

**National Round Table on the Environment
and the Economy**

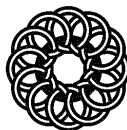
2004 Greening of the Budget Submission

Natural Capital: A Critical Foundation of Our Economy

Disponible en français

NRTEE

National Round Table
on the Environment
and the Economy



TRNEE

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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Executive Summary

In this 2004 Greening of the Budget submission, the National Round Table on the Environment and the Economy (NRTEE) emphasizes that Canada must take better account of the full range of assets necessary to sustain a healthy society and economy. These assets represent our nation's "capital," an economic term first used to designate entities such as buildings and equipment that ensured economic production in the future. This submission stresses that other types of capital – in particular, the environmental assets that provide the ecological "services" that make life possible – are also important to our future well-being. The concept of sustainable development requires that future generations have the necessary capital of all types – and certainly no less than we do – to pursue their own goals. In order to uphold this principle, federal budgets need to account for the full range of our national capital.

The federal government has made concerted use of the budget to promote policies and behaviours that stimulate the creation of produced capital through measures to enhance innovation and productivity. It has focused less attention on the equally important opportunities to use fiscal policy to help maintain the continued productivity of our natural capital.

This budget submission identifies three groups of recommendations to ensure that our fiscal policies systematically integrate environment–economy considerations and explicitly recognize the role of natural capital in maintaining a prosperous economy. They are:

- improving the information base on natural capital;
- helping rural and Aboriginal communities protect natural capital; and
- protecting natural capital in urban communities.

These recommendations reflect the critical role fiscal policy plays in influencing decision making in Canada. Their adoption will mark an important step in integrating sustainability considerations into our fiscal policy; such integration is essential if the federal government is to promote sustainable development effectively and consistently.

Improving the information base on natural capital

The NRTEE's 2003 report on national environment and sustainable development indicators proposed three major sets of recommendations to ensure that the information base for decision making on fiscal and other policy accounts more fully for natural, human and social capital:

- Statistics Canada should publish annually the six indicators of natural and human capital identified by the NRTEE, and the Minister of Finance should incorporate them in the federal budget statement in order to provide Canadians with a better context for understanding the overall state and potential of our economy.
- Statistics Canada should expand Canada's System of National Accounts to include information on all types of capital, including natural capital, and the interactions among the various types of capital.
- The Government of Canada, through Environment Canada's Canadian Information System for the Environment (CISE), should improve the data structures and information systems relating to environmental data.

To begin the process of implementing these measures, this budget submission sets out three recommendations:

Recommendation 1: That Statistics Canada, Environment Canada and Natural Resources Canada be provided with \$5 million a year to continuously improve and regularly report the recommended indicators of natural and human capital.

Recommendation 2: That Statistics Canada be provided with \$20 million a year to begin the process of collecting and integrating the data needed to expand Canada's System of National Accounts so that it includes all types of natural, human and, eventually, social capital.

Recommendation 3: That Environment Canada be provided with \$20 million a year to enable CISE to become fully operational.

Helping rural and Aboriginal communities protect natural capital

This set of recommendations focuses on the provision of incentives and information to help rural and Aboriginal communities to steward the natural capital that forms both an important basis of their livelihood and an irreplaceable part of Canada's national heritage.

The recommendations stem from two reports issued over the past two years by the NRTEE: *Securing Canada's Natural Capital: A Vision for Nature Conservation in the 21st Century* (released in June 2003) and *Aboriginal Communities and Non-Renewable Resource Development* (released in June 2001). This year's budget submission focuses on measures that both reports argued are necessary to maintain natural capital in rural areas:

- creating incentives for stewardship of natural capital by all members of society, including agricultural, rural and Aboriginal communities and resource industries;
- strategically investing in enhancing the capacity of Aboriginal communities to share the economic benefits from resource development and manage their natural capital sustainably; and

- accelerating conservation planning in areas where unique opportunities exist to plan in advance of major industrial development, most particularly the Mackenzie Valley in the Northwest Territories.

Recommendation 4: That the Ecogifts Program be enhanced to further encourage private landowners to conserve ecologically sensitive lands.

This would entail:

- 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.

Recommendation 5: That Agriculture and Agri-Food Canada and Finance Canada, in partnership with provincial governments as appropriate, introduce a suite of specific incentives for landowners through Environmental Farm Plans or their equivalents, including:

- accelerated capital cost allowance claims on conservation equipment, such as flushing bars, fencing, and watering and manure management facilities; and
- cost sharing for capital improvements and equipment related to conservation objectives.

Recommendation 6: That \$5 million be provided to Canadian Heritage and partners such as the Tourism Industry Association of Canada and community representatives to develop a national sustainable tourism strategy to enhance the economic benefits associated with protected areas for local communities.

Recommendation 7: That a \$15-million Large Projects Consultation Fund be created to facilitate participation by Aboriginal governments and organizations in consultations for large non-renewable resource development projects in the three

northern territories. This funding should be made available before intervenor funding is provided under any relevant environmental assessment or regulatory process.

Recommendation 8: That \$25.8 million be allocated over six years to continue implementing 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.

Recommendation 9: That the Mackenzie Valley Environmental Impact Review Board be provided with a five-year funding commitment of at least \$2.2 million per year.

Protecting natural capital in urban communities

This third set of recommendations focuses on the important role fiscal policy can play in establishing a leadership role for the federal government in protecting urban environmental quality – that is, in ensuring that Canada’s urban centres (a key component of our produced capital) function as effectively as possible and with minimal adverse impacts on natural capital (such as surrounding agricultural lands and air quality). These recommendations are designed to help enhance the well-being of urban residents and to ensure that cities remain attractive, stable centres for business and talented workers.

The recommendations stem from two recent NRTEE reports: *Environmental Quality in Canadian Cities: The Federal Role* (released in May 2003) and *Cleaning Up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada* (released in February 2003). The second report was requested by the federal government in its 2001 budget.

The first report focused on the need for the federal government to adopt a coherent approach in using

fiscal levers to improve urban environmental quality. One of the key themes of the report was the need for greater horizontal and vertical integration of fiscal policies that affect urban decision making. It also suggested specific measures to promote various aspects of urban environmental quality, including:

- funding and encouraging the use of urban transit;
- promoting energy-efficient buildings and community energy systems;
- supporting sustainable urban development patterns (or urban form); and
- promoting sustainable municipal infrastructure.

The second report, on the NRTEE’s National Brownfield Redevelopment Strategy, included recommendations in three areas:

- the need for strategic public investment – tax incentives, loans, grants and mortgage guarantees – to overcome market reluctance to provide capital to finance the early stages of brownfield redevelopment;
- the need for all levels of government to work together to improve the regulatory environment for brownfield redevelopment by introducing predictability and consistency with regard to the liability regime and the post-remediation evaluation process; and
- the need to raise stakeholder awareness of the benefits of brownfield redevelopment and increase brownfield redevelopment capacity by promoting innovation in the area of remediation technology.

Most of the fiscal recommendations in this submission address the first area: the lack of available capital, which 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.

Recommendation 10: That \$1 billion a year be invested 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 NRTEE also recommends that the federal government adopt sustainability criteria for current and future transit programs to ensure that the funds dedicated to improving urban transit also promote sustainable urban growth.

Recommendation 11: That, to promote the use of urban transit, the *Income Tax Act* be amended to make employer-provided transit passes a tax-exempt benefit.

