“It’s never too late to lead”

Recommendations from the
Waterloo Region Climate Policy Consultation
August 18, 2016

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"Start now! We've lost decades already!"

"I hope the politicians' interest is genuine! These suggestions should be taken seriously. This [climate consultation] is more than just a photo op."

"It's never too late to lead…"

Introduction

Citizens want immediate action and ambitious leadership on climate change, and are ready to pay the price for their present and future security through a combination of: a reconfigured tax regime based on carbon pricing; economic "carrots and sticks" that will spur both innovation and conservation; and personal choices toward a low-carbon lifestyle. Since even the best efforts at energy conservation alone will be eclipsed by increasing population in the coming decades, it is imperative that government lead the way in shifting our economy, our transportation systems and our electrical grid away from fossil fuels and toward renewable energy sources that will be sustainable for a more populous planet. Those were some of the messages that came through most clearly during the Waterloo Region Climate Policy Consultation on August 18, 2016.

In response to the federal government's call for citizen engagement on climate policy, and convened by a network of local environmental groups (Divest Waterloo, Citizens' Climate Lobby, APTEnvironment, Blue Dot Group, REEP Green Solutions, Transition KW, Community Renewable Energy Waterloo, Solidarity for Chippewas of the Thames First Nation, and Sustainable Waterloo Region) the event compelled more than 300 concerned people to converge on Kitchener City Hall on a summer evening. The individuals represented municipal government; universities and colleges; industry, business and finance; labour; and students. In attendance as well were all five members of Parliament from the region—House Leader and Minister for Small Business and Tourism Bardish Chagger (L—Waterloo), Marwan Tabbara (L—Kitchener South-Hespeler), Raj Saini (L—Kitchener Centre), Harold Albrecht (C—Kitchener Conestoga) and Bryan May (L—Cambridge). In a powerful display of democracy in action, passionate and lively dialogue unfolded in a highly charged but respectful and mutually supportive atmosphere. Everyone had their say.

The program began with a welcoming song by a local Indigenous group, Mini Ode Kwewak N'gamowak (the Good Hearted Women Singers). Following a presentation by the MPs about the current federal approach to climate change, participants broke into small groups (of approximately 8-10 people) to share their ideas on climate policy. At the end of the discussion period, one representative from each group reported back to the entire group on two or three key ideas that had surfaced in their discussions. Two young women offered their profound, prophetic calls to action on climate change (see the Appendix of this document for the full

transcript of their words). The MPs offered some final thoughts and words of thanks, and the Good Hearted Women Singers sent us into the evening with a travelling song. The presence of the Good Hearted Women Singers was more than "window dressing": they symbolized the inextricable link between climate justice and reconciliation with Indigenous peoples.

The ideas brought forward during the evening's discussions have been organized and presented here under the rubric of the federal government's four Working Groups on its National Climate Strategy: How and Where to Reduce Emissions; Ideas for Clean Technology, Innovation and Jobs; Preparing for the Impacts of Climate Change; and Putting a Price on Carbon. These are preceded by and set within the larger context of how Canada can truly lead the way on climate action, and the hopes this community maintains for government action on climate change in the immediate future. This document concludes with an Appendix containing the speeches given by local youth at the end of the climate policy consultation.

The Role of Individuals, the Role of Leaders

A sense of personal and collective responsibility for climate change pervaded the Waterloo Region Climate Policy Consultation, along with a deep desire for systemic changes—led by government action—that might allow all of us to "create a new world in the shell of the old."

Again and again, facilitators and organizers heard statements such as:

"We need an economy of enough vs. an economy of scarcity."

"Reconsider values (needs vs. wants) to get to the root of the problem."

"We need to live more simply, and waste less."

"We should consider ourselves a part of nature, not apart from it."

"Climate change is a moral and ethical issue: it affects all life on earth, including future generations."

It was clear that most people in attendance recognized their own role in using—and sometimes abusing—the resources of the earth. They showed awareness that change is difficult but necessary, and that there could be personal costs attached to climate solutions. One person asked, "As we go forward, the cost of living will rise; how do we publicly acknowledge and accept this?" Always present was the sense of problems that must be considered over the long term ("think about seven generations, not election cycles"), that many problems "can't be managed in the future if we don't act now," and even the fear of being in the midst of an "extinction-level crisis."

