

STATE OF CANADA'S BROWNFIELD REDEVELOPMENT INDUSTRY

A Review of Canada's Progress in Response to the National Round Table on the Environment and the Economy's 2003 National Brownfield Redevelopment Strategy

Prepared for:

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March 31, 2008

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LIST OF ACRONYMS

AUMA	Alberta Urban Municipalities Association
CBN	Canadian Brownfields Network
CCME	Canadian Council of Ministers of the Environment
CIP	Community Improvement Plan
CMHC	Canada Mortgage and Housing Corporation
CPPI	Canadian Petroleum Products Institute
CREA	Canadian Real Estate Association
CUI	Canadian Urban Institute
ECO Canada	Environmental Careers Organisation Canada
ESSA	Environmental Services Association of Alberta
FCSAP	Federal Contaminated Sites Action Plan
FCM	Federation of Canadian Municipalities
GMF	Green Municipal Fund
LEED ND	Leadership in Energy and Environmental Design – Neighbourhood Development
MCEBR	Montreal Centre of Excellence in Brownfield Rehabilitation
NBA	National Brownfields Association
NRTEE	National Round Table for the Environment and the Economy
OBIP	Ontario Brownfield Innovation Partnership
OCE	Ontario Centres of Excellence
OCETA	Ontario Centre for Environmental Technology Advancement
PIRI	Partnership in RBCA Implementation
RBCA	Risk-Base Corrective Actions
RSC	Record of Site Condition
SDTC	Sustainable Development Technologies Canada
TIF	Tax Increment Financing
USEPA	United States Environmental Protection Agency

EXECUTIVE SUMMARY

In 2003, the National Round Table on the Environment and the Economy (NRTEE) released the report "Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada. The NRTEE Brownfield Strategy was presented as a realistic, practical and innovative blueprint for action on Brownfield redevelopment in Canada. The strategy encouraged the public sector (federal, provincial, territorial and municipal) to take a leadership role to address the barriers to Brownfield redevelopment.

The Ontario Centre for Environmental Technology Advancement (OCETA), on behalf the Canadian Brownfields Network (CBN) and in collaboration with the NRTEE conducted a market research study to identify the actions that have been undertaken in response to the recommendations in the NRTEE Brownfield Strategy including initiatives and activities since 2003, current market leaders and relevant barriers.

Information was obtained by researching select internet websites and relevant reports and by conducting a telephone survey that targeted over 40 key stakeholders including NRTEE Task Force Members, and others from government and industry.

The key findings that were identified from the market research study include the following:

1. The NRTEE Brownfield Strategy has been well-received by both the public and private sector and has been used as a key guidance document regarding what is needed to remove the barriers to Brownfield redevelopment.
2. The definition of "brownfields" used by NRTEE has become recognized as the industry standard however, this definition has often been modified to meet the particular needs of various regions or sectors.
3. There has been a reprioritization regarding the important barriers identified by the NRTEE as well as the addition of new barriers that are considered to be an impediment to redevelopment in Canada.
4. Effective communication and cooperation between the public and private sectors has played a major role in the development of successful brownfield strategies. The importance of private sector engagement should be stressed at all levels of government.
5. It is important that all levels of government work together to coordinate their approaches in order to remove barriers and improve the brownfields redevelopment process.
6. Brownfield redevelopment is directly linked to reducing greenhouse gas emissions and act as a catalyst in creating revitalized sustainable communities. Brownfields should be an important component of government policy objectives in the areas of climate change and sustainable communities.
7. Barriers to brownfield redevelopment are often inter-related and by removing one barrier, there can be a positive impact on other barriers.

The findings from this preliminary study, which included a small number of stakeholder surveys and consultations, have indicated that considerable action has been taken in Canada since the release of the NRTEE Brownfield Strategy in 2003.

It appears that the NRTEE Brownfield Strategy played a significant role in motivating brownfield redevelopment in Canada but further research is required to identify key areas that would continue to motivate the Canadian brownfield redevelopment industry.

1 INTRODUCTION AND BACKGROUND

In 2003, the National Round Table on the Environment and the Economy (NRTEE) released the report "Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada. The NRTEE Brownfield Strategy was presented as a realistic, practical and innovative blueprint for action on Brownfield redevelopment in Canada. The strategy encouraged the public sector (federal, provincial, territorial and municipal) to take a leadership role to address the barriers to Brownfield redevelopment. As stated in the NRTEE Brownfield Strategy, "public sector-led initiatives are central to efforts aimed at overcoming the market barriers and in particular those of bridge financing and uncertainty around liability". The strategy proposed action by the public sector in three strategic areas:

1. Apply Strategic Public Investment to Address Upfront Costs;
2. Establish an Effective Public Policy Regime for Environmental Liability and Risk Management;
3. Build Capacity for and Community Awareness of Brownfield Redevelopment.

Within each of these strategic areas, key recommendations and associated public sector responsibilities were identified to assist Canada in transforming urban and rural Brownfield sites to productive community assets.

During the development of the NRTEE Brownfield Strategy, the NRTEE recognized that progress was already being made in a number of Canadian communities and provinces. The National Strategy attempted to build on these successes and identify gap areas where strong public sector leadership, in collaboration with the private sector and community organizations, was required to address the barriers to brownfield redevelopment in Canada.

Five years have now past since the release of the NRTEE Brownfield Strategy and the NRTEE is interested in identifying the impacts that the Strategy has had on the Canadian brownfield redevelopment industry. The Ontario Centre for Environmental Technology Advancement (OCETA), on behalf the Canadian Brownfields Network (CBN) and in collaboration with the NRTEE, conducted a market research study to identify the actions that have been undertaken in response to the recommendations in the NRTEE Brownfield Strategy including initiatives and activities since 2003, current market leaders and relevant barriers.

2 PURPOSE OF THE STUDY

The major objective of this market research study was to compare the recommendations in the NRTEE Brownfield Strategy to the actions that have been undertaken since 2003 by both the public and private sector. OCETA carried out the following deliverables for the study:

- Review of public and private sector internet websites and relevant literature to compile a list of actions; and
- Survey of key stakeholders to identify progress made in relation to the NRTEE Brownfield Strategy and to provide a brief update on the current state of the Canadian brownfield redevelopment industry.

In NRTEE's role as a "catalyst in identifying, explaining and promoting in all sectors of Canadian society and in all regions of Canada, principles and practices of sustainable development", the market research study provides the NRTEE with information on the impacts of the NRTEE Brownfield Strategy including influences to public policy and private sector investment in brownfield redevelopment.

This study is not intended to be a comprehensive review but rather a "snapshot" of the progress that has occurred in response to the work carried out by the NRTEE on brownfield redevelopment in Canada. If the findings from this study, which involved selective stakeholder consultations, indicate that considerable

action has been taken in Canada, it may be useful to conduct a more extensive study with broader stakeholder consultations across Canada to identify the range and impact of public and private sector initiatives on brownfield redevelopment.

3 METHODOLOGY

The market research study focused on actions taken by both the public (national government-based organizations, and federal, provincial, territorial, regional and municipal governments) and the private sectors in response to the recommendations in the NRTEE Brownfield Strategy and provided an opportunity to gather comments and feedback on the current state of the Canadian brownfield redevelopment industry. In particular, the study identified:

- Whether the NRTEE definition for brownfields is commonly being used by the public and private sector;
- Whether a National Brownfield Redevelopment Strategy has been developed and implemented;
- The allocation of strategic investments to address upfront costs;
- Efforts to establish an effective regime for environmental liability and risk management;
- Capacity building activities that encourage brownfield redevelopment;
- The role that the NRTEE Brownfield Strategy played in motivating change; and
- The current market failures or barriers to brownfield redevelopment.

Information was obtained by researching select internet websites and consulting relevant reports such as a recent internal report by Infrastructure Canada, and by conducting a telephone survey that targeted over 40 key stakeholders including the NRTEE Task Force Members, and others from government and industry. A copy of the survey is provided in Appendix A and a complete list of the organizations contacted for the survey is provided in Appendix B.

A total of fifteen survey responses were obtained and included the following organizations: Province of Ontario, Province of Quebec, Province of British Columbia, Canadian Federal Government, Kilmer Brownfield Equity Fund (Private Equity Firm), Royal Bank of Canada, L and A Concepts, Miller Thompson LLP, City of Brantford, Cement Association of Canada, Municipal Consultant for the Territories, Federation of Canadian Municipalities, Trammell Crow Company, Canadian Petroleum Products Institute, and Canadian Real Estate Association.

An overview of the study findings is provided in the following sections and is presented using the headings from the survey.

The Summary of Actions Taken in the Canadian Brownfield Redevelopment Industry (Appendix C) compares the information gathered to the specific recommendations identified in the Strategy.

4 BROWNFIELD DEFINITION

The NRTEE Brownfield Strategy defined brownfields as “abandoned, idle or underutilized commercial or industrial properties where past actions have caused known or suspected environmental contamination, but where there is an active potential for redevelopment”.

The survey respondents agreed that this definition is still recognised by the public and private sector as a good generic definition for brownfield sites however, few organizations use it verbatim. Stakeholders vary the definition of brownfields based on their specific needs.

The private sector tends to focus on brownfields that are located in urban areas where the potential for redevelopment is high. Brownfields are defined as contaminated sites where there is a potential for “value creation”. These sites are commonly found in urban centres with high land values or market drivers which

frequently result in a remediated property value that is greater than the cost of the remediation and therefore encourages redevelopment. Private sector organizations describe brownfield sites with redevelopment potential in terms of ending their current life cycle and starting a new life cycle through the creation of an alternate end-use.

Provincial governments such as Ontario, as well as many municipalities, often include small urban and rural sites in their brownfield definition because they want to encourage the redevelopment of under-utilized sites in all communities. Governments tend to focus on areas such as rural and small urban communities that are not in "growth mode" where they often do not have the same market forces driving development as larger urban centres. Provincial and municipal governments are recognizing that the redevelopment of one brownfield site can have a "big footprint" in terms of creating redevelopment potential in an area. To assist in motivating redevelopment, municipalities are creating flexible, practical and unique brownfield definitions that are based on local policies and programs.

Brownfield sites are often thought to be the legacy of industrial and commercial uses but both the private and public sectors may include institutional uses such as a military facilities and hospitals in their definition.

Municipalities in urban centres may be concerned with labelling sites as brownfields because of the negative stigma surrounding the terminology and often refer to these properties as community improvement sites within a designated community improvement area.

Respondents agreed that the number of brownfield sites can increase or decrease based on the definition used making it difficult to develop an inventory of Canadian brownfields.

5 DEVELOPMENT OF A NATIONAL BROWNFIELD REDEVELOPMENT STRATEGY

The survey respondents were not aware of any efforts to develop a National Brownfield Redevelopment Strategy but did note that provincial governments are now participating in the recently established Intergovernmental Forum on Brownfields.

