

Consultations on a Canadian Resource Recovery Strategy



Summary of Yellowknife/Northwest Territories & Yukon Consultation Held at Yellowknife, NT on April 22, 2002



Natural Resources
Canada

Ressources naturelles
Canada

Canada

Consultations on a Canadian Resource Recovery Strategy Summary of Yellowknife/Northwest Territories & Yukon Consultation Held at Yellowknife, NT on April 22, 2002

1. Background

Natural Resources Canada (NRCan) is holding a series of consultation sessions over the spring of 2002 on the development of a Canadian Resource Recovery Strategy (CRRS). Sessions are being held in seven locations including Vancouver, Yellowknife, Edmonton, Toronto, Halifax, Montreal and Iqaluit. Representatives from industry, non-governmental organisations and all levels of government are being invited to participate. The objectives of these sessions are to identify:

- ✍ Resource recovery priorities in urban, rural, and north of 60 communities across Canada;
- ✍ Barriers to resource recovery in every region;
- ✍ Potential resource recovery demonstration projects in industrial, post-consumer and institutional sectors;
- ✍ Estimated levels of project funding and co-funding partners.

In Yellowknife, the day-long consultation session began with an introduction by each participant, followed by an overview from Mike Clapham, NRCan, of the Canadian Resource Recovery Strategy (see Background Paper, Attachment I). The group then discussed resource recovery issues, priorities, roles of different stakeholders in the development and demonstration of projects, barriers to resource recovery, following which they identified potential resource recovery projects for co-funding by NRCan.

A copy of the agenda and the list of participants in Yellowknife are attached (Attachments II and III). There were sixteen participants representing resource recyclers, the City of Yellowknife, Diavik Diamonds, the government of the Northwest Territories, local entrepreneurs, a landfill operator, a gold mine undergoing environmental rehabilitation (Miramar Giant Mines), and concerned citizens including one Inuit Elder. Participants included two representatives from Yukon and two from Inuvik.

2. Items of Note North of 60° and Yellowknife

- ✍ The landfill in the City of Yellowknife has no restrictions on non-hazardous materials. Residents are not charged for access to the landfill (no tipping fee). As a result, there is little incentive to recycle or reduce readily recyclable materials, e.g. cardboard.
- ✍ The City landfill provides a section for salvageable materials where goods such as clothing, TV's, etc. can be retrieved at no charge.
- ✍ The City landfill does not meet the environmental management standards for Diavik Diamonds, necessitating the shipment of wastes by Diavik further south for sound environmental management.
- ✍ Most supplies are shipped from the south. Very few goods are shipped south other than gold and diamonds and some waste. Most of the waste remains in the north and is not recovered or reused. Many trucks return south empty, so that backhaul costs are covered in the one-way shipping prices.
- ✍ Land access to distant mines is available only in the winter via ice roads, which are available for a period of approximately 10 weeks. The remote mines target to have most of their supplies shipped over the winter roads to avoid costly delivery by air, the only other available mode of transportation.
- ✍ Yellowknife has more artists per capita than any other Canadian community.
- ✍ Yellowknife has a relatively high population of short-term residents that tend to have little interest in recycling.
- ✍ Many community services are provided by volunteers. Volunteer efforts are difficult to sustain due to lack of resources, which results in burnout and lack of continuity in initiated programs.
- ✍ Several resource recovery projects were identified that would deliver both resource recovery and local community benefits.
- ✍ Some of the resource recovery projects identified involve innovative partnerships between industry and local government that would potentially reduce costs, greenhouse gas emissions and environmental impacts.

3. Resource Recovery Issues

Participants identified the resource recovery issues listed in Table 3-1.