Recommendation 12: That, to promote investment in community energy systems, Class 43.1 of the *Income Tax Act* regulations be amended to allow all capital investments related to a community energy system to be eligible for an accelerated capital cost allowance.

Recommendation 13: That the *Excise Tax Act* be amended 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 energy-efficient products in each category eligible for the GST rebate.

As well, the *Excise Tax Act* should provide a rebate of 36% of the GST incurred for costs associated with renovations to create a self-contained apartment unit in an existing house.

Recommendation 14: That the existing 36% new housing GST rebate be increased to 50% for R-2000 homes. This additional rebate would represent 25% to 50% of the estimated R-2000 cost premium.

Recommendation 15: That the GST rebate for eligible green infrastructure projects be increased to 100%. This action would underline the federal government’s commitment to investing in green infrastructure.

Recommendation 16: That practical, performance-based criteria be adopted for current and future infrastructure programs that ensure that federal funds dedicated to improving urban infrastructure also promote urban environmental quality.

Recommendation 17: That the Canada Mortgage and Housing Corporation conduct research on the potential contribution of eco-efficient mortgages (including location-efficient mortgages and green mortgages) to the more efficient use of land in Canada. If research results warrant, this would lead to a pilot project. Then, if pilot project results warrant, a wider eco-efficient mortgage program involving the financial sector would be pursued.

Recommendation 18: That, in recognition of the significant upfront costs associated with brownfield remediation, sections 18 and 20(1) of the *Income Tax Act* be amended 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.

Recommendation 19: That a brownfield redevelopment current deduction and investment tax credit be established, which would be similar to the Scientific Research and Experimental Deduction Program’s credit provision provided in sections 37 and 127 of the *Income Tax Act*.

Recommendation 20: That federal liens and tax arrears be removed from qualifying brownfield sites. The federal government should also work with the provincial governments to develop criteria for removing Crown liens against brownfield properties.

Recommendation 21: That the Canada Mortgage and Housing Corporation be provided with funds to, under its current mandate, offer mortgage

guarantees for brownfield redevelopment projects providing housing. The federal government should also expand the mandate of the Canada Mortgage and Housing Corporation to allow the corporation to provide mortgage insurance for residential, commercial and industrial development for qualifying brownfield sites.

Recommendation 22: That the federal government endow a \$250 million revolving brownfield redevelopment fund to make low-interest loans available for certain brownfield redevelopment projects. Repayment proceeds from initial loans should be provided to other projects.

The revolving loan fund program could be administered by the Federation of Canadian

Municipalities, Canada Mortgage and Housing Corporation, Business Development Bank of Canada, or specific qualifying provincial or municipal agencies.

Recommendation 23: That the federal government 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.

Recommendation 24: That \$5 million a year be provided to Technology Partnerships Canada to extend the program to include funding for the demonstration of remediation technologies on designated brownfield sites in Canada.

1. Investing in Canada's Natural Capital

1.1 Introduction

Formed in 1994, the National Round Table on the Environment and the Economy (NRTEE) is a publicly funded, independent advisory body reporting to the Prime Minister. The NRTEE's mandate is to provide policy advice and recommendations to governments and the public on promoting sustainable development in Canada.

The particular value of the Round Table's recommendations derives from the way it brings relevant stakeholders together in a neutral forum where they can openly discuss critical issues and work together to find solutions. The NRTEE's 25 members represent decision makers and opinion leaders in a broad range of sectors, including business, labour, academia, environmental organizations and First Nations, as well as diverse regions across the country.

The NRTEE focuses on improving understanding of and identifying solutions for key issues that lie at the intersection of the environment and the economy. In its ongoing work, it emphasizes the important role that environmental (or natural) capital plays in supporting Canada's continued economic and social well-being. A key interest is to ensure that the marketplace considers the full benefits and costs of economic decisions, including their impact on the environment. The NRTEE's recommendations are designed to help correct the market distortions caused by policies, practices and market failures that favour unsustainable practices over realistic sustainable options.

Because the NRTEE recognizes the significance of fiscal policy in influencing decision making across a wide spectrum of issues, most of its program recommendations include detailed fiscal policy

reforms, such as changes in tax treatment; the elimination, redirection or development of new tax incentives; and revised or new program spending to support the desired outcomes.

The NRTEE's budget submissions to the federal government, which have been made annually since 1996, are compendiums of selected recommendations from NRTEE program reports. As such, these recommendations have not only been approved by Round Table members, but they have also been influenced by the extensive multistakeholder consultations involved in their development.

This year's budget submission once again reflects the importance of fiscal policy in influencing decision making in Canada. It represents an important step toward the integration of sustainability considerations into federal fiscal policy.

1.2 The Role of Natural Capital in Canada's Economy

The NRTEE's 2004 Greening of the Budget submission emphasizes that Canada must take better account of the full range of assets that will be necessary to sustain a healthy society and economy. These assets represent our nation's "capital," an economic term first used to designate entities such as buildings and equipment that ensured economic production in the future. This submission emphasizes that other types of capital – in particular, the environmental assets that provide the ecological "services" that make life possible – are also important to our future well-being.

Canada must start to explicitly integrate consideration of all the key types of capital into fiscal policy. Preserving development options for future generations depends on the availability of a

wide range of assets or capital. These assets include produced capital (such as machinery, buildings, transportation networks and other durable goods), natural capital (the provision of space for living in, raw materials and a clean and stable environment), human capital (the knowledge and skills embodied in individuals), and social capital (the countless human interactions necessary for a vibrant and well-functioning society). The concept of sustainable development requires that subsequent generations have the necessary capital of all types – and certainly no less than we do – to pursue their own goals. In order to uphold this principle, federal budgets need to account for the full range of our national capital.

Natural capital is a particularly important component of national wealth. For many Canadians, it provides spiritual and aesthetic benefits. Our vast geography, abundant wilderness and relatively clean environment help define our local and national identity. But natural capital also supports economic activity by providing not only the raw materials and the land on which we live and work, but also the many ecological services that support life, including the cleansing of fouled air and water, and the provision of productive soil.

Like produced capital, natural capital can be degraded, for example, through modification of land areas and excessive waste loadings. It can be very difficult, and in some cases impossible, to replace lost natural capital – it is harder to create new wetlands than it is to build a new factory. It is possible, however, to rejuvenate, enhance or even avoid the deterioration of many types of natural capital through environmentally sustainable practices.

The federal government has made concerted use of the budget to promote policies and behaviours that stimulate the creation of produced capital through measures to enhance innovation and productivity. However, it has not focused as much attention on the equally important opportunities to use fiscal policy to ensure the continued productivity of our

natural capital. In a growing range of circumstances, a lack of quantity or quality of natural capital (in the form of clean air and water, productive soil, a predictable climate or a reliable source of raw materials) may become an important factor limiting economic production.

Fiscal policy clearly needs to pay more attention to sustaining and rejuvenating this important aspect of our national wealth. Consequently, this submission identifies three groups of recommendations to ensure that our fiscal policies systematically integrate environment–economy considerations and explicitly recognize the role of natural capital in helping to maintain a prosperous economy. These are:

Improving the information base on natural capital. Section 2 includes recommendations to improve the base of information on the status of Canada’s natural capital, recognizing that good information is a prerequisite to informed decision making. An important aspect of these recommendations is creating the ability to link information on natural capital to economic data by expanding the System of National Accounts.

Helping rural and Aboriginal communities protect natural capital. Section 3 recommends the provision of incentives and information to help rural and Aboriginal communities steward the natural capital that forms both an important basis of their livelihood and an irreplaceable part of our national heritage.

