

THE STORY	THE DETAILS	TERMS & PEOPLE
<p><i>Since the 1980s Canada established itself as a leader in the environmental movement; however, following the defeat of Prime Minister Paul Martin's Liberal Party in 2006 by Stephen Harper's Conservative Party, Canada's reputation as an environmental steward has taken a beating.</i></p>	<p><b>Depletion of the Ozone Layer</b></p> <ol style="list-style-type: none"> <li>1). Canada was a signatory of the <b>Stockholm Declaration</b> (1972).</li> <li>2). Science determined in the 1970s that <b>hydrochloroflourocarbons</b> (HCFCs) emitted due to human industrial activity was responsible for depleting the earth's ozone layer.</li> <li>3). In 1987 Canada and other nations of the world signed the <b>Montreal Protocol</b>. This protocol set up a framework and schedule for the phasing out of HCFCs and <b>hydrofluorocarbons</b> (HFCs). As a result of this agreement the ozone hole over Antarctica is shrinking.</li> <li>4). In 1992 the United Nations Framework Convention on Climate Change (UNFCCC) was established as a mechanism to help countries reduce greenhouse gas emissions based on the premise that "<b>global warming</b>" was occurring and it was "anthropogenic."</li> <li>5). In 1997 Canada was a signatory of the <b>Kyoto Protocol</b>. Canada was obligated to reduce its overall greenhouse gas emissions by 6% by 2012. Prime Minister Stephen Harper took Canada out of the Kyoto agreement in 2006. Between 1990 and 2015 Canada's GHG has increased by 25%. Canada leaving the Kyoto agreement hurt our international reputation as environmental leaders.</li> </ol>	<p><b>STOCKHOLM DECLARATION:</b> the first international meeting to acknowledge human impacts on the environment.</p> <p><b>HYDROCHLOROFLOUROCARBON (HCFCs):</b> a single atom of chlorine emitted in to the atmosphere can destroy 100,000 molecules of ozone. The ozone layer is important for protecting life on earth from being harmed by UV-rays from the sun. The true extent of the damage will not be known for decades because it takes a long time for HCFCs to reach the stratosphere.</p> <p><b>MONTREAL PROTOCOL:</b> originally signed in 1987 and amended as part of the <i>Kyoto Protocol</i> (1999).</p> <p><b>HYDROFLOUROCARBON (HFCs):</b> is an ozone depleting molecule used, like HCFCs, in refrigerants, aerosols, etc.</p> <p><b>GLOBAL WARMING:</b> the first scientific term referring to the alteration of the earth's atmosphere, oceans, etc. This term has since been replaced by the less confusing and more accurate phrase "climate change."</p>
<p><i>As global demand for energy (oil) increased in the early 2000s, Canadian energy companies looked to develop Alberta's tar sands. This demand led to gasoline rising to over \$1.25 CDN per barrel.</i></p>	<p><b>Alberta's Tar Sands</b></p> <ol style="list-style-type: none"> <li>1). Alberta has been developing the tar sands since the late 1960s; however, production has ramped up over the past two decades. Oil is extracted from the tar sands by using a mixture of high pressure hoses, water, and an admixture of chemicals. Canada is the world's fifth largest producer of oil.</li> <li>2). The extraction of <b>bitumen</b> oil from the tar sands producing three to five times more greenhouse gases than conventional drilling.</li> </ol>	<p><b>BITUMEN:</b> the technical term used for the viscus oil rich tar extracted using pressurized water.</p>