Table 3-1: Resource Recovery Issues in the Northwest Territories (NT) and Yukon

Issue	Industrial	Institutional/ Commercial	Post-consumer
Metal tanks from Giant Mine	Y		
Scrap metal from Giant Mine	Y		
Waste packaging - Industrial/ Commercial/Institutional (ICI) (cardboard)	Y	Y	
Metal from out of service large metal tanks in remote communities		Y	
Waste oil from vehicles			Y
Food scraps, other organics	Y		Y
Paper (80% of material in Yellowknife and Inuvik landfills is paper)	Y	Y	Y
Hazardous materials	Y	Y	Y
Propane tanks that require valve replacement every 10 years			Y
Wooden pallets	Y	Y	
Wood waste (poles)	Y		
Tires	Y	Y	Y
Municipal organic matter	Y		Y
Yard wastes			Y
Nonspec industrial waste oil	Y		
Domestic glass			Y
Domestic plastic			Y
Beverage containers			Y
Building materials	Y	Y	Y
Electronic scrap	Y	Y	Y
Other hazardous waste			Y
Batteries			Y
Fluorescent light bulbs	Y	Y	Y
Waste heat		Y	
Sewage		Y	
Used goods - e.g. microwaves, TV's, furniture			Y
Solvents			Y
Paints in NT (paints are separated in the Yukon)		Y	Y
Arsenic trioxide (250,000 tonnes) buried in closed gold mines	Y		
Automobile waste products			Y

4. Priorities

The session participants identified the following priorities:

Summary of Priorities
<ul style="list-style-type: none">✍ Metal tanks at Giant Mine✍ Scrap Metal at Giant Mine (thousands of tonnes)✍ Waste paper✍ Waste oil from vehicles✍ Hazardous waste✍ Arsenic trioxide✍ Waste packaging

5. Barriers

- ✍ Complete life cycle costs are not addressed in the price of products.
- ✍ The social and environmental costs associated with the manufacture, use and disposal of a product are not included in the product price.
- ✍ Actual costs of landfill operations are not known.
- ✍ Lack of easy access to recycling bins in Yellowknife (bins are provided in a limited number of locations and residents have to take their recyclables to the bins).
- ✍ High costs of transportation due to long distances, small populations and distance from large populations.
- ✍ Lack of infrastructure for collection of recyclables from office buildings in Yellowknife and elsewhere
- ✍ Lack of infrastructure for storing materials recovered by backhaul until volumes are sufficient to economically transport and/or recover locally
- ✍ Truck transport from remote areas available only during winter road season (typically 10 weeks per year)
- ✍ Lack of volumes in Northwest Territories makes recycling economically unfeasible

- ✍ Lack of political will
- ✍ Lack of enforcement of government policies for government recycling and green procurement due to lack of infrastructure
- ✍ Safety and environmental regulations inhibit recycling
- ✍ Municipalities are not subject to the same stringent regulations for waste management as industry

Summary of Key Barriers
✍ Transportation costs
✍ Lack of volumes
✍ Collection, storage infrastructure
✍ Life cycle and social and environmental costs not included in the costs of products

6. Roles

The following roles for governments and industry to play in enhancing resource recovery were identified:

Role	Federal	Provincial	Territorial	Municipal	Industry
Increase awareness				Y	
Lead by example	Y				
National inventory of available used resources (e.g. database accessible through 1-800 or E-bay)	Y				
Funding for resource recovery	Y				
Incentives for recycled product content	Y				
Facilitate use of recycled content by coordinating permission/approvals from CMHC/other agencies	Y				
Provide tax breaks for renovation (property, income)	Y	Y	Y	Y	
Design for recovery recycling, e.g. housing/computers	Y				
Implement true cost accounting of landfill				Y	
Limit quantities of waste (charge after limit exceeded)				Y	
Make it convenient to recycle				Y	
Offer financial incentives for recycling					
Ticket litterers				Y	
Recover methane from landfill				Y	
Practice product stewardship					Y
Be open to innovative ideas for resource					Y

Role	Federal	Provincial	Territorial	Municipal	Industry
recovery					
Print reports, manual on demand only	Y	Y	Y	Y	Y
Charge extra for manuals of products					Y
Accept responsibility for packaging/provide baler at store					Y
Arrange for cardboard to be backhauled					Y
Ban commercial cardboard from landfill				Y	
Implement deposit/takeback - put responsibility back to producer				Y	Y
Provide incentives for backhaul			Y		
Coordinate/Harmonize resource recovery through Canadian Council of the Ministers of the Environment (CCME)	Y	Y	Y		

