

The Energy and Environment Round-Up: October 14th 2007

Posted by <u>Stoneleigh</u> on October 14, 2007 - 11:00am in <u>The Oil Drum: Canada</u> Topic: <u>Miscellaneous</u> Tags: agriculture, arctic, biofuel, climate change, drought, ethanol, geothermal,

natural gas, oil sands, peak oil, sheila watt-cloutier, water [list all tags]

This is an Energy and Environment Round-Up by ilargi.

As the tar sands royalties soap drags on, and we do have links to some really good articles on the topic, from Nature.org, Mother Jones, and many others, still, how could we not open with climate change, two days after Al Gore and the IPCC won the first ever Climate Change Nobel Prize, and Sheila Watt-Cloutier and James Hansen did not?

Everything that the winners stand for is rendered obsolete in one broad stroke by the article from New Scientist that we open with below. And that is the problem: the people who do the frontline work are snubbed, while the late arrivals get decorated. Yes, Gore raises awareness. But awareness of what, exactly?

And that's not the only issue: both winners stand out for being repeatedly, if not incessantly, wrong on what they claim to be experts in, only to be corrected time and again by those they beat out for the award. Yes, it's done, we know, and maybe we should just lower our standards, like everyone else. Problem with that is, we don't trust there's time left for any standards other than the real ones.

Zero emissions needed to avert 'dangerous' warming

Only the **total elimination of industrial emissions** will succeed in **limiting climate change to a 2°C rise** in temperatures, according to computer analysis of climate change. Anything above this target has been identified as "dangerous" by some scientists, and the limit has been adopted by many policymakers.[..]

A 100% reduction of emissions saw temperature change stabilise at 1.5° C above the pre-industrial figure. With a 90% reduction by 2050, Weaver's model predicted that temperature change will eventually exceed 2°C compared to pre-industrial temperatures but then plateau.

The researchers conclude that governments should consider reducing emissions to **90% below current levels** and remove what is left in the atmosphere by capturing and storing carbon. *There is a stark contrast between this proposal and the measures currently being considered*.

Under the UN's Kyoto protocol, most developed nations have agreed to limit their emissions to a



minimum of 5% below 1990 levels by 2012. What happens beyond this date is the subject of ongoing debate and negotiation.

The European Union nations have agreed to limit their emissions to 20% below 1990 levels by 2020, and support dropping global emissions to 50% below 1990 levels by 2050.

"There is a disconnect between the European Union arguing for a 2°C threshold and calling for 50% cuts at 2050 - **you can't have it both ways,**" says Weaver, who adds: "If you're going to talk about 2°C you have got to be talking 90% emissions cuts."



No big disappointment but Nobel win would have helped Arctic: Watt-Cloutier



A Canadian nominee for the Nobel Peace Prize says she's not that disappointed about failing to get the prestigious award because her nomination still brought more attention to climate change.

Sheila Watt-Cloutier is an Inuit leader and campaigner against global warming, who had been tabbed as one of the favourites for the prize. But she lost out to Al Gore, a former U.S. vice-president, who has also fought to reduce greenhouse gas emissions....

....Watt-Cloutier, 53, is known for emphasizing how climate change effects people, especially indigenous cultures such as the Inuit. She won Norway's Sophie Prize for the environment in 2005 for calling attention to the impact of climate change on life in the Arctic.

And when she was head of the Inuit Circumpolar Conference, she brought a petition to the Inter-American Commission on Human Rights against the United States, saying the country's refusal to limit greenhouse gas emissions was harming the Inuit way of life.

That human rights approach to global warming has only been strengthened by the nomination, she said.

Climate went AWOL during this election

These are people who voluntarily pay a monthly premium for their electricity to assure, out of principle, that their money is not directed to building more nuclear and coal-fired power plants. Bullfrog takes a small cut, as profit-driven businesses typically do, but the rest goes toward the purchase of renewable power and the development of new wind and small hydroelectric projects.

Given the bias in the crowd – a microcosm of change that's slowly infecting the province – it wasn't difficult to find disappointment with how the provincial election is proceeding, and the surprising lack of attention to environmental and energy issues. Oh, and that little threat to humanity called global warming.

"It's completely off the radar," said one Bullfrog customer, who's also a venture capitalist by day. "You know, you're right, it never really did take off as an election issue," commented another.

Gordon Downie, lead singer of the Tragically Hip and devoted Bullfrog customer, was perhaps best at expressing the frustration that many voters have with the current election campaigns. Downie volunteered his time to sing a few "unplugged" songs for the crowd.

"We all know there's one burning issue facing the planet ... funding for faith-based education," he remarked sarcastically in between songs. He didn't look particularly happy.

Rather than talking about adding creationism to the curriculum, maybe, added Downie, we should be honest about what we're doing to the planet and, as he put it, "start teaching kids about destructionism."

