reduction target and the means by which they will measure and publicly report the achievement of this goal.

# Regaining the Lead: Creating a New Waste Minimization Strategy for Manitoba

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## INTRODUCTION

In 1989, Manitoba's Minister of Environment, along with the Environment Ministers from all other provinces and territories, made a commitment to reduce waste going to disposal by 50 per cent by the year 2000.<sup>1</sup>

In order to achieve this ambitious target, Manitoba passed the ground-breaking *Waste Reduction and Prevention Act (WRAP)* in 1991 to give it the legislative authority to establish programs for recovering materials from the waste stream. That Act also called for annual strategy reports to be presented to the Legislature. By the mid-1990's, the Manitoba government had modified the WRAP Act to strengthen its ability to create arms-length organizations and give them the authority to raise the necessary funds to finance their operations. It also produced the (only) *Waste Reduction and Prevention Strategy Report* and introduced regulations creating the Tire Stewardship Board, the Manitoba Association for Resource Recovery Corporation (MARRC) and the Manitoba Product Stewardship Corporation (MPSC) to collect tires, used oil and beverage/food containers and printed material, respectively. By the late 1990's, the Province had commissioned a Regional Waste Management Task Force which provided a set of recommendations for better managing waste disposal sites in Manitoba. It had also consulted with stakeholders on how best to recover household hazardous wastes and by mid-2001 had produced regulations for the creation of a product stewardship board to collect those wastes. In 2000, it established the Waste Reduction and Pollution Prevention (WRAPP) fund to finance waste reduction initiatives, out of the income generated by the Sustainable Development Innovations Fund.

All of these initiatives have resulted in considerably less waste going to disposal. Some of them have been very successful. However, as this brief will show, the Province is still far from reaching the target of a 50 per cent reduction in waste going to disposal and it is lagging behind many other jurisdictions in Canada. This brief will outline key areas in which considerable additional effort is required to minimize waste; it will point to promising practices in other Canadian jurisdictions that could be adopted by Manitoba; and, it will argue for the creation of a new Waste Reduction and Prevention Strategy to guide future efforts at achieving the 50 per cent goal and beyond.

## THE STATE OF WASTE MINIMIZATION IN MANITOBA

In 1988, Manitoba was disposing of one tonne (1,000 kg) of waste per person. Accordingly, the 1989 commitment of reducing this amount by half by the year 2000 meant that the target was 500 kg of waste going to disposal by 2000. As the following

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<sup>1</sup> Pollution Prevention Branch, Manitoba Environment, *Waste Reduction and Prevention Strategy Report 1996*. Pg.1

table shows, 798 kg were being disposed of by 2000, a reduction of only 20 per cent, the third highest rate of disposal in the country. By 2002, the amount had declined to 776 kg per person, for a diversion rate of only 22 per cent.

### Waste Disposal Per Capita in Manitoba

	1988 <sup>1</sup>	1996 <sup>2</sup>	2000 <sup>3</sup>	2002 <sup>3</sup>
Population	1,084,100	1,134,346	--	--
Disposal (Tonnes)	1,088,436	947,884	--	--
Disposal (kg/person)	1,004	840 (3) <sup>4</sup>	798 (3) <sup>4</sup>	776 (4) <sup>4</sup>

Sources: <sup>1</sup> *Waste Reduction and Prevention Strategy Report, 1996*. Pollution Prevention Branch, Manitoba Environment, November 1996, pg. 11

<sup>2</sup> Statistics Canada, *Waste Management Industry Survey: Business and Government Sectors, 1996*. Cat. No. 16F0023XPE, Table 2.1

<sup>3</sup> Statistics Canada, *Waste Management Industry Survey: Business and Government Sectors, 2002*. Cat. No. 16F0023XIE, Table A.1

<sup>4</sup> This is the interprovincial ranking.

### Inter-provincial Performance

There are two reasons for Manitoba's relatively high rate of waste disposal. First, it has the third highest rate of generating waste (993 kg/person vs. 971 kg/persons for Canada in 2002). Second, it has only the 6th highest rate of diverting material from the landfills (22%) which is equivalent to the national average. This is mainly due to its poor ranking on residential and construction/demolition sources of waste, as the following table reveals:

### Percentage of Material Diverted from Disposal, by Source, 2002

Ranking	Residential	Industrial, Commercial & Institutional	Construction and Demolition	All Sources
Best	39% (PEI) 33% (NS)	30% (BC)	46% (NS)	30% (NS)
Manitoba	17% (7th)	28% (3rd)	9% (6th)	22% (6th)
Worst	7% (NF)	9% (YK,NWT)	0% (YK,NWT)	9% (NF)

Source: Statistics Canada, Cat. No. 16F0023XIE, Table A.7

Even if Manitoba was to achieve the current highest diversion rate in Canada (30%), it would see the amount of waste disposal drop from only 776 to 695 kg/person. This is still some 195 kg/person higher than the original goal of a 50 per cent reduction to 500 kg/person.

To achieve its targeted diversion rate of 50 per cent, it will likely have to both reduce the amount of per capita waste being *generated* and increase the amount being *diverted* from landfills. Current efforts focus almost exclusively on diverting materials from landfills and not on reducing the amount generated.

