District Energy Initiatives, Partnerships and Collaborations

Hamilton Community Energy®

Overview of HCE:

- **Energy Centre located at 79 Bay Street North:**
  - Provides thermal heat to approximately 2.0 million square feet of municipal, institutional, commercial and multi-residential space
  - Partner with City of Hamilton's District Cooling for cooling
  - Supplies on-peak and black start electricity for City Hall
  - Provides operations and maintenance ("O&M") services to Hamilton Renewable Power Inc.
Overview of HCE (continued):

McMaster Innovation Park ("MIP"):
- Owns and operates a hybrid district energy system that currently services the CanMet Materials Laboratory facility and the Atrium at MIP
- Final phase for geo-exchange system commissioned on January 31, 2011
- A very 'good news' story for the City of Hamilton
  - One of the first hybrid applications in Ontario (integration of MIP’s solar thermal system with HCE’s geo-exchange system and conventional energy equipment)
  - Demonstrated ability to leverage multiple green technologies efficiently and effectively
  - Reinforces Hamilton as a Centre of Excellence

Key Partnerships:
- City of Hamilton
  - Public Works
  - Energy Department
  - Planning and Economic Development
  - Hamilton Renewable Power Inc.
  - Downtown Hamilton Development
- McMaster Innovation Park
- Golden Horseshoe Strategic Alliance
- Industry Education Council
Successful Collaboration with the City:

- Gas buying strategy
- Lister Block
  - Interim heat during construction
  - On-going thermal heat post commissioning
- MacNab Street Snowmelt
  - Ready to be commissioned and for the first snow fall
- Energy efficiency realized at City Hall, Farmers' Market and Public Library
  - Approximately 19% reduction in thermal heat requirements
- Expanded O&M services for bio-gas purification system
- Continued focus on new opportunities for both thermal heating and cooling on behalf of the City

Benefits to the City of Hamilton:

- Continued support of the City's triple bottom line
- Reductions in greenhouse gas emissions (more than 30,000 tonnes since commissioning in 2002)
- Full redundancy and reliability for City and other customer facilities
- Efficient energy supply
- Downtown redevelopment opportunities

Upcoming Projects and Future Expansion Potential:

- McMaster Automotive Resource Centre
- Court House located at 50 Main Street (possible hub for DE satellite location)
  - Developer
  - O&M services
Questions