



The Energy and Environment Round-Up: October 4th 2007

Posted by [Stoneleigh](#) on October 4, 2007 - 7:00pm in [The Oil Drum: Canada](#)

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[Macleans: Alberta stands accused](#)

[A huge fight between East and West -- over the oil sands -- is just starting](#)



Left unfettered, Alberta's energy sector will, by the end of this century, transform the southern part of the province into a desert and its north into a treeless, toxic swamp. Driven both by global warming and oil and gas developments, temperatures in Alberta will soar by as much as eight degrees. The Athabasca River will slow to a trickle, parching the remainder of the province's forests and encouraging them to burst into flame, generating vast quantities of CO₂. "They're going to be the architects of their own destruction," says journalist William Marsden, whose new book outlines the environmental threats posed by Alberta's energy industry.

Even now, fish pulled from the Athabasca downstream of the oil sands taste of gasoline and smell of burning galoshes in the fry pan. The landscape is perforated by more than 300,000 oil and gas wells. Water in some areas to the south can be set alight with a match, likely due to coal-bed methane developments. Doctors administering to Aboriginal communities not far from the oil sands report high rates of thyroid conditions

and rare diseases such as cancer of the bile duct. Some from those communities have been employed at the oil sands raking in the carcasses of ducks floating on vast pools of rotten water, the by-product of the sands' oil-extraction methods.

Such are the claims contained in Marsden's upcoming *Stupid to the Last Drop: How Alberta is Bringing Environmental Armageddon to Canada (And Doesn't Seem to Care)*, which presents a scenario almost too frightening to contemplate and suggests Alberta may already be too far gone for redemption -- indeed, that it is environmentally doomed. "When you start digging up an area equivalent to the state of Florida, when you start carpet-bombing your province with oil and gas wells, and at the same time, you've got global warming drying up the glaciers and your rivers -- you're kind of looking at a doomsday scenario," he says. "It sounds bizarre, but it's an absolute possibility that they could be literally destroying themselves."

['Why not nuke Alberta?'](#)

In the Athabasca basin, oil companies have destroyed thousands of acres of boreal forest wetlands, including rare fens. The boreal forest represents three to four thousand years' accumulation of peat, with pine trees surrounded by wetlands, natural canals and shallow lakes. Many of the wetlands have been plowed up and drained in order to get at the oil sands beneath.

"We just have a habit of stripping the defences of our ecosystem," David Schindler says. "We're setting ourselves up both for floods and for droughts." Schindler is a stocky, muscular man with powerful arms and hands, a broad mouth and facial features that remind you of Raymond Massey. He holds the Killam Memorial Chair in the Department of Biological Sciences at the University of Alberta, and he speaks in a disarmingly clinical manner that leaves you wondering if he really said what you thought he just said.

I describe a doomsday scenario, thinking he will say I'm going too far: "By the end of this century the southern half of the province will be a desert. The northern half will be dug up for oil sands. The entire province will simply be a network of coal bed methane and in situ mining operations, most of which will have been abandoned; the forests will be destroyed by the pine beetle, forest fires and clear-cutting; and there won't be any water for anybody. So at the end of the day you will have a pot of gold with no place to live, except maybe the odd oasis."

Without flinching, Schindler nods his agreement.

[Woodland Cree file lawsuit against Alberta oilsands leases](#)

The Woodland Cree First Nation of northwestern Alberta launched legal action against the province Tuesday, arguing they should be consulted before any oilsands leases are sold on traditional lands.

The lawsuit also seeks a halt to the Alberta regulator's approval of Shell Canada's Carmon Creek project - the first major development in the Peace River oilsands deposit.

Woodland Cree Chief William Whitehead said Tuesday that his community has grave concerns about environmental degradation from large oilsands projects.

And he said the lawsuit was aimed at forcing the province to discuss potential lease sales with affected First Nations in order to prevent the type of development seen in the Athabasca oilsands deposit that surrounds Fort McMurray in northeastern Alberta.

"We do not want to see a repeat of what people in Fort McMurray are experiencing," Whitehead said Tuesday. "Let's do it right this time."

Other council members of the Woodland Cree who had travelled down to Calgary on Tuesday to file the lawsuit said the oil and gas development was "overwhelming" to the community.

They say there are already major water and health issues in the area, even with the small number of pilot projects already up and running.

[Support for Big Oil wanes in Alberta](#)

Big Oil has always quietly accepted that, much like the tobacco or war industry, having a poor image is a cost of doing business.

One exception, of course, was Alberta. With about a third of the provincial economy riding on its fortunes, its residents could usually be counted on to be sympathetic, particularly during big fights with the federal government.

That reservoir of goodwill seems to have vanished. A surprising number of Albertans seem to be cheering for a six-member panel calling for a punitive increase in taxes and royalties from Big Oil. Warnings by firms, including EnCana Corp., now Canada's largest oil and gas producer, that such a measure will dry up investment and harm the economy are scoffed at as "posturing." Many, including the panel itself, believe oil companies have no choice but to pay up because they have nowhere else to go, since the rest of the world has gotten even meaner.

[Fighting over Alberta's oil windfall](#) [Wildcat strikers are protesting Alberta's restrictive labour code](#)

Such sentiments aren't good news for the oil sands, which account for much of Alberta's \$150 billion in industrial construction. The sands now employ 15,000 -- tough to achieve in a labour crunch -- but will need over double that by 2010 given current scheduling, says Tristone Capital's Chris Feltin. Unrest may cause developers to rethink plans and cost estimates, chilling investors. All this hands unions, says Feltin, "a very big stick" in the fight for morsels of Alberta's oil wealth. "Working people really haven't seen a whole lot of benefit from this boom," says Piper. "I think this is just the beginning of a long story."

[Alberta urged 3 years ago to raise oil, gas royalties](#)

The Alberta government was told three years ago it should consider raising oil and natural gas royalties by the province's Energy Department, which calculated that at least \$1-billion more could be collected annually without hurting industry, according to Alberta's auditor general.

"Neither this information nor the reasons why changes have not taken place have been made public," auditor general Fred Dunn said in his annual report published Monday morning.

The findings of the auditor general validate similar conclusions made in a landmark report issued two weeks ago by an independent royalties review panel that found the province has been missing out in billions of dollars in energy dollars, recommending that royalties and taxes be increased.