How global warming will save us from peak oil

The best reason yet not to be worried about global warming: A more pleasant climate in the Arctic will make it easier for oil and gas companies to extract resources in the formerly harsh north.

That is the most delightful nugget to be mined from a front-page article in Tuesday's New York Times by Jad Mouawad, "A Quest for Energy in the Globe's Remote Places." Here is a reporter for whom the glass is always half full, of fossil fuel.

Indeed, the world's fast-rising use of fossil fuels, by contributing to global warming, could eventually make the Arctic more accessible for oil and gas production.

That's the kind of insight that will have you whistling a happy tune all day long. But it's not the only factoid of interest in Mouawad's account of the mighty engineering obstacles that must be overcome as oil companies search for fossil fuels in remote areas.

"There are no easy barrels left," said J. Robinson West, chairman of PFC Energy, an industry consulting firm in Washington. "The only barrels are going to be the tough barrels."

Oil sands as an industry saviour? The numbers tell the real story

The theme of this year's World Energy Outlook is surging Chinese and Indian demand and how it will be met (or not). The oil sands, relatively speaking, will probably not get much ink in the report. And that's the point. The IEA doesn't believe the oil sands, in spite of their rapid growth, will make anything more than "an important dent" in the global oil market - this from an IEA official who did not want to be named ahead of the report's publication. On the supply side of the equation, what the IEA cares about most is OPEC production, with special attention on Iran, the potential target of American fighter-bombers.

"Dent" status is not what Alberta and the rest of Canada like to hear. In Alberta, the gucky oil sands have become the glamorous industry as conventional oil and natural gas production wanes. Suncor, Syncrude and the other big oil sands players are promoted as phenomenal Canadian success stories. When he's on foreign trips, Prime Minister Stephen Harper touts Canada as an "emerging energy superpower," as if it were the next OPEC. It's a misleading, extravagant and potentially dangerous claim. Canada will not save the world from oil shortages and the numbers tell the story.

Road to Riches: Pipeline Through Paradise

Oil executives have discussed the "Arctic play" for well over 30 years. But so far, U.S. exploitation of the area's petroleum resources has been limited largely to the rigs in Prudhoe Bay off the Beaufort Sea on Alaska's north coast, which pump oil into the Alyeska pipeline that runs south through the state to the port of Valdez, where it is loaded onto tankers. Now, the industry is seeking to move forward on a number of grand schemes to fully exploit what the former president of Shell Oil called the "stranded" reserves of the Arctic region



-such as Shell's planned drilling in the Beaufort Sea off the coast of the Arctic National Wildlife Refuge, which has been delayed by a court challenge by Native Alaskan and environmental groups.

Making profitable use of these abundant fossil fuels depends not only on drilling rights, but on creating a mode of transportation—a way to bring the oil and gas south to

energy-hungry consumers. And here, the path to the industry's goals both short-term and long runs through one thousand miles of pristine Canadian wilderness, following the course of the mighty Mackenzie River. Now, decades-old plans are again moving forward to build a pipeline through the Mackenzie River Valley that would carry natural gas directly to southern Canada and the lower forty-eight. If current proposals succeed, they will lay the groundwork for what will become North America's greatest ever industrial development plan—bigger than the Colorado dams or the Tennessee Valley Authority. They also will disrupt the native cultures of a vast, virtually untouched region and wreak widespread destruction on one of the last best places on earth. "This is the environmental frontier," Kert Davies of Greenpeace told Mother Jones. "It will be a giant fight over the next 20 years."

The Last Stand in the Boreal: Mackenzie Valley



"Historically, the threats to the boreal were concentrated in the southern tier, mostly from industrial forestry — and frankly, the threats haven't been that large until the last 10 or 15 years," says Evie Witten, director of The Nature Conservancy's boreal forest program. "But changes in technology have allowed the use of what until now had been quite marginal forests for fiber and pulp production. That has greatly increased the pressure on the forest."

While more than 70 percent of Canada's northern woodlands remains unaltered by industrial activity, the pressures to develop these remote lands are piling up: Along with the long-standing threat of logging, there are growing demands from diamond mining, hydroelectric dams, and, most of all, an explosion in energy and mineral development.

"Some large swaths of forest are being cleared in Alberta for oil-sands development, and several hydro projects are in the works or are being planned," says Witten. "Oil, gas and mining are going to be the real changes in the future — these will be fundamental changes on the landscape, and they're going to be concentrated this time in the north."

Nowhere in the boreal are these pressures more front and center - and nowhere is time ticking away so rapidly - as along the Mackenzie River. Wide and brawling, heavy with sediment, the Mackenzie and its tributaries drain a fifth of Canada's land area, flowing almost due north to the Beaufort Sea.

As if to match that epic sweep, the Canadian government has fast-tracked a longdormant plan to build a 750-mile-long natural-gas pipeline the length of the Mackenzie Valley, hurried along by explosive oil and natural-gas demands to the south.

