

## **CMOS National Congress 2006**

*Presentation by His Worship, Joe Pantalone, Deputy Mayor of the City of Toronto  
[Delivered at the Downtown Sheraton Centre in Toronto, May 29, 2006]*

*To the 40th CMOS Congress entitled:  
Weather Oceans & Climate \_ Exploring the Connections*

On behalf of Mayor David Miller... welcome to Toronto and CMOS 2006! It is indeed a privilege to have a gathering of such distinguished scientists in our city.

As our world becomes increasingly complex, and all levels of government are faced with difficult decisions on a daily basis, we're learning to value guidance from scientists as never before. As deputy mayor of Canada's largest city, I know the days of simple decisions, based on how things have always been done, are long over. We are entering an age of uncertainty. We must now deal with issues which our ancestors could not even imagine – climate change, voracious demands for energy, air quality concerns, sudden extreme weather – we need the guidance and the expertise from the people in this room now more than ever.

I can imagine that when CMOS was first created, way back in 1939, when your society was originally known as the Canadian branch of the Royal Meteorological Society, that your predecessors also had no concept of what the future would demand of your expertise. Yet your organization has grown and evolved to meet the challenges of today. You have brought together expertise from government, universities and the private sector. You have moved from basic weather forecasting and recording data into the massively complex world of supercomputers, satellites, rising sea levels, global warming, and climate predictions for the next century!

Toronto is proud of its long tradition of serving as a center for science excellence. We have three major universities, and numerous government and private research institutes, including, as I'm sure you're well aware, the headquarters of Environment Canada's atmospheric research division – the Meteorological Service.

Over the years, we have hosted a large number of landmark conferences – perhaps the best-known in your field, was the 1998 World Conference on the Changing Atmosphere - the ground-breaking gathering which brought the issue of climate change to world attention.

But our city is known, not just for its science excellence, but also for its ability to act on the findings of that science. Toronto has long been a leader in environmental action and planning for natural disasters.

As you travel through our city, you cannot help but notice, especially at this time of year, the beautiful green valleys, filled with trees, extending throughout the city, and even into the downtown core. Our green valleys are the result, strangely enough, of Toronto's preparations for severe weather. On October 15, 1954, Toronto suffered massive

flooding and 81 people were killed as Hurricane Hazel tore through our city. In its aftermath, a comprehensive system of flood control was developed to protect our citizens and their property. Dams and reservoirs were constructed on Toronto's major rivers, and the valley's preserved in a natural state, to absorb the impact of future storms. This has created a marvelous network of parks and natural areas throughout our city. Meteorology has indeed shaped Toronto!

More recently, Toronto has focused on threats to the atmosphere – particularly climate change and air quality. You may ask – “What can a single city do to stop global climate change?” And I can answer that with a resounding “A LOT”! Toronto has been recognized as one of the five leading cities in the world for reducing its emissions of greenhouse gases. In 2005, Toronto received an award as a "Low Carbon Leader" from The Climate Group, based in London, England. Furthermore, the David Suzuki Foundation in October 2005 called Toronto “the Leading City in North America on climate change”.

We received these recognitions primarily because of three major initiatives: harnessing methane from landfills, refitting our buildings with efficient lighting and heating, and improving our public transit. As a result, Toronto realized a 42% reduction in GHG emissions from municipal facilities during the 1990s, and a further 20% cut in 2005. Our methane-capture program generates \$20 million and our building efficiency efforts save \$17 million in energy and maintenance costs?

But we are not resting on our laurels – the City of Toronto is continuing in its quest for innovative solutions to improve the lives of our citizens and to protect the environment. We have developed a system that draws cold water from the depths of Lake Ontario to provide air conditioning and heating for buildings in our downtown core. This further reduces greenhouse gas emissions, and represents yet another step towards clean air for Toronto.

In 1991, 15 years ago, City Council established the Toronto Atmospheric Fund to encourage citizens and local businesses to combat climate change and improve air quality. Working with all sectors of the community, the fund encourages local actions that lead to significant emission reductions. On an annual basis, the fund has over \$1 million available in grants and up to \$8 million available for loans. This initiative also supports Toronto's Clean Air Partnership, which works with a wide variety of partners to improve local air quality.

Recently steps have been taken to expand these initiatives beyond the city of Toronto, and into the larger Greater Toronto Area. At the 2005 Toronto Smog Summit, federal and provincial ministers, together with mayors and councilors from across the GTA signed a declaration that included a commitment to discuss the creation of a new climate/clean air agency for the entire Greater Toronto Area.

But we cannot do this work alone – and this is where you, the scientists, are playing a vital role. I believe that experts in the atmospheric and ocean sciences are engaged in some of the most important scientific research taking place in Canada today.

I am also pleased to see that, as scientists, you recognize the value of reaching out to the citizens of Toronto. The issues which you are studying are of great interest to us all, and increasing our understanding is vital to the decisions which we must make in our modern world. I note that you have special sessions included in your conference for teachers, media and members of the public. The city of Toronto is privileged to host the public lecture on climate change at our City Hall – just across the street – on Tuesday evening.

In Toronto, in recent years we suffered through much too much weather, including debilitating heat waves, sudden torrential rainstorms, and snowfall so heavy that then Mayor Mel Lastman called in the army to clear the streets. Meteorology is definitely important to us. And, although rising sea levels are unlikely to bring salt water to Lake Ontario, we too understand the value of oceanography and its vital link to world climate. Your conference is titled “weather, oceans, and climate – exploring the connections”. I think the last word is the most important. We are beginning to see now that everything is connected, that just as the actions of a single city are important on a global scale, so is the outcome of a single conference on the global stage. Go now – make connections – between yourselves and your research, and with our city and our citizens, and with the world beyond. I’m sure that we will all be enriched by your presence.

I wish you a productive and successful meeting. I also hope that you’ll have time to relax a little and enjoy our city, and all that it has to offer. Thank you.