Climate Change Town Hall
Mainway Recreation Centre
Thursday, August 4th 2016

Hosted by: Karina Gould, MP for Burlington

approx. 150 people in attendance

1. How and where to reduce emissions

Make investment where you can get the best reduction in greenhouse gas emissions per dollar spent. Target the biggest sources of GHG emissions.

- Transportation: accounts for large percentage of our emissions (40%)
    - Need to target transportation: e.g. car sharing, car pooling, stopping idling vehicles; business credits to encourage people to work from home
    - Need to promote public transportation
    - Need to promote the use of more efficient vehicles and make electric vehicles financially comparable to non-electric vehicles:
        - Need quick and accessible recharging stations
        - Electric car batteries need to last as long as a tank of fuel
    - Green corridor train (improve connectedness)
    - Decrease investment in building roads
    - Work with municipalities to improve cycling infrastructure and walkability
    - Provide public transportation subsidies to individuals
    - Provide incentives for private companies to compensate employees who use public transit
    - Promote local solutions for local needs
    - Implement additional consumer subsidies/rebates for electric/hybrid vehicles and vehicles powered by alternative energy, in coordination with provincial plans
    - Create an 'environmental tax' for SUV's, large consumer trucks, and large engine cars that fall below a specified fuel efficiency rating
    - Canada should look towards accessibility and density of cities to remove need for extended transit and saving horizontal space by growing up not out
        - Need to make this attractive to populations and encourage overall smaller physical footprints
        - How to work with provinces and municipalities to foster sustainable growth

- Infrastructure:
    - Change building codes (geothermal and LED lights for new construction); retrofit of old buildings important in addition to creating new green buildings
    - LED Street lights – shut off lights in buildings and offices in the evenings

    - Promote automated lighting systems. i.e. motion sensors in stairways and rooms
    - Look at homes, apartments, condos:
        - New affordable housing and government infrastructure should be sustainable. Heavier upfront costs but lower operating costs
        - Retro fit homes: Solar panels, insulation, green roofs. Move to geothermal and heat pumps.
        - A group of 20 houses, for example, could use geothermal, and it could be co-owned and the costs and benefits shared locally
        - Wind development at the personal/home level
        - Canada should consider looking to European style centralized heating and cool systems for whole communities
- Fossil fuels:
    - Begin the transition away from fossil fuels: reduce fossil fuel subsidies and invest in green energy; reduce coal power generation across the country
    - We must keep the oil in the soil: Why does the federal government continue to approve pipelines, accompanying infrastructure, and oil sands projects whilst simultaneously promoting action on climate change?
    - Keep our remaining oil for products with no known alternative.
    - Build up renewable energy movement: provide tax breaks on capital gains earned from renewable energy companies.

- The environmental movement:
    - Concern for the environment is not popular; the government needs to focus on changing the *image* of the environment/environmental movement
    - "Green fatigue" is a real issue: people don't want to talk about climate change because it's depressing, uncomfortable, etc.
    - Environmental problems seem insurmountable at times, therefore practical and probable solutions need to accompany statements of the problems
    - Community-based social marketing (how to get people to change their behaviour) has the potential to be a suitable framework for addressing this problem
    - Need to be able to identify barriers in order to work towards removing them
        - E.g. create greater trust, implement a certification system regarding wind and solar development at the personal/home level

- Landscaping:
    - Provide funding for community gardens
    - Use local flora in landscaping. Less water use and more carbon capture
    - Greenhouse programs
    - Incentives for grocery stores to buy local
    - Plant trees – less carbon, more oxygen

2. Ideas for new technology and job creation

- Circular economy:
    - Systems thinking rather than individual thinking. We should focus on the bigger structural systems that reduce greenhouse gas emissions, such as designing and building transportation networks that do not favour the car – cycling networks, improved public infrastructure, etc.)
    - Manufacturers need to be made responsible for the whole life cycle of a product
        - Ex.: creating a closed loop for vehicle transportation (ex: Tesla's Gigacity Solar).
        - Implement incentives for automobile manufacturers to increase research, development and production of alternative energy vehicles
    - Improved business education which incorporates the environment and green/sustainable supply chains
    - Bringing local talent (colleges and universities) together with industry to support circular economy

- Locally sourced economies:
    - Begin building an economy based on local renewables. All houses and communities should be self-sustainable. Use the technologies we have (solar, wind, geothermal)
    - Solar panels and wind turbine development must be small-scale and affordable
    - Shop locally → mandate grocery stores stock local products
    - Suggests a website be created that lists local businesses by categories
    - Carpooling website/portal for City's/Region's
    - Pilot project: replace baseboard heaters and A/C with "heat pump" style (these kinds of projects could use incentives similar to provincial incentives that encourage updating to more energy efficient appliances)

- 'Throw away' economy:
    - Stop the 'throw away' economy. Change the mind set – no longer consumers, citizens.
    - Focusing less on linear waste process (make, use, throwaway)
    - Create composts at apartment dwellings and businesses

- Fund research and innovation:
    - Find new alternatives for building materials (concrete, steel, etc.)
    - Waste conversion
    - Renewable energy projects
    - Recycling: produce natural materials to replace synthetics based on fossil fuels (plastics)
    - More funding for university research: put it to schools to find solutions and new products
    - Work with incubators for new solutions

