

Green Economic Sector Development Strategy

Date:	May 16, 2007
To:	Economic Development Committee
From:	Donald G. Eastwood, General Manager Economic Development Culture and Tourism
Wards:	All
Reference Number:	P:\2007\Cluster A\EDCT\ECON DEV\ed0706-020

SUMMARY

The Economic Development Culture and Tourism Division (EDCT), has undertaken the development of a Green Economic Sector Development Strategy to support the growth and recognition of Toronto's environment and renewable energy industry sector, promote environmental best practices among employers and increase the City's competitiveness and retention of existing employment. This report presents the initiative's strategic directions and outlines actions to improve the local/global environment, increase prosperity and better the quality of life for Torontonians.

RECOMMENDATIONS

The General Manager of the Economic Development, Culture and Tourism Division recommends:

1. Council endorse the vision, objectives, and strategic directions contained in the Green Economic Sector Development Strategy and summarized in this report;
2. Council request the Economic Development, Culture, and Tourism Division work with other City Divisions to ensure that the City's prosperity objectives are incorporated into the development of existing and new environmental policies and programs;
3. Council endorse the implementation of the action items listed in the report; and

4. Council request the General Manager of Economic Development, Culture and Tourism, in co-operation with other City Divisions, to report to the Economic Development Committee in September 2007 on a work plan for implementing the action items and the resources that may be required.

Financial Impact

There are no financial implications resulting from the adoption of this report.

DECISION HISTORY

The Roundtable on the Environment made several recommendations to facilitate the City of Toronto's role in promoting initiatives that simultaneously stimulate the economy, create jobs, and clean up the environment.

At its meeting October 26, 27, 28 and 31, 2005, Clause No. 46, Report No. 9 (Item g), Council approved the activities endorsed by the Policy and Finance Committee to endorse the following activities:

- a. Establish a core internal working group within the City, including a liaison from the Roundtable on the Environment.
- b. Commission a study to determine existing strengths, weaknesses, opportunities and threats in the green industry and business sector.

<http://www.toronto.ca/legdocs/2005/agendas/council/cc051026/pof9rpt/cl046.pdf>

The Economic Development, Culture, and Tourism Division undertook the Green Economic Sector Development Strategy in response to those recommendations.

ISSUE BACKGROUND

Since Toronto's Environmental Plan came into force in 2000, there has been some progress in greening Toronto's economy, especially in relation to greening City operations, increasing energy efficiency in the commercial/institutional sector, promoting the development of green industries and businesses, and promoting environmentally sustainable urban form. Recognizing the need to make continued progress in these areas, city staff is taking an interdivisional approach on a number of initiatives to realize the objectives of the Climate Change Plan and the Economic Development Strategy to ensure that the City is taking strategic, coordinated action related to developing a green economic development strategy and action plan.

The Delphi Group and Gartner Lee consulting firms were retained to assist in the development of a Green Economic Sector Development Strategy by engaging with city divisions industry, labour, academia, and government stakeholders.

This study was managed by Economic Development Culture and Tourism (EDCT) with

the support of an inter-divisional working group which included staff from the Toronto Environment Office, Energy Efficiency Office, Planning, Building and Public Health. Funding for the project was leveraged through the support of the City's Technical Services Division and a grant from the Federal Community Investment Support Initiative (CISP).

People, Planet & Profit: Catalyzing Economic Growth & Environmental Quality in the City of Toronto:

- Provides a better understanding of the existing strengths, weaknesses, opportunities and threats in Toronto's green industry and business sector.
- Provides recommended actions to enhance business competitiveness and stimulate job creation.
- Promotes green business practices to existing companies.
- Supports environment and clean energy sector development, firm formation, expansion business attractions.

This project will result in strategic initiatives to support and promote the ability of existing firms in all sectors to invest in technologies and processes as well as the economic growth and success of local environmental companies. As comprehensive background research into current sector conditions and analysis of future actions, this study will be a resource for Economic Development and City staff to move forward and promote Toronto's competitive advantages in key economic clusters including Environment, and Renewable Energy Technology.

Improving Toronto's Competitiveness

The clear connection between environmental considerations and economic competitiveness is leading a transformation of the way the global economy works. Competitive Economies are integrating both environmental and economic performance in order to position themselves to improve, or even to maintain, the quality of life of their people and to spur the innovation and creativity needed to drive a competitive and sustainable economy.

