Elizabeth May - Clearing the Air on Climate Change

Host Organization: Manitoba Wildlands www.ManitobaWildlands.org

Winnipeg, Manitoba June 20, 2006

Introduction

Elizabeth May: As you likely know, I am the former Executive director of Sierra Club of Canada. The current acting executive director, Stephen Hazel, is a fantastic friend and a terrific leader and very much involved in the Mackenzie Gas Pipeline and Tar sands projects.

I am very grateful to be here. This purpose of this tour is to clear the air on climate change. We really felt that in the climate movement in Canada that the Harper government was distributing so much misinformation that actually constitutes disinformation, about where the government is on Kyoto. We wanted to clarify what is going on and then address "Why is it that Canada's had so much trouble in meeting targets?" And that really comes down to focusing very directly on the carbon output of the Athabasca Tar Sands.

So in starting this topic, one thing I should say is that the movie 'An Inconvenient Truth' is worth seeing. Please bring your friends to see it. I'm going to give you a very very short encapsulation of the current science on climate change, and then we'll move into to the global politics of UN agreements, of Kyoto and then get in to what's going on in Canada.

But even if I had 2 hours I couldn't do the job that the movie An Inconvenient Truth does in bringing the science home to people in a very understandable way. When we had a free premiere of the film in Toronto in early May, I did a question-answer session with Al Gore in a room full of people like this. And his question to everyone was: How many of you saw March of the Penguins? Of course, every hand went up and he said, "How many you saw it on opening night? One guy in the back of the room raised his hand. Mr. Gore said "Thank you sir! You're the reason everybody else went because the studios didn't promote it."

It's going to take word of mouth to make sure An Inconvenient Truth is seen and it's for those of you who haven't seen it. I'm going to tell you about briefly now and provide the kind visuals and graphics and all the things, bells and whistles that I can't to make it really understandable.

The Science of Climate Change

For those of you who occasionally find yourself speaking to a neighbor or a recalcitrant uncle who say things to you like: "Look, weather's always changing. Climate's always changing, we used to be under ice here.", I want to share my approach. What I focus on, because it's the most solid science we have, isn't the science of temperature change (because we really only have a temperature record that doesn't go back that very far). What you look at, which can be extremely persuasive for people and certainly tell us that we're in trouble, is the actual measured scientifically derived concentrations of CO2 in our atmosphere over a very long period of time.

We can't know what temperature it was except by proxy measurements and inference. But we actually have the know-how to determine exactly how much Carbon Dioxide has been in our atmosphere going back a long period of time, based on Antarctic ice core sampling. And when the Antarctic ice cores are pulled up, you can carbon date them, basically almost like a tree - counting the rings - and then you get to individual air pockets. And the air inside the Antarctic ice core in those little pockets is like a time capsule of atmospheric chemistry. It will tell exactly what warming gases were doing in our atmosphere over a long period of time.

So, we know that up until the Industrial Revolution, a little more than a hundred years ago, the atmospheric carbon dioxide was at about 275 parts per million. So this is an expression of concentration, obviously not in volumes of GHG emissions because the concentration of CO2 in our atmosphere is a reflection of the full output of the carbon cycle.

So we have carbon being released into the atmosphere and then we have the functioning of green things. Forests, and oceans pulling carbon out of the atmosphere and sequestering it in green things. Over many millennia, there was a good balance of carbon in the atmosphere, up until about the industrial revolution. As I said 275 parts per million is the figure that's usually used. And it's extraordinary to also remember that if it wasn't for that amount of CO2, a vanishingly small amount of it when you think about it - 275 parts per million is not a lot - this planet would be too cold to sustain life. Those of you who have done work on chemistry issues, particularly toxic chemicals, and dealing with pesticide companies, 275 parts per million is the kind of thing they say "You can drink that. You know that's not very much at all, don't worry." So, it's a very small concentration. But as I said, without it, this planet would be too cold to sustain life. It's the natural greenhouse effect that holds some of the solar radiated heat near the surface of the planet, makes this planet warm enough to sustain life. And it's a vanishingly small amount of CO2 that has this very important effect on our entire climate system, on our whole planet.

If we go back through this ice core record, we know that we have more CO2 in our atmosphere, not only than in any time in the last 1000 years or 2000 years or 10 000 years, we actually know by direct measurement that there is now 30% more CO2 in our atmosphere than at any time in the last 650,000 years. This is an extraordinary shift. 30% more CO2 in the entire record of measured chemistry of our atmosphere going back 650 000 years. It certainly predates human civilization. We have never had more than 280 parts per million CO2.

History of Climate Change and Kyoto Protocol

So, that's the chemistry of what's happening and that's why, in 1988, Canada hosted a conference on the threats posed by climate change. Prime Minister Mulroney and Gro Harlam Brundtland, Prime Minister of Norway, who was one of the first world leaders to stand up and say, "Climate change is a serious threat", addressed this conference in Toronto, the last week of June in 1988. This was the first major international scientific conference on climate change- to attract major media attention.

That conference was titled "Our Changing Atmosphere: Implications for Global Security". That's important, because now we talk about security and it always brings to mind to Al Qaeda, or the Taliban. I mean, this is **real** security. Back in 1988, we were talking at a UN sponsored conference, co-sponsored by the government of Canada, that our changing atmosphere had implications for global security. And the consensus statement of the conference was "Humanity is conducting an unintended, uncontrolled, globally pervasive experiment whose ultimate consequences are second only to global nuclear war."

It was very clear, even in 1988 - when we didn't have anything like the science that we have now.

I'm going to fast forward, in the interest of time, to all of the global negotiations. But in essence, that June 1988 conference kicked off the UN system to create something called the Intergovernmental Panel on Climate Change, which is *not* full of scientists appointed by Greenpeace and Sierra Club of Canada, but of scientists appointed by governments. These scientists, numbering over 2000, constitute collectively the world's largest peer review system ever. And they review all of the peer-reviewed literature and they look through, and then they have to negotiate, basically. What's consensus and what isn't?