7. Opportunities

Group discussion revealed the following opportunities for improving resource recovery in the region:

- ✍ Consider mechanisms to recover money from the items salvaged from the Yellowknife landfill - perhaps by charging a small fee for access to the 'salvage' section. Inuvik requires a salvage permit for access to their salvage area. This money could then be used to encourage recycling.
- ✍ Impose a landfill ban on disposal of specific recyclable materials, e.g. cardboard, and arrange for a viable alternative.
- ✍ Develop a diversion strategy for demolition materials.
- ✍ Provide recycling bins 'everywhere.'
- ✍ Impose a charge for garbage over a certain weight.
- ✍ Impose a fine for disposal of recyclables - distribute the fine among all the tenants in a multi-resident building.
- ✍ The Federation of Canadian Municipalities (FCM) represents over 1000 communities. FCM has a total of \$250 million available from a Green Municipal Fund for innovative environmental approaches. FCM is seeking ways to decouple growth in waste quantities from economic growth and is interested in projects that result in greenhouse gas emissions reduction.
- ✍ The local prison is being relocated. Alternate uses for the building and the water storage tank under the building should be pursued.
- ✍ Explore extension of existing product stewardship programs in Alberta to NT, e.g. beverage containers, tires and/or develop NT programs based on Alberta experience. Alberta has successful programs based on government establishing a requirement for product takeback

by industry and imposing a takeback fee in the product price. The fee is then collected and utilized by industry to establish and pay for cost-effective recycling programs.

- ✍ Identify and implement incentives for recycling, e.g. buying a solar panel should be tax deductible, there should be an incentive, possibly a tax incentive, for buying waste oil.
- ✍ Transport recyclable materials to recycling facilities in the south on supply trucks that would otherwise be deadheading back (making a return trip without a load).
- ✍ Partnerships between industry, government and local communities
- ✍ Study/develop models for effective mobilization of not-for-profit organizations that could provide continuity.
- ✍ Partnerships between retailers, especially 'big box' retailers, and local communities
- ✍ Establish a resource recovery fund.
- ✍ Involve local/regional offices of federal departments with central federal offices and local governments in the development and delivery of local resource recovery programs.

8. Projects

Participants identified a variety of possible resource recovery projects in the region. These are presented in Table 8-1 below under the headings of post-consumer, institutional and industrial projects; projects that could potentially address more than one category are grouped together as "cross-cutting" projects. Some projects were more fully developed. All project ideas have been reported below. Where details were available, they have been included.

Project submissions received after the April 22 consultation are listed in Table 8-2.

Table 8-1: Potential Resource Recovery Projects

Project	Sponsor	Impact	Cost	Potential Partners
CROSS-CUTTING				
Build an Arts Centre for Northwest Territories (NT) using reclaimed large holding tanks. These tanks are no longer required because long-term storage of fuel in tanks is no longer necessary. (Project proposed in letter to city councillors submitted).	Francois Thibeau, supported by Aurora Arts Society	<ul style="list-style-type: none"> • Diversion of large quantities of steel from landfill • Filling a local need for an Arts Centre • Saves environmental impacts of extraction • Processing of natural resources 	?	City of Yellowknife, Government of Northwest Territories (GNWT). Cleanup costs of the tanks are the responsibility of the Department of Indian and Northern Development (DIAND).
Save former Hudson's Bay warehouse building from demolition, turn it into a community activity centre that incorporates a glass foundry, a music school, an Arts Centre, etc. Heat from foundry could be used to heat building.	Matthew Grogono, supported by other local citizens and artists	<ul style="list-style-type: none"> • Avoidance of demolition wastes • Reuse of equipment in building • Serving a community need 	\$1.5 to 2 million	
Energy offset between community and minesite - Diavik could pay for wind energy project in Yellowknife to offset greenhouse gas emissions from electricity production at minesite, greenhouse gas credits could be obtained.	Diavik Mines	<ul style="list-style-type: none"> • Greenhouse gas emission reductions from NWT 	?	
Remote mines in NT could pay to upgrade landfill in Yellowknife and save costs of transport of wastes further south for environmental disposal.	Diavik Mines	<ul style="list-style-type: none"> • Improved landfill in Yellowknife • Reduced GHG emissions by avoided transport south • Cost savings to mines 	?	
Feasibility study of wind profiles could be applied to communities.	mines		?	
Save 2 mine headframes, turn into geological museum for NT		<ul style="list-style-type: none"> • Extends landfill life • Provides local employment • Attracts tourists 	?	DIAND, the City of Yellowknife, and the NT Department of Resources, Wildlife and Economic Development (RWED).

