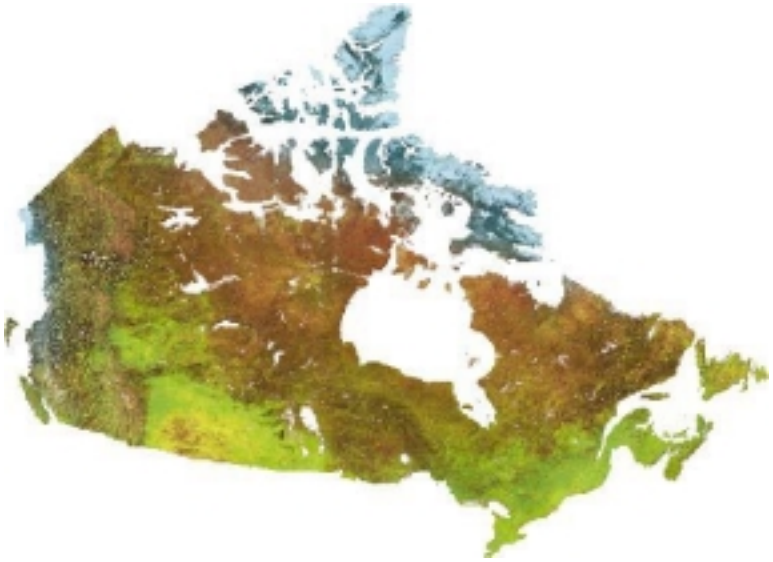
# Consultations on a Canadian Resource Recovery Strategy



## Summary of
## Halifax/Atlantic Provinces Consultation
## Held at Halifax, NS on May 16, 2002

Natural Resources Canada | Ressources naturelles Canada

Canada

# Consultations on a Canadian Resource Recovery Strategy
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## 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 and rural communities across Canada
- Resource recovery priorities in Canada's North
- 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 Halifax, the day-long consultation session began with introductions by Dr. Richard Haworth, Assistant Deputy Minister, Natural Resources Canada and Gerald MacLellan, Executive Director, Nova Scotia Ministry of Environment and Labour, followed by an overview from Mike Clapham, NRCan, of the Canadian Resource Recovery Strategy (see Background Paper, Attachment I). Barry Friesen, (Nova Scotia Ministry of Environment and Labour), Brian Smith (Halifax Regional Municipality), Daniel Khan (Lafarge Canada) and Duncan Cross (Canadian Plastics Industry Association) provided introductory comments about resource recovery experience, issues, priorities, barriers and opportunities in Atlantic Canada.

Participants then discussed in plenary resource recovery issues in Atlantic Canada, the roles of different stakeholders in the development and demonstration of projects and barriers to resource recovery. They also proposed several potential resource recovery projects for potential co-funding by NRCan.

A copy of the agenda and the list of participants in Halifax are attached (Attachments II and III). There were 24 participants representing resource recyclers, industry associations, the Regional Municipality of Halifax, Dalhousie University, the Atlantic Canada Opportunities Agency, industry, the Governments of Nova Scotia and New Brunswick, local entrepreneurs and the Federation of Canadian Municipalities. The majority of participants were from Nova Scotia with three representatives from Prince Edward Island, and one each from New Brunswick, and Newfoundland and Labrador.

## 2. Items of Note in the Discussion

- If Canada does not develop resource stewardship programs, it risks losing control of many of the resource assets that it will have originally produced. Canadian companies will lose access to essential raw materials and fall behind in innovation.

- The Government of Canada has a role to play as a catalyst in supporting resource recovery initiatives by communities, governments and industry.

- The CRRS complements Nova Scotia's Solid Waste Management Strategy. New Brunswick has just released an action plan on waste recovery.

- There is a need to start seeing recycled materials as industry's principal feedstock and virgin materials as top up rather than the other way around.

- As a result of extensive public consultation and effective leadership (through legislation and targeted programs), Nova Scotia has become a Canadian leader in resource recovery. The Province has achieved its goal of 50 percent waste diversion from landfill, serves all its residents with curbside recycling and provides access to 85 percent of its industry to central composting facilities. These activities have created 1000 new jobs.

- The convenience of recycling programs may undercut the long-term change in attitudes required to consume less. Decision-makers must not lose sight of this goal.

- The 3 "Rs" are education, education, education!

- Once put in place, a resource recovery infrastructure can be put to multiple uses, lowering operating costs for all users.