Protecting natural capital in urban communities. Section 4 focuses on the important role federal fiscal policy can play in ensuring that Canada’s urban centres – a key component of our produced capital – function as effectively as possible and with minimal adverse impacts on natural capital (such as surrounding agricultural lands and air quality). These recommendations are designed to help enhance the well-being of urban residents, and to ensure that our cities remain attractive, stable centres for business and talented workers.

1.3 The Impact of Fiscal Policy on Canada's Natural Capital

The recommendations in this submission should be seen as important starting points in a long-term process of reform directed at ensuring that each federal budget more fully accounts for natural capital.

By overlooking natural capital considerations, some fiscal policy measures have had profound yet unintended environmental implications, and are contributing to the loss of natural capital even as they attempt to meet social or economic objectives. The result is an accumulating natural capital debt, similar in some ways to the financial debt that has been the focus of many of the federal government's recent budgets. Although previous budgets have emphasized improving the quality of life by reducing the financial debt and making strategic investments in jobs and productivity growth, few have paid as much attention to sustaining the natural capital that also supports Canadians' well-being.

In addition to avoiding unintended harm to the environment, a long-term commitment to budget

reform should also focus on the systematic use of fiscal policy to create positive incentives for more sustainable forms of development. The NRTEE has identified "ecological fiscal reform" as one of the most powerful and efficient, yet underutilized, policy options for promoting sustainable development. Ecological fiscal reform is a strategy that redirects a government's taxation and expenditure programs to create a cohesive, integrated set of incentives to support the shift to a more sustainable form of development.

Canada has made limited progress relative to many OECD countries toward adopting ecological fiscal reform or integrating natural capital objectives systematically into its fiscal policy. This means that Canada may not be addressing its environmental problems as cost-effectively as other countries. More fundamentally, without integrating natural capital considerations more fully into our fiscal policy, Canada will miss opportunities to ensure that future generations have even greater options for development than we currently enjoy.

2. Improving the Information Base on Natural Capital

2.1 Why We Need Improved Information About Natural Capital

In the 2000 spring budget, the Minister of Finance observed that “we must come to grips with the fact that the current means of measuring progress are inadequate.” He then asked the NRTEE to develop a set of national indicators that Finance Canada and other decision makers could use to track the impact of current economic practices on the natural and human assets that will be needed by future generations of Canadians. The resulting report, *Environment and Sustainable Development Indicators for Canada* (released in May 2003), concluded that Canada’s indicators and information systems need to take better account of the natural, human and social capital assets that are necessary to sustain a dynamic economy and healthy society.

Tracking more complete information about Canada’s full set of capital assets would help Canadians avoid decisions that inadvertently deplete key human and natural assets, or that under-invest in the protection or enhancement of assets that may be necessary to realize future development opportunities. Providing good information on the full range of important national assets will require significant improvements in the type and quality of information collected at the national level.

The NRTEE’s report on indicators made three major sets of recommendations to ensure that the information base for making decisions on fiscal and other policy accounts more fully for natural, human and social capital:

- Statistics Canada should publish annually the six indicators of natural and human capital identified by the NRTEE, and the Minister of

- Finance should incorporate them in the federal budget statement in order to provide Canadians with a better context for understanding the overall state and potential of our economy.

- Statistics Canada should expand Canada’s System of National Accounts to include information on all types of capital, including natural capital, and the interactions among the various types of capital.

- The federal government, through Environment Canada’s Canadian Information System for the Environment (CISE), should improve the data structures and information systems relating to environmental data.

The six indicators identified by the NRTEE include five for natural capital and one for human capital:

- The Forest Cover indicator tracks changes in the extent of Canada’s forests – a key natural resource and provider of ecosystem services such as habitat for wildlife. Because this indicator is based on satellite data, it can be regularly updated, something that was not possible with earlier national forest indicators in Canada.

- The Freshwater Quality indicator shows the extent to which Canada’s freshwater bodies are meeting objectives for uses such as swimming, irrigation and sustaining aquatic life, revealing trends in how many monitored waterways are classified as “marginal” or “poor.” The indicator calculated in the report, although still in a preliminary form, is the first national aggregation of this type of water quality data in Canada.

- The Air Quality indicator is estimated using ground-level ozone (“smog”) measurements. This indicator is the first readily available Canadian measure of air quality that weights

exposure to a pollutant by population. In other words, this indicator tries to factor in the number of people who are exposed to low-level ozone, as well as the ambient concentrations of ozone in different parts of the country. Ozone is the current focus of the indicator because of the well-understood links between exposure and health problems. It is hoped that other pollutants will eventually be incorporated into the indicator.

The Greenhouse Gas Emissions indicator, already calculated by Environment Canada, tracks total annual emissions of greenhouse gases. All of the gases tracked in this indicator are likely affecting the stability of the global climate.

The Extent of Wetlands indicator will track changes in the total area of wetlands. Wetlands provide many essential ecosystem services: they supply habitat and food for many species, purify water and store large quantities of carbon. Moreover, by retaining and releasing large volumes of water, they help replenish ground water, control floods and storm waters, reduce erosion and protect shorelines. Wetlands also indirectly support a range of economic activities such as fishing, farming and recreational activities.

Like the forest cover indicator, this indicator will be based on satellite data. This is the only indicator that cannot be reported at present, although it could be produced in approximately two years with suitable funding.

The Educational Attainment indicator tracks the percentage of the working-age population with post-secondary education. This indicator will reveal Canada's investment in educating its workforce and will help us understand our ability to compete in a global, knowledge-based economy.

These indicators are simple and easy to understand. They illustrate some of the more important natural

and human capital that must be maintained for the future. Reporting on them in each federal budget would help supplement the information provided by traditional macroeconomic indicators such as gross domestic product (GDP). In particular, they would provide a more balanced set of signals regarding the impacts of current policies and activities on Canada's ability to sustain development into the future. But much remains to be done. More work is required to refine each indicator, and funding is needed to ensure that they can be reported on an annual basis.

The indicators provide a quick overview of the state of some key types of human and natural capital. Detailed analysis and decision making, however, will necessitate a comprehensive information system that links all types of capital (natural, human and social) with economic information.

To create such an information system, the NRTEE proposes a long-term process to reform Canada's System of National Accounts (SNA). As in other countries, Canada's SNA provides the information upon which all macroeconomic indicators are based, but collects very little information about Canada's natural, human or social capital. Adding accounts to track these types of capital makes it possible to study important interactions: the analysis of climate change, for instance, would greatly benefit from an information system that would coherently link data on natural capital (e.g., greenhouse gas emissions) with economic data (e.g., the activities that lead to greenhouse gas emissions). The expansion of the SNA, while not modifying any of the existing economic accounts, would permit analysis of a more complete set of relevant factors, as well as the development of more informed and more coherent fiscal, industrial and environmental policies.

Statistics Canada will develop the new capital accounts within the SNA. However, populating these accounts with data will require the assistance of many different data providers. In particular, the NRTEE has concluded that Canada needs to greatly improve the quantity, quality and accessibility of

information about natural capital. Among other things, this will require continued support for Environment Canada's Canadian Information System for the Environment (CISE).

2.2 Budget Recommendations

This submission's recommendations focus on starting to implement the three main recommendations of the NRTEE's report on indicators:

- providing funding to develop and regularly report the small set of natural and human capital indicators identified by the NRTEE;
- initiating the long-term expansion of Canada's System of National Accounts to include information on all types of capital, including natural capital; and
- funding the Canadian Information System for the Environment to create consistent national databases on issues such as biodiversity and water quality.

