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Digital Challenges in Addressing Climate Change

In October, I attended the annual Climate Action Network Conference, held in Ottawa as a delegate on behalf of Just Earth. Founded by Lynn Macdonald, former MP for the NDP in the Toronto riding of Broadview Greenwood, the organization focuses on lobbying MPs on climate change. The conference began just days after the tragic shooting of a soldier on Parliament Hill, with the radicalized ISIS perpetrator gunned down in Centre Block by the Serjeant-at-arms. Needless to say, all Canadians were shaken up by the incident, but no more so than Members of Parliament, themselves. Emergency lock down procedures in response to such outbursts of violence are more familiar to administrators of schools, colleges and universities as rising levels of youth violence have given rise to a whole new industry of regulatory procedures, surveillance technology, grief counselling and much more.

The Conference, ably chaired by incoming executive director Louise Comeau, began with a CAN reception hosted in Centre Block for MPs. The following day concluded with a dinner hosted by the Leader of the Opposition, Thomas Mulcair, at Stornoway. The silver lining in discussions on policy related to climate change was that more attention was focused on the overlap between the natural and cultural environments and the need for action on both fronts if we are to respond effectively to urgent warnings from the International Panel on Climate Change that we are rapidly running out of time.

New telecommunications technologies underscore the extent to which we live in a global village. Issues have become more diffuse and interconnected. Change in one sector affects others, irrespective of national boundaries. Public health issues merge with those in education, the environment, energy, culture, gender, security and the economy. New media offer enormous potential in mobilizing for political action, limiting climate change, maintaining the biosphere and securing energy needs. But they can also be mobilized for harmful, destructive purposes. These realities must be recognized and addressed before meaningful policy is possible.

In response, the Government of Canada could more boldly examine the impact of digital technologies on future sustainability, taking into account a number of factors:

Energy waste and insatiable demands

According to a report released by Greenpeace earlier this year, digital technology products and services accounted for about 2% of worldwide emissions in 2012, roughly the same as the airline industry. Some of the biggest electricity demands come from huge data centres that house the stacks of computers that process search requests, store photos and stream video. These online services dubbed “cloud computing” - identified as the

fastest growing sector of the digital industries - collectively consume more electricity than all but five countries - China, the U.S., Japan, India and Russia. While laudable strides have been made by companies such as Apple Inc. focused on renewables, the emphasis on marketing practices that create demand continues unimpeded. Each advance depends on a further cradle to grave cycle of extraction and transport from manufacture to market - then from consumption to waste pit. These electronic cast-offs contain a witch's brew of heavy metals and toxic substances such as lead, cadmium and mercury. Some are recycled but most are shipped off to developing countries willing to pay cash for trash. It is estimated that in the U.S. alone, over 250,000 cell phones are discarded daily. Mining operations involved also help to fuel conflict in developing countries.

Misplaced emphasis on economic growth and job creation

As Naomi Klein and others point out, the really inconvenient truth is that our problem is not about carbon, it is about capitalism - that we are facing nothing short of a civilizational wake-up call. The convenient truth is that we can seize the moment to transform our failed system and build something better. This cannot happen without examining our digital toys that comprise a growing sector of the modern, unsustainable economy. An easy starting point would be to regulate the gaming industry. In the December, 2010 issue, *The Economist* predicted that video games will be the fastest growing form of mass media over the coming decade, estimated at around \$82 billion U.S. by 2015. The action-packed (code for violence filled) video game "Call of Duty: Black Ops had fans in countries around the world queued for blocks on the first day of its release in 2010 - an example of what Benjamin Barber, a sociologist at New York University and author of the book *Consumed*, would call infantilized consumerism.

In 2011, it was reported in *The New York Times* that wasteful government spending in both Canada and the U.S. involves generous tax breaks for video game producers regardless of content. Gory video games are now one of the most highly subsidized businesses on the continent. The most recently released federal NDP policy statement calls for "improving incentives for Canadian film and TV productions". The nature of proposed productions needs to be examined. In 2008, a bill was brought before the House by the Minister of Heritage for the elimination of such incentives for audio visual productions involving extremely violent content deemed to be harmful to the public interest. It initially passed but ultimately died on the order paper when another election was called after being stalled in the Liberal dominated Senate at the time. Industry lobbyists successfully advanced the argument that such discretionary funding would be too grave a threat to freedom of expression. The reality is that what it would impede is freedom of corporate enterprise regardless of consequences.

