

# Canadian Brownfields and Guidance for Effective Redevelopment

Tammy Lomas-Jylha

General Manager, aboutREMEDICATION and Director, Canadian Brownfields Network  
2070 Hadwen Rd., Unit 201A, Mississauga, ON, L5W 2C9

**ABSTRACT** Canada's industrial urban and rural lands or brownfields are redevelopment challenges for local government. "Brownfields are typically littered with abandoned buildings, all sorts of rubbish, leaking tanks, and rusting drums...About 30,000 brownfields mar the Canadian landscape" (MacLean's, August 11, 2003). "These sites adversely impact a neighbourhood's image and quality of life, and in some cases pose risks to human health and the environment" (NRTEE, 2003).

Canadian communities need to recognize that brownfield redevelopment makes economic, social and environmental sense and that brownfields are community commodities. Redevelopment or the re-use of languishing assets is Sustainable Development and Smart Growth.

In March 2003, the Canadian Brownfields Network (CBN) was launched as a national voice for brownfields redevelopment and urban revitalization in Canada. The network was formed by the private sector in response to recommendations by the National Round Table on the Environment and Economy's recommendation for the establishment of a national network to coordinate efforts to build Canadian capacity to undertake the redevelopment of brownfields and by the office of Dennis Mills, MP for the creation of a national brownfields network. The CBN works with existing organizations across Canada to encourage progressive thinking and effective approaches for the revitalization of Canadian communities thereby improving a community's environmental and economic performance. Key objectives are promoting national and regional interest, facilitating linkages and connectivity between government, stakeholders and practitioners, building capacity, researching key Canadian issues on site remediation and brownfields redevelopment, and coordinating the exchange of ideas, expertise and success stories.

Canadian communities are at various stages of brownfield redevelopment. Some are not even aware that brownfields exist in their community while others recognize the importance of brownfields redevelopment as an integral part of sustainable community development and have developed innovative policies and incentives for urban revitalization. The majority of Canadian communities, especially the smaller municipalities, need guidance regarding how to get started and how to identify the steps for brownfield reuse. Supported by the Canadian Brownfields Network, an Ontario Municipal Brownfields Redevelopment Toolbox is being developed to guide urban centers in the redevelopment and revitalization of challenged sites and to encourage the creation of productive land uses such as affordable housing and improved community services. Communities can follow a decision tree of effective steps in redevelopment

including community readiness, evaluation, transaction, implementation, and site management.

## **Introduction**

Canada's industrial urban and rural lands or brownfields are redevelopment challenges for local government. "These sites adversely impact a neighbourhood's image and quality of life, and in some cases pose risks to human health and the environment" (NRTEE, 2003).

Canadian communities need to recognize that brownfield redevelopment makes economic, social and environmental sense and that brownfields are community commodities or valuable resources. Redevelopment or the re-use of these assets is Sustainable Development and Smart Growth. As part of their development strategy, Canadian municipalities need to emphasize and incorporate community revitalization. Engaging in the productive reuse of brownfields provides municipalities with a mechanism to strengthen and enhance their economies while coping with growth pressures and resource challenges (MMAH, 2004).

This paper will discuss brownfields redevelopment in Canada specifically, public awareness and perception, Canada's brownfields market, and Canadian Initiatives focusing on aboutREMEDICATION – communication or dissemination resource, the Canadian Brownfields Network – Canada's voice for redevelopment and remediation, and the Ontario Municipal Brownfields Redevelopment Toolbox – providing the steps for effective redevelopment.

## **Canadian Awareness and Perception**

There are numerous definitions for brownfields from the US, European Union, and Canadian municipalities but generally they emphasize these key points:

- Sites may be located in both urban and rural communities;
- The type of sites are either industrial, commercial and sometimes institutional;
- They are often strategically located in already services areas meaning the infrastructure (roads, water and sewer service, hydro etc.) already exist unlike greenfields or areas that have not been developed before;
- They may be abandoned or underused which may be related to real or perceived contamination.

Planning legislation and planning policies often specifically avoid defining brownfields to provide municipalities with the flexibility to identify their own community improvement plans and characterize brownfields to "fit" within these plans and their needs.

In the past, brownfields were all thought to be dirty or contaminated and therefore a negative stigma surrounded these sites. Municipalities and developers tended to ignore

these sites because of the negative view and potential challenges with remediation and redevelopment instead focusing on new development projects. As such, new development has resulted in urban sprawl.

Public perception is starting to change and municipalities are looking at brownfields as a resource and important component of sustainable community improvement. Municipalities need better growth management plans to accommodate the growth in population that is expected over the next 25-30 years.