While most participants at the climate consultation saw the need for personal and collective actions to mitigate climate harm, they also spoke vehemently about the need for government to provide leadership in creating systemic change—as soon as possible. With dire scenarios already unfolding, there is no time for a gradual transition away from a fossil-based economy: *the time for action is now*.

The following are some ways that participants identified the role of the Canadian government in creating the systemic changes needed to have both national and international impacts.

Economic Growth Is Not the Holy Grail…

"The government should stop putting economic growth ahead of the environment." Many people wrote about the need to rethink the very notion of economic growth, to realize that there are limits to the earth's ability to provide resources and to absorb waste: "We must stop expecting endless economic growth. Prosperity is possible without growth. There are limits to growth." This is hardly a radical economic theory: it was proposed in 1972 by the Club of Rome's report *The Limits to Growth*, and is still advocated today by many world-class economists. In short, "We need a life-serving economy."

…But the Market Can Help Us Achieve Our Goals

Market-based instruments—notably, carbon pricing—have great potential to effect the kind of change that is needed if Canada is to meet its Paris Agreement commitments by drastically reducing its carbon emissions. Being a leader in carbon pricing—by instituting a national fee-and-dividend tax as well as border carbon adjustments—will introduce a truly level playing field on carbon. The end result: carbon-intensive products will become too costly to produce, and alternatives will be found. This can be done while meeting Canada's commitments to World Trade Organization agreements!

Regulation and "the Right to Regulate" Are Critical

From preventing urban sprawl to designing building codes for highly efficient homes, the Canadian government needs to author regulations that will protect its citizens from the worst effects of climate change. Canadians also need our government to say no to international trade and investment agreements that would rob us of the right to regulate for the protection of the environment and our communities. This is the wrong moment in history for "regulatory chill" to render our leaders fearful, powerless or inert when strong environmental protections are sorely needed.

Canada Should Be a "Good Global Citizen"

Recognizing that "the right to clean air, clean water and safe food" is universal, many participants spoke of Canada's responsibility to the developing world. In some cases, this meant "respecting human rights"; in other cases, it meant that Canada should "assist developing countries with climate financing." Finally, it came through as a plea to "apply pressure internationally to the world's worst polluters: India and China."

A Note on Process and Disagreement

"We don't always agree on the strategies, but we agree on the urgency."

With such a large group (more than 300 people) and a diversity of voices, the full range of ideas shared during the group conversations on the evening of August 18 cannot be conveyed in all its depth. Instead, this summary document is an attempt to capture the key themes that emerged, the most commonly expressed ideas and the sense of urgency and commitment to action that participants brought to the table.

The Waterloo Region climate consultation attracted people from every walk of life, from a variety of demographics. In reviewing and synthesizing the notes from the evening's group discussions, it was clear that a near-consensus emerged on most points. For instance, the majority of people seemed to believe that transitioning from fossil fuels to renewable forms of energy was a vital and, indeed, unavoidable step in addressing climate change. A few notes here and there, however, spoke of a more conservative approach (stating, for example, that pipelines currently carrying bitumen could be useful for transporting a lower-carbon form of fossil fuel, natural gas).

On some critical points, no consensus emerged. Regarding geo-engineering, the question was raised: do we have time to investigate its potential and implement, or are the potential side effects too dangerous to contemplate? Likewise, participants asked whether nuclear power can be a safe choice—and, even with safety concerns, whether the world can decarbonize sufficiently *without* nuclear power. On such points, with relatively little input and no consensus, this report remains largely silent.

The recommended goals (or "key messages") that appear for each Working Group attempt to represent the majority view on each of the discussion points, while the many detailed suggestions demonstrate that there were a variety of ways in which people thought our leadership should address the desired goals. Readers are asked to be aware that some voices of dissent were heard throughout the evening.

Working Group #1: How and Where to Reduce Emissions

Key message: Reduce greenhouse gas emissions by transitioning from a fossil economy to a renewables economy. Using market-based mechanisms wherever possible, create a comprehensive and visionary National Energy Strategy.