## Manitoba's Progress in Recovering Materials from the Waste Stream

### Residential Recycling via the MPSC

Between 1995 and 2003/04, there has been variable success in increasing the level of recovery of materials from the residential waste stream, as the following table shows:

<b>Material</b>	<b>1995</b>	<b>2003/04</b>
Newspapers, fliers, magazines and phone books	22%	91%
Corrugated Cardboard	--	81%
PET (#1) Plastics	17%	60%
#4,5 & 7 Plastics	--	50%
Boxboard	7%	40%
Glass Containers	13%	40%
Aluminum Containers	15%	36% <sup>2</sup>
Steel Containers	10%	35% <sup>2</sup>
Polycoat & Aseptic Containers	--	34%
HDPE (#2) Plastics	--	30%
Gable Top Cartons	7%	--
<b>TOTAL</b>	<b>16%</b>	<b>65%</b>
Tonnes	15,559	57,723

Sources: Pollution Prevention Manitoba Environment, *Waste Reduction and Prevention Strategy Report*, November 1996, Table 5, pg. 13; MPSC, *Annual Report, 2003-2004*, pg. 22

The current overall diversion rate for the residential sector of 65 per cent exceeds the 60 per cent target set by Ontario and Quebec. However, only paper and some plastics have a high recovery rate. For the remaining items, there is still a long way to go in achieving acceptable recovery rates.

### Household Hazardous Waste Recovery

According to the Annual Reports of the Department of Conservation, the Province has been collecting and diverting from the waste stream the following quantities of household hazardous wastes since 1999/00.

<b>Year</b>	<b>Tonnes Collected</b>	<b>Per cent diverted</b>
1999/00	300	15%
2000/01	419	21%
2001/02	491	21%
2002/03	478	n/a
2003/04	501	n/a

<sup>2</sup> These per cents likely understate the true amount of recycling of these materials, given the informal collection that occurs by individuals.

In each of these fiscal years, the Province has sponsored 30 collection events - 16 in Winnipeg and 14 outside of Winnipeg.

### Consumer Electronic Waste

In October 2002, the newly formed Electronics Product Stewardship Organization of Manitoba (EPSOM) operated 5 depots in Winnipeg and one in Stonewall for consumers to return unwanted electronics goods. 93.5 tonnes of old electronics were collected. No depots have been held since to collect waste electronics. Environment Canada estimates that Manitobans will throw away more than 5,000 tonnes of waste electronics in 2005.

### Tire Recycling

Of all of the waste diversion initiatives, the clear success story has been tire recycling. According to the November 1996 *Waste Reduction and Prevention Strategy Report*, less than 1 per cent of used tires were being recycled in 1991. By 1995, the number of recycled tires had risen from 6,000 to 904,000, representing all used tires generated that year. However, less than half of the recovered tires were being recycled into new products. Most were being burned for fuel. By 2003, 1.475 million tires were being recycled and only 12 per cent were being used for tire-derived fuel.

### Used Oil, Oil Filters and Containers

The recovery rate for used oil, oil filters and containers is also quite high. From a nine per cent recovery rate for used oil in 1991, it had risen to 79 per cent in 2003/04. Furthermore, 75 per cent of used oil filters but only 21 per cent of used oil containers were recovered in 2003/04.<sup>3</sup>

### Organic Wastes

According to the 2002 Statistics Canada Waste Management survey, the residential sector generated 494,535 tonnes of waste material, of which an estimated 40 per cent is comprised of organics. Thus, there are an estimated 197,800 tonnes of organics being generated just by households. Of that total, Statistics Canada estimates that 16,261 tonnes were being composted by both governments and businesses, for a diversion rate of 8 per cent.<sup>4</sup>

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<sup>3</sup> Manitoba Conservation, *Manitoba Conservation Annual Report 2003-2004*. Pg. 119

<sup>4</sup> The 8 per cent figure excludes organics being composted by households, thus understating the true amount. However, the amount being composted includes businesses while the base amount of 197,800 tonnes excludes them, thus overstating the true amount. With the two errors working in opposite directions, the 8 per cent figure may be close to the true amount being diverted.

### Summary: Current Diversion Rates

By way of summing up the current state of waste minimization in Manitoba, the following table describes the diversion rates being achieved for various waste materials:

#### **Current Diversion Rates by Type of Material**

<b>Material</b>	<b>Per cent Diverted from Landfills</b>
Used Tires	100%
Printed material	91%
Corrugated Cardboard	81%
Used Oil	79%
Used Oil Filters	75%
#1 Plastics	60%
#4,5 & 7 Plastics	50%
Glass containers	40%
Boxboard	40%
Aluminum Cans	36%
Steel Cans	35%
Polycoat & Aseptic Containers	34%
#2 Plastics	30%
Industrial, Commercial & Institutional Waste	28%
Used Oil Cans	21%
Household Hazardous Wastes	21%
Construction and Demolition Materials	9%
Organic Residues	8%
Consumer Electronics	0%

Clearly, the areas in which much more vigorous waste diversion measures are required are the following:

- Consumer Electronics
- Organics
- Construction and Demolition Wastes
- Household Hazardous Wastes
- Used oil bottles
- Industrial, Commercial and Institutional Wastes
- Glass, boxboard, aluminum and steel cans, polycoat & aseptic containers and # 2 Plastics (all the responsibility of the MPSC).