[Alberta's inaction on royalties slammed](#)

In December, 2004, the Alberta government, then led by Ralph Klein, was told there was room to raise royalties on oil, natural gas and oil sands. The Auditor-General found that the same suggestion has been made several times since 2004, highlighting an August, 2006, meeting led by then energy minister Greg Melchin, where the "the wealth of information [suggested] the need to increase Alberta's share although that conclusion [was not] explicitly stated."

The opposition Liberals Monday demanded an immediate election. "The Auditor-General's report shows a government that is deliberately misleading Albertans and that has been deceitful about its royalty collection," provincial Liberal Leader Kevin Taft said.

"The people of Alberta should be furious with what the Auditor-General uncovered and should run this government out of office."

[Royalty row divides Alberta](#)

In the 10 days since a provincially appointed panel dropped its bombshell report recommending that Alberta play hardball with the oilpatch, work inside Calgary's office towers has turned from planning growth to assessing damage and even eyeing an exodus.

EnCana Corp., Canada's largest oil and gas producer, took the first shot across the bow yesterday, saying it will move \$1-billion worth of spending from Alberta next year if the full brunt of the recommendations are adopted. Others could follow suit.

Oklahoma City-based Devon Energy Corp. sent an internal memo to its 1,400 employees saying it was analyzing the potential impact of the recommendations on its investment plans in Canada. Some producers are weighing the merits of shifting their investments to other provinces. Pipeline companies are reviewing billions in pipeline plans.

Others are working with lawyers to assess their strategy if agreements are ripped up by

the provincial government. Job searches are being put on hold. Real-estate deals are in limbo.

[Crescent vows to leave Alberta if royalties hiked](#)

A second major Canadian oil and gas player is warning it will abandon Alberta if the government adopts a special panel's recommendation to raise royalties for oil, natural-gas and oilsands development.

Crescent Point Energy Trust, one of the country's largest oil-and-gas income trusts, said yesterday it has decided to spend 100% of its \$150-million capital development budget in Saskatchewan next year because of uncertainty created in Alberta following a controversial royalty study, which the provincial government is now digesting and will formally speak to within the next two to three weeks.

The exodus would amount to a loss of investment in Alberta of about \$30-million, based on the fact only about 20% of Crescent Point's production -- about 6,000 barrels of oil equivalent a day -- is based in Alberta.

[Canadian Royalty Review Causes Major Backlash](#)

"Most of Alberta's production sells for \$30 to \$50 per BOE, well below the global benchmark," Kvisle wrote. "With a cost structure approaching \$30 BOE, there is not much room left for higher royalties and taxes."

Released in September, the report by the Royalty Review Panel is titled "Our Fair Share," and consists of 104 pages of recommendations for the government to improve the existing royalty structure.

"Our goal is to ensure the royalty framework strikes the right balance, providing Albertans with a fair return while maintaining an internationally competitive system that allows the provincial economy to continue to prosper," said Alberta's Minister of Finance Dr. Lyle Oberg when the report was made public.

A formal response to the report by the government has been promised by mid-October. It is suspected that many more oil and gas companies are stalling strategic decisions about investing in Alberta until then.

[Big Oil not kidding about pulling out of Alberta](#)

Canada's largest oil companies warned yesterday they are not making idle threats in the aftermath of public-opinion surveys showing Albertans think the sector is posturing when it says it will shift billions if the government imposes higher taxes and royalties.

"We are trying to say, 'Beware of the consequences,' " said Jim Buckee, former chief

executive of Talisman Energy Inc., noting that Albertans don't appear to understand the implications of such sweeping changes. "I think it will be quite devastating."

The oil industry's push to sway public opinion has escalated in the wake of polls showing 88% of Albertans believe they are not getting "a fair share" from oil and gas royalties and that 66% of those polled want Ed Stelmach, Alberta's Premier, to fully adopt the contents of a controversial report from a provincial panel two weeks ago urging a 20% boost in government take from the oil sector, or \$2-billion a year.

[Alberta within rights to raise royalties, says law professor](#) [Energy firms decry 'no grandfathering'](#)

Alberta has the right to raise royalties on existing oil and natural gas projects in the province, according to a University of Calgary law professor, countering suggestions from industry that such a move could constitute a breach of contract.

Last month, an expert, six-member panel concluded that Alberta is missing out on billions of dollars of energy profits, recommending an increase in royalties and taxes. The panel insisted there should be no "grandfathering" of existing projects, meaning the proposed new rules would apply to everyone, adding that if grandfathering was used, "almost nothing would change."

Nigel Bankes, a law professor at University of Calgary with an expertise in resources law, says Crown leases in Alberta that provide energy companies the right to develop resources in the province explicitly state that royalties are not fixed and could change over time.

"It allows governments to share in any unanticipated changes in the market value of the resource," Prof. Bankes said in a new paper written for the Institute of Advanced Policy Research at U of C.

[If Albertans want it all, oil sands must pay](#)

Alberta is the richest province, the one with no debt, no provincial sales tax, the lowest income taxes. The unemployment rate is barely 3 per cent, which is to say it's zero; anyone who can fog a mirror can get a job (but not an apartment). The boom has been going for so long that many Albertans assume these things are a divine right. And the newcomers from other provinces, 97,000 of them over the past couple of years, have never known the place to be anything other than absurdly prosperous. What most of them don't realize is that Shangri-la on the Bow River is not funded by oil.

It's natural gas that pays the bills. Gas royalties, at an estimated \$6-billion this fiscal year, will contribute nearly as much to the treasury as personal income taxes. When gas prices are higher, the take is even bigger. Oil's contribution to provincial revenue is much smaller: about \$1.1-billion from conventional crude, and another \$1.8-billion from the oil sands and synthetic crude.

The last figure isn't larger because of the famous "1 plus 25" royalty regime, which gives oil sands producers a nearly free ride until they recover their massive upfront costs.

Hence the review panel's most radical suggestion: Oil sands companies should pay more and many (though not all) gas projects ought to pay less.

A clever idea, that. The output from oil sands is expected to nearly triple, to three million barrels a day, by 2020. And natural gas? Growth is dead. Gas production is flat at roughly 13 billion cubic feet per day, which is roughly where it's been since the mid-1990s, and that level is becoming harder to sustain.

