National Round Table on the Environment and the Economy *Greening of the Budget Submission*

Budget Recommendations 2003

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National Round Table on the Environment and the Economy



Table ronde nationale sur l'environnement et l'économie

NRTEE Mandate

The National Round Table on the Environment and the Economy (NRTEE) was created to "play the role of catalyst in identifying, explaining and promoting, in all sectors of Canadian society and in all regions of Canada, principles and practices of sustainable development." Specifically, the agency identifies issues that have both environmental and economic implications, explores these implications, and attempts to identify actions that will balance economic prosperity with environmental preservation.

At the heart of the NRTEE's work is a commitment to improve the quality of economic and environmental policy development by providing decision makers with the information they need to make reasoned choices on a sustainable future for Canada. The agency seeks to carry out its mandate by:

- advising decision makers and opinion leaders on the best way to integrate environmental and economic considerations into decision making;
- actively seeking input from stakeholders with a vested interest in any particular issue and providing a neutral meeting ground where they can work to resolve issues and overcome barriers to sustainable development;
- analyzing environmental and economic facts to identify changes that will enhance sustainability in Canada; and
- using the products of research, analysis and national consultation to come to a conclusion on the state of the debate on the environment and the economy.

The NRTEE has established a process whereby stakeholders themselves define the environment/economy interface within issues, determine areas of consensus and identify the reasons for disagreement in other areas. The multistakeholder approach, combined with impartiality and neutrality, are the hallmarks of the NRTEE's activities. NRTEE publications address pressing issues that have both environmental and economic implications and which have the potential for advancing sustainable development.

Members of the National Round Table on the Environment and the Economy

The NRTEE is composed of a Chair and up to 24 distinguished Canadians. These individuals are appointed by the Prime Minister as opinion leaders representing a variety of regions and sectors of Canadian society including business, labour, academia, environmental organizations, and First Nations. Members of the NRTEE meet as a round table four times a year to review and discuss the ongoing work of the agency, set priorities, and initiate new activities.

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Table of Contents

1.0	Exe	cutive S	ummary	1
	1.1	The Ro	und Table Process	1
	1.2	A More	Fully Balanced Budget	1
	1.3	Sustain	able Urban Communities	1
	1.4	Brown	field Redevelopment	2
	1.5	Sustain	ability Opportunities for Northern Aboriginal Communities	2
	1.6	The En	vironment and Human Health	3
	1.7	Conser	ving Canada's Natural Heritage	3
	1.8	Buildin	g Canada's Knowledge Base and Sustainable Development Capacity	4
2.0	Intr	oductior	1	5
	2.1	The Ro	und Table Process	5
	2.2	A More	Fully Balanced Budget	5
	2.2	Propos	als for the 2003 Budget	6
3.0	Sus	tainable	Urban Communities	7
	3.1	Overvi	ew	7
	3.2	Encour	aging the Use of Urban Transit	7
		3.2.1	Long-term Federal Funding for Urban Transit	7
			Recommendation 1	8
		3.2.2	Tax Exemption for Employer-Provided Transit Passes	8
			Recommendation 2	8
	3.3	Improv	ing Energy Efficiency of Buildings	9
		3.3.1	Expanded Use of Community Energy Systems	9
			Recommendation 3	9
		3.3.2	GST Rebate for Eco-Efficient Renovations	9
			Recommendation 4	9
		3.3.3	Additional New Homes Built to the R2000 Standard	10
			Recommendation 5	10
	3.4	Promo	ting Sustainable Urban Development Patterns	10
		3.4.1	Eco-Efficient Mortgages	10
			Recommendation 6	10
	3.5		ting Sustainable Infrastructure	11
		3.5.1	New Sustainability and Competitiveness Criteria for Federal Infrastructure Programs	11
			Recommendation 7	11
		3.5.2	Elimination of GST on Green Municipal Infrastructure	12
			Recommendation 8	12
	3.6	Summa	rry of Recommended Measures	13

4.0 A	A N	lational Brownfield Redevelopment Strategy	14
4	1 .1	Overview	14
4	1 .2	Addressing the Lack of Funding	15
		4.2.1 Addressing Upfront Costs Associated with Brownfield Remediation	16
		Recommendation 9	16
		Recommendation 10	16
		4.2.2 Removing Liens and Tax Arrears Against Qualifying Properties	17
		Recommendation 11	17
		4.2.3 Leveraging Private Loan Capital for Brownfield Redevelopment	17
		Recommendation 12	17
		4.2.4 Establishing a Designated Brownfield Revolving Loan Fund Program	17
		Recommendation 13	18
		4.2.5 Providing Grants for Certain Brownfield Projects	18
		Recommendation 14	18
4	1 .3	Building Community Awareness and Capacity	18
		Recommendation 15	19
4	1.4	Summary of Recommended Measures	19
505	Sus	tainable Opportunities for Northern Aboriginal Communities	21
		Overview	21
		Building Regulatory Capacity	21
Ū		Recommendation 16	22
5	5.3	Building Information Capacity	22
		Recommendation 17	22
5	5.4	Cumulative Effects Management	22
		Recommendation 18	23
5	5.5	Improving Basic Education Levels in Aboriginal Communities	23
		Recommendation 19	23
5	5.6	Ensuring Meaningful Aboriginal Consultation in Large Project Proposals	24
		Recommendation 20	24
5	5.7	Summary of Recommended Measures	25
(0 1	- 1	Farrier wordt bergen 11 olde	00
		Environment and Human Health	26
		Overview	26
		Building Research Capacity	26
6	5.3	Continuing the Toxic Substances Research Initiative	26
-		Recommendation 21	27
6	5.4	Building Regulatory Capacity	27
	_	Recommendation 22	27
6	6.5	Summary of Recommended Measures	28

7.0 Conserving Canada's Natural Heritage	29
7.1 Overview	29
7.2 Establishing and Maintaining Protected Areas	29
7.2.1 Funding for Establishment of New Parks	29
Recommendation 23	29
7.2.2 Addressing the Ecological Integrity of Canada's Existing Parks	30
Recommendation 24	30
7.3 Building Our Conservation Knowledge Base	30
7.3.1 Digital File of Canada's Conservation Areas	31
Recommendation 25	31
7.3.2 Standard National Classification System	31
Recommendation 26	31
7.3.3 National, Coordinated Land-Cover Monitoring Program	31
Recommendation 27	31
7.4 A National Gap Analysis Program	31
Recommendation 28	32
7.5 Ecogifts	32
Recommendation 29	32
7.6 Conserving Canada's Oceans	32
Recommendation 30	33
7.7 Developing a Network of Marine Protected Areas	33
Recommendation 31	33
7.8 Capacity Building for Marine Conservation	37
Recommendation 32	33
7.9 Summary of Recommended Measures	34
8.0 Building Canada's Knowledge Base and Sustainable Development Capac	ity 36
8.1 Environmental and Sustainable Development Indicators	36
8.2 An Expanded System of National Accounts	36
Recommendation 33	37
8.3 Environment Canada's Canadian Information System on the Enviror	ament (CISE) 37
Recommendation 34	37
8.4 Summary of Recommended Measures	38
Appendix A	
Summary of 2003 Budget Recommendations from	
the National Round Table on the Environment and the Economy	39

1.0 Executive Summary

1.1 The Round Table Process

The National Round Table on the Environment and the Economy (the Round Table) is an independent advisory body that provides policy advice to the Federal Government concerning the promotion of sustainable development.

One key means by which the Round Table fulfills its mandate is through its Greening of the Budget submission – an annual set of recommendations that outline the ways in which the Federal Government can better integrate economic, social, and environmental considerations into its annual budget. These recommendations are the product of multistakeholder processes involving a diverse crosssection of stakeholders – including industry, Aboriginal peoples, environmental interests, and others.

1.2 A More Fully Balanced Budget

This year, the Greening of the Budget submission focuses on measures aimed at ensuring a more fully balanced budget – in other words, a budget that moves beyond simple fiscal balance to bring into equilibrium economic, environmental, and societal objectives.

The challenge Canadians face is clear. Frequently, the marketplace overlooks the social and environmental consequences of economic choices. Too often, market failures are magnified by government programs that actively encourage unsustainable practices.

The Round Table recommendations aim to restore a balance by ensuring that the marketplace considers the full value of economic decisions, including their impact on the environment, on Canada's 'natural capital,' and on our social infrastructure. The recommendations will help to correct the distortions caused by policies, practices, and market failures that favour unsustainable practices over realistic sustainable options.

The Round Table is calling for action in four key areas:

- promotion of sustainable communities, specifically environmental quality in urban areas, brownfield redevelopment, and northern Aboriginal communities;
- improved understanding of the links between environment and human health;
- preservation and enhancement of Canada's rich natural heritage; and
- development of Canada's knowledge base and capacity for achieving sustainable development, particularly through a set of environmental and sustainable development indicators.

The content and priorities highlighted in this submission flow from work undertaken by the NRTEE. Many of the recommendations also support and build on the priorities highlighted in the government's recent Throne Speech, including reducing greenhouse gas (GHG) emissions, promoting innovation and productivity, providing opportunities for Aboriginal communities, and improving the health of Canadians.

1.3 Sustainable Urban Communities

As urban areas continue to evolve into key drivers of the global economy, quality of life issues and sustainability considerations grow in importance. Although previous federal budgets have moved to encourage sustainable urban growth, a more comprehensive long-term strategy is needed.

The Round Table's Urban Sustainability Task Force is developing a *State of the Debate* Report – to be released in the spring of 2003 – which focuses on using federal fiscal levers to improve environmental quality in cities. Meanwhile, the Round Table has identified a number of recommendations from the task force process in four related policy areas:

- development of measures to fund and encourage the use of urban transit;
- encouragement of energy efficiency of buildings and community energy systems;
- development of policies to support sustainable urban development patterns (or urban form); and
- promotion of sustainable municipal infrastructure.

1.4 Brownfield Redevelopment

Brownfields are contaminated lands that – if remediated and redeveloped – could serve as significant engines of sustainable urban growth. Restoring economic and ecological value to Canada's brownfields is key to building sustainable urban communities.

Fiscal and legal barriers, however, often skew development in favour of greenfield locations by making brownfield sites uneconomical or impractical to redevelop. The three main barriers to brownfield redevelopment in Canada are:

- an inconsistent and uncertain legal liability regime for brownfield redevelopment;
- the lack of financial capital for upfront costs in brownfield projects; and
- low stakeholder awareness of the challenges and opportunities intrinsic to brownfields.

The 2001 Federal Budget mandated the Round Table to prepare a national brownfield redevelopment strategy. A comprehensive strategy has been developed and will be released in February 2003. Although the strategy recommends action by all levels of government, it highlights several areas where federal budget action (with corresponding budget and regulatory action at the provincial level) could help overcome brownfield barriers. These include:

- expanding access to capital throughout the redevelopment process as a way of stimulating investor interest;
- improving the regulatory environment for brownfield redevelopment;
- raising stakeholder awareness of the benefits of brownfield redevelopment; and
- increasing brownfield redevelopment capacity by promoting innovation in the area of remediation technology.

1.5 Sustainability Opportunities for Northern Aboriginal Communities

Aboriginal communities in the North – as elsewhere – struggle with extreme poverty and at times, substandard living conditions. But the economic opportunities created by the region's non-renewable resources have the potential to greatly improve local living conditions – if the benefits were to flow to communities.

To ensure that this economic development is both sustainable and beneficial to the peoples of the North, a strong regulatory framework is needed to guide the development of non-renewable resources. At the same time, investments must be made in educational and decision-making capacities to ensure that Aboriginals are full participants in decisions regarding resource development and economic benefits deployment. In effect, sustainable development in Canada's North should be supported by:

- building a strong regulatory framework for nonrenewable resource development via extended funding for the Mackenzie Valley Environmental Impact Review Board (MVEIRB);
- creating a reliable, up-to-date geoscience database to facilitate land-use planning and to protect sensitive land areas;
- implementing a "Cumulative Effects Assessment and Management" (CEAM) framework for resource development in the Northwest Territories;
- improving basic educational levels in Aboriginal communities; and
- more directly involving Aboriginal communities in large project proposals.