## MANITOBA'S WASTE MINIMIZATION INITIATIVES

Since the introduction of the WRAP Act in 1991, the Province has introduced three main programs to minimize waste. They include the establishment of,

1. The Tire Stewardship Board in March 1995 to recover and reuse used tires in the province, governed by the Tire Stewardship Regulation;
2. The Manitoba Product Stewardship Corporation (MPSC) in January 1995 to collect a 2 cent levy on non-deposit and non dairy beverage containers and use it to fund municipal recycling programs, governed by the Multi-Material Stewardship Regulation; and,
3. The Manitoba Association for Resource Recovery Corporation (MARRC), Inc. in 1997 to set up regional Eco-Centre depots to collect used oil, filters and containers for recycling, governed by the Used Oil Filters and Containers Stewardship Regulation.

In 2000, the Government created the Waste Reduction and Pollution Prevention (WRAPP) fund from income generated by the Sustainable Development Innovations Fund to help finance waste minimization initiatives. In its first three years of operation, some \$1.6 million has been spent on waste minimization (and management) initiatives.

The Government also has devoted considerable effort to improving how waste is disposed of in Manitoba. In 1998, it appointed the Regional Waste Management Task Force that produced a report the following year containing recommendations focused on achieving – high environmental protection, integrated solid waste management and regional coordination. It has pursued the implementation of these recommendations. However, as the focus of this brief is on waste minimization (and not management) initiatives, this area of the Government's efforts will not be commented on further.

### **Household Hazardous Wastes**

In 1987, the Province established the Manitoba Hazardous Waste Management Corporation (MHWC) charged with developing a management system for hazardous wastes. As of September 1995, the MHWC and Miller Paving became shareholders of Miller Environmental Corporation. Miller became the operator of the facility while the Government of Manitoba maintained ownership of the land and responsibility for land value and property protection programs established with the R.M. of Montcalm. In 1999, Miller Environmental assumed responsibility for operating the collection depots. In the same year, the Province undertook a public consultation exercise about how best to recover household hazardous wastes. From that consultation, it developed *A Plan to Manage Household Hazardous Waste in Manitoba* report in July 2001 which set out the draft regulation for creating a *product stewardship program* for 11 types of hazardous wastes. The proposed HHW program and regulations were patterned after the Lubricating Products Stewardship Regulation. However, that regulation was put on hold in December 2002. In its place, the Pollution Prevention Branch of Manitoba Conservation "has pursued educational strategies for improving the management of

hazardous wastes"<sup>5</sup> and has funded collection events throughout Manitoba through the services of Miller Environmental. However, it should be noted that the 2001/02 Annual Report stated, "This program has not been able to meet public demand for service and collected only 21 per cent of household hazardous waste generated."<sup>6</sup>

### **Construction and Demolition Waste**

The Pollution Prevention Branch of Manitoba Conservation prepared "Construction and Demolition Waste Disposal Guidelines" in 2001/02. That year's Annual Report states, "The Guidelines will provide sufficient guidance to local governments, building owners, landowners and demolition and hauling contractors for C & D waste diversion from landfills and to prevent illegal dumping."<sup>7</sup> A reading of the actual guideline shows that it deals exclusively with the proper disposal of construction and demolition waste materials. The only reference to *diversion* is the following phrase, "Diversion of C&D materials from the landfill . . . is encouraged." A key element of encouraging improved recovery of C&D waste is that of ensuring that the wastes are managed properly and sent for disposal to landfills or for proper recycling activities. As such the Guidelines provide passive support for C&D waste diversion.

### **Consumer Electronic Waste**

In 2002, through the leadership of the Thomas Sill Foundation, the *Electronic Products Stewardship Organization of Manitoba* (EPSOM) was created with the purpose of conducting a consumer electronic products stewardship research and demonstration project on the collection, reuse and recycling of unwanted consumer electronics in the Province of Manitoba. The Manitoba Government provided financial and technical assistance. As noted above, the project held a depot at five locations in Winnipeg and one in Stonewall in October 2002 and collected 93.5 tonnes of unwanted electronics. In 2002/03, the Pollution Prevention Branch participated in a federal-provincial Electronics Product Stewardship Working Group with a view to establishing a National Electronics Stewardship Program.

### **Organic Wastes**

The annual reports of the Sustainable Development Innovations Fund show that about \$650,000 has been spent on composting projects between 2000/01 and 2003/04. Of that total, about 20 per cent went to RCM to fund its educational and promotional program. Another 23 per cent went to the City of Winnipeg to promote its curbside collection pilot project for yard waste, to have a centralized compost facility designed and to subsidize the sale of backyard composters. Twenty per cent went to the U. of M. to fund demonstration projects with another 20 per cent going to municipalities like Winkler, Altona, Brandon, Gladstone, Treherne and East St. Paul.

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<sup>5</sup> Ibid, pg. 120

<sup>6</sup> Manitoba Conservation, *Manitoba Conservation Annual Report 2001-2002*. pg. 166

<sup>7</sup> Ibid, pg. 166

Also, the Province sponsored the Composting Matters Conference in October 2004 to help create networks and to showcase composting practices happening in the province. The Compost Trainer Course is planned for March 2005 to train facility operators that are currently working without certification.

