

Toronto Summit 2007
Toronto City Summit Alliance
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A Green Toronto
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- Thank you for inviting me to open up this Green Toronto workshop. I want to talk to you today about the urgent need for visionary leadership on climate change, the importance of environmental values as a driver for decision making and the need for focused, integrated solutions.
- This Summit, and Mayor Miller's commitment to making Toronto the greenest city in North America comes at a time when environment, especially global warming and climate change is the number one issue on people's minds.
- Canadians may have first heard about global warming in 1988 when the International Conference on the Changing Atmosphere: Implications for Global Security brought 300 scientists and policy makers from 46 countries and institutions to Toronto. It was this conference that called for an international agreement on climate change and that coined the famous line in its concluding statement: "Humanity is conducting an unintentional, uncontrolled, globally pervasive experiment whose ultimate consequences could be second only to a global nuclear war."
- The 1988 Toronto Conference also called for greenhouse gas reductions of 20 percent below 1988 levels by 2005. The City of Toronto was the first to adopt this target as its own and established the Toronto Atmospheric Fund and other initiatives like the Better Buildings Partnership and the Office of Energy

Efficiency. Toronto, like other cities in Canada and around the world, participating in the International Council for Local Environmental Initiatives Cities for Climate Protection Program, or Partners for Climate Protection, as we call it in Canada, adopted similar targets and have made real progress in cutting greenhouse gas emissions from corporate operations. Where we have not done so well is in conquering the real challenge of citywide emissions. We must tackle that challenge now and with real determination.

- Since 1988, the climate change science has become stronger and more certain while greenhouse gas emissions the world over increased rapidly, especially in our cities. If the world had heeded the call in 1988 to cut emissions 20 percent we could have avoided the next degree of warming we now face. To avoid more than 2 degrees global warming requires rapid and deep reductions of the order of 30 percent by 2020 and 60-80 percent by 2050. Two degrees global warming represents 2 – 6 degrees average warming in Canada with winter temperatures even higher especially in the North. Local governments endorsed these emissions targets in Montreal in 2005 when the world came to Canada for the climate negotiations. The Federation of Canadian Municipalities also approved these targets at its Annual General Meeting last year.
- Toronto faces real and serious risks from climate change impacts ranging from heat waves affecting the sick and old, changes to water quality and quantity from declining lake and river levels, storm water overflow from increased intensity of precipitation and extreme events leading to transmission failures, blackouts, flash floods and urban forest damage. These risks are real and potentially costly for

infrastructure, health and the local economy. And they are risks you will face in your lifetimes and for certain in the lifetimes of your children.

- Sir Nicholas Stern, a former World Bank economist, was asked by the UK Treasury to assess the costs of climate change and he concludes we risk 5 – 20 percent of global gross domestic product while the cost of avoiding the problem is about 1 percent of GDP.
- The world is coming to terms with the seriousness of climate change and the next five years are going to see a revolution in my opinion in public demand for real reductions. Toronto has an important leadership role to play at home, in Canada and globally in committing to the deep reductions that are required and to give voice to its concerns about how climate change will affect its citizens, its infrastructure and its quality of life. We need Toronto to take a strong stand in defense of its citizens and to call for all orders of government to stay on track with its initial commitments to the Kyoto Protocol and to set the stage for the revolutionary changes needed to protect ourselves. With the current debate about the Protocol, you are thinking is she crazy? I can assure you I am not. The Protocol represents a process, it is a verb, not a one off thing, a noun. It is not just about the target. Canada can do better than it is doing, and it can do the things that other countries to reach their targets. There are provisions for managing any shortfalls as part of the ongoing negotiations for future targets. As this speech is not about the Kyoto Protocol I can't spend the time I would like to explain how it works and how it does engage developing countries in the carbon market. Suffice

it to say that the issue is too important to fail, and Canada needs to be part of the process if it is to protect its citizens.

- So as we come up to the 20-year anniversary of the historic Toronto conference what should Toronto do to respond to climate change? It should really become the greenest city in North America!
- Getting there requires an unwavering focus on energy. Toronto needs a grand vision to rally around: energy self sufficiency by 2020! The City of Copenhagen is aiming to be fossil fuel free and has set a goal to cut its greenhouse gas emissions by 80 percent. Why not Toronto?
- Sixty three percent of Toronto's greenhouse gas emissions are generated in buildings through the use of electricity and natural gas. Almost \$2.7 billion was spent on electricity in 2005 and in 2004 4.3 billion cubic metres of gas was consumed. I was unable to find out how much that gas cost or the total volume of gasoline purchased. But we should know, and Toronto should be looking at those energy expenditures from the perspective of keeping those dollars in Toronto. Toronto should understand the energy flows into and out of the city and how that energy is converted into useful work and/or wasted as a matter of course. It needs to understand its energy system. Currently Toronto's focus for its energy plan is meeting the 90 MW target for demand management and the city is developing a renewable energy strategy, both of which have a heavy weighting toward electricity and both of which are very important. I would argue, however, that Toronto needs an integrated energy plan and that it commit to undertaking energy planning along with land use, transportation and infrastructure planning

processes. I believe this is critical to engaging Toronto and other cities from the earliest stages in energy planning so we don't run into conflicts between energy needs and community priorities. The greatest risk to Ontario reaching its electricity objectives is NIMBYISM and the only way to manage that is to fully engage local councils and citizens right from the start.