1.6 The Environment and Human Health

Canadians are increasingly concerned about the potential health impacts of chemical substances in the environment. At the same time, Canadians also understand that new substances, materials, and medicines can have health and economic benefits. The Round Table is calling on the government to continue its efforts to develop a policy framework that not only encourages the research and use of new products, but also protects the environment and health of Canadians.

Specifically, the government's capacity to ensure that the use of chemical substances in our environment is safe, efficient, and effective needs to be broadened in two ways:

• by expanding the research capacity available to study the links between substances in our environment and human health; and

 by improving the regulatory capacity (and by extension consumer confidence) of the agencies responsible for reviewing and approving new and existing substances.

1.7 Conserving Canada's Natural Heritage

Canada's natural heritage is integral to the country's identity and economic foundation; it is also an important social and cultural asset. Too often, however, Canada's natural 'capital' is consumed or damaged without regard for its real value to our economic future, our health, or our environment. Canadians must take steps to properly conserve this legacy, to ensure that future generations can share in its beauty and benefits.

The Round Table applauds Canada's recent recommitment to completing its system of national parks. But the federal commitment must be implemented in such a way as to ensure that parks are established in consultation with local communities and can contribute to preserving the integrity of local and regional ecosystems. Meeting this goal will require new integrated systems of land and water management, including core protected areas and buffer zones, and connections between these areas that allow key species to move freely through their natural ranges.

The Round Table's Task Force on the Conservation of Natural Heritage is completing a full framework for nature conservation, to be released in the summer of 2003. In the meantime, funding should be allocated to the following areas so that the initial steps to begin securing Canada's natural capital can be taken:

- funding the commitment to establish a federal network of protected areas;
- developing a strategy for a national network of marine protected areas;

- building federal conservation capacity by developing a robust information base (such as a digitally accessible database of existing conservation areas in Canada and a multidisciplinary, integrated national marine conservation database);
- improving the ecological integrity of Canada's existing national parks via the recommendations of the Panel on Ecological Integrity in Canada's National Parks; and,
- allocating funds to implement sustainable oceans management in a manner consistent with Canada's Oceans Strategy.

1.8 Building Canada's Knowledge Base and Sustainable Development Capacity

In its 2001 Budget, the Federal Government asked the Round Table to develop a small set of national Environmental and Sustainable Development Indicators (ESDI) to track ways in which current economic activities might affect future generations of Canadians. These indicators – to be released in the spring of 2003 – will alert Canadians to trends in the state of Canada's natural capital, including its forests, wetlands, air quality, freshwater quality, and greenhouse gas emissions. To use these indicators, the Federal Government will need to expand its system of national accounts to include measures of human, natural, and social capital. At the same time, these accounts, to become functional, will have to be populated with data.

Consequently, the Round Table recommends that the Federal Government prepare for the completion of Canada's Environment and Sustainable Development Indicators by:

- providing sufficient long-term funding to the government organizations concerned to enable them to start developing national accounts of human, natural, and social capital; and
- financing the ongoing work of Environment Canada's Canadian Information System on the Environment (CISE) so as to expand the collection, management, and assessment of environmental data and knowledge.

2.0 Introduction

2.1 The Round Table Process

The National Round Table on the Environment and the Economy (the Round Table) is an independent advisory body reporting to the Prime Minister. The Round Table is mandated to provide policy advice and recommendations to governments and the public on promoting sustainable development in Canada.

One of the most important ways the Round Table fulfills this obligation is by making recommendations to the Federal Government on budget initiatives, through its annual Greening of the Budget Submission. The Greening of the Budget submission aims to demonstrate how, in selected policy areas, the Government of Canada can integrate economic, environmental, and social considerations within its budget so as to benefit Canada and Canadian society in the short- and long-term.

The Round Table's strength is the way in which it brings relevant, diverse stakeholders to the table to develop recommendations. The Round Table process brings together representatives from industry, government, Aboriginal communities, and environmental non-governmental organizations (ENGOs), not only to find common ground and but also to set baseline expectations and goals, and produce practical recommendations.

The Round Table establishes multistakeholder processes to work on complex, sustainable development policy issues of relevance for Canadians. In 2000, in the Millennium Statement *Achieving a Balance: Four Challenges for Canada in the Next Decade*, Round Table members identified four major sustainable development challenges for Canada in the next decade. Highlighted were the accumulation of toxic contaminants, loss of natural spaces, deterioration of urban environments, and change in global economics. Several of the recommendations in this submission flow from task forces established to help overcome these challenges. In particular, the recommendations build on the work of several multistakeholder task forces, including the following: Urban Sustainability; Health, Environment and Economy; Brownfields; Aboriginal and Northern Communities; Conservation of Nature; Environment and Sustainable Development Indicators; and Ecological Fiscal Reform. Although not all these task forces have completed their processes and produced a final report, the Round Table has included recommendations from those whose processes are sufficiently advanced.

As well, the Round Table's recommendations support many of the priorities highlighted in the government's recent Speech from the Throne. These include measures to help reduce GHG emissions; stimulate innovative environmental technologies; improve environmental, social, and economic conditions in Canadian cities and towns; help Northern Aboriginal communities; and improve the health of Canadians.

2.2 A More Fully Balanced Budget

Canadians have come to expect "balanced budgets" from the Federal Government. This term is used to describe fiscal balance – the balancing of government revenues and expenditures. The Round Table's recommendations are aimed at producing a more fundamentally balanced budget; that is, one that achieves a balance between economic prosperity and an enhanced environmental and social quality of life.

Frequently, the marketplace overlooks the social and environmental consequences of economic choices. Too often, the subsequent market failures are magnified by government programs that actively encourage unsustainable practices and that, at times, punish people financially for trying to be environmentally responsible.

This submission offers a number of practical recommendations to help the Federal Government to begin progressively eliminating measures that encourage unsustainable practices and to implement incentives that encourage a balance; thereby making sustainable practices equally, or more attractive than unsustainable practices.

2.3 Proposals for the 2003 Budget

The Round Table's Proposals for the 2003 Budget will help the government to fulfill environmental commitments announced in previous years and in the recent Speech from the Throne. The proposals should help to improve the quality of life in Canada's communities, while enhancing the productivity, health, and environment of all Canadians. For the 2003 Budget, the Round Table is calling for federal action in four key areas:

- promotion of sustainable communities, specifically, environmental quality in urban areas, brownfield redevelopment, and northern Aboriginal communities;
- improved understanding of the links between environment and human health;
- preservation and enhancement of Canada's legacy of natural heritage; and
- development of Canada's knowledge base and capacity for achieving sustainable development, particularly through a set of environmental and sustainable development indicators.

By accepting and moving forward on these recommendations, the Federal Government will begin a process that ultimately allows Canadians to 'capture' the economic and community benefits associated with environmental initiatives, while simultaneously promoting and preserving the country's natural heritage.

3.0 Sustainable Urban Communities

3.1 Overview

The world is becoming increasingly urban. Globally, cities are growing quickly. Many are becoming primary economic drivers. But as the economic importance of cities grows, their 'quality of life' becomes a key factor in their ability to prosper. This is especially true of Canada. As the government's recent Throne Speech noted: "Competitive cities and healthy communities are vital to our individual and national well-being, and to Canada's ability to attract and retain talent and investment."

In December 2001, the Round Table launched an Urban Sustainability Program to not only catalyze momentum around improving the environmental quality of Canada's urban regions, but also to stimulate economic competitiveness.¹ The resulting task force decided to focus on applying Ecological Fiscal Reform (EFR) to urban sustainability. EFR shows how a coordinated, deliberate strategy to redirect tax and expenditure programs can help Canada meet its sustainable development objectives.

The Urban Sustainability Task Force identified several recommendations to ensure that fiscal decisionmaking adequately reflects real environmental costs and benefits. Specific measures for the 2003 Budget focus on four related issues: encouraging urban transit; improving building energy efficiency; promoting better urban development; and encouraging sustainable municipal infrastructure. These recommendations will help to reduce GHG emissions, improve health in cities, and stimulate innovation.

3.2 Encouraging the Use of Urban Transit

Air quality is one of the most important quality of life indicators in urban areas.

Like many of the world's major urban areas, Canada's cities face the increasingly difficult challenge of controlling air pollution. At the same time, Canada is also responding to the need to reduce national greenhouse gas emissions. These GHG emissions from private passenger transportation vehicles are a major contributor to total national emissions. (Transportation accounts for 35% of Canada's enduse GHG emissions, and more than 40% of that comes from private passenger transportation.)²

Encouraging the greater use of urban transit could significantly contribute to achieving Canada's GHG reduction targets under the Kyoto Protocol, while also reducing air pollution and traffic congestion in national urban areas. For example, a transit bus emits 65% fewer GHGs per passenger kilometer and between 25% and 90% fewer pollutants than a singleoccupant car.³

3.2.1 Long-term Federal Funding for Urban Transit

Despite the obvious benefits of urban transit in helping to reduce GHG emissions and improve air quality, the Federal Government, compared to our trading partners, does little to support urban transit. In fact, Canada is the only G-8 country currently without a national program to finance transit projects.

¹ NRTEE defines urban sustainability as the enhanced well-being of cities or urban regions, including the integrated economic, ecological, and social components, that will maintain the quality of life for future generations

² Natural Resources Canada, End-Use Energy Data Handbook, 1990-2000, June 2002

³ Noxon Associates, At the Crossroads-Towards a Federal Vision for Urban Transit, May 2001

The Federal Government recognizes that this must change. In its recent Throne Speech, the Federal Government promised to address the issue of sustainable urban transit as part of its 10-year commitment to upgrading urban infrastructure.

Recommendation 1

In the next budget, the Federal Government should invest \$1 billion a year for 10 years to create a stable, long-term urban transit fund. The fund should include contributions to both capital and operating costs. Such a stable source of funding would allow cities to make long-term plans for their urban transit systems.

The Federal Government should also adopt sustainable criteria for current and future transit programs to ensure that the federal funds dedicated to improving urban transit also promote sustainable urban growth. The Round Table recommends that the Government require proponents of transit funding to provide a long-term plan that includes the following components:

- establishing the number of net, new transit riders attracted from cars as a result of transit investment.
- focusing on growing city-regions (where the opportunity exists to prevent development of further non-transit-supportive land use and to capture high numbers of net new transit riders).
- documenting the environmental and economic benefits of the transit investment (e.g., GHG reductions, road infrastructure investments averted, congestion costs averted).
- indicating how they will monitor results (e.g., actual net new transit riders, development in identified transit nodes and corridors).

- indicating of how the attractiveness of transit will be improved relative to the auto (e.g., traveller cost, travel times, convenience);
- providing a cost estimate of spending on transit versus spending on auto-related travel as per the plan;
- developing a comprehensive approach to achieving land-use patterns that will support transit ridership, including area-wide planning policies, transit node and corridor-specific landuse policies, area-wide as well as transit node and corridor-specific municipal pricing policies (e.g., development charges, property tax, user fees);
- developing a transportation demand management plan; and
- developing a cost estimate of investment per net new transit rider.

3.2.2 Tax Exemption for Employer-Provided Transit Passes

The *Income Tax Act* currently promotes the use of private vehicles over transit. The Act designates both employer-provided parking and transit passes as taxable income. But policy exemptions allow many employers to give workers untaxed free parking. By exempting employer-provided parking but not transit passes, the tax system gives employees a financial incentive to drive to and from work rather than take transit.

Recommendation 2

To promote the use of urban transit, the *Income Tax Act* should be amended to make employer-provided transit passes a tax-exempt benefit.