At a national level, Manitoba Conservation has participated in the Standards Committee to review Compost Quality Standards along with other provincial representatives and the Composting Council of Canada. These updated Standards are to be reviewed by the Canadian Council of Ministers of the Environment (CCME) and the Canadian Food Inspection Agency (CFIA) with the objective of incorporating them into both the CCME guidelines and CFIA requirements. Manitoba Conservation also has been involved in the review of the Compost Facility Operator Guidelines Draft with the Compost Council of Canada.

### **Waste Minimization Projects**

Annually, since the mid-1990s, the Department of Conservation has funded waste minimization projects through the Sustainable Development Innovations Fund, the SDIF Open Category and the WRAPP funds. Over the last two fiscal years, the monies allocated to key waste minimization projects are set out in the following table:

#### **SDIF Allocations to Waste Minimization Projects**

<b>Type of Project</b>	<b>Total</b>	<b>2002-2003</b>	<b>2003-2004</b>
Regional Waste Management	\$ 73,500	\$ 23,500	\$50,000
Integrated Waste Management	\$428,050	\$ 82,100	\$345,950
Composting	\$549,735	\$ 80,850	\$468,885
Regional Recycling	\$545,760	\$100,350	\$445,410
Construction and Demolition Waste Management	\$ 44,000	\$ 12,000	\$ 32,000
Institutional Waste Reduction	\$120,000	\$ 45,000	\$ 75,000

### **SHORTCOMINGS IN MANITOBA'S WASTE MINIMIZATION EFFORTS**

One obvious shortcoming is the presence of only one waste reduction strategy report since the passage of the WRAP Act in 1991. The Act called for the tabling of annual strategy reports with the Legislature. However, the *Waste Reduction and Prevention Strategy (WRPS) Report* of November 1996 offers a good basis for enumerating the shortcomings in provincial efforts to minimize waste.

The report sets out three broad strategic directions for the period of 1996 to 2000. They are:

1. Building on Existing Stewardship Programs;
2. Establishing New Waste Minimization Initiatives; and,
3. Reducing Waste at Source.

## Building on Existing Stewardship Programs

With respect to the first direction, the WRPS Report lists the following objectives for the Manitoba Product Stewardship Program (MPSP):

- High waste diversion rates
- Full municipal participation in MPSP
- High participation rates
- Monitoring and reporting on progress
- Expand the levy base to include other designated materials
- Expand eligible material list to include other recyclable materials
- Extend multi-material programs to the Industrial Commercial Institutional (ICI) sector
- High rates of value-added processing

By the year 2000, the WRPS Report indicated that the following objectives would be achieved - a true cost accounting model, maximum municipal participation, maximum level of diversion and active provision of recycling programs in the ICI sector.

Of these objectives, a number have not been achieved. As noted above, there are a number of materials still with low diversion rates, the levy base has not been expanded to include other designated materials and the program has not been extended to the ICI sector. In its 2004-2007 Draft Business Plan, MPSC indicates that the development of a broader stewardship model remains an important objective but that it has not been able to achieve clarity from the province on the Corporation's role in the development of a broader stewardship model. That Draft Business Plan also shows the Corporation incurring operating deficits of over \$1 million per year for 2005, 2006 and 2007 with the consequent reduction in its surplus from over \$3 million to just under \$800,000.<sup>8</sup>

With respect to the Tire Stewardship Board operation, its Board of Directors has had to use up 80 per cent of its reserve funds to pay for the cost of loading, transporting and recycling off-road tires from municipal landfills that are not included in the \$2.80 per tire levy. The 2004-2007 Business Plan notes, "With the continual annual generation of scrap ORT's (Off Road Tires) and other program costs, reserve funds will be depleted in less than two years."<sup>9</sup> The Plan also notes that the \$2.80 levy does not reflect the weight and actual cost of recycling medium truck tires vs. car tires. Thus, to remain financially viable, the Tire Recycling operation in Manitoba requires a differential levy on all tires (both on- and off-road) that reflects the weight and cost of recycling.

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<sup>8</sup> Manitoba Product Stewardship Corporation, *Sustaining the MPSC Model: 2004-2007 MPSC Business Plan*. Pg. 47.

<sup>9</sup> Manitoba Tire Stewardship Board, *Three-Year Business Plan April 1, 2004 To March 31, 2007*. ([www.skyweb.ca/~mbtirebd/documents/TSB\\_2004-2007\\_Business\\_Plan.htm](http://www.skyweb.ca/~mbtirebd/documents/TSB_2004-2007_Business_Plan.htm)). Pg. 12

## **Establishing New Waste Minimization Initiatives**

The WRPS Report lists three initiatives to be undertaken between 1996 and 2000:

- Used Oil
- Organic Waste Composting
- Construction and Demolition Waste

Of the three, only the first objective, as described in the Report, has been accomplished.

With respect to organic waste composting, the WRPS Report sets the following objective:

- To have the diversion of organic waste integrated into all waste management programs operated by the municipal and ICI sectors by the year 2000.

It goes on to note that it will be necessary to establish composting as the organic waste management practice of choice and that partnerships will be pursued with municipal governments, industry, non-government agencies and other stakeholders in developing a provincial composting strategy. As noted above, the Province's efforts have been largely devoted to funding demonstration composting projects by institutions and municipalities and to promoting backyard composting through education and workshops.