3. How to put a price on carbon

- Need for greater transparency on how money will be spent
- We need to set new goals and standards
- Pricing carbon: it should be based on actual social costs to society
- Communicate clearly with Canadians on what these costs are: i.e. subsidies, health, revenue loss, assessment due to environmental damage/pollution (watershed economic impact)
- Set carbon prices high enough (or caps low enough) to act as a real disincentive; Ensure that revenues generated from carbon pricing are invested in growing the green technology and infrastructure sector
- Alternatively, the federal government could set nation-wide emissions reduction targets that the provinces can achieve in their own unique ways
- Motivate instead of penalize to reduce carbon
- Mandate accounting for embodied carbon
- Do not focus solely on carbon; there are many other forms of pollution and environmental impacts that must be considered (i.e. water quality, toxins in water and air released from industry, toxins in our food system, loss of ecosystems, loss of biodiversity).
    - Calculate and communicate costs

4. Preparing for the impacts of climate change

- Information and awareness raising:
    - Inform people of risks and what they can do to mitigate
    - The latest analyses of global warming indicate that the state of the earth's climate is far worse than we are currently planning for. We need better education on the seriousness of global warming.
    - Awareness that our way of thinking has to evolve – demand government programs
    - Protect our water sources; Prevent them from misuse

- Need to be ready for possible shocks to our lifestyle:
    - Promote a decrease in production and consumption of red meat (take steps to reduce food waste and waste from animal agriculture)
    - Provide sufficient subsidies to support innovative, sustainable methods that increase the consumption of locally-produced food
    - Encourage more working remotely from home (reducing congestion)
    - **Ban plastic bags** – support the reduction and recycling of waste: a zero waste and circular economy

- Resilient infrastructure:
    - Every municipality should have a climate change action strategy in place
    - Establish nation-wide green building design and operation standards

- Need to change our building codes in order to strengthen the structure and environmentally friendly criteria of residential and commercial buildings
- Provide incentives to developers to keep 15% green space. Implement incentives for energy conservation/retrofit such as upgrading insulation/windows/doors/building envelope/LED and motion-sensitive lighting systems
- Improve local greenhouse and hydroponic operations
- New developments should be self-sustainable (wind, solar, geothermal, car share programs, green building techniques, health/cooling, etc.)
- We should focus on creating "living buildings"
- Impermeable concrete pavement should be illegal
- Better cooperation between government and businesses (e.g. between architects and government)
- Charge for storm water runoff so people can take steps to reduce those impacts
- Insurance companies have adjusted their policies to be almost all water- and weather-related. Companies step up to give those rebates to those who prepare for impacts
- Build on best practices: The City of Burlington is introducing a program in collaboration with the University of Waterloo to assess people' homes to make sure they're flood resistant

- Forest management:
  - Better attitude toward urban forests → plant more trees
  - Plant more native plant species: self-sufficient and drought resistant.
  - Landscaping: need to adopt environmentally friendly ecologically wise landscaping choices. Less lawns, more native pollinating plants and local food production
  - Support preservation and enhancement of green space
  - Hamilton has "tree giveaway" program (free trees to plant on private property)
  - Stop / discourage developer clear cutting
  - Promote federal Investment in the Cootes to Escarpment EcoPark System as a form of green infrastructure in Burlington's Backyard. The land could be used as an outdoor laboratory for government scientists to collaborate with the Royal Botanical Gardens and McMaster University on topics such as ecological restoration, natural carbon capture systems, pollinator protection programs, etc.

5. General ideas on climate change reduction

- Keep environmentalism affordable:
  - Need to ensure that those of lower income are included in the process
  - Need to make sure that lower income Canadians are not hurt by carbon taxes.
  - Public transit costs should go down; gas should go up – not the other way around.

- Knowledge transfer:
  - We don't always need to reinvent wheel – we should look to see what is being done in jurisdictions around the world, build on best practices.

- Education campaigns:
    - Education through advertising at the national level on behavioral changes, i.e. like Heritage commercials, but climate change commercials with tips on how to reduce emissions/environmental impact at the household level.
    - Educate new generation from start on environmental management
    - Young people are knowledgeable on climate change – need to provide opportunities to educate the older generations of Canadians.
    - New technology is always promoted better through public sector (see Canada Post shifting to electric vehicles, for example)

- Government leadership:
    - Starting with 24 Sussex, mandate that all federal buildings be constructed to meet the principles of Living Building Challenge, or equivalent.
    - We need to view this as a global issue: Canada needs to provide bold leadership
    - Police coherence: at the moment there are conflicting government priorities, governments want to reduce our emissions but are ok with expansion of fossil fuel extraction.
    - Governments must be truthful and transparent in their reporting, and not sugar coat the issues
    - Some things need to be imposed top down in order to stimulate action on climate change
    - Include in the Canadian Charter of Rights and Freedoms and the Ontario Environmental Bill of Rights the right to a healthy environment
    - Look into investments in science, especially to help small businesses
    - Price carbon high to stimulate interest in green development
    - Inclusion of airplanes and cargo ships not addressed at COP21

- Government Coordination
    - Our three levels of government must work together to find a way for Canadians to continue to reduce their consumption, and not have to support massive institutions and infrastructure needed by our industrial base.

- Active Citizenry:
    - Challenge the City of Burlington to dedicate 5 percent of its transportation budget to cycling infrastructure
    - Place environmental issues at the top of the list

- First Nations communities.
    - Must support indigenous communities. They are the least resilient to climate change and will be hit the hardest. We must join them in their struggles for protecting clean air, water and land.