- Resource recovery priorities in Nova Scotia are all kinds of plastic goods, electronic equipment, construction and demolition material and wastes from boat-building.

## 3. Policy Considerations

Workshop participants identified the following policy considerations relevant to the federal, provincial and municipal governments in designing resource recovery programs:

- Governments will have to choose which instruments they wish to use in promoting resource recovery as these choices may have implications on costs and environmental benefits. For example, should governments promote a deposit-refund scheme for electronic goods or central collection points for used products? Such choices should be made in the spirit of the recover-reuse-recycle hierarchy.

- Governments should also encourage market trends whereby consumers lease services rather than buy goods from producers (e.g., leasing carpet services rather than purchasing carpets; buying "comfort" from a utility rather than electricity; leasing rather than buying a computer).

- Governments could use their procurement policies to encourage greater resource recovery. Because of their large purchasing power, governments can create economies of scale that

would lower the costs of resource recovery. The Nova Scotia government alone spends about $120 million a year on goods. Barriers to "greening" procurement policies include: higher costs (important at a time of tight budgets); lack of awareness; competitiveness concerns where there may be a sole supplier; possible trade-off between encouraging local content and resource recovery.

- Resource recovery programs need to have incentives incorporated in them to motivate resource users. While economic incentives are probably the most powerful, other incentives (e.g., social pressure) can also work. Public education and unpalatable alternatives (e.g., having to build a new landfill site if recycling rates did not increase) can also create incentives. Ultimately, consumers have to see a value in enhanced resource recovery. How to create benefits to consumers is the challenge.

- Incentives, however, are not enough. In many cases, regulations will also be required both to ensure a level playing field and achieve environmental gains. Changing the relative attractiveness of alternatives (e.g., by raising tipping fees), sharing the burden among the various actors in the product chain and education can also be effective.

- In selecting possible demonstration projects under the CRRS, the federal government should place greater weight on environmental effectiveness than innovation. In many cases, the barrier to increasing resource recovery is not technological but economic, attitudinal or the absence of infrastructure. The government should not feel compelled to innovate if solutions that have worked elsewhere appear appropriate.

- While municipalities are the principal solid waste managers, they have limited financial resources or policy leverage to reduce waste generation at the source (e.g., packaging).

- Municipalities need to be more involved in the development of federal and provincial policies on resource recovery as these can affect them directly. For example, a decision to introduce a deposit-refund scheme for aluminium beverage containers that were previously recycled can remove one of the most valuable elements in the waste stream and change the economics of municipal resource recovery projects.

- The "green funds" administered by the Federation of Canadian Municipalities can pay for demonstration projects or feasibility studies. These funds have been little tapped for resource recovery issues so far.

## 4. Barriers to Enhanced Resource Recovery

Participants identified the following barriers to enhanced resource recovery:

- In relatively sparsely populated regions such as the Atlantic Provinces, markets are often far away and transportation costs of recovered materials (e.g., glass) can be high. Governments wishing to promote resource recovery face a chicken and egg issue: should they develop the supporting infrastructure first or the feedstock? The issue in Atlantic Canada is often how to downscale proven technology to suit local conditions.

- The cyclical nature of many markets for recovered resources is a major barrier to the introduction of recycling programs.

- Public education is essential and has to be continuous. One-off programs may raise awareness in the short-term but will not be effective over time.

- Many consumers and industry groups still do not see the value of resource recovery and oppose initiatives to enhance it (e.g., suits by beverage manufacturers to prevent Nova Scotia from implementing a deposit-refund scheme on soft-drink aluminium cans).

- It is difficult for small jurisdictions to impose extended responsibilities unto producers when these are outside the region.

- Resource recovery does not appear to be a policy priority for senior levels of government.

- Networks that would help increase resource recovery are poorly developed. There are insufficient opportunities for resource producers and potential buyers or users to meet.

- Regions with low population densities may not generate enough waste to achieve economies of scale in resource recovery

- Virgin materials are often cheaper than recycled materials, because the price of virgin material does not include the full environmental and human health costs of producing them. These costs should eventually be internalized although such internalisation may have adverse impacts on some industries. Increasing costs to consumers may also lead to unintended effects (e.g., more littering where garbage collection costs are charged separately). In the meantime, governments should ensure that their tax regimes do not discriminate in favour of virgin products. It would be worthwhile to update the analysis of the fiscal treatment of virgin and recycled materials done in the mid-90s (Mintz study).