RIO, UNFCC and Kyoto

That conference also kicked off, by 1990, the United Nations General Assembly, saying "Right, we're going to have a big conference to deal with the twin threats of the environmental crisis and the development crisis" and that was, of course, June '92 in Rio. This was where the first substantive step in global international law was taken on the climate crisis, which was the signing and ratifying of the UN Framework Convention on Climate Change by over 180 countries from around the world, including United States, which is still a party, although arguably in flagrant violation of the FCCC (as other countries may soon conclude that Canada is), of the Kyoto Protocol.

Within the UN Framework Convention on Climate Change (UNFCCC), we adopted a regime that said we must reduce emissions; we must stabilize emissions in the atmospheric concentrations before they can become dangerous. That's actually the convention language, "dangerous." So it is about stabilizing emissions, again going back to the fact that we were at 275 parts per million before the Industrial Revolution.

The IPCC was asked to determine for policy makers "what's dangerous?". How can we advise policy makers on what the danger level is? No one really knew. Certainly it already feels pretty dangerous if you're on one of the low-lying islands that has already been evacuated, or you were in New Orleans last fall when Katrina hit. There are a lot of places you could be in the world that already feel dangerous.

The scientific community began to estimate where that danger level would be. And the negotiations began in earnest to create a protocol within the UNFCCC that would have specific timelines, targets and deadlines. And those negations lead to Kyoto, Japan, December 1997 and the Kyoto Protocol.

Kyoto Disinformation

One of the pieces of disinformation that we keep hearing is that somehow the Kyoto Protocol is flawed because the developing countries did not sign on. People who work on this issue need to know that from the very first Conference of the Parties (COP) to negotiate this agreement in Bonn in 1995, the negotiating framework was modeled on the Montreal Protocol to save the ozone layer. The Montreal Protocol is the most effective global treaty we have ever had on an environmental issue The Montreal Protocol was an extremely effective global agreement to reduce, remove and ultimately eliminate the use of chlorofluorocarbons and other ozone depleting substances. For a number of reasons, that protocol started with the premise that, "Industrialized countries go first". The essential principle of the Montreal Protocol was that industrialized countries will reduce their CFCs and other ozone depleting substances first.

In September 1987, I was in the Minister of Environment's office and worked on this protocol. The initial reductions for the Montreal Protocol to save the ozone layer had industrialized countries reducing by fifty percent, which by the way, within a couple of years moved up to one hundred percent. In 1987, industrialized countries committed to reduce by fifty percent, while developing countries were allowed to increase by ten percent. Now no one stood around in a chorus saying "the agreement is flawed". Everyone understood what we were doing. Everybody involved knew that the problem was created by the industrialized world, from a technology developed in the industrialized world, where all of the profits were made in the industrialized world.

So the technology to solve the problem we knew would be developed in the industrialized world. That technology would have to be transferred to developing countries. So that's how the Montreal Protocol was structured, and I'm sorry for going into so much detail about it, but it drives me absolutely crazy when we keep hearing people say the Kyoto Protocol was flawed because China and India refused to sign on. They were never asked! The architecture of the agreement was based on what had just worked for the ozone layer.

US Pulls Out

Implementing Kyoto was fraught with difficulty. The key problem was of course when George Bush got elected. In the 2000 election campaign, George Bush had made significant pledges to reduce carbon, to limit carbon directly by regulation from all the electrical fired plants in the US. Within a couple months of the inauguration the US cabinet, Bush's cabinet didn't hold a meeting, they never looked at the science but he had pressure from the coal lobby and he called Christine Todd Whitman, his head of the EPA (this poor woman) who had just been in Italy assuring all the world's environment ministers that the Bush administration was on side with Kyoto. She and Paul O'Neil, the first treasury secretary of the Bush administration, had a mandate to develop their Kyoto plan. Then she gets called into the oval office and told, "Christie, we're not doing it". This is all related on a first hand account from Paul O'Neil on exactly what happened in the White House.

So when the US pulled out, they didn't just pull out one vote out of the ratification. For those of you who remember, it was a double-barreled target, for ratification so that the Kyoto protocol could come into force as a legally binding treaty. It required that 55 countries had to ratify. And those 55 countries had to be the equivalent of 55% of global emissions in 1990. The reason that they structured it this way, of course, was that they needed the industrialized countries on board. So when the US pulled out, with 4% of the world's population, they took out one vote out of the 55 countries ratifying, but 25% of global emissions in 1990.

We've been through the wars on this one. It was such work first to get Canada to ratify. But the world needed Canada to ratify, because hitting that 55% target meant that if the US wasn't going to ratify we needed everybody in the industrialized world to sign on. Russia was the big-ticket question. And frankly, the Bush administration did everything they could to make sure that Russia did not ratify. So it wasn't just a question of Bush walking away to protect the US economy, he tried to destroy this agreement.

Interestingly enough, and I might as well be honest about this, it was the European Union promising Russia that they could get into the World Trade Organization that tipped the balance. So that's what led us to February 16th, 2005 when the Kyoto protocol drew breath of life. It works, it's alive, it survived all those years from '97 to 2005 of the largest global power trying to kill it. And then it held its first

organizing meeting in Canada in November and December 2005, to launch negotiations for the next phase, and commitments beyond the first commitment period, 2008-2012.

Kyoto First Steps

Another piece of disinformation and confusion around the Kyoto protocol is the idea that it really is trivial in its impact; that it doesn't do anything and therefore we shouldn't bother doing it. Reality is, again, this agreement was designed to move in stages. And the first commitment period under Kyoto, the 6% below 1990 levels for Canada to be achieved between 2008 and 2012, was seen as a modest first step only. It was always understood as a down payment on future action. No one in the scientific community or in government was under the delusion that achieving the first period under Kyoto would avert a climate crisis. It was to buy time, demonstrate the bona fides of the industrialized world and move on to the next stage, with deeper emissions cuts.