Project	Sponsor	Impact	Cost	Potential Partners
Recover cardboard, paper, and packaging; convert into pellets for use as fuel			?	Suppliers, City of Yellowknife
POST-CONSUMER				
Youths from local Christian Fellowship Society could collect beverage cans from local office buildings and sell them to a local beverage collection centre and/or Alberta. Money could pay for a Christian Centre.	Diavik / Francois Thibeau	<ul style="list-style-type: none"> • Provide activities for local youths 	?	
INSTITUTIONAL				
Challenged people could refurbish pallets and avoid/reduce need for Yellowknife to buy new pallets (e.g. similar project in Hawkesbury). Pallets could also be used as fuels.		<ul style="list-style-type: none"> • Extends landfill life 		
Recover waste heat from diesel GS at Jackfish Lake to run a greenhouse, or for aquaculture, or to heat a compost facility.		<ul style="list-style-type: none"> • Attracts new industry • Reduces greenhouse gas emissions 		
Study sustainability of not-for-profits				
Study tax deductions for volunteer organization to address sustainability				
Reuse old buildings, establish a greenhouse that would provide local produce		<ul style="list-style-type: none"> • Extends landfill life • Reduces greenhouse gas emissions from transport of produce 		
Restore 50 year old arena to multiuse - skating in winter, and community centre in summer		<ul style="list-style-type: none"> • Extends landfill life • Enhance community quality of life 	\$1.5 million (approx.)	
Reuse equipment from old Canadian Tire Building - into Arts Centre Building, sprinklers, heating system		<ul style="list-style-type: none"> • Extends landfill life 		Canadian Heritage Foundation, Governments of NT and Yukon, DIAND, private foundations, Federation of Canadian Municipalities (FCM)
Revitalize Festival of Midnight Sun				

Project	Sponsor	Impact	Cost	Potential Partners
INDUSTRIAL				
Establish local businesses to make communities more self-sufficient, reduce transportation costs of products, e.g. bakeries		<ul style="list-style-type: none"> Provides local employment 		
Recover and use heat from 80° F water that is 1000 feet deep				DIAND, Arctic Energy Alliance
Recycle of Scrap Metal located at Giant Mine. Unless a suitable alternative is found, thousands of tons of scrap metal currently located at the Giant Mine site will have to be hauled, at cost, to a landfill. The proposal is to make use of back-haul opportunities offered by trucks returning empty from Yellowknife to the south, and ship the scrap south for recycling. It is proposed that money that would otherwise have been used to collect and haul this scrap material to the landfill be allocated for this project. (Details provided above have been abstracted from a project sheet received after the April 22 consultation.)	Miramar Giant Mine Ltd.	<ul style="list-style-type: none"> Divert material from the City of Yellowknife landfill. Eliminate potential ground water and surface water contamination. 	\$400,000 (over a period of two to four years)	DIAND, Government of Northwest Territories (GNWT), City of Yellowknife, and local trucking firms.