The most likely scenario is a long-term decline in gas output, meaning lower gas royalties. Two years ago the province reaped \$8-billion in gas royalties; now that gas prices have fallen, it's \$6-billion; with another modest decline in prices, two years from now it will be \$4.6-billion, by government forecasts.

The number may be too conservative but the trajectory is right. The industry begs Mr. Stelmach not to kill the golden goose, but as far as he's concerned, it's already dying, so it's time to find a new one, in Fort McMurray.

[Ad campaigns heat up in wake of royalties talk](#)

Tristone Capital Inc. warned yesterday of a potential "\$5-billion to \$10-billion" decline in capital spending by gas producers should the full brunt of a special panel's recommendations be adopted.

Tristone is launching an ad campaign tomorrow in newspapers across the province, claiming the proposed 20% royalty hike would be "catastrophic" for the oil and gas sector and ultimately for the province's economy. It follows adds in weekend newspapers by EnCana Corp., warning changes to Alberta's royalty regime would force it to move \$1-billion in capital investments out of the province next year.

Meanwhile, Devon Canada Corp., in an internal memo, urged its staff to read the Tristone report and voice their opinions to provincial politicians. The report by Tristone, the global energy advisory firm based in Calgary, was one of three made public yesterday. It contends the higher royalties would lead to less exploration and ultimately production, especially of natural gas, which in turn would wipe out the panel's predicted revenue gains of \$2-billion annually.

"The proposal has the unintended effect of giving the province a larger piece of a smaller pie and it's not in the best interest of Albertans," said Tristone president and CEO George Gosbee.

[Eye on Canadian Oil Sands Trust](#)

What are the risks? If the price of oil does rise past \$100 and then past \$200 and so on over the next decade, what might stand in the way of vast riches for the COS shareholder? First, of course, there is the difficult problem of managing a huge, sprawling, technologically advanced and advancing enterprise located in an inhospitable environment with severe endemic labor shortages. Assuming the company continues to successfully handle these daily challenges, their task will not be simply a matter of bundling up all the profits and sending them off to shareholders. The public — and their

elected representatives — will be increasingly concerned about protecting their environment and securing their "fair share" of the rising corporate profits.

Syncrude, like all oil sands companies, operates under both provincial and federal environmental regulations. Both jurisdictions specify requirements and financial penalties for failing to meet them. COS allocates about \$125 million per year to satisfying the environmental specifications laid out by those governmental requirements. It estimates that Alberta's requirements for continuing reductions in GHG emissions will add 30 cents per barrel or \$7 million to its costs in 2H '07. National environmental standards are under development and the company estimates that its costs of compliance may be "significant". Please see the web sites of Syncrude and COS, for further discussion of environmental problems and their remediation. The quarterly reports of COS detail its approach to environmental issues, including costs.

[Energy Alberta files for nuclear licence on Peace River](#)

Energy Alberta Corp., a private Calgary-based firm, has selected a lakeside site about 30 kilometres west of his home in Peace River, Alta., to build a nuclear power plant. It's been 14 years since an atomic energy facility went into service in this country, and this new project, if built, would mark the first time one has been built in Western Canada....

...While the Alberta government is still deciding whether to sign off on the controversial project, Energy Alberta filed an application last month with the Canadian Nuclear Safety Commission for a licence to prepare the Peace River-area site. It's the first of five licence applications in a process that could extend over the next 10 years.

[Albertans an 'easy sell' for nukes](#)

Nuclear companies are taking advantage of naive Albertans who haven't yet learned about the risks of nuclear energy, says a long-time critic of the nuclear industry.

Gordon Edwards is a mathematician with Vanier College in Montreal who has spent 30 years advocating for nuclear responsibility. He was brought in by local environmental groups to inform Albertans about the potential risks of nuclear energy.

"I think both (French nuclear company) Areva and (Atomic Energy Canada Ltd.) AECL are enthusiastic about the degree of naivete because it means it's easier to sell it," he said during a meeting with The Journal's editorial board Friday.

But Energy Alberta Corp., which has proposed a plant next to a lake 30 kilometres west of Peace River, says it's actually quite the opposite.

It would be easier to try to build something in Ontario, where residents are used to nuclear power, than trying to convince Albertans living in the land of oil and gas that nuclear power is a good idea, company spokesman Guy Huntingford said.

[Alberta urged to shun nuclear power](#)

Edwards' tour of Alberta is being sponsored by the Sierra Club of Canada, an environmental group which believes nuclear power plants in Canada should be phased out of existence.

He attacked the AECL on several fronts, suggesting the Crown corporation is desperate to sell reactors even though the model proposed for Alberta uses technology that's unproven and unlicensed.

[UK: Nuclear industry pushes for early approval of new plants by warning of bottlenecks](#)

The government's plans to build up to 10 nuclear power plants in Britain over the next decade could be thwarted by a shortage of skilled project managers, industry executives have warned.

They have told ministers that the coming nuclear renaissance in Europe and in emerging economies such as Russia, China and India - driven by the need to combat global warming and reduce energy imports - could also constrain the delivery of key reactor components unless decisions are made swiftly and the planning process is speeded up.

The executives are even warning that the first new nuclear plants may not come on stream until towards the end of the next decade because of the demand for project managers to deliver the 2012 Olympic Games and other big infrastructure projects.

[Alberta power line hearings are cancelled after spying allegations](#)

Alberta's Energy and Utilities Board is cancelling all proceedings related to a proposed Edmonton-Calgary power line that has been plagued by scandal since the regulator admitted hiring private investigators to monitor opponents of the project.

New chairman William Tilleman called Sunday's decision "the equivalent of granting a mistrial."

Mr. Tilleman says it's vital that Albertans have confidence that the energy watchdog acts fairly, responsibly and in the public's interest.

AltaLink, Alberta's largest transmission company, will now have to file a whole new set of applications for the project and undergo a new public hearing with an independent panel.

[New power transmission line could spur mining development](#)

Betting on a resurgent mining sector, the provincial government gave a green light

yesterday to a new transmission line that will bring electricity to the northwest corner of the province and could spur billions of dollars worth of mineral development in the region.

Industry groups that have spent several years lobbying the government to approve the project were jubilant, saying the line would be an "economic catalyst" for northwestern B.C.