So 6% below 1990 by 2012 is Canada's target. Pick up the National Post and read what they say, "Ah the Kyoto protocol expires in 2012." This wasn't an opinion piece. This is what masquerades as news. They had the good grace to actually publish my letter that clarified that no, the first commitment period ends in 2012 and the world community in Montreal just last December committed to deeper emission reduction targets to be negotiated to be ready to go so that seamlessly when 2012 arrives we have a new set of targets. And we move right ahead with deeper cuts.

We know that the international scientific community is now saying that what could be dangerous keeps moving down in terms of what evidence they're seeing. So there's a significant body of scientists, not yet the IPCC consensus, who are saying not only must we avoid the obviously dangerous two times CO2 model, which is, 275 parts per million before the industrial revolution, 550 parts per million at the doubling point. A lot of scientists who gathered in Exeter, England a year ago are saying that we have got to avoid 400 parts per million and worst case maybe 450, that's getting really dangerous. We may get tipping points in the atmosphere. We've got to reduce sharply. And that's what led the world mayors who gathered in Montreal, and the world youth summit in Montreal, and a number of countries to say we need to go to 30% reductions below 1990 levels by 2020, moving towards 80% reductions by 2050.

These are steep emission reductions targets. It makes it so obviously clear that Canada must meet our 6% emission targets if we're going to have any hope of playing a constructive role in reducing by 30% below 1990 by 2020. So why haven't we done a better job? A lot of Canadians are wondering.

Truth About Greenhouse Gas Emissions

One big fat piece of misinformation is that somehow the Bush administration has done better at reducing emissions than Canada. The US has not reduced emissions at all. US emissions have risen by more than 1 billion tons since 1990. The difference – there's always a germ of truth in every big fat lie – the germ of truth here is that Canada hasn't done well at all. Our emissions have risen by 24.9% above what they were in 1990. Not good performance when you're aiming to reduce. Clearly no one would defend that. But you need to remember, again, in terms of global terms, Canada's 3% of global emissions. So our 24.9% increase, while deplorable, pales in comparison to the US, which has increased its emissions by 16% above 1990 levels. And remember, in 1990 they were 25% of global emissions. And they're trying to sabotage global progress. That's a problem.

But why would the US emissions have risen by 16% and Canadian emissions have risen by 24.9%? What's the difference in percentage terms? And the answer is found in Northern Alberta. In the boreal forest wetland ecosystem described as the Athabasca Tar Sands. I always clarify that this is a boreal forest ecosystem, because the term "tar sands," while extremely good at describing what's under the forest, might suggest to some people we have a sort of a vast Northern Sahara, where tar pools at the surface. We have intact ecosystems, wildlife habitat and it's being removed with the largest earth moving equipment on the face of the Earth, as rapidly as possible.

So the tar sands emissions are the reason - not one reason - they are **THE** reason that on a percentage basis our emissions have gone up by so much more than those in the US.

Tar Sands and Mackenzie Natural Gas Pipeline

Now the history of the tar sands is an interesting one. I've been researching it because I've been there and I've been involved in environmental assessment hearings and opposing the expansion of the tar sands without realizing where it really came from, because it felt like it sneaked up on us.

Back in the 1970's, there wasn't much going on in tar sands development in Northern Alberta. Syncrude was pretty much the only company there, it had a number of government partners, and it was the biggest player. Back then, Peter Lougheed was Premier of Alberta, as some of you will remember, from '71 to '85. Lougheed appointed a northeast energy commissioner and in an interview with the Globe and Mail, Lougheed described his guy as - he said "We called him the czar."

The idea was that Lougheed knew that someday the world would run out of cheap easily findable oil – well, we're there – and that the bitumen muck under the forest of Northern Alberta would become commercially viable. And there should be orderly development.

What Ralph Klein did when he became premier was decide that Lougheed was hampering free market. He got rid of the czar. No more energy commission. Now in 1993 we had the election of Jean Chretien and of course the Red Book of 1993 election promises. I don't need to remind you of the bright red book. And of course Chretien said you can look at it you can tell us if we've done what we said we'd do and clearly they didn't do any of the environmental – well one of the environmental things, but the key ones were all broken promises. In 1993, Chretien was elected with a commitment to reduce Canada's greenhouse gas emissions. By the way this was the target that came from that Montreal conference I mentioned so it's different base years. But they took the red book target right out of the 1988 conference on 'Our Changing Atmosphere: Implications for Global Security', which said we would reduce our emissions 20% below 1988 levels by 2005. And I think Chretien got the number right, but the wrong direction slipped into his mind somewhere, because of course by 2005 we were 24% above.

What Chretien did right after getting elected, something like Bush in terms of election promises immediately broken, was to fly out to Edmonton. Chretien went there to buck up Anne McLellan's riding in Edmonton, and announced two things. One was a couple billion dollars of federal investment to get the tar sands moving. And the other thing he announced was that there would be no carbon tax in Canada

Now that may have sounded like an abstract odd thing to say, but at that very moment, coming out of the Rio conference there was a vast (as in the Canadian way), multi stakeholder process involving industry, environmental groups, government, scientists, etcetera to assess 80 different measures that

might be used so we could meet our targets. And one of those measures was a carbon tax. And what Chrétien did was remove it from being studied. At the same time, he funded a real kick-start for the tar sands.

In 1996 Klein decided the tar sands weren't being developed fast enough. At that point, oil was less than \$20 US a barrel. Now Klein figured having gotten rid of the czar, people still weren't stampeding in to Northern Alberta the way he'd like. So he lowered royalties for tar sands developments to the lowest royalty rate anywhere on the planet. 1%. Oil companies would pay 1% until the companies recovered all their capital costs, following cost recovery they'd pay 25% of revenue less costs.

