



District Heating Utilities:

Options for ownership, operations and financing

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Renewable District Heating in Cities Workshop
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Overview

- Introduction
- Ownership and operations
- Financing and funding

CEA's Renewable Energy Guide

Four modules:

- *Heating Our Communities*
- *Utilities and Financing*
- *Governance* (forthcoming)
- *Powering Our Communities* (forthcoming)



District Heating Utilities

- Foster sustainability, local economic development, energy security
- Local government services are excluded from the *BC Utilities Commission Act*
 - Local government utilities therefore have greater freedom in setting rates

Options for Ownership and Operations

A number of options – all with benefits and drawbacks:

- **Directly** within local government operations
- Wholly-owned **subsidiary** corporation
- **Contracting** out servicing and operations
- Joint-ownership **partnership** with private (or other public) partners
- ...and of course, **no government role** in ownership or operation

South East
False Creek
NEU

	Liability Exposure	Expertise and capacity	Degree of LG control
Operation as LG department	High	Low for smaller LGs	High
Wholly-owned subsidiary	Lower	Low for smaller LGs	High
Service contract for operation	Lower	High	Moderate
Joint ownership	Lower	High	Lower

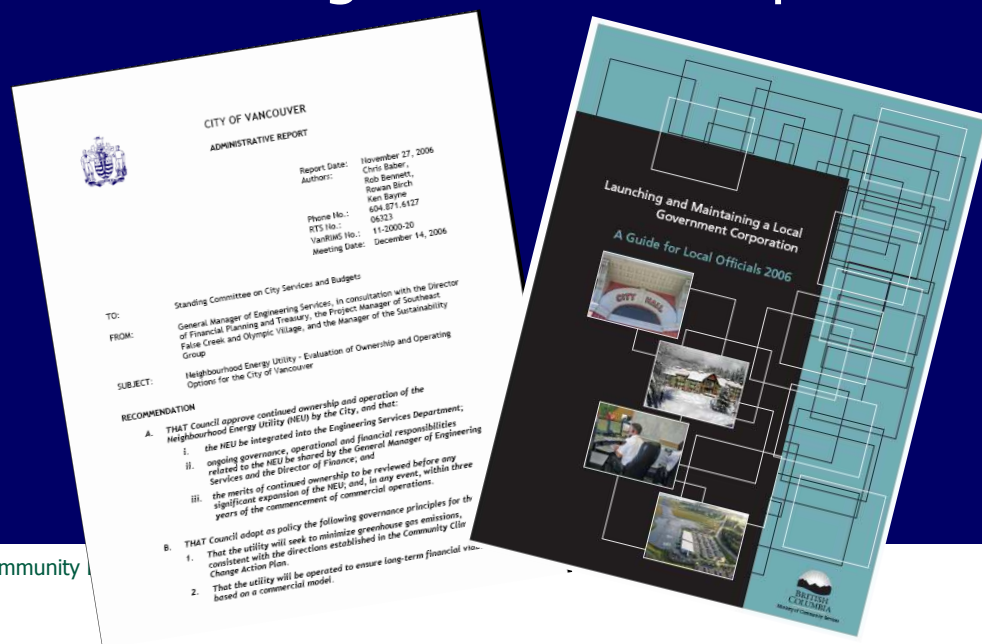
District Energy
Windsor

Lonsdale Energy
Corporation

Resources

Two great resources (in addition to CEA's utilities guide):

- City of Vancouver's analysis of options for the NEU
- Ministry of Community Services guide to establishing a Local government corporation



Financing and Funding

Where does the upfront capital come from?

- MFA long term debenture bond is traditional source
- Other options may be better, or at least offer more flexibility
 - Community Bonds (through MFA)
 - Lease-purchase (through MFA)
 - Partnerships
 - Shares – including flow-through shares
 - Revolving fund

Free money!! (grants)

- Grants and loans from other levels of government
 - CEA's Guide *"Funding your community energy and climate change initiatives"*
 - FCM's Green Municipal Fund, Gas Tax Agreement funds, other infrastructure funds all appropriate
 - Bioenergy Strategy target for 10 new biomass-fired community energy systems in BC
 - But, grant programs are almost always over-subscribed...

Financing and Funding

Getting the money back: recouping capital expenditures:

- User fees are most straightforward
 - Metered
 - Flat rate
 - Carbon credits/renewable energy credits (but significant hurdles in terms of verification and validation)
- Taxation

DIY offsets for
carbon neutral local
government?