Canadian municipalities are beginning to understand the benefits associated with redevelopment through the process of rehabilitation and rejuvenation. Benefits include:

- Improved quality of life (crime, vermin, health hazard sources);
- Acts as a catalyst to revive older communities through the creation of employment and growth opportunities and by encouraging investor interests both domestic and foreign;
- Preservation of green space/belts (greenfields) and optimizing use of scarce land by reusing existing land inventory and existing infrastructure and by reducing urban sprawl;
- Reduces environmental concerns related to contamination; and
- Increases local tax revenues.

The negative perception is giving way to a more positive view regarding the opportunities. To help alleviate the negativity that surrounds brownfield sites, innovative municipalities have developed creative terminology for their brownfield sites including signature sites in Etobicoke Ontario and impacted sites in Newfoundland.

### **Canada's Brownfield Market**

Unlike other countries that have characterized their sites and created land inventories or lists of their brownfield sites, it has been difficult to characterize the number of sites in Canada. Property owners are concerned that if their site is labeled a brownfield, it will create a negative view, lower property values, and create neighbourhood concern.

So how large is the Canadian brownfields market? In an August 11, 2003 publication by MacLean's Magazine it stated that

“Industrial development has left municipalities across Canada holding the bill for cleaning up sometimes orphaned, often toxic lands. Known as brownfields, they are typically littered with abandoned buildings, all sorts of rubbish, leaking tanks, and rusting drums...About 30,000 brownfields mar the Canadian Landscape”.

In the National Roundtable on the Environment and the Economy's (NRTEE) report - Cleaning up the Past, Building the Future – A National Brownfield Redevelopment

Strategy for Canada, reference is made to the possibility that as many as 30,000 such sites may exist in Canada.

Generally, it is thought that Canada's brownfields market is 1/10<sup>th</sup> the size of the U.S. market which is estimated at between 125,000-600,000 sites.

There are two sectors or types of brownfield markets in Canada and these are the public and private sectors. The drivers or motivators that direct and encourage the market differ for both types of markets. For the public sector, the driver is public good or a need to ensure that the general public is living in a safe, clean, and healthy environment. These types of sites, like the Sydney Tar Ponds in Nova Scotia which has a shared responsibility, receive federal, provincial and municipal support and funding, and must adhere to the government approval requirements for publicly owned sites.

The private sector or privately owned properties can be divided into primary and secondary markets. Both of these markets require private sector funding, innovative approaches to cleanup, and creative land uses. Both must also adhere to provincial regulations and municipal brownfield strategies (if they exist).

In the primary market, of which Vancouver, Toronto and even Calgary are examples, the driver to motivate brownfields redevelopment is economic performance and end use. In each of these cities, land is at a premium and this is a great incentive for developers to take on the challenges of redevelopment. Developers prefer redevelopment projects that result in residential lands because this land use provides the greatest return on investment. Redevelopment of brownfields into residential lands in these high markets often does not require brownfield strategies or financial incentives to motivate the market. In Toronto's downtown core, the issue or concern is the loss of industrial lands or employment lands. Measures are being taken by the municipality to ensure that mixed end use is met.

For the secondary markets, economic performance is not likely to be a strong motivator or driver, so municipal leadership plays an important role. Municipalities would need to create drivers in the form of municipal strategies that includes financial incentives. Financial incentive programs implemented by a municipality are designed to level the financial playing field between a brownfield site and a new development project. The ability to create financial incentive programs is dependent on the provincial/territorial legislation and regulations. In Ontario, new regulations now allow municipalities to freeze or cancel the municipal portion of the property tax on contaminated sites and the Ministry of Finance may match the municipal tax treatment for the education portion of the property tax.

Another driver for secondary markets is a brownfields champion. One of the stakeholders such as a municipal employee, developer or community leader must actively increase awareness regarding the benefits of redevelopment, work with each stakeholder, and promote and prepare a municipal brownfields strategy.

Municipalities like Hamilton, Cambridge and Etobicoke in Ontario understand that sustainable development must include the productive reuse of brownfields. To encourage property owners to clean up brownfield sites, these municipalities have developed community improvement plans and offer financial tools. In Hamilton, the city has been working to redevelop industrial sites or neighbourhoods. The city has prepared a community improvement plan or the Environmental Remediation and Site Enhancement (ERASE) Plan to promote cleanup and reuse of brownfields. Key components are a grant program and assistance with marketing. Cambridge offers a wide variety of financial incentives to help developers and investors reduce the cost of redeveloping sites and buildings. Etobicoke has just launched their industrial and office grants program to stimulate the industrial and office investment within a specific area of the city. Their financial incentive programs are designed to encourage redevelopment of brownfields into productive employment lands.