Now before this happened Suncor had been paying 30% royalties less costs on its oil and gas. To give you some other comparisons, Venezuela, has a current royalty rate for all conventional oil is 30%. In Norway, again deep-sea oil, the royalty comes to 14 – little more than 14 dollars a barrel, compared to the little more than 4 dollars a barrel in Alberta. Now don't think for a minute that now that oil is \$70 a barrel the province of Alberta has reassessed this royalty rate. It's still 1% - until the company recovers all its costs and then it goes to 25% which is still not even on par with other countries.

More Subsidies

1996 also was the year in which Jean Chrétien decided he hadn't done enough for the tar sands, so the accelerated capital cost allowance for the tar sands companies was brought in. The accelerated capital cost allowance works like this: companies can deduct a 100% of their equipment costs against first year's income. Now, you can imagine the equipment costs. I mentioned this is the biggest earth moving equipment on the face of the planet; the trucks that operate the tar sands are basically the size of 3 storey buildings. The guys who drive them have to climb up two flights of stairs as if they're going into the second storey of a house before they get to the door to their cab. This is enormous equipment, hugely expensive. The impact of this accelerated capital cost allowance is for all of the oil and gas industry in Canada the equivalent of a 1.4 billion dollar annual subsidy from the federal taxpayer to the production of oil and gas. So when Ralph Klein says don't look greedily at our wealth, we might say no, but we'd like you to stop taking money from us, that would be good.

This is not a picture of equal treatment of different economic sectors. The oil and gas sector has been getting substantial cushioning from any impact of Kyoto. Chrétien also promised them that the emissions reductions that he asked them to make – which, by the way, for the oil and gas sector only, are on the Bush formula of intensity targets. So they have to reduce the amount of greenhouse gases they produce - if we still do this and Harper doesn't cancel it - as a ratio to how many barrels of oil they produce. Not in absolute terms. All the other economic sectors in Canada that have reduction targets under Kyoto have to actually reduce emissions. But what's called the large final emitters group, which particularly includes the oil and gas sector, but also utilities and electrical producers, they get the special treatment of reductions as against unit of output. But only the oil and gas sector get this additional cushion. Chrétien sent a letter to the Canadian Association of Petroleum Producers, that if the cost per ton of carbon ever exceeds \$15 a ton in terms of their costs in meeting this intensity target, the Canadian taxpayer will make up the difference. So again it's another subsidy approach.

Now the tar sands, they're boreal forest, they're muskeg, they're wetland. When you get to the ground underneath, it's 10% bitumen which is a viscous material, a tarry molasses. In one environmental assessment that I was involved in for a single mine - the Canadian Resources Horizon Mine - they were going to be taking everything out of an area of 6500 hectares. It's just removed. Now they're prepared to do open pit mining for any bitumen material that's accessible. That's as deep as 75 meters below the

surface of the earth. So you're going 75 meters down with open pit mining, over an area of 6500 hectares. Now if it's lower than 75 hectares, don't think they leave it there because they can't get at it, no no no no no. They then pump down through steam and wells what their called in-situ bitumen mining. Which uses again, huge amounts of water to get the bitumen to dribble up closer to the surface.

Tar Sands Boom

So of the current tar sands mining operations, about two thirds is open pit, and about one third is insitu, and it's as far as we know the largest strip mine in the world, you can see it from outer space. It's gone through, as you can imagine with all these tax benefits, and with oil going through the roof in terms of price, it's experiencing something for which the word 'boom' is really trivially small.

In 1995 the tar sands were producing half a million barrels of oil a day. Today, it's twice that; its a million barrels of oil a day, actually 1.3 million. By 2011 based on the \$54 billion of investment that's already on the table for the tar sands, it will be two million barrels of oil a day. And they don't plan on stopping; it's just more and more development all the time to the point that even former Premier Lougheed is saying this hurts the economy of Alberta. This is, in Lougheed's words, "a traffic jam". Nobody can develop properly with this kind of craziness.

Canada now sells more oil and gas to the United States than Saudi Arabia. We are providing 16% of all the oil the US imports and most of it is now from the tar sands. So it gets the climate twice; gets it upstream where it's being produced, and it gets it in the United States which has no intention of any kind of energy policy under Bush/Cheney that isn't caught up under the words "more, more, more" of everything.

So where are we in terms of what it means? Before I get to the ecological impacts, I want to cover some of the social ones, because they get missed. Believe it or not I have friends in Fort McMurray, and it is really appalling what's happened to the community. In 1971 it had a population of less than 7,000 people, by 1981 it was over 30,000. Today there are 70,000 people living in Fort McMurray. They lack adequate infrastructure of every kind. They don't have adequate sewage, they don't have adequate housing. As a matter of fact 20% of that 70,000 population has no fixed address. A lot of the people working there are in work camps. Thousands and thousands of working age guys who take big salaries are in these work camps.

So of course there's a huge crime problem, there's the use of drugs, there's assault, there's HIV/AIDS, there's prostitution. One of the doctors I've talked to in Fort McMurray said that every kind of high impact, high stress, high risk behaviour you can imagine happens in those work camps. And they have an acute lack of workers. They want more people to come, there's no place to put them, there's no infrastructure.

So the mine I mentioned, Canadian Resources Horizon mine, this year for the first time brought in 200 temporary workers from China. There's an Edmonton construction firm that's figured out that they've got another labour pool they haven't properly accessed and that's prisons. So guys on day parole can be used to help with this work.

As for the situation in Fort McMurray, they have two doctors for every 6,500 people, one of the lowest levels of medical services anywhere in Canada. And they have one of the highest crime rates and one of the highest housing costs rates and rental rates in Canada. As a matter of fact, the official poverty line in Fort McMurray, to qualify for low-income housing is \$65,000 a year. They're awash in money

and poor in everything. They have no community, they have no health, they have no safety, they have no infrastructure. Last week the city council of Fort McMurray passed a resolution that they will go before the next hearing for expansion of the tar sands and oppose any new expansion until people deal with the problems of Fort McMurray. This is something new so it's not being anti-Alberta to point out that this is a global disaster. There was recently a report of a cancer spike of very rare cancers in the Cree population of Fort Chipewyan. Air quality is going down, water quality is going down.