2.2.1 Develop and Report Environment and Sustainable Development Indicators

The six indicators developed by the NRTEE will supplement macroeconomic indicators such as GDP, highlight the importance Canadians attach to national capital assets, and help track Canada's progress in preserving and enhancing the country's natural capital.

The NRTEE therefore recommends that Statistics Canada publish the indicators annually and that the Department of Finance incorporate them into each federal budget statement. Funding is also required to improve the indicators. For the time being, efforts should focus on developing the wetlands indicator (Natural Resources Canada and Environment Canada), and improving the water quality (Environment Canada) and forest cover (Natural Resources Canada) indicators.

Recommendation 1: That Statistics Canada, Environment Canada and Natural Resources Canada

be provided with \$5 million a year to continuously improve and regularly report the recommended indicators of natural and human capital.

2.2.2 Expand the System of National Accounts

The NRTEE recommends that the System of National Accounts be expanded to include accounts on the natural, human and 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 environmental, social and economic issues.

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. Working with other departments such as Environment Canada, Statistics Canada has prepared a long-term work plan for this initiative. This work plan requires the allocation of stable, base-budget funding at a level sufficient to cover both data collection and data integration costs.

Recommendation 2: That Statistics Canada be provided with \$20 million a year to begin the process of collecting and integrating the data needed to expand Canada's System of National Accounts so that it includes all types of natural, human and, eventually, social capital.

2.2.3 Support the Canadian Information System for the Environment

Although the System of National Accounts 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.

In parallel with the NRTEE's work on indicators, Environment Canada has been working on the Canadian Information System for the Environment, a project that will dramatically expand the collection, management, integration, assessment and

communication of environmental data and knowledge at the national level. In particular, CISE will help create databases that are regularly updated, something that the NRTEE found sorely lacking, even for critical environmental matters such as water quality. Over time, CISE will also enhance national consistency and coherence in environmental data, and will help set national priorities for monitoring programs. These databases will be the source for much of the information to be included in the enhanced System of National Accounts.

CISE also has a key role to play outside the System of National Accounts by providing access to

environmental information relevant to federal environmental responsibilities (toxics management, ecosystem quality, climate change, etc.).

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

Recommendation 3: That Environment Canada be provided with \$20 million a year to enable CISE to become fully operational.

Providing Information About Natural Capital			
Measure	Estimated Cost	Implementing Agency	Purpose and Benefits of Measure
1. Develop and regularly report six indicators of natural and human capital	\$5 million per year to improve and report the indicators on an annual basis	Statistics Canada, Environment Canada, Natural Resources Canada	Provide tracking of some of Canada's key types of natural and human capital to enable informed decision making
2. Begin to expand the System of National Accounts to include all types of natural, human and, eventually, social capital	\$20 million per year to expand and maintain new capital accounts	Statistics Canada	Enable comprehensive assessment of Canada's key types of capital. Allow for better analysis of issues that have both environmental and economic aspects
3. Begin to make fully operational Environment Canada's Canadian Information System for the Environment (CISE)	\$20 million per year to fund CISE	Environment Canada	Expand the collection, management, assessment, and communication of environmental knowledge at a national level through the creation of a publicly accessible information system; includes creating cohesive, national databases on natural capital such as water quality

3. Helping Rural and Aboriginal Communities Protect Natural Capital

3.1 Rural, Agricultural and Aboriginal Communities Are Important Stewards of Natural Capital

Rural and Aboriginal communities, especially those whose economies are dependent on agriculture or natural resource extraction, have a more direct relationship with natural capital than their urban counterparts: they tend to rely more directly on natural capital for their economic and social well-being. Yet that same close connection also brings a particular set of tensions that require careful management.

Farmers, for example, seek to maximize the returns from their land while ensuring that they do not deplete or contaminate their soil. Modern farming is also energy-intensive, while remaining heavily dependent on a predictable climate that is increasingly threatened by global emissions of greenhouse gases from the burning of fossil fuels. Resource industry communities prosper from the extraction and processing of natural resources (fish, timber, minerals, oil and gas), while seeking to avoid the aesthetic and human health problems that can directly impact their communities from poor management, and the economic dislocations that can result from overharvesting.

At the same time, many resource industries face increasing demands from consumers worldwide for assurances that their products come from sources with sound environmental and resource management practices. In addition, while farm and resource communities depend directly on natural capital for their livelihoods, they also face growing pressures to act as stewards of natural spaces on behalf of all Canadians. Frequently, however, society does not reward them for playing this role.

Aboriginal communities face particularly strong tensions. While resource development presents many Aboriginal (and other rural and northern) communities with tremendous economic opportunities, it also brings high risks such as the further erosion of traditional ways of life and cultural cohesion. Without a significant investment in skills development, many Aboriginal people risk missing out on the economic benefits, while being left with the environmental damage and social dislocation that can result from sporadic resource development.

3.2 Budget Recommendations

The recommendations in this section of the Greening of the Budget submission stem from two reports issued over the past two years by the NRTEE: *Securing Canada's Natural Capital: A Vision for Nature Conservation in the 21st Century* (released in June 2003) and *Aboriginal Communities and Non-Renewable Resource Development* (released in June 2001).

In *Securing Natural Capital*, the NRTEE set out a strategic framework for enhancing conservation in Canada. The framework features five core elements: designing conservation solutions through integrated land use planning; encouraging industry to become a better steward of Canada's lands and seas; encouraging and supporting local communities in conservation planning and monitoring; building and sharing a strong base of knowledge to support conservation; and valuing natural capital to ensure that economic decisions formally factor in the value of nature.

The NRTEE's *Aboriginal Communities* report – which focused on Aboriginal communities in the Northwest Territories – stated that a strong

economic, social and regulatory framework is urgently needed to ensure the long-term sustainable development of the North's non-renewable resources, with benefits flowing to local Aboriginal communities. To build this framework, Canada needs to invest strategically in five key areas: building regulatory capacity, building information capacity, cumulative effects management, improving education, and creating opportunities for meaningful consultations.

This year's budget submission focuses on areas that both reports argued are necessary to maintain natural capital in rural areas:

- creating incentives for stewardship of natural capital by all members of society, including agricultural, rural and Aboriginal communities and resource industries;
- strategically investing in enhancing the capacity of Aboriginal communities to share the economic benefits from resource development and manage their natural capital sustainably; and
- accelerating conservation planning in areas where unique opportunities exist to plan in advance of major industrial development, most particularly the Mackenzie Valley in the Northwest Territories.

Specific budget recommendations to achieve these three objectives are included in this submission.

3.2.1 Enhance the Ecogifts Program

The Ecogifts Program is an 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. However, several adjustments to the Ecogifts Program could be made to enhance its applicability and ability to target conservation of priority landscapes:

Reduce the capital gains tax on ecological gifts to zero. Under the *Income Tax Act*, any disposition of land, whether by donation or by sale, is deemed to have occurred at fair market value, with any increase in value thereafter being taxed as a capital gain. As a result, landowners who donate their lands are taxed on their notional capital gains, even though they have received no such income. Although amendments to the *Income Tax Act* have partially addressed this problem, it remains a barrier to conservation. Removal of the capital gains tax on ecological gifts would encourage more owners of ecologically sensitive land to donate the title or conservation easements to a conservation organization.

Expand the program to include inventory lands.

