District Energy System

Report to Council

July 27, 2009
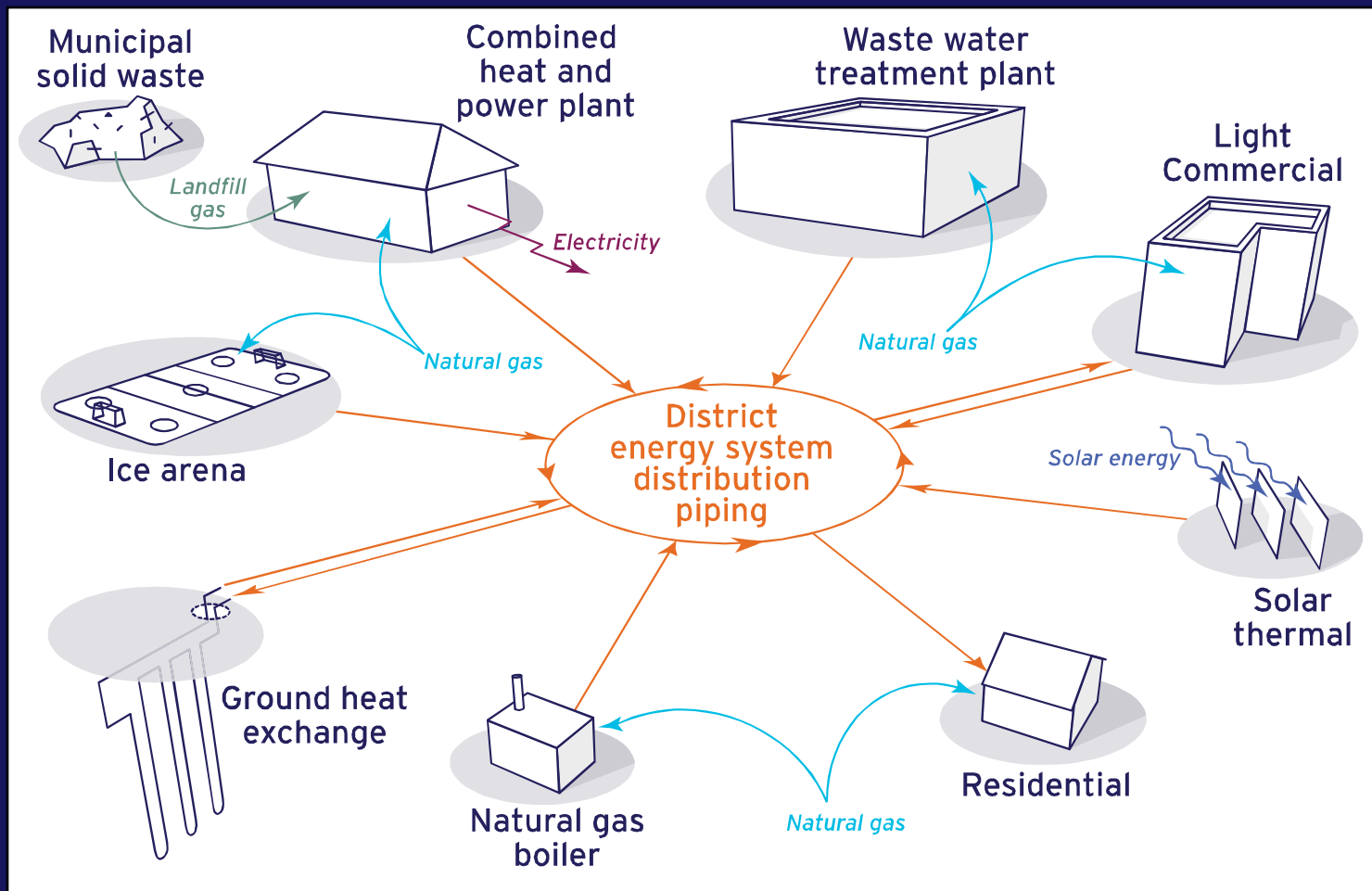
Infrastructure Planning
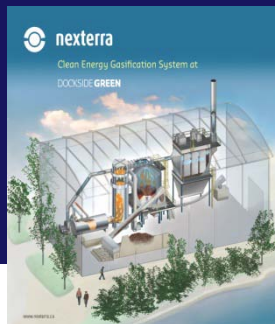
District Energy Systems

- $200,000 approved in 2008 Capital Plan, all to be funded through grants
- Ready to engage Pre-Feasibility stage:
  - Emerging Market: Mapping and load scale
    - Downtown
    - Pandosy-Richter Corridor and Town Centre
  - Technical and Financial Screen criteria
  - Stakeholder & Public Consultation
- Next Steps:
  - Understand options
  - Serve as background documentation in funding applications for feasibility study
  - Used for pre-evaluating CO_2 credit opportunity

District Energy Systems

Dockside Green

District Energy System

Project: Dockside Green

Developer: Vancity, Three Point Properties

Details: >1.3M sq.ft. mixed-use

Location: Victoria, BC

Energy System:
- ➤ *Biomass via gasification*
- ➤ *Sewer heat waste recovery*

Whistler Athlete's Village

Project: Whistler Athlete's Village

Developer: Resort Municipality of Whistler

Details: >460 units

Location: Whistler, BC

Energy System:
➤ Heat recovery from waste water effluent

Changing Community Values

- Rising public concerns about the climate change impacts of energy use
  - Climate Action Charter - City required to be CO2 neutral by 2012, 33% reduction by 2020, 80% reduction by 2050
  - Utility costs are anticipated to increase
    - BC - Hydro to increase by 11% from 2008 -2011
    - BC - NG costs - will increase…

- Federal, provincial and municipal policy makers are responding, e.g.:
  - Grants available for Green energy
  - Kelowna
    - KGH lake cooling
    - OCU waste heat from Waste Water Treatment Plant
    - UBC-O aquifer geothermal

Resolutions

- Approve application for $10k from Ministry of Community Development Infrastructure Planning Grant Program
- Approve adjustment to 2010 budget to spend $20K of Energy Reserve managed by Energy Management Committee

Possible areas for DES in Kelowna