OEB ENERGY EAST CONSULTATION

Christine Penner Polle Coordinator, Western Canada Citizens' Climate Lobby

Kenora, March 25, 2014



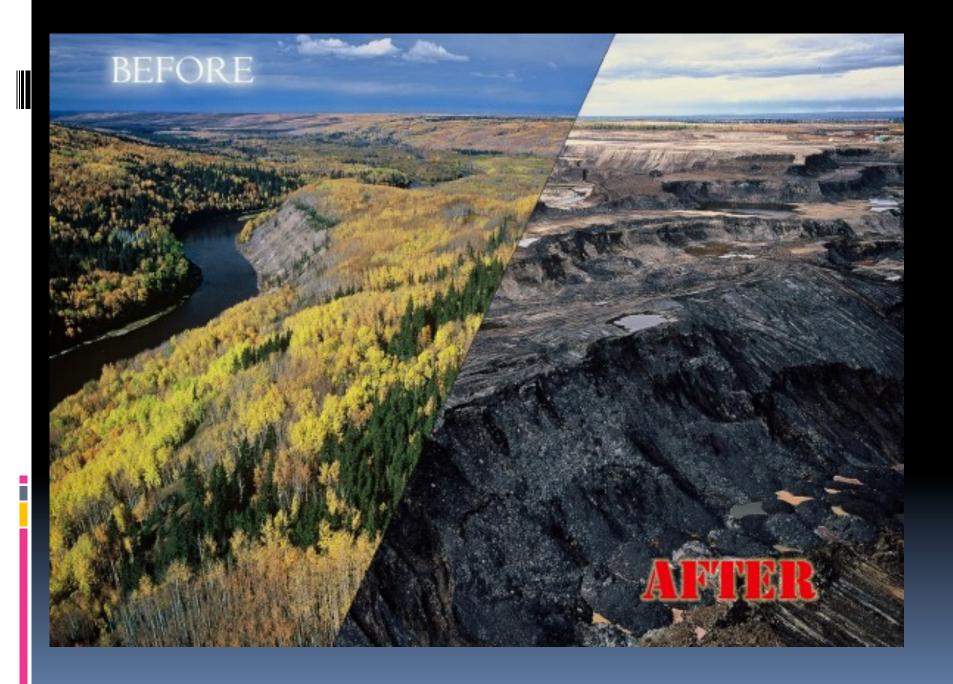
- CCL works to create the political will for a liveable climate.
- CCL proposes a consumer-friendly price on carbon that will speed the transition from fossil fuels to clean energy.

CCL's Position on the Energy East Pipeline

- Until Canada has a compelling climate and energy strategy at the federal level, Citizens' Climate Lobby will be opposed to any new fossil fuel infrastructure in Canada.
- CCL proposes that Canada's national energy strategy include a revenueneutral carbon price on fossil fuels, based on the CO2 content of those fuels. Revenue from that levy should be returned to the public as a monthly or annual payment to protect households from rising costs associated with a price on carbon.

Canada has no national energy strategy

- The Conservative government's climate plan is to regulate each of Canada's industrial sectors separately.
- The federal government's climate strategy is "disjointed, confused, and nontransparent" & its policies are projected to be 90 percent weaker than in 2007. (Federal Environment Commissioner, 2011)





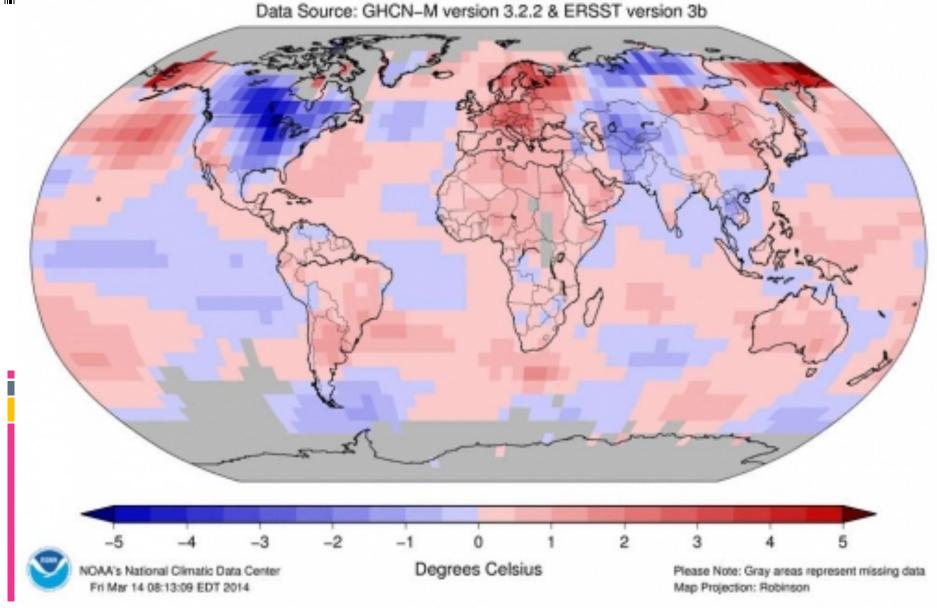
"Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and the sea level has risen."