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	<p>3). Canada is third in the world for the emission of greenhouse gases (second only to Australia and the United States).</p>	
	<p><b>The Copenhagen Accord</b></p> <p>1). In December 2009 Canada and the other industrialized countries of the world met in Copenhagen, Denmark to address the problem of <b>climate change</b>.</p> <p>2). The <i>Copenhagen Accord</i> endorsed a continuation of the aims of the <i>Kyoto Accord</i>. The countries attending the meeting in Copenhagen acknowledge that climate change posed an “<b>existential risk</b> to humankind.”</p> <p>3). Prime Minister Stephen Harper, leader of the Conservative Party, argued Canada could not afford the reductions to greenhouse gases recommended by the accord. A coalition of environmental groups gave Canada the dubious distinction of being the “<b>Fossil of the Year</b>.”</p> <p>4). Prime Minister Harper put economic development above all other aims. To this end he <b>gagged scientists</b> working for the government preventing them from sharing information vital to the public interest, e.g. information relating to ice thickness in the Arctic, impacts of the tar sands development and associated emissions, etc.</p> <p>5). The government created an elaborate bureaucracy to hide scientific information from the journalists, e.g. in order to get permission to share information with a journalist a scientist had to ask for approval from an elaborate bureaucracy of non-scientists (ten levels). The request to share information could be denied at any level in the chain.</p> <p>6). In Sept 2013 dozens of scientists participated in a protest in Ottawa in a “Stand Up for Science” event. Scientists, and members of the general public, both desired decisions made by the government to be “evidence based.” <b>Evidence based decisions</b> are ones which take in to account “reality” when policies are created (as opposed to policies purely shaped by ideology, e.g. profit).</p>	<p><b>CLIMATE CHANGE:</b> a scientific term used in reference to changes occurring within the atmosphere, oceans and environment attributed to human industrial activity (otherwise known as “anthropogenic climate change”).</p> <p><b>EXISTENTIAL RISK:</b> future projections of climate change suggest further warming, sea level rise, and an increase in the frequency/severity of extreme weather disasters. Effects of climate change include loss of biodiversity, stresses to existing food-producing systems, and increased spread of infectious diseases such as malaria; it has been suggested that runaway climate change might cause Earth to become hot like Venus (leading to the end of civilization as we know it).</p> <p><b>FOSSIL OF THE YEAR:</b> an award for the planet’s worst polluters and/or countries which do the least considering the danger of climate change.</p> <p><b>GAGGING SCIENTISTS:</b> the Harper administration gagged scientists, or prevented them from talking, so the government could control the information percolating down to the Canadian people. By controlling information the Conservative could delay, even prevent, Canadians from pressuring the government to change course.</p>

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<p><i>During the Canadian election of 2015, many people voted Liberal just to remove Stephen Harper's administration from office. Canadians looked to new leadership from the Liberals (who won the election) to set Canada upon a different course with respect to the environment, e.g. the Liberals would actually use science as a basis of developing policies related to the environment.</i></p>	<p><b>Canada and the Paris Climate Conference</b></p> <p>1). Prime Minister Justin Trudeau and all of Canada's premiers participated in the <b>Paris Climate Conference</b> (December 2015).</p> <p>2). Participating countries agreed to reduce rates of global greenhouse gas emissions by 2020 in order to prevent greater warming than <b>2 degrees Celsius</b> by 2100. There will be an attempt to keep cooling to 1.5 degrees Celsius.</p> <p>3). Canada, and the other signatories of the <i>Paris Agreement</i>, agreed to create a yearly fund of 100 billion USD to help countries deal with the effects of climate change while promoting the creation and use of renewable energies.</p> <p>4). The fundamental problem with the Paris Agreement, as with the <i>Kyoto Accord</i> or most other international agreements, is it is not binding because it is based in <b>international law</b>. As such, the growing economic powerhouse of India has said it would not stop building coal power plants (since coal energy is the cheapest and most efficient way to meet a growing economy's needs), e.g. 500 to 1,000 plants are slated to be constructed in Asia alone in the next decade.</p> <p>5). Saskatchewan Premier Brad Wall has promised to meet 30% of Saskatchewan's energy needs through renewables by 2030.</p> <p>6). Different promises to cut greenhouse gas emissions have been made by different provinces, e.g. <b>carbon tax</b> in British Columbia and a <b>cap and trade system</b> in Ontario.</p>	<p><b>PARIS CLIMATE CONFERENCE:</b> all the participating countries at this conference, unlike previous meetings, acknowledged that climate change was both real and caused by human activity.</p> <p><b>2 Degrees Celsius:</b> some models predict that if the earth warms 2 degrees sea levels will rise such that island countries like Fiji and the Maldives will disappear.</p> <p><b>INTERNATIONAL LAW:</b> is a body of law covering international agreement which nations voluntarily submit to because such agreement cannot be binding (because there is no power on earth capable of forcing all nations to follow it).</p> <p><b>CARBON TAX:</b> a tax on products, process, etc. which contain carbon. Carbon based products become more expensive because of an associated tax. The idea is as such products become more expensive, fewer people will buy and consume them.</p> <p><b>CAP AND TRADE:</b> a regulatory system meant to reduce certain kinds of emissions and pollution and to provide companies with a profit incentive to reduce their pollution levels faster than competing companies. Under a cap-and-trade program, a limit (or "cap") on greenhouse gases is set, and companies are permitted to sell (or "trade") any unused portion of their allowance. Companies struggling with their CO2 limit can buy extra from other companies.</p>