Table 8-2: Project Submissions received after April 22, 2002

Project	Sponsor	Impact	Cost	Potential Partners
POST-CONSUMER				
Tire recovery/removal/reuse. The objective of the study is to implement alternatives to land filling used tires, including feasibility assessment of re-use strategies. Options include: (a) the collection, sorting and shipping to south and (b) create re-use projects.	AB Salvage	<ul style="list-style-type: none"> • Network with local community for reuse • Network with southern organizations that recycle tire products. • Prevent land filling and potential fire hazards with toxic emissions 	\$33,000 (two collections/year: \$18,000; assess feasibility of re-use strategies:\$15,000) Funding in place at present: \$13,000	Town of Inuvik (Municipal Green Funds), Inuvik Recycling Society and a Tire producer
Used Batteries Recovery/Removal. To collect, sort and ship south, used batteries to prevent land filling and potential fire hazards with toxic emissions.	AB Salvage	<ul style="list-style-type: none"> • Network with organizations that recycle battery products. 	\$18,000 a year (twice yearly collections and shipments) Funding in place at present: \$9,000	Town of Inuvik and Inuvik Recycling Society.
Recovery/Reuse and Removal of used waste paints -- latex and non-latex (oil-based) paints	AB Salvage	<ul style="list-style-type: none"> • Network with local community for reuse of used paints • Network with southern organizations that dispose of used non-latex paint products 	\$18,000 a year (twice yearly collections and shipments) Funding in place at present: \$9,000	Town of Inuvik and Inuvik Recycling Society.
Used Vehicle Recovery/Removal. To collect, sort and ship south, used vehicles to prevent land filling and potential fire hazards with toxic emissions	AB Salvage	<ul style="list-style-type: none"> • Network with organizations that utilize scrap metal products 	\$57,000 a year (one annual collection / compaction and shipment). Funding in place at present: \$26,000	Town of Inuvik (Municipal Green Funds), Inuvik Recycling Society

Project	Sponsor	Impact	Cost	Potential Partners
Cardboard/paper recovery/burner conversion. To collect, sort, reuse and convert cardboard products and paper products to prevent land filling and produce heat energy.	AB Salvage	<ul style="list-style-type: none"> Reduce land filling in rural/northern community 	\$300,000 for year one. Funding in place at present: \$150,000	Town of Inuvik, NT Department of Resources, Wildlife and Economic Development (RWED), Environment Canada, Inuvik Recycling Society, and Local Businesses.
Project Coordinator - Resource Recovery Strategist. The role of the Northern representative for the NRCan initiative would be to initiate, organize, seek funding, offer community education, investigate feasibility plans and oversee all daily operations of resource recovery strategies, to deal with preventing and diverting items from the community landfill that would otherwise be potential fire hazards, leachable or give off toxic emissions. Will oversee all projects related to cardboard, batteries, tires, used vehicles, paints, paper, used oil, bottle deposit system, and backhauling activities.	AB Salvage	<ul style="list-style-type: none"> Significant impact on rural/northern communities. Network with local community for reuse Network with southern organizations that recycle/dispose of various waste materials. 	\$120,000 a year. Estimated funding in place at the moment: \$60,000	Town of Inuvik, Municipal Green Funds, Environment Canada (Eco-Action and the Canadian Rural Partnerships Program), RWED and the Inuvik Recycling Society.

Attachment I

**CONSULTATIONS ON
A CANADIAN RESOURCE RECOVERY STRATEGY**

- A Background Paper -

April 12, 2002

1. Introduction

Resource recovery seeks to recover materials and energy at the end of product life in an economic, social and environmentally sustainable manner. Natural Resources Canada (NRCan) wishes to identify potential demonstration resource recovery projects that are reflective of Canada's unique circumstances. These projects will form the basis of a Canadian Resource Recovery Strategy.

NRCan is undertaking a consultative process with all interested partners to solicit their views and ideas in a series of discussion fora to identify resource recovery priorities and recommend economic and environmentally sustainable demonstration projects for co-funding. Your input to this process is being sought.

NRCan is targeting to identify projects, funding partners and levels that can be incorporated in a resource recovery strategy that reflects the needs of all regions across Canada. From these consultations a business case will be developed and presented to federal senior management in the fall of 2002.

2. The Process

Consultations are planned during April and May in the following locations:

- ✍ Vancouver, B.C. covering B.C. and the Yukon
- ✍ Edmonton, Alberta covering Alberta, Saskatchewan and Manitoba
- ✍ Yellowknife, N.W.T. covering the North West Territories
- ✍ Toronto, ON covering Ontario
- ✍ Montreal, QC covering Quebec
- ✍ Halifax, N.S. covering Atlantic Canada
- ✍ Iqaluit, Nunavut covering Nunavut

The objectives of the consultations are to identify:

- ✍ resource recovery priorities in urban and rural communities across Canada;
- ✍ resource recovery priorities north of Canada's 60th parallel;
- ✍ barriers to resource recovery in each region;
- ✍ potential resource recovery demonstration projects in industrial, post-consumer and institutional sectors;
- ✍ estimated levels of project funding and co-funding partners.

