

Freezing in the dark: Energy security and heating emergencies in Nova Scotia

Larry Hughes, PhD
Energy Research Group
Department of Electrical and Computer Engineering
Dalhousie University
<http://lh.ece.dal.ca/enen>

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Freezing in the dark: Energy security, heating emergencies, and electricity supply in Nova Scotia
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Some questions...

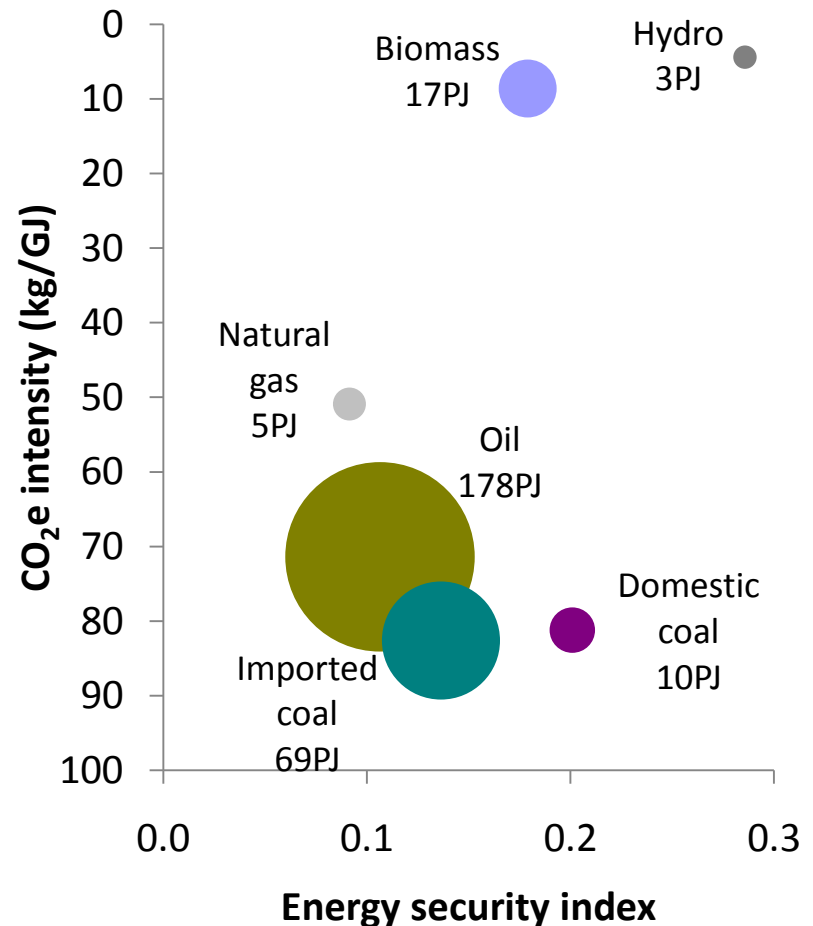
- How secure is our energy supply?
- How prepared are we to deal with heating emergencies?
- Who has a say in how decisions about our energy supply are made?
- Why should Nova Scotians be concerned about these issues?

What is energy security?

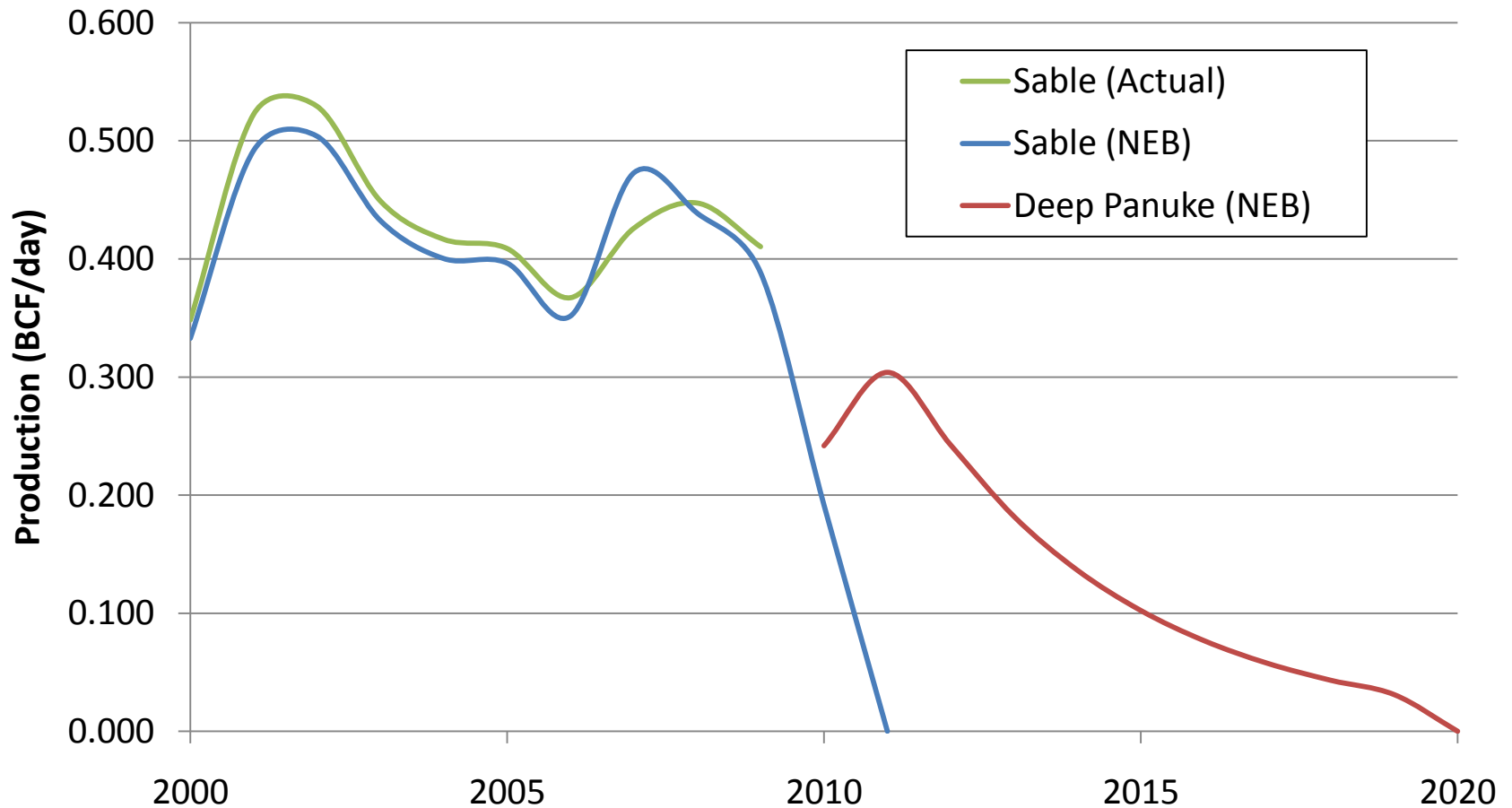
- What is it?
 - The availability of a regular (i.e., uninterrupted) supply of energy at an affordable price.
- A “regular supply” requires:
 - Supply
 - Infrastructure
- Why is it important?
 - Economic growth
 - Poverty reduction
 - Political stability

Energy security and Nova Scotia

- 80 to 85 percent of Nova Scotia's energy is imported
- Supply limitations:
 - UK, NFLD (geological)
 - Venezuela, Middle East, Colombia (geopolitical)
- Limited connections to the rest of Canada
- Much of the province's energy is exported



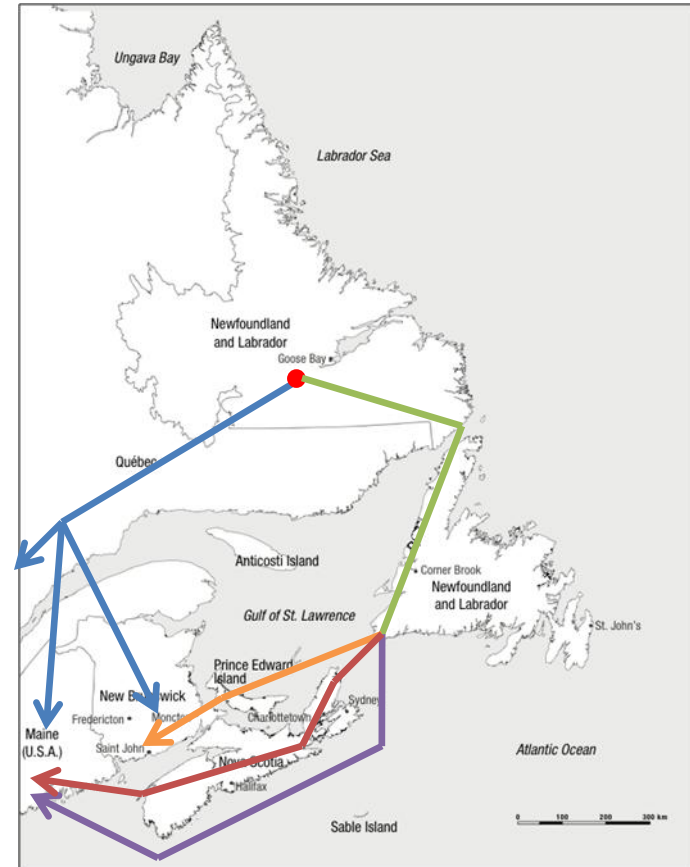
Offshore Nova Scotia (Natural gas)



Source: CNSOPB; NEB, Canada's Energy Future, 2007.

Nova Scotia's 2009 Energy Strategy

- Drivers:
 - 10% GHG reduction below 1990 levels by 2020
 - Focus on electrical generation
- Demand side management
- Natural gas
- Wind and tidal
- Grid upgrade
- Lower Churchill



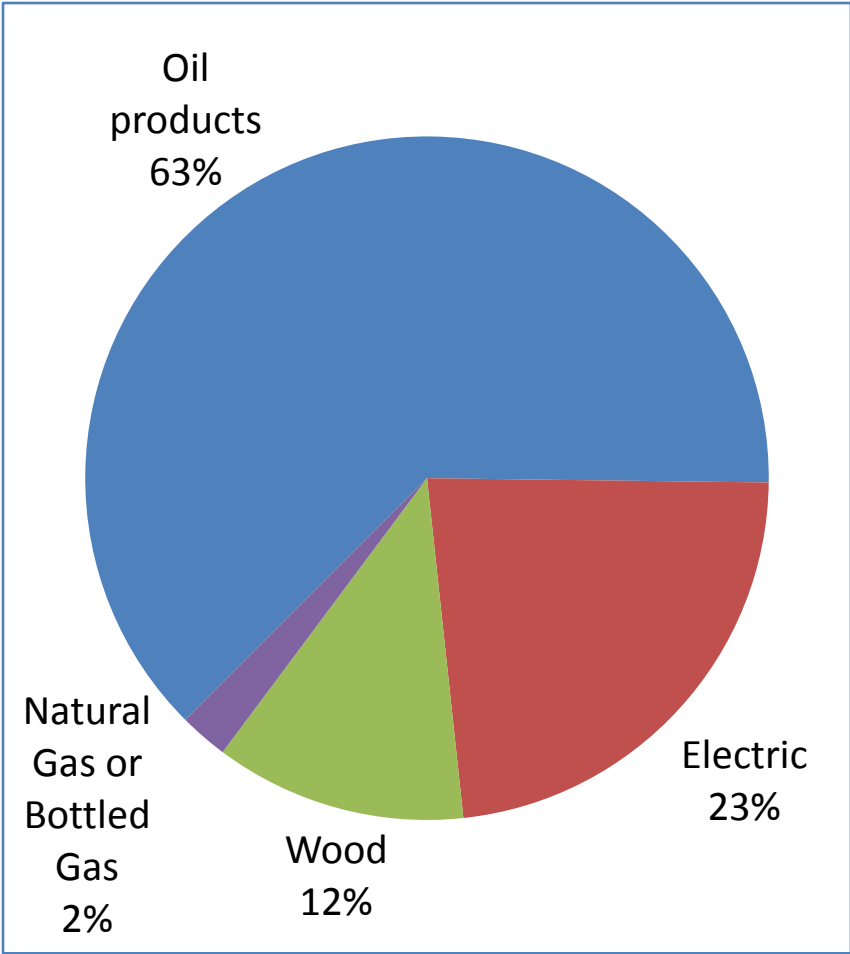
What is a heating emergency?

- Inability to obtain energy to meet residential space heating needs because of events such as:
 - Supply shortages
 - Infrastructure failure
 - Inability to pay
- Concerns:
 - Safety
 - Health
- Fuel poverty is not necessarily a heating emergency

Addressing heating emergencies

- Inability to pay:
 - Subsidies
- Infrastructure failure or supply shortages:
 - Turn to other energy sources (if they exist or can be used)
 - Requisition fuel supplies
 - Rationing
 - Heat shelters