3.3 Improving Energy Efficiency of Buildings

In Canada, residential energy use accounts for 17% of total energy end-use and 16% of end-use-related GHG emissions.⁴ Commercial buildings account for 13% of both energy use and GHG emissions. The Round Table has identified the improved energy efficiency of buildings as a key urban sustainability factor; it has also identified several opportunities to encourage improved energy efficiency in urban areas.

3.3.1 Expanded Use of Community Energy Systems

Community energy systems provide shared heating, cooling, steam, or electricity to groups of residential or commercial buildings in close proximity to each other. These systems can yield significant energy savings. For example, the Hamilton Community Energy Project, which will soon begin distributing heat to about a dozen buildings, estimates reductions in emissions in participating buildings as follows: sulphur dioxide emissions, reduced by 57 000 KG per year; oxides of nitrogen, reduced by 13 000 KG per year; and carbon dioxide (a major greenhouse gas), reduced by 9 851 000 KG per year.⁵

While energy efficient, community energy systems are capital intensive and require significant upfront investments in physical plant and distribution networks. These large upfront costs mean that private companies that are considering investing in such a system cannot expect a return on investment for many years.

Until 1994, community energy production and distribution equipment was eligible for an accelerated capital cost allowance under Class 34 of the *Income Tax Act* (now Class 43.1). However, this exemption was cut as a deficit-fighting measure. Allowing

community energy systems to be once again eligible for the capital cost allowance would create an incentive for their use.

Recommendation 3

To promote investment in community energy systems, Class 43.1 of the *Income Tax Act* regulations should be amended to allow all capital investments related to a community energy system to be eligible for an accelerated capital cost allowance.

3.3.2 GST Rebate for Eco-Efficient Renovations

Older homes are much less energy efficient than new homes. For example, a typical 1950 home employs about twice the energy used by a conventional new home of the same size.⁶ Significant energy efficiency improvements could be realized by retrofitting older homes with more energy-efficient heating equipment, appliances, and so on. At the same time, pressures on urban infrastructure and the need for more greenfield development would be reduced if more rental units could be created in existing urban homes.

New housing is eligible for a rebate of 36% of the GST paid. However, homeowners undertaking renovations to improve energy efficiency or add rental space typically receive no break on their GST payments.

Recommendation 4

The Government should amend the *Excise Tax Act* to extend the GST rebate currently available on the sale of new homes to renovations on existing homes that improve their energy efficiency. This should be accompanied by a "premium energy performance" labelling program, which identifies the top energyefficient products in each category eligible for the GST rebate.

⁴ Natural Resources Canada, *End-Use Energy Data Handbook, 1990-2000*, June 2002

⁵ Robert Desnoyers, President, Hamilton Community Energy, Personal Communication, January 2003

⁶ Canadian Homebuilders Association, "About New Homes", www.newhomesmonth.com/aboutnewhomes/newhomeenergy.html, January 2003

As well, the *Excise Tax Act* should provide a rebate of 36% of the GST incurred for costs associated with renovations to create 'accessory' rental units in existing houses.

3.3.3 Additional New Homes Built to the R2000 Standard

The R2000 home program is well established and internationally recognized. The benefits of R2000 homes are several – they consume 30% less energy than conventional new homes and offer long-term savings in operating costs. Yet they represent only about 3% of new units.⁷ As well, an R2000 home is slightly more expensive to purchase than a conventional new home, which may be a deterrent to wider acceptance.

Recommendation 5

To encourage a greater percentage of new homes built to R2000 specifications, an additional GST rebate of one percentage point (14% of GST) should be provided for new R2000 homes, in addition to the existing 36% new housing rebate. This would bring the total GST rebate to 50% for R2000 homes. This additional 1% rebate would represent 25% to 50% of the estimated R2000 cost premium. (Alternatively, the current 36% new housing GST rebate could be redirected solely to R2000 homes on a phased-in basis.)

3.4 Promoting Sustainable Urban Development Patterns

One key tool in improving urban sustainability is the identification of measures to make urban development patterns more sustainable. Making better use of development opportunities in already urbanized areas is especially important. Employing more compact urban forms and making more efficient use of already urbanized areas could reduce car travel, energy use, and GHG emissions, while supporting other initiatives in this budget submission such as increased use of transit and expanded use of community energy systems.

3.4.1 Eco-Efficient Mortgages

Buying housing in already urbanized areas is typically more expensive than buying in comparable greenfield locations. This higher expense is offset, in part, by reduced expenses in other areas. People living near concentrated transit or employment areas, for example, are less dependent on cars and tend to have lower vehicle ownership costs.

Conventional mortgage lending practices do not take this into account, but location-efficient mortgages (LEMs) do – providing higher amounts of principal to people buying houses in the urban core or in areas with good transit service. The LEMs can help spur greater demand for well-located housing, which, in turn, reduces car use, promotes transit ridership, and reduces air pollution and GHG emissions. Other jurisdictions are currently exploring LEMs as a tool to promote urban core regeneration. For example, the American national government is currently piloting a two-year \$100-million project to test LEMs in select U.S. cities.

Similarly, 'green mortgages' take into account the potential for reduced monthly expenses associated with adopting green practices in the home, such as energy efficiency or participation in community energy systems.

In this text, we refer to these two types of mortgages collectively as 'eco-efficient' mortgages.

Recommendation 6

The next federal budget should provide the Canadian Mortgage and Housing Corporation (CMHC) with funding for a pilot project of eco-efficient mortgage offerings that reflect consideration of the effects of location and energy efficiency (in particular R2000

⁷ National Climate Change Program, *Buildings Table Options Report, Residential Sector*, Final, Revised 15 November 1999, Marbek Consultants et al.

homes) on carrying costs. Ideally, this project would be offered in partnership with interested financial institutions. The project funding should also include funding to undertake the research needed to establish ways of adapting eco-efficient mortgages to the Canadian market.

3.5 Promoting Sustainable Infrastructure

A key element in improving the environmental quality of cities involves addressing the green infrastructure deficit in urban areas – a view echoed in the Throne Speech.

The term "infrastructure" refers to the provision of vital services, such as transportation and water and wastewater treatment. Over the last few decades, however, such infrastructures have been allowed to deteriorate severely. In some municipalities, for example, wastewater treatment is non-existent. Similarly, existing demand for transit goes unfulfilled for lack of funds to buy new rolling stock or expand networks.

The Federal Government has taken some steps to recognize this deficit. The 2000 and 2001 Budgets funded a Green Municipal Enabling Fund to help municipalities assess environmental needs. More recently, the Prime Minister announced federal funding to help upgrade the City of St. John's wastewater treatment systems.

The following recommendations are aimed at targeting federal investments for 'green' infrastructures, which, in turn, would support other federal government priorities (such as responding to climate change and improving the quality of life in cities).

3.5.1 New Sustainability and Competitiveness Criteria for Federal Infrastructure Programs

The government has already begun investing in Canada's municipal infrastructure through

Infrastructure Canada and the Strategic Infrastructure Fund. However, only a portion of the funding is allocated to sustainable infrastructure projects.

Federal infrastructure investments should take into account several factors, such as:

- the magnitude of the potential positive impact on urban sustainability of the current and future infrastructure investment by municipalities;
- the long timeframe of such investments and, therefore, their influence on urban sustainability well into the future; and
- the potentially high level of investment involved.

Adequately addressing these factors will increase the effectiveness of urban environmental improvements and help the government attain other objectives, such as reaching Canada's Kyoto targets.

Recommendation 7

The Federal Government should adopt sustainable criteria for current and future infrastructure programs that ensure that the federal funds dedicated to improving urban infrastructure also promote sustainable urban growth. The Round Table recommends that criteria include the submission of a sustainable Community Investment Plan that shows:

- the problem or need to be addressed by the infrastructure investment;
- the ways in which the proposed infrastructure investment fits into a comprehensive, longer term investment plan for improving urban environmental quality;
- the ways in which existing infrastructure capacities have been or will be fully exploited;
- the ways in which all options for addressing infrastructure needs jointly with surrounding municipalities or other relevant entities have been explored and fully exploited;

- a comprehensive approach to managing the demand for the infrastructure. For example, for transportation infrastructure, a transportation demand management plan is required. For water-related projects, metering will be a required precondition;
- the exploration of a range of alternative options (including other types of infrastructure) for solving the infrastructure need;
- a life-cycle costing analysis of the proposed project and alternatives;
- the financial contribution and role of other partners, including provincial government, municipal government, other agencies, and the private sector; and
- the expected environmental improvements (quantified) in terms of air, water, or soil quality of the proposed project and the alternatives.

The Round Table also recommends that part of the federal infrastructure funding be used to provide grants to municipalities as a contribution to the development of the Sustainable Community Investment Plan.

3.5.2 Elimination of the GST on Green Municipal Infrastructure

While the Federal Government provides funds for green infrastructure, it also charges municipalities

GST on purchases related to these investments. In contrast, provincial and territorial infrastructure purchases are GST-exempt. Although some municipal GST is rebated, much money is retained. Witness, for example, the Toronto Transit Commission's estimate that it has paid \$130 million in GST since the tax was introduced.

Exempting green infrastructure from the GST would free municipal funds for other investments. It would also indicate strong support for the commercialization of innovative new green technologies in the areas of water and wastewater treatment.

Recommendation 8

The Federal Government, which has already recognized the importance of investing in green infrastructure, should now reinforce its commitment by increasing the GST rebate for eligible green infrastructure projects to 100%.

Although precise guidelines will need to be developed, eligible purchases should include:

- transit vehicle purchases
- transit vehicle maintenance and repairs
- water and wastewater infrastructure
- renewable energy infrastructure, and
- district energy systems.

3.6 Summary of Recommended Measures – Sustainable Urban Communities

Budget Requirements – Sustainable Urban Communities								
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits			
Create stable and secure funding for urban transit		Proposed measure	Places urban transit on more equal footing with private passenger transportation (cost and convenience)		Reduces greenhouse gas emissions and other air pollutants, reduces traffic congestion			
Develop tax exemption for employer-provided transit passes	\$202-\$264 per new rider per year ⁸	Tax expenditure	Encourages switch from private passenger transportation to urban transit	Finance Canada	See above			
Allow capital investments for community energy system to be eligible for the Accelerated Capital Cost Allowance		Tax expenditure	Makes investment in community energy systems more economically feasible	Finance Canada	Reduces greenhouse gas emissions, reduces air pollution			
Extend GST rebate available on the sale of new homes so it applies to renovations of existing homes that improve energy efficiency	Further analysis required; however, costs likely to be minimal	Tax expenditure	Reduces demand for new greenfield housing, encourages energy efficiency in home heating	Finance Canada	See above			
Increase GST rebate for R2000 certified homes	\$13 million ⁹	Tax expenditure	Stimulates demand for energy efficient new homes	Finance Canada	Reduces greenhouse gas emissions, improves energy efficiency, reduces air pollution			
Create Eco-Efficient Mortgage Pilot Project	\$500,000	Program spending	Reduces demand for new greenfield housing, makes existing urban housing stock more affordable	СМНС	Reduces greenhouse gas emissions and other air pollutants, reduces traffic congestion			
Develop sustainable criteria for current and future infra- structure programs	No cost	N/A	See above	Infrastructure Canada	See above			
Increase GST rebate for municipal green infrastructure purchases to 100%		Tax expenditure	Encourages munici- palities to invest in green, versus non-green, infrastructure	Finance Canada	Reduces greenhouse gas emissions, improves water quality, improves wastewater discharge			

8 Canadian Urban Transit Association 2002 Budget Submission, Employer Provided Income Tax Exempt Transit Passes, p. 4

⁹ This assumes that the incentive would double the demand for R2000 homes from 3% to 6%

4.0 A National Brownfield Redevelopment Strategy

4.1 Overview

Brownfields, found in cities and towns across the country, are abandoned, vacant, derelict, or underutilized commercial and industrial properties where past actions have resulted in actual or perceived contamination. Brownfields differ from other contaminated sites in one important way: they have good potential for being cleaned up and redeveloped for productive use.