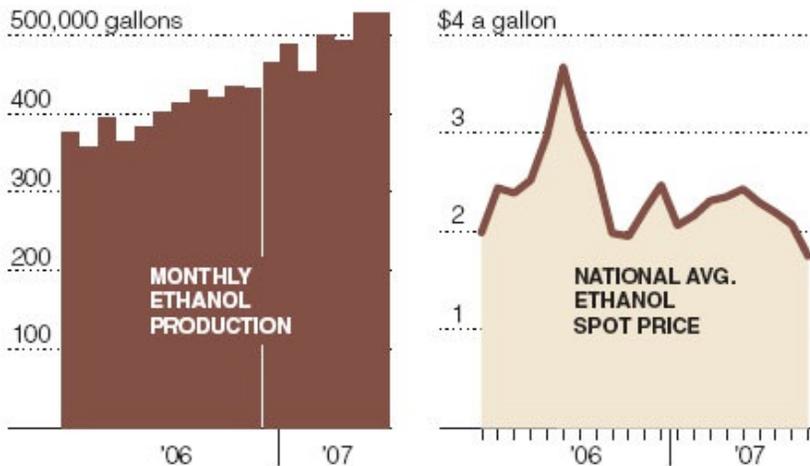
"Economic, reliable power is a huge factor for mine development," said Dan Jepsen, president of the Association for Mineral Exploration British Columbia, which said advanced mineral projects in the region could account for more than \$3.5-billion in investment and more than 2,000 jobs if the projects are built.

Those projects include the Galore Creek and Red Chris copper-gold projects and Mount Klappan, a coal project.

[Ethanol's Boom Stalling as Glut Depresses Price](#)

A Glut of Ethanol

Ethanol production has increased sharply over the last 18 months, outstripping demand and leading to a drop in prices.



Sources: Renewable Fuels Association; Friedman, Billings, Ramsey

The ethanol boom of recent years — which spurred a frenzy of distillery construction, record corn prices, rising food prices and hopes of a new future for rural America — may be fading.

Only last year, farmers here spoke of a biofuel gold rush, and they rejoiced as prices for ethanol and the corn used to produce it set records.

But companies and farm cooperatives have built so many distilleries so quickly that the ethanol market is suddenly plagued by a glut, in part because the means to distribute it have not kept pace. The average national ethanol price on the spot market has plunged 30 percent since May, with the decline escalating sharply in the last few weeks.

"The end of the ethanol boom is possibly in sight and may already be here," said Neil E.

Harl, an economics professor emeritus at Iowa State University who lectures on ethanol and is a consultant for producers. "This is a dangerous time for people who are making investments."

[Ethanol Boom Is Running Out of Gas](#)

The price of ethanol has fallen by 30% over the past few months as a glut of the corn-based fuel looms, while the price of ethanol's primary component, corn, had risen. That is squeezing ethanol companies' profits and pushing some ethanol plants to the brink of bankruptcy.

Financing for new ethanol plants is drying up in many areas, and plans to build are being delayed or canceled across the Midwest, as investors increasingly decide that only the most-efficient ethanol plants are worth their money.

Some ethanol companies are "under deathwatch" now, says Chris Groobey, a partner in the project-finance practice of law firm Baker & McKenzie, which has worked with lenders and private-equity funds involved with ethanol.

That could be fine for big efficient players like Archer-Daniels-Midland Co., one of the nation's biggest ethanol producers by output. ADM and other big ethanol companies probably can ride out the storm, even though they might have to scale back on their production. Smaller players may not fare as well, and may be snapped up by bigger survivors.

[Archer Daniels Midland Eying Ethanol Plant Acquisitions](#)

Archer Daniels Midland Co. (ADM) Chief Financial Officer Doug Schmalz said Tuesday the corn and soy bean processing giant would consider buying ethanol plants now that lower prices for the fuel have been pressuring production margins.

"In general, we'll look at all opportunities including acquisitions," Schmalz said at the Citi Biofuels Conference.

"We have to have properties that will fit within our network. Some plants just wouldn't fit; others might. We'll analyze that as they become available."

[Corn-to-Ethanol: US Agribusiness Magic Path To A World Food Monopoly](#)

Many of us Americans still think we have a layer of financial fat and can afford a doubling or tripling of food costs without going hungry. Not so in the third world, and with some in America as well. A friend reminded me, "Meat is not good for us anyway." Some would not mind giving up meat sometimes, but in Darfur or Uganda, there may be no meat or luxury foods to give up. When the price of rice or corn, or beans rises suddenly by a third or half, many will go without. This recently happened in Mexico City

with corn tortilla shells; in the third world, the price of corn may be the difference between life and death. Commodity markets are now world markets, when price of corn rises in Chicago the impact is felt in India and Russia.

[Small Wheat Crop Projections Expected](#)

A Statistics Canada survey due on Thursday is expected to confirm earlier projections of a small wheat crop, said grain traders and analysts polled ahead of the report. The traders mainly expected Statscan's latest survey of 17,100 farmers, done from Sept. 4 to 11, to find results similar to its July 31 production estimates. But some said anecdotal harvest yield reports from the southern Prairies have been disappointing. "In the south, the heat affected wheat more than we earlier thought," one trader said. "I think we're going to see some declines in production." Trade estimates for wheat production averaged 20.2 million tonnes and ranged from 19.6 million to 20.5 million tonnes. Statscan's survey at the end of July found wheat yields sapped by a month-long heat wave, and pegged production at 20.322 million tonnes.

[Grocery Bills to Soar as Grain Prices Surge](#)

Rising prices and surging demand for the crops that supply half of the world's calories are producing the biggest changes in global food markets in 30 years, altering the economic landscape for everyone from consumers and farmers to corporate giants and the world's poor.

"The days of cheap grain are gone," says Dan Basse, president of AgResource Co., a Chicago commodity forecasting concern.

This year the prices of Illinois corn and soybeans are up 40% and 75%, respectively, from a year ago. Kansas wheat is up 70% or more. And a growing number of economists and agribusiness executives think the run-ups could last as long as a decade, raising the cost of all kinds of food.

In the past, such increases have been caused by temporary supply disruptions. Following a poor harvest, farmers would rush to capitalize on higher crop prices by planting more of that crop the next season, sending prices back down. But the current rally, which started a year ago in the corn-futures trading pit at the Chicago Board of Trade, is different.