The Mackenzie Gas Pipeline, if built, will be one of the largest industrial developments in Canadian history. The project would bring roads, airstrips, compressor stations, processing facilities, feeder pipelines, at least three natural-gas production fields and housing for an estimated 8,000 construction workers into one of the largest roadless areas remaining on the continent.

In the face of these mounting threats, the boreal is also the setting for one of the most ambitious conservation projects ever undertaken — one that brings together an unusual cadre of stakeholders.

Canada's deliverable natural gas seen falling in 2007-2009: NEB

Deliverability of Canada's conventional natural gas will decline by 7 to 15 per cent during 2007-2009 as a result of lower drilling activity, but other sources should fill the gap, the National Energy Board says.

In a report released Wednesday, the NEB says gas deliverability will decrease from 483 million cubic metres per day as of the end of 2006 to a lower range between 410 and 449 million cubic feet per day in 2009.

"The drilling pace that sustained Canadian natural gas deliverability is gone, for the moment," board chairman Gaetan Caron said in a release.

Oilpatch giant rebels

Alberta heavyweight producer Canadian Natural Resources Ltd. said it may cancel three in-situ oilsands projects worth \$7-billion, halt two major expansions of its Horizon oilsands mining project, and slash natural-gas drilling by 65% next year if Alberta implements proposals to significantly increase its take from the oil-and-gas sector.

In the most dramatic warning to the Alberta government to date, the senior company said its Kirby, Birch Mountain and Gregoire Lake thermal projects would no longer be economic under proposed recommendations by a provincially appointed panel into the royalty regime.

Canadian Natural, Alberta's second-largest natural-gas producer and largest heavy-oil producer, said it will also scrap Phases 4 and 5 of its Horizon oilsands project, or when it reaches production of 232,000 barrels a day. In total, the company would back off oilsands projects that would have added 425,000 b/d and move its investment to British Columbia, Saskatchewan and West Africa, pay down debt or give cash back to shareholders.

Meanwhile, natural-gas drilling would decline to only 128 wells in 2008, from a high of 692 in 2005, the company said.

Higher royalties could result in 30,000 job cuts in Alberta: FirstEnergy

Proposed changes to taxes and royalties charged by Alberta's provincial government to the oil and gas industry, combined with a deep natural gas drilling slump already under way, could result in more than 30,000 job cuts, FirstEnergy Capital Corp. predicted Wednesday.

Already, 3,500 jobs are likely to be eliminated next year because of low natural gas prices, and another 8,100 jobs will be cut if the new fiscal rules recommended last month by a provincial panel are adopted, the brokerage said.

Royalty hike will kill pipeline

Increasing tax take via a royalty increase will not produce the royalty panel's simple promise of a \$2-billion increase in revenue. In fact, Alberta's revenue stream will decrease. EnCana and Talisman alone, as stewards of their shareholders' money, would need to move \$1.5-billion worth of investments to other jurisdictions. Canadian Natural Resources Ltd.'s project cancellations would eliminate the need for one of the five multibillion-dollar oil pipelines proposed to handle increased oilsands production. That pipeline would have created more than 12,000 person-years of work, added \$1-billion to Canada's GDP and increased personal, corporate and property taxes paid to governments. So much for reduced wait times in emergency rooms and more funds for teachers and schools!

David MacInnis is president of the Canadian Energy Pipeline Association (CEPA).

Oil major warns of \$20-billion in cuts

"There's room for increased royalties. We're saying that," Canadian Natural president Steve Laut said in an interview.

"But it has to be at higher prices, and it has to be done in a way that makes sense, that's fair for Alberta; fair in the sense it gets more royalties but also ensures that there is a vibrant oil and gas sector."....

....Canadian Natural, which has the biggest exposure to Alberta among the major energy companies, has taken the hardest hit in the market since the royalty report. The company's market capitalization has fallen by \$3.8-billion (Canadian) to \$39.2-billion as its stock has slid 8.8 per cent, compared with a 4.4-per-cent decrease in the Toronto Stock Exchange energy index.

Alberta Oil Sands Group Makes Royalty Recommendations

A concerned group of in situ oil sands development corporations submitted a letter to the Government of Alberta in a joint response to the Report of the Alberta Royalty Review Panel. The companies assert that the Report fails to account for the many ways

in which Alberta's smaller, entrepreneurial firms contribute to our economy by taking on huge risks and driving the technologies that make the Alberta Advantage possible.

The group, called the Alberta In Situ Oil Sands Alliance says that the Panel appears to have overlooked the fact that Alberta's oil sands are costly to develop and produce. The economic terms must be fair and balanced for the province and the industry in order to attract the substantial financial resources needed to fund these world-scale projects. Alberta-based corporations, and the citizens of Alberta, will face significant and adverse consequences if the Panel's recommendations are implemented.

