



THE TORONTO AND REGION CONSERVATION AUTHORITY

Sustainable Communities Board Meeting #4/04

Chair:	Michael Di Biase
Vice Chair:	Suzan Hall
Members:	Maria Augimeri
	Glenn De Baeremaeker
	David Gurin
	Colleen Jordan
	Glenn Mason
	Elaine Moore
	Gerri Lynn O'Connor
	Linda Pabst
	Andrew Schulz
	John Sprovieri
	Dick O'Brien - Chair, Authority

July 9, 2004

11:00 A.M.

SOUTH THEATRE, BLACK CREEK PIONEER VILLAGE

AGENDA

- 1. MINUTES OF MEETING #3/04**
(Enclosed herewith on Green)
- 2. BUSINESS ARISING FROM THE MINUTES**
- 3. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF**
- 4. DELEGATIONS**
- 5. PRESENTATIONS**
 - 5.1** A presentation by Doug Webber, Shareholder, Halsall and Associates, in regards to the efforts with Menkes Developments Limited to apply green building technology to industrial building.
 - 5.2** A presentation by John Campbell, President, Toronto Waterfront Revitalization Corporation (TWRC), in regards to the TWRC Sustainability Framework.

6. CORRESPONDENCE

7. SECTION I - ITEMS FOR AUTHORITY ACTION

- | | |
|---|------|
| 7.1 GREEN BUILDING TECHNOLOGY | |
| The Living City Initiatives and Partnerships | 3-5 |
| 7.2 SUSTAINABILITY FRAMEWORK FOR THE TORONTO WATERFRONT
REVITALIZATION CORPORATION | |
| | 6-8 |
| 7.3 ENVIRONMENTAL MANAGEMENT SYSTEM | 9-11 |

8. NEW BUSINESS

NEXT MEETING OF THE SUSTAINABLE COMMUNITIES BOARD #5/04,
TO BE HELD ON OCTOBER 1, 2004,
IN THE SOUTH THEATRE, BLACK CREEK PIONEER VILLAGE

Brian E. Denney
Chief Administrative Officer

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TO: Chair and Members of the Sustainable Communities Board
Meeting #4/04, July 9, 2004

FROM: Brian Denney, Chief Administrative Officer

RE: GREEN BUILDING TECHNOLOGY
The Living City Initiatives and Partnerships

KEY ISSUE

To encourage developers, building owners and architects across the Toronto region can to utilize green building technology and energy saving processes.

RECOMMENDATION

THE BOARD RECOMMENDS TO THE AUTHORITY THAT the efforts the Toronto and Region Conservation Authority (TRCA) and Halsall & Assc. have initiated in engaging Menkes Development Inc. in green building design & implementation be advocated to other private sector developers in the Toronto region to reduce up-front and lifecycle energy costs while also reducing the environmental impact around the site, improving indoor environmental quality and reducing the consumption of potable water and fossil fuel source energy;

AND FURTHER THAT The Living City section under the TRCA website develop a catalogue to highlight TRCA supported building projects that have successfully applied green building technologies and have achieved certification under the LEED rating system.

BACKGROUND

The Canada Green Building Council is a broad-based inclusive coalition of representatives from different segments of the design and building industry. The Council will work to:

- change industry standards;
- develop best design practices and guidelines;
- advocate for green buildings; and,
- develop educational tools to support its members in implementing sustainable design and construction practices.

Members of the Green Building Council represented by engineers, architects and manufacturers developed the LEED (Leadership in Energy and Environmental Design) rating system for Green Buildings.

The LEED Rating System is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. LEED provides a complete framework for assessing building performance and meeting sustainability goals based on well-founded scientific standards. LEED emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.

Halsall and Associates are an engineering firm specializing in sustainable development. Their vision for buildings in our communities focuses on the belief that buildings and the construction industry have a deep and lasting impact on our environment. "All too often, buildings become a burden for future generations. Halsall wants to work to make them an asset." (source: www.halsall.com).

Menkes Industrial and Office Division concentrates on the development, leasing, and management of industrial and office properties. Menkes has developed in excess of 8 million square feet of high quality, strategically located industrial and office buildings in the Greater Toronto Area (GTA).

Menkes Development Inc. have applied to build a 650,000 sq. ft. industrial tenant complex on land in their ownership at Goreway Dr. and Steeles Ave. in Brampton. The site is adjacent to sensitive lands. In addition to TRCA's permit procedures to protect the valleyland near the building, a request has been put forth for Menkes to apply green building technology to the site and strive to achieve a LEED "silver" rating. A rating of LEED silver will greatly reduce disturbance around the site by implementing strict erosion control measures and maintaining stormwater run-off conditions equal to a vacant greenfield site. Energy requirements for this building will be a minimum 25% better than the Model National Energy Code.