Not only have prices remained high, but the rally has swept up other commodities such as barley, sorghum, eggs, cheese, oats, rice, peas, sunflower and lentils. In Georgia, the nation's No. 1 poultry-producing state, slaughterhouses are charging a record wholesale price for three-pound chickens, up 15% from a year ago.

What's changed is that powerful new sources of demand are emerging. In addition to U.S. government incentives that encourage businesses to turn corn and soybeans into motor fuel, the growing economies of Asia and Latin America are enabling hundreds of millions of people to spend more on food. A growing middle class in these regions is

eating more meat and milk, which in turn is increasing demand for grain to feed livestock.

[Quebec's green tax hits the pumps Monday](#)

Quebec's controversial carbon tax on energy companies comes into effect Monday, despite fears it could also target industries that use large amounts of petroleum and carbon products.

The green tax is believed to be the first of its kind in Canada and will be used to help Quebec reach its Kyoto Protocol targets to reduce greenhouse gas emissions by 2012.

Quebec will put almost a penny of tax — 0.8 cents — on every litre of gas sold and 0.9 cents of tax on every litre of diesel sold.

It's expected to raise about \$200-million yearly to finance the province's green plan and it's not yet clear if the carbon tax will affect consumers.

[How eco-friendly are party platforms really?](#)

All the major parties in the Ontario election campaign make the claim.

They all want to promote energy conservation and renewable electricity sources. They all swear they'll stop smog and climate change. They're in favour of parks and green space and cleaning up the Great Lakes. They agree it's a great idea to promote local foods.

In fact, they're tripping over each other to convince voters they're on the right side of what has become a motherhood issue.

[Man on emission](#)

Canada hasn't even formalized its climate change plan yet. But already, Europeans don't like what they see in Harper's approach to environmental policy. That might have a lot to do with Ottawa's decision to put its name behind the Asia Pacific Partnership, the proverbial tie that binds the globe's climate-change renegades and doesn't include any European countries. Scratch that; it has everything to do with the APP.

There won't be a formal announcement until this coming October, but Stephen Harper's made it very clear he's only got eyes for the so-called "anti-Kyoto club." Even though it regroups the world's biggest emissions-producing countries - the U.S., China and India, along with Australia, Japan and South Korean - the APP is seen as a subversive entity among the world's Kyoto boosters. Unlike its predecessor, the APP contains no caps on emissions. In fact, it doesn't actually force its members to do much of anything at all. Instead, it focuses on the voluntary development of cleaner technologies and its charter

even suggests climate change may not be as urgent as people have made it out to be: "development and poverty eradication are urgent and overriding goals internationally." While the slight at their cause is no doubt a rub to environmentalists, it's the Partnership's reluctance to impose hard caps on emissions that has them up in arms.

[Widening Arctic meltdown chills Canadian scientists](#)

[This year may be seen as 'tipping point' in march of climate change, official says](#)

"The ice is no longer growing or getting old," says John Falkingham, chief forecaster for the Canadian Ice Service, the Environment Canada agency that helps ships find a way through the Northwest Passage and other parts of the Arctic.

"Ten years from now, we may look back on 2007 and say that this was the year we passed the tipping point."

The tipping point is the term climatologists use to describe that moment in time when winter can no longer keep up with the meltdown that spring and summer brings. The less ice there is to reflect solar radiation back into the atmosphere, the warmer the Arctic Ocean becomes.

Until this summer, Falkingham, a 32-year veteran of the service, was reluctant to push the button as hard as other climate watchers, who have been saying that the Northwest Passage will be seasonally ice-free within 25 to 30 years.

But this summer, the ice retreated so far beyond all expectations that he was "shocked" if not "stunned" by what he and his colleagues saw.

[A Cycle of Warming Spirals in the Arctic](#)

Not only did the extent of sea ice this summer decline to a record-low, exposing the fabled Northwest Passage for the first time in history, but even the thickest, most permanent ice that typically doesn't melt in summer declined by 23%, according to a new NASA study. This study goes beyond other, similar studies that have been released in recent days because it characterizes not only the extent of sea ice versus open water, but also characterizes the thickness and type of ice that remains.

The two forces could indicate that a so-called global warming "positive feedback loop" is in effect that will lead to ever-greater declines in ice year after year. That could lead to a tipping point — after which the loss of ice accelerates and can not be reversed.

"The reason so much (of the Arctic ice) went suddenly is that it is hitting a tipping point that we have been warning about for the past few years," James Hansen, director of NASA's Goddard Institute for Space Studies, told Reuters last week.

From the 1970s through the 1990s, perennial ice declined by about 193,000 square miles each decade. Since 2000, that rate of decline has nearly tripled.



The new NASA study of expelled old ice builds on previous measurements showing that the proportion of thick, durable floes that were at least 10 years old dropped to 2 percent this spring from 80 percent in the spring of 1987, said Ignatius G. Rigor, an ice expert at the University of Washington and an author of the new NASA-led study.

Without the thick ice, which can endure months of nonstop summer sunshine, more dark open water and thin ice absorbed solar energy, adding to melting and delaying the winter freeze.

The thinner fresh-formed ice was also more vulnerable to melting from heat held near the ocean surface by clouds and water vapor. This may be where the rising influence of humans on the global climate system could be exerting the biggest regional influence, said Jennifer A. Francis of Rutgers University.

[Why Climate Change Can't Be Stopped](#)

As the world's leaders gather in New York this week to discuss climate change, you're going to hear a lot of well-intentioned talk about how to stop global warming. From the United Nations, Bill Clinton, and even the Bush administration, you'll hear about how certain mechanisms—cap-and-trade systems for greenhouse gas emissions, carbon taxes, and research and development plans for new energy technologies—can fit into some sort of global emissions reduction agreement to stop climate change. Many of these ideas will be innovative and necessary; some of them will be poorly thought out. But one thing binds them together: They all come much too late.

[Record 22C temperatures in Arctic heatwave](#)

Parts of the Arctic have experienced an unprecedented heatwave this summer, with one research station in the Canadian High Arctic recording temperatures above 20C, about 15C higher than the long-term average. The high temperatures were accompanied by a dramatic melting of Arctic sea ice in September to the lowest levels ever recorded, a further indication of how sensitive this region of the world is to global warming. Scientists from Queen's University in Ontario watched with amazement as their thermometers touched 22C during their July field expedition at the High Arctic camp on Melville Island, usually one of the coldest places in North America.