- An overarching objective of energy self sufficiency provides a frame around which to assess energy options and city decision making. It also would drive an integrated approach where buildings are seen less as energy consuming facilities than the spine connecting energy supply units integrated below ground through community energy systems and contributing to overall supply through solar PV/solar thermal, cogeneration and geothermal.
- Recently, the Toronto Star proposed four objectives for Toronto: 30 percent cut in greenhouse gases by 2020; zero closings of city beaches in a year; 70 percent waste diverted from landfill; and 30 percent tree canopy in Toronto.
- You might see these objectives as distinct, but I don't. If these objectives were pursued as an integrated response to both cutting the emissions causing global warming and as a way to adapt to the inevitable climate change impacts the city will face, you could have real gains in quality of life in Toronto while making it more resilient as well.
- Here are just a few examples of how this could work. Increasing tree canopy to 30 per cent coverage and adding other green space through green roofs and more permeable surfaces throughout the City can help manage increased intensity of

precipitation and slow storm water runoff, preventing overflow and beach closings and providing shade to cool the city cutting back on air conditioning which is the leading cause of increased electricity consumption. Targeting investment in renewable energy in buildings, especially emergency facilities like police and fire stations, hospitals, city hall, etc., can make operations self reliant and resilient in the face of increased blackouts resulting from extreme weather events. Increased diversion of waste from landfill can provide compost and recycling materials, but remaining material can also be gasified for energy further contributing to development of a distributed energy system.

- What steps might Toronto take to succeed in achieving a sustainable energy future and in engaging citizens in a community wide green challenge?
- First, the City needs an integrated energy plan and to engage citizens in its development. If done well, it would drive water conservation, a huge energy consumer, green space strategy, and investments in distributed energy systems, conservation, efficiency renewable energy and alternative fuels in vehicles and buildings and bring down smog, climate and other air emissions.
- As I have noted, we need to broaden our focus from transit and focus on buildings: residential and commercial: retrofitting needs to be a city-wide priority, with a particular focus on low-income households. But we also need to look at our buildings as the spine that links a distributed energy system throughout the city. We need to fast track approvals for buildings meeting the highest standards and that include proposals for renewable and cogeneration systems.

- Second, the City needs to formerly commit to community wide targets for greenhouse gases of 30 percent by 2020 and 80 percent by 2050: these cuts could support a drive toward energy self sufficiency, including a massive increase in conservation, efficiency and renewable energy and alternative fuels in both buildings and transportation systems. And the City should commit to doing what it can to help meet the Kyoto level targets of 6 percent below 1990 levels by 2012. Its contribution, in turn, can help Ontario meet that target. And it should strive to beat its targets within corporate operations and the city so it can participate in carbon markets.
- Third, the City needs a vulnerability assessment that assesses the economic costs of the impacts risks identified by the Clean Air Partnership. If the City risks losses in economic activity of 5 – 20 percent of GDP as identified by Nicholas Stern, shouldn't climate security become a top priority for the mayor, council and its citizens? Should we not be adapting our infrastructure standards and energy decisions to ensure our citizens are as safe as they can be? Are our emergency preparedness and public health agencies ready for an increase in extreme events? We need to integrate our green space, energy and adaptation agendas for the greenest outcomes. Is putting in bigger sewer pipes the best way to manage more intense precipitation? Or is a more sustainable answer increased green cover to slow the flow of water, increase absorption while at the same time cooling the city and providing habitat and social space?

- Fourth, we also need to undertake a focused education effort showing citizens the link between energy and climate change and air pollution and how their actions can contribute to a green, clean future for Toronto.
- Fifth, the City needs safe space to talk about tough issues in a rational way and I would start that conversation with a focus on waste management and energy from waste issues.
- Sixth, the City needs to assess its internal structures to ensure it has the capacity for decision making that generates better environmental outcomes. We need to find a way to bring the civil engineers, efficiency, urban foresters and environmental teams into an integrated decision making structure.
- Thank you for listening today and considering some of my suggestions as you move into the workshop phase. I and others working on climate change and energy issues look forward to working with you to make Toronto the greenest most resilient city in North America.