The disposition of land held as inventory yields a profit rather than a capital gain (because it is not a "capital asset"), 100% of which is deemed income for income tax purposes. Such land is not eligible for tax benefits under the Ecogifts Program, which applies only to capital gains associated with ecological gifts. As the Ecogifts Program is intended to offer incentives to preserve significant ecological areas, it should apply to all people and companies owning qualified land, regardless of how the land is held.

Recommendation 4: That the Ecogifts Program be enhanced to further encourage private landowners to conserve ecologically sensitive lands.

This would entail:

- 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.

3.2.2 Provide Incentives to Create an Environmental Farm Plan

Farmers can adopt a wide variety of measures to enhance ecological services on their lands. Some of these measures should be introduced in the context of Environmental Farm Plans.

There are seven Environmental Farm Plan programs across the country, in Alberta, Ontario, Quebec and each of the Atlantic provinces. Under these programs, farmers voluntarily prepare a plan that identifies areas of environmental concern and sets goals for improvement, often in return for a financial incentive. Participants in Ontario, for example, receive a cash transfer of up to \$1,500 per farm business to support the implementation of new management practices. As of May 30, 2001, approximately 20,000 farm families were participating in the program.¹

The federal government's Agricultural Policy Framework is seeking to enhance the use of Environmental Farm Plans, although delivery of related programs would remain with local organizations. Additional fiscal incentives for farmers could be linked to the adoption and implementation of Environmental Farm Plans and their equivalents.

Recommendation 5: That Agriculture and Agri-Food Canada and Finance Canada, in partnership with provincial governments as appropriate, introduce a suite of specific incentives for landowners through Environmental Farm Plans or their equivalents, including:

- accelerated capital cost allowance claims on conservation equipment, such as flushing bars, fencing, and watering and manure management facilities; and
- cost sharing for capital improvements and equipment related to conservation objectives.

3.2.3 Create a National Sustainable Tourism Strategy

New long-term measures are needed to ensure that communities benefit from conservation. Tourism provides one way for rural, resource-dependent, remote (R3) communities to maximize the economic benefits of living near protected areas.

Tourism strategies are typically based on local knowledge and the unique ecology, history and culture of the local landscape. For example, an advisory committee struck by the Minister of Canadian Heritage in 1996 recommended the development of a heritage tourism strategy for the entire Banff–Bow Valley area. The Banff/Lake Louise Tourism Bureau subsequently organized a Heritage Working Group composed of high-level representatives from the public and private sectors.

Other such communities could use similar strategies. However, there is currently no national framework to support the development or promotion of these strategies.

Recommendation 6: That \$5 million be provided to Canadian Heritage and partners such as the Tourism Industry Association of Canada and community representatives to develop a national sustainable tourism strategy to enhance the economic benefits associated with protected areas for local communities.

3.2.4 Ensure Meaningful Aboriginal Consultation in Large Project Proposals

Consultations relating to major non-renewable resource projects in the North, such as diamond mines and pipelines, place tremendous demands on all participants. These projects are by their very nature complex and controversial. Consultation begins at the early planning stages and continues throughout the project review and regulatory processes and into the operational phase. Many of the consultation processes for these projects go far

¹ Ontario Crop and Soil Improvement Association Web site (www.ontariosoilcrop.org/EFP.htm).

beyond direct participation in environmental assessment hearings and therefore do not qualify for intervenor funding.

These consultation processes threaten to overwhelm Aboriginal organizations and governments. For instance, ongoing access to expertise in a variety of areas is essential if they are to understand and respond to the large volume of technical material contained in project applications. All of these demands come on top of the routine matters that have, in many cases, already stretched Aboriginal governmental capacity to the limit.

Major projects are vitally important to non-renewable resource development in the North. The NRTEE is concerned that existing core resources are insufficient to support the consultation effort required for these projects.

Recommendation 7: That a \$15-million Large Projects Consultation Fund be created to facilitate participation by Aboriginal governments and organizations in consultations for large non-renewable resource development projects in the three northern territories. This funding should be made available before intervenor funding is provided under any relevant environmental assessment or regulatory process.

3.2.5 Support Cumulative Effects Management for the Northwest Territories

Although the environmental regulation of non-renewable resource projects in the North has improved, the challenge of addressing the cumulative effects of multiple non-renewable resource projects and related activities remains. Whereas the effects of an individual mine or natural gas resource project may be acceptable, 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 for the Northwest Territories. The purpose of this 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."²

Although the Cumulative Effects Assessment and Management Framework initiative has received some funding from the federal government, long-term funding has yet to be secured.

Recommendation 8: That \$25.8 million be allocated over six years to continue implementing 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.

3.2.6 Support the Mackenzie Valley Environmental Impact Review Board

Given the projections of rapid development of non-renewable resources over the next 25 years, a strong regulatory framework is urgently needed for the Northwest Territories.

Although the integrated regulatory and resource management regime created under the *Mackenzie Valley Resource Management Act* is a good first step, the NRTEE 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.

For the Mackenzie Valley Environmental Impact Review Board, building capacity is a precondition to

² NWT Cumulative Effects Assessment and Management Working Group, *CEAM Framework Work Plan Summary*, Yellowknife, April 2000, p. 3.

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 9: That the Mackenzie Valley Environmental Impact Review Board be provided with a five-year funding commitment of at least \$2.2 million per year.

Natural Capital in Rural and Aboriginal Communities			
Measure	Estimated Cost	Implementing Agency	Purpose and Benefits of Measure
4. Enhance the Ecogifts Program		Finance Canada	Expand the program to remove the remaining capital gains tax on gifts of land, and include donations of land held in business inventories. Encourages landowners to donate ecologically sensitive lands to charitable land trusts
5. Working with provincial governments, introduce a suite of specific incentives for landowners through Environmental Farm Plans		Agriculture and Agri-Food Canada Finance Canada	Provide incentives to landowners to purchase equipment related to conservation objectives
6. Fund partnership between Canadian Heritage and the Tourism Industry Association of Canada to develop a national sustainable tourism strategy	\$5 million	Canadian Heritage	Maximize opportunities from sustainable tourism
7. Create a Large Projects Consultation Fund for northern Aboriginal communities	\$15 million	Indian and Northern Affairs Canada	Provide resources to allow Aboriginal communities to fully participate in the consultation process. Ensure that concerns of Aboriginal communities are addressed in large project proposals at the pre-intervenor stage
8. Support the development and implementation of a cumulative effects management framework for the NWT	\$25.8 million over 6 years	Indian and Northern Affairs Canada	Enable planning to avoid unforeseen cumulative impacts of resource development activities
9. Provide stable funding for the Mackenzie Valley Environmental Impact Review Board	\$2.2 million per year over 5 years		Ensure decisions regarding development activities account for all relevant considerations

4. Protecting Natural Capital in Urban Communities

4.1 The Importance of Natural Capital to Urban Well-Being

Through initiatives such as the Prime Minister's Caucus Task Force on Urban Issues, the federal government has recognized the need to play a stronger role with respect to municipalities. As the government's 2002 Throne Speech emphasized, "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." These issues are becoming increasingly important as our population becomes more concentrated in urban centres, and as cities play an ever-growing role in driving the Canadian economy.

The linkages between the quality of urban natural capital, economic performance and social well-being are numerous. A city's local natural capital in the form of air and water quality, as well as the impact of contaminated sites, can have a profound impact on the health and quality of life of its residents, on its ability to attract and retain businesses and well-qualified workers, and on regional and national economic prosperity.