"This was exceptional for a place where the normal average temperatures are about 5C. This year we frequently recorded daytime temperatures of between 10C and 15C and on some days it went as high as 22C," said Scott Lamoureux, a professor of geography at Queen's.

"Even temperatures of 15C are higher than we'd expect and yet we recorded them for between 10 and 12 days during July.

[Ice cap melt seen "very, very alarming"](#)

Record melting of Arctic sea ice this year sent a "very alarming" signal about warming at the North Pole, but it couldn't all definitely be blamed on manmade climate change, the U.N.'s top weatherman said on Tuesday.

The amount of Arctic ice which melted this summer beat a previous record, set two years ago, by an area more than four times the size of Britain, a 30-year satellite record shows.

"This year was quite exceptional ... the melting of the Arctic ice ... it's quite spectacular," Michel Jarraud, secretary general of the World Meteorological Organisation, told Reuters.

"Can it all be attributed to climate change? That's very difficult. It's very, very alarming," he said. His answer to how best to interpret the melt was -- "let's do more research".

[Arctic Melting Accelerating](#)

So much ice has disappeared that the Arctic today looks much like what scientists thought it would in 2050. It's as if the atmosphere hit the fast-forward button. Accelerating Arctic Melting

If the forecast models are correct and the vanishing ice is responsible, this could be the beginning of weather changes that might someday leave the West perpetually parched and strain water resources even further than they are now.

[In Greenland, potatoes thrive as seal hunting wanes](#)

In this village of 56 people in southern Greenland, history has come full circle. It was here, in about 985, that Erik the Red, leader of a medieval Norse colony, built his farm and raised sheep, cattle, and barley.

But about 300 years later, the climate changed. The Norse's agrarian lifestyle began to unravel when the Little Ice Age arrived, dooming the colony.

Today the hillside overlooking Erik's Fjord is lush and green again. A crop of young potatoes and radishes await harvesting. The plot is surrounded by tall grass – food for thousands of sheep – blowing in the cool winds coming off the melting glaciers to the north and east. In a nearby village, residents have started growing broccoli.

"Spring is coming many weeks earlier now, and the last five winters have been very short and rainy," says Tommy Maro, mayor of Qaqortaq, the region's principal town. "It will be exciting to see how the land will change in the next 20 years. Maybe we will have more sheep farmers, more green areas, more things we can grow."

Perhaps nowhere else in the world are the effects of climate change as obvious as in Greenland, where warming temperatures have brought a mixed blessing to the 56,000 residents that live on this island, a self-governing territory of Denmark. As winter sea ice disappears, the traditional means that the indigenous Inuit people have developed to survive in the Arctic – sled dog mushing, seal hunting, ice-hole fishing – are rapidly becoming obsolete. Farming, an occupation all but unheard of a century ago, has never looked better.

[Grim Outlook for Polar Bears](#)



A polar bear expert with the Fish and Wildlife Service, Scott L. Schliebe, said the bears

were resilient and adaptable, but just to a point. “I truly believe this is an important part of our natural history,” Dr. Schliebe said. “We should take every effort we can to try to maintain it.”

On one possible track, the bears, facing a chronic food gap, could weaken and reproduce ever less as the ice-free summer season expands. The other course could be a swift collapse, should more summers unfold like this past one, said Steven C. Amstrup of the United States Geological Survey. He led an exhaustive recent study of polar bears in a federal review weighing whether they should be put on the endangered species list.

If emissions of greenhouse gases and resulting global and Arctic warming continue apace, the study said, two-thirds of the 22,000 or so bears will disappear by midcentury.

[Drought, warmth bring record low water levels in Lake Superior](#)

It’s the first time in 81 years that the biggest and deepest of the lakes, with a surface area matching South Carolina’s, has reached a new monthly low, Sellinger said. The Army Corps recorded Superior as also setting a record by a half-inch in August. But the NOAA lab had the lake at slightly above its record level then.

Either way, the lake has plummeted over the past year and has lagged beneath its long-term average level for a decade — the longest such period in its known history.

“I’ve been here since 1959 and this is the lowest I’ve seen it,” said Joel Johnson, owner of Lakehead Boat Basin in Duluth, Minn.

Some areas had so little water last spring and summer that recreational boats couldn’t reach docking slips, although other marina operators managed operate normally.

Commercial shippers, who haul iron ore and coal across the lakes to manufacturing centers such as Detroit, have been unable to fill cargo holds to capacity for fear of scraping bottom in shallow channels.

[As frost fades, berry rivalry heats](#)

Decades ago, the flat fields of wild blueberries more than three hours north of Quebec City posed no threat to Maine’s standing as the world’s wild blueberry capital.

Every four years or so, killing spring frosts hit Quebec, nearly obliterating the year’s harvest around St.-Jean Lake, while Down East Maine, some 350 miles southeast, reliably produced millions of pounds a year for use in jams, pie fillings, and muffins.

But temperatures are rising in Canada, and so too are the annual blueberry harvests - giving a whiff of how global warming could shift economic fortunes.

Killing spring frosts occur half as often now as in the 1950s - with the decline most noticeable in the last 20 years - and Quebec growers have gained the confidence to expand production to take advantage of skyrocketing worldwide demand. As a result,

Maine blueberry producers are uneasy about competition from their northern neighbor - and their future.

[Climate change: The new talk of farm country](#)

From the vineyards of Ontario's Niagara Peninsula to the wheat fields of the Prairies, farmers across the country are in the thick of harvesting.

But this year in farm country, besides the normal talk about crop conditions, there is also chatter about global warming. Few farmers have ever seen a year like this one, marked by hot, sunny and unusually dry conditions in so many regions.

"Every single conversation that goes on about yields and weather conditions, global warming is part of that conversation," says Stewart Wells, a Saskatchewan farmer and head of the National Farmers Union, although he adds that growers are unsure that what they are seeing is really climate change starting to happen.

While global warming is expected to have many deleterious effects, such as melting icecaps and rising sea levels, it has always been considered something of a potential agricultural boon for Canadian farmers....

....Many farmers wondering about climate change point to the Prairies this year as a possible harbinger of things to come. The summer has been warmer, but the weather has been following only part of the script suggested by the computer models because precipitation has been lacking.