With respect to construction and demolition waste, the WRPS Report sets the following two objectives:

- to have construction and demolition activities conform to practices identified as promoting waste minimization; and,
- to develop demonstration projects and promote awareness of opportunities to minimize waste in the industry and among those commissioning construction and demolition work.

It notes that the pursuit of voluntary measures is the preferred approach. It would seem that this is what has happened, with the adoption of the *Construction and Demolition Waste Disposal Guidelines* in 2001/02. As noted above, very little of C&D materials are being diverted from landfills. One recent exception is the recycling of aggregate by Rocky Road Recycling.

## **Reducing Waste at Source**

The discussion in the WRSP Report with respect to reducing waste at source focuses on pollution prevention and sets out the following objectives:

- build partnerships of key stakeholders interested in promoting pollution prevention;
- promote awareness of benefits of, and opportunities for, applying pollution prevention;
- document the benefits of applying pollution prevention;
- initiate new applications of pollution prevention; and,
- identify barriers to broader applications of pollution prevention.

A reading of the annual reports of Manitoba Conservation and the SDIF reveal little activity aimed at reducing waste at source.

### **Other Limitations**

In addition to these limitations, the Household Hazardous Waste Stewardship Regulation was not implemented and the existing depots do not meet public demand and result in low diversion rates. As well, it would appear that little is being done to promote waste minimization by the ICI sector, which is estimated to generate about 60 per cent of the total waste. Furthermore, the current system for funding the activities of the MPSC and the Tire Stewardship Board are inadequate to sustain the existing level of diversion and certainly do not allow for achieving increased diversion rates.

### **Summary: Current Shortcomings in Manitoba's Waste Minimization Efforts**

- Given its limitations under provincial regulation and its exclusive reliance on beverage container levies, the MPSP has not achieved acceptable diversion rates of a number of its materials; it has not achieved maximum household diversion rates in a number of municipalities; it has not extended its reach into the ICI sector; and, it has not expanded its levy base to include other materials.
- The MPSC and the Tire Stewardship Board, face significant financial challenges and will not be financially sustainable without key changes to their revenue base.
- The current system of Household Hazardous Waste depots is not meeting demand and is not resulting in acceptable diversion rates.
- There are no programs in place for recycling consumer electronics waste.
- Very few municipalities and ICI institutions have integrated composting practices into their waste management systems.
- There is only passive support for the recycling of C&D waste.
- There are no active measures aimed at reducing the amount of waste *generated* by households and the ICI sector.

## OPTIONS FOR IMPROVING MANITOBA'S PERFORMANCE

To address these shortcomings, Manitoba needs to develop programs which are effective in diverting materials from the waste stream. While it can borrow from its own successes in the areas of tires and used oil and packaging, other Canadian jurisdictions offer solutions to diverting materials from the waste stream. In particular, the practices adopted by British Columbia and Nova Scotia will be described, as both of these provinces have the highest waste diversion rates in Canada.

### **Extended Producer Responsibility (or Product Stewardship)**

Since the early 1990s, in recognition of the need to reduce environmental pollution and financial burden on local governments, British Columbia has been trying to incorporate elements of extended producer responsibility into its waste management programs and policies. The 'first generation' of product stewardship initiatives – tires and lead-acid batteries – were government-led programs funded by eco-taxes paid by consumers, with minimal to no industry involvement. While these efforts were a step in the right direction, they did not fulfill the requirements of EPR. The 'second generation' of product stewardship programs – household hazardous waste and beverage containers – placed responsibility for developing and implementing initiatives on industry. These programs also placed greater emphasis on consumer education and awareness in the hope of altering negative consumption patterns and emphasizing green products and packaging. The aim of such initiatives is actually to reduce the amount of materials recovered, because as consumers make wiser purchasing decision, less waste will be generated<sup>10</sup>.

In recognition of the value of industry-led product stewardship initiatives, in September 2002, the Province introduced the British Columbia Product Stewardship Business Plan 2002/2003 – 2004/2005, which creates a framework for extended producer responsible programs in British Columbia, and describes the Province's vision and principles, the key players roles and responsibilities and the results-oriented approach.

#### *Vision & Principles*

The B.C. provincial government regards product stewardship as a concept in which "end-of-life products and packaging are managed under environmentally sound and effective waste management systems that are financed and operated by producers and users, rather than by general taxpayers"<sup>11</sup>.

In order to achieve this vision, the Ministry has identified what they deem to be the fundamental principles of a successful product stewardship strategy. These include:

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<sup>10</sup> Environment Management Branch, B.C. Ministry of Water, Land and Air Protection, *Overview of Industry Product Stewardship in British Columbia, July 2003*.

<sup>11</sup> B.C. Ministry of Water, Land and Air Protection, *British Columbia Industry Product Stewardship Business Plan 2002/2003 to 2004/2005*. Pg. 3.

1. Producers and user are responsible for waste management;
2. EPR policies must create a level playing field for producers and users;
3. Stewardship initiatives must be result-oriented rather than prescriptive; and.
4. Program development and implementation must be transparent and producers must be accountable to government and consumers.