The benefits of brownfield redevelopment are numerous. Remediating contaminated sites will help protect the environment and health of Canadians (particularly those living or working near them). As well, brownfield redevelopment can 'unlock' other economic, environmental, and social benefits. Specifically, brownfield remediation opens these sites for economic use instead of a comparable greenfield. Redeveloping existing urban land has associated benefits, such as reducing urban sprawl and the increased traffic and air pollution that come with it, and reducing GHG emissions. It also reduces society's tendency to develop agricultural or ecologically sensitive land.

Although the exact number is unknown, the Round Table has estimated that there may be as many as 30,000 brownfield sites across Canada. A range of interconnected market barriers serves to keep brownfields idle or abandoned in Canada.

In its 2001 Budget, the Federal Government, having identified the need for a coordinated brownfield strategy, asked the Round Table to develop a National Brownfield Redevelopment Strategy to ensure Canada's place as a global leader in remediation. To fulfill this mandate, the Round Table set up a task force of 25 experts from a variety of backgrounds, including federal and provincial officials, development practitioners, environmentalists, lawyers, municipal leaders, and bankers.

The Task Force developed a strategy with recommendations for action by all levels of government. It addresses five key barriers to brownfield redevelopment: lack of access to capital; uncertain liability regimes; inconsistent approaches to assessing risk; complicated and overlapping government regulatory regimes; and a general lack of public awareness about the benefits of brownfield redevelopment.

The recommendations represent a package of complementary and reinforcing initiatives selected to address the key market failures to brownfield redevelopment in Canada. The strategy is intended to provide a blueprint for action for all governments in Canada. Recommendations that require federal budget action have been included in this submission.

In some cases, the core value of the brownfield land provides a large enough market incentive to drive the remediation and redevelopment of the land. More often, however, these barriers make brownfield redevelopment an unattractive market opportunity, compared to greenfield development. In many cases government policy even reinforces the bias toward greenfield redevelopment.

Several provinces and municipalities have taken steps to address these barriers. Quebec's Revi-Sol Program, for example, provides grants that help communities pay for studies leading to rehabilitation work; it also helps cover the actual costs of rehabilitation. In Ontario, the provincial government has introduced new brownfields legislation addressing regulatory liability issues. While many of these initiatives have helped spur local brownfield development, there is no Canada-wide coordination. Canada is behind other countries, as well, in implementing national programs or measures to promote brownfield redevelopment. For example, the U.S. Brownfields National Partnership Action Agenda has collaborated with brownfields programs in 48 states and more than 300 local governments since 1997. And the United Kingdom recently enacted legislation allowing companies to offset 150% of the cost of contaminated land remediation against taxable profits.

The Round Table's strategy aims to create an investment environment that will attract prospective brownfield developers; for example, it places brownfield redevelopment on a level footing with greenfield development and offers liability relief, where appropriate. The National Brownfield Redevelopment (NBR) Strategy, which will be released in February 2003, will make recommendations to the federal, provincial, and municipal governments in three policy areas:

- availability of sufficient capital for all stages of brownfield redevelopment so brownfields can share a level playing field with greenfields;
- establishment of fair, transparent, and coherent public policy regimes, notably liability regimes; and
- development of community awareness and capacity.

Based on an analysis of measures in other jurisdictions, the NBR Strategy recommends that measures aimed at addressing each of these policy areas be implemented in a coordinated fashion to achieve a true impact on brownfield redevelopment.

Many of these recommendations, particularly in the area of strategic public investments, have federal budget fiscal implications. However, the NBR Strategy notes that the policy instruments should not be considered in isolation from one another. Building a successful strategy will require that the measures be seen as a package; each one complementing and reinforcing one another, each addressing different types of problems.

Furthermore, Federal Government leadership will be essential if the national strategy is to be implemented successfully by all levels of government. Federal funding should act as an incentive for provincial action, particularly in terms of financial assistance and liability relief for stakeholders. Following an initial period of perhaps five years, federal funding assistance could be offered on a preferential basis, the goal being to encourage participating provinces to continue progress on brownfield redevelopment initiatives. (assistance, however, should not automatically be withheld from provinces that have not undertaken action to facilitate brownfield redevelopment).

Building a successful strategy is not as simple as choosing one or two financial incentives and some measures related to liability. Rather, the recommendations should be recognized for what they are: a *package* of measures that complement and reinforce one another; one which, as a whole, speaks to the challenges of brownfield redevelopment in a realistic and effective manner.

4.2 Addressing the Lack of Funding

The lack of available capital is one of the main barriers to brownfield redevelopment. In many cases, federal tax and other laws provide incentives for greenfield development that are unavailable for comparable brownfield projects. The Round Table is making several recommendations to address the lack of capital at various stages of the brownfield redevelopment process.

These recommendations are aimed at changing federal policies and laws that act as disincentives to brownfield redevelopment. In many cases, they seek to develop a made- in-Canada approach to an incentive that has worked well in other jurisdictions. The measures proposed are part of an integrated strategy to address the barriers to brownfield redevelopment and, as such, are highly interdependent.

4.2.1 Addressing Upfront Costs Associated with Brownfield Remediation

One of the key barriers to brownfield redevelopment is the large upfront expense for developers associated with cleaning up the site. These cleanup costs must be incurred well in advance of developing the site; in other words, recovering these costs can often take years. Faced with large investments, developers often choose to develop greenfield sites instead, because they can usually begin to generate a return on the development investment more quickly.

Furthermore, the *Income Tax Act* intensifies this barrier by forcing developers remediating sites to treat their investments as upfront capital costs rather than as expenses deductible against annual income. For developers this means costs incurred can only be deducted from the income generated by the redeveloped site, which typically will not be realized for several years. In comparison, the *Income Tax Act* allows costs of greenfield development to be recovered against income more quickly (the reason being that greenfield properties usually generate income sooner than brownfields).

Internationally, many governments have recognized this disincentive and amended their tax laws to address it. In 1997, the U.S. Congress approved a tax incentive known as the *Brownfield Expensing Provision*, which allows new owners of brownfield sites to write off cleanup costs in the year incurred. As well, the United Kingdom recently passed legislation allowing businesses to claim 150% of the costs incurred to remediate contaminated sites against corporate tax otherwise payable.

In Canada, the Federal Government recently changed the *Income Tax Act* to make expenses for mine

expansions and oil sands investments eligible for an accelerated capital cost allowance against income not directly related to the capital investment. In the case of brownfields, redevelopment will have environmental and social, as well as economic benefits.

Recommendation 9

In recognition of the significant upfront costs associated with brownfield remediation, the Federal Government should amend sections 18 and 20(1) of the *Income Tax Act* to allow remediation expenses to be treated as a deductible expense or a capital cost in computing income in the year the cost is incurred, or to allow such costs to be carried forward to subsequent years.

Recommendation 10

The government should establish a brownfield redevelopment current deduction and investment tax credit, similar to the Scientific Research and Experimental Deduction Program's credit provision provided in sections 37 and 127 of the *Income Tax Act.*

This would allow capital expenditures associated with the remediating of brownfield sites to be treated for income tax purposes in the same way as eligible capital expenditures are treated for scientific research and experimental development. Specifically, developers would be eligible to deduct capital outlays for brownfield remediation on a current year basis.

Capital costs for brownfield remediation would be an eligible expenditure for the purposes of the investment tax credit. Under the *Income Tax Act*, SR&ED investment tax credits can be deducted from income when computing tax payable. In the case of small business corporations, the SR&ED investment tax credit can be refundable up to a certain amount. Again, these changes would alleviate the high upfront costs associated with remediating a brownfield site.

4.2.2 Removing Liens and Tax Arrears Against Qualifying Properties

Many brownfield sites fall into a class known as orphan sites. These sites are usually delinquent with regard to property tax payments, to the point of being eligible for municipal tax sale. They are also often encumbered by outstanding federal and/or provincial crown liens, which cannot be cancelled through municipal tax sale. Sometimes the weight of back taxes and crown liens can destroy an otherwise sound redevelopment proposal.

Some provinces are considering developing a set of recognized criteria and protocols that would allow for the removal of all crown liens from an orphaned site if a feasible redevelopment proposal were submitted for approval.

Recommendation 11

The Federal Government should work with the provincial governments to develop criteria for removing crown liens against brownfield properties, where the liens are a barrier to an otherwise feasible redevelopment proposal.

4.2.3 Leveraging Private Loan Capital for Brownfield Redevelopment

Several task force members have noted a need for new private loan capital to finance brownfield redevelopment. Private lenders often prefer greenfield developments over brownfield redevelopment proposals because the latter often carry additional financial burdens. In the United States, government mortgage guarantees have been one of the main instruments used to encourage private lending for brownfield redevelopment.

In Canada, the Canada Mortgage and Housing Corporation (CMHC) has acted as a vehicle to enable higher-risk mortgage financing, as well as direct lending in certain circumstances. It is possible, under its existing legislative mandate, for CMHC to provide mortgage insurance for brownfield redevelopment sites, provided the underlying purpose of the redevelopment is to provide housing.

Recommendation 12

To more effectively spur brownfield redevelopment, the government should expand the mandate and funding of CMHC to provide mortgage insurance for loans to residential, commercial, or industrial development for brownfield sites.

4.2.4 Establishing a Designated Brownfield Revolving Loan Fund Program

Brownfield redevelopment projects are often unable to attract private sector financing because lenders see the risks as being too large to justify a mortgage on commercial terms. Yet although these sites are unsuitable for redevelopment on purely commercial terms, the public still benefits from their redevelopment. In the United States, the EPA **Brownfield Economic Redevelopment Initiative** helped create and fund Brownfield Cleanup Revolving Loan Funds. These revolving loan funds help states, local governments, and specified coalitions make low interest loans to public and private applicants to facilitate brownfield redevelopment projects. This practice has helped promote brownfield projects that would otherwise be uneconomical. The revolving nature of the fund allows loan repayments to be used to make new loans for other projects.

In Canada, a revolving fund could be used to address disparities of interest in urban versus rural brownfield redevelopment projects. This would involve lending the initial funds to urban brownfield sites, which are easier to promote and more likely to be completed. The repayment of these loans could be used to provide loans for promotion of rural brownfield redevelopment on more favourable terms.

Recommendation 13

The Federal Government should endow a revolving brownfield redevelopment fund to make low interest loans available for brownfield redevelopment projects. Repayment proceeds from initial loans should be provided to other projects, particularly rural brownfield proposals that may require loans on more favourable terms.

Part of the loan could be forgiven if the redevelopment turns out not to be economically viable.

The revolving loan fund program could be administered by the Federation of Canadian Municipalities (FCM), CMHC, the Business Development Bank of Canada, or specific qualifying provincial or municipal agencies.

4.2.5 Providing Grants for Certain Brownfield Projects

Many municipalities are interested in redeveloping brownfield sites for such public use as parks, museums, or recreational facilities and in remediating orphan sites with little immediate economic interest for the private sector. However, such brownfield redevelopment proposals may be unsuitable for mortgage financing because the land once redeveloped will not generate enough income to repay the mortgage.

The 2000 Budget created two Green Municipal Funds, one of which provides grants for brownfield inventories and assessment but not for cleanup. These funds are open to all municipalities and their public-sector or private-sector partners. The programs should be reviewed and updated to accommodate the specific funding needs of brownfield redevelopment, including changes to allow for critical remediation work.

This approach is in broad agreement with recent budget recommendations offered by the Federation of Canadian Municipalities, which is responsible for administering the Green Municipal Funds.

Recommendation 14

The Federal Government should work with provincial and municipal governments to provide comprehensive grant funding for qualifying brownfield redevelopment projects. Only municipalities and not-for-profit agencies seeking to redevelop a brownfield should be eligible for the program. Either an existing program such as the Green Municipal Funds could be used or a new, dedicated funding program could be developed.

