

OTTAWA CENTRE ECO-DISTRICT -- BACKGROUNDER

OVERVIEW OF SOME EXISTING AND EMERGING ASSETS

The goal of the OCED is to dramatically boost environmental performance – along with economic development and other aspects of sustainability -- by greening buildings, infrastructure and community culture. The rationale and proposed next steps for the OCED are described in the presentation. The purpose of this backgrounder is to illustrate the impressive set of *existing* sustainability assets in the downtown core. These assets create a good foundation on which to build the eco-district.

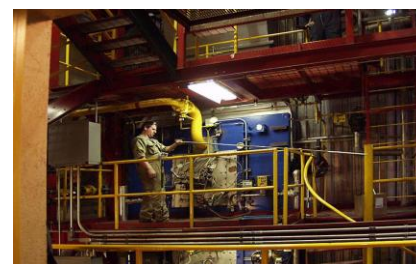
GREEN ENERGY

The Fleet Street Pumping Station uses hydraulic power channeled from a drop in elevation in the Ottawa River to pump part of the City's water supply system. It is the only such station still in operation in Canada, and pumps over fifty percent of the City's potable water from the Lemieux Island Water Purification Plant up the escarpment into the distribution system. It saves the City of Ottawa over \$1 million annually in energy costs.



Energy Ottawa's generating stations on Victoria Island: One of the two run-of-the-river hydroelectric stations owned by Energy Ottawa's was built in 1891; the oldest operating hydroelectric station in Canada. EO has just purchased three more adjacent generating stations. This will bring the output of EO's Chaudière Falls operation to 38 megawatts -- enough to power 28,000 homes, and more than twice current capacity. There is potential to expand capacity to 60 megawatts.

The Cliff Street Heating Plant next to the Supreme Court building was one of the first district energy systems in North America. The massive underground distribution system now heats and cools 50,000 employees in 52 buildings including the Parliament buildings, the Supreme Court, the National Gallery, the Bank of Canada, DND HQ and the US Embassy. This system could provide the infrastructure for a more sustainable energy future in the OCED.



The LeBreton Flats District heating system built in 1982 provides hot water for space heating and domestic hot water for 142 neighbouring apartments and townhouses.

Solar energy installations. One example in the district is the 10 kW array on the roof at City Hall, which began delivering to the grid in 2011.



GREEN BUILDINGS

Green developers and building managers: Numerous developers and property managers active in the downtown are recognized environmental leaders. For example, Ottawa-based Windmill and Minto are two of Canada's acknowledged greenest developers. Bentall Kennedy, which manages a number of key green buildings in the core (e.g., Sun Life Financial Centre and World Exchange Plaza), was ranked first in America and fifth globally by the Global Real Estate Sustainability Bench Mark Foundation. Oxford Properties, manager of Constitution Square, was recently recognized by Ottawa Hydro for their energy conservation programs

Green Buildings: There are approximately 30 certified green buildings in our Downtown. Some examples include:

- **Telus House Ottawa**, 215 Slater – Earned LEED gold in 2010. Uses up to 40% less energy consumption and 40% less water consumption and 80% of the workforce takes public transit, rides bicycles or walks.
- **EDC building**, corner of Slater and O'Connor streets – EDC is targeting LEED gold for this 18-storey, 520,000-square-foot building.
- **Minto Place**, Lyon and Laurier. Minto's two office towers and hotel complex are BOMA Best Level 3 certification (the second-highest rating under in this system) and 180 Kent Street is targeting LEED Platinum. A stand-out feature in the atrium of Minto Place is the green wall.

Green Roofs: There are at least four green roofs in the core, including the CD Howe building at 235 Queen Street, the Provincial Court House on Elgin (1.6 acres of green roof!), the new EDC headquarters, and 279 Laurier.

Growing residential capacity: The growing number of residential units in the core area is making it easier to live close to work downtown, and to justify further investments in green living infrastructure.

Energy efficiency programs and incentives: BOMA Ottawa's new "Lose to Win" program assists tenants and landlords to work together to save energy. Hydro Ottawa and Enbridge also have energy efficiency programs and incentives for businesses and facility owners. The OCED will further boost uptake of these programs in the district.

Green Key Hotels: Based on the results of comprehensive environmental self-assessment backed by follow-up independent audits, over a dozen hotels in the district are Green Key hotels that have achieved at least a level 3 rating by taking action to reduce their environmental footprint in a range of operational areas.



SUSTAINABLE AND ACTIVE TRANSPORTATION INFRASTRUCTURE

The Laurier segregated bike lane: This is the first segregated bike lane in Ontario.



Other cycling infrastructure: This includes the NCC's off-road pedestrian/bike path along the canal and the Ottawa River below Parliament Hill, and numerous on-road cycling lanes.



Bixi bike stands: There are 5 stands in the ecodistrict core.

Sparks Street pedestrian mall



Car sharing: There are 6 VRTUCar locations in the core area, including 1 electric car charging station at the World Exchange Plaza.



The planned LRT will have 3 stations in the downtown area.

Downtown MOVES: The Downtown Ottawa Mobility Overlay Study is a planning process to take maximum advantage of the coming LRT and its three downtown stations, via an integrated design and transportation strategy that significantly improves the pedestrian, cycling and transit friendliness of the core.



ADDITIONAL GREENSPACE

Parliament Hill



The Bytown locks

The Rideau Canal and Skateway

The Pumphouse white water paddling facility: In the tailrace of the Fleet Street pumping station is a class 2 whitewater, and an area for beginning white water paddlers where the outflow meets the Ottawa River Victoria Island.



Community Gardens: Nanny Goat Hill CG at Laurier and Bronson has 80 plots and will host 2 farmers market days this summer. If successful this could become a full season market, right on the Laurier bike lanes. There is another raised-bed community garden at Lyon and Lisgar that has 36 plots.



OTHER ASSETS

- **Existing and emerging City plans** provide a good context for the OCED, e.g., the 20/20 Downtown Ottawa Urban Design Strategy, the adjacent community design plans, Ottawa MOVES (mentioned above).
- **The Value of Investing in Canadian Downtowns:** This recent Canadian Urban Institute report is about how and why to invest in ten downtowns, including Ottawa's.
- **IBM Smarter Cities Challenge:** A dedicated IBM team of experts will be loaned to the City for three weeks to assist in its current land use exercise on properties surrounding the planned light-rail transit stations.
- **Savour Ottawa restaurants:** There are 4 in the core.
- **"Green Key" hotels:** There are at least 3 in the core, including Minto Suites, The Marriott and The Westin.
- **Social enterprise hubs:** Hub Ottawa and Under One Roof have both launched in the past year.
- **Leading environmental consulting companies:** There are a number in or near the core, including Terrachoice environmental marketing and Marbek Resource Consultants).
- **National environmental organizations:** Headquarters or regional offices of a number of important national ENGOs are found in the core, e.g., Nature Canada, Canadian Wind Energy Association, Pembina Institute for Appropriate Development, Tree Canada. There are many other sustainability-oriented organizations in Ottawa that would have an interest in supporting the eco-district, including the Natural Step Program, Canadian Green Builders Association, and BOMA.
- **Canada's Greenest Employers:** Two of the 2012 designated employers are found in the core: City of Ottawa, National Capital Commission
- **National and international sustainability conferences:** Many such conferences are held in the core, including the recent FCM Sustainable Communities Conference and the Canadian District Energy Conference (both held at the Westin)