Each survey respondent agreed that communication between the public and private sector has improved significantly in many provinces through stakeholder engagement mechanisms and public-private sector initiatives. When this collaboration has been formalized through initiatives such as the Ontario Brownfields Stakeholder Group it has resulted in more effective communication on policies and initiatives to promote brownfield redevelopment. Several survey respondents stated that effective public and private sector communication actually resulted in an improved and streamlined brownfield redevelopment process.

There did not appear to be any current initiatives to create a Federal Coordinating Office as recommended by the NRTEE Brownfield Strategy. Several respondents from the private sector did state that they did not believe that federal intervention would improve the brownfield industry in Canada and that adding another layer of bureaucracy may create additional confusion and result in ineffective policies that do not address local concerns and situations.

The Canadian Brownfields Network (CBN) and the National Brownfields Association (NBA) were most commonly identified as national organizations that focused on brownfield redevelopment. However, a number of respondents noted that neither group have fully lived up to their "national" status, and reiterated the need for one unified, national organization.

6 STRATEGIC INVESTMENT TO ADDRESS UPFRONT COSTS

Recommendation 1.1: Implement Tax System Changes to Promote Brownfield Redevelopment

Recommendations	Actions Taken
1.1 Implement tax system changes to promote brownfield redevelopment	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia announced (2008) the development of a <i>Brownfield Renewal Strategy</i> that will include tax measures targeted towards brownfields. http://www2.news.gov.bc.ca/news_releases_2005-2009/2008AL0005-000259.htm - Alberta began to forego the education tax component of property taxes to allow municipalities to make use of TIF. (2005) http://www.york.ca/NR/rdonlyres/nfdoi2fybk4lhh7f7pvagy2zbhrc4b7bfxywke_x2563y2kz2jfkp5hiqtkgs3gisvnhghv3hn5q3p33ba3pdr5vg/Nov+3+tax+att+1.pdf - Ontario implemented a Brownfield Financial Tax Incentive Program. (2005) http://www.mah.gov.on.ca/Page5077.aspx - Ontario amended the <i>Planning Act</i> to allow municipalities to offer Tax Increment Grants and make exemptions on development permit fees. (2006) http://www.ontla.on.ca/library/repository/mon/18000/276269.pdf - Ontario introduced TIF on a pilot basis. (2006) http://www.fin.gov.on.ca/english/budget/ontariobudgets/2006/bk6.html

Recommendation 1.1 – Implement Tax System Changes to Promote Brownfield Redevelopment recommended the need to remove tax impediments such as allowing remediation and redevelopment expenses to be treated as a deductible expense. Based on the market research study, this recommendation does not appear to have been implemented by any level of government in Canada. However, several provinces and municipalities have developed alternate tax-based incentive programs to encourage the redevelopment of brownfields. In particular, the Province of Ontario made changes to the *Planning Act*, thereby allowing municipalities in Ontario to create Community Improvement Plans and Brownfield Strategies that target specific areas for redevelopment and offer Tax Increment Grants for a range of activities related to brownfield redevelopment. Both the Provinces of Ontario and Alberta have implemented Tax Increment Financing programs and will forego the education tax portion of property taxes to complement municipal brownfield incentives. The Province of British Columbia is also considering a number tax incentives and disincentives under its proposed *Brownfield Renewal Strategy* to attract investment in brownfield projects.

Recommendation 1.2: Remove Liens and Tax Arrears against Qualifying Brownfield Sites

Recommendations	Actions Taken
1.2 Remove liens and tax arrears against qualifying brownfield sites	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - NRTEE collaborated with the CBN to develop <i>A National Framework for Encouraging Redevelopment of Qualifying Brownfields through the Removal of Crown Liens and Tax Arrears</i>. (2005) http://www.nrtee-trnee.ca/eng/publications/brownfields-liens/section1-brownfields-liens-eng.html <p>Federal</p> <ul style="list-style-type: none"> - The Federal government has taken steps to allow the removal of liens and tax arrears on a case-by-case basis. <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - Saskatchewan's <i>Tax Enforcement Act</i> was amended in 2001 to allow municipalities to use the costs incurred for the cleanup of environmental contamination as justification for the discharge of tax liens. http://www.qp.gov.sk.ca/documents/English/Statutes/Statutes/T2.pdf - Ontario's <i>Municipal Statute Law Amendment Act</i> (2006) removes provincial crown liens where a municipality chooses to take ownership of a property after a failed tax sale. The Province will also remove liens from contaminated sites through negotiations. http://www.mah.gov.on.ca/Page223.aspx - The North West Territories will compensate municipalities for taxes in arrears on abandoned properties on a case-by-case basis. <p>Private Sector</p> <p>National</p> <ul style="list-style-type: none"> - NRTEE and the CBN delivered the <i>Strategic Solutions for the Removal of Liens and Tax Arrears on Brownfield Sites Workshop</i> in Ottawa in 2005. http://www.aboutremediation.com/evts/result.asp?track=vs&eventsess=396

Recommendation 1.2 – Remove Liens and Tax Arrears against Qualifying Brownfield Sites recommended that the Federal and provincial governments need to jointly develop principles and criteria for the removal of tax liens and arrears. The NRTEE collaborated with the CBN to develop *A National Framework for Encouraging Redevelopment of Qualifying Brownfields through the Removal of Crown Liens and Tax Arrears* in 2005. This framework was meant to act as a catalyst and assist in the development of legislation and regulations related to tax liens. While there appears to be a consensus regarding the value and usefulness of the removal of crown liens and tax arrears, relatively little progress has been made. The Federal government and several provinces will remove tax liens from contaminated sites on a case-by-case basis, however only the Province of Ontario has a formal process in place to remove crown liens and tax arrears from brownfield properties that have failed a tax sale.

Recommendation 1.3: Provide Mortgage Guarantees for Qualifying Brownfield Sites

Recommendations	Actions Taken
1.3 Provide mortgage guarantees for qualifying brownfield sites	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - CMHC began offering mortgage loan insurance to brownfield sites in Ontario in 2005 on a case-by-case basis and includes sites where property-specific standards have been used. This mortgage loan insurance is now available in other provinces. - CMHC partnered with Ontario's <i>Affordable Housing Program</i> to provide mortgage guarantees for non-profit groups involved in affordable housing redevelopment projects. (2006)

Recommendation 1.3 – Provide Mortgage Guarantees for Qualifying Brownfield Sites recognized that the lack of access to capital from conventional sources is a major barrier that could be addressed by the Canada Mortgage and Housing Corporation (CMHC) providing mortgage guarantees. CMHC has made some progress in providing mortgage guarantees within several provinces. In 2005 a Pilot Project was started in the Province of Ontario that offered mortgage loan insurance to brownfield sites on a case-by-case basis, including those where remediation to property-specific standards had been undertaken. This mortgage loan insurance is now available in other provinces as well. CMHC also played a role in Ontario's Affordable Housing Program by providing mortgage guarantees for non-profit groups involved in affordable housing redevelopment projects.

Recommendation 1.4: Provide Revolving Loans for Qualifying Brownfield Sites

Recommendations	Actions Taken
1.4 Provide revolving loans for qualifying brownfield sites	<p>Public Sector</p> <p>Federal</p> <ul style="list-style-type: none"> - The Federal government provided \$150 million to the GMF for a revolving fund for brownfields. (2005) http://sustainablecommunities.fcm.ca/GMF/GMF_History.asp <p>Private Sector</p> <ul style="list-style-type: none"> - Royal Bank of Canada and the Canadian Imperial Bank of Commerce have begun to offer lending and project finance products for brownfields.

Recommendation 1.4 – Provide Revolving Loans for Qualifying Brownfield Sites recommended that all levels of government participate in the offering of revolving loans for brownfield redevelopment projects. In 2005, the Federal government established a \$150 million revolving fund for brownfield projects through the Federation of Canadian Municipalities (FCM) Green Municipal Fund (GMF). Three GMF Brownfield Requests for Proposals have been issued to date by the FCM; October 3, 2005, May 10, 2006 and August 22, 2007. The Brownfield GMF Loan is currently available only to municipalities and, as a result, the majority of private developers find the process too long and onerous. FCM is evaluating the success of the Brownfield GMF Loan through a stakeholder consultation process and have re-designed the offer which is anticipated to be issued in the spring of 2008.

Increased awareness of brownfields and improved regulatory certainty has started to open up the brownfield redevelopment market. In particular, private lending institutions such as the Royal Bank of Canada and the Canadian Imperial Bank of Commerce have begun to offer lending and project finance products for brownfields.

Recommendation 1.5: Provide Grants for Qualifying Brownfield Sites

Recommendations	Actions Taken
<p>1.5 Provide grants for qualifying brownfield sites</p>	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - FCM's Green Municipal Fund provides grants to help cover the costs of feasibility studies and field tests that demonstrate the potential of projects to improve community sustainability, including brownfields redevelopment. http://sustainablecommunities.fcm.ca/GMF/ <p>Federal</p> <ul style="list-style-type: none"> - The Federal government created the \$33 billion Building Canada Fund (2007). It will provide funding for infrastructure priorities including brownfield redevelopment. http://www.buildingcanada-chantierscanada.gc.ca/funprog-progfin/target-viser/bcf-fcc/bcf-fcc-eng.html - The Federal government committed long-term funding of \$3.5 billion for federal contaminated sites plus \$500 million for shared-responsibility sites in 2004 as part of the Federal Contaminated Sites Action Plan (FCSAP). http://pwgsc.gc.ca/greening/text/sites-e.html - The Canada-Ontario Affordable Housing Program, created in 2005, is funding eight projects being built on cleaned up brownfield sites. http://www.mah.gov.on.ca/Page1112.aspx <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia announced (2008) the development of a <i>Brownfield Renewal Strategy</i> that will include grants for qualifying brownfields. http://www2.news.gov.bc.ca/news_releases_2005-2009/2008AL0005-000259.htm - Alberta introduced the Petroleum Tank Site Remediation Program to provide funding to assist in the remediation of underground storage tank sites (2000). A second program was introduced in 2006 targeting municipalities and owners that would have been eligible under the original program. http://www.municipalaffairs.gov.ab.ca/documents/New_applicant_application_package_3.pdf - Alberta amended the Municipal Government Act in 2005 to allow municipalities to offer a Community Revitalization Levy and other incentives. http://www.qp.gov.ab.ca/Documents/acts/M26.CFM - Manitoba announced a \$39 million plan to clean up contaminated sites across the province. (2007) http://news.gov.mb.ca/news/index.html?archive=week&item=1466 - Ontario amended the <i>Planning Act</i> in 2006 to allow municipalities to offer Feasibility Study Grants, Remediation Grants, and Municipal Fee Grants through CIPs. http://www.ontla.on.ca/library/repository/mon/18000/276269.pdf - Ontario provided \$11 million in 2007 to Hamilton, Cornwall, Brantford, St. Catharines, and the University of Ottawa for community brownfield projects. http://www.mah.gov.on.ca/Page4575.aspx - The Canada-Ontario Affordable Housing Program, created in 2005, is funding eight projects being built on cleaned up brownfield sites. http://www.mah.gov.on.ca/Page1112.aspx - Quebec implemented the Revi-Sols program from 1998 until 2006 to provide grants for brownfield redevelopment projects. http://communiqués.gouv.qc.ca/gouvqc/communiqués/GPQF/Septembre2004/22/c2621.html - Quebec launched the <i>ClimatSol Program</i> in 2007 to provide grants for brownfield redevelopment projects with a focus on climate change. http://www.mddep.gouv.qc.ca/Infuseur/communiqué.asp?no=1076 - Atlantic PIRI is developing a memorandum of understanding that will include the ability to offer brownfield incentives and other methods to promote brownfield redevelopment.