Resource Extraction: Halt expansion of the fossil fuel industry [oil/bitumen, coal/ lignite, natural gas/liquefied natural gas]

- Close the tar sands projects.
- Make no investments in new pipeline or gas infrastructure.
- Put an end to subsidies for the fossil fuel industry.
- Since known carbon reserves are already far in excess of what can safely be burned, allow no further exploration for oil and gas on Canadian lands or in Canadian waters.
- Crack down on fossil fuel lobbyists who try to mislead the public with false "information."
- Allow no "fracking" for shale oil or gas.
- Mining companies—destroying other countries [and Canada]—must clean up their own environmental degradation.

Energy: Expand the use of renewable forms of energy

- Incentivize the construction and use of renewable energy sources, such as wind, solar, geothermal, and tidal power.
- Empower researchers and practitioners to find better ways to store energy for the grid, and to find alternative forms of power to "backstop" the grid during non-peak times for wind and solar.
- Look to other countries, such as Germany, for renewables success stories and best practices.

Sequester Carbon Using "Carbon Sinks"

- Protect existing forests, especially old-growth forests.
- Invest in reforestation and new forests.
- Incentivize the use of biochar for agricultural use.
- Encourage the use of green roofs on new buildings and retrofits.

- Create a massive aquatic-plant colony in the ocean to create a carbon sink.
- "While I see the value of technologies such as solar panels and windmills, I would like to see our country also develop strategies of mitigation that would be in harmony with nature. I have seen square miles in Europe where there is nothing but solar panels or plastic-covered greenhouses. Sequestering would be, for me, a better option for Canada."

Transportation: Support a new culture of transportation

- Move toward complete [non-carbon] electrification of the light- duty vehicular transportation system.
- Offer tax incentives to purchase electric and/or hybrid vehicles.
- Mandate carpool lanes on local [multi-lane] highways.
- Impose and enforce idling laws.
- Mandate strict limits on urban sprawl to reduce transportation needs.
- Encourage walkable cities, and active transportation: cycling [or skateboards and scooters].
- Redirect auto subsidies to foster production of EV.
- Support safe, year-round cycling and walking infrastructure in cities and towns.
- Invest in mass-transit infrastructure (light rail and buses within cities; high-speed rail for inter-city travel).
- Install EV-charging stations at all public buildings.
- Offer tax incentives for cycling or giving up car ownership.
- Institute carbon offset taxes on airfares.
- Place tolls on more roads.
- Restrict the transportation of consumer goods. In addition to the loss of jobs, the manufacture of consumer goods in low-wage jurisdictions emits more.
- Stop subsidizing drivers and private transportation.
- Find incentives to keep workers at home and off the 401.
- Red [traffic] lights should be mitigated at night to avoid unnecessary idling.
- Ease high-congestion traffic through flexible work hours.
- Institute a car-pooling/car-sharing tax credit.

Agriculture: Support transitions from imported to local food, from animal-based protein to plant-based protein

- Research and invest in biochar for more sustainable farming, and for massive carbon sequestration.
- Regulate major food chains to make selling local produce in supermarkets easier.
- Subsidize restaurants that have gardens.
- Localize food growing and control watersheds in a sustainable manner.
- Increase local food security.
- Use the lessons from traditional agriculture to decrease the use of pesticides and chemical fertilizers.
- "Promote food production in urban spaces [vertical farming] and remove bylaws that prohibit a 'messy' (i.e., natural) urban property."
- Use agricultural subsidies to encourage reduced emissions from food production.
- Change Canada Food Guide to emphasize vegetables.
- Limit meat production.
- Address the cultural importance of meat consumption in the Western diet.
- Legislate responsible on-farm energy consumption and recycling.
- Legislate ecological responsibility in fast-food restaurants.
- Incentivize small farming [and permaculture].
- Provide incentives for growing our own food in the home environment.
- Encourage community gardening plots.
- Research and share the best management practices in industrial farming.
- Educate people on food/agriculture and its impact on carbon management.
- Recognize that extreme weather impacts food security, especially that of Indigenous populations.
- Move toward full-cost pricing of farm products.
- Bring back the concept of Victory gardens.
- Foster community gardens and rooftop growing on large buildings.
- Enable local independence by teaching about growing food, and the benefits of eating organic/vegetarian; train municipal politicians on what can be done locally.