Cities also influence the state of Canada's natural capital outside their boundaries. Their large, concentrated populations require constant infusions of energy, water and materials. Urban expansion can lead to a loss of prime agricultural lands and sensitive areas. It has been estimated, for example, that redeveloping a hectare of urban brownfields can save at least 4.5 hectares of greenfields from being developed in outlying areas. Greenhouse gas emissions from automobile and energy use demonstrate that some urban environmental impacts are global in nature.

In many cases, maintaining natural capital in urban areas implies the improvement of municipal

infrastructure and the creation of a more compact and energy-efficient urban form. In other words, improving natural capital in cities necessitates improving the quality of their produced capital (e.g., water treatment plants, transit systems, buildings).

The NRTEE's report on urban environmental quality shows that federal fiscal policy, by helping to shape transportation, energy use and development decisions, already has an important influence on the natural capital of cities. However, in most cases this influence is unintended. The recommendations included in this submission are a first step toward creating a cohesive federal approach to improving environmental quality and natural capital in urban areas.

One urban issue that has received particular attention from the NRTEE is the redevelopment of brownfields, an area where the NRTEE has developed a detailed national strategy. This strategy was requested by the federal government in its 2001 budget.

Brownfields are vacant 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. Although the exact number is unknown, the NRTEE has estimated that there may be as many as 30,000 brownfield sites across Canada.

The benefits of brownfield redevelopment are numerous. Remediating contaminated sites can help protect human and environmental health (particularly in adjacent areas). Moreover, brownfield remediation opens these sites for economic use and saves a comparable greenfield (which may be on agricultural or ecologically sensitive land). The result is a more efficient urban form that reduces urban

sprawl and traffic, with its associated air pollution and greenhouse gas emissions.

4.2 Budget Recommendations

The recommendations in this section stem from two recent NRTEE reports: *Environmental Quality in Canadian Cities: The Federal Role* (released in May 2003) and *Cleaning Up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada* (released in February 2003).

Environmental Quality in Canadian Cities focused on the need to create a coherent approach for how the federal government uses fiscal levers to improve environmental quality in cities. One of the key themes of the report was the need for greater horizontal and vertical integration of fiscal policies that affect urban decision making. It also made specific recommendations to promote various aspects of urban environmental quality, including recommendations on:

- funding and encouraging the use of urban transit;
- promoting energy-efficient buildings and community energy systems;
- supporting sustainable urban development patterns (or urban form); and
- promoting sustainable municipal infrastructure.

Many of these recommendations are included in this submission.

The measures proposed in this section complement the climate change initiatives announced by the federal government on August 12, 2003. The federal spending announced then will contribute to initiating or expanding a variety of programs that will develop and increase the use of greenhouse gas reduction technologies. Several of the recommendations in this submission propose fiscal tools (e.g., GST rebates) that will create positive market signals to provide further incentives to disseminate these technologies.

The second report, on the NRTEE's National Brownfield Redevelopment Strategy, included recommendations in three areas:

- the need for strategic public investment – tax incentives, loans, grants and mortgage guarantees – to overcome market reluctance to provide capital to finance the early stages of brownfield redevelopment;
- the need for all levels of government to work together to improve the regulatory environment for brownfield redevelopment by introducing predictability and consistency with regard to the liability regime and the post-remediation evaluation process; and
- the need to raise stakeholder awareness of the benefits of brownfield redevelopment and increase brownfield redevelopment capacity by promoting innovation in the area of remediation technology.

Most of the fiscal recommendations in this submission address the first area: the lack of available capital, which 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. For this reason, the NRTEE is making several recommendations to address the lack of capital at various stages of the brownfield redevelopment process. No single type of financial assistance can address all of the problems facing brownfield properties, and different policy instruments will be needed for different participants and different brownfield sites.

It should be noted that the measures included in this Greening of the Budget submission to address upfront financing are part of an integrated strategy to address the barriers to brownfield redevelopment and, as such, are highly interdependent. Issues of liability and stakeholder awareness must also be addressed by all levels of government.

4.2.1 Encourage the Use of Urban Transit

Air quality is one of the key types of natural capital affected by urban communities. Like urban areas around the world, 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. Transportation accounts for 35% of Canada's end-use greenhouse gas emissions, and more than 40% of this amount comes from private passenger transportation.³

Greater use of urban transit could contribute significantly to achieving Canada's greenhouse gas reduction targets under the Kyoto Protocol, while also reducing air pollution and traffic congestion in urban areas. For example, compared with a single-occupant car, greenhouse gas emissions from a transit bus are 65% lower per passenger kilometre, while quantities of pollutants released are between 25% and 90% lower.⁴

Despite the obvious benefits of urban transit in helping to reduce greenhouse gas emissions and improve air quality, Canada is the only G8 country without a national program to finance transit projects. The federal government recognizes that this must change. In its latest Throne Speech, the government promised to address the issue of sustainable urban transit as part of its 10-year commitment to upgrading urban infrastructure.

Recommendation 10: That \$1 billion a year be invested 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 NRTEE also recommends that the federal government adopt sustainability criteria for current and future transit programs to ensure that the funds dedicated to improving urban transit also promote sustainable urban growth.

4.2.2 Provide a Tax Exemption for Employer-Provided Transit Passes

At present, the *Income Tax Act* indirectly promotes the use of private vehicles over transit. While the *Act* designates both employer-provided parking and transit passes as taxable income, a range of loopholes makes it easier to avoid paying tax on parking than on transit passes, even though taking transit generally benefits the public. For example, if an employer provides open parking rather than spaces dedicated to particular employees, the parking space is not considered a taxable benefit. 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 11: That, to promote the use of urban transit, the *Income Tax Act* be amended to make employer-provided transit passes a tax-exempt benefit.

4.2.3 Expand the Use of Community Energy Systems

Community energy systems provide shared heating and cooling steam or electricity to groups of residential or commercial buildings in close proximity to one another. 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 tonnes per year; oxides of nitrogen reduced by 13 tonnes per year; and carbon dioxide (a major greenhouse gas) reduced by 9,851 tonnes per year.⁵

3 Natural Resources Canada, *End-Use Energy Data Handbook*, 1990–2000, June 2002.

4 Noxon Associates, *At the Crossroads – Towards a Federal Vision for Urban Transit*, May 2001.

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

Although they are 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 to recoup their 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 12: That, to promote investment in community energy systems, Class 43.1 of the *Income Tax Act* regulations be amended to allow all capital investments related to a community energy system to be eligible for an accelerated capital cost allowance.

4.2.4 Offer a GST Rebate for Eco-Efficient Renovations

Older homes are much less energy-efficient than new homes. For example, a typical 1950s 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 houses to be more energy-efficient. 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 to add

rental space typically receive no break on their GST payments.

Recommendation 13: That the *Excise Tax Act* be amended 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 energy-efficient products in each category eligible for the GST rebate.

As well, the *Excise Tax Act* should provide a rebate of 36% of the GST incurred for costs associated with renovations to create a self-contained apartment unit in an existing house.

4.2.5 Encourage the Purchase of New Homes Built to the R-2000 Standard

The R-2000 home program is well established and internationally recognized. Yet even though R-2000 homes consume 30% less energy than conventional new homes, they represent only about 3% of new units.⁷ This is partly because an R-2000 home is slightly more expensive to purchase than a conventional new home. Although they cost less to operate and therefore offer long-term savings, R-2000 homes are an estimated 2% to 4% more expensive than conventional new homes.⁸

Recommendation 14: That the existing 36% new housing GST rebate be increased to 50% for R-2000 homes. This additional rebate would represent 25% to 50% of the estimated R-2000 cost premium.