Recommendation 1.5 – Provide Grants for Qualifying Brownfield Sites recommended the need for all levels of government to provide a comprehensive grant funding program targeted to municipalities and non-profit organizations.

The Federal government has provided long-term funding for the cleanup for federally-owned and shared-responsibility contaminated sites under the Federal Contaminated Sites Action Plan (FCSAP) and has made funds available for intergovernmental redevelopment programs such as the Canada-Ontario Affordable Housing Program and the Building Canada Fund.

FCM's Green Municipal Fund (GMF) provides grants of up to \$350,000 to support municipal governments and their partners with feasibility studies and field tests that seek to demonstrate the potential of a project to improve the environmental effectiveness of municipal operations related to brownfields and other categories.

The Province of Quebec's Revi-Sol program, which was implemented in 1998, is one of the first and most successful brownfield grant programs established in Canada, resulting in the cleanup of over 300 sites. The subsequent program, ClimatSol was launched in 2007 and retains many aspects of the Revi-Sols program but also incorporates a focus on climate change.

Several other provincial governments have made funding available for limited remediation and redevelopment programs. The Province of British Columbia is planning to provide matching funding for sites with low redevelopment potential under their new *Brownfield Renewal Strategy*. The Province of Ontario provided \$11 million in 2007 to Hamilton, Cornwall, Brantford, St. Catharines, and the University of Ottawa for community brownfield projects.

Municipalities in the Provinces of Alberta and Ontario are also allowed to provide grants for certain redevelopment activities as a result of changes to provincial legislation in 2005 and 2006 respectively. Atlantic PIRI is currently examining the use of incentives and other means to promote brownfield redevelopment. Municipalities in New Brunswick and Prince Edward Island do not collect taxes and as a result an innovative incentive process must be developed.

In the north, municipalities will often receive technical and financial support from the Territory for remediation of brownfields, although there is no general policy regarding grants for qualifying brownfield sites.

7 ESTABLISHING AN EFFECTIVE PUBLIC POLICY REGIME FOR ENVIRONMENTAL LIABILITY AND RISK MANAGEMENT

Recommendation 2.1: Allow Binding Contractual Allocation of Liability

Recommendations	Actions Taken
2.1 Allow binding contractual allocation of liability	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - CCME developed a report entitled <i>Recommended Principles on Contaminated Sites Liability</i>. (2006) http://www.ccme.ca/assets/pdf/csl_14_principles_e.pdf <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia announced (2008) the development of a <i>Brownfield Renewal Strategy</i> that will provide greater flexibility in liability allocation. http://www2.news.gov.bc.ca/news_releases_2005-2009/2008AL0005-000259.htm - Ontario's <i>Regulation 153/04</i> states that a Record of Site Condition can be a condition of sale resulting in both parties receiving regulatory protection. (2004) http://www.ene.gov.on.ca/envision/land/decomm/condition.htm

Recommendation 2.1 – Allowing Binding Contractual Allocation of Liability recommended the need for provincial and territorial governments to develop a framework that permits binding contractual allocations of regulatory and civil liability among parties. There does not appear to be much action taken regarding the contractual allocation of liability in Canada. In the Province of Ontario, a Record of Site Condition can be a condition of sale resulting in both parties receiving some regulatory liability protection. However, one survey respondent indicated that the ability to flexibly manage liability has actually decreased as a result of changes in legislation. The Province of British Columbia is planning on providing enhanced flexibility in liability allocation under its new *Brownfield Renewal Strategy* and the New Brunswick Brownfield Liability Working Group recommended allowing contractual allocation of liability in its 2007 summary report.

Recommendation 2.2: Provide for Termination of Regulatory Liability

Recommendations	Actions Taken
2.2 Provide termination of regulatory liability	<p>Public Sector</p> <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia introduced Certificates of Compliance in 2004 which provide protection from future regulatory liability. http://www.qp.gov.bc.ca/statreg/reg/E/EnvMgmt/EnvMgmt375_96/375_96_00.htm - Manitoba's <i>Contaminated Sites Remediation Act</i> states that a municipality that takes responsibility of a site after a failed tax sale is not responsible for the remediation of the site. (1996) http://web2.gov.mb.ca/laws/statutes/ccsm/c205e.php - Ontario's <i>Regulation 153/04</i> provides protection against regulatory liability through the filing of a Record of Site Condition. (2004) http://www.ene.gov.on.ca/envision/land/decomm/condition.htm - Quebec amended the <i>Environment Quality Act</i> in 2003 to clarify regulatory liability allocation. http://www.heenanblaikie.com/fr/expertise/publications/item?id=426 - The New Brunswick Brownfield Liability Working Group was established in response to recommendations in the National Strategy. Their final report was produced in 2007 and is now being considered by the provincial government. http://www.atlanticrbc.com/eng/nb_working_g_brownfield.html

Recommendation 2.2 – Provide for Termination of Regulatory Liability recommended that the provinces and territories should establish legislation that clearly allows for the termination of all on-site and off-site

regulatory liabilities. Several provinces have taken steps to reduce and clarify regulatory liability risk since the release of the NRTEE Brownfield Strategy. The Provinces of British Columbia and Ontario have implemented tools that provide limited protection from regulatory orders, while in the Province of Quebec changes made to the *Environment Quality Act* in 2003 prevent the province from issuing any order against properties that have been remediated to generic standards. The Atlantic Provinces are currently considering the recommendations made by the New Brunswick Brownfield Liability Working Group in their final report. These steps have mainly targeted on-site liability. Atlantic PIRI is developing a recommendation for the Atlantic Provinces that includes the transfer of site responsibility to the Province once a Record of Site Condition is accepted and the creation of an assurance fund formed through contributions from industry to cover the remediation costs for any re-opened contaminated sites.

Recommendation 2.3: Provide for Termination of Civil Liability after a Limitation Period

Recommendations	Actions Taken
2.3 Provide for termination of civil liability after limitation period	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia's <i>Environmental Management Act</i> of 1997 protects municipalities that acquire contaminated sites involuntarily from civil liability unless the municipality subsequently contaminates the property. It also provides protection for site owners whose site was contaminated solely due to migration from another site as well as to secured creditor who do not cause an increase in contamination. http://www.env.gov.bc.ca/epd/remediation/fact_sheets/pdf/fs03.pdf - Manitoba's <i>Contaminated Sites Remediation Act</i> of 1996 exempts receivers, receiver-managers, and trustees from personal liability for pre-existing contamination when they have taken reasonable steps to prevent further contamination. http://web2.gov.mb.ca/laws/statutes/ccsm/c205e.php - In Ontario, new legislation protects municipalities from civil liability in instances where they relied on filed cleanup documentation. (2007) http://www.mah.gov.on.ca/www.mah.gov.on.ca/Page4586.aspx

Recommendation 2.3 – Provide for Termination of Civil Liability after a Limitation Period recognized that the market failures or barriers from civil liability required that provincial and territorial governments establish legislation allowing for termination of civil liability. The Provinces of British Columbia and Ontario have both extended civil liability protection to municipalities and in specific situations, civil liability protection may also be extended to owners, receivers, and trustees who have not caused an increase or change to the type or level of contamination found at the brownfield property. In the Province of Manitoba, the legislation exempts receivers, receiver-managers, and trustees from personal liability for pre-existing contamination. The majority of survey respondents stated that while civil liability protection for municipalities plays an important role in the acceptance of property-specific standards, it was the responsibility of the private sector to manage their own civil liability through the use of qualified professionals and insurance mechanisms.

Recommendation 2.4: Create an Insurance Fund for Post-Liability Termination Claims

Recommendations	Actions Taken
2.4 Create an insurance fund for post-liability termination claims	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - Alberta created the Upstream Oil and Gas Orphan Fund to pay for the clean up of orphan wells, pipeline abandonment, and other site reclamation activities. This was implemented before the NRTEE Brownfield Strategy was released and was last expanded in 2000. http://www.ercb.ca/docs/programs/Lmp/HistoryOrphanFund.pdf <p>Private Sector</p> <ul style="list-style-type: none"> - Insurance companies such as AIG have expanded their insurance and risk management resources for brownfield projects. (ongoing) http://www.aon.com/ca/en/about/aon_canada/news/arem.jsp

Recommendation 2.4 – Create an Insurance Fund for Post-Liability Termination Claims recommended that the provincial and territorial governments who have incorporated legislation to address post-remediation termination of regulatory and civil liability create an insurance fund. The majority of survey respondents felt that the creation of an insurance fund for post-liability termination claims was unnecessary and only benefited the original and present polluters and redevelopment companies that perform sub-standard work. These concerns contributed to the Province of Ontario deciding not to create an insurance fund and in retaining the “polluter pays” principle. There are certain sectors, such as the upstream oil and gas sector in the Province of Alberta, where abandoned sites pose a significant problem and a cleanup fund such as the Upstream Oil and Gas Orphan Fund can be beneficial.