- Provide significant incentives and remuneration for farm work.
- Create a process to hear from farmers; involve them in transition to more sustainable farming.
- Support restorative agriculture, especially permaculture.
- Plant and farm with crops that are more appropriate to a wetter and hotter Canada. Take advantage of longer growing seasons.
- Protect the irrigation and climate resilience of the agricultural land base in Canada.
- There is a need for scientific studies to monitor trends that are valuable to farmers/fishers.

Buildings: Make all buildings highly energy efficient

- Institute a more stringent National Building Code for all new buildings (residential, commercial and industrial). Adopt Passive House standards such as those in effect in Brussels and Oslo, which can save 80-90% on heating costs compared to current building standards. Consider net-zero as an alternative housing standard. Label buildings for energy usage.
- Provide incentives for the purchase or construction of zero-carbon buildings. Residential and commercial building codes need to be improved and upgraded substantially.
- In order to increase the efficiency of existing structures, incentivize deep retrofits of existing buildings.
- Use all government buildings as models of energy efficiency: build to Passive House or LEED Gold certification and install geothermal and solar wherever possible.
- Require solar on all existing buildings, including integrated photovoltaics.
- Use all spaces on public buildings to put up energy projects including integrated photovoltaics.
- Renewable energy (geothermal, solar, higher levels of insulation) should be integrated into all new construction.
- Build infrastructure with white roofs [and other surfaces] to reflect solar energy.
- Encourage higher density city planning. Don't waste space on parking lots. Higher density benefits public health, requires fewer kilometres of water and sewer lines, means that less money is spent on infrastructure, and makes way for increased walkability.
- Legalize tiny homes, preferably utilizing as much wood as possible.
- Legislate against ostentatious homes that have high emission rates in construction.

- Install programmable thermostats in all buildings.
- "Environmental concerns must be more important than the developer's profits!"
- Implement better planning for higher urban density, with all needs within a small radius.
- Tax heavily for pollution and non-green construction; give tax breaks for LEED buildings.
- Create green-network communities through building code and policy changes.
- Affordable communities and developments should use green building materials.
- Housing should be designed for land reclamation, e.g., reclaimed parking lots.
- Promote passive solar housing design.
- After full-cost accounting, it is apparent that the ecoEnergy home renovation programs made more in income tax and HST than they spent: offer similar programs for home efficiency upgrades!
- Do not delay; start building green infrastructure with the technology we have now.
- All flat roofs and malls should have solar power to heat water.
- Support and subsidize the creation of community-owned renewable energy projects.

Working Group #2: Ideas for Clean Technology, Innovation, and Jobs

Key message: Support the development and sharing of innovations for an equitable, liveable world for future generations.

- The greatest need is for technologies to capture and sequester carbon: dealing with the carbon already in our atmosphere is a problem that has not been—but must be—solved.
- Equally important is the development of energy storage technologies that will allow expansion of the electrical grid without greater reliance on fossil fuels as a "backstop."
- As climate changes, how will food supply be affected? Research in agronomy should address what new crops may be grown.
- Research should address plant pathology and pest management.
- Invest in the research required to realize utility-scale electricity storage.
- Foster Canada's strong innovation sector and help it to join the task of environmental improvement.

Clean Technology

- There is a need for more wind energy, and for a strategy to ameliorate the "NIMBY" problem with wind.
- There is a need to either ban or change ozone-depleting products such as aerosol cans and certain types of refrigeration [especially as hydrofluorocarbons are major contributors to global warming].
- Legislate climate responsibility in the fossil fuel industry.
- Shift what we are rewarding. Subsidize clean energy.
- Accountability demands regulation in waste sector.
- Use renewable materials to make items currently made from hydrocarbons, e.g., fast-growing trees for paper products.