- Some regulations (e.g., the building code's prohibition against the use of recovered materials) act as barriers to re-use and recycling.

- Designing for the environment (e.g., extending the useful life of tires or asphalt shingles) provides far greater leverage on improving environmental quality than resource recovery programs (e.g., how many uses do we need to find for rubber from used tires that we would not have to worry about if tires were longer-lasting?). However, as a large importer of manufactured products, Canada may have less leverage in encouraging design for the environment or extended producer responsibility.

- The rise in Internet sales represents a challenge to local stewardship programs.

- There will be no universal solution to wastes problems. Approaches will have to adapt to various issues and sectors and change as required over time.

## 5. Projects

Participants identified a variety of possible resource recovery projects in the region. These are presented in Table 5-1 below under the headings of crosscutting, post-consumer, institutional and industrial projects. Participants were encouraged to consider the following questions when introducing projects:

- What is the project?
- Who is the proponent of the project?
- What resource recovery issue does it address?
- Who are the potential or existing partners and co-founders?
- What is the estimated cost?
- What sector/barrier does the project address?

Details of project submissions received after the May 16 consultation are included in Table 5-2.

## Table 5-1: Potential Resource Recovery Projects

| Project | Sponsor | Impact | Cost | Potential Partners |
|---|---|---|---|---|
| **CROSS-CUTTING** | | | | |
| Study on the feasibility of recovering glass for small-scale applications (e.g., water treatment, septic systems). | | | | Amherst Glass Works, NS Resource Recovery Fund Board |
| Demonstration project to create the infrastructure to pick up, sort and remanufacture plastic strapping. (A project sheet has been submitted - additional details are available in the minutes of the Toronto Consultation.) | Kasar Equipment Industries | | | |
| **POST-CONSUMER** | | | | |
| Plastics washing facility for Atlantic provinces. Update pre-feasibility study by NS government. | Novapet | • Allow marketing of contaminated plastic containers and film | | Municipalities, provinces |
| Antigonish composting project: develop organic farming markets by specifying compost characteristics and safety (Barry Friesen to add information). | | | | |
| Composting of dead livestock (Barry Friesen to add information). | | | | |
| Demonstration plant for biodegradable plastic packaging, using European technology (Barry Friesen to add information). | | | | |
| Develop standards and specifications for alternative uses of plastic wastes (e.g., guard-rails, lamp posts, railway ties) to facilitate marketing (Wilf Carter to add information). | Agri-Plas Systems 2000 Inc. | | | Engineering laboratory to test products and certify properties |
| Make structural or decorative board out of tire fluff left over from tire shredding. | N.S. Dept. of Env. and Labour | • Divert 5 tonnes/day out of landfill in Nova Scotia | | |

| Project | Sponsor | Impact | Cost | Potential Partners |
|---|---|---|---|---|
| Urban Turf. Construction of a full-sized soccer field in the Town Bay Roberts, using crumbed rubber tires. 85% of tire mass will be used (all rubber and fluff, excluding steel). Smaller-scale demonstration sites elsewhere have proven environment-ally benign (trace toxics from rubber absent). The government of Newfoundland and Labrador has already awarded a contracted a company to collect and grind tires. (A project sheet has been submitted.) | Jim Floyd, Landscape Architect | • 1 soccer field can use 50,000 tires<br>• 50 soccer fields built in Newfoundland and Labrador will consume all discarded tire in the province over 10 years | $400,000 over the next year.<br><br>50% Town<br>50% Fed & NF&L Govts. | Town of Bay Roberts, Newfoundland and Labrador Government, Federal Government. (Smaller demonstration projects in the province were carried out with the support of NF Multi-Materials Stewardship Board and municipalities.) |
| Recycling of asphalt shingles into pavement (Robert Anderson to add information). | | • Divert shingles from landfills | | Halifax Regional Municipality, paving companies |
| Quantification of reduction in methane emissions as a result of organic materials no longer being landfilled. | Halifax Regional Municipality | | | |
| Waste characterization study (involving literature review and sampling of waste) to help set priorities for future resource recovery efforts (Fred Wendt to add information). | Halifax Regional Municipality | | | |
| Demonstrating project of heat recovery from composting plant for greenhouse application. | | | | Greenhouse industry; composting industry |
| Marketing study to increase the desirability and acceptability of compost. | | | | Composting industry; landscape industry; municipalities; producers of organic wastes |
| Demonstration project to collect, grind and market materials from fibreglass boat hulls. | | • Possible markets include concrete and fibreglass manufacturing (excluding boats) | | NS Boat Builders Association; resin distributors |