Recommendation 2.5: Apply Site-Specific Assessment and Approvals Regime

Recommendations	Actions Taken
2.5 Apply site-specific assessment and approvals regime	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia has increased its emphasis on site-specific assessments through the development of tools such as the <i>Supplemental Guidance for Risk Assessments</i>. (2007) http://www.env.gov.bc.ca/epd/remediation/guidance/technical/pdf/tg07.pdf - Alberta developed a set of site-specific soil and groundwater guidelines in 2007. http://environment.gov.ab.ca/info/library/7752.pdf - Ontario introduced the <i>Record of Site Condition Regulation</i> in 2004 which allows the development of property-specific standards. http://www.ene.gov.on.ca/envision/gp/071907.php - Ontario is currently revising the Qualified Person program, defined in 2004 under Reg. 153, to help ensure that assessments done on contaminated sites are reliable and high quality. http://www.ene.gov.on.ca/envision/land/decomm/condition.htm - The Atlantic Canada provinces launched the Atlantic RBCA program in 1996 to streamline the use of property-specific standards. http://www.atlanticrbc.com/

Recommendation 2.5 – Apply Site Specific Assessment and Approval Regime recommended the need for the establishment of effective and scientifically current assessment regimes to enable site-specific assessment. The provinces across Canada are moving towards the use of site-specific assessments and approvals. In particular the Province of British Columbia and the Atlantic Provinces have been using risk-based approaches for over a decade while others, such as the Provinces of Ontario and Alberta, have made relatively recent changes to their approval regimes to include site-specific standards based on risk assessment. The results from the survey indicate that Atlantic RBCA is a recognised and streamlined

process, and generally viewed as a leading approach. Significant progress still needs to be made to ensure that the site-specific assessment and approvals regimes operate in an efficient and consistent manner. One of the main issues with using the risk assessment approach is that there are often serious process delays related to regulatory approvals in many jurisdictions.

Recommendation 2.6: Provide for Regulatory Approvals of Remediation

Recommendations	Actions Taken
<p>2.6 Provide for regulatory approvals of remediation</p>	<p>Public Sector</p> <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia introduced Certificates of Compliance in 2004 which provide protection from future regulatory liability. http://www.qp.gov.bc.ca/statreg/reg/E/EnvMgmt/EnvMgmt375_96/375_96_00.htm - British Columbia created the Contaminated Sites Approved Professional Society in 2006 to oversee professionals approved to work on contaminated sites. http://www.csapsociety.bc.ca/ - Alberta is currently developing regulations on Remediation Certificates that will provide closure from regulatory liability. (2008) http://www.ales2.ualberta.ca/rr/courses/encs455/docs/Regulatory_Overview.pdf - Manitoba Conservation will issue a closure letter, in accordance with the <i>Environmental Site Investigations Guideline</i> amended in 2002, confirming the completion of remediation work on a site and stating that no further remediation is required at the time. http://www.gov.mb.ca/conservation/envprograms/contams/standards/guideline-98-01-may02-2002.pdf - Ontario's Record of Site Condition (2004) must be filed by a Qualified Person and provides protection from regulatory orders with some exceptions. http://www.ene.gov.on.ca/envision/land/decomm/condition.htm - Quebec amended the <i>Environment Quality Act</i> in 2002 to develop a list of experts authorized to furnish certificates targeting land protection and rehabilitation. http://www.ceaeq.gouv.qc.ca/accreditation/experts/index_en.htm - New Brunswick relies on contaminated site professionals for the approval of remediation work. (1999) http://www.atlanticbca.com/eng/professional_nb.html <p>Private Sector</p> <ul style="list-style-type: none"> - OCETA developed and delivered the <i>Qualified Persons-Risk Assessment Training Session</i> on behalf on the Ontario Ministry of the Environment in 2007. - OCETA conducted a <i>Jurisdictional Review of Contaminated Site Qualified Persons Programs</i> in 2008. http://www.canadianbrownfieldsnetwork.ca/PDF/Jurisdictional_Review_of_Contaminated_Site_QP_Programs_PRESENTATION.pdf

Recommendation 2.6 – Provide for Regulatory Approvals of Remediation recommended the need for legislation in the provinces and territories that included the regulatory approval and acceptability of remediation efforts using site specific approaches. Provinces are increasingly relying on the use of qualified professionals for the approvals of remediation. The qualified professional plays a significant role in the execution of high-quality and consistent contaminated site work. Although the qualified professional programs vary between the various jurisdictions in Canada, the Provinces of British Columbia, Ontario, and Quebec, and the Atlantic Provinces, all have regulations in place that allow qualified professionals to approve work conducted on contaminated sites including site assessment and remediation.

The Province of Alberta is currently developing regulations on Remediation Certificates that will provide closure and protection from regulatory liability. Manitoba Conservation will issue a closure letter confirming the completion of remediation work on a site and stating that no further remediation is required at that time.

This system was implemented in 2002. Closure letters become null and void if the site use changes or if residual impacts cause a problem in the future. In 2004, the Province of Ontario introduced the Record of Site Condition (RSC) that summarizes the environmental condition of a property as of a particular date. The RSC provides protection from regulatory orders with some exceptions.

8 BUILDING CAPACITY FOR AND COMMUNITY AWARENESS OF BROWNFIELD REDEVELOPMENT

Recommendation 3.1: Increase Capacity to Undertake Brownfield Redevelopment Projects

Recommendations	Actions Taken
<p>3.1 Increase capacity to undertake brownfield redevelopment projects</p>	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - FCM has developed a number of tools and resources to build capacity including webinars and guidance documents. http://www.fcm.ca/ - The Canadian Real Estate Association published <i>Developing Brownfields – Information for Realtors</i> to increase the capacity of realtors to undertake brownfield redevelopment projects (2008) <p>Federal</p> <ul style="list-style-type: none"> - Industry Canada and Public Works and Government Services Canada have collaborated to deliver a series of regional workshops (Halifax, Montreal, Toronto, Banff) to increase awareness of how innovative technologies can meet the specific site remediation needs of federal contaminated site custodians (2007, 2008). http://strategis.ic.gc.ca/epic/site/ea-ae.nsf/en/ea02329e.html - FedNor and Environment Canada have supported the development and delivery of the <i>Brownfield Knowledge Workshop Series – Building Capacity for Redevelopment and Revitalization in Ontario</i> which were delivered by OCETA in 2006. - OCETA, with the support of Industry Canada, the Province of Ontario, CMHC, and other private sector stakeholders, has participated in Canadian Brownfield and Remediation Showcase Initiatives at the US EPA's Brownfields Conferences which focused on fostering networking opportunities and stimulated business development for Canadian companies. (2005, 2006, 2008) http://www.oceta.on.ca/brownfields-workshop/CAD-Showcase-Boston_06_Form.pdf <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - Senior provincial government staff from across the country are moving forward to establish the Intergovernmental Forum on Brownfields. http://www.mah.gov.on.ca/Page222.aspx - The Atlantic Council of Ministers of the Environment was formed to increase cooperation between and capacity of the Atlantic Provinces (2005). http://www.gov.ns.ca/news/details.asp?id=20050928003 - British Columbia has created a provincial Land Remediation Office to increase the internal capacity of the Provincial government and local communities to undertake brownfield redevelopment. (2007) - British Columbia has developed a number of guidance documents related to both technical and administrative guidance. (2005-2008) http://www.env.gov.bc.ca/epd/remediation/guidance/index.htm - British Columbia announced (2008) the development of a <i>Brownfield Renewal Strategy</i> which includes capacity building as a key focus. http://www2.news.gov.bc.ca/news_releases_2005-2009/2008AL0005-000259.htm - The Alberta Environmental Law Centre published its report on <i>Brownfield Redevelopment in Alberta: Analysis and Recommended Reforms</i> in 2006. http://www.aenweb.ca/node/986 - Ontario created the Brownfields Coordinator office, under the Ministry of Municipal

Recommendations	Actions Taken
	<p>Affairs and Housing, to help the Province and municipalities increase their capacity to redevelop brownfields through coordination, development of resources such as <i>Brownfield Redevelopment in Small Urban and Rural Municipalities</i> (2007) and <i>A Practical Guide to Brownfield Redevelopment</i> (2007). http://www.mah.gov.on.ca/Page220.aspx</p> <ul style="list-style-type: none"> - The Province of Ontario collaborated with FedNor, OCETA and other private sector stakeholders to develop the <i>Ontario Brownfields Redevelopment Toolbox</i> (2004) and the <i>Ontario Service Station Redevelopment Framework</i> (to be made available in 2008) to provide municipalities and other stakeholders with the knowledge needed to clean up and redevelop brownfields. http://www.aboutremediation.com - Atlantic PIRI has worked with provincial governments and industry to develop a number of guidance documents, online training for Atlantic RBCA, and conferences on contaminated properties. (2006, 2007) http://www.atlanticrbca.com - New Brunswick, in collaboration with the private sector, began delivering outreach and capacity building sessions in 2007. <p><u>Private Sector</u></p> <ul style="list-style-type: none"> - OCETA, in collaboration with the Province of Ontario, has worked with the private sector and municipalities to develop the <i>Ontario Brownfields Redevelopment Toolbox</i> (2004) and the <i>Ontario Service Station Redevelopment Framework</i> (to be made available in 2008) to provide municipalities and other stakeholders with the knowledge needed to clean up and redevelop brownfields. http://www.aboutremediation.com - OCETA, with the support of Industry Canada, the Province of Ontario, and CMHC, participated in Canadian Brownfield and Remediation Showcase Initiatives at the USEPA's Brownfields Conferences which focused on fostering networking opportunities and stimulated business development for Canadian companies. http://www.oceta.on.ca/brownfields-workshop/CAD-Showcase-Boston_06_Form.pdf - Seneca College created the Integrated Environmental Remediation Program in 2003 to increase the professional capacity of Ontario's workforce. http://www.senecac.on.ca/cbe/iesr/ - The CBN collaborated with the Province of Ontario to develop and deliver a number of highly interactive Brownfield Training Workshops entitled the <i>Ontario Brownfields Knowledge Workshop Series: Building Capacity for Brownfields Redevelopment and Revitalization</i> in 2006 (Sudbury, Kingston, Sarnia-Lambton, York Region) and 2007 (Barrie, Kanata, Burlington) . http://www.canadianbrownfieldsnetwork.ca/ - OCETA delivered a workshop entitled <i>Financing Your Brownfield Redevelopment Project</i> in Banff in 2006. http://www.aboutremediation.com/render/pageRender.asp?itemcode=AR-PRS-PRS&itemid=3201 - ECO Canada completed a demand-side labour market study for contaminated sites in 2007 and a supply-side labour market study (expected 2008) to enable Canada to meet the human resource requirements associated with the cleanup of contaminated sites in Canada. http://www.eco.ca/pdf/ECO_ConSites_Final_EN.pdf

Recommendation 3.1 – Increase Capacity to Undertake Brownfield Redevelopment Projects recommended the need for all levels of government to cooperate and increase the capacity of both the public and private sector through training, education, information exchange and tools. Significant effort has gone into building capacity at the national, provincial and municipal level by both the public and private sector. Survey respondents have emphasized the need to continue to build capacity and improve Canadian expertise to take on the challenges of brownfield redevelopment.