Tar Sands - Environmental Impacts

Now look at the environmental impact. I want to spend some time talking about water. The Athabasca River is already 30% lower flow than it was decades ago, probably because of the impacts of climate change. As you know, as the planet is warming, and you can say, 'You know on an average basis we've had a 1 degree Celsius temperature increase over the last 100 years, the rate of warming is three times faster in the western arctic.' That corner of Canada, particularly in Mackenzie Valley but coming down south into the Athabasca River basin, is warming rapidly.

The Alberta department of environment gives out water permits to the oil sands companies. They need a lot of water. For every barrel of oil produced they use up to six barrels of water, depending on whether it's in-situ or open pit. Because you have to boil the bitumen out of the tar sands muck. So when they're done of course they've got a lot of wastewater, which needs to go into tailings ponds. Already over 50 square kilometers of Alberta is tailings ponds. You could call it a small tailing sea. And these ponds are held back with some of the largest manmade structures on the face of the planet. So there's a lot of water being withdrawn, in fact the current permits for withdrawals that are licensed from the province of Alberta come to over 359 million cubic meters a year, which is twice as much as they city of Calgary uses in a year. Dr. David Schindler, who many of you will know of, brilliant Canadian scientist, at the University of Alberta in Edmonton, is saying you know "Alberta's heading for a water crisis". When I was cross-examining the officials from the Alberta department of environment in some of these hearings in Fort McMurray I asked, 'do you take into account the impacts of climate change when you give these permits for the water?' 'No' they said, 'it's too uncertain.' Well, they're doing everything they can to make it more certain; I suppose you could give them that. The other last bit on water use is that the companies don't pay for the water they take. They pay a small permit fee to get their permits to take the water; they do not pay for the water.

Now second only to the water intensity of production of the tar sands is the energy intensity. You can imagine, they've got to boil the bitumen muck out of the tar sands. These operations use so much energy that for every barrel of oil produced, about a third to a half of a barrel of oil equivalent energy is consumed. Anyone see a losing cycle here? So we've got a huge amount of energy being consumed in order to produce the oil, which we then sell to the United States for the cars that don't have proper energy efficiency standards.

The total amount of greenhouse gases from the Athabasca tar sands is the reasons that our emissions are higher than the United States as a percentage basis. It's *THE* reason. Because we're burning so much natural gas and other fossil fuels to get the bitumen out of the tar sands. And that's the driving force behind building the Mackenzie gas pipeline.

Mackenzie Natural Gas Pipeline

The purpose of the Mackenzie gas pipeline going from the Beaufort Sea and industrializing the Alberta boreal wilderness in Canada, and one of the last wild river on the face of the Earth, is to feed natural gas, a relatively clean burning fossil fuel into the tar sands to produce carbon intensive dirty fuel. It's like turning gold into lead. Brilliant process. And the pipeline now has gone from its original \$3 billion estimate to \$7 billion and last week they said it will cost 10 billion dollars. And again this is another place where the fossil fuel industry is demanding more subsidies.

The consortium to develop the Mackenzie gas pipeline is led by Imperial Oil, a subsidiary of Exxon, which last year had the most astounding levels of profits, over 30 billion dollars in profits in a year. Even the US congress called Exxon before them and you may remember, congressmen asking CEO's of companies that they usually just ask if they can get them some more coffee, they were asking 'don't you find these levels of profits obscene?' And 'aren't these windfall profits?' Well the very same companies who have experienced the highest rates of profit, the highest level of profits in human history, have now told the Canadian government that if they don't get another 1 billion dollars from the Canadian taxpayers they're not prepared to build the Mackenzie gas pipeline.

Anne McLellan promised them the 1 billion dollars right before the 2005-2006 election, and so far it looks like Harper is going to do it as well and make sure they have this additional subsidy to build. By the way there are three gas production facilities, two of which are in bird sanctuaries at the mouth of the Mackenzie River and Beaufort Sea.

They will build a buried pipeline down 1300 kilometers through permafrost, which of course is melting. So the engineering there is very difficult because the pipeline moves at 180 atmospheres of pressure – of course it freezes, the pipe around it freezes the ground around it on either side. Pipelines like that have to be buried because they don't want anything happening because if it gets a break or a tear or something happens it blows up. And of course once you build the McKenzie gas pipeline all kinds of gas reserves on either side will suddenly become commercial. And this is the biggest mega project industrialization scheme ever in Canada and all the hearings are happening in Yellowknife and Inuvik. They won't allow a single hearing in Calgary. Sierra Club of Canada and World Wildlife Fund participate, but Sierra Club Canada is the only group there opposing the pipeline on the basis of the impacts of climate change and linking it to the tar sands.

This is an appalling mega project and the Mackenzie gas pipeline project must be understood to be part of the Athabasca tar sands. It is virtually the main market for all the natural gas. But it won't be enough. It still won't be enough energy for the tar sands which is why they're now talking about building a nuclear reactor at the western northernmost corner of Saskatchewan to feed energy to the tar sands and then Ralph Klein, said he was against nuclear power for the Athabasca tar sands – this may be the one thing he ever said that I completely agreed with. He once said, "Why would we put a terrorist target right next to our biggest resource?" Well, okay, good; although now he has changed his mind. And now there are actually companies coming to the tar sands proposing to build their own nuclear reactor as they come forward.

Climate Change Action and Solutions

So, I've now depressed you, but there is an alternative. What we need to do – and it needs to be addressed by Canadians – we need to address this as a national problem. We can't be so phobic about the fact that a long time ago before many of you were born there was a thing called the National Energy Program and therefore no one can ever talk to Alberta about energy ever again. We really need to address this and the first thing would be to end all federal subsidies to oil and gas production. To have a

program of tax shifting so that we actually put taxes on carbon and take them off things we want like jobs. So reduce payroll taxes, get rid of GST, reduce income taxes, there's a lot of places we can shift taxes but put them on the things we don't want, which is production in the Athabasca tar sands. And at the same time move heaven and earth to raise awareness in Alberta that they need to raise their royalty rates, so that the people that are doing this massive destruction are paying their fair share.