Strategies for Innovation

- Invest in properly sited biomass plants for power generation through co-generation, thereby making use of waste.
- Support policies that encourage micro-electric power generation in all possible applications.
- Modify the standards of work hours to accommodate climate in the interests of conservation.
- Balance the need to evoke massive cultural change with the costs of that change.
- Incorporate more geothermal into Canada's energy portfolio.
- Develop coastal wave [tidal] renewable power.
- Mitigate urban heat islands. Use reflective roof tops, light-coloured road surfaces, and shade all parking lots with trees. These practices minimize the need for air conditioning.
- Urban areas must plan to have green areas, with work places and shops adjacent to public transit and bike paths.
- Infrastructure capacity should model extreme [weather] events, with planning for flood resilience. Affordable communities/developments should use green building materials.
- Recognize that Canada is vast and different regions can implement ideas differently.

Jobs Created through Sustainability

- Many jobs are needed to development new technologies: this has great potential for the Canadian economy.
- Support a just and sensitive transition of workers from the oil-and-gas sector to renewables and/or to jobs in more sustainable industries.
- To create green jobs, collaborate with groups such as Alberta's Iron and Earth that retrain the building trades in renewable energy projects; take this opportunity in Fort McMurray to diversify the economy away from the oil sands.
- Invest in infrastructure that creates sustainable job growth.
- Set long-term GHG targets and backcast to support appropriate infrastructure/technology/sector transition and sector targets that fit global 1.5 degree goal and Canada's Action Plan.
- No one in Canada should fear losing a job through speaking up about climate issues.

Working Group #3: Preparing for the Impacts of Climate Change

Key messages: Adaptation vs. mitigation is a false dichotomy: all solutions should address both. Restore environmental legislation and protections. Adapt through education and resilience. The need for reduced dependence on energy will be at the heart of all our climate solutions.

Environmental Education

- Public education on adaptation strategies and climate science is not just made available through our schooling system, but through public service
- announcements, and the continued funding of science and dissemination of scientific data and information.
- Research and education support our training and preparation for a low-carbon economy.
- For the next generation to care enough to save the environment, it will need a different attitude and mindset toward nature. People need a relationship with the natural world in order to create change. Environmental/outdoor education is important.
- There is a need for the grassroots, bottom-up power in numbers that is fostered by educational and economic support.
- Education: help the next generation to innovate, don't ask, "Should the problem find the solution?"

- Home education: teach kids where food comes *from.*
- Promote "Earth values": we need an informed public based on science; value Indigenous knowledge.
- There needs to be nationwide environmental education (elementary to high school).
- Educate children about what activities and products use the most resources, including fuel and water for production.
- Spend more money on educating the public about what is needed and what can be done—and how urgent the need is for immediate action.

Water Management (Clean Waterways, Water Scarcity, Flooding)

- Access to clean drinking water is a right, not a privilege: water is not a commodity.
- Provide clean water for all communities, Indigenous and non-Indigenous.
- We need a long-term National Water Strategy. We will lessen the severity of climate change if we protect our freshwater resources, e.g., the Great Lakes, and value the economic benefits of our green spaces and healthy ecosystems.
- Manage and reduce water use.
- Ban bottled water, except for situations where publicly treated, safe drinking water is impossible to provide.
- Supply public water stations for refillable bottles.
- Stop the privatization of water.
- Encourage the use of rainwater capture in cisterns for grey water use in homes.
- Consult Indigenous groups: they should have veto power on all pipelines, dams and logging on their traditional territories.
- Limit watering for lawns: land is better used for growing food, not grass.
- Employ extended watering bans when necessary.
- Weatherproof infrastructure to prepare for violent weather and flooding.
- Plan and design communities: site-resilient building codes; soccer fields, not houses, intentionally in flood zones; better zoning to protect natural capital: soil and water.
- Construct oversize culverts and storm-management ponds.
- Change the Fisheries Act: "We need to reverse legislation 'Schedule 2 of the Fisheries Act,' which creates planned destruction of our freshwater."

- Study the impact of population density on water levels/table: urban density vs. resources.
- Build in safe areas, away from coastlines and flood plains.
- Flood mitigation: renaturalize streams and river corridors; buffer all streams and tributaries with plantings.

Migration and Social Impacts

- Prepare for climate refugees (coastal populations moving inland as sea levels rise).
- Partner with other countries where impacts are the same (e.g., the Dutch with flooding).
- Protect vulnerable people from extreme weather events.
- What to do about nations and governments that will disappear?
- The most at-risk populations in the world will bear the brunt of the suffering (people with disabilities, those living in poverty, etc.).
- Recognize that extreme weather impacts food security, especially for low-income and Indigenous populations.