Recommendation 3.2: Facilitate the Demonstration of Innovative Environmental Technologies and Remediation Processes

Recommendations	Actions Taken
<p>3.2 Facilitate the demonstration of innovative environmental technologies and remediation processes</p>	<p><u>Public Sector</u></p> <p>National</p> <ul style="list-style-type: none"> - In 2004, the Federal government expanded Sustainable Development Technologies Canada's mandate to include funds available for the demonstration of soil technologies. http://www.sdte.ca/en/soilandwater.htm <p>Federal</p> <ul style="list-style-type: none"> - The Montreal Centre of Excellence in Brownfields Rehabilitation is a non-profit corporation founded in 1997 by the three levels of government to stimulate and support technology innovation to help industry develop expertise in these areas. The Federal government awarded the Centre an additional \$1.56 million in 2005. http://www.cemrs.qc.ca/ <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - The Ontario Centres of Excellence (OCE), OCETA, and the Ontario government are in the process of developing the Ontario Brownfield Innovation Partnership (OBIP). - Quebec's Revi-Sols Program (1998-2006), encouraged alternative clean up methods by providing grants of 50% of assessment if the contaminants were landfilled or 70% of the costs if they were treated. http://www.mddep.gouv.qc.ca/sol/terrains/climatsol/index.htm <p><u>Private Sector</u></p> <ul style="list-style-type: none"> - The Cement Association of Canada has provided research funding for a number of Ontario universities related to remediation techniques and is also a member of OBIP.

Recommendation 3.2 – Facilitate the Demonstration of Innovative Environmental Technologies and Remediation Processes recommended the need for the Federal, provincial and territorial governments to reduce regulatory barriers for innovative technologies and fund demonstration projects on brownfield sites throughout Canada. While several respondents mentioned the difficulties they still face when trying to demonstrate or utilize innovative technologies, there are a handful of programs to assist and encourage the uptake of new remediation approaches. The Federal government, through SDTC, has provided funds for the demonstration of soil technologies that prevent, treat, or contain contamination or which facilitate an increase in land use or land value through brownfield remediation. In 2005 the Federal government also contributed \$1.56 million to the Montreal Centre of Excellence in Brownfields Remediation to help continue its mandate to stimulate and support technology innovation in the decontamination and remediation field. The Province of Ontario has partnered with the Ontario Centres of Excellence (OCE) and OCETA to develop the Ontario Brownfields Innovation Partnership (OBIP) to encourage collaborations amongst universities, colleges, private companies, and end users. In addition to their involvement in the above-mentioned programs, the private sector has also undertaken its own initiatives.

Recommendation 3.3: Raise Awareness of the Benefits of Brownfield Redevelopment

Recommendations	Actions Taken
<p>3.3 Raise awareness of the benefits of brownfield redevelopment</p>	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - FCM's Centre for Sustainable Development has engaged municipalities in an effort to share knowledge, experiences and best practices on a range of topics including brownfield redevelopment. http://www.sustainablecommunities.fcm.ca/About_Us/ - CMHC has raised awareness through outreach and the distribution of case studies that highlight successful brownfield projects since 2005. http://www.cmhc-schl.gc.ca/en/inpr/su/sucopl/sucopl_004.cfm <p>Federal</p> <ul style="list-style-type: none"> - The Real Property Institute of Canada began holding its annual Federal Contaminated Sites national Workshop in 2006 to bring to together experts to exchange ideas and information about the challenges of addressing federal contaminated sites. http://www.rpic-ibic.ca/en/activities/2008_FCS/ <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - The Province of Ontario has helped educate municipalities on the benefits of brownfield redevelopment and on the importance of developing Community Improvement Plans to help encourage redevelopment. http://www.mah.gov.on.ca/Page220.aspx <p>Municipal</p> <ul style="list-style-type: none"> - Ontario municipalities showcase their successes and promote the steps they are taking to encourage brownfield redevelopment within their communities through websites (e.g. www.aboutremediation.com) and at conferences. <p>Private Sector</p> <ul style="list-style-type: none"> - Since 2003, private sector organizations have delivered a number of conferences targeted towards brownfield remediation and redevelopment (e.g. CUI, Strategy Institute, ESSA/RemTech, CBN). Brownfield sessions have also been incorporated into conferences on sustainability (e.g. FCM, AUMA, CBN, OCETA, Globe) http://www.aboutremediation.com/calendar/calendar.asp - OCETA delivered over 10 Knowledge Workshops throughout Canada between 2004 and 2006 to increase awareness of the benefits of brownfield redevelopment http://www.aboutremediation.com - The Canadian Urban Institute's Brownie Awards, which were first held in 2001, bring recognition and attention to successful brownfield projects and their associated benefits. http://www.canurb.com/events/awards_brownies.php - ReNew Canada provides national coverage of brownfields issues and successes. http://www.renewcanada.net - The US Green Building Council has introduced a pilot program for LEED ND (Neighbourhood Developments) that includes points for brownfield redevelopment. Ten pilot spots have been offered for Canadian projects. The Canadian Green Building Council will be observing these projects to learn how to adapt the rating system for Canada. (2007) http://www.cagbc.org/leed/systems/faqs.htm

Recommendation 3.3 – Raise Awareness of the Benefits of Brownfield Redevelopment recommended the need for all levels of government to develop an integrated communications and education strategy to raise awareness of the benefits of brownfield redevelopment. The majority of survey respondents agreed that this recommendation was the one where the most progress has been made although several respondents emphasized that there is still a lack of awareness in some regions in Canada and a lack of understanding at the political level regarding the substantive economic, environmental, and social benefits associated with addressing the barriers to brownfield redevelopment. Organizations such as FCM and the Province of

Ontario's Brownfields Coordinating Office have engaged municipalities and educated them regarding the benefits brownfield redevelopment. Municipalities in Ontario and Quebec's Revi-Sols Program have promoted their successful brownfield projects and brought attention to the benefits that can be achieved.

A number of private sector organizations (e.g. OCETA, CUI, Strategy Institute, ESSA/RemTech, CBN) have delivered a number of conferences and knowledge workshops across Canada to increase awareness of the benefits of brownfield redevelopment. The Real Property Institute of Canada has also been holding an annual conference to exchange ideas and information about the challenges of addressing federal contaminated sites.

It is also important to recognize the significant role that the media (e.g. ReNew Canada, HazMat Magazine) have made in raising awareness of the issues and benefits associated with brownfields redevelopment. Local and national coverage by media of redevelopment projects and government policies and programs has helped to elevate the profile of brownfield projects across Canada.

9 ROLE OF THE NATIONAL BROWNFIELD REDEVELOPMENT STRATEGY IN MOTIVATING CHANGE

The majority of the survey respondents agreed that the NRTEE's Report "Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy acted as a "catalyst in identifying, explaining and promoting in all sectors of Canadian society and in all regions of Canada, principles and practices of sustainable development". This report is seen as the benchmark or "touch stone" and provided the starting point for discussions about brownfield redevelopment. The issues and commercial benefits of brownfield redevelopment are now well understood and accepted because of the efforts of the NRTEE and their collaboration with credible organizations recognized as Canadian experts in brownfield redevelopment and remediation.

Based on survey responses, the NRTEE Brownfield Strategy has played a significant role in the development of brownfield strategies in the Provinces of British Columbia and Ontario and in the Atlantic Provinces.

British Columbia is using the NRTEE Brownfield Strategy as a basis for the development of their new Provincial Brownfield Renewal Strategy. The province is currently reviewing the NRTEE's recommendations through a stakeholder engagement process for the purpose of identifying key approaches to address the Province's needs and to motivate redevelopment in British Columbia.

Prior to the release of the NRTEE Brownfield Strategy, the Province of Ontario had made a number of legislative and policy changes to address the barriers to the redevelopment of brownfield sites in Ontario. The Strategy prompted the province to address the issue of crown liens and tax arrears as well as develop strategies for removing other barriers such as lack of awareness and the need for capacity building. The Province of Ontario is continuing efforts to address the issue of liability and regulatory delays.

The NRTEE Brownfield Strategy was instrumental in prompting action in the Atlantic Provinces. After the release of the Strategy, the Province of New Brunswick, on behalf of Atlantic PIRI, formed the New Brunswick Brownfield Development Working Group to examine the recommendations in the NRTEE Brownfield Strategy and develop a report on the options and recommendations for facilitating brownfield redevelopment in New Brunswick. The Working Group presented the final report in 2007 to the province for consideration and includes a number of recommendations that are directly related to the NRTEE Brownfield Strategy. The Atlantic Provinces are also developing a memorandum of understanding regarding brownfield incentives and promotion.

It appears that the Strategy has had less impact in the Province of Quebec since issues such as regulatory and civil liability are not seen as a major barrier to brownfield redevelopment. The Province of Quebec has focused on improving access to capital through the Revi-Sols and ClimatSol programs.

10 CURRENT MARKET FAILURES OR BARRIERS TO BROWNFIELD REDEVELOPMENT

The NRTEE's Report "Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy identified a number of market failures or barriers that prevent the redevelopment of Brownfields in Canada:

- Lack of access to capital;
- Regulatory liability risk;
- Civil liability risk;
- Limited access to insurance protection;
- Regulatory delays;
- Stigma and risk perception;
- Lack of awareness among many key public sector and private sector groups.

The general perception from the survey respondents is that while progress has been made to reduce each of these impediments to redevelopment in Canada, further work is required. The list of identified barriers is still relevant but there has been a re-prioritization of the barriers that were identified in the NRTEE Brownfield Strategy and there are a number of additional market failures that pose a significant impediment to the reuse of brownfield sites.

Survey respondents generally agreed that the two most important market failures were regulatory delays and regulatory liability risk followed closely by access to capital. Access to insurance and lack of awareness were no longer considered to be important barriers by the majority of the survey respondents although lack of awareness is still an issue in some regions of Canada.

Several respondents stated that the lack of access to capital, insurance protection and civil liability were no longer a major issue since market forces can often deal with these issues once the other barriers such as regulatory liability are removed.

The new barriers that were identified by survey respondents included:

- Value creation on brownfield sites;
- Inter-governmental relations;
- Labour market shortage in the contaminated site remediation industry; and
- Capacity building.

Both the public and private sector have identified value creation as a new barrier to brownfield redevelopment. Creating value on a brownfield site is difficult given that the cost of cleanup or remediation is often higher than land values. Survey respondents emphasized that more creative approaches and exit strategies are needed for successful redevelopment to occur.

Inter-government (federal, provincial/territorial and municipal) relations and communication has been identified as a barrier to redevelopment. There is a need to identify successful approaches, build on the success of these approaches by integrating them into government policies and programs, and harmonize provincial and territorial policies such as qualified professional programs. Efforts are underway to improve

communication through the newly formed Inter-provincial Forum on Brownfields but it is important that all levels of government works together to coordinate their efforts.

ECO Canada has now completed the demand and supply labour market studies for contaminated sites in Canada. Findings identify that Canada is not currently in a position to meet the human resource requirements associated with the cleanup of contaminated sites. The report emphasizes that Canada's environment sector currently has a significant shortage of workers with the appropriate expertise to meet the demand of the contaminated site remediation industry and provides a strategy including recommendations on how the public and private sector can address this barrier.

