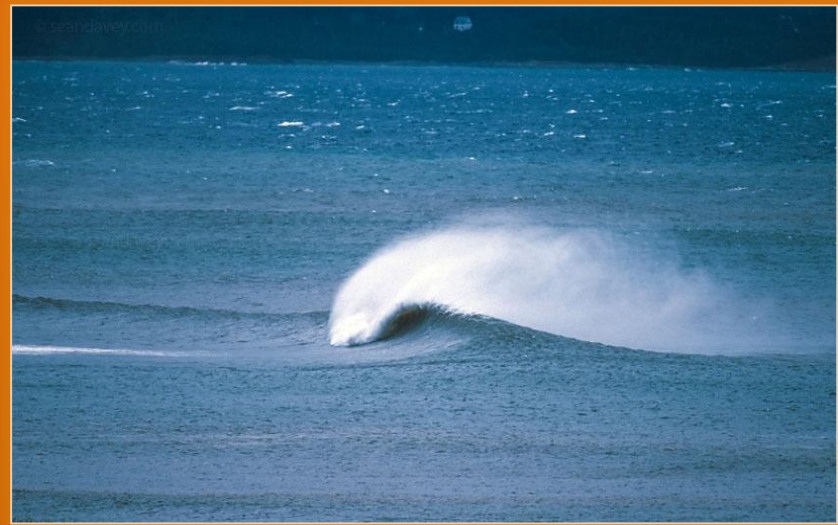


Presentation to the Standing Committee on Energy, the Environment and Natural Resources

Senate of Canada

By Wayne Anstey, CAO and Mary Ellen Donovan, Director of
Legal Services, HRM

Our Vision



- We need to change our energy mix and increase our reliance on local, sustainable energy systems.
- Doing so will not only help Nova Scotia meet its environmental obligations as laid out in the Province's Environmental Goals and Sustainable Prosperity Act, it will grow the Nova Scotian economy.

Why Energy Matters to HRM?



- - **\$1.5 Billion** is spent locally on energy
 - Approximately **60-70% leaves** the municipality, leaves the province, leaves Canada (foreign oil, coal from abroad)
 - With the cost of fossil fuels rising, even if our energy needs remain constant, that number will rise.

What we are doing: Changing our Energy Demand

- Energy Efficiency Programs in HRM facilities
 - HRM has invested \$10 million over last 4 years.
 - Savings \$2 million/year
 - Return on Investment to tax payers: 18.75 Percent
 - Federal funding is significant
 - eg. Alderney 5 project could not have happened without GoC. (TEAM).
 - eg. Eco NS Program, FCM contributions , etc to initiatives.



Changing our energy Demand

- Projects are big and small:
 - Major building retrofits
 - Installing “vending Misers” on vending machines.
 - LED lights for traffic lights and street lights.



Changing our Energy System



- District Energy Projects
 - Creating energy within our own community.
- Projects include
 - Solar panels on police station connected to a swimming pool
 - Geothermal: Halifax has built and is operating more geothermal buildings than anywhere else in Atlantic Canada
 - Energy from Methane at Highland Landfill (2mw)



Changing our role in the community: Engaging citizens

- Community Solar Program
- Pilot Project whereby homeowners pay for solar hot water heaters through addition to tax bill (estimated at \$500/year).
- Homeowner will save approx. \$500 per year (30% of energy use is from hot water).
- 700 residents signed up on the first day!
- 1000 homes in the pilot.

Why it works

It's Simple

- HRM takes care of all of the administration – contracting, getting rebates, ensuring quality.

It's Cost Effective

- Yearly costs to homeowners is about equal to savings. The high fixed cost of renewables is no longer an obstacle.
- HRM can employ economies of scale to keep costs down.
- Quality control can be achieved cost effectively.



It Proves:

- There is an appetite for renewable energy amongst the public.
 - But purchasing and installing on their own is too complex. Rebates are complicated, sourcing is uncertain, etc.
 - Start up costs prevent most families from getting involved.
- The municipality can make a difference to the environment and the community by decreasing these risks and costs.



Our Objective

- Halifax to become Canada's #1 Solar City
- There were 200 solar hot water installs in NS last year
- 800 overall in all of Canada.
- There will be 1000 installs next year in HRM alone

Our Objective : Just the beginning



- This pilot project demonstrates a new way that Municipalities can engage the public, providing incentive for clean energy adoption.
- Future projects could include energy efficiency measures and other renewables (Biomass, PV, etc.)
- High replication across Canada

Keeping energy \$ and jobs local:



- Program will create 40-50 jobs in solar industry in Nova Scotia.
- New trade in solar installation.
- Creates capacity with local industry and could grow into a competitive advantage for Nova Scotia and Canada.
- Increased efficiency and expertise.

How we do it: Innovation and financing



- **Energy efficiency and innovation require financing**
- HRM's Solution: all savings from energy efficiency fed back into a fund for future energy efficiency projects.
 - Like retained earnings, we can leverage current savings into greater energy and environmental sustainability.
 - Used to increase efficiency in HRM's own capital assets and projects.

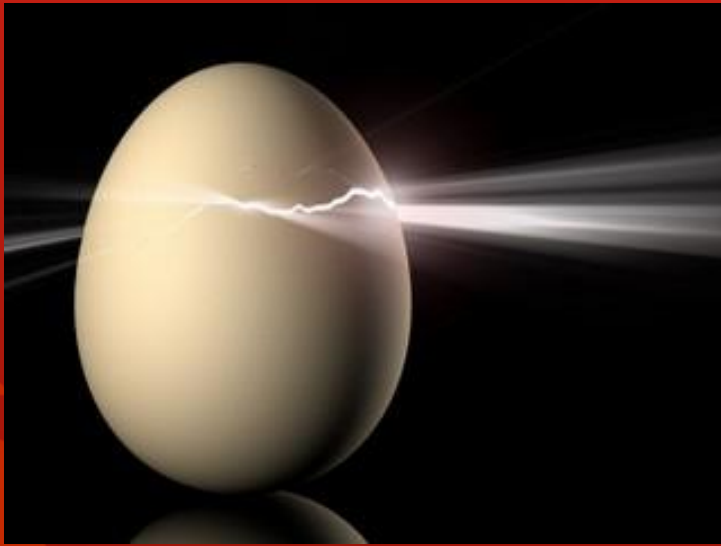
Government cooperation:

- Municipal governments in Canada currently have direct or indirect control over 44% of GHG emission (and energy systems).
- Municipalities are powerfully positioned to move the country towards a more distributed energy system.
- Need to be empowered to act, both Legislatively and Financially

Financial Partnerships

- All Projects require financing: Projects are long term, capital intensive and require underwriting
- **capital intensity** of projects is the biggest constraint on municipal action.
- Municipalities require **direct** funding to ensure that these projects can be undertaken.
- Federal-municipal partnerships work well and enable municipalities to take action.

Financial Innovation



- Most external financing models are for capital projects and assets of the municipalities.
- It is, therefore, challenging to find funding sources, loans or grants, for innovative endeavours.

- Governments and community groups must broaden their understanding of how municipalities should interact with their citizens
- We are a partner, not only with governments but with residents in adapting to a new energy future.

Recommendations:

- Municipalities need to be empowered to create sustainable energy systems, but we also recognize we need to act now with the tools we have.
- Need greater legislative capacity and more flexible financing options.
- Various direct partnerships between the federal, provincial governments and municipalities are essential.
- Ultimately, by empowering municipalities, you are empowering citizens and businesses to act, make change and grow.