4.2.6 Eliminate the GST on Green Municipal Infrastructure

A key to improving the environmental quality of cities is to remedy the green infrastructure deficit in

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

7 National Climate Change Program, *Buildings Table Options Report, Residential Sector*, final report prepared by Marbek Consultants in association with Sheltair Scientific and SAR Engineering, revised November 15, 1999.

8 Ibid.

urban areas – a view echoed in the latest Throne Speech. Over the last few decades, municipal 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 address this deficit. The 2000, 2001 and 2003 federal budgets all allocated municipal infrastructure funds. However, one of the fiscal inconsistencies identified by the NRTEE is that while the federal government already 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. For example, the Toronto Transit Commission estimates that since the introduction of the GST it has remitted \$130 million to the federal government.⁹

Recommendation 15: That the GST rebate for eligible green infrastructure projects be increased to 100%. This action would underline the federal government's commitment to investing in green infrastructure. 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.

4.2.7 Develop New Sustainability and Competitiveness Criteria for Federal Infrastructure Programs

The federal 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 place a priority on projects that will make substantial contributions to improved environmental quality in a cost-effective manner.

Recommendation 16: That practical, performance-based criteria be adopted for current and future infrastructure programs that ensure that federal funds dedicated to improving urban infrastructure also promote urban environmental quality. The NRTEE recommends that these criteria include the submission of a Sustainable Community Investment Plan that shows:

- how the proposed infrastructure investment fits into a comprehensive, longer-term investment plan for improving urban environmental quality;
- how existing infrastructure capacities have been or will be fully exploited;
- how all options for jointly addressing infrastructure needs with surrounding municipalities or other relevant entities have been explored and fully exploited;
- a comprehensive approach to managing the demand for the infrastructure (e.g., for transportation infrastructure, a transportation demand management plan is required; for water-related projects, a metering program);

⁹ Toronto Transit Commission, "TTC seeks court declaration to be exempt from GST," news release, June 21, 2002 (www.newswire.ca/releases/June2002/21/c8948.html).

- that a range of alternative options for solving infrastructure needs – including other types of infrastructure – have been explored;
- a life-cycle costing analysis of the proposed project and alternatives;
- financial contributions and roles of other partners, including provincial governments, municipal governments, other agencies and the private sector; and
- a quantification of the expected environmental improvements, in terms of air, water or soil quality, of the proposed project and the alternatives.

4.2.8 Examine Eco-Efficient Mortgages

One way to improve urban environmental quality is to make urban development patterns more compact and use already-urbanized areas more efficiently. These changes could reduce car travel, energy use and greenhouse gas emissions, while supporting other initiatives in this budget submission, such as increased use of transit and expanded use of community energy systems.

Buying housing in already-urbanized areas is typically more expensive than buying new housing in greenfield areas. 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. Households with fewer or no cars may therefore be able to carry a higher amount of mortgage principal.

Conventional mortgage lending practices do not take this factor 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. In so doing, LEMs support reinvestment in downtown and older suburban areas, redevelopment of brownfields, increased use of transit and more efficient use of existing municipal infrastructure.

Other jurisdictions are currently exploring LEMs as a tool to promote urban core regeneration. For example, the U.S. government is currently piloting a two-year, \$100-million project to test LEMs in select U.S. cities.

“Green mortgages” are similar to LEMs, but these mortgages take into account the potential reductions in monthly expenses resulting from energy efficiency measures such as purchasing energy-efficient heating or appliances, participating in community energy systems or purchasing an R-2000 home.

Recommendation 17: That the Canada Mortgage and Housing Corporation conduct research on the potential contribution of eco-efficient mortgages (including location-efficient mortgages and green mortgages) to more efficient use of land in Canada. If research results warrant, this would lead to a pilot project. Then, if pilot project results warrant, a wider eco-efficient mortgage program involving the financial sector would be pursued.

4.2.9 Provide Upfront Deductibility of Brownfield Remediation Costs

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, and recovering these costs can often take years.

The *Income Tax Act* adds to this barrier by forcing developers remediating brownfield sites to treat their investments as upfront capital costs rather than as expenses deductible against annual income. For developers this means that the costs incurred can be deducted only from the income generated by the redeveloped site, which typically will not be realized for several years.

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. Doing the same for brownfield redevelopment will create environmental and social, as well as economic, benefits.

Recommendation 18: That, in recognition of the significant upfront costs associated with brownfield remediation, sections 18 and 20(1) of the *Income Tax Act* be amended 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.

4.2.10 Implement a Brownfield Redevelopment Current Deduction and Investment Tax Credit

A second way to reduce the burden of upfront remediation costs is to create a Brownfield Redevelopment Current Deduction and Investment Tax Credit. Under this mechanism, qualifying remediation costs would be classified as deductible business expenses that could be carried forward and would be eligible for an investment tax credit. This option complements the recommendation proposed above, since such an incentive could be valuable to a party that does not earn positive taxable income in a year in which it incurs qualifying expenditures. If the tax credit was claimed, qualifying expenditure deductions made in computing income would then be reversed.

Such a tax credit would allow capital expenditures associated with remediating a brownfield site to be treated for income tax purposes in the same way that

eligible capital expenditures for scientific research and experimental development are treated. Under the *Income Tax Act*, scientific research and experimental development investment tax credits can be deducted from income when computing tax payable. In the case of small business corporations, this investment tax credit can be refundable up to a certain amount.

Recommendation 19: That a brownfield redevelopment current deduction and investment tax credit be established, which would be similar to the Scientific Research and Experimental Deduction Program's credit provision provided in sections 37 and 127 of the *Income Tax Act*.

4.2.11 Remove Federal Liens and Tax Arrears from Qualifying Brownfield Sites

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. Such properties are notoriously difficult to sell, however, because of the known or perceived contamination and the anticipated high costs of remediation. They are also often encumbered by outstanding federal and/or provincial Crown liens, which cannot be cancelled through municipal tax sale. Developing these sites is difficult, since the weight of back taxes and Crown liens can often destroy an otherwise sound redevelopment proposal.

This recommendation represents a highly cost-effective approach to providing financial assistance to brownfields, because it can be delivered for free (except for administration costs) to sites that may be of zero or very little worth to the government in the absence of any redevelopment.

The NRTEE proposes that all levels of government should forgive Crown liens and tax arrears for qualifying brownfield sites. Some provinces are currently considering developing a set of recognized criteria and protocols that would allow the removal

of all provincial liens from an orphaned site if a feasible redevelopment proposal was submitted for approval. This process would be more effective if clear and consistent criteria and processes were established across all government jurisdictions, so that developers and purchasers would know whether a particular site, wherever it might be located, was eligible for lien removal.

Recommendation 20: That federal liens and tax arrears be removed from qualifying brownfield sites. The federal government should also work with the provincial governments to develop criteria for removing Crown liens against brownfield properties.

4.2.12 Provide Mortgage Guarantees for Qualifying Brownfield Sites

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.

Government mortgage guarantees target the lack of access to capital from conventional sources, a market failure that arises when lenders have concerns over the reduced value of properties and collateral due to contamination. They also complement the tax changes and lien relief measures proposed above, because the impact of mortgage guarantees is likely to occur during the later, post-remediation stage, when the environmental status of the land is clear enough to attract loan financing from conventional sources.