4.3 Building Community Awareness and Capacity

Successful brownfield redevelopment initiatives depend on strong community awareness, support, and skills. A key part of the National Brownfield Redevelopment Strategy will include recommendations aimed at both raising community and stakeholder awareness as to the benefits of brownfield redevelopment and promoting Canadian success stories and knowledge in innovative remediation technology. Many of these recommendations are aimed at building upon existing provincial and local initiatives.

The NBR Strategy identifies opportunities to promote brownfield remediation through a better sharing of expert knowledge and the promotion of innovative Canadian remediation technologies. In Quebec and several other provinces, temporary approvals or temporary operating permits can be issued to allow emerging technology vendors to demonstrate the validity and effectiveness of their innovative processes.

In keeping with the Federal Government's commitment to promote innovation, the task force believes a National Brownfield Redevelopment Strategy must support efforts to promote the development and commercialization of cutting-edge remediation technologies. Currently, the government has several existing programs to foster the commercialization of innovative technologies. One of these, Technology Partnerships Canada, seeks to promote private sector commercialization of new technology by providing repayable loans to eligible companies.

Recommendation 15

The Federal Government should provide additional targeted funding to Technology Partnerships Canada to extend the program to include funding for the demonstration of remediation technologies on designated brownfield sites in Canada.

Budget Requirements – Brownfield Redevelopment Strategy							
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits		
Allow remediation costs to be treated as deductible expenses in the year occurred	Further analysis needed. Some years this would result in a net cost; in others, measures would result in a net saving	Tax expenditure	Accommodates large upfront costs associated with brownfield redevelopment	Finance Canada	Encourages redevelopment of brownfield sites versus expansion of greenfield development. Reduces urban sprawl, improves air quality, reduces greenhouse gas emissions		
Create a brownfield redevelopment Current Deduction and Investment Tax Credit for brownfield remediation costs	Further analysis required	Tax expenditure	Accommodates large upfront costs associated with brownfield redevelopment	Finance Canada	See above		
Remove federal liens and tax arrears from qualifying sites	Further analysis required; however, costs likely to be minimal	Expenditure	Facilitates the development of orphaned brownfield sites	Revenue Canada	See above. Allows for municipal tax sale of orphaned sites		
Expand CMHC mandate/funding to provide mortgage insurance for redevelopment projects at qualifying brownfield sites	Further analysis required	Program spending	Leverages new private loan capital for brownfield remediation by unknown risks associated with lending	Canada Mortgage and Housing Corporation	See above Reduces urban sprawl		

4.4 Summary of Recommended Measures – Brownfield Redevelopment

Budget Requirements – Brownfield Redevelopment Strategy							
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits		
Create a revolving loan fund for brownfield redevelopment	Further analysis required	Program spending	Makes upfront capital available at market rates for brownfield redevelopers without access to private capital	Could be administered by the FCM, CMHC, Business Development Bank of Canada, or by qualifying provincial or municipal agencies	See above Revolving nature of fund allows repayment proceeds to be directed to rural redevelopment projects at more favourable rates		
Grant funding for municipal brownfield redevelopment projects	Further analysis required	Program spending	Provides upfront capital for municipal redevelopment projects without access to private capital	Federation of Canadian Municipalities	Promotes urban rejuvenation via redevelopment of core lands for public use		
Increase funding for Technology Partnerships Canada to demonstrate new remediation technologies		Program spending	Facilitates innovation in brownfield remediation technology	Industry Canada	Promotes Canada as a world leader in brownfield remediation technology; demonstrates success of emerging remediation technologies		

5.0 Sustainable Opportunities For Northern Aboriginal Communities

5.1 Overview

Today, northern Aboriginal communities face opportunities as well as challenges. On the one hand, natural resource finds, major advances on land claim areas, and self-government agreements have brought new hope for the future. But at the same time, longterm social problems – including severe poverty – make it difficult for the Aboriginal Canadians to manage and benefit from these opportunities.

In 1998, the Round Table set up an Aboriginal Communities and Non-Renewable Resource Development (ACNRD) Task Force to examine how resource-based development was affecting life in northern Aboriginal communities. The program's goal was to ensure that future non-renewable resource development would support economically viable Aboriginal communities without compromising local ecological integrity.

Through the ACNRD Task Force – which included representatives from Aboriginal communities, industry, environmental NGOs, and the Territorial and Federal Governments – several key challenges and opportunities for resource development in the Northwest Territories (NWT) were identified. While the study focused on the NWT, its principles apply equally to all three territories and to northern and isolated areas in many provinces. The *State of the Debate* report *Aboriginal Communities and Nonrenewable Resource Development* was released in June of 2001.

One of the ACNRD Task Force's main conclusions was that a strong economic, social, and regulatory framework was urgently needed to ensure long-term sustainable development in non-renewable resources, with benefits flowing to local Aboriginal communities. This goal is consistent with commitments made in the recent Speech from the Throne. To build this framework, Canada needs to strategically invest in five key areas: building regulatory capacity, building information capacity, cumulative effects management, improving education, and creating opportunities for meaningful consultations.

5.2 Building Regulatory Capacity

Given the projections of fast development of nonrenewable resources over the next 25 years, a strong regulatory framework is urgently needed for the Northwest Territories.

While the integrated regulatory and resource management regime created under the *Mackenzie Valley Resource Management Act* (MVRMA) is a good first step, the ACNRD Task Force is concerned that the boards and agencies created under the Act may be underfunded. Without adequate resources, the boards will be overwhelmed by their workload and may be unable to function, thus delaying project planning and approvals.

The Round Table identified two systemic funding problems. First, the federal land claims implementation process, which manages MVRMA funding, consistently underestimates the operational needs of regulatory and resource management boards. Second, given their funding, some boards have an unrealistically heavy workload.

For the Mackenzie Valley Environmental Impact Review Board (MVEIRB), building capacity is a precondition to sustainable, long-term resource management. It will also provide regulatory certainty for potential project proponents, a key factor in any decision to invest. As well, increased funding would allow for intervenor funding at regulatory hearings; a provision consistent with other regulatory legislation such as the *Canadian Environmental Assessment Act*.

Recommendation 16

The budget should provide the Mackenzie Valley Environmental Impact Review Board with a five-year funding commitment of at least \$2.2 million per year.¹⁰

5.3 Building Information Capacity

A reliable, up-to-date geoscience database is critical to encouraging sustainable development in Canada's North. In addition to being a valuable tool for private sector mineral developers, a database would improve land-use planning and protected area strategies, making it easier to support environmental practices and concerns.

Many ACNRD Task Force participants were concerned that geoscience research and mapping in Canada's North had been substantially underfunded, even though the region is ranked by industry as a top area for mineral exploration. In effect, the 1987-1991 Canada-N.W.T. Mineral Development Agreement Geoscience Program allocated only 5% of national geoscience funding to the Territories (which then included Nunavut), even though it occupies about a third of Canada's land mass.¹¹ Note that reduced funding to the Geological Survey of Canada forced it to close its Yellowknife office.

Recommendation 17

To support sustainable mineral development in the Northwest Territories, the Government of Canada should provide \$10 million annually for 10 years to the Geological Survey of Canada and the C.S. Lord Northern Geoscience Centre to create a modern, integrated, and accessible geoscience database for the NWT.¹²

5.4 Cumulative Effects Management

Even though the environmental regulation of nonrenewable resource projects in the North has improved, the challenge of addressing the cumulative effects of multiple non-renewable resource projects and related activities remains. At times, the effects of an individual mine or natural gas resource project may be acceptable, whereas the combined impact of numerous projects in a single region may not.

The most important initiative in cumulative effects management in Canada's North is the Cumulative Effects Assessment and Management Framework (CEAM Framework) for the NWT. The initial work plan for this initiative was submitted in April 2000. The purpose of the CEAM Framework is to "provide a systematic and coordinated approach to the assessment and management of cumulative effects in the NWT, reflecting the needs of various stakeholders, without prejudice to land claims activities or existing legislation."¹³

A steering committee to oversee development of the CEAM Framework has been established with representation from the federal and territorial governments, Aboriginal organizations and governments, industry, environmental groups, and the Mackenzie Valley Environmental Impact Review Board.

Although the CEAM Framework initiative has received some funding from the Federal Government, long-term funding has yet to be secured. Members of the ACNRD Task Force were alarmed that no funding has yet been provided to implement the CEAM Framework and that no processes are yet in place to deal with detected cumulative effects.

¹⁰ The \$2.2 million recommended includes \$1.7 million for MVEIRB-estimated operating costs (calculated three years ago before the renewed interest in oil and gas development) and \$500,000 for an intervenor mechanism

¹¹ Gathering our Strengths, p. 11

¹² Based on *Funding Government Geological Surveys: How Much is Enough?* by the Intergovernmental Working Group on the Mineral Industry, 1999; and the NWT Non-Renewable Resource Strategy, Common Ground

¹³ NWT Cumulative Effects Assessment and Management Working Group, *CEAM Framework Work Plan Summary*, Yellowknife, April 2000, p. 3

Recommendation 18

The Government of Canada should allocate \$25.8 million over six years to create and implement the Cumulative Effects Assessment and Management Framework under development by Indian and Northern Affairs Canada and Environment Canada. After five years, funding requirements should be reassessed.

Support should include ongoing funding for the Mackenzie Valley Cumulative Impact Monitoring Program (MVCIMP). The MVCIMP Working Group is designing a community-based monitoring program for the Mackenzie Valley. The MVCIMP will be able to generate the baseline environmental data, analysis, and traditional information required for the monitoring component of the CEAM Framework.

5.5 Improving Basic Education Levels in Aboriginal Communities

Round Table discussions and consultations have consistently identified the lack of Aboriginal 'capacity' as the major barrier to meaningful participation by Aboriginal people in long-term sustainable development. Indeed, several studies have noted that no amount of resource development jobs will create sustainable Aboriginal communities if residents are not equipped to capitalize on these opportunities.

The lack of basic literacy is of particular concern. Education levels in the Northwest Territories are much lower than in the rest of Canada. The most recent data available suggests that more than 20% of residents of the Northwest Territories have a Grade 8 education or less – double the national average of 10%.¹⁴ That percentage may be even higher for Aboriginal communities.

To participate in the northern wage economy, Aboriginal communities need tools to improve literacy and basic education. Without better education, full Aboriginal participation in sustainable economic development will continue to be elusive.

Recommendation 19

As a first step, the Round Table recommends that the Federal Government contribute \$5 million to the creation of a three-year awareness program to raise the profile of education and training in all Aboriginal communities in the Northwest Territories.

The program would be headed by the premier of the Northwest Territories and would involve the Intergovernmental Forum,¹⁵ the Independent Champion,¹⁶ the National Aboriginal Achievement Foundation (including 24 outstanding Aboriginal achievers from across Canada), as well as industry and business representatives.

This would be part of a longer term strategy to raise education levels in Aboriginal communities to at least the level of non-Aboriginal communities. Once the program is launched, the Round Table would recommend a follow-up contribution of \$60 million for a 10-year adult education program to enhance adult literacy, education, computer literacy, and basic skills among Aboriginal men and women 18 to 48 years of age in the NWT. This recommendation is consistent with priorities highlighted in the Throne Speech.

¹⁴ Statistics Canada. 1996 Census. Figures refer to the population 15 years and over by highest level of schooling

¹⁵ The Intergovernmental Forum brings together high-level political leadership from the federal, territorial, and Aboriginal governments to discuss devolution and resource revenue sharing issues

¹⁶ The Aboriginal Communities and Non-Renewable Resources Development Task Force has recommended the creation of an independent capacity-building champion (the Independent Champion) to provide leadership and direction for capacity-building initiatives in the NWT in such areas as adult literacy, education, employment training, government, and life skills.