Toronto has ambitious objectives with respect to residential and employment growth, seeking to add 500,000 new residents and 500,000 new jobs. Achieving these objectives can make a transformative change to the City's environmental performance by mitigating the negative impacts of urban and employment sprawl. For example an office building built at King/Bay can take advantage of transit thus creating a smaller environmental foot print. A similar development at Hwy 404 and Hwy 7 in comparison, produces 2,154,938 kilograms of carbon dioxide more per year.

Office Sprawl & Emissions (kg/yr)

Emission Type	King & Bay	404 & 7	Difference
NOX	2,108	7,213	5,105
SO2	14	47	33
CO	42,479	145,370	102,891
VOCs	3,284	11,239	7,955
PM10	2,629	8,997	6,368
PM25	578	1,978	1,400
CO2	889,687	3,044,625	2,154,938

Impact of Moving 2000 Office Workers (i.e. 500,000 sq ft office building) from King & Bay to 404 & 7:

	King & Bay	404 & 7	Difference
Total auto km /yr	3,259,284	11,153,698	7,894,415
Transit trips /yr	634,800	57,363	-577,437
Litres of fuel /yr	291,025	995,925	704,900
GHG Emissions kg /yr	940,779	3,219,469	2,278,690

Creating a culture within the City that supports the development of policies, programs, and projects that achieve a “triple bottom line” will be crucial to meeting both Toronto’s prosperity and environmental objectives. The triple bottom line, means using an expanded spectrum of values and criteria for measuring organizational success that includes economic, environmental and social concerns. This approach is a tool for assessing future actions that can spur municipal innovation as we look for new ways of addressing complex issues and foster inter-divisional collaboration.

The green initiatives outlined in the strategy will contribute to Toronto’s effort to enhance its competitive position in the global market, stimulate strong economic growth, improve the local/global environments, increase prosperity and better the quality of life for Torontonians.

COMMENTS

There is a tremendous green movement that is happening around the world that is creating exciting opportunities for new business in Toronto as well as opportunities for existing businesses to reinvent themselves.

Annual global environmental markets have surpassed the \$US 1 trillion level, as a multitude of drivers converge, driving demand for innovative clean solutions to new heights. In Canada, the market has surpassed \$35 billion annually. Over 6000 Canadian firms, employing over 250,000 people provide innovative 'green' solutions that generate both financial and environmental benefits to buyers around the world. Green Economic Development opportunities related to environment and clean technologies has risen to become the sixth-largest venture investment category in the Canada and the U.S., behind information technology, software, biotechnology, health care, and telecommunication.

In light of this growing market opportunity, Toronto must embrace the global green movement and build on its existing core strengths in order to develop a strong green industry cluster and existing business base.

THE GREEN ECONOMIC SECTOR DEVELOPMENT STRATEGY

Core Strengths

Toronto's remarkably diverse economy creates unlimited opportunities and uniquely positions the City to build upon this burgeoning and convergent market segment. Environmental drivers, market forces and policy issues in the City have stimulated the growth of companies in areas such as energy efficiency, demand side management, green building architecture/design and high end consulting firms. Other more innovative technology solution providers (e.g. clean energy) and high-value service firms (e.g. green financial investment) have also emerged and are expanding in number and size within Toronto.

The Delphi Group prepared a profile of the sector and estimates that there are over 1,000 organizations residing in the City of Toronto whose primary business is in the environment and clean energy sectors or they are offering a 'green' element to their main product or service line. These activities are likely generating over 20,000 jobs and \$2 billion of revenue annually for the local economy.

In addition, Toronto also has a strong presence of more traditional environmental companies in the areas of engineering consulting, law, waste management, remediation and a strong grass roots movement which has existed for some time.

The City of Toronto has a number of other strengths that are particularly relevant to the Green Economic Development Strategy. The strong network of universities and colleges

provide a backbone for the innovation network within the city, while Toronto's Global reputation and presence including an outstanding quality of life compared to other large comparable cities is clearly an advantage.

A strong existing industry business base, Toronto's reputable business support and financial services and its location on Lake Ontario and the center of the Great Lakes Region allow for easy access to the largest potential market for green technologies and services in the US. Toronto's early and ongoing leadership also helps to position the city to take advantage of the growing and global demand for environmental products, services and technologies.

Toronto's Critical Strengths For Successful Green Economic Sector Development



Toronto must continue to capitalize on its core strengths and build on the existing businesses that have successfully found a market. In the global knowledge economy, quality of place takes on an additional importance, as an “economic foundation” and key competitive factor.” Specialization, innovation and finding more flexible and higher value-added niches, including environmental and renewable energy technologies, are key to Toronto's future competitiveness and environmental health.