In Canada, the Canada Mortgage and Housing Corporation (CMHC) has acted as a vehicle to enable higher-risk mortgage financing in the residential sector, as well as direct lending in certain circumstances. It would be possible, under its existing legislative mandate, for CMHC to provide mortgage insurance for brownfield redevelopment

sites, provided the underlying purpose of the redevelopment was to provide housing. Expanding the mandate of CMHC to cover all types of development, including commercial and industrial, would give even more impetus for private sector action.

Recommendation 21: That the Canada Mortgage and Housing Corporation be provided with funds to, under its current mandate, offer mortgage guarantees for brownfield redevelopment projects providing housing. The federal government should also expand the mandate of the Canada Mortgage and Housing Corporation to allow the corporation to provide mortgage insurance for residential, commercial and industrial development for qualifying brownfield sites.

4.2.13 Establish 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. In the United States, the Environmental Protection Agency's Brownfield Economic Redevelopment Initiative helped create and fund Brownfield Cleanup Revolving Loan Funds through cooperative agreements with states and municipalities to capitalize these revolving funds. 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.

Revolving loan funds are particularly well suited to those brownfield sites that are only marginally unprofitable to private developers, because they deliver a modest level of financial assistance in the form of reduced interest rates. These loans should be made available only to sites that meet criteria determining whether the projects contribute positively to the economic, social and environmental aspects of the community.

Recommendation 22: That the federal government endow a \$250 million revolving brownfield redevelopment fund to make low-interest loans available for certain brownfield redevelopment projects. Repayment proceeds from initial loans should be provided to other projects.

The revolving loan fund could be administered by the Federation of Canadian Municipalities, Canada Mortgage and Housing Corporation, Business Development Bank of Canada, or specific qualifying provincial or municipal agencies.

4.2.14 Provide Grants for Qualifying Brownfield Projects

Many municipalities are interested in redeveloping brownfield sites for such public uses 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.

Current funding models for municipalities (such as the Federation of Canadian Municipalities' Green Municipal Enabling Fund) could be adapted or expanded to accommodate the specific funding needs of brownfield redevelopment. Alternatively, a new grant funding program, involving all levels of government, could be established with criteria for site assessment and revitalization demonstration projects. In both cases, criteria should limit the availability of grants to municipalities and not-for-profit organizations (including properties remediated under the control of these entities) to target those sites where remediation is not market driven and where the site would not be redeveloped in any other case.

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 23: That the federal government 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.

4.2.15 Facilitate the Demonstration of Innovative Brownfield Remediation Technologies and Processes

Canada's national brownfield redevelopment strategy should support efforts to bring to market made-in-Canada brownfield remediation technologies and processes. These efforts should strive to provide an additional platform in support of Canadian innovation that complements programs already in place to promote the development, demonstration and commercialization of environmental technologies.

In Quebec and several other provinces, temporary approvals or temporary operating permits (certificates of approval) can be issued to technology vendors that want to demonstrate the validity of their technological claims and test the effectiveness of their processes. The concept could be extended to brownfields, with the assistance of funding programs such as Industry Canada's Technology Partnerships Canada program. Where environmental technology vendors are provided with the financial means to demonstrate their technologies and bring them to market, they should be granted access, through a formal process, to designated brownfield sites to test and perfect their proposed technologies and techniques.

The positive impact of such technology demonstration programs has been demonstrated by the Superfund Innovative Technology Evaluation (SITE) Program, operated by the U.S. Environmental Protection Agency for the past 13 years.

Recommendation 24: That \$5 million a year be provided to Technology Partnerships Canada to extend the program to include funding for the demonstration of remediation technologies on designated brownfield sites in Canada.

Natural Capital in Urban Communities
Energy Efficiency Measures for Transit and Buildings

Measure	Estimated Cost	Implementing Agency	Purpose and Benefits of Measure
10. Create stable and secure funding for urban transit	\$1 billion per year over 10 years		Encourage transit use by placing transit on more equal footing with private vehicles. Reduces greenhouse gas emissions and other air pollutants, reduces traffic congestion
11. Amend the <i>Income Tax Act</i> to make employer-provided transit passes tax-exempt	\$202–\$264 per new rider per year ¹⁰	Finance Canada	Encourage switch from private passenger transportation to urban transit. Reduces greenhouse gas emissions and other air pollutants, reduces traffic congestion
12. Allow capital investments for community energy systems to be eligible for an accelerated capital cost allowance		Finance Canada	Make investment in community energy systems more economically feasible. Reduces greenhouse gas emissions, improves energy efficiency, reduces air pollution
13. Extend the GST rebate available on the sale of new homes so it applies to renovations of existing homes that improve energy efficiency		Finance Canada	Encourage residential energy efficiency. Reduces greenhouse gas emissions, improves energy efficiency, reduces air pollution
14. Increase the GST rebate for R-2000 homes	\$13 million ¹¹	Finance Canada	Stimulate demand for energy-efficient new homes. Reduces greenhouse gas emissions, improves energy efficiency, reduces air pollution
15. Increase the GST rebate for municipal green infrastructure projects		Finance Canada	Stimulate municipal investment in green infrastructure. Reduces greenhouse gas emissions, improves water quality, improves wastewater discharge
16. Develop sustainability criteria for current and future infrastructure programs	No direct budgetary expenditure necessary	Infrastructure Canada	Ensure infrastructure development is designed to enhance urban environmental quality. Reduces greenhouse gas emissions, improves water quality, improves wastewater discharge
17. Fund research and a pilot project on eco-efficient mortgages	\$500,000	CMHC	Reduce demand for new greenfield housing by making existing urban housing stock more affordable. Reduces greenhouse gas emissions and other air pollutants, reduces traffic congestion

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

11 This assumes that the incentive would double the demand for R-2000 homes from 3% to 6%.

Natural Capital in Urban Communities Brownfield Redevelopment			
Measure	Estimated Cost	Implementing Agency	Purpose and Benefits of Measure
18. Allow remediation costs to be treated as deductible expenses in the year incurred	Some years this would result in a net cost; in others, a net saving	Finance Canada	Accommodate large upfront costs associated with brownfield redevelopment. Makes the redevelopment of brownfield sites more attractive vis-à-vis the development of greenfield sites. Reduces urban sprawl, improves air quality, reduces greenhouse gas emissions
19. Create a brownfield redevelopment current deduction and investment tax credit		Finance Canada	Accommodate large upfront costs associated with brownfield redevelopment
20. Remove federal liens and tax arrears from qualifying sites	Costs likely to be minimal	Revenue Canada	Allow for municipal tax sale and the eventual redevelopment of orphaned brownfield sites
21. Offer mortgage guarantees for brownfield redevelopment projects		CMHC	Leverage new private loan capital for brownfield remediation by reducing the risks associated with lending to these projects
22. Create a revolving loan fund for brownfield redevelopment	\$250 million		Ensure access to capital at market rates for those brownfield redevelopers without access to private capital. Revolving nature of fund allows repayment proceeds to be directed to rural redevelopment projects at more favourable rates
23. Grant funding for certain brownfield redevelopment projects (e.g., those developed for public use by municipalities or not-for-profit organizations)		FCM	Provide upfront capital for municipal redevelopment projects without access to private capital
24. Increase funding for Technology Partnerships Canada to demonstrate new remediation technologies	\$5 million per year	Industry Canada	Facilitate innovation in brownfield remediation technology. Promotes Canada as a world leader in brownfield remediation technology; demonstrates success of emerging remediation technologies