There should be an immediate moratorium on any new projects in the tar sands. There's already, as Lougheed said, a traffic jam. There's already 54 billion dollars of commitments happening, they're already going to 2 million barrels of oil by 2011. That will by the way, result in 70 million tons of carbon to the atmosphere by 2011, maybe more, but between 70 and 90 million tons of carbon, I'm using the more conservative estimate. When you consider that Canada's entire Kyoto gap is 280 megatons and the tar sands is 70, you can see what a big component of the Kyoto problem the tar sands really are. So moratorium on any new development, fix the tax system, stop subsidizing the most profitable companies in the world to produce the world's most profitable product. Should be simple. They're dealing with this in the US; recently, Congressman Marky told a – a congressional hearing, "Subsidizing oil and gas companies to find oil and gas is like subsidizing a fish to swim".

Then we need to be very, very clear about Kyoto. We need to be clear about what the Harper government is doing. We now know from the leaked documents that went to the negotiators in Bonn last month that the instructions from the Harper government (and even though they are a minority government, they didn't have to take this to the House of Commons) were that Canada would not take on any new targets past 2012. This is what people need to understand, the negotiating instructions come from the Prime Minister's Office and were leaked by some very brave person. I understand the RCMP are investigating internally. I've been on many government delegations and I have never been privy to see the negotiating instructions that our negotiators have when they go to an international meeting of this type. So in the world community we've gone from being a country that was having trouble making its targets but trying and willing to negotiate new targets post-2012 to a country that's clearly joined the George Bush camp of intransigence and sabotage of Kyoto.

We need to move to the Kyoto plus targets of 30% below 1990 levels by 2020, 50% by 2030 and 80% below 1990 levels by 2050. As I said that's a target that's come now out of the world's mayors, and also if you don't think any standing politician would be willing to say that they want 80% reductions in greenhouse gases below 1990 levels by 2050, think again – that's Governor Schwarzenegger's target in California. And of course as you know he's a Republican.

200 US mayors have passed resolutions to meet Kyoto targets. The New England region, New York, California, many US states are moving forward and increasingly leading. US Republican senators are calling for action to reduce climate change and to have binding emissions targets imposed. Senators like McCain who will be coming up as a potential Republican leader. No wonder Bush was so happy to see Harper; he doesn't have anyone left who agrees with him in the US.

So I'm going to close the formal part here so that I can take questions. I just want to reinforce that we need a lot of citizen activism in the coming weeks and months. We need to stay right on top of what the Harper government's doing. All of us know about the Energuide programs being cancelled, about the accelerated capital cost allowance for renewable energy being cancelled, for the energy efficiency for low-income housing program being cancelled.

But we do face a kind of a song and dance that goes "We're not pulling out of Kyoto, we just can't reach the targets". The targets are the legally binding part of this agreement. It's just as if we're dealing

in a situation where a country tried to say credibly to the world community, "We're still in the ceasefire agreement, we just decided we have to keep bombing." There's a point at which you lack all credibility internationally and the tar sands makes our job that much harder, which is why we're trying to reach out to as many people as possible to explain it in this way. Thank you for your attention (applause).

Question & Answer Period

Gaile Whelan Enns: I wanted to ask Elizabeth to talk a little bit more about what went on in Montreal, in November and December 2005. Two of us from our office were at the UN Climate Conference for most of the duration, and it was in many ways a rather extraordinary stretch of time given we were in the middle of the non-federal election federal election, but among other things there were 600 environmental organizations, all of them members of Climate Action Network internationally there. And some of the things that happened in the last four or five days might best be described by you.

Montreal Kyoto Meetings 2005

EMay: Okay. In a nutshell, this was one of those old-fashioned perils of Pauline movies where instead of Pauline, it's the planet being tied to the tracks and the train is bearing down. This was a cliffhanger. And it went for two weeks; we started November 28th, which you will recall is the day the government was defeated, the opening day of the climate conference.

Delegates from all around the world showed up,— to remind you of where this fits in global diplomacy. Every time all the parties to the 1992 UN Framework Convention on Climate Change (UNFCCC) process meet it's called a COP - a conference of the parties. And so it was at COP 3 that Kyoto was born, and this was COP 11 in Montreal (November / December 2005). So they'd been meeting every year, struggling. During this time of what might have been spinning wheels, when it wasn't clear if Kyoto would ever enter in force, they went through the most extraordinary complex global negotiations probably on any topic ever, to figure out what happens if someone cheats. We have these things called flexibility mechanisms, how will those rules work? So in Marrakech at one of the COP's they had a whole series of rules, but they had to be accepted.

So what happened in Montreal was basically we had a conference of the parties, COP 11, for the eleventh time all the governments had met that were part of the UNFCCC. At that same time, we had the first ever meeting of the parties under the Kyoto protocol. So for those of you who have ever been in associations where sometimes you go to the annual general meeting and for most of the meeting you're the annual general meeting and then sometimes you're the board of directors and you change hats, you remember what those meetings are like? Okay, same thing. Stéphane Dion, as Minister of the Environment for Canada at the time was the president of this global negotiation. Which meant his job was for the UN; it was not a Canadian job.

And he'd gavel us in and say, "I'm calling to order the conference of the parties" and he'd get through some business (knocks) "Adjourning Conference of the Parties, (knocks) I now call to order the Meeting of the Parties."

The only difference between the two sets of decisions is that the US couldn't vote on anything in the Meeting of the Parties because it was only the Kyoto parties (countries), and the agenda there was much tougher because since this agreement was negotiated in '97 with the assumption it would enter

into force within 2, 3 years maybe, they picked 2005 as the year in which all of the "what we do next" discussions had to happen. So we had the first meeting, where you had to adopt all the rules, combined with the almost last meeting, before you launch the negotiations to make sure you're ready for the commitment period that starts after 2012.