International Panel on Climate Change,
November 2013

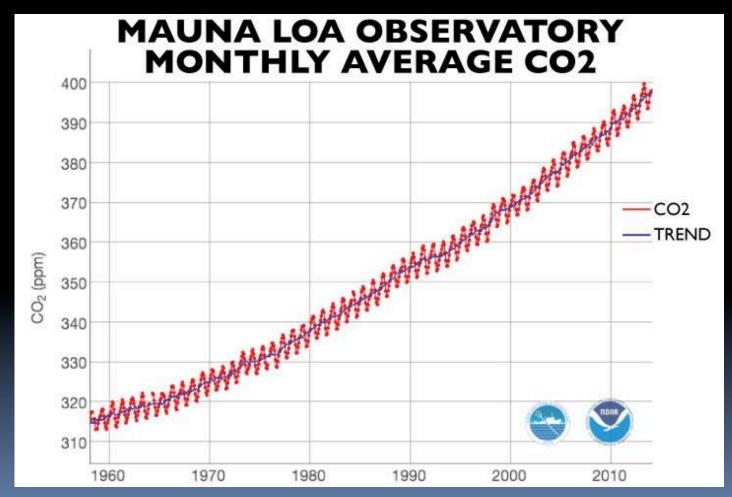
WHERE YOU LIVE, BUT ...

Jan. 2014 4th Warmest Recorded Globally

Land & Ocean Temperature Departure from Average Dec 2013-Feb 2014 (with respect to a 1981-2010 base period)



CO2 blew past 400 ppm two months earlier than last year. Ralph Keeling says, "It's just a matter of time before it stays over 400 forever."





"Climate change is one of the defining issues of our age and it's already having an impact on our lives."

Gord Miller, Ontario Environmental Commissioner March 2012



"Observations are increasingly showing that many impacts of climate change are occurring faster and sooner than projected. If the current emissions trend continues, Ontario is projected to see an increase in annual average temperature of 3°C in the south of the province and 4°C in the Far North by 2050. It is worth remembering that an average increase of more than 2°C is widely considered dangerous. Environmental Commissioner of Ontario

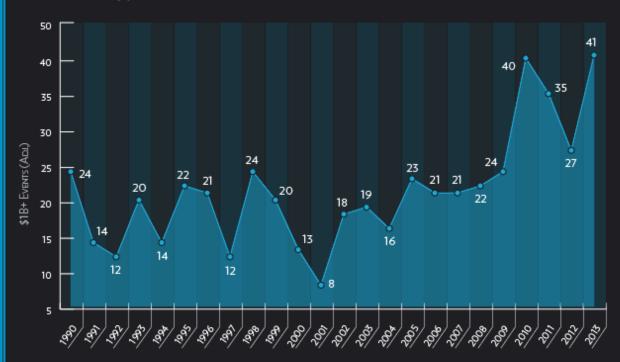
Other projected impacts include:

- Disruptions to critical infrastructure, including water treatment and distribution systems, energy generation and transmission and transportation
- Lower Great Lakes water levels which could compromise shipping and reduce hydroelectric output
- More frequent water shortages, as summer temperatures and evaporation rates increase
- Greater risks to public health from injury, illness and premature death from climate-related events such as extreme weather, heat waves, smog and ecological changes that support the spread of diseases
- Increased risk for remote and resource-based communities, which are already severely affected by drought, ice-dam flooding, forest fires and warmer winter temperatures
- Damage to Ontario's ecosystems, through the combined influence of changing climate, human activities and such natural disturbances as fire, outbreaks of insects and disease.

Earth set a new record for billion-dollar weather disasters in 2013 with 41

Global Billion-Dollar Weather-Related Disasters

Since 1990





NOTE: Inflation-adjusted Data prior to 2000 is questionable for Asia and Latin America Source: Aon Benfield



Hurricane Sandy flooded more than 150,000 homes, killed over 140 people and left about 8.5 million homes in 20 states without power.