5.6 Ensuring Meaningful Aboriginal Consultation in Large Project Proposals

The need for more effective consultation with Aboriginal communities was a common theme in the ACNRD Task Force discussions. Consultation opens the door to meaningful participation by Aboriginal communities in decision-making – a legal requirement for non-renewable resource development in the North.

The funding of Aboriginal involvement is an area of concern, however. In particular, Aboriginal leaders told the Task Force they were worried about the costs and strain that major, controversial non-renewable resource projects might place on northern Aboriginal communities (e.g., diamond mines or pipeline projects).

Recommendation 20

The upcoming Federal Budget should establish a \$15million Large Projects Consultation Fund to facilitate participation by Aboriginal governments and organizations in consultations for large nonrenewable resource development projects in the three northern territories. This funding should be available before intervenor funding is provided under any relevant environmental assessment or regulatory process.

Budget Requirements Sustainable Opportunities for Northern Aboriginal Communities							
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits		
Provide long-term funding for the MVEIRB	\$2.2 million/ year for five years (see footnote 4)	Program spending	Enhances capacity of the MVEIRB	INAC	Ensures rigorous environmental reviews of proposed new development in the Mackenzie Valley		
Establish Geoscience Database	\$10 million/year for 10 years	Program spending	Provides a modern, accessible database for the NWT	Natural Resources Canada and INAC	Facilitates responsible land-use planning in NWT; provides comprehensive geological information about Canada's North to regulators, Aboriginals, investors, and other stakeholders		
Implement CEAM Framework, including the ongoing funding for the MVCIMP	\$25.8 million over six years (\$800,000 in 2001 Budget, then \$5 million/ year for five years beginning 2002)	Program spending	Provides funding to meet commitment to monitor cumulative effects in Canada's North	INAC and Environment Canada	Ensures comprehensive cumulative effects management in the NWT		
Create an education and training awareness-raising initiative	\$5 million	One-time spending	Raises awareness of the importance of basic education in Aboriginal communities	Government of the Northwest Territories	Better prepares Aboriginal communities to participate in the northern economy		
Create a Large Projects Consultation Fund	\$15 million over three years	Program spending	Provides capacity that allows Aboriginals to fully participate in the consultation process	INAC	Ensures that concerns of Aboriginal communities are addressed in large project proposals at pre-intervenor stage		

5.7 Summary of Recommended Measures

6.0 The Environment and Human Health

6.1 Overview

Canadians are increasingly concerned about the potential health impacts of chemical substances in their environment. At the same time, they understand that new substances, materials, and medicines may also provide health and economic benefits. Canada needs a policy framework that not only encourages innovation, but also safeguards the environment and health of Canadians.

In 1999, the Round Table set up a Task Force on Health, Environment and Economy to study how federal decisions were made regarding the management of potentially toxic substances. It was found that capacity was lacking in two particular areas:

- that pertaining to research capacity, to enable the study of the links between substances in our environment and their impacts on human health; and
- that pertaining to regulatory capacity, to enable agencies responsible for substance review and approvals to strengthen Canadian confidence in the safety of new and existing chemicals.

These findings, released in the *State of the Debate* report *Managing Potentially Toxic Substances in Canada* in 2001, are in agreement with the views and recommendations of the Romanow Report.

6.2 Building Research Capacity

In 1999, the Canadian Institutes for Health Research (CIHR) was created to develop a comprehensive and interactive approach to funding health research. Last year, the Round Table identified an urgent need for more research capacity at CIHR to enable study of the relationship between the environment and human health. In its 2001 Budget, the Federal Government raised CIHR's annual budget by \$75 million, allowing it to establish its Environmental Influences on Health Strategic Research initiative.

Although this work is ongoing, several additional issues now require research, including:

- exposure to chemicals and the redefinition of action;
- the additive effects of multiple substance exposures (substance synergies);
- chronic low-dose exposures;
- anti-microbial resistance linkages to food production;
- air quality and incidents of childhood asthma rates;
- neurological impairments and other health outcomes linked to environmental exposures, including endocrine disruption, immune suppression, and cancer.

As well, a multi- and cross-disciplinary science base must be developed to address such crosscutting issues as children's environmental health and the need for effective risk-assessment tools for measuring toxicity.

The research funded by this initiative will provide valuable information to regulators as they make riskassessment decisions about new and existing substances.

6.3 Continuing the Toxic Substances Research Initiative

The Toxic Substances Research Initiative (TSRI) – the second research capacity priority – was developed by the government in 1996 to enhance Canadians'

understanding of how exposure to toxic substances affects human health, including child health. Research sponsored by the TSRI provides decisionmakers with the information needed to assess and develop risk-management strategies for toxic substances. It also provides Canadians with sciencebased information they can use to make their own decisions.

As the TSRI's initial funding expired 31 March 2002, the future of the initiative remains uncertain. This initiative is nevertheless a key part of Canada's effort to sort out the links between the environment and human health and, as such, deserves to receive continued funding.

Recommendation 21

Funding for the TSRI should be increased to \$20 million per year and continued for at least another four years. Such a policy would provide the certainty needed to continue the research currently funded under the TSRI into the future.

6.4 Building Regulatory Capacity

In his 1999 report, the Commissioner of the Environment and Sustainable Development noted a "growing gap between the demands placed on federal departments to provide scientific information on toxic substances and their ability to meet existing obligations and respond to emerging issues."¹⁷

The Round Table's Task Force on Health, Environment and Economy also noted a growing backlog in the regulatory agencies' efforts to review new and existing chemical substances. The Round Table believes that increasing the capacity of government departments to create, process, and manage scientific information is key to improving the quality of life of all Canadians. Increased capacity is important, as well, to ensure that the scientific information obtained through investments in universities, the CIHR, and other research institutes is factored into government decision-making.

An increased capacity for regulatory agencies would improve the quality of substance reviews and ensure that decisions to approve substances better reflect the current and specific needs of the Canadian population relative to environmental and human health. At the same time, increased funding would also allow the current backlogs of submissions awaiting approval to be cleared. Canadians would then have quicker access to innovative and sustainable health technologies.

Recommendation 22

The Round Table recommends that an additional base funding of \$56 million a year¹⁸ for five years be provided to the federal agencies responsible for regulating and approving chemical substances in Canada.

This funding would provide a platform for agencies to review and assess new and existing products more quickly and in a manner consistent with the increasing complexity of modern review processes. Specifically, funding should be targeted to the Pest Management Regulatory Agency (PMRA), Health Canada, and Environment Canada for their regulatory activities under the *Canadian Environmental Protection Act* (CEPA). After five years, agency funding needs should be reassessed.

This recommendation is in accordance with the general approach to reforming the health care system identified in the recent Romanow Report.

¹⁷ Commissioner of the Environment and Sustainable Development, 1999 Report, chapter 3, section 3.49

¹⁸ Annual funding would be allocated as follows: \$25 million to Health Canada, \$25 million to Environment Canada, and \$6 million a year for the PMRA. Figures were obtained from Health Canada, Environment Canada, and the House of Commons Standing Committee on Environment and Sustainable Development May 2000 Report, *Pesticides: Making the Right Choice for the Protection of Health and Environment.*

	Budget Requirements The Environment and Human Health							
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits			
Increase funding for the continuation and expansion of the Toxic Substances Research Initiative	\$20 million/year for four years	Program spending	Continues and enhances the TSRI program	Health Canada	Promotes better understanding of the effects of toxic substances on human health			
Increase funding for agencies regulating new and existing chemical substances	\$56 million/year for five years	Program spending	Increases capacity of regulators to review new and existing chemical substances	Health Canada, Environment Canada, and the Pest Management Regulatory Agency	Quicker access to more efficient and safer chemical products; more recent data on risks/benefits of existing substances			

6.5 Summary of Recommended Measures

7.0 Conserving Canada's Natural Heritage

7.1 Overview

Canada's natural heritage is integral to our identity and economy. A major challenge facing Canadians is how best to conserve and enhance the country's natural capital for the benefit and enjoyment of future generations. Canadians are seeing signs of change that suggest we are pushing against the ecological limits of our world. We must start now to recognize and account for the value of natural capital in day-to-day economic decisions. Too often, our natural capital has been consumed or damaged without regard for its inherent value – both to the economy and to our health and environment.

The NRTEE created a Task Force on the Conservation of Natural Heritage in the spring of 2001. Task Force members representing a variety of government, NGO, industry, community, and Aboriginal perspectives agreed on two key goals for the program:

- to encourage Canadians at all levels to undertake stewardship of the land and waters, both public and private; and
- to shape and support new tools that would help Canadians to better conserve the long-term health of the country's ecosystems.

The Federal Government recently renewed its commitment to the conservation of Canada's natural heritage by announcing plans for ten new national parks and three marine conservation areas. Although the government should be commended for this important step forward, these initiatives alone are not enough to protect our natural capital.

Undoubtedly, parks and other large protected areas are critical anchors for conservation; yet other approaches to conservation are also needed. Ecological integrity needs to be maintained across entire lands and seascapes. This requires new integrated systems of land and water management; for instance, core protected areas, buffer zones, and connections between these protected areas that allow key species to move freely throughout their natural ranges.

The Round Table is developing a strategic framework for conservation that will be completed by the spring of 2003. For now, the government can take action in several areas.

7.2 Establishing and Maintaining Protected Areas

7.2.1 Funding the Government's Commitment to Establish New National Parks

The federal government has committed many times to establishing a network of protected areas to safeguard Canada's biological diversity. Most recently, the federal government announced its commitment to establishing ten new national parks and five new National Marine Conservation Areas over the next five years. These protected areas form a core building block of long-term ecological health, and therefore represent a fundamental part of a meaningful nature conservation strategy in Canada.

Departments and agencies responsible for the creation of protected areas do not currently have the resources to meet these conservation commitments.

Recommendation 23

The Round Table recommends that the federal government allocate the resources necessary to meet

its commitments to establish ten new national parks and five new National Marine Conservation Areas over the next five years.

7.2.2 Maintaining the Ecological Integrity of Existing Parks

Although the creation of new national parks and marine conservation areas is important, the Federal Government must not let the ecological health of existing national parks deteriorate. Indeed, in March 2000, the Panel on Ecological Integrity of Canada's National Parks found that the ecological integrity of nearly all of Canada's 39 national parks was at risk.¹⁹

The factors placing the parks at risk are diverse. They include the presence of alien species, the suppression of natural fires, a high incidence level of human visitor use, the establishment of transport corridors inside parks, and the development of inappropriate infrastructures. Equally important are the external factors that also risk park ecological integrity. The panel noted that the parks, while set within human boundaries, are part of larger interconnected ecosystems that extend beyond their boundaries. The use of adjacent lands for forestry, agriculture, urban growth, mining, and transportation can have negative repercussions for the ecological integrity of parks.

Recommendation 24

To complement Canada's new national parks, the ecological integrity of the existing parks should be protected as well. The government should fund the recommendations of the Panel on Ecological Integrity in Canada's National Parks, including the following suggestions to:

- increase ecological monitoring within parks;
- promote initiatives to develop better working relationships with Aboriginal peoples in and around parks; and

 develop, with the provinces and territories, a more integrated approach to land-use planning around national parks; that is, for the purposes of habitat preservation, creation of zones of cooperation within greater ecosystems, and coordinated access management planning for lands surrounding the national parks.

7.3 Building Our Conservation Knowledge Base

A strong, nationally consistent conservation knowledge base is critical to the country's ability to design and achieve a comprehensive new vision for nature conservation in Canada. Such knowledge is a building block of conservation - "You cannot manage what you cannot measure." As well, a robust information base is essential to identify, predict, and manage existing and emerging challenges to the longterm conservation of nature.