The Alliance's members and many other small Alberta companies play a very important role in driving technology forward and unlocking value for the benefit of Albertans. Their business models depend on finding economic and environmentally friendly solutions for developing Alberta's largest resource. The expertise that crafts these technologies resides in the Albertans that staff these companies.

Costs, prices to cut gas output

Most of the country's gas reserves lie in the Western Canada Sedimentary Basin, a mature region where many wells are approaching the end of their producing life. In recent years, spiralling demand and high prices have spurred producers to increase drilling and exploration programs, helping to maintain overall production levels despite rising costs and fewer prospects.

However, in 2006 natural gas prices moderated from their previous hurricane-assisted peaks, while exporters' profit margins were hit both by labour costs continuing to climb - spurred in part by Alberta's oil sands boom - and the continuing appreciation of the dollar. Consequently, many producers slashed their drilling budgets for 2007, and the country's top three - EnCana Corp., Canadian Natural Resources Ltd. and Talisman Energy Inc. - all say they aren't likely to boost spending next year either.

Sack Stelmach

Stelmach has had 10 months to legitimize the PC party's private leadership vote by calling a general election. That he has refused to do so -- and is getting away with it -- is an indictment of Alberta's weak culture of political accountability, atrophied after 36 years of one-party rule. The unofficial motto of the Alberta PCs is that of France's Louis XIV: "L'etat, c'est moi."

If Albertans in general had made the same mistake as the PC party did in voting for Stelmach, his proposed new \$2-billion oil and gas royalty increase would be no less foolish, but it would have the veneer of democracy to it. Or if that tax had been proposed by the PC party in the last election under Klein, then even unelected Stelmach could claim a mandate to impose it.

But Stelmach has neither of these democratic fig leaves. And so an unelected Alberta Premier is about to impose a punitive new tax on Alberta's key industry, without the trifle of public consent. Even King Ralph wouldn't have been so presumptuous.

The rationale for this tax hike can be nothing but envy: The provincial government's annual surplus exceeds \$8-billion, despite spending more per capita than any other province. This is a jealous ambush of the oil and gas industry -- killing the goose that lays the golden egg.

A deep well of discontent

When Ed Stelmach unexpectedly became Premier of Alberta last December, following the long reign of Ralph Klein, a quiet but important shift occurred: Power moved from Mr. Klein's home base in the energy capital of Calgary to Mr. Stelmach's traditional territory, rural Alberta.

Mr. Stelmach has hardscrabble roots on a farm near Edmonton that his grandfather settled in 1898 and in his early 20s he returned to work the homestead instead of heading to law school after an older brother died unexpectedly. That turn back to the farm led him away from corporate power, and even though Mr. Stelmach put grander ambitions on hold, he slowly and surely still managed to rise to the province's highest office, arriving there without years of hanging out at Calgary's Petroleum Club, unlike Mr. Klein and other predecessors.

Today, Mr. Stelmach is poised to make the most important economic decision in the country this year - promising a decision by month's end on what's fair for energy royalties. He is not an eloquent man but is known as a careful leader, a listener - precisely the opposite of Mr. Klein, a shoot-first-ask-questions-later man whom oil executives considered a trustworthy buddy.

Now, the blunt question is whether Mr. Stelmach has the acumen to make the right decision on royalties, and business fears what it calls a potential catastrophe if he makes the wrong move and sinks the country's most robust economy. Billions of dollars, at the very least, are on the line, along with thousands of jobs - in Alberta and across Canada. Mr. Stelmach's government is not particularly popular and there is a strong temptation to play the populist card given the polling numbers that show some support for a landmark report that calls for significantly higher royalties to be implemented in full.

Tap into coalbed methane potential

Whether the Kyoto accord comes into effect or not, clean energy will be the mantra for governments, and presumably for producers and consumers.

And into that mantra, companies that have access to coalbed methane (CBM) -- or its variant coalseam methane (CSM) -- are hoping to make their mark. Methane is the major component of natural gas and is also a byproduct of the coal-formation process.

"Utilization of coalbed methane has three major benefits," said a recent report from Credit Suisse. The benefits: bridging the energy shortage, improving coal-mining safety and lowering emissions.

Syncrude Yet To Decide On Repairs For Malfunctioning Coker Unit

Syncrude Canada Ltd. is still working on a malfunctioning coker unit at its Fort McMurray, Alta., oilsands project, below, that has cut production at the site by about 20% for more than a week. Siren Fisekci, a spokeswoman for Canadian Oil Sands Trust, the largest shareholder in the Syncrude joint venture, said no decision has yet been made on whether to close the facility for up to three weeks to clean out coke deposits.

"They are still working to restart it and they haven't determined if they want to go in for a fuller cleanout," she said. The Sept. 30 malfunