

# Local Sustainable Energy

Town Hall Meeting  
October 2, 2014  
Marguerite Centre, Pembroke

Ole Hendrickson  
Ottawa River Institute



*“Fostering sustainable communities and ecological integrity in the Ottawa River watershed”*

# Renewable technology economics

- Unlike oil, coal and gas, supplies of which are limited and subject to geopolitical tensions, renewable energy devices can be built anywhere and implemented wherever there is sufficient water, wind and sun.
- As the scale of manufacture [notably in China] and use of renewables rises, market forces make them more accessible, affordable and efficient.
- The US and EU are increasing trade tariffs on imported Chinese photovoltaic panels. Restricting global trade in renewable devices will only slow the rate at which costs decrease and will decelerate the world's retreat from fossil fuels.

Source: Mathews, J.A. and Tan, H. 2014. Manufacture renewables to build energy security. *Nature* 513: 166-168.

# Number of jobs created for every \$1 million invested

## OIL & GAS

2



## CLEAN ENERGY (wind, solar, hydro and biomass)

15



Where do you want Canada to invest?

\*Blue Green Canada. (2012, November 22).

*More Bang For Our Buck: How Canada can create more jobs and less pollution.*

# *More Bang for our Buck*

(2012 report by labour & environment groups)

- **Develop a Canadian energy strategy**
- **Create green jobs** in renewable energy and low-carbon industries, with a transition plan for current energy workers and others affected
- **Set national targets** for renewable energy, energy efficiency and transit
- **Eliminate fossil fuel subsidies:** stop handing taxpayer dollars to polluting fossil fuels industries.
- **Educate:** awareness and training in the workforce

# Ontario's *Green Energy Act*

- Good legislation overall (energy conservation, demand management, feed-in tariff) but poor implementation
- Domestic content provision overturned by WTO
  - Ontario's attempt to kick-start renewables manufacturing
- Provincial Cabinet chose industry-driven approach rather than local community-based, decentralized approach
- Experiences to date in upper Ottawa valley
  - Still no consistent, coordinated home retrofit programs
  - Solar installations provide more local benefits than wind
  - problematic push to dam every potential hydropower site (only 2/19 Ottawa River watershed hydro facilities considered 'green')
  - Neglect of wood biomass

# *Sustainable Energy for the Ottawa Valley*

- ORI's 2006 report still largely relevant
  - “moving away from non-renewable sources of energy towards renewable sources and sustainable levels of use”
- Report identifies and discusses three main areas of energy use: **transportation, space heating, and electricity use**
- **Food production** emerged as an additional important area for sustainable energy use
- ORI has also made efforts to promote local sustainable energy suppliers and contractors

# ORI report – main messages

- Energy price signals are a powerful motivator for everyone. People act based on cost-benefit and payback considerations.
- Conservation is only a motivator for some, but this could grow. There is a need for a “cultural shift” in public attitudes towards conservation.
- Government programs at federal and provincial levels are seen as confusing, inaccessible, and mired in red tape. People would respond to consistent and coordinated home retrofit programs, but none exist.
- Municipal regulations (e.g., zoning) generally do not present barriers to innovative housing designs or projects such as district energy facilities.

# ORI report – main messages (cont'd)

- Despite considerable potential for new wind and hydro power developments, implementation has been slowed by red tape and artificially low prices.
- Highways and personal vehicles are a “given” in the County. No one is looking to a future without cars. Public transport is not seen as a viable alternative.
- Programs are needed to facilitate car pooling and ride sharing. More people would work at home if they had access to high speed internet.
- “Wastes” (e.g., garbage, wood wastes) are not well integrated in the mix of energy generation options.
- Wood provides a major part of the energy needs of Renfrew County. Councils have positive attitudes towards continuing or increased use of wood energy.



Thank you!  
Questions?