Geo-engineering (Proceed with Caution)

- Geo-engineering needs careful study and trials before being implemented in any way.
- Consultation of the public is necessary before using geo-engineering methods, even in trials.
- One voice: "There is geo-engineering in region of Waterloo-Kitchener. Are we adapting to geo-engineering instead of greenhouse gases? There is a need to spread [news of] geo-engineering to the general public."

Protect Biodiversity

- Trees: Plant more forests, both in Canada and the Region of Waterloo, and in other countries through NGOs. Fund NGOs.
- So much needs protecting: bee population (protection from pesticides); f in the north.
- We need to remediate landfills contaminated with biohazardous waste.
- We need to adapt crops to warming temperatures.
- There is a need for stewardship to protect green properties.

Consult with Indigenous Peoples and Rectify Climate Injustice

- Commit to full adoption of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and teach Canadians about the declaration.
- UNDRIP assures free, prior, informed consent for Indigenous peoples on projects that affect their traditional territories.
- Support Indigenous renewable energy projects.
- Indigenous people should not have to boil their water.
- Recognize that extreme weather impacts food security, especially of Indigenous populations.
- Learn from Indigenous peoples: respectful relationship with nature.
- There should be financial and technical support for disproportionately affected countries/communities, e.g., northern First Nations and Inuit, island nations, and communities affected by the desertification of equatorial zones.
- Protect prime farmland, sensitive ecosystems and waterways on all new construction; consult Indigenous groups affected by construction.

Population

- "No one likes to discuss the matter of the rapidly increasing population of the world, but it will take a huge amount of technology to supply energy for 7.5 billion people (and then some). We need to slow down the number of consumers of energy in a fair, just way; that is, without harm."
- Introduce population-control measures: address the population issue at home and globally.
- Ensure that countries more vulnerable to climate change are supported to avoid situations that increase numbers of climate refugees.
- There is a need for [standardized] disease vector mapping.
- There should be more accessible social programs, as work could decline and conflict could rise [in the future].

The Economy

- How do we help people who are hit hardest by rising electricity rates?
- There should be community ownership of renewable energy to create an energy system in which there is trickle-down and shared positive effects.

- Local government should support GHG reduction locally.
- Local/community climate-action plans should be tied to all future infrastructure money for cities/towns. If possible, these should be part of designated Integrated Community Sustainability Plans.
- There should be green energy incentives, not grants, for municipalities.
- Incentivize local economies and manufacturing.
- Revive Canada Post as an engine of energy transition.
- Expand community services.
- There needs to be a new Canadian nationally determined contribution to the United Nations Framework Convention on Climate Change (UNFCCC).
- The economic sector has the opportunity to reorient.
- Provide Green product incentives for small businesses to lower initial costs.
- There should be international promotion of fair trade and eco-friendly products.
- There must be policy coherence for market-based instruments.
- Cost-benefit analysis is needed for any strategy.
- The federal government should provide guidance for industry on how to "internalize the externalities."
- Encourage zero waste in production processes: put cost back onto manufacturers.
- Make public all connections between government and the fossil fuel industry.
- End conflicts of interests:
    - Fix the NEB process.
    - Stop the CPP board conflicts of interest.
    - Stop the revolving door between corporations and government.
- Stand up to corporations and hold them accountable for harms to the environment.
- Hold Canadian companies to Canadian standards everywhere in the world.
- Trade laws/agreements should benefit local economies and communities.
- Review trade agreements to assess their impact on economic development, local environment, and health.
- Add human health impacts into the calculus when making strategic economic decisions.

- There should be penalties for environmental destruction, such as higher fines for business/industries that do damage to the environment.

Working Group #4: Putting a Price on Carbon

Key message: "Right-sized" carbon pricing—across Canadian provinces and through an international system of border carbon adjustments—will internalize the costs of dirty energy and high-carbon industries, exposing high-carbon products and paving the way for lower-carbon products to become the natural (low-cost) choice for consumers.

- Encourage consumer acceptance of carbon pricing by labelling all products based on their GHG emissions.
- Make companies pay for carbon footprint throughout lifecycle of products: production, packaging, transportation.
- Make the polluters pay (institute a carbon tax) so that prices reflect true environmental costs.
- Price carbon at a level sufficient to increase costs of plastics and thus discourage excess packaging, bottled water, and cheap goods.
- Carbon pricing will drive changes in production choices: industries will find lower-carbon alternatives if their costs are no longer feasible.
- Carbon pricing will drive changes in consumer choices: meat, dairy, and other commodities that require high levels of inputs may be less affordable, but plant-based proteins should become more affordable.
- "Shouldn't local tomatoes be cheaper than ones brought in from Mexico? Shouldn't a head of lettuce cost less than a burger?"
- Assist industry to innovate: i.e., in the auto sector there should be no more handouts when carbon pricing is factored into all production.
- Adjust stable and rising carbon pricing (in line with inflation).
- Carbon pricing should go to a separate fund to facilitate greener lifestyles/incentivize programs for more sustainable infrastructure.
- Redirect [redistribute] [carbon-tax] revenue as in the B.C. model of carbon pricing or invest that money in renewables.
- We need carbon pricing to ensure the environmental choice is also the economic choice and vice versa.

- Demand transparency in trade deals—stop the TPP!
- Introduce a national carbon tax.
- Harness the market, i.e., fee and dividend, cap and trade.
- Set a federal carbon-tax level of $30/T for all provinces.
- Develop provincial plans for carbon-tax supplements within one year.
- Use border carbon adjustments to tax imports from countries with no price on carbon.
- Negotiate a common carbon price for NAFTA countries.
- Refund half the total tax and use the other half to reduce carbon.

Appendix: Remarks from Youth

Emma Smith

My name is Emma. I'm a student at the University of Waterloo in Fine Arts. I've been living in the city for about two years now. One thing I've experienced is that living in the city can really shift your perspective on climate change. You can really distance yourself because you're in the city. But that's not always the case. I'm originally from Bkejwanong, Walpole Island, it's a reserve down south from here, along the border between Lake Erie and Lake Huron, on the St. Clair River about 45 minutes down from Aamjiwnaang.

One of the things about climate change is that I grew up thinking it was normal for our beaches to close because of bad water conditions; I grew up thinking it was normal to have to boil my water to drink it, when it was unsafe. I thought everyone in Canada had to deal with that. It was not until this year I realized most of you guys never had to do that. I saw a lot of hunters lose their role in the community because the birds don't come; there's no ice fishing anymore; there's a lot of changes to the ecosystem.

And as was said in a lot of the recollections of your talks today, change needs to happen now. Change — that we need to have plans. And we need to think about our future generations. My people believe that we do not own the land, that we are simply borrowing from future generations, our children, our children's children, and we need to make sure that it is still here for them.

Thank you.

Niara Van Gaalen (Full version given to MPs)

Hello everyone,

There are many people who are standing on a cliff of deliberate, unconcerned ignorance, when it comes to climate change. When they look into the abyss of the future, they simply want the normal life

their parents wanted for them. Unfortunately, with climate change already happening, it will not be possible to live the way our forefathers did. We must be better. And it must happen now.

The Government of Canada needs to lead by example. Everything that is owned by the government, and that they spend our tax dollars on, must from now on contribute to the end of climate change. Institutions, like hospitals, schools, and city halls such as this one, have to help us sequester carbon biologically, to transition to a low carbon economy, to encourage world population reduction, and to restore nature. Our government also has to stop subsidizing, and accepting money from, the large and irresponsible fossil fuel, agro-tech, pharmaceutical, and forestry industries.

There is a list of simple, small things that need to be mandatory and made easily accessible to everybody by law, in order to end climate change: things like rain barrels, recycling, composting, physically separated bike lanes, and excellent, affordable, and punctual public transportation. For every child born in Canada we ought to plant trees in their honour. And we must protect Canada's great forests, for all time, in our constitution, by restoring what we have damaged, and by embedding in law the protection of 40% of Canada as forest cover. We must also strategically protect at least half of Canada's 9.985 million square kilometres as pure nature, for all eternity. This is one of the greatest gifts you, as politicians and citizens, could possibly give your children.