Generally stakeholders have an increased awareness of the benefits of brownfield redevelopment but further work is required to increase awareness in all regions and to build capacity within the public and private sectors. Municipalities need training and tools to assist them in understanding the steps required to redevelop brownfields (e.g. a brownfield redevelopment tool or roadmap such as the Ontario Municipal Brownfield Redevelopment Toolbox) and guidance on how to make decisions based on the level of acceptable risk. There is still considerable discomfort with the private sector developers who find it easier to develop greenfields where there is less risk and regulatory delays. The Province of Ontario has engaged the developers sector and created a redevelopment guide to assist developers and other private sector organizations in understanding how to take on the challenges of redevelopment. There is a need to showcase brownfield redevelopment successes where developers have acquired the knowledge and appropriate team of experts.

11 KEY FINDINGS

The key findings that were identified from the market research study include the following:

1. The NRTEE Brownfield Strategy has been well-received by both the public and private sector and has been used as a key guidance document regarding what is needed to remove the barriers to Brownfield redevelopment.
2. The definition of "brownfields" used by NRTEE has become recognized as the industry standard however, this definition has often been modified to meet the particular needs of various regions or sectors.
3. There has been a reprioritization regarding the important barriers identified by the NRTEE as well as the addition of new barriers that are considered to be an impediment to redevelopment in Canada.
4. Effective communication and cooperation between the public and private sectors has played a major role in the development of successful brownfield strategies. The importance of private sector engagement should be stressed at all levels of government.
5. It is important that all levels of government work together to coordinate their approaches in order to remove barriers and improve the brownfields redevelopment process.
6. Brownfield redevelopment is directly linked to reducing greenhouse gas emissions and act as a catalyst in creating revitalized sustainable communities. Brownfields should be an important component of government policy objectives in the areas of climate change and sustainable communities.
7. Barriers to brownfield redevelopment are often inter-related and by removing one barrier, there can be a positive impact on other barriers. As an example, actions taken to reduce regulatory uncertainty in the Province of Ontario have resulted in private lending institutions making more capital available for brownfield projects.

The findings from this preliminary study, which included a small number of stakeholder surveys and consultations, have indicated that considerable action has been taken in Canada since the release of the NRTEE Brownfield Strategy in 2003.

It appears that the NRTEE Brownfield Strategy played a significant role in motivating brownfield redevelopment in Canada but further research is required to identify key areas that would continue to motivate the Canadian brownfield redevelopment industry.

To better understand and characterize the current barriers and possible solutions to motivate redevelopment, a more extensive study with broader stakeholder consultations across Canada is required. Several organizations such as the CBN, CREA, CPPI, provincial governments, industry associations and the Federation of Canadian Municipalities, have expressed considerable interest in identifying which barriers are relevant in Canada's current Brownfield Redevelopment Industry and determining what action is required to motivate redevelopment. This comprehensive study would build on past successes and identify gap areas where strong public and private sector leadership is required to address the barriers to brownfield redevelopment in Canada.

APPENDIX A: SURVEY TO DETERMINE THE IMPACTS OF THE NATIONAL BROWNFIELD REDEVELOPMENT STRATEGY

We would appreciate your participation in this survey being conducted by OCETA on behalf of the Canadian Brownfields Network (CBN) and in collaboration with the National Round Table on the Environment and the Economy.

In 2003, the National Round Table on the Environment and the Economy (NRTEE) released the report "Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada. The National Strategy was presented as a realistic, practical and innovative blueprint for action on Brownfield redevelopment in Canada and encouraged the public sector (Federal, Provincial, Territorial and Municipal) to take a leadership role to address the barriers to Brownfield redevelopment. The strategy proposed action by the public sector in three strategic areas:

1. Apply Strategic Public Investment to Address Upfront Costs;
2. Establish an Effective Public Policy Regime for Environmental Liability and Risk Management;
3. Build Capacity for and Community Awareness of Brownfield Redevelopment.

Five years have now past since the release of the strategy. OCETA is conducting a market research study to compare the recommendations in the NRTEE's National Strategy with actions that have been undertaken by both the public and private sector, and to identify direct or indirect links to the NRTEE strategy.

We would appreciate your time in answering a few questions on your knowledge and experience with actions that have been taken to address the barriers in the NRTEE strategy. We expect that the survey will take approximately 20 minutes to complete.

The information provided by survey respondents will be kept strictly confidential. All survey results will be presented in aggregate form only. No reference will be made to organizational and individual names.

If you have any questions, please contact Jay Mullin, OCETA at jmullin@oceta.on.ca, (905) 822-4133 ext.238.

Section 1: Contact Information

Name:	Title:
Company:	
Address:	
City:	Prov.:
Postal Code:	
Phone:	Fax:
Email:	Website:
Notes:	

The following questions pertain to your knowledge of actions that have been undertaken by the public and private sector to address the barriers to Brownfield redevelopment as identified in the NRTEE's 2003 National Brownfield Redevelopment Strategy (herein referred to as the NRTEE Brownfield Strategy).

Section 2: Brownfield Definition

1. The NRTEE Brownfield Strategy defined Brownfields as: *Abandoned, idle and underutilized commercial or industrial properties where past actions have caused known or suspected environmental contamination but where there is an active potential for redevelopment.*

- a. Is this definition commonly being used by the public and private sector in Canada? Yes _____ No _____
What other definitions of Brownfields are being used?
- b. Do you know the reasons why these alternative definitions are being used?

2. The NRTEE Brownfield Strategy focused on brownfields that were located in urban areas along transportation corridors where municipal services are readily available and both the cleanup and potential for redevelopment are high.

- a. Do you agree that brownfields in urban areas are the current focus of private and public sector redevelopment activities? Yes _____ No _____
- b. What other types of brownfields are the focus of the public and private sector?

Section 3: National Brownfield Redevelopment Strategy

3. Development and implementation of the NRTEE Brownfield Strategy:

- a. Do you feel that the public and private sectors have made an effort to collaborate on the development and implementation of a national brownfield strategy on brownfield redevelopment?
Public Sector: Yes _____ No _____ Not Sure _____
Private Sector: Yes _____ No _____ Not sure _____
- b. If yes, please provide specific examples of how the public and private sectors have collaborated to develop and implement the elements of a national brownfield strategy. _____
- c. Were efforts ever made to establish a Federal Coordinating Office?
Yes _____ No _____ Not sure _____
Which provincial/territorial governments have taken steps to develop a Provincial/Territorial Brownfield Strategy? Please list _____
- d. Have efforts been made to create a national organization?
Yes _____ No _____ Not sure _____
- o If yes, is this a public or private sector led initiative? Check _____ Public _____ Private
 - o If yes, please list organization(s) and identify if they have public sector funding support?

Section 4: Strategic Investments to Address Upfront Costs

- 4. Has the government implemented a tax system change to promote brownfield redevelopment** (e.g. Amendments to the Federal Income Tax Act: to allow expenses to be treated as a deductible expense and to create a Brownfield Redevelopment Current Deduction. Provincial governments permit the deductions of remediation expenses and extend application to funding to remediation work)?
- a. Federal Yes _____ No _____ Not sure _____
 - b. Provincial/Territorial (list) Yes _____ No _____ Not sure _____
 - c. If yes, please list provincial/Territorial governments
- 5. Has the government removed liens and tax arrears against qualifying brownfield sites?** Yes _____ No _____ Not sure _____
- a. If yes, list which government has taken steps to remove liens and tax arrears

For the following series of questions (Questions 6-15), for each question, please identify the actions that have been taken by the public or private sector to address the key barriers to Brownfield redevelopment as identified in the NRTEE Brownfield strategy? Please note why actions have not been taken.

Question	List the Public Sector Organizations that have taken action and the specific actions taken	List the Private Sector Organizations that have taken action and the specific actions taken
Section 4: Strategic Investments to Address Upfront Costs		
6. What actions have been taken to provide mortgage guarantees for qualifying brownfield sites?		
7. What actions have been taken to provide loans for qualifying brownfield sites?		
Section 5: Establishing an Effective Regime For Environmental Liability and Risk Management		
8. What actions have been taken to allow binding contractual allocation of liability?		
9. What actions have been taken to address the issue of regulatory liability?		
10. What actions have been taken to address the issue of civil liability?		

<p>11. What actions have been taken to create an insurance fund for post-liability termination claims?</p>		
<p>12. What actions have been taken to apply site-specific risk assessment and approvals regime?</p>		
<p>Section 6: Building Capacity for and Community Awareness of Brownfield Redevelopment</p>		
<p>13. What actions have been taken to increase the capacity of the public and private sector to undertake brownfield redevelopment projects?</p>		
<p>14. What actions have been taken to implement demonstration projects of innovative environmental technologies and remediation processes?</p>		
<p>15. What actions have been taken to raise awareness of the economic, social and environmental benefits of brownfield redevelopment?</p>		

16. What role has the NRTEE Brownfield Strategy played in motivating these changes?

17. The NRTEE Brownfield Strategy identified the following as significant market failures or barriers to redevelopment: lack of access to capital, regulatory liability risk, civil liability, limited access to insurance protection, regulatory delays, stigma and risk perception, and lack of awareness among many key public sector and private sector groups.

- a. Are any of these barriers no longer an issue? Please list: _____
- b. Are there any other major barriers that are now an issue and why? Please list:
- c. Prioritize the barriers in terms of highest importance to lowest (place a number beside each barrier with 1 being the highest priority or issue)
 - i. **lack of access to capital** _____
 - ii. **regulatory liability risk** _____
 - iii. **civil liability** _____
 - iv. **limited access to insurance protection** _____
 - v. **regulatory delays** _____
 - vi. **stigma and risk perception** _____

- vii. **lack of awareness** _____
- viii. _____
- ix. _____
- x. _____

- d. Which barriers still need to be addressed to motivate the brownfield redevelopment industry in:
 - i. Canada
 - ii. Provincial/Territory
 - iii. Municipality

18. Do you have any additional comments?

Thank you for taking the time to participate in this survey.

