

GREEN TECH THE SERIES COLUMN FOR JUNE 8, 2016

HEADLINE: FINALLY... BUSINESS AND GOVERNMENT GET IT ON CLIMATE CHANGE

For weeks and months now, I have been receiving small leads and hints from my sources on what the Province of Ontario is planning on climate change. Given their track record, taking a wait and see approach seemed appropriate. A couple of weeks ago, a leaked copy of a draft plan on climate change hit the media. While it is doubtful this is the final rendition, it can only seem reasonable this was “leaked” to gain reactions so that they could fine tune before the final plan is announced; right now expected sometime in June or July.

This “Climate Change Action Plan” is a 57 page blueprint on what the province hopes to achieve. There is a wide ranging list of grants and funding projects, including switching to electric school buses, a 354 million dollar package; expanding the GO train system; and 375 million towards research on clean technology, including a center for development of electric and other low carbon vehicle technology. They are hoping this plan will increase electric car sales to over 80,000 annually in Ontario by 2025. The package for vehicles includes rebates at time of purchase, up to \$14,000.00 and a subsidy for low and moderate income families to take their old cars off the road and replace them with electric vehicles. This aggressive plan calls for an electric or hybrid vehicle in every multi-vehicle household.

The housing sector is projected to receive 3.8 billion dollars to move ahead on retrofitting homes to geothermal, solar and other forms of electric heating. A new agency, called the “Green Bank,” will administer and provide funding for solar and geothermal projects once this plan is made into law. The building code will see some major changes requiring all homes and small buildings built after 2030 to be heated without fossil fuels, including natural gas. Today, natural gas heats 75% of all homes in Ontario. It will not be banned, rather phased out by means of grants and incentives to upgrade the heating methods. One area that is causing some considerable chatter is in the real estate community. Energy audits will have to be done on all homes before they are sold, adding a major step to provide a buyer the real cost of operating a home. By 2050, every new building in Ontario will have to meet the new standards for heating.

All of this comes with a cost, as expected. It is estimated that every household in Ontario will see this plan cost the family budget over \$150.00 a year. The cap and trade proposal is enshrined in this climate plan. Gas prices will rise at least 4

cents a litre and a home heated with natural gas will cost an additional \$60.00 a year. For all of this, they project that greenhouse gasses will drop by 15% by 2020 and 80% by 2050.

There have been numerous meetings by world leaders over the years on climate change and reduction of greenhouse gasses, the recent Paris meeting may have hopefully finally sunk in. According to the world health organization, air pollution is now the number one cause of death in the world, more than malaria and HIV combined, claiming over 3 million people annually. This figure is projected to double by 2050. One sentence from this report is pointed. "When dirty air blankets our cities most vulnerable urban populations, the youngest, oldest and poorest are the most impacted."

Vehicles are the largest culprit; they contribute up to 75% of all pollution in urban centers. The world and the cities who lead the pack for air pollution are taking steps this year. New Delhi has banned large diesel vehicles entirely. India tops the list of worst urban air with 16 of the top 30 worst most polluted cities. Mexico City has banned private cars from the street one day each week. Madrid has banned traffic entirely from a major portion of its streets. Homes come in next, contributing 17% of the greenhouse gasses.

Federally, new regulations on appliances and commercial products like beverage machines and commercial refrigeration will come under tougher standards for energy efficiency. All of this will happen by 2020; that's four years from now. While these appliance standards are projected to cost Canadians 384 million for new appliances, the overall savings in energy is projected to be over 1.5 billion, within a decade. Ottawa also announced that a federal climate change plan will be developed in conjunction with the provinces.

The world's larger corporations are beginning to get it; all be it slowly. Europe's largest oil company, Shell, recently announced that it is making a large corporate investment in renewable energy. It's called "New Energies." This 1.7 billion dollar investment is just over 1% of Shell's budget; it is a start. This initiative will combine the company's existing hydrogen, bio-fuels operations and start large scale investments in wind and solar. Is it possible that Shell may have seen the writing on the wall after a London based think tank warned the world's oil companies that their business model is dying? Hopefully when one of the world's largest sees the writing on the wall, others will follow.

My last word; if you have read this column in the past you will know that I have been a strong proponent of preserving our largest single asset, water. As I researched this column, a study that Nestle did in 2009 has been leaked. This

huge food company found that the increase in meat consumption in the developing countries and India and China can potentially cause catastrophic water shortages; to quote “one calorie of meat requires 10 times as much water as one calorie of corn, soy or other vegetables.” The report goes on to state that, if the world does not reduce meat consumption, the world will face a serious fresh water shortage. This company knew this seven years ago - with global population expected to exceed 9 billion by 2050, there simply won't be enough fresh water. We have a short time to fix this problem, too.

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