Participants are requested to come to the meeting with one or more of the following:

- ✍ local resource recovery issues and opportunities;
- ✍ sectoral resource recovery issues and opportunities, i.e. industrial, institutional, post-consumer;
- ✍ barriers encountered in addressing the above issues and opportunities;
- ✍ potential demonstration projects that need co-funding to implement.

A draft format for identifying potential demonstration projects is attached for your consideration (see Appendix I). One form for each potential demonstration project should be completed and taken to the consultation meeting.

The priorities, barriers and demonstration projects identified over the course of the consultations will be compiled in notes that will be transmitted to all participants. NRCan will use the results of the consultations to recommend demonstration projects for co-funding by the federal government.

3. CONTEXT

3.1 Background

Domestic and global demand for recycling and recycled products has been steadily increasing, and will continue. Both industrialized and non-industrialized economies are being challenged to be efficient and competitive, and to ensure the environmentally sound management of products and materials throughout their life cycle.

The recycling of products is becoming a highly competitive growth industry. Recycling is recognized as being resource efficient and is one of the means of achieving industrial and commercial stewardship together with associated reductions in greenhouse gas emissions. Domestic and international pressure for the adoption of prevention-oriented measures that maximize the material and energy efficiency of products in their design and manufacture is growing. This pressure is creating opportunities for cost-effective and environmentally sound recycling and reuse of products at the end of their planned economic life.

Canada has been blessed with geography and geology rich in naturally occurring resources. Due to the multi-elemental complexity of many ore bodies, the challenges presented in harvesting multiple species of forest resources and oil exploration and extraction, Canada has unique and highly specialized competencies in natural resource management and production expertise. This specialized resource management knowledge base combined with existing infrastructure of modern processes and production facilities, provide a significant advantage in managing complex recyclable resource materials arising from both post industrial and post consumer sectors.

Small and Medium-size Enterprises (SME's) have their own special opportunities, needs and challenges. For them, a typical challenge is to secure access to small-scale technologies and processes for resource recovery that are affordable and cost-effective, and that do not necessarily rely on direct or regular access to more sophisticated centralized recovery facilities. SME's remain the backbone of Canada's economy, responsible for a high proportion of employment, growth.

In absolute terms resource recovery operations are most attractive in urbanized regions, but in relative terms can occasionally be of greater significance in sensitive rural and remote areas. The North would be a particularly significant case in point, as would be valuable farming and tourism areas and regions with delicate ecosystems and valued natural amenities. In communities and regions where haulage of recyclable materials to centralize recovery operations is too costly or impractical, local small-scale recovery enterprises may present an attractive alternative and opportunity.

Canada has an opportunity to establish itself as a global leader in niche areas of resource recovery, with a positive image as a responsible life-cycle manager of products. There is a need to develop and promote Canadian technologies and approaches that can compete in the growing global market for viable and environmentally responsible resource recovery technologies and expertise. In order for this to happen Canada has to remain an active and credible participant in international policy developments affecting both global markets for recyclable materials and the access to foreign markets of Canadian products.

3.2 The Canadian Resource Recovery Strategy

NRCan is facilitating the development of a Canadian resource recovery strategy. Canada needs a strategy for the following reasons:

- ✍ to improve material and resource efficiencies,
- ✍ reduce environmental impacts of resource use,
- ✍ contribute to Canada's plan to reduce greenhouse gas emissions,
- ✍ address the unique challenges and opportunities to resource recovery posed by Canada's geography, population distribution and climate,
- ✍ position Canada to be a global leader in niche areas of resource recovery.

Resource recovery consists of measures to maximize the economic opportunities and success in - recovering products (and by-products), materials and energy at the end of product life, and putting them back to work in the economy through recycling and reuse.

