

Green Municipal Fund
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Globe 2006 Lunchtime TEAM Techtalk Series
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Energy Efficiency and Innovation

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Federation of Canadian Municipalities

- **National voice of municipal governments since 1901**
- **Represents over 1,100 municipal governments**
- **Dedicated to improving the quality of life in all communities by promoting strong, effective and accountable municipal government**
- **Focus: advocacy on economic, environmental and social policies that affect municipal government**

The Green Municipal Fund

- **The Government of Canada has endowed the Federation of Canadian Municipalities with \$550 million to establish and manage the Green Municipal Fund (GMF).**
- **The GMF operates at arms-length from the federal government, and supports municipal governments, and their partners, to improve air, water and soil quality, and to address climate change.**

The 'First Stop' for Municipal Governments

- The Green Municipal Fund is the only fund that addresses specifically the needs of municipal governments wanting to pursue environmental infrastructure initiatives.
- To date, 522 GMF studies and capital implementation projects have been approved by FCM, for a total funding of \$301 million in grants and low-interest loans. These activities will deliver significant environmental benefits in communities across Canada and leverage over \$1.9 billion in economic activity.
- As of March 31, 2005, data showed that GMF projects have delivered greenhouse gas reductions of over 876,000 tonnes and reductions of over 1,025 tonnes of NOx, SOx, PM10 and VOC for cleaner air.

GMF – Funding Categories...

- **Energy** – *building retrofits or new construction; demand management; renewable energy and community energy systems, including solar and wind power or energy from biomass or landfill gases*
- **Water** – *watershed management, water conservation and new approaches to potable water, wastewater, and stormwater treatment*
- **Transportation** – *public transit, municipal fleets, integrated and alternative transportation systems, and transportation demand management*

...Funding Categories cont.

- Solid waste – *waste diversion and landfill gas management*
- Sustainable community planning – *integrated land use, transportation and energy planning, and community and corporate greenhouse gas reduction plans*
- Brownfields – *brownfield remediation and redevelopment*

GMF Energy Projects to Date

- ✓ **175 GMF energy projects approved to date:**
 - ✓ **135 studies**
 - ✓ **40 capital implementation projects**

A Competitive RFP System...

- The GMF has moved to a competitive RFP system for obtaining GMF grant and loan funding for capital implementation projects.
- On October 3, 2005, the GMF launched its first RFP. On March 3, 2005, \$15 million was awarded by FCM to municipal governments for brownfield remediation projects.
- On February 8, 2006, an Energy RFP was launched making available \$20 million in low interest loans and \$2 million in grants. The RFP closes on April 12, 2006.

...with independent, third-party assessment

- **An independent, third-party committee of experts assesses RFP proposals submitted.**
- **The amount of funding that may be offered to municipal governments will depend on the assessment of the projects' potential environmental, social and economic benefits to their communities.**

More RFP Announcements in the Future

<i>RFP Sector</i>	<i>RFP Launch Date</i>	<i>Intent to Apply Closure Date</i>	<i>RFP Closure Date</i>	<i>Loan Funds Available</i>	<i>Grant Funds Available</i>
Waste	5-Apr-06	26-Apr-06	7-Jun-06	\$10 million	\$2.5 million
Brownfields	10-May-06	31-May-06	12-Jul-06	\$20 million	0
Water	30-Aug-06	20-Sep-06	1-Nov-06	\$10 million	\$3.5 million
Sustainable Transportation	30-Aug-06	20-Sep-06	1-Nov-06	\$10 million	\$2 million

An example of GMF partnering with TEAM...

- In Okotoks, AB, a GMF investment of almost \$3 million, partnered with a \$1 million TEAM investment, is key to leveraging an additional \$16 million to build a “first in North America” subdivision using solar seasonal storage technology to store solar energy in spring, summer and fall for use when winter arrives.



... Environmental Benefits of the Okotoks Project

- With approximately 90 per cent of energy consumption provided by solar energy, the net performance over the baseline is approximately 2.4 tonnes of greenhouse gas (GHG) emissions reductions per home per year or a 72 per cent reduction for the baseline case.
- The installation of water conservation measures will reduce water consumption per home to 200 L/home/day, a savings of 16 per cent.
- Moving to the R-2000 standard for home construction will reduce the thermal energy load. Without R-2000, about 45 per cent more thermal energy would be needed to deliver to the homes for space heating compared to the current design load.

Other Examples of GMF Funding and Financial Leveraging for Environmental Technology Innovation...

- In Ontario, a GMF investment of \$10 million helped the City of Toronto and Enwave District Energy Limited leverage almost \$167 million for a joint project using new technology to draw cold water from Lake Ontario and distribute it through pipes to cool downtown buildings. The technology cuts energy costs by as much as 75 percent and greenhouse gas emissions by more than 40,000 tonnes.



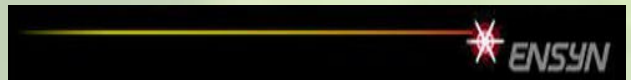
Greening the Infrastructure at Benny Farm

- At Benny Farm in Montreal, Quebec, a \$3 million GMF grant is helping to leverage an additional \$21 million for this Chez-soi (Notre-Dame-de-Grace) and City of Montreal project – winner of the prestigious international award: the Holcim Awards Gold 2005 – as the best North American sustainable development project.
- It comprises the sustainable construction and renovation of 187 housing units, integrating socio-economic processes and low-cost sustainable measures, such as water treatment, geothermal heating and cooling systems, as well as, provisions for waste management.
- It is estimated that 313 tonnes of greenhouse gases will be saved and 6,700,000 litres of potable water conserved (50 per cent in the case of the renovations and 25 per cent for the new construction).
- Water treatment reduction is estimated at 11,000,000 litres per year. Storm water run-off reduction is estimated at 4,200,000 litres per year.



Ensyn Technologies Inc. RTF Bio-refinery

- A GMF \$2,025,000 loan towards this project with a total value of \$9,000,000 is assisting Ensyn Technologies Inc., partnering with the Town of Renfrew and Opeongo Forestry Services, to demonstrate that Ensyn's Rapid Thermal Process can utilize wood waste to economically produce renewable electricity and commercially valuable chemicals. Ensyn intends to replicate the process in a variety of rural and urban settings.
- GHG emissions (CO2 equivalents) will be reduced by:
 - 8,500 tonnes as a result of electricity being produced from biomass verses traditional fossil fuel sources;
 - 7,700 tonnes by producing a natural chemical that replaces a petroleum derived phenol;
 - 26,300 tonnes by producing a high grade activated carbon that would normally be produced from coal sources.



Building Capacity for Future Success

- **The lessons learned from GMF projects have produced a wealth of information on new technologies and best practices.**
- **The GMF is building capacity for a more sustainable future for communities by making this information - including project summaries and case studies - publicly available on its website www.sustainablecommunities.ca**

Capacity Building Included in the New GMF Agreement

- **Under the new funding agreement up to \$750,000 is used annually to fund capacity building activities in the six GMF categories: Energy, Water, Waste, Sustainable Transportation, Brownfields and Integrated Community Projects.**
- **The GMF Capacity Building program includes continued support for Partners for Climate Protection, which now has 132 member communities across Canada.**

The GMF Toolkit

- **The GMF is constantly evolving to meet the needs of Canada's municipal governments.**
- **New financial products, improved application processes, and resources such as case studies and workshops are all part of the GMF toolkit that municipal governments are using to pursue their sustainable development goals.**

For More Information

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