VISION, OBJECTIVES AND DIRECTIONS

The Strategy proposes a green vision for the City. Toronto should become:

A globally recognized green industry hub that generates sustainable value to the City, local industry and its residences while stimulating the continued growth and sustainability of established businesses.

To achieve this vision, the City of Toronto must take a number of strategic directions. The key objectives under pinning each of these directions are to:

- Catalyze innovation and foster environment and clean energy sector development, firm formation, expansion and recruitment;

- Boost green business practices to ensure that the demand for sustainable solutions is strong;
- Enhance business competitiveness and stimulate job creation.

A critical success factor for the Green Economic Sector Development Strategy is ensuring that the strategy works in harmony with the other initiatives within the City of Toronto including those initiatives that respond to the economic, social and environmental needs of its citizens.

The Strategy sets out a number of strategic directions that include:

- Support the growth of the existing base of environmental businesses
- Stimulate the growth of the Green Market
- Educating and expanding the workforce to support the green economy
- Toronto leading by example
- Marketing the “Toronto Advantage”
- Enhance and Leverage Partnerships with academia, association, governmental and labour

Producing the Green Economic Sector Development Strategy provided an opportunity for business, academia, government, non-profit and labour stakeholders to come together and identify a range of actions in order to advance the growth of the sector and environmental performance of the business community.

The actions fall into three main categories that aim to stimulate residential and business demands for environmental goods and services, create opportunities for local companies to service the market and thereby grow their operations and ensure the labour force is prepared to support the sector. Over 50 actions were identified and form part of the strategy.

The following ten action items have the potential to have a significant impact on improving the sector and Toronto’s economic position. It is recommended that the following priority actions be implemented.

- Create a one window utility conservation program undertaken jointly with City, Toronto Hydro, Enbridge, and targeted at the existing business community to support best environmental practices and make our companies industry leaders.
- Develop a district energy project in Toronto Discovery District to support the sustainable use of energy, provide stability with respect supply and costs and stimulate new development in the area.

- Formalize a Toronto Environmental Research and Commercialization Initiative to strengthen research partnerships in the fields of sustainable energy and environment; to seek avenues for commercialization of these technologies, and to link local and international environmental research to business opportunities.
- Develop a Sustainable Employment District Pilot project to stimulate industrial ecology, and economic competitiveness as a means of creating competitive advantage for companies in the area.
- Develop a Green Home Innovation Centre to showcase and provide education on environmental products and services to Toronto residents that leverages partnerships and current initiatives.
- Develop a training program with the business, academia and labour communities to assist office operations and manufacturing companies to establish in house expertise with respect running and maintain environmental systems.
- Organize municipal workshops on Green Procurement and methods for stimulating environmental innovation within the City's operations including a trade fair to demonstrate new and emerging environmental products and services to municipalities and the business community.
- Develop a training program with the business, academia and labour communities to improve the skill sets of architects, building and design professionals with respect to incorporating integrated environmental design into building design and construction.
- Support the creation of environmental industry capabilities database and Toronto consumer market prospectus in cooperation with environmental industry association(s) and other levels of government to stimulate local company growth and to attract new companies to the area.
- Organize Workshops with TABIA (Toronto Association of Business Improvements Areas) and the Chambers of Commerce to engage the participation of the small business community in the "Zerofootprint" initiative.

Conclusion

The City of Toronto is poised to meet the rising demand for global environmental solutions. The Green Economic Sector Development Strategy points to the actions required to catalyze green business development in Toronto and to enhance the City's position as a globally recognized green industry hub. The Strategy will help shape the vision for Toronto, with a coordinated commitment, action plan and resources all working towards a common goal: To be the Greatest and Greenest of the World's big cities.

CONTACT

Kyle Benham, Director
Business Development and Retention
Tel: (416) 397-5309
Fax: (416) 392-3374
Email: kbenham@toronto.ca

John Alderdice
Economic Development Officer
Tel: (416) 392-1004
Fax: (416) 396-4241
Email: jalderd@toronto.ca

SIGNATURE

Donald G Eastwood, General Manager
Economic Development, Culture and Tourism

ATTACHMENTS:

People, Planet & Profit: Catalyzing Economic Growth & Environmental Quality
in the City of Toronto – May 2007