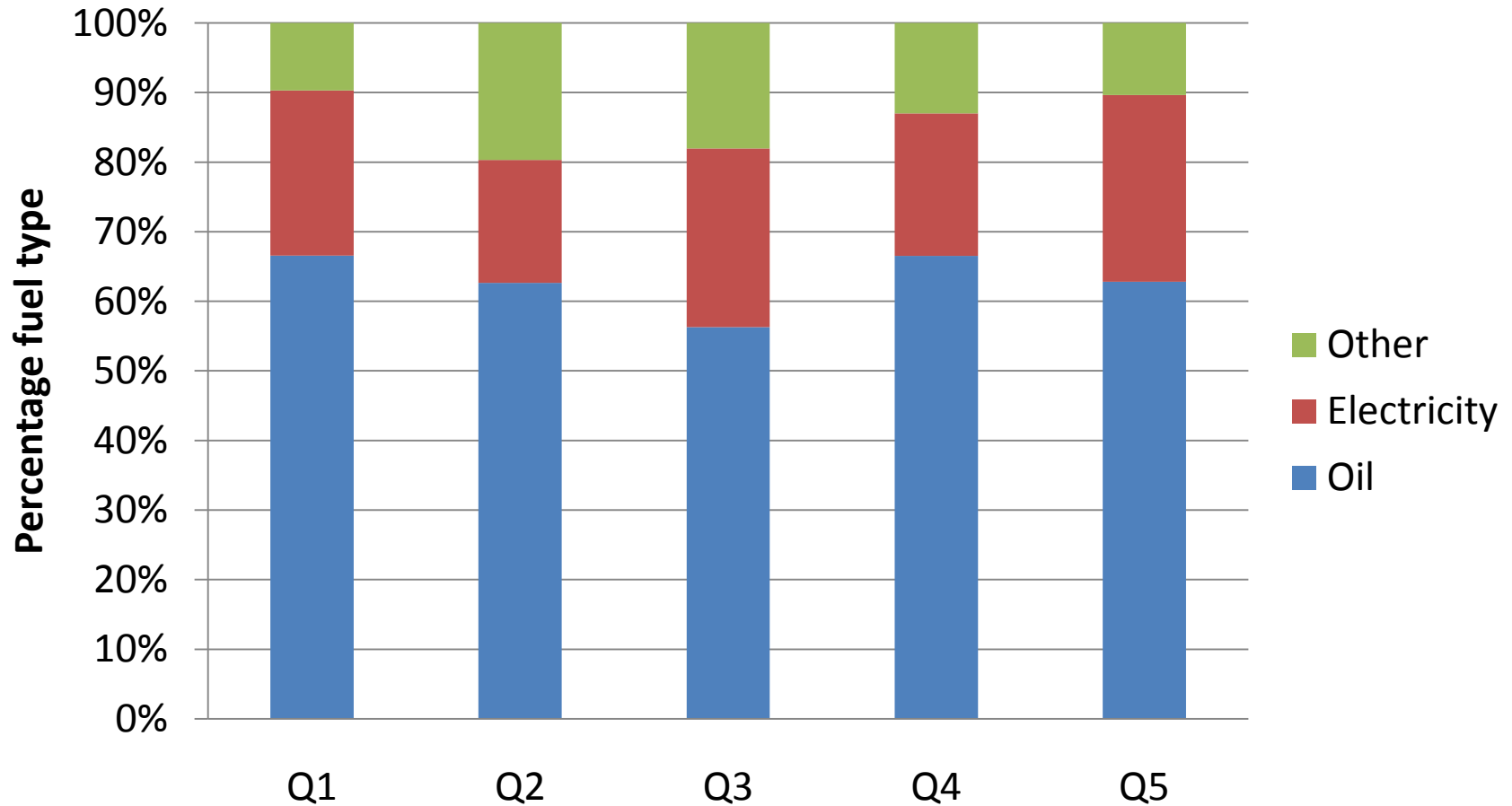
How Nova Scotians heat their homes



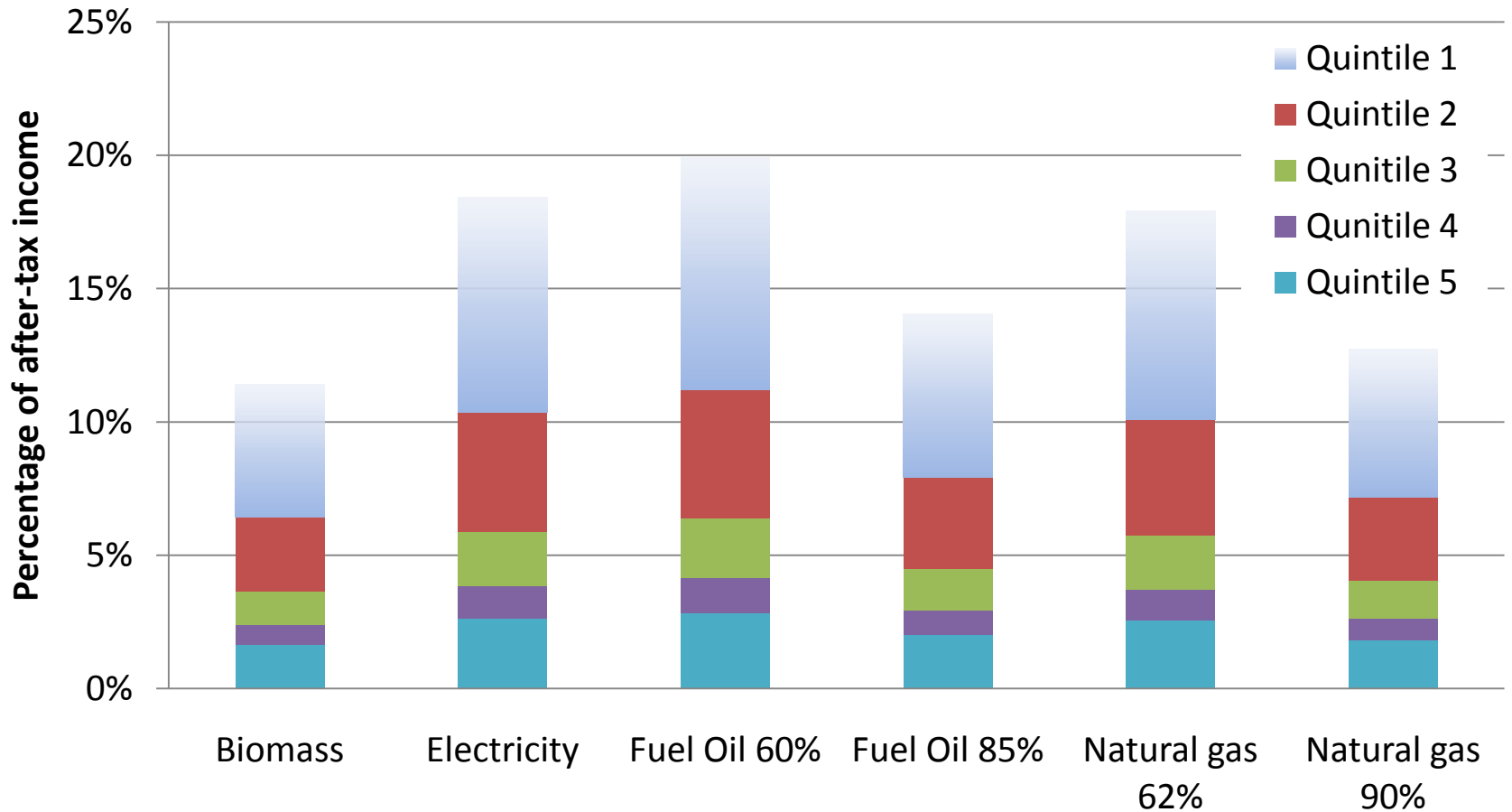
	Household size	Pre-tax upper income limit	Quintile population
Q1	1.34	\$22,600	101,733
Q2	1.98	\$37,680	150,322
Q3	2.46	\$56,000	186,763
Q4	2.82	\$85,000	214,094
Q5	3.34		253,573

Sources: NRCan, Office of Energy Efficiency, 2008; Statistics Canada, Survey of Household Spending in 2005, 2005

Fuel purchases by quintile



Cost of fuel by quintile



What Nova Scotia is doing

- Conserve Nova Scotia:
 - Energy reduction information is available
 - Residential Energy Affordability Program (REAP)
- Residential energy assistance programs:
 - “Your energy rebate”
 - Heating Assistance Rebate Program (HARP)
 - Heat Smart
- Emergency preparedness (EMO):
 - Refinery export restrictions
 - “Comfort Centres”

What Nova Scotia should be doing

- Offer assistance only to those in need
- Adopt a 4Rs energy policy for all energy services (especially heating):
 - *Review* existing demand, services, and potential secure supplies
 - *Reduce* energy demand
 - *Replace* insecure existing supply with secure supply
 - *Restrict* new demand to secure sources
- Change the way electricity is metered

An example

- An energy *replacement* program for schools and other government buildings:
 - Flat-roofs: solar
 - Dual-fuel furnaces (oil/natural gas/etc plus biomass)
- What good does this do?
 - Creates a solar and biomass industry
 - Educates Nova Scotians for these industries
 - Domestic, secure energy supply
 - Can lower energy costs and reduce emissions
 - Offer a refuge with secure energy supplies for those facing a heating emergency

Returning to the questions

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