A resource recovery strategy focuses on the promotion and support of innovative product design and supportive public, private and consumer policies and practices that a.) increase the recoverability of valuable material and energy resources at the end of product life; b.) improve access to recoverable products, materials and energy (including product components and by-products) by those involved in the recycling and reuse sectors; and c.) enhance the efficiency and environmental soundness of recycling and reuse. Cost-effective and environmentally sound resource recovery optimizes the productive use of natural resources, minimizes waste generation and related treatment and disposal costs and supports industrial innovation and competitiveness.

Effective resource recovery efforts involve complex policy, technology, regulatory, and infrastructure issues that transcend traditional industrial, commercial, institutional and consumer sector and inter-jurisdictional boundaries. Strong partnerships with provinces/territories, communities, industry, consumers and public stakeholder groups are vital to successful approaches. The establishment of a consultation process identifying projects that will have an impact on the recovery of materials currently going to waste is an essential start.

Three key elements need to be addressed when developing a cost-effective, environmentally sound resource recovery strategy than can advance Canada ' s sustainable development goals:

1. How to inform, influence and engage decision-makers in governments, industry, non-governmental organizations and Canadians generally in taking appropriate action in resource recovery activities. Shifting the paradigm, from considering end-of-life products and materials as a waste to looking at them as valuable resources to be recovered for further economic use, will be crucial to increased recovery activities

2. How to advance technologies, processes and supporting institutional networks and infrastructure so that they better support resource recovery. The availability of cost-effective and environmentally sound technologies, infrastructure, equipment and processes is vital to the growth and development of domestic resource recovery operations. This includes both upstream technologies and approaches for the design of products that are amenable to cost-effective recovery at the end of their planned economic life, and downstream technologies and approaches for the efficient and effective diversion, extraction, separation, reuse and recycling of materials and energy
3. How to create and maintain a policy and regulatory environment that facilitates and reinforces cost-effective and environmentally sound resource recovery. At the heart of a viable resource recovery sector in Canada is a favourable domestic climate for investment in, and operation of, resources recovery operations. The complex array of regulatory and other policy measures affecting the operation and financing of resource recovery operations influence profoundly the overall financial and operational viability of many reuse and recycling initiatives.

4. Project Criteria

Demonstration projects are to be identified that:

- ✍ will develop and promote Canadian technologies and approaches that can compete in the growing global market for viable and environmentally responsible resource recovery technologies and expertise;
- ✍ inform, influence and engage decision-makers in governments, industry, non-governmental organizations and Canadians generally in taking appropriate action in resource recovery activities;
- ✍ advance technologies, processes and supporting institutional networks and infrastructure so that they better support resource recovery;
- ✍ create and maintain a policy and regulatory environment that facilitates and reinforces cost-effective and environmentally sound resource recovery.

The projects should:

- ✍ be capable of being economically, environmentally and socially sustainable;
- ✍ have willing partners from other levels of government, industry, community groups and other interested stakeholders;
- ✍ recover products and materials at the end-of-life for industrial, institutional and post consumer levels of society;
- ✍ address local priorities and have active local champions,
- ✍ be reasonably well-defined
- ✍ need co-funding to implement.

5. Conclusions and Next Steps

Following the stakeholder consultation sessions and any written comments submitted by May 31, 2002, a summary of the comments received will be compiled and circulated to interested stakeholders. Taking these comments into account, an overall strategy will be developed. The recommended demonstration projects and funding levels and partners will form the basis of the strategy. It is anticipated that the strategy will be submitted for funding approval in the fall of 2002.

Stakeholder views on these proposals are an important element of the Canadian resource recovery strategy process. Your views are greatly appreciated.

6. Appendix I

Canadian Resource Recovery Strategy

Draft Format to Identify Potential Projects

- ✍ Title

- ✍ Originator (with address and contact information by e-mail, Fax and telephone.)

- ✍ Brief description of proposed project

- ✍ Type of project: industrial, post-consumer, institutional.

- ✍ Geographical Emphasis: north of 60th parallel, urban and/or rural.