### *Roles & Responsibilities*

The business plan clearly defines the key roles of each of the major stakeholder. Under this strategy, the provincial government is responsible for strategic planning, which involves defining outcomes, monitoring progress, enforcing the regulation, and approving industry plans for stewardship. Industry is obligated to: design, implement and monitor product stewardship programs, achieve the outcomes defined by the Province, compile program achievement reports for consumers and the Province, and organize education/awareness campaigns targeted at consumers and others in the product chain. Municipal governments are expected to cooperate with industry, providing land and zoning for collection sites, and may also choose to bid for collection contracts. Finally, consumers are required to use products properly, provide funding for stewardship programs through product purchases, and return products and packaging after use.

### *Results-Oriented Approach*

Traditionally, waste management policies in B.C. have followed the command-and-control approach. However, these programs have proven ineffective at reducing the amount of waste and encouraging reuse and recycling. The Province recently commissioned a study of “Stewardship Options: A Review of Service Delivery Models”. This study highly recommended the Ministry change its approach – implementing result-based policies rather than prescriptive regulations.

Results-based regulations focus on the achievement of defined outcomes, allowing industry to determine the best way to reach those targets. Implementing such policies will require the government, in cooperation with stakeholders, to set clear and measurable program objectives based on the waste management hierarchy and goals of the regulation. Industry will then be responsible for devising the ideal means to achieve these outcomes. Industry will also be obliged to monitor and report their accomplishments to the government and other concerned stakeholders. The government will then assess the results of industry activities and identify whether changes need to be made. The process is cyclical and emphasizes continual improvement. Results are carefully monitored and action is taken to either enhance successful initiatives or adjust for problems when objectives are not met.

Using this framework, British Columbia plans to re-evaluate and re-develop existing waste management programs in the province, such as programs for Beverage Containers, Scrap Tires, Used Oil, Used Post-consumer Paint and Lead Acid Batteries. The business plan also addresses the province’s intentions to begin reviewing additional products and waste streams for potential stewardship programs, including plastics, packaging, electronics and end-of-life vehicles.

## Integrated Waste Management Strategy

In 1995, in an effort to alter the way waste was viewed and managed in Nova Scotia, the provincial government introduced the *Solid Waste-Resource Management Strategy*. The aim of the strategy was to confront many of the challenges surrounding waste management, including: “reducing the amount of waste we generate, identifying opportunities for the recovery of valuable resources, encouraging the development and commercialization of new technologies, and taking necessary action to secure a sustainable future...”<sup>12</sup>. To achieve this end, policy-makers based the province’s waste-management plan on three basic principles: (i) environmental protection, (ii) efficient use of resources, and (iii) enhancing economic opportunities.

Provincial legislators hoped to achieve four main goals through the implementation of this plan:

- Achieve a 50-percent waste diversion target by the year 2000
- Adopt stricter disposal procedures (i.e. landfill bans and new landfill standards)
- Improve regional cooperation for waste management and diversion
- Take advantage of economic opportunities arising from the use of waste materials (e.g. compost, recycled products, new technology, employment)

As a result of its new approach to waste management, the Province of Nova Scotia has significantly increased the amount of waste being diverted from landfill, reduced the number of municipal landfills by 55-percent and developed an efficient collection infrastructure for beverage containers, blue box materials, and organic matter. Nova Scotia’s economy has benefited greatly from this initiative – one thousand new jobs have been created and new businesses have emerged<sup>13</sup>. In addition, pursuit of the strategy has led to an increased awareness of waste management and environmental issues. Nova Scotians are beginning to recognize that sustainable development is an important part of daily life and they can play a role in conserving the environment.

The success of the Strategy and corresponding regulation, the *Solid Waste-Resource Management Regulation* (N.S. Reg. 24/2002), relied on the implementation of several key tools:

- *Landfill bans.* Waste which is banned from Nova Scotia landfills includes: beverage containers, LDPE and HDPE packaging, corrugated cardboards, newspaper, glass food containers, tires, oil, lead-acid batteries, steel or tin cans, paint, antifreeze, and organic waste.
- *Deposit-Refund System.* Resource Recovery Fund Board operates a provincial half-back deposit refund program for alcoholic and non-alcoholic beverage containers (excluding milk beverages).

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<sup>12</sup> Nova Scotia Department of Environment, *Nova Scotia – Solid Waste-Resource Management Strategy*, October 1995. Pg. 2.

<sup>13</sup> Nova Scotia Department of Environment, *Status Report 2001 of Solid Waste-Resource Management in Nova Scotia*.

- *Landfill Improvements.* The Strategy seeks to reduce the number of active landfills in the provinces and raise the standards of operational landfills. New restrictions include: a ban on open burning, higher standards for the design and management of MSW sites and stricter procedures for the operation of incinerators.
- *Industry Stewardship Agreements.* Industry's involvement in waste diversion and management has been deemed a key component to the success of reduction, reuse and recycling in Nova Scotia. The Strategy delegates responsibility to the Resource Recovery Fund Board for negotiating agreements with producers/importers with respect to the end-of-life management of their goods. Since the inception of the Board, agreements have been reached with producers and/or retailers of paint, tires, and sharps (needles). In addition, the Department of Environment has also signed an agreement with the dairy industry in which producers have consented to expanding their involvement in the management of milk containers.
- *Economic Development.* A major goal of the Strategy is to increase the recognition of waste as an economic resource. Creating jobs, producing value-added goods from recycled materials, and developing environmental technologies are integral parts of the Strategy.
- *Regional Cooperation.* To improve economies of scale and reduce waste management and diversion costs, the Strategy divides the province into seven regions. Municipalities in each region must work together to develop a Regional Solid Waste-Resource Management Plan, which addresses how the region will accomplish the provincial waste diversion target of 50-percent.