[Climate Change: U.S. Moving Backwards](#)

Electricity generation from coal is the biggest source of carbon dioxide (CO₂) emissions in the world -- larger than deforestation or the transportation sector, says Rebecca Tarbotton, director of RAN's Global Finance Campaign

The 150 proposed new plants would add 600 million to 1.1 billion tonnes of carbon annually into the atmosphere, Tarbotton said in an interview. Total global emissions of carbon are currently about 8 billion tonnes.

"There is no hope of averting climate catastrophe if a significant number of those plants are built," said Bill McKibben, author and founder of Step It Up, the largest demonstration against global warming in history.

"Climate change is already happening much faster than anyone expected," McKibben told IPS.

[Pollution causing premature deaths](#)

Pollution could be causing up to 25,000 premature deaths in Canada each year and burdening the health care system with up to \$9.1-billion annually in extra costs, according to a new study by researchers at the University of British Columbia and the University of Alberta.

The study is one of the first to estimate the largely preventable health toll in Canada caused by the widespread exposure to air pollution, hazardous chemicals and pesticides, although the World Health Organization has conducted similar research this year and also concluded that environmental factors cause thousands of premature deaths in Canada each year.

The research was published online this week in the journal *Environmental Research*, and also estimated that pollution is responsible for between 8,000 and 24,000 new cases of cancer and 500 to 2,500 low birth-weight babies annually.

[Amazon jungle could be lost in 40 years, say campaigners](#)

The Amazonian wilderness is at risk of unprecedented damage from an ambitious plan to improve transport, communications and power generation in the region, conservationists warned yesterday.

Development plans have been drawn up to boost trade links between 10 economic hubs on the continent, but threaten to bring "a perfect storm of environmental destruction" to the world's oldest rainforest, according to a report from Conservation International.

Projects to upgrade road and river transport, combined with work to create dams and lay down extensive power and communications cabling, will open up previously inaccessible parts of the rainforest, raising the risk of widespread deforestation that could see the loss of the entire Amazon jungle within 40 years, the environmental group said.

Tim Killeen, a scientist with Conservation International, examined the projects funded under the multinational government-backed Initiative for the Integration of the Regional Infrastructure of South America (IIRSA). He found that the environmental impact of individual projects had often been well assessed, but there had been a failure to look at their collective impact on the region.

[Is Ancient People's End a Warning for the Future?](#)

The people who lived in these ancient villages, which are known as pueblos, were part of a large culture that thrived for several hundred years in the high desert plain that covers parts of modern Utah, New Mexico, Colorado and Arizona. Archaeologists call them Anasazi, or Ancient Pueblo People. One of the best known of their pueblos is in Mesa Verde National Park in Colorado.

But sometime in the late 1200s, the Anasazi abandoned all of their pueblos. And for more than a hundred years, archaeologists have been perplexed about why....

....Kuckelman thinks the reason was climate change. A major drought hit the area in the

1270s. Kuckelman says her research from one of the villages, Sand Canyon Pueblo, shows that the drought destroyed the people's ability to grow corn to feed themselves and their turkey flocks. They were forced to revert to hunting and gathering.

She figured this out by analyzing their garbage. According to Kuckelman, the people tossed the remains of their meals and ash from their hearths into pits outside the walls of their kivas, their round stone homes. She compared refuse from the early days of the settlement to what was left in the kivas when the residents moved away.

[Climate change becomes urgent security issue in Australia](#)



As the first bush fires of the year rage through Australia's national forests, concern over climate change is intensifying among Australians.

A telephone survey of more than 1,000 people released Wednesday showed that 40 percent of Australians thought that global warming was a greater threat to security than Islamic fundamentalism. Only 20 percent thought it was less serious.

The survey, by the U.S. Studies Center, based at the University of Sydney, came a day after the government's top scientific body said that rising temperatures and reduced rainfall were inevitable in Australia.

The report brought calls for more resources to be focused on mitigating the effects of future climate change rather than the current policy of trying to reduce greenhouse gas emissions.

Extreme weather, including a drought that has persisted in some places for six years, has focused the Australian public on climate change, and it is shaping up as a major issue in general elections expected to be called in the next few weeks.

[Hot, parched and sinking - apocalypse Sydney](#)

Sydney faces a temperature rise of up to 4.3 degrees by 2070, and a tripling of the number of days a year when the thermometer soars above 35 degrees, if global greenhouse gas emissions are not cut deeply, a report warns.

But it is already too late for the city to avoid a warming of about 1 degree by 2030 as well as a 3 per cent reduction in annual rainfall because of polluting gases present in the atmosphere.

The report, Climate Change in Australia, provides the most comprehensive assessment of the country's climate to date, and is based on the work of more than 50 scientists from the CSIRO and the Bureau of Meteorology.

Its grim projections of more droughts, heatwaves, bushfires, and severe "weather events" were released in Sydney yesterday at the Greenhouse 2007 conference.

[Sinkholes and Sewage Spills Foretell a Major Crisis](#)

If dirt gets in the pipes, then the pipes carry the dirt away. Eventually — even if the pipes carry only tiny amounts of dirt away each day — this weakens the ground above the pipes. This ground lies below — and supports — our roads and buildings. Sooner or later, the ground gives way, creating the gaping sinkholes that swallow up cars and houses and even lead to people's deaths. One such sinkhole in Los Angeles was 30 feet deep and shut down a stretch of highway. Another in Grand Rapids, Mich., cut off the water supply to residents, who then had to live under a "boil water advisory."

That's Scenario One. Conversely, sewage may leak out. If sewage leaks out, then you have major health issues in the surrounding environment. Last year alone, more than 3.5 million people became ill from E. coli and other toxins released from over 40,000 sewage spills in the U.S., according to the EPA. Then there are the beaches.

More than 1.5 million people get sick in Southern California every year because of bacterial pollution in the ocean — much of it coming from broken pipes, according to a study by UCLA and Stanford. And in Hawaii last year, Waikiki Beach had to close after 40 million gallons of raw sewage flowed into the water after a water main pipe broke.

As bad as 2006 was, "This year is shaping up to be even worse," Rooney said. "From Hawaii to New York, Alaska to North Carolina and everywhere in between, an epidemic of breaking pipes is causing unprecedented havoc."