- ✍ Estimated impact on material and/or energy recovery.

- ✍ Estimated total cost of the project, and estimated timeframes.

- ✍ Potential partners in project.

- ✍ Estimated funding sources and levels

Attachment II
Consultations on a Canadian Resource Recovery Strategy
Yellowknife/Northwest Territories & Yukon Consultation - April 22, 2002
Yellowknife Inn - (Copper Room)
Agenda

8:00 am	Registration & Refreshments	
8:30 am	Welcome / Workshop Objectives	Roger Yates
8:40 am	Round Table Introductions	All
9:00 am	Overview on CRRS Strategy	Mike Clapham
9:20 am	Round Table Discussions on Priorities and Issues:	Chair: Carole Burnham
	✍ Industrial	
	✍ Institutional	
	✍ North of 60°	
	✍ Post-consumer	
10:30 a.m.	Break	
10:45 am	Introduction of Issues to be addressed by breakout Groups	Chair: Carole Burnham
11:00 am	Breakout Group Discussions	All
12:00 pm	Networking buffet lunch	
12:45 pm	Breakout Groups Continue Discussions	All
2:00 pm	Groups Report to Plenary / Group	
2:30 pm	Break	
2:45 pm	Round Table Closing Comments/Issues	All
3:30 pm	Next Steps	Mike Clapham
3:45 pm	Summary / Thank You's	Roger Yates
4:00 pm	Adjourn	

Attachment III

Consultations on a Canadian Resource Recovery Strategy Yellowknife/Northwest Territories & Yukon Consultation - April 22, 2002

List of Participants

Company	Name	Contact Number	E-mail Address
City of Yellowknife	H. Julian Huang	(867) 920-5697	jhuang@city.yellowknife.nt.ca
City of Yellowknife	Mayor Gordon Van Tighem	(867) 920-5693	gvanthem@city.yellowknife.nt.ca
City of Yellowknife	Bruce Underhay	(867) 669-3404	bailfac@city.yellowknife.nt.ca
Diavik Diamonds	Brenda Kuzyk	(867) 609-6508	brenda.kuzyk@diavik.com
Federation of Canadian Municipalities	Sherri Watson	(613) 792-1357	smwatson@magma.ca
Government of Northwest Territories	Emery Paquin	(867) 873-7654	emery_paquin@gov.nt.ca
GroundTrax (Yukon) Inc. Environmental Systems	Sue Greetham	867-660-4629	greetham@marshlake.polarcom.com
Hatch	Carole Burnham	(416) 445-0500	cburnham@attcanada.ca
Hatch	Roger Yates	(905) 403-4131	ryates@hatch.ca
Inuvik, Inuit Elder	Albert Bernhardt	(867) 777-1341	No e-mail (via Barbara Armstrong)
Inuvik Recycling Society (and AB Salvage)	Barbara Armstrong	(867) 777-2072	recycle@permafrost.com
Miramar Giant Mine Ltd.	Ron Connell	(867) 669-3725	ron_Connell@nt.sympatico.ca
NRCan	Mike Clapham	(613) 992-4404	mclapham@nrcan.gc.ca
Originals by T-BO	Francois Thibeau	(867) 873-5672	No e-mail (via Matthew Grogono)
Prospector, Dump Stacker	Walter Humphries	(867) 873-5432	baldwin@internorth.com
Raven Recycling Society, Whitehorse, Yukon	Padraig Holohou	(867) 667-7269	operations@ravenrecycling.org
Recycling Council of Alberta	Christina Seidel	(403) 843-6563	cseidel@telusplanet.net
Terra Verra Co.	Gary Vaillancourt	(867) 766-2507	No e-mail (via Matthew Grogono)
Yellowknife Glass Recycling	Matthew Grogono	(867) 669-7654	grogono@internorth.com

Did not Attend but Request Documentation:

Company	Name	Contact Number	E-mail Address
Artist Run Community Centre (Aurora Arts Society)	Arlene Yaceyko		ayaceyko@excite.com
City of Yellowknife	Katherine Silcock	867-920-5689	ksilcock@city.yellowknife.nt.ca