Three different knowledge bases are needed:

• A publicly accessible digital file detailing conservation areas

Such a file would outline the boundaries of all existing conservation areas in Canada (including relative degrees of protection). Some such information already exists. For instance, Natural Resources Canada, Environment Canada, and the Canadian Council on Ecological Areas have some data on conservation areas. However, the information is neither complete nor publicly available; nor is it available in comparable, consistent form.

• A standard national classification of terrestrial and aquatic biological communities Currently no national classification of terrestrial and aquatic biological communities exists in Canada. Such a classification is essential, however, for the broad assessment of habitat

¹⁹ Report of the Panel on Ecological Integrity in Canada's National Parks, volume 1, 2000.

change and identification of national-level conservation priorities. The Canadian Forest Service, NatureServe Canada (and US), Parks Canada, and provincial Conservation Data Centres are cooperating in the development of a Canadian National Vegetation Classification. This initiative needs to be supported and expanded to address a full range of terrestrial and aquatic communities.

A national land-cover monitoring program Although several Canadian departments and jurisdictions collect land cover information, there is currently no national, coordinated land-cover monitoring program in Canada. Applying a common classification standard to currently available remote sensing imagery (eg. Landsat) would allow the country to monitor land-use changes, report on carbon sinks for the Kyoto Protocol, develop a nationally consistent forest inventory, and assess habitat available for migratory species and species at risk. The Canadian Land Cover Initiative (CLCI), an initiative including Natural Resources Canada (Canadian Forest Service and the Canada Centre for Remote Sensing), the Canadian Space Agency, Agriculture and Agri-Food Canada, Environment Canada, and the Ontario Ministry of Natural Resource, has been attempting to develop terms of reference for such a program, but without success to date. Discussions with the United States and Mexico on a North American approach to land cover monitoring, using a common classification standard, would strengthen a Canadian program.

Recommendation 25

The NRTEE recommends that the government allocate \$300,000 and 3 full-time equivalents over three years to Natural Resources Canada (NRCan) to transform the Canadian Conservation Areas Database (CCAD) into a fully accessible digital file that is public accessible through the Geoaccess Division of NRCan's National Atlas of Canada web site.

Recommendation 26

The Round Table recommends that \$1 million be provided over three years to key departments such as NRCan and Environment Canada to accelerate the completion of a standard national classification of biological communities and to begin using it to set conservation priorities for Canada by 2005.

Recommendation 27

The Round Table recommends that \$200,000 be provided over two years to key departments to develop a national, coordinated land-cover monitoring program in Canada.

7.4 A National Gap Analysis Program

Conservation planning on Canada's managed land and seascapes requires a variety of information supports. Building the conservation knowledge base constitutes one such tool. Another – known as gap analysis – can play a critical role in planning for conservation and in a way that balances the environmental, economic, and social considerations.

Gap analysis provides a systematic approach to evaluating the current and required levels of conservation effort required in a particular region. It uses geographic information systems (GIS) to map and model wildlife habitat and species distributions. This information can then be used to identify the 'gaps' in biodiversity protection that must be filled by the establishment of new reserves or changes in landuse or ocean management practices. It can play a key role in directing and targeting conservation efforts and resources and, based on shared data and information, can help different stakeholders agree on "one map" for a given landscape or seascape.

A National Gap Analysis Program has been used with great success in the United States, where it has helped to catalyze renewed action in establishing conservation networks and to forge cooperative relationships between various agencies and stakeholders. A key feature of this program is the colocation of small core groups of federal, state and university researchers in an academic setting. Although no similar program or set of protocols exists in Canada at the present time, the Canadian Information System for the Environment and other national information systems are utilizing GIS as an organizing principle for geographically distributed information to forward development of such a program. Establishing a gap analysis program in Canada would create the basis for long-term scientific cooperation in support of conservation planning.

Recommendation 28

The NRTEE recommends that the government allocate adequate short-term and long-term funding to Environment Canada, NRCan, and other partner organizations to begin the process of creating a national gap analysis program for Canada.

7.5 Ecogifts

The Ecogifts Program is yet another important tool for enhancing conservation and encouraging action by individual landowners. Since 1995, aspects of the *Income Tax Act* have supported the donation of ecologically sensitive lands and conservation easements for conservation purposes. Several adjustments to the Ecogifts Program could be made to enhance its applicability and its ability to target conservation of priority landscapes.

Recommendation 29

The Round Table recommends that the Federal Government enhance the Ecogifts Program to further encourage private landowners to conserve ecologically sensitive lands. This would entail:

- allowing landowners to sell ecologically sensitive lands to conservation organizations for less than appraised fair market value and to receive a tax receipt for the portion of the land donated (i.e., the difference between purchase price and fair market value);
- removing the remaining capital gains tax from gifts of ecologically sensitive lands and easements; and
- extending provisions of the Ecogifts program to include donations of ecologically significant lands held by corporations or individuals as inventory of their business.

7.6 Conserving Canada's Oceans

With the largest coastline in the world, Canada is inarguably a marine nation. Canada's marine ecosystems are under extreme stress due to a variety of factors, including overfishing, land-based pollution, and the introduction of exotic species. Unlike terrestrial conservation, which is a joint federal-provincial jurisdiction, the health of Canada's oceans ecosystems falls under federal jurisdiction. However, provincial, territorial and local governments play an important role in oceans management. Provinces have primary responsibility for provincial lands, the shoreline and specific seabed areas, and municipalities have responsibility for many land-based activities affecting the marine environment, such as land-based pollution.

The Round Table supports the Federal Government's Ocean Strategy as a fundamental and comprehensive plan for sustainably managing Canada's rich marine diversity. Unfortunately, although the strategy itself was released in July, the government to date has not yet allocated funding to the plan.

Recommendation 30

In order to promote an integrated and sustainable approach to oceans management in a manner consistent with the mandate and principles of Canada's Oceans Act, the Round Table recommends that the Federal Government, as part of the 2003 Budget, allocate \$500 million over five years to fund the implementation of the recently released Ocean Strategy.

7.7 Developing a Network of Marine Protected Areas

A key element of the proposed Oceans Strategy is the development of a National Marine Protected Areas network. For years, the Round Table has pointed out the need for more marine conservation areas, particularly in light of evidence that Canada's marine conservation efforts are lagging significantly behind our terrestrial efforts.

In its recent Speech from the Throne, the government recognized the growing concern over the sustainability of marine ecosystems by announcing a commitment to establish five new national marine conservation areas, an important step in beginning to implement Canada's new *National Marine Conservation Areas Act.* The Round Table applauds this initiative as a first step in a more systematic, strategic effort to establish an integrated system of national marine conservation areas in Canada.

Recommendation 31

The Round Table recommends that the Federal Government in collaboration with conservationists, industry, Aboriginal communities, and other stakeholders develop a comprehensive strategy for a national network of marine protected areas. The strategy would include the creation of several new protected areas by specific dates:

- five new *Oceans Act* marine protected areas by 2004, with ten more by 2010;
- five new national marine conservation areas by 2007, with five more by 2010; and
- five new national or marine wildlife areas by 2007.

7.8 Capacity Building for Marine Conservation

One of the underpinnings of Canada's Oceans Strategy is the development of an integrated approach to marine planning. Such a development will require timely, detailed information about the state of current marine ecosystems.

Currently, there are serious gaps in our base of information about Canada's oceans. For example, there is no regular publication that details the important national trends concerning the state of our marine areas. These gaps must be closed.

Recommendation 32

The Task Force recommends that the Federal Government allocate \$50 million over five years to filling these gaps. The first goal would be to create a multidisciplinary, integrated national database focused on the marine environment, one that would form the basis for decision-making about marine conservation in Canada. The second goal would be to identify information gaps, collect new information, and conduct additional research based on the gaps in the information identified.

	Budget Requirements Conserving Canada's Natural Heritage								
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Fund the creation of 10 new national parks and five new national marine conservation areas		Program spending	Provides funding to implement an existing federal government commitment	Parks Canada and other relevant departments and agencies	Enhances protection and conservation of Canada's natural heritage				
Implement the recommendations of the Panel on Ecological Integrity in Canada's Parks	\$328 million over five years (Panel estimate)	Program spending	Provides increased funding to an existing program in order to maintain Canada's National Parks	Parks Canada	Enhances protection and conservation of Canada's natural heritage				
Complete information databases and classification standards	\$1.5 million over three years	Program spending	Enhances our understanding of Canada's aquatic and terrestrial areas	Natural Resources Canada, Environment Canada, and the Canadian Council on Ecological Areas	Helps government and private sector interests make informed environmental decisions				
Develop a National Gap Analysis Program		Program spending	Evaluates current and required levels of biodiversity protection on allocated lands		Sets conservation priorities (eg. new reserves, changes in management practices)				
Enhance the Ecogifts Program			Encourages land owners to donate ecologically sensitive lands to charitable land trusts	Finance Canada	Enables all owners of ecologically sensitive lands to participate fully in the conservation of Canada's natural heritage in a voluntary, incentive- based manner				
Implement recommendations of <i>Canada's Oceans</i> <i>Strategy</i>	\$500 million over five years	Program spending	Preserves and enhances conservation of Canada's marine areas	Fisheries and Oceans Canada	Enhanced conservation and sustainable development of Canada's oceans resources				

7.9 Summary of Recommended Measures

Budget Requirements Conserving Canada's Natural Heritage								
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits			
Develop a National Network of Marine Conservation Areas		Program spending	Establish new marine protected areas	Parks Canada and other relevant departments and agencies	Protection of representative sample of Canada's marine environment			
Create an integrated national database and do enhanced marine research	\$50 million over five years	Program spending	See above	Fisheries and Oceans Canada and Environment Canada	See above			

8.0 Capacity Building

8.1 Environmental and Sustainable Development Indicators

The Environment and Sustainable Development Indicators (ESDI) Initiative attempts to select and develop national-level indicators to measure Canada's progress in integrating economic and environmental policy. These indicators will help Canadians track the impact of current economic activities on the lives of future generations.

The 2000 Budget recognized this need, and the Round Table was asked to develop a small set of indicators to supplement the existing macroeconomic indicators. These indicators will provide an overview of the ways in which current activities affect key aspects of natural and human capital. Examples of the indicators include:

- the Forest Cover Indicator
- the Extent of Wetlands Indicator
- the Air Quality Indicator
- the Freshwater Quality Index
- the Greenhouse Gas Emissions Indicator, and
- the Human Capital Indicator.

Once developed, it is expected that the indicators will be reported on in each federal budget, thus highlighting the importance we Canadians attach to our capital assets and to helping track Canada's progress in preserving and enhancing the country's natural capital.

The Round Table will present these indicators to the government by the spring of 2003. For now, the government should start investing in the development and implementation of the information resources needed to regularly report on these indicators.

8.2 An Expanded System of National Accounts

Even though the ESDI Indicators highlight particular types of key capital, the ESDI Steering Committee concluded that a comprehensive assessment of Canada's capital would greatly assist in examining the relationship between the environment and the economy.

Canada's existing macroeconomic indicators are supported through the System of National Accounts (SNA), a series of data structures that capture vital information regarding the Canadian market economic activity. Although the existing economic data structures or indicators will not change, the SNA would be expanded to include broader measures of the human, natural, and, in principal, social capital so vital to current and future development. Once developed, the new accounts will help to create a comprehensive, coherent information system that provides linkages among environment, social, and economic issues.

Statistics Canada laid the groundwork for these new accounts with its pioneering work in developing satellite accounts on natural resources, as well as its leadership role in fostering international consensus about models for expanded national environmental statistics. In continuing the process, Statistics Canada is now working with other data collection agencies, such as Environment Canada and Natural Resources Canada, to assess the range of needs of potential users. Expanding Canada's System of National Accounts is a long-term undertaking. But it must begin now.

Recommendation 33

The Round Table recommends that adequate, interim short-term and long-term funding be provided to Statistics Canada, Environment Canada, and other partner organizations so as to begin the process of collecting and integrating the data needed for Canada's new system of national accounts.