[Africa Only Responsible for 3 Percent of World Emissions](#)

'Nigeria remains a responsible and responsive member of the International Community and will continue to actively pursue all means of ensuring sustainable and safe use of environmental resources. In the spirit of representative democracy, it is pleasing to note that Nigeria's legislative arm has inaugurated its committee on environment and ecology with a pledge to ensure maximum compliance with environmental standards'.

Hajiya Halima said that development of Renewable Energy Resources in terms of manpower and technologies was at the front burner in the meeting of ministers of Environment, from nineteen countries, United Nations Agencies and Development Banks from Europe, Asia and African met in the German capital, Berlin last week.

[Another disaster brews in Darfur](#)



Women wait as long as three days for water, using jerrycans to save their places in perpetual lines that snake around pumps. A year ago, residents could fill a 5-gallon plastic can in a few minutes, but lately the flow is so slow it takes half an hour.

"The water is running out," said a breathless Mariam Ahmed Mohammed, 35, sweating at the pump with an infant strapped to her back. "As soon as I fill one jerrycan, I put another at the back of the line."

Water isn't the only endangered resource. Forests were chopped down long ago, and the roots were dug up for firewood. Thousands of displaced families are living atop prime agricultural land, preventing nearby farmers from growing food.

As the Darfur conflict approaches its fifth year, the environmental strain of the world's largest displacement crisis is quickly depleting western Sudan's already-scarce natural resources. And experts say that is exacerbating chronic shortages of land and water that contributed to the fighting in the first place.

"There is a massive resource problem in Darfur," said environmentalist Muawia Shaddad, head of the Sudanese Environment Conservation Society. "We've been shouting about this for years, but no one listened."

[With This Ring: The Environmental Cost of Gold Mining](#)

Gold mining today resembles dismembering mountains more than panning for nuggets; most mines never unearth a single visible flake. Instead they crush vast amounts of rock, pile it up, and leach out the gold molecules with cyanide.

Mining gold to create a single 1/3-ounce 18-karat ring produces at least 20 tons of waste and 13 pounds of toxic emissions.

Those emissions contain 5.5 pounds of lead, 3 pounds of arsenic, almost 2 ounces of mercury, and 1 ounce of cyanide.

Across the globe, Newmont crushed and disposed of more than 700 million tons of rock in 2004.

[Brazilian land attracts foreign farmers](#)

"In the last five years the value of the land in this area of production has gone up 300% and for us this has had a very important wider impact," he says.

"This was land that was practically all cerrado [savannah or grassland] which is now being occupied and has brought an economic benefit for us all."

The mayor is so pleased with the investment so far that his next goal is to attract funds from the Chinese who, he hopes, will back the construction of a railway to the coast.

There are more than 20 foreigners living and working in the area and, if you include the people who are not residents, the number goes up to 50, he says.

Asked about possible risks to the local environment, including the cerrado, regarded biologically as one of the richest savannahs in the world, the local agriculture and environment secretary, Eduardo Yamashita, says all progress brings risks.

[We paved paradise](#)

In Tippecanoe County, Ind., there are 250,000 more parking spaces than registered cars and trucks. That means that if every driver left home at the same time and parked at the local mini-marts, grocery stores, churches and schools, there would still be a quarter of a million empty spaces. The county's parking lots take up more than 1,000 football fields, covering more than two square miles, and that's not counting the driveways of homes or parking spots on the street. In a community of 155,000, there are 11 parking spaces for every family.

Bryan Pijanowski, a professor of forestry and natural resources at Purdue University, which is located in Tippecanoe, documented the parking bounty in a study released this September. When it made the news, Pijanowski got puzzled reactions from locals. In short, they said: "Are you crazy? I can never find parking where I'm going!"

That's the paradox of parking. No matter how much land we pave for our idle cars, it always seems as if there isn't enough. That's America. We're all about speed and convenience. We don't want to walk more than two blocks, if that.

[Blind People: Hybrid Cars Pose Hazard](#)

Because hybrids make virtually no noise at slower speeds when they run solely on electric power, blind people say they pose a hazard to those who rely on their ears to determine whether it's safe to cross the street or walk through a parking lot.

"I'm used to being able to get sound cues from my environment and negotiate accordingly. I hadn't imagined there was anything I really wouldn't be able to hear," said Deborah Kent Stein, chairwoman of the National Federation of the Blind's Committee on Automotive and Pedestrian Safety. "We did a test, and I discovered, to my great dismay, that I couldn't hear it."

The tests -- admittedly unscientific -- involved people standing in parking lots or on sidewalks who were asked to signal when they heard several different hybrid models drive by.

"People were making comments like, 'When are they going to start the test?' And it would turn out that the vehicle had already done two or three laps around the parking lot," Stein said.

[Oil War Feared Between Uganda and DR Congo](#)

Lake Albert, in the Great Rift Valley, is one of the sources of the River Nile and is Africa's seventh largest lake. Rich oil reserves have been discovered beneath its eastern, Ugandan, shores and in the sediments below the lake. Production is expected to begin in 2009, bringing the Ugandan government rich rewards in royalties and taxes.

Following the discovery of oil in what geologists term the Albertine Basin, beneath the lake, both the Ugandan and Congolese armies have been deploying heavily around the shores, with some observers saying there is now a threat of all-out war.

"In normal circumstances, the world over, resources are shared between nations but if the parties don't approach the problem in a civilized manner, it can degenerate into war," said Joseph Mazinga, a Ugandan political scientist and researcher.

A senior Ugandan lawyer, Musa Ssekaana, concurred, saying, "There is no clear demarcation of the border. Unless both countries come together and solve the problem, they will go to war over the oil resources."

[Burma: Oil versus monks](#)

America is hungry for Iraq's oil. Burma is all about oil too. China and India are hungry for Burma's oil. America loved the Iraqi dictator for as long as the dictator was in America's economic interest. China and India love the Burmese military junta because the junta has promised them oil (and gas).

Imagine, the day that 20,000 maroon-robed monks marched the streets of Rangoon, the day that the Burmese military shot at the unarmed rally with live bullets was also the day that the Indian Oil Minister Murli Deora was in Rangoon. In Rangoon signing oil and gas exploration contracts between ONGC and the Burmese military junta. China's interest in the survival of the military junta is two-fold: there's oil, plus Burma is China's gateway to the Indian Ocean.



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