In the western provinces of British Columbia and Alberta, there are no municipalities that offer financial incentives to encourage, promote and activate community redevelopment and revitalization in the secondary markets. Developers, property owners and municipal staff have stated that these types of incentives would greatly assist the secondary brownfields markets in western Canada.

Depending on the province and the needs of the municipality, there are a number of financial incentives that can be developed to assist redevelopment.

### **Canadian Initiatives**

Over the past five to seven years, there have been a number of initiatives focusing on brownfields redevelopment in Canada including:

- Research of the barriers to redevelopment;
- Efforts to increase awareness and communicate successful approaches or case studies;
- Changes to provincial legislation and regulations;
- Creation of municipal strategies and incentives; and
- Development of a national brownfields strategy.

The national brownfields redevelopment strategy for Canada prepared by the NRTEE made several recommendations for strategic direction including:

1. Applying strategic public investment to address upfront costs;
2. Establishing an effective public policy regime for environmental liability and risk management; and
3. Building Capacity For and Community Awareness of Brownfields Redevelopment.

Three programs and initiatives that address the third recommendation regarding building capacity and awareness are:

- aboutREMEDATION
- Canadian Brownfields Network
- Brownfields Redevelopment Toolbox

### **aboutREMEDATION**

aboutREMEDATION is Canada's premier resource on sustainable brownfield redevelopment and effective remediation of contaminated lands. The website provides up to date news, programs and initiatives, relevant resources, tools and solutions, business directory of key practitioners and stakeholders, innovative cleanup technologies for removal and treatment, best practices and successful case studies. The technology and case study directories provide online search capability and allow website visitors to obtain information on proven technologies. Both brownfield stakeholders and practitioners can access relevant information on aboutREMEDATION to guide them through remediation and redevelopment.

Key sectors of the economy dedicated to remediation and redevelopment include the insurance industry, finance, lawyers, real estate brokers, consultants, municipal educators, developers and the owners of brownfield properties. The website allows industry leaders from the private and public sector to profile and promote their approaches, business capability and services.

The website attracts over 60,000 unique visitors per year who are seeking up-to-date information and innovative solutions. Private sector website sponsors include Gowlings Lafleur Henderson LLP, Aon Reed Stenhouse Inc., AIG Environmental, XL Environmental Inc., JJ Barnicke, City of Hamilton, Jacques Whitford Environmental Ltd., XCG Consultants Ltd., SEACOR Environmental Inc., Gartner Lee Ltd., RESTORATION Environmental Contractors, CRESTech and Seneca College.

aboutREMEDATION is an effective communication and dissemination tool for the Canada's brownfield redevelopment, community revitalization and site remediation activity.

### **Canadian Brownfields Network**

In March, the Canadian Urban Institute and aboutREMEDATION launched the Canadian Brownfields Network (CBN) in response to NRTEE's recommendation for a national brownfields network to coordinate efforts to build Canadian capacity to undertake the redevelopment of brownfields. The CBN is Canada's national voice for

brownfields redevelopment. The CBN facilitates linkages, and connectivity between government, stakeholders and practitioners, builds capacity, researching key Canadian issues on site remediation and brownfields redevelopment, and coordinates the exchange of ideas, expertise and success stories. Progressive thinking and creative approaches for the revitalization of Canadian communities are key components of sustainable community development.

Strategic alliances are being formed with industry associations and other organizations who have a vested interest in brownfield redevelopment in Canada to ensure that the network reaches key sectors and regions across Canada. Current supporting organizations include: ESAA (Environmental Services Association of Alberta), Ontario Environment Industry Association (ONEIA), Ontario Professional Planners Institute (OPPI), Canadian Environmental Auditing Association (CEAA), CRESTech, RESEAU Environnement, Ontario Professional Planners Institute (OPPI), Canadian Institute of Planners, Canadian Urban Institute, Seneca College University of Toronto, Montreal Centre of Excellence, Atlantic PIRI, and the Canadian Environmental Auditing Association.

Recognized experts, both practitioners and stakeholders, have been selected from across Canada and internationally to form the CBN Advisory Panel. The panel will act as the organization's "braintrust" and provide direction to the CBN with a purpose to coordinate national interests and strengthen the Canadian brownfields redevelopment industry.