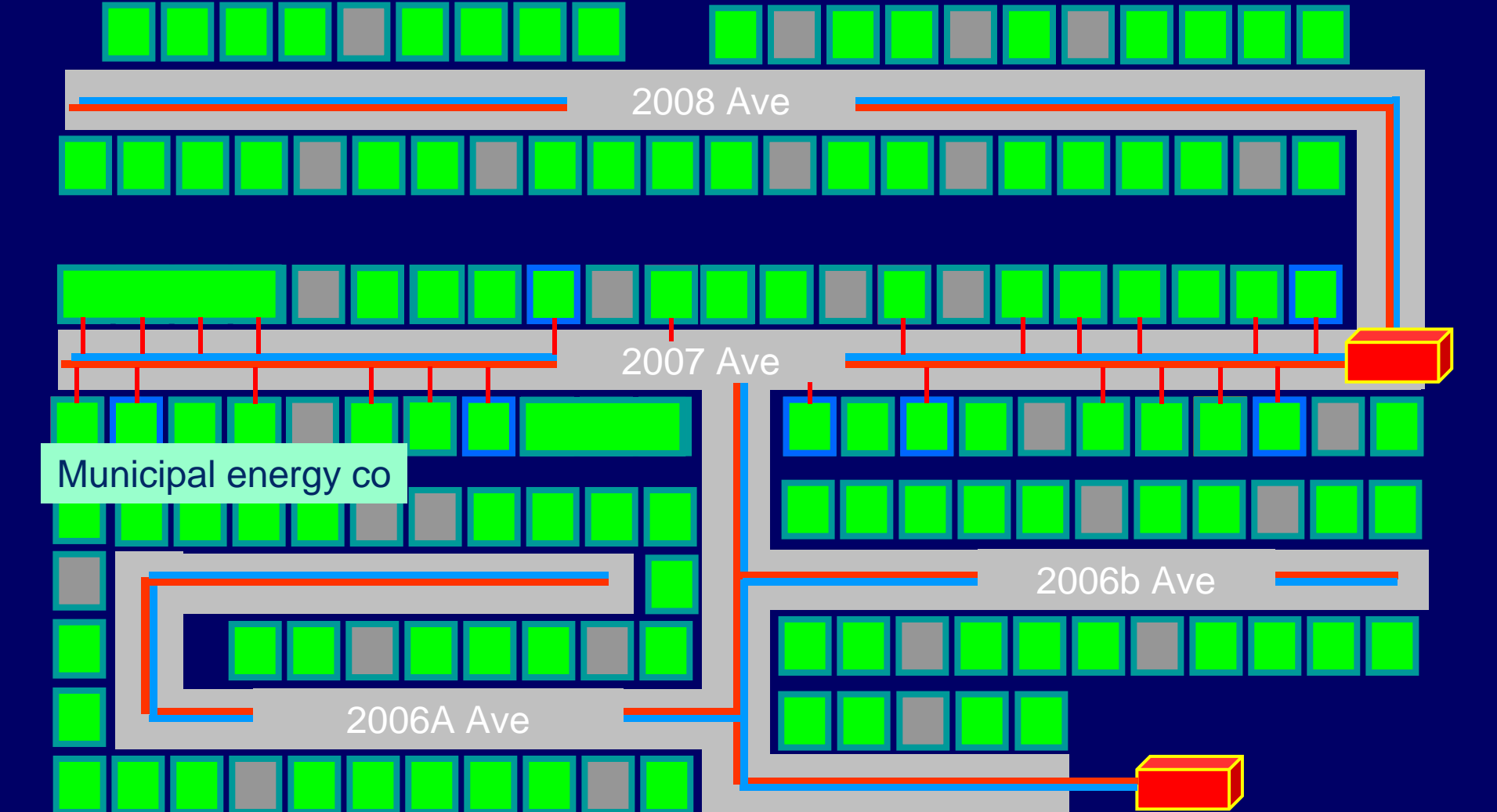
Financing and Funding

Getting the money back: recouping capital expenditures:

- User fees
- Taxation: General taxation revenue not appropriate, but alternative taxation approaches might be:
 - Local Improvement Charges

- Legal opinion for District of Central Saanich
- Most suitable where improvements to local air quality (this may change with new leg.)

Beyond projects: city wide strategies



Thank you