| Project | Sponsor | Impact | Cost | Potential Partners |
|---|---|---|---|---|
| Identification of components in the waste stream with the highest environmental impact in order to identify resource recovery and source reduction opportunities. | | • longer-life roof shingles would reduce construction and demolition material going to landfill<br>• some wood and gypsum waste can be turned into products | | |
| **INSTITUTIONAL** | | | | |
| De-packaging study: demonstration project on the separation of contents from package (e.g., cans, bottles, boxes) for damaged goods. | | | | |
| Feasibility study on creating the infrastructure for the disposal of light bulbs. | | | | NS Resource Recovery Fund Board, lighting industry |
| **INDUSTRIAL** | | | | |
| Cement kiln dust (CKD) utilization potential. Evaluate use of CKD in agricultural, fishery, and acid rock drainage treatments. Would involve monitoring over 4 to 5 years. (A project sheet has been submitted.) | Lafarge | • CKD can help neutralize acidity and improve biological yields but may include trace heavy metals | $50,000 to $500,000 for studies (over 5 years). | Fisheries and Oceans Canada, Agriculture Canada, local fishery associations, farmers, fishermen, acid generating sites. |
| Cement kiln energy recovery potential: evaluate availability of alternative compatible fuels with cement manufacturing process. Estimate the costs of delivering fuels to the site and the infrastructure to manage and deliver fuels to the manufacturing process. (A project sheet has been submitted.) | Lafarge | • Complete destruction of “waste” materials<br>• Energy and mass recovered in a stable building material that is unlikely to release undesirable residues. | Feasibility studies: $15,000 to $150,000; Engineering and construction: $1 Million. | Municipal solid waste managers; by-product producers |

| Project | Sponsor | Impact | Cost | Potential Partners |
|---|---|---|---|---|
| Systemic application of inter-resource recovery systems, e.g., possible symbiotic relationship between Sable island gas and Canso Strait industries. The study will consider potential symbiotic relationships between these industries and the nature of niches that could be filled to make the most effective use of available by-products. (A project brief has been submitted.) | Dalhousie University | | ? | Nova Scotia Dept of Energy, Resource Recovery Fund Board, Atlantic Canada Opportunities Agency (ACOA), Enterprise Cape Breton, federal (NRCan, NRC, EC, IC), regional (Strait regional and Guysborough Economic Development Agencies), and private sector companies. |
| Devise and develop a "Centre for packaging reuse" to increase the reuse and recycling of packaging materials currently discarded in industrial parks. The study will build on on-going efforts to transform Burnside Industrial Park into an ecosystem. A mechanism could be devised for collecting, sorting and marketing large volumes of packaging materials (currently discarded in the Burnside Industrial Park) to serve as a model for other industrial parks and zones in Canada, and possibly a marketing opportunity for other countries. (A project brief has been submitted.) | Dalhousie University (Industrial Ecology Research and Development Group) | | ? | N.S. Dept of Env. & Labour, Resource Recovery Fund Board, federal (NRCan, EC), Halifax Regional Municipality, and private sector companies. |