### **Brownfields Redevelopment Toolbox**

Canadian communities are at various stages of brownfield redevelopment. Some are not even aware that brownfields exist in their community while others recognize the importance of brownfields redevelopment as an integral part of sustainable community development and have developed innovative policies and incentives for urban revitalization. The majority of Canadian communities, especially the smaller municipalities, need guidance regarding how to get started and how to identify the steps for brownfield reuse.

According to the Ontario Ministry of Municipal Affairs and Housing, municipalities need to:

- Promote the brownfields redevelopment internally and externally as part of their progressive development strategies;
- Commit to developing a brownfields strategy;
- Build public support for a brownfields strategy;
- Develop new brownfields related programs; and
- Implement and monitor new programs.

Supported by the Canadian Brownfields Network, aboutREMEDICATION and the Ontario Centre for Environmental Technology Advancement (OCETA) have partnered with government and the private sector to develop an Ontario municipal brownfields

redevelopment toolbox. The toolbox is being developed to guide urban centers in the redevelopment and revitalization of challenged sites and to encourage the creation of productive land uses such as affordable housing and improved community services. Communities can follow a decision tree of effective steps in redevelopment including community readiness, evaluation, transaction, implementation, and site management.

Specifically, the toolbox will provide steps, tools, best practices and resources on the following:

- Community readiness will emphasize an understanding of the barriers and benefits of redevelopment, the importance of selecting a definition of brownfields that is relevant for their community, and provide checklists for community assessment.
- Evaluation will consider a project or site's viability or property valuation, and provide the key components of site characterization and risk assessment, project risk management, financial risk, governance structure and regulatory compliance, remediation options and public perception;
- Transaction will focus on risk management and transfer, securing investment and financing, engaging the public, the planning process and community improvement plans, permit and approval requirements, selection of cleanup options;
- Implementation will provide guidance on the remediation and demolition process, and redevelopment to a successful community land-use; and
- Site management will include information on the importance of monitoring the remediation and redevelopment activity as well as showcasing successes.

Currently, the CBN is delivering training workshops to Ontario communities for the purpose of increasing awareness regarding the benefits of brownfield redevelopment and to provide the tools for successful community improvement projects. Future workshops are being considered for other urban and rural communities across Canada.

The NRTEE recommended that a guide was needed to raise awareness and promote greater consistency and efficiency in cleanup activities across the country. The toolbox will address this need in Ontario and the CBN has future plans to develop a decision tree and brownfield redevelopment toolbox for other provinces in cooperation with local governments.

### **Concluding Remarks**

The brownfields redevelopment industry in Canada is still in the early stages. Efforts are underway to:

- Increase awareness of the benefits and encourage redevelopment;
- Coordinate national interests and strengthen the Canadian brownfields redevelopment industry; and
- Guide municipalities in the development of effective strategies, policies and guidelines to encourage remediation, revitalization and redevelopment.

In particular, the Canadian Brownfields Network is coordinating efforts and accelerating redevelopment and revitalization across Canada. Canadian perception is changing in that people are more receptive to the redevelopment and reuse of brownfields. The Canadian brownfields industry needs drivers to motivate the markets including economic performance, public good, and financial incentives. Municipal leadership and community champions are required to 'put' brownfields back into productive use. The Brownfields Redevelopment Toolbox will provide municipalities with the steps and tools for effective redevelopment by guiding municipalities through community readiness, evaluation, transaction, implementation and site management.

### **Acknowledgements**

The brownfields redevelopment toolbox is being developed by the Ontario Centre for Environmental Technology Advancement (OCETA) and the Canadian Brownfields Network with funding support from FedNor-Industry Canada, Environment Canada-Ontario Region, Canada Mortgage and Housing Corporation and in cooperation with EcoLog Information Resources Group, Aon Reed Stenhouse Inc., Gowling Lafleur Henderson LLP, Jacques Whitford Environmental Ltd., the Ontario Ministry of Municipal Affairs and Housing, the City of Kitchener, the City of Etobicoke, the City of Cornwall, and the Niagara Economic and Tourism Corporation (NETC).

### **Resources and References**

[www.aboutremediation.com](http://www.aboutremediation.com)  
[www.canadianbrownfieldsnetwork.ca](http://www.canadianbrownfieldsnetwork.ca)  
[www.mah.gov.on.ca](http://www.mah.gov.on.ca)

National Round Table on the Environment and the Economy. (2003). *Cleaning up the Past, Building the Future – A National Brownfield Redevelopment Strategy for Canada*

Ontario Ministry of Municipal Affairs and Housing (MMAH). (2004). *Brownfields Showcase 11 – Opportunities in Our Own Backyard*. Provincial Planning and Environmental Services Branch