With regard to short-term funding, the ESDI Initiative's final report will comment on five of the six recommended indicators. But the report will also strongly recommend the improvement of certain indicators – particularly those pertaining to the extent of forests and wetlands, both of which require remote sensing data. Funds in the short-term should go toward developing the indicators so the best use is made of the existing data.

Although much can be accomplished in the short to medium term, fully expanding and improving the SNA will take several years and will involve several data-collection agencies in addition to Statistics Canada. Therefore, stable, base-budget funding for for these agencies at a level sufficient to cover both data collection and data integration costs will be needed to support this effort over the long-term.

8.3 Environment Canada's Canadian Information System on the Environment

Although the System of National Accounts (SNA) will provide a structured approach to relating trends in natural, human, and eventually social capital to economic trends, these new accounts will have to be populated with data. Canada's ability to expand the SNA depends on the data providers' capacity to continue and expand their collection and monitoring activities to make their data readily available.

In cooperation with the ESDI Initiative, Environment Canada has been working on the Canadian Information System on the Environment (CISE), a project that will dramatically expand the collection, management, integration, assessment, and communication of environmental data and knowledge at a national level. In particular, CISE can help in creating nation-wide current and historical databases that are regularly updated, something that the ESDI Steering Committee found sorely lacking, even for critical environmental matters such as water quality. Over time, CISE will also help by building national consistency and coherence to the data, and to help set national priorities for monitoring programs. These databases will be the source for many of the data included in the expanded SNA.

The CISE has a key role to play outside the SNA as well: the provision of access to environmental information relevant to federal environmental responsibilities (toxics management, ecosystem quality, climate change, etc.).

While the CISE has been approved in principle, it has not yet been funded for full-scale operation. To date, the CISE activities have been supported by the temporary re-allocation of funds within Environment Canada's current budget. To be effective, however, it needs financial certainty.

Recommendation 34

Environment Canada needs adequate, long-term funding to enable the CISE to move into full operation. In effect, funding for the next fiscal year should be announced and provided to ensure the collection and accessibility of the needed data by the time the Environmental and Sustainable Development Indicators are complete.

	Budget Requirements Capacity Building									
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits					
Provide funding to track and report on environmental sustainable development indicators in an expanded system of national accounts		Program spending	Implements and reports on ESDI created by the Round Table	Statistics Canada, Finance Canada, and Environment Canada	Provides benchmarking and tracking of Canada's performance in promoting sustainable development for future generations					
Provide funding for Environment Canada's Canadian Information System on the Environment (CISE)			Expands the collection, management, assessment, and communication of environmental knowledge at a national level through the creation of a publicly accessible database	Environment Canada						

8.4 Summary of Recommended Measures

APPENDIX A

2003 Budget Recommendations of the National Round Table on the Environment and the Economy

	Budget Requirements – Sustainable Urban Communities								
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Create stable and secure funding for urban transit		Proposed measure	Places urban transit on more equal footing with private passenger transportation (cost and convenience)		Reduces greenhouse gas emissions and other air pollutants, reduces traffic congestion				
Develop tax exemption for employer-provided transit passes	\$202-\$264 per new rider per year ²⁰	Tax expenditure	Encourages switch from private passenger transportation to urban transit	Finance Canada	See above				
Allow capital investments for community energy system to be eligible for the Accelerated Capital Cost Allowance		Tax expenditure	Makes investment in community energy systems more economically feasible	Finance Canada	Reduces greenhouse gas emissions, reduces air pollution				
Extend GST rebate available on the sale of new homes so it applies to renovations of existing homes that improve energy efficiency	Further analysis required; however, costs likely to be minimal	Tax expenditure	Reduces demand for new greenfield housing, encourages energy efficiency in home heating	Finance Canada	See above				
Increase GST rebate for R2000 certified homes	\$13 million ²¹	Tax expenditure	Stimulates demand for energy efficient new homes	Finance Canada	Reduces greenhouse gas emissions, improves energy efficiency, reduces air pollution				

Summary of Recommended Measures – Sustainable Urban Communities

²⁰ Canadian Urban Transit Association 2002 Budget Submission, Employer Provided Income Tax Exempt Transit Passes, p. 4

²¹ This assumes that the incentive would double the demand for R2000 homes from 3% to 6%

Budget Requirements – Sustainable Urban Communities									
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Create Eco-Efficient Mortgage Pilot Project	\$500,000	Program spending	Reduces demand for new greenfield housing, makes existing urban housing stock more affordable	СМНС	Reduces greenhouse gas emissions and other air pollutants, reduces traffic congestion				
Develop sustainable criteria for current and future infrastructure programs	No cost	N/A	See above	Infrastructure Canada	See above				
Increase GST rebate for municipal green infrastructure purchases to 100%		Tax expenditure	Encourages municipalities to invest in green, versus non-green, infrastructure	Finance Canada	Reduces greenhouse gas emissions, improves water quality, improves wastewater discharge				

Summary of Recommended Measures – Brownfield Redevelopment

Budget Requirements – Brownfield Redevelopment Strategy									
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Allow remediation costs to be treated as deductible expenses in the year occurred	Further analysis needed. Some years this would result in a net cost; in others, measures would result in a net saving	expenditure	Accommodates large upfront costs associated with brownfield redevelopment	Finance Canada	Encourages redevelopment of brownfield sites versus expansion of greenfield development. Reduces urban sprawl, improves air quality, reduces greenhouse gas emissions				
Create a brownfield redevelopment Current Deduction and Investment Tax Credit for brownfield remediation costs	Further analysis required	Tax expenditure	Accommodates large upfront costs associated with brownfield redevelopment	Finance Canada	See above				

	Budget Requirements – Brownfield Redevelopment Strategy								
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Remove federal liens and tax arrears from qualifying sites	Further analysis required; however, costs likely to be minimal	Expenditure	Facilitates the development of orphaned brownfield sites	Revenue Canada	See above. Allows for municipal tax sale of orphaned sites				
Expand CMHC mandate/funding to provide mortgage insurance for redevelopment projects at qualifying brownfield sites	Further analysis required	Program spending	Leverages new private loan capital for brownfield remediation by unknown risks associated with lending	Canada Mortgage and Housing Corporation	See above. Reduces urban sprawl				
Create a revolving loan fund for brownfield redevelopment	Further analysis required	Program spending	Makes upfront capital available at market rates for brownfield redevelopers without access to private capital	Could be administered by the FCM, CMHC, Business Development Bank of Canada, or by qualifying provincial or municipal agencies	See above. Revolving nature of fund allows repayment proceeds to be directed to rural redevelopment projects at more favourable rates				
Grant funding for municipal brownfield redevelopment projects	Further analysis required	Program spending	Provides upfront capital for municipal redevelopment projects without access to private capital	Federation of Canadian Municipalities	Promotes urban rejuvenation via redevelopment of core lands for public use				
Increase funding for Technology Partnerships Canada to demonstrate new remediation technologies		Program spending	Facilitates innovation in brownfield remediation technology	Industry Canada	Promotes Canada as a world leader in brownfield remediation technology; demonstrates success of emerging remediation technologies				

Sus	Budget Requirements – Sustainable Opportunities for Northern Aboriginal Communities								
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Provide long-term funding for the MVEIRB	\$2.2 million/ year for five years (see footnote 4)	Program spending	Enhances capacity of the MVEIRB	INAC	Ensures rigorous environmental reviews of proposed new development in the Mackenzie Valley				
Establish Geoscience Database	\$10 million/year for 10 years	Program spending	Provides a modern, accessible database for the NWT	Natural Resources Canada and INAC	Facilitates responsible land-use planning in NWT; provides comprehensive geological information about Canada's North to regulators, Aboriginals, investors, and other stakeholders				
Implement CEAM Framework, including the ongoing funding for the MVCIMP	\$25.8 million over six years (\$800,000 in 2001 Budget, then \$5 million/ year for five years beginning 2002)	Program spending	Provides funding to meet commitment to monitor cumulative effects in Canada's North	INAC and Environment Canada	Ensures comprehensive cumulative effects management in the NWT				
Create an education and training awareness-raising initiative	\$5 million	One-time spending	Raises awareness of the importance of basic education in Aboriginal communities	Government of the Northwest Territories	Better prepares Aboriginal communities to participate in the northern economy				
Create a Large Projects Consultation Fund	\$15 million over three years	Program spending	Provides capacity that allows Aboriginals to fully participate in the consultation process	INAC	Ensures that concerns of Aboriginal communities are addressed in large project proposals at pre-intervenor stage				

Summary of Recommended Measures – Sustainable Opportunities for Northern Aboriginal Communities

Budget Requirements – The Environment and Human Health									
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Increase funding for the continuation and expansion of the Toxic Substances Research Initiative	\$20 million/year for four years	Program spending	Continues and enhances the TSRI program	Health Canada	Promotes better understanding of the effects of toxic substances on human health				
Increase funding for agencies regulating new and existing chemical substances	\$56 million/year for five years	Program spending	Increases capacity of regulators to review new and existing chemical substances	Health Canada, Environment Canada, and the Pest Management Regulatory Agency	Quicker access to more efficient and safer chemical products; more recent data on risks/benefits of existing substances				

Summary of Recommended Measures – The Environment and Human Health

Summary of Recommended Measures – Conserving Canada's Natural Heritage

	Budget Requirements – Conserving Canada's Natural Heritage								
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Fund the creation of 10 new national parks and five new national marine conservation areas		Program spending	Provides funding to implement an existing federal government commitment	Parks Canada and other relevant departments and agencies	Enhances protection and conservation of Canada's natural heritage				
Implement the recommendations of the Panel on Ecological Integrity in Canada's Parks	\$328 million over five years (Panel estimate)	Program spending	Provides increased funding to an existing program in order to maintain Canada's National Parks	Parks Canada	Enhances protection and conservation of Canada's natural heritage				
Complete information databases and classification standards	\$1.5 million over three years	Program spending	Enhances our understanding of Canada's aquatic and terrestrial areas	Natural Resources Canada, Environment Canada, and the Canadian Council on Ecological Areas	Helps government and private sector interests make informed environmental decisions				

	Budget Requirements – Conserving Canada's Natural Heritage								
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits				
Develop a National Gap Analysis Program		Program spending	Evaluates current and required levels of biodiversity protection on allocated lands		Sets conservation priorities (eg. new reserves, changes in management practices)				
Enhance the Ecogifts Program			Encourages land owners to donate ecologically sensitive lands to charitable land trusts	Finance Canada	Enables all owners of ecologically sensitive lands to participate fully in the conservation of Canada's natural heritage in a voluntary, incentive- based manner				
Implement recommendations of <i>Canada's Oceans</i> <i>Strategy</i>	\$500 million over five years	Program spending	Preserves and enhances conservation of Canada's marine areas	Fisheries and Oceans Canada	Enhanced conservation and sustainable development of Canada's oceans resources				
Develop a National Network of Marine Conservation Areas		Program spending	Establish new marine protected areas	Parks Canada and other relevant departments and agencies	Protection of representative sample of Canada's marine environment				
Create an integrated national database and do enhanced marine research	\$50 million over five years	Program spending	See above	Fisheries and Oceans Canada and Environment Canada	See above				

	Budget Requirements – Capacity Building									
Measure	Budget (\$)	Type of Initiative	Purpose of Measure	Implementing Agency	Benefits					
Provide funding to track and report on environmental sustainable development indicators in an expanded system of national accounts		Program spending	Implements and reports on ESDI created by the Round Table	Statistics Canada, Finance Canada, and Environment Canada	Provides benchmarking and tracking of Canada's performance in promoting sustainable development for future generations					
Provide funding for Environment Canada's Canadian Information System on the Environment (CISE)			Expands the collection, management, assessment, and communication of environmental knowledge at a national level through the creation of a publicly accessible database	Environment Canada						

Summary of Recommended Measures – Capacity Building