APPENDIX B: LIST OF SURVEY CONTACTS

National Organizations

Canadian Brownfields Network
Canadian Council of Ministers of the Environment
Canada Mortgage and Housing Corporation
Federation of Canadian Municipalities
Montreal Centre of Excellence in Brownfield Rehabilitation
Sustainable Development Technologies Canada

Government – Federal

Environment Canada
Industry Canada
Infrastructure Canada
Department of Finance

Government – Provincial

Alberta Environment
Atlantic PIRI
British Columbia Crown Contaminated Sites Branch
Ontario Ministry of Municipal Affairs and Housing
Quebec Ministry of the Environment

Government – Municipal

Association of Yukon Communities
City of Brantford
City of Edmonton
City of Kingston
City of Yellowknife
Town of Cochrane

Private Sector

AIG Insurance
Alberta Law Centre
Brownfields Capital
Canadian Homebuilders Association
Canadian Petroleum Products Institute
Canadian Real Estate Association
Cement Association of Canada
Cherokee Canada
Trammell Crow Company
Miller Thompson
National Brownfield Association
ONCAP
Quantum Environmental Group
InfoPlexus
Royal Bank of Canada
Urban Development Group
Vancity Enterprises

APPENDIX C: SUMMARY TABLE OF ACTIONS TAKEN IN THE CANADIAN BROWNFIELD REDEVELOPMENT INDUSTRY

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
1. Applying strategic public investments to address upfront costs	1.1 Implement tax system changes to promote brownfield redevelopment	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia announced (2008) the development of a <i>Brownfield Renewal Strategy</i> that will include tax measures targeted towards brownfields. http://www2.news.gov.bc.ca/news_releases_2005-2009/2008AL0005-000259.htm - Alberta began to forego the education tax component of property taxes to allow municipalities to make use of TIF. (2005) http://www.york.ca/NR/rdonlyres/nfdoi2fybk4lhh7f7pvagy2zbhrvc4b7bfxywkex2563y2kz2jfkp5hiqtkgs3gisvnhghv3hn5q3p33ba3pdr5vg/Nov+3+tax+att+1.pdf - Ontario implemented a Brownfield Financial Tax Incentive Program. (2005) http://www.mah.gov.on.ca/Page5077.aspx - Ontario amended the <i>Planning Act</i> to allow municipalities to offer Tax Increment Grants and make exemptions on development permit fees. (2006) http://www.ontla.on.ca/library/repository/mon/18000/276269.pdf - Ontario introduced TIF on a pilot basis. (2006) http://www.fin.gov.on.ca/english/budget/ontariobudgets/2006/bk6.html

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
	<p>1.2 Remove liens and tax arrears against qualifying brownfield sites</p>	<p><u>Public Sector</u></p> <p>National</p> <ul style="list-style-type: none"> - NRTEE collaborated with the CBN to develop <i>A National Framework for Encouraging Redevelopment of Qualifying Brownfields through the Removal of Crown Liens and Tax Arrears</i>. (2005) http://www.nrtee-trnee.ca/eng/publications/brownfields-liens/section1-brownfields-liens-eng.html <p>Federal</p> <ul style="list-style-type: none"> - The Federal government has taken steps to allow the removal of liens and tax arrears on a case-by-case basis. <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - Saskatchewan's <i>Tax Enforcement Act</i> was amended in 2001 to allow municipalities to use the costs incurred for the cleanup of environmental contamination as justification for the discharge of tax liens. http://www.qp.gov.sk.ca/documents/English/Statutes/Statutes/T2.pdf - Ontario's <i>Municipal Statute Law Amendment Act</i> (2006) removes provincial crown liens where a municipality chooses to take ownership of a property after a failed tax sale. The Province will also remove liens from contaminated sites through negotiations. http://www.mah.gov.on.ca/Page223.aspx - The North West Territories will compensate municipalities for taxes in arrears on abandoned properties on a case-by-case basis. <p><u>Private Sector</u></p> <p>National</p> <ul style="list-style-type: none"> - NRTEE and the CBN delivered the <i>Strategic Solutions for the Removal of Liens and Tax Arrears on Brownfield Sites Workshop</i> in Ottawa in 2005. http://www.aboutremediation.com/evts/result.asp?track=vs&eventsess=396
	<p>1.3 Provide mortgage guarantees for qualifying brownfield sites</p>	<p><u>Public Sector</u></p> <p>National</p> <ul style="list-style-type: none"> - CMHC began offering mortgage loan insurance to brownfield sites in Ontario in 2005 on a case-by-case basis and includes sites where property-specific standards have been used. This mortgage loan insurance is now available in other provinces. - CMHC partnered with Ontario's <i>Affordable Housing Program</i> to provide mortgage guarantees for non-profit groups involved in affordable housing redevelopment projects. (2006)

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
	<p>1.4 Provide revolving loans for qualifying brownfield sites</p>	<p><u>Public Sector</u> Federal</p> <ul style="list-style-type: none"> - The Federal government provided \$150 million to the GMF for a revolving fund for brownfields. (2005) http://sustainablecommunities.fcm.ca/GMF/GMF_History.asp <p><u>Private Sector</u></p> <ul style="list-style-type: none"> - Royal Bank of Canada and the Canadian Imperial Bank of Commerce have begun to offer lending and project finance products for brownfields.

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
	<p>1.5 Provide grants for qualifying brownfield sites</p>	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - FCM's Green Municipal Fund provides grants to help cover the costs of feasibility studies and field tests that demonstrate the potential of projects to improve community sustainability, including brownfields redevelopment. http://sustainablecommunities.fcm.ca/GMF/ <p>Federal</p> <ul style="list-style-type: none"> - The Federal government created the \$33 billion Building Canada Fund (2007). It will provide funding for infrastructure priorities including brownfield redevelopment. http://www.buildingcanada-chantierscanada.gc.ca/funprog-progfin/target-viser/bcf-fcc/bcf-fcc-eng.html - The Federal government committed long-term funding of \$3.5 billion for federal contaminated sites plus \$500 million for shared-responsibility sites in 2004 as part of the Federal Contaminated Sites Action Plan (FCSAP). http://pwgsc.gc.ca/greening/text/sites-e.html - The <i>Canada-Ontario Affordable Housing Program</i>, created in 2005, is funding eight projects being built on cleaned up brownfield sites. http://www.mah.gov.on.ca/Page1112.aspx <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia announced (2008) the development of a <i>Brownfield Renewal Strategy</i> that will include grants for qualifying brownfields. http://www2.news.gov.bc.ca/news_releases_2005-2009/2008AL0005-000259.htm - Alberta introduced the <i>Petroleum Tank Site Remediation Program</i> to provide funding to assist in the remediation of underground storage tank sites (2000). A second program was introduced in 2006 targeting municipalities and owners that would have been eligible under the original program. http://www.municipalaffairs.gov.ab.ca/documents/New_applicant_application_package_3.pdf - Alberta amended the Municipal Government Act in 2005 to allow municipalities to offer a Community Revitalization Levy and other incentives. http://www.qp.gov.ab.ca/Documents/acts/M26.CFM - Manitoba announced a \$39 million plan to clean up contaminated sites across the province. (2007) http://news.gov.mb.ca/news/index.html?archive=week&item=1466 - Ontario amended the <i>Planning Act</i> in 2006 to allow municipalities to offer Feasibility Study Grants, Remediation Grants, and Municipal Fee Grants through CIPs. http://www.ontla.on.ca/library/repository/mon/18000/276269.pdf - Ontario provided \$11 million in 2007 to Hamilton, Cornwall, Brantford, St. Catharines, and the University of Ottawa for community brownfield projects. http://www.mah.gov.on.ca/Page4575.aspx - The <i>Canada-Ontario Affordable Housing Program</i>, created in 2005, is funding eight projects being built on cleaned up brownfield sites. http://www.mah.gov.on.ca/Page1112.aspx - Quebec implemented the <i>Revi-Sols</i> program from 1998 until 2006 to provide grants for brownfield redevelopment projects. http://communiqués.gouv.qc.ca/gouvqc/communiqués/GPQF/Septembre2004/22/c2621.html - Quebec launched the <i>ClimatSol Program</i> in 2007 to provide grants for brownfield redevelopment projects with a focus on climate change. http://www.mddep.gouv.qc.ca/Infuseur/communique.asp?no=1076

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
<p>2. Establishing an effective public policy regime for environmental liability and risk management</p>	<p>2.1 Allow binding contractual allocation of liability</p>	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - CCME developed a report entitled <i>Recommended Principles on Contaminated Sites Liability</i>. (2006) http://www.ccme.ca/assets/pdf/csl_14_principles_e.pdf <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia announced (2008) the development of a <i>Brownfield Renewal Strategy</i> that will provide greater flexibility in liability allocation. http://www2.news.gov.bc.ca/news_releases_2005-2009/2008AL0005-000259.htm - Ontario's <i>Regulation 153/04</i> states that a Record of Site Condition can be a condition of sale resulting in both parties receiving regulatory protection. (2004) http://www.ene.gov.on.ca/envision/land/decomm/condition.htm
	<p>2.2 Provide for termination of regulatory liability</p>	<p>Public Sector</p> <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia introduced Certificates of Compliance in 2004 which provide protection from future regulatory liability. http://www.qp.gov.bc.ca/statreg/reg/E/EnvMgmt/EnvMgmt375_96/375_96_00.htm - Manitoba's <i>Contaminated Sites Remediation Act</i> states that a municipality that takes responsibility of a site after a failed tax sale is not responsible for the remediation of the site. (1996) http://web2.gov.mb.ca/laws/statutes/ccsm/c205e.php - Ontario's <i>Regulation 153/04</i> provides protection against regulatory liability through the filing of a Record of Site Condition. (2004) http://www.ene.gov.on.ca/envision/land/decomm/condition.htm - Quebec amended the <i>Environment Quality Act</i> in 2003 to clarify regulatory liability allocation. http://www.heenanblaikie.com/fr/expertise/publications/item?id=426 - The <i>New Brunswick Brownfield Liability Working Group</i> was established in response to recommendations in the National Strategy. Their final report was produced in 2007 and is now being considered by the provincial government. http://www.atlanticrba.com/eng/nb_working_g_brownfield.html

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
	<p>2.3 Provide for termination of civil liability after a limitation period</p>	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia's <i>Environmental Management Act</i> of 1997 protects municipalities that acquire contaminated sites involuntarily from civil liability unless the municipality subsequently contaminates the property. It also provides protection for site owners whose site was contaminated solely due to migration from another site as well as to secured creditor who do not cause an increase in contamination. http://www.env.gov.bc.ca/epd/remediation/fact_sheets/pdf/fs03.pdf - Manitoba's <i>Contaminated Sites Remediation Act</i> of 1996 exempts receivers, receiver-managers, and trustees from personal liability for pre-existing contamination when they have taken reasonable steps to prevent further contamination. http://web2.gov.mb.ca/laws/statutes/ccsm/c205e.php - In Ontario, new legislation protects municipalities from civil liability in instances where they relied on filed cleanup documentation. (2007) http://www.mah.gov.on.ca/www.mah.gov.on.ca/Page4586.aspx
	<p>2.4 Create an insurance fund for post-liability termination claims</p>	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - Alberta created the Upstream Oil and Gas Orphan Fund to pay for the clean up of orphan wells, pipeline abandonment, and other site reclamation activities. This was implemented before the National Strategy was released and was last expanded in 2000. http://www.ercb.ca/docs/programs/Lmp/HistoryOrphanFund.pdf <p>Private Sector</p> <ul style="list-style-type: none"> - Insurance companies such as AIG have expanded their insurance and risk management resources for brownfield projects. (ongoing) http://www.aon.com/ca/en/about/aon_canada/news/arem.jsp