RATIONALE

TRCA staff recognizes this project offers an important opportunity to work towards market transformation with green buildings in the GTA. Menkes is one of the largest development companies in our region. Halsall and Associates is currently leading Menkes through the learning processes required to apply green building design. Our goal is to have Menkes recognize the application of LEED principles as an effective way to create new buildings and apply this system to future projects on a regular basis. Menkes is an ideal candidate to assist in the promotion of green building practices to other developers in our regions. Halsall and Associates have the expertise and experience to work with Menkes and introduce the economical, environmental and social benefits of green building technology.

It has been identified by the Green Building Council that up-front costs for creating green buildings will be equal to traditional building costs if participants apply the LEED process past 4 building projects. After 4 projects have implemented green building design strategies, the learning curve for building green is complete and developers can apply green building designs with a "business as usual" perspective. Life cycle costs for green buildings have demonstrated energy savings in excess of 60% over traditional buildings. The combination of equal up-front costs and the substantial reduction in life-cycle building costs establish a strong financial case for implementing green building design strategies

An on-line catalogue of TRCA supported green building to be initiatives developed as a component under The Living City section of TRCA's website will act as a source for reliable examples of green buildings in the Toronto region. Staff at TRCA want to utilize this web resource to present our efforts to new partners, encourage funding support and engage public and private project leaders.

Report prepared by: Andrew Bowerbank, extension 5343
For Information contact: Andrew Bowerbank, extension 5343
Date: June 28, 2004

TO: Chair and Members of the Sustainable Communities Board
Meeting #4/04, July 9, 2004

FROM: Brian Denney, Chief Administrative Officer

**RE: SUSTAINABILITY FRAMEWORK FOR THE TORONTO WATERFRONT
REVITALIZATION CORPORATION**

KEY ISSUE

The Sustainability Framework is a draft document compiled by the Toronto Waterfront Revitalization Corporation (TWRC) to identify redevelopment strategies and actions for the City's waterfront lands.

RECOMMENDATION

THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff incorporate the principles included within the draft sustainability framework in the development, environmental assessment, and implementation of projects which TRCA is undertaking on behalf of the TWRC including the Environmental Assessments for the Lower Don Naturalization and Flood Control, Port Union Park, Mimico Linear Park, and the implementation of the Tommy Thompson Park Master Plan.

THAT staff continue to work with TWRC staff to refine the Framework's definition and indicators of sustainability in alignment with TRCA programs.

AND FURTHER THAT as a member of the TWRC Sustainable Framework committee, the CAO, Brian Denney, will continue to provide associate members with direction and recommendations on how the framework's objectives can be achieved and how the actions can yield measurable results

BACKGROUND

Toronto Waterfront Revitalization Corporation (TWRC) is committed to making the City's waterfront both a national and global model for sustainability. What TWRC does on the waterfront can and will set new standards for best practices not only in Canada but throughout the world.

TWRC has developed a sustainability framework draft document that is designed to be a road map that will guide the transformation of the waterfront into new, vibrant downtown neighbourhoods. Although it is a draft document, its goal is clear: to ensure that sustainability principles are integrated into all facets of waterfront management, operations and decision-making.

The Framework draft document is divided into 4 sections:

- Toronto's waterfront: The 21st Century Starts Here
This section works to present/define sustainability as it will apply to waterfront revitalization.

- Made in Toronto

This section outlines the vision and mission statements and gives an overview of the framework's direction.

- Sustainability Action Plan

This section lists and defines the attributes associated with the project including: Energy, Land Use, Transportation, Buildings, Air Quality, Water, Human communities, Innovation, Materials and Waste, Natural Resources.

- What the TWRC Will Do

This section outlines the actions that will be undertaken to apply the sustainability framework to projects planned for Toronto's waterfront redevelopment.

RATIONALE

The TWRC Sustainability Framework document is a comprehensive draft that addresses the need for sustainable planning strategies. The goals, targets, objectives and rationales outlined are appropriate and well defined, however, directions on how the objectives and goals can be achieved need greater, support, detail and directional focus. TRCA staff and associates can work with TWRC to ensure this document identifies and addresses all concerns as it moves toward its final iteration.

The Framework document identifies preliminary concerns about the value of the sustainability concept in Appendix 5. TRCA can offer support to address these concerns through our efforts under our sustainable communities agenda.

We can also offer professional support by bringing the expertise of our established partners to the table. TRCA's Waterfront Aquatic Habitat Restoration Strategy is referenced in the TWRC framework document and sets the stage for partnership work to further this document for implementation. The Living City identifies the fact that programs cannot be implemented through independent efforts. Partnerships play a large role in our efforts to make our regions a place where human settlement can flourish forever as part of nature's beauty and diversity.