There is another list of things – chemicals, substances, and practices, the most important of which being the mining of the tar sands and fracking – that need to be banned. One law, one person's vote, can stop these atrocities that are destroying the earth. It is well understood that these things are important to Canada's economy now, but is there a price that can be put on the quality of life of your children and grandchildren? Please look at me, and the faces of all the children on earth, in all honesty, and tell us "no."

It is essential that we move to a low-carbon economy. A carbon tax will help, but it needs to happen nation- and world-wide. We need to tax items that should not be banned, but are still harmful to the environment, such as meat, and we need to ban factory-farming of animals. We also need to change the financial system, and address the problem of tax havens. Many ask how we will pay for the changes needed to stop climate change. This is just one of many examples: by cooperating with countries world-wide, money that hides in places like Delaware, and London, England can be returned to the people to whom it belongs, especially in Third World countries. In a similar way, we need to renegotiate and rethink all treaties and agreements, such as the TTP, NAFTA, and the Vancouver Declaration.

Biologically capturing and storing carbon is the single best way we can act quickly to prevent some of the worst events that could occur due to climate change. We need to make biochar, and incorporate it into our soil, a huge and damaged carbon sink that can be restored, and can simultaneously offset at least about 20% of global greenhouse gas emissions each year. We need to make more items out of sustainable wood, green our cities, pressure countries that destroy tropical rainforest, and replant and restore the kelp forests on our coasts, to the benefit of both us and the otters. Renewable energy, such as concentrated solar power and geothermal, will also be a part of the solution. Every day there is word of new developments in carbon-storage techniques, and renewable and sustainable technology. The government must be deeply informed of all the technological possibilities, make sure that Canada's

citizens, especially young people, are a part of their development, invest money in them, and make laws to ensure they happen quickly.

It will be easier to stop climate change if we slow and reverse population growth. We have the means to support a few billion more people. But it will be so difficult, especially considering that this growth will occur in the Third World. The fewer people, the easier it is to act quickly, cooperate, and share. We must invest in women in other parts of the world so that they are in charge of their bodies and can plan their families, and we must educate women and all children. Canada, however, will likely receive many climate refugees and immigrants. We must plan, creating infrastructure and jobs with opportunities for fairly paid manual labour so that we can welcome them with open arms. On that note, considering the number of people, also consider dogs and cats, about 14 million in Canada, all of which require meat to feed. A carbon tax on non-working cats and dogs, would help to reduce their number, and persuade people to think twice about the environmental impact of a pet.

There can be no waiting for the right plan or the right technology to fix things. We have had decades to find a magic bullet and have not found it; we have to proceed without one. Although technology will help us to end climate change, we cannot engineer it away. I once read that there is no good time to have a baby. There is no good time to rebirth our world. Of course it is inconvenient that the biosphere has fallen ill; there is never a good time to be sick. But we still have to heal what we have damaged. I find it incredible that we can send a man to the moon, but we have failed to act proactively when it comes to climate change. We, the young generation, on behalf of all the other unique species on earth, expect the government to make drastic changes now, because the biosphere is incredibly fragile. We hold the government, and every single adult in Canada and across the world, accountable for all the actions you do and do not take. We must make another giant leap for mankind today, because otherwise all of mankind and every other living thing will suffer immensely. I challenge you, and expect you, to go and partake in this change, because to do nothing would be a betrayal of my generation.

Thank you

Niara van Gaalen (Read to the assembly on August 18 at Kitchener City Hall)

Hello everyone,

There are many people who are standing on a cliff of deliberate, unconcerned ignorance, when it comes to climate change. When they look into the abyss of the future, they simply want the normal life their parents wanted for them. Unfortunately, with climate change already happening, it will not be possible to live the way our forefathers did. We must be better. And it must happen now.

I expect the government of Canada to set an example for the citizens of this country and the citizens of our world, by ensuring that their every act contributes to the end of climate change through biological carbon sequestration, transitioning to a low carbon economy, encouraging population reduction, and helping us to restore nature. It will not be easy, but is there a price that can be put on the quality of life of your children and grandchildren? Please look at me, and the faces of all the children on earth, in all honesty, and tell us "no."

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