Glamorizing violent entertainment poses threats to community safety, security and peace

Recently, Anna Marie Tremonte on CBC Radio, *The Current*, hosted a program on the harassment of women in the video game design field. No mention was made about the nature of the content and how it might pollute the work environment. The CEO of the international gaming association based in Seattle, a woman, was also interviewed. She spoke of how she enjoys “action-filled” video games such as *Halo*, and *Call of Duty*, herself, and said one of her key strategies is for “greater market penetration into the Middle East...”. Current evidence is that ISIS is already extremely media savvy and uses social media to recruit and radicalize both male and female youth around the world.. More emphasis on *World of Warcraft* gaming is bad for both the cultural and natural environment. It is no accident that we have rising levels of youth gang violence, internet addictions, cyberbullying and evidence of mental instability in young adults. Every month, over ten million players log on to play games such as “Whack your soul mate” involving excessive amounts of blood and gore. *addictingames.com* has become one of the Internet’s premier casual gaming sites. We have been warned for decades about how media violence contributes to AVIDS (acquired violence immune deficiency syndrome) and a mean world outlook. It is time to move beyond the duplicitous and specious argument that it is “just entertainment”, or that the “findings showing harmful effects are inconclusive”. Common sense indicates otherwise. If advertising messages help to sell products and media coverage of violence acts can incite copycat crimes, *Infotainment* and *edutainment* can also influence behaviour.

Commercial exploitation of children through advertising strategies

“Pester power” and “the nag factor” are well known techniques used by advertising agencies to target children with a host of commodities that go far beyond the digital seduction which starts with “brainy baby and Baby Einstein” videos, regardless of extensively documented research showing harmful effects (c-cave.org; commercialfreechildhood.org). A number of countries have developed cooperative restraints on the harmful effects of advertising to minors. Many have taken serious steps to limit exposure in their countries. Advertising to children 13 years and under is banned in Quebec, with Great Britain, Switzerland, Italy, France and other countries adopting similar legislation. It has yet to be passed in the rest of Canada, despite repeated calls from numerous Boards of Health over the years and bills introduced by NDP members in Ontario and the House of Commons.

Health and well being

The harmful effects of over exposure to digital technologies goes well beyond their impact on children. An enormous body of scientific evidence has accumulated about their addictive tendencies, sedentary nature of their use, tendency to impede development of socializing skills, apart from those cultivated online, contribution to attention deficit disorders and so on (Dyson, 1995; 2000; Morgan, 2002). Added to these, in recent years, have been warnings issued by the World Health Organization, advocates such as former president of Microsoft Canada, Frank Clegg and American scientist Devra Davis, about

dangers from exposure to low level radiation from wireless devices and how these can increase the risk of cancer. Since 2011, many countries which include Belgium, France, and India have passed laws either prohibiting the placement of cellular antennae on the roofs of hospitals, schools and playgrounds, restricting the sale of kiddie-phones designed for children or recommending limited exposure due to health risks. Cordless phones, Wi-Fi, smart meters and cell towers effectively function as low-level, constantly-emitting microwave transmitters. In Canada, the WHO warnings continue to be ignored by various levels of government.

Consumer driven value systems encouraged by digital technologies

Much has been written about the rise and continued emphasis on hyper consumerism characterized by inequalities, immaturity, indulgence, and childishness focused on faux needs *none* of which will help to create a sustainable future. The relentless efforts of marketers to manipulate the needs and wants of gullible consumers cannot continue to be ignored by climate action advocates. Like the nurturing of violence as a conflict resolution strategy, encouraging such infantilized behaviour will not get us to where we want to go. The NDP Policy statement calls for a strengthening of laws against hate propaganda and hate crimes. But this means addressing the unlimited freedoms now enjoyed by perpetrators. If we are serious about responding to the civilizational wake up call before us, we are going to need bold, courageous policies that limit unbridled capitalism in both the cultural and natural environment.