Hugely complex negotiating process. Climate action network groups from around the world met in a strategy meeting in September to prepare. We put on a board the key decisions we needed - under a lot of categories, and I won't explain all of them. But just to say if you could picture this kind of a matrix of decision, you know, discussion under Article 9. Worst decision, they don't do anything. Best decision, they decide to go ahead and da da da. Under this one, what happens under Article 3.9? Best decision, worst decision. So we had these laid out on a matrix about six items down here and we had them from worst, to not so bad, to acceptable but weak, to really strong. And when we started the negotiations on November 28th, and we met as a group we didn't have a single country as supporting the global climate groups' positions, down the line on "very strong." Not one. And by the time the conference adjourned, we had every single decision in the best contemplated possible result strongest decision category. Every single one. And that was thanks to Stéphane Dion.

It was extraordinary. So we had the Canadian government fall the opening day. By the way, the people running the conference the Palais des Congrès in Montreal went on strike the same day (laughter). The delegates from around the world were like "What's happening to Canada? The government's falling and everyone's on strike!" I kept trying to reasure, "no don't worry, don't worry." And Stéphane Dion said "don't worry, I am not a politician until December 9th." Well actually he couldn't be a politician until December 11th, because …I'll just tell you the last two days.

Last Days – Montreal

The last two days were pretty exciting. On the Wednesday night, the US delegation walked out of a high level private meeting. At that point they go into closed meetings and then they'd have open meetings so sometimes we could get in the room. This was one of the meetings we could not get in the room for. Because they needed to have a decision under the conference of the parties with the US on board, in order to be able to make good progress on the Kyoto decisions because some countries were linking it. Like Japan didn't want to commit to steeper emissions reduction negotiations past 2012 unless the US at least agreed to something on the conference of the parties set of decisions.

So they had this language, because the US said we will not agree to any negotiations. So the language was something like I say, that 'all parties in the conference of the parties would agree to an ongoing dialogue not to lead to negotiations.' And the head of the US delegation, Harlan Watson, actually said to this community of world leaders, "That's unacceptable, that says 'negotiation'." And Dion said no, it says...and Dion's trying to finesse this, the guy finally said "if it walks like a duck, it quacks like a duck, it's a duck" and he walked out of the room. Leaving people from all around the world saying "what's a duck?" He left Chinese delegates, Brazilian delegates, everyone saying, "what's a duck?" So the next day the Climate Action Network showed up with lots of little yellow rubber duckies to give to all the delegates – so we know what's a duck!

Now earlier that day, actually Monday, Tuesday, Wednesday that week I'd been dealing with the Clinton Foundation to secure the commitment of an old friend of mine, the former president of the United States to show up in Montreal. And it became increasingly clear the only day he could come was the last day, the Friday. So on Thursday we discovered that the US delegation had now told

Stéphane Dion and the UN group, "if you let Clinton in the building, we walk." So, okay that's pretty nasty. And I said to the Canadian delegation and the UN delegation and all of the secretariat running things, I said "if I've done something – if Sierra Club of Canada, if we've made a problem here for you, we'll un-invite him." They said "no, we've never asked an NGO to do that." But we started sending messages down to the former president of how to finesse his message, because we'd initially thought he could speak Friday to give everyone that great sense of triumph and conclusion that we were doing well. Suddenly he was arriving at a very, very high wire act moment with no net.

And so Friday morning people were all abuzz and they swept us out of the room. At this point we have no decisions by the way. Nothing's been decided and it's the last day of the conference. No decisions have been approved by the COP or by the MOP. The conference is supposed to end at 5pm, Bill Clinton is going to speak at 1pm.

Clinton in Montreal

So around noon Dion adjourns us, we have a room that holds about 6,000 people, 8,000 people, oh boy. Sweep everybody out of the room, they brought in the sniffer dogs and the security forces and they also turned all the chairs that were facing this way to face that way, so that no one was looking at the UN logos and there was a blue curtain on the back wall, which was now the front of the room.

. So people were saying to me, 'I heard Clinton was supposed to speak, I heard you invited him, where's it gonna be?'

I said 'well it's on your program.'

'I don't see it on my program.'

'Yeah right there, see it says side event hosted by the city of Montreal, St. Laurent room.'

'Where's the St. Laurent room?'

Well, of course in the way of these big conference facilities, you can bring in walls if you want, and you create many smaller rooms, so what they did is they only left one door open. This was kind of an Alice In Wonderland approach to the problem. All of us went through this tiny door called the St. Laurent room and found ourselves back in Plenary, but facing in a different direction.

President Clinton gave a masterful speech, without a note in front of him. Not a note in front of him. The speech is posted on the Sierra Club of Canada website.

He moved his way through the issue so brilliantly, that he didn't insult Bush. He went way out of his way not to insult Bush. Which was one of the reasons I was particularly peeved with environment minister Rona Ambrose the other day, one of her whoppers was to claim that the "Liberals" had invited Bill Clinton into Montreal where he "bashed" the Bush administration. He was so diplomatic. He made it very possible for the US to sign on to this weak useless language about dialogue not leading to negotiation. Clearing the way to an agreement.

Now this is where I'm going to move into speculation. Because the minute Bill Clinton left, the minute the US delegation said we were okay, suddenly the negotiations nosedived.

Russia Blocks

Suddenly Russia wouldn't agree to the language on Article 3.9, which was our key protocol section about negotiating post-2012. At 6 o'clock we broke for dinner, we were supposed to resume at 8pm - didn't happen, midnight - didn't happen. 2:16 AM. Now they're all off in meeting rooms, and we're all

working the corridors. At 2:16 AM Dion gaveled us back in and the word was out, he's going to try to bluff the Russians. He knows they won't agree, he's going to smoke 'em out and make them do it in a room in public and see if we can get them to just let it go through.

