

#### Municipal Financing for Energy Efficiency

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Sustainable Energy Solutions

#### Mission

To advance sustainable energy solutions through innovative research, education, consulting and advocacy.



#### Vision

The Pembina Institute envisions a world in which our immediate and future needs are met in a manner that protects the earth's living systems; ensures clean air, land and water; prevents dangerous climate change, and provides security, justice and equal opportunity for all.



#### **BC Emissions - Today and** 2020



- 2007 emissions are estimated to be 71 million tonnes
- If we do nothing, emissions will increase to 84 million tonnes by 2020
- Doing nothing is not an option



#### Where will Reductions Come From?





#### **Potential Benefits**

- Reduce energy use and GHG emissions from buildings
- Promote local economic development and training
- Improve the health and comfort of residential buildings
- Demonstrate provincial leadership



#### **Barriers**

- Upfront cost of upgrades
- Access to affordable capital
- Long payback (for some upgrades)
  - Length of home ownership



### Options to encourage energy efficiency retrofits

- Education
- Incentives
- Regulations
- Financing





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# What do we mean by financing?

• PACE, PAYS, LICs, PAPER??...



# What do we mean by financing?

- Property tax financing
- On-meter financing
- Traditional loans



# **Property Tax Financing**

- Used for building and neighbourhood-scale projects
- Recovered through an additional charge on the property tax bill
- Attached to the property, and so costs and benefits are transferred at point of sale

• Example: LICs or PACE



#### Legislative challenges...

- Community Charter does not explicitly permit the use of LICs for EE/RE
- Can individual properties be designated as a service area?



### **On-bill Financing**

- Provided by a utility
- Recovered through the utility bill, or by separate assessment
- Attached to the meter or to the homeowner

• Example: PAYS



#### Legislative challenges...

- Current legislation does not allow transfer of loan at point of sale
- BC energy utilities are currently only able to fund programs that reduce usage of the specific type of energy they supply



#### **Traditional Loan**

- Loan is provided to a homeowner to financing energy efficiency upgrades
- Loan is attached to the individual, and not transferred at point of sale



# Designing a program for B.C.

Program elements to consider:

- Source of program capital
- Program administration



### **Source of Capital**

- Municipal reserves or tax base
- Municipal Finance Authority of BC
  - Municipal/Community Bonds
- FCM Green Municipal Fund loans for capital projects
- Private borrowing
- Utility partnerships
- Federal or provincial energy efficiency loan fund
  - recommended in report commissioned by CMHC



# Designing a Regional Energy Fund?

 Using the tax-base to fund energy efficiency and renewable energy retrofits for existing residential buildings in the Peace River Regional District



# Does the PRRD have jurisdiction?

- Yes!
- The Local Government Act allows the PRRD to provide assistance "for the purpose of benefitting the community or any aspect of the community"



# Where does the funding come from?

• The funds would be generated by an increase on property taxes.

#### • Example:

- To raise \$1,000,000 per year, taxes would increase \$16 per year (estimated on a \$300,000 Class 1 property)
- Program funded by:
  - Industry 57%
  - Business 17%
  - Residential, Farm & Non-profit 26%



# Overview of Design Categories

- Jurisdiction
- Source of capital
- Projection of energy and emissions savings
- Qualification for funding
- Funding distribution
- Monitoring and verification
- Contractors and energy advisors
- Governance and administration



#### Thank you!

#### **Questions?**

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