## **Consumer Electronic Waste**

The Government of Alberta has created a non-profit organization, the *Alberta Recycling Management Authority*, to manage a province-wide electronics recycling program. Starting October 1, 2004, televisions, computers and related equipment currently going into Alberta's landfills will be collected, reused, recycled and turned into new products and economic opportunities.

Starting February 2005, an environmental fee, ranging from \$5 to \$45 (depending on the item), will be placed on each product included in the program. These fees will be collected from sellers and manufacturers, once all retail and industry partners have registered for the program and updated their systems to accommodate the fee collection. The fees will cover the costs of collection, transportation and recycling of electronic materials, education and awareness programs and electronics recycling related research. Collection will be coordinated through locally run depots and drop-off points across the province.

The Alberta Recycling Management Authority (ARMA) has a multi-stakeholder board responsible for overseeing both tire and electronic recycling.

## Household Hazardous Wastes

In 1998, the Province of British Columbia introduced the *Post-Consumer Residual Stewardship Program Regulation* that requires producers of paint, solvents/flammable liquids, domestic pesticides, gasoline and medications to create a province-wide collection and management system for the residuals of their products. Similarly, in 1996, the Province of Nova Scotia established the *Post-Consumer Paint Stewardship* program, under which brand owners must develop a system for collecting and treating consumer paint waste (or enter into a stewardship agreement with Nova Scotia's Resource Recovery Fund Board).

In both provinces, *Product Care*, a non-profit industry sponsored association, manages these stewardship programs for businesses that have signed on as members. The association was formed by companies in the paint, solvent, pesticide and petroleum industries in response to emerging stewardship regulations. In BC, Product Care, in partnership with municipal governments, private businesses, and/or NGOs, operates 105 paint waste depots and 40 depots for flammable liquids, gasoline and pesticides.

The Province of Nova Scotia, in addition to mandating stewardship responsibilities, has placed landfill bans on certain household hazardous waste products, such as lead-acid batteries, automotive antifreeze and waste paint. Each regional waste management area in the province operates at least one depot that collects HHW at minimum of once per month, if not more frequently. In BC, while the provincial government has not instituted landfill bans, some municipalities have, including Vancouver and Victoria, which both ban household hazardous waste. Vancouver and Victoria also provide information to residents on how to replace, reduce and recycle household hazardous products.

## Organic Wastes

Nova Scotia has been able to greatly reduce the amount of organic waste entering provincial landfills through:

- Banning organic waste from landfills;
- Providing curbside organic waste collection to 75% of Nova Scotia residents;
- Backyard composting education and awareness projects; and
- Centralized composting for businesses in 50 of the 55 municipalities in the province.<sup>14</sup>

## Construction and Demolition (C&D) Debris

The Province of British Columbia does not have any policies that mandate the management of construction and demolition debris. However, there is a program in Vancouver called BuildSmart, which provides information on sustainable buildings,

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<sup>14</sup> Nova Scotia Department of Environment, *Status Report 2001 of Solid Waste-Resource Management in Nova Scotia*.

including the proper management of construction waste. The group encourages construction companies to develop construction and demolition waste management plans, and provides a variety of resources to assist construction businesses, such as sample waste management program plans, recycling directories, case studies, and waste management guidelines. Further, some of the municipal governments in the province have banned some C&D waste from their landfills. For instance, Vancouver prohibits drywall from entering their landfill, while Victoria bans aggregate, asphalt, concrete, and rubble, and restricts the amount of drywall entering their landfill.

Both B.C. and N.S. operate a free reusable materials exchange programs - RCBC Mex and Nova Scotia Materials Exchange. These services put businesses looking to dispose of industrial by-products or surplus materials in contact with businesses looking to purchase such materials. No figures were available as to the success of these exchange initiatives.

### **REQUIRED NEXT STEPS**

Resource Conservation Manitoba (RCM) believes that Manitoba's longer-term waste reduction policies should reflect a 'zero waste' approach. This will require more attention to the first 'R' – Reduce – in order to reduce the generation of waste. RCM sees the attainment of a 50 per cent waste diversion rate as a reasonable intermediate target along the way to the more ambitious and sustainable zero waste goal.

The last and only *Waste Reduction and Prevention Strategy Report* was issued in November 1996. As noted above, it outlined three strategic directions for the period of 1996 to 2000 – build on existing stewardship programs, establish new waste minimization initiatives and reduce waste at source.

In order for Manitoba to achieve the goal of a 50 per cent reduction in waste going to disposal, a new Waste Reduction and Prevention Strategy is required, by the end of 2005, that clearly sets out the following:

- a time frame for achieving the 50 per cent reduction of waste going to disposal;
- the types of materials that will be the focus of the waste reduction and prevention strategy;
- the mechanisms for achieving and exceeding the 50 per cent target; and,
- a system for measuring and publicly reporting on progress in achieving the desired reductions.