- The Framework objectives are general. Clear indicators are needed to give direction for measurable results.
- The Sustainability "bar" must be set high and specific components must be defined so that project requirements are not left open to interpretation. More definitive structure to the Framework's targets must be in place to give specific guidelines and fully illustrate expectations.
- The design process should be reviewed to identify relationships and compatibility to all infrastructure components. A Seamless transition from private to municipal lands must be regulated as demonstrated in the Vancouver sustainability agenda.
- Section 3: Sustainability Action Plan will be reviewed to ensure all factors have been considered.

- The value of sustainable development needs strong support that can address the response to preliminary concerns outlined in appendix 5.

Report prepared by: Andrew Bowerbank, extension 5343

For Information contact: Andrew Bowerbank, extension 5343

Date: June 28, 2004

TO: Chair and Members of the Sustainable Communities Board
Meeting #4/04, July 9, 2004

FROM: Brian Denney, Chief Administrative Officer

RE: ENVIRONMENTAL MANAGEMENT SYSTEM

KEY ISSUE

Receipt of the summary of the Environmental Management System - 2003 year end report and recommendations of priorities for 2004.

RECOMMENDATION

THE BOARD RECOMMENDS TO THE AUTHORITY THAT the summary of the Environmental Management System (EMS) 2003 year end report be received;

AND FURTHER THAT the major efforts in 2004 and beyond address the priority areas of energy use, fleet use and waste management.

BACKGROUND

At Authority Meeting #10/99, held on October 29, 2004, Resolution #A278/99 was approved as follows:

THAT the proposed corporate Environmental Policy Statement be adopted;

AND FURTHER THAT the proposed framework for implementing an Environmental Management System be approved.

Following this, extensive staff consultation, research and planning resulted in an initial set of environmental management targets and objects. These were finalized in 2002. In 2003, 57 targets were grouped under our seven significant aspects, which are: Vehicle and Equipment Use, Energy Use, Water Use, Land Management, Procurement, Management of Contaminated Lands and Waste Management. 2003 represented the first year of EMS implementation, during which TRCA's progress towards the aforementioned targets was monitored and reported.

It is the intent of the EMS to administer a system to continually review, consult on, monitor, report, revise and improve TRCA's environmental performance in selected areas where our internal operations have significant impact on the environment (these areas are called "significant aspects" under ISO 14000 terminology, one global standard for environmental management systems).

PERFORMANCE SUMMARY

Positive Indicators

TRCA met EMS targets in the following areas:

- adhering to smog alert operations
- procuring green energy
- shutting down computers and lights
- buying Energy Star gas boilers, HVAC systems, appliances
- buying efficient fluorescent lighting
- performing good sediment control at construction sites
- recording and reporting on EMS impact on decision making
- purchasing gasoline from sustainable energy companies
- reducing mapping resource consumption through improvements and reliance on digital mapping
- maintaining vehicles
- provision of composting options at all staff locations.
- purchased two hybrid vehicles
- 27% reduction in natural gas usage at Head Office (causation to be clarified - possible factor: new high efficiency HVAC system)
- breathing wall process commenced (completed in 2004)
- completed arrangements to purchase 10% green energy, organization-wide
- implemented a mandatory green procurement list
- Authority approved policies on pesticide use and operations on smog days
- TRCA actively pursuing energy conservation and other positive measures in new facilities

Major Concerns Pertaining to 2003 Performance

TRCA did not fare as well in relation to:

- Recording and reporting on EMS impact in decision making.
- Purchasing gasoline from sustainable energy companies.
- Reducing mapping resource consumption through improvements and reliance on digital mapping.
- Vehicle maintenance.
- Provision of composting options at all staff locations.

Major areas of action for 2004 and beyond:

Vehicle/Fleet Usage

- Arguably TRCA's largest negative impact on environment.
- Fleet vehicle use up 17% over 2002 data (causes being investigated).
- Fuel consumption also increased significantly.

Waste Management

- Little progress has been made.
- Current system is highly complex, resulting in difficulties gathering background information.

Energy Use

- Despite green energy and leadership on new facilities, energy usage remains a key concern due to the aging infrastructure of existing facilities.

RECOMMENDATIONS

Major efforts in 2004 and beyond will be to address the priority areas of energy use, fleet use and waste management.

2004 Targets

- Utilize our membership in Smart Growth Black Creek to introduce policies pertaining to mileage reduction, telecommuting, teleconferencing, employee commute impacts and reducing fuel use.
- Finalize a strategy for greening the TRCA vehicle fleet via hybrid utilization and sustainable ethanol fuels.
- Perform waste audits, take steps to simplify the waste management system, gather background diversion data toward the goal of reducing waste significantly.
- Develop a corporate energy management plan to prioritize retrofits at existing facilities and work with partners to improve energy use in TRCA rental facilities.
- Develop a biodiesel strategy for use in equipment, vehicles and potentially as heating fuel.

Report prepared by: Brian Dundas, extension 5262

For Information contact: Brian Dundas, extension 5262

Date: June 25, 2004