Dion put forward the good language, and all you have to do in a UN meeting, any one country can block. You just put your flag up. This is like a little nameplate. The Russians flipped their flag up, and they objected. And it was quite an extraordinary moment, the head of Russian delegation said "We never saw this language before, it is new to us, it's not....we are object on behalf of the Russian Federation to this language and we are more than prepared to explain our reasons." And Stéphane Dion said, "as you are now blocking important progress for the fate of the world, I suggest you explain your reasons to the world." At 2:16 AM that's pretty good.

Margaret Beckett, the environment minister from the UK, said "I appeal to our dear friends from Russia, you who more than anyone else have given so much to bring this agreement to life."

Anyway, no progress. We adjourn. At five in the morning, we're now in what's called a contact group on Article 3.9, squished into a small room where some of us can get in. And David Drake - a Canadian diplomat whose name you will not know, but for whom you should name your children because thank God for him - David Drake who was brought back from our mission in Japan because all the good Canadian diplomats who ever negotiated anything in Rio have been cast to the winds, and there was no Canadian member of our delegation who ever negotiated in Kyoto, so short institutional memory. But they brought Dave Drake back, they're trying to negotiate, so Dave and the South African are cochairs. The Brazilian says "I have not slept for 36 hours, I would like to", and the Russian says "You think you have not slept! You can well imagine that I have not slept for even longer!" So we're getting depressed.

Meanwhile, what's happening behind the scenes? God bless the old fashioned PMO, they're rousting Putin. They're getting him on the phone; they've woken up Paul Martin to call Putin, and meanwhile they've woken up Allan Rock in New York to wake up his Russian counterpart at the UN. And Pierre Pettigrew, who was there all night long because he was heading our delegation, because Dion was running the UN meeting, Pierre Pettigrew's trying to get through to his opposite number, the foreign minister in Moscow to say, "We're having a problem here."

Meanwhile, the conference was supposed to have been over at 6 pm, so you can also try to imagine that at this point the place where we had coffee every day for two weeks is like a movie set that's been struck. The carpets have been rolled up, the furniture is moved, the signs are gone, they're taking away the conference all around us, and it's almost five in the morning.

Canadian Diplomacy

It turns out what happened, and I didn't find out 'till much later, that Pierre Pettigrew got the Russian foreign minister on the phone and he said "Oh no no, those are not our instructions, I'll call my delegation." Time goes by, nothing shifts. The Russian minister calls Pierre Pettigrew back, he says, "My delegation has turned off their cell phones I need you to take your cell phone" I know this is hard for you to see Pierre Pettigrew I know it's hard. Pierre Pettigrew takes his cell phone and walks through the meeting until he finds the Russians. And I know from the firsthand account of his aide who was with him, he said "it was kinda funny, even when we got to them they didn't want to take the call." So

here's Pierre Pettigrew trying to hand the phone to the head of the Russian delegation saying "It's your boss, Minister so and so in Moscow, he must speak to you now."

So at 5:30 in the morning David Drake rushed out, rushed back in and said "Something's happening. Let's get back to Plenary." We got back to Plenary. 5:50 AM, (knocks to imitate gavel) gaveled back into session. Now I can tell you the only people who stayed up all night – a lot of observers went home because they didn't know it was going to keep going all the night long – but the youth of Canada, there must have been 40 kids who stayed up with me all night. Wonderful, wonderful kids. They stayed up, we stayed up all night, kind of just witnessing.

So back we are 5:50 am, and they gaveled through – okay, agreements on the Conference of the Parties, do I hear objections? No. (knocks) I now – he says – I now close the meeting of the Conference of Parties. Now I move to (knocks) opening Meeting of the Parties. Accepting language of Article 9. (knocks) Carried. Accepting language of Article 3.9. (knocks) Carried. Accepting new language for CDM. (knocks) Carried. Accepting the Marrakech agreements. (knocks) Carried. Every single thing Carried.

By 6:17 AM we were delirious. Every single thing we wanted got through by 6:17 AM. Actually it must have been more like 6:14AM because every time we started cheering in the back Stéphane Dion would say "Quiet please, I don't want to lose the translators, we must finish this business." So at 615AM he looked up at the translators – and they were all in a wall in a higher level, looking down through glass windows. And he said, "I had prepared some closing comments...I wonder if you might stay and translate for me?" And they all looked down and applauded. And they translated for him, and that was it. So we were euphoric, jumping up and down, screaming, so happy!!

Unfortunately, if I wasn't telling you this all now in this, in this dreadfully emotional fashion, you would never know because the Canadian media was on the campaign trail and missed it. Missed it altogether.

So anyway, I'm sorry that took so long, that was another very long answer, but what I would say is, the good news is the world community pushed by Canada is still moving forward to negotiating those agreements. The fact that Canada has shifted from being a country that pushed us to this to a country that's trying to sabotage this, does not change the fact that the world community is still moving. And it also proves one thing, and it was a dear friend of mine, some of you may know the book "Good News for a Change" or "Naked Ape the Super species" written by David Suzuki and Holly Dressel. Holly was there. And I said to her afterwards, she'd been there for most of the time, but on the Thursday she went home. I said "Holly, don't go home Thursday. Don't go home today, because tomorrow Bill Clinton's coming, it's going to be fun, you can meet him and I'll introduce you." "No no, I have to go now." I said it's not over yet, "No I have to go now."

And afterwards she told me, she said "I had to go home because it was so clear to me that there was no hope. I knew you were going to lose, and I didn't think I could stand to see your face. Or all those beautiful young people who believed you could win. So I had to go home because I couldn't bear it." So that's how it felt to someone who's pretty good at finding good news.

So that's one of the messages from my new book, "How to Save the World in Your Spare Time." One of my favourite things I share with you in the book is if you don't believe in miracles, you're not facing facts (applause).

END