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
	2.5 Apply site-specific assessment and approvals regime	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia has increased its emphasis on site-specific assessments through the development of tools such as the <i>Supplemental Guidance for Risk Assessments</i>. (2007) http://www.env.gov.bc.ca/epd/remediation/guidance/technical/pdf/tg07.pdf - Alberta developed a set of site-specific soil and groundwater guidelines in 2007. http://environment.gov.ab.ca/info/library/7752.pdf - Ontario introduced the <i>Record of Site Condition Regulation</i> in 2004 which allows the development of property-specific standards. http://www.ene.gov.on.ca/envision/gp/071907.php - Ontario is currently revising the Qualified Person program, defined in 2004 under Reg. 153, to help ensure that assessments done on contaminated sites are reliable and high quality. http://www.ene.gov.on.ca/envision/land/decomm/condition.htm - The Atlantic Canada provinces launched the Atlantic RBCA program in 1996 to streamline the use of property-specific standards. http://www.atlanticrbca.com/

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
	<p>2.6 Provide for regulatory approvals of remediation</p>	<p>Public Sector Provincial/Territorial</p> <ul style="list-style-type: none"> - British Columbia introduced Certificates of Compliance in 2004 which provide protection from future regulatory liability. http://www.qp.gov.bc.ca/statreg/reg/E/EnvMgmt/EnvMgmt375_96/375_96_00.htm - British Columbia created the Contaminated Sites Approved Professional Society in 2006 to oversee professionals approved to work on contaminated sites. http://www.csapsociety.bc.ca/ - Alberta is currently developing regulations on <i>Remediation Certificates</i> that will provide closure from regulatory liability. (2008) http://www.ales2.ualberta.ca/rr/courses/encs455/docs/Regulatory_Overview.pdf - Manitoba Conservation will issue a closure letter, in accordance with the <i>Environmental Site Investigations Guideline</i> amended in 2002, confirming the completion of remediation work on a site and stating that no further remediation is required at the time. http://www.gov.mb.ca/conservation/envprograms/contams/standards/guideline-98-01-may02-2002.pdf - Ontario's Record of Site Condition (2004) must be filed by a Qualified Person and provides protection from regulatory orders with some exceptions. http://www.ene.gov.on.ca/envision/land/decomm/condition.htm - Quebec amended the <i>Environment Quality Act</i> in 2002 to develop a list of experts authorized to furnish certificates targeting land protection and rehabilitation. http://www.ceaeq.gouv.qc.ca/accreditation/experts/index_en.htm - New Brunswick relies on contaminated site professionals for the approval of remediation work. (1999) http://www.atlanticrbca.com/eng/professional_nb.html <p>Private Sector</p> <ul style="list-style-type: none"> - OCETA developed and delivered the <i>Qualified Persons-Risk Assessment Training Session</i> on behalf on the Ontario Ministry of the Environment in 2007. - OCETA conducted a <i>Jurisdictional Review of Contaminated Site Qualified Persons Programs</i> in 2008. http://www.canadianbrownfieldsnetwork.ca/PDF/Jurisdictional_Review_of_Contaminated_Site_QP_Programs_PRESENTATION.pdf

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
<p>3. Building capacity for and community awareness of brownfield redevelopment</p>	<p>3.1 Increase capacity to undertake brownfield redevelopment projects</p>	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - FCM has developed a number of tools and resources to build capacity including webinars and guidance documents. http://www.fcm.ca/ - The Canadian Real Estate Association published <i>Developing Brownfields – Information for Realtors</i> to increase the capacity of realtors to undertake brownfield redevelopment projects (2008) <p>Federal</p> <ul style="list-style-type: none"> - Industry Canada and Public Works and Government Services Canada have collaborated to deliver a series of regional workshops (Halifax, Montreal, Toronto, Banff) to increase awareness of how innovative technologies can meet the specific site remediation needs of federal contaminated site custodians (2007, 2008). http://strategis.ic.gc.ca/epic/site/ea-ae.nsf/en/ea02329e.html - FedNor and Environment Canada have supported the development and delivery of the <i>Brownfield Knowledge Workshop Series – Building Capacity for Redevelopment and Revitalization in Ontario</i> which were delivered by OCETA in 2006. - OCETA, with the support of Industry Canada, the Province of Ontario, CMHC, and other private sector stakeholders, has participated in Canadian Brownfield and Remediation Showcase Initiatives at the US EPA's Brownfields Conferences which focused on fostering networking opportunities and stimulated business development for Canadian companies. (2005, 2006, 2008) http://www.oceta.on.ca/brownfields-workshop/CAD-Showcase-Boston_06_Form.pdf <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - Senior provincial government staff from across the country are moving forward to establish the <i>Intergovernmental Forum on Brownfields</i>. http://www.mah.gov.on.ca/Page222.aspx - The Atlantic Council of Ministers of the Environment was formed to increase cooperation between and capacity of the Atlantic Provinces (2005). http://www.gov.ns.ca/news/details.asp?id=20050928003 - British Columbia has created a provincial Land Remediation Office to increase the internal capacity of the Provincial government and local communities to undertake brownfield redevelopment. (2007) - British Columbia has developed a number of guidance documents related to both technical and administrative guidance. (2005-2008) http://www.env.gov.bc.ca/epd/remediation/guidance/index.htm - British Columbia announced (2008) the development of a <i>Brownfield Renewal Strategy</i> which includes capacity building as a key focus. http://www2.news.gov.bc.ca/news_releases_2005-2009/2008AL0005-000259.htm - The Alberta Environmental Law Centre published its report on <i>Brownfield Redevelopment in Alberta: Analysis and Recommended Reforms</i> in 2006. http://www.aenweb.ca/node/986 - Ontario created the Brownfields Coordinator office, under the Ministry of Municipal Affairs and Housing, to help the Province and municipalities increase their capacity to redevelop brownfields through coordination, development of resources such as <i>Brownfield Redevelopment in Small Urban and Rural Municipalities</i> (2007) and <i>A Practical Guide to Brownfield Redevelopment</i> (2007). http://www.mah.gov.on.ca/Page220.aspx - The Province of Ontario collaborated with FedNor, OCETA and other private sector stakeholders to develop the <i>Ontario Brownfields Redevelopment Toolbox</i> (2004) and the <i>Ontario Service Station Redevelopment Framework</i> (to be made available in 2008) to provide municipalities and other stakeholders with the knowledge needed to clean up and redevelop brownfields. http://www.aboutremediation.com - Atlantic PIRI has worked with provincial governments and industry to develop a number of guidance documents, online training for Atlantic RBCA, and conferences on contaminated properties. (2006, 2007) http://www.atlanticrbc.com <p>Private Sector</p>

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
	<p>3.2 Facilitate the demonstration of innovative environmental technologies and remediation processes</p>	<p><u>Public Sector</u></p> <p>National</p> <ul style="list-style-type: none"> - In 2004, the Federal government expanded Sustainable Development Technologies Canada's mandate to include funds available for the demonstration of soil technologies. http://www.sdtc.ca/en/soilandwater.htm <p>Federal</p> <ul style="list-style-type: none"> - The Montreal Centre of Excellence in Brownfields Rehabilitation is a non-profit corporation founded in 1997 by the three levels of government to stimulate and support technology innovation to help industry develop expertise in these areas. The Federal government awarded the Centre an additional \$1.56 million in 2005. http://www.cemrs.qc.ca/ <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - The Ontario Centres of Excellence (OCE), OCETA, and the Ontario government are in the process of developing the Ontario Brownfield Innovation Partnership (OBIP). - Quebec's Revi-Sols Program (1998-2006), encouraged alternative clean up methods by providing grants of 50% of assessment if the contaminants were landfilled or 70% of the costs if they were treated. http://www.mddep.gouv.qc.ca/sol/terrains/climatsol/index.htm <p><u>Private Sector</u></p> <ul style="list-style-type: none"> - The Cement Association of Canada has provided research funding for a number of Ontario universities related to remediation techniques and is also a member of OBIP.

NRTEE STRATEGIC DIRECTION	RECOMMENDATIONS	PROGRESS MADE
	<p>3.3 Raise awareness of the benefits of brownfield redevelopment</p>	<p>Public Sector</p> <p>National</p> <ul style="list-style-type: none"> - FCM's Centre for Sustainable Development has engaged municipalities in an effort to share knowledge, experiences and best practices on a range of topics including brownfield redevelopment. http://www.sustainablecommunities.fcm.ca/About_Us/ - CMHC has raised awareness through outreach and the distribution of case studies that highlight successful brownfield projects since 2005. http://www.cmhc-schl.gc.ca/en/inpr/su/sucopl/sucopl_004.cfm <p>Federal</p> <ul style="list-style-type: none"> - The Real Property Institute of Canada began holding its annual Federal Contaminated Sites national Workshop in 2006 to bring to together experts to exchange ideas and information about the challenges of addressing federal contaminated sites. http://www.rpic-ibic.ca/en/activities/2008_FCS/ <p>Provincial/Territorial</p> <ul style="list-style-type: none"> - The Province of Ontario has helped educate municipalities on the benefits of brownfield redevelopment and on the importance of developing Community Improvement Plans to help encourage redevelopment. http://www.mah.gov.on.ca/Page220.aspx <p>Municipal</p> <ul style="list-style-type: none"> - Ontario municipalities showcase their successes and promote the steps they are taking to encourage brownfield redevelopment within their communities through websites (e.g. www.aboutremediation.com) and at conferences. <p>Private Sector</p> <ul style="list-style-type: none"> - Since 2003, private sector organizations have delivered a number of conferences targeted towards brownfield remediation and redevelopment (e.g. CUI, Strategy Institute, ESSA/RemTech, CBN). Brownfield sessions have also been incorporated into conferences on sustainability (e.g. FCM, AUMA, CBN, OCETA, Globe) http://www.aboutremediation.com/calendar/calendar.asp - OCETA delivered over 10 Knowledge Workshops throughout Canada between 2004 and 2006 to increase awareness of the benefits of brownfield redevelopment http://www.aboutremediation.com - The Canadian Urban Institute's Brownie Awards, which were first held in 2001, bring recognition and attention to successful brownfield projects and their associated benefits. http://www.canurb.com/events/awards_brownies.php - ReNew Canada provides national coverage of brownfields issues and successes. http://www.renewcanada.net - The US Green Building Council has introduced a pilot program for LEED ND (Neighbourhood Developments) that includes points for brownfield redevelopment. Ten pilot spots have been offered for Canadian projects. The Canadian Green Building Council will be observing these projects to learn how to adapt the rating system for Canada. (2007) http://www.cagbc.org/leed/systems/faqs.htm