Tacloban, Phillipines the day after SuperTyphoon Haiyan







"Recent burning of boreal forests exceeds fire regime limits of past 10,000 years" Proceedings of National Academy of Sciences , July 22, 2013

Climate change: IPCC issues stark warning over global warming

Call to 'stop dithering about fossil fuel cuts' as expert panel warns entire globe is affected

Lord Stern stated that governments must decide what "kind of world we want to present to our children and grandchildren".

The Guardian/Observer, Saturday, September, 21 2013



"Stabilizing atmospheric concentrations of greenhouse gases will require a radical transformation of the global energy system over coming decades."

(factsheet: Climate, Environment, and the IMF Published March 18, 2014)

"Even more important is the issue of climate change, which, in my view, is by far the greatest economic challenge of the 21st century. The science is sobering — the global temperature in 2012 was among the hottest since records began in 1880. Make no mistake: without concerted action, the very future of our planet is in peril."

IMF Managing Director Christine Lagarde
January 2013

World Economic Forum

"Greening economic growth is the only way in which sustainable, inclusive development can be achieved that will satisfy the basic needs of 9 billion people and provide them with equal rights to material prosperity. A key challenge is the urgent need to reduce carbon emissions to avoid the catastrophic impacts of global warming."

Report: Climate Change and Green Growth

Organization for Economic Co-operation & Development (OECD)

"Any new fossil resources brought to market - conventional or unconventional - risk taking us further away from the trajectory we need to be on."

OECD Secretary-General Angel Gurria

(Reuters News, October 9, 2013)

International Energy Agency:

If current trends continue, and we go on building high-carbon energy generation, then by 2017, there will be no room for manoeuvre at all — the whole of the carbon budget will be spoken for.

"The door is closing. I am very worried – if we don't change direction now on how we use energy, we will end up beyond what scientists tell us is the minimum [for safety]. The door will be closed forever."

Fatih Birol, Chief Economist International Energy Agency "The greenhouse gas emissions from oil flowing through TransCanada Pipelines' proposed Energy East project would be equivalent to putting the emissions from seven million cars a year on Canadian roads."

Climate Implications of the Proposed Energy East Pipeline: A Preliminary Assessment The Pembina Institute

2014

The production of oil sands oil creates more than double the carbon pollution of conventional oil production, according to a study by the U.S. Department of Energy's National Energy Technology Laboratory.

World Bank

"We're on track for a 4°C warmer world marked by extreme heat-waves, declining global food stocks, loss of ecosystems and biodiversity, and life-threatening sea level rise." World Bank, "Turn Down The Heat" "If there is no action soon [on greenhouse gas reductions], the future will become bleak." Jim Yong Ki, President, World Bank

Ontario Environmental Commissioner:

Avoiding socio-economically dangerous climate change requires us to limit global average temperature increases to no more than 2 degrees. Achieving this will require a reduction of atmospheric concentration of GHGs to less than 350 parts per million (ppm) by using less fossil fuels and increasing the amount of carbon stored in Earth's plants, soil and oceans. The best scientific predictions suggest that global GHG emissions will need to be reduced by more than 50 per cent by mid-century. This is an immense challenge that requires prompt action by all societal actors.

"The single most effective climate policy today [in Canada] is Ontario's decision to phase out coal [for generating electricity]. The emissions associated with building Energy East could effectively wipe out the gains of our single most effective climate policy by far."

Clare Demerse, The Pembina Institute.



"Yes, the planet got destroyed. But for a beautiful moment in time we created a lot of value for shareholders." October 2, 2013

Energy Darwinism: Fossil fuels and utilities at risk

A major new report from investment banking giant Citi has highlighted the dramatic changes sweeping the world's energy industry, and is being used as a clarion call to review the estimated \$37 trillion that will be invested in energy infrastructure and projects over the coming two decades.

Citi says fossil fuels further up the cost curve are most at risk, and new projects built now will face competition with new technologies within the first quarter of their anticipated 25-year life. "These project entail significantly more risk than is widely recognised," the analysts write.

Image Source: Wiki Images

"Unlike the financial crisis, we do not have a 'climate bailout option' up our sleeves...And despite all the attention given to climate change deniers, our understanding of the scale of the risk is much better developed than our understanding of the financial risks, pre-crisis."

OECD Secretary-General Angel Gurria

Impacts of Energy East Pipeline That Should Be Considered:

- Climate impacts, short and long-term, of supporting new fossil fuel infrastructure in the province.
- Fiduciary responsibility of the Ontario government to taxpayers.

"The basic matter is not one of economics. It is a matter of morality -- a matter of intergenerational justice. The blame, if we fail to stand up and demand a change of course, will fall on us, the current generation of adults. Our parents honestly did not know that their actions could harm future generations. We, the current generation, can only pretend that we did not know."

Dr. James Hansen, retired head of NASA Goddard Institute for Space Studies