### **Time Frame for Achieving the Waste Minimization Goal**

Regarding an appropriate time frame, RCM feels that a target date of 2010 would provide sufficient time to achieve the 50 per cent target. With aggressive programs in place to deal with those materials not being diverted in sufficient volumes, five years would provide ample time to achieve the target. The experience of the Tire Stewardship

Board, the used oil recovery program and MPSC show that, with the proper program, high rates of diversion can be achieved within a short time frame. However, achieving a 50 per cent reduction in waste going to landfills should be seen as an interim or short-term target only.

## **Types of Materials**

Given the foregoing analysis, it is RCM's view that the following materials have to be given a high priority in such a strategy:

- consumer electronics
- organic residues
- construction and demolition waste
- household hazardous wastes
- Industrial, Commercial and Institutional wastes
- a range of food and beverage containers that continue to have low diversion rates.

## **Mechanisms for Achieving Waste Minimization**

Regarding the appropriate mechanisms for achieving high diversion rates, RCM believes that the Extended Producer Responsibility (EPR) model is required for most of these materials to achieve and exceed the 50 per cent goal. This model is consistent with the principles embedded in the WRAP Act and experience with EPR initiatives has shown them to yield substantial environmental benefits as well as conferring economic advantages. The environmental benefits include increased recycling rates, reduced dependency on virgin materials and lower energy consumption and greenhouse gas levels. The economic benefits include the development of new processing and recycling technologies, the creation of new markets for secondary materials, the fostering of new business enterprises such as processing facilities and manufacturing plants and the reduction of costs through improved product design and more efficient production and distribution processes<sup>15,16,17,18</sup>.

For those materials for which designated producers or stewards are difficult or impossible to identify, such as organics and C&D waste, RCM recommends that alternative best practice collection and recycling systems be adopted.

Accordingly, prior to designing programs to achieve high diversion rates of specific materials, the Province should undertake a thorough review of best practices in place in

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<sup>15</sup> EPR Working Group, *Extended Producer Responsibility: A Prescription for Clean Production, Pollution Prevention and Zero Waste, 2003*. ([www.GRRN.org/epr\\_principles.html](http://www.GRRN.org/epr_principles.html))

<sup>16</sup> Organisation for Economic Cooperation and Development, *Extended Producer Responsibility: A Guidance Manual for Governments, 2001*.

<sup>17</sup> Tojo, N., Lindhqvist, T. & Davis, G.A., *EPR Programme Implementation: Institutional and Structural Factors, 2001*.

<sup>18</sup> Quinn, L., *Stewardship of Plastic Packaging in Manitoba: A Multi-stakeholder Model, 2004* (unpublished thesis). Pg. 2 and 222.

other jurisdictions in Canada, the U.S. and Europe and engage in a public consultation about proposed programs prior to implementing them. Particular attention should be paid to identifying the best types of governance and funding structures for achieving high diversion rates.

### **Measuring Progress in Achieving Waste Minimization Targets**

One of the difficulties faced in producing this brief was the lack of comprehensive information on the rates of waste diversion being achieved for specific materials. At a global level, the biannual surveys carried out by Statistics Canada are useful in tracking progress. However, they are limited because they exclude the waste diversion being achieved by households via backyard composting and by industry recycling and diverting on site. These surveys also do not track the amount of consumer electronic waste being generated nor household hazardous wastes.

To rectify these gaps in our knowledge, the Province should develop the capacity to monitor the composition of waste streams on a regular basis particularly as it pertains to household hazardous wastes, consumer electronics and the ICI sector, and to track the waste diversion efforts of the ICI sector and households.

In addition, the Department of Conservation should establish a set of outcome indicators for its pollution prevention programs and annually report on how well they are being attained. Alberta's Department of the Environment is in the process of developing appropriate outcome indicators for its programs and could serve as a model for such a program in Manitoba.

## **SUMMARY AND CONCLUSIONS**

When Manitoba first enacted the WRAP Act in 1991, the province was considered a Canadian pioneer in the area of waste management. The creation of the Tire Stewardship Board, the MARRC and MPSC in the mid-1990's put in place fairly effective tools for diverting materials from landfills. The consultations of the late 1990's around Household Hazardous Waste and regional waste management created the basis for achieving further reductions in waste going to landfills.

However, since then, comparatively little has been done to further reduce the amount of waste going to landfills. While the WRAPP Fund has provided needed funds to promote waste minimization, key initiatives like the regulation to implement a Household Hazardous Waste program have been shelved, and both MPSC and the Tire Stewardship Board are facing growing deficits unless levy revenues are increased to reflect the growing costs. Too little is being done to promote composting in the province and, apart from one pilot project in 2002, nothing has been done to address the growing consumer electronic waste. As a result, Manitoba no longer leads the country in waste minimization efforts. It stands in 6th place in terms of the rate of waste diversion.

To regain the high ground, the Department of Conservation needs to develop a second Waste Reduction and Prevention Strategy report, through a review of best practices in other jurisdictions and consultation with stakeholders, that sets out the following elements:

- a time frame for achieving the 50 per cent reduction of waste going to disposal;
- the types of materials that will be the focus of the waste reduction and prevention strategy;
- the mechanisms for achieving the reductions; and,
- a system for measuring and publicly reporting on progress in achieving the desired reductions.

A draft report should be prepared by the middle of 2005 and shared with key stakeholders in the Province by way of producing a clear blue print, by the end of 2005, of how Manitoba can achieve and exceed its goal of a 50 per cent reduction of waste going to landfills.

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Resource Conservation Manitoba  
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