**Table 5-2: Project Submissions received after May 16, 2002**

| Project | Sponsor | Impact | Cost | Potential Partners |
|---|---|---|---|---|
| **CROSS-CUTTING** | | | | |
| Off The Road Tire/or Energy Cells. Designed to recover materials and energy at the end of life of large scrap tires (6' to 15' diameter, weighing 750 lbs to 10 tonnes) that until now have been unprocessable, the project will target Off The Road (OTR) tires used by industries such as mining, forestry, oil & gas exploration, agriculture and construction. Alternatives sought include the securing of Power Purchase Agreements (PPA) of fuel supply contracts and partnerships with industries that would like to fix power costs by regional distribution of power generation. (Details above are abstracted from a project sheet submitted by a British Columbia company after the Vancouver consultation minutes were issued. Presented here for the record, and also due to potential impact across Canada.) | Target Recycling Inc. (Chemainus, British Columbia) | • Tremendous impact North of 60 (much of Canada's Natural Resources is harvested with equipment utilizing OTR tires).<br>• Benefit urban areas also (can be extended to cover all OTR tires across Canada).<br>• Recover materials and energy at the end of life in an economic, and social/environmentally sustainable manner.<br>• Create jobs<br>• Regional Distribution of Power Generation will provide a positive impact on a provincial and national scale. | $3.5 Million USD in each province.<br><br>(The initial demonstration project implementation in one province will require partial government funding to secure PPA's of fuel supply contracts; a program of this type can be implemented in 3 provinces within 6 months). | Provincial utilities (for PPA power purchase agreements) and industries such as Pulp & Paper Mills, Mining Processors, Smelters, etc. |
| Unrecyclable Plastic Residues as a Source of Fuels for the Cement Industry. Plastic film is typically landfilled as it is extremely difficult to sort into their polymer types, or contaminated. This project will convert plastic film into a form suitable for use as fuel, upgrade if necessary automotive shredder residue (ASR) to a fuel, and use both in a full-scale trial in a cement kiln and analyze the results from an environmental and economic perspective. | The Environment and Plastics Industry Council (EPIC) and Lafarge Canada Inc. | • Divert from landfill<br>• Recover energy from waste | $340,000 (in 2003)<br><br>Funds requested from CRRS: $200,000 | Municipalities, Sol Plastics, CRRS/NRCan |

## 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 60 $^{th}$ 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 an contact information by e-mail, Fax and telephone.)

- Brief description of proposed project

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

- Geographical Emphasis: north of 60 $^{th}$ 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

## Halifax/Atlantic Provinces Consultation - May 16, 2002

***Location: Harbour Suite A - Westin Nova Scotian Hotel, Halifax***

## Agenda

| | | |
|---|---|---|
| **8:00 am** | **Registration & Refreshments** | |
| **8:30 am** | **Welcome** | **Roger Yates** |
| **8:35 am** | **Opening Remarks** | **Dr. Richard Haworth**<br>**Assistant Deputy Minister**<br>**Minerals and Metals Sector, NRCan** |
| **8:40 am** | **Opening Remarks** | **Gerard MacLellan**<br>**Executive Director, Environment and Labour,**<br>**Nova Scotia** |
| **8:50 am** | **Round Table Introductions** | **All** |
| **9:05 am** | **Overview & Workshop Objectives** | **Mike Clapham** |
| **9:20 am** | **Panel Introductions** | **Roger Yates** |
| **9:30 am** | **Panel Discussion on Priorities, Issues in <u>Urban</u> and <u>Rural</u> Areas:**<br>ä Industrial<br>ä Institutional<br>ä Post-consumer | **Invited Local Representatives**<br>**Barry Friesen, Environment & Labour, N.S.**<br>**Brian Smith, Halifax Reg. Municipality**<br>**Dan Khan, Lafarge Canada Inc.**<br>**Duncan Cross, Canadian Plastics Ind. Assoc** |
| **10:30 a.m.** | **Break** | |
| **10:45 am** | **Plenary Discussion** | **All** |
| **11:45 am** | **Networking buffet lunch** | |
| **12:30 pm** | **Introduction of Issues to be addressed by breakout Groups** | **François Bregha** |
| **12:40 pm** | **Breakout Groups** | |
| **3:00 pm** | **Break** | |
| **3:15 pm** | **Groups Report to Plenary/Group Discussion** | |
| **3:45 pm** | **Round Table Closing Comments/Issues** | **All** |
| **4:15** | **Next Steps** | **Mike Clapham** |
| **4:30 pm** | **Summary/Thank you** | **Roger Yates** |
| **4:45** | **Adjourn** | |

## Attachment III

# Consulations on a Canadian Resource Recovery Strategy
# Halifax/Atlantic Provinces Consultation - May 16, 2002

## List of Participants

| Company | Name | Contact Number | E-mail Address |
|---|---|---|---|
| Agri-Plas Systems 2000 Inc. | Austin Boyd | 902-569-1965 | austin@pei.aibn.com |
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| Clean Nova Scotia | Kate Fortin | 902-420-8802 | kfortin@clean.ns.ca |
| Dalhousie University | Dr. Abdel E. Ghaly | 902-494-6014 | abdel.ghaly@dal.ca |
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| Kasar Equipment Industries | Rick Agar | 905-795-2727 | ragar@on.aibn.com |
| Lafarge Canada Inc. | Dan Khan (Panelist) | 902-673-3723 | dan.khan@lafarge.ca<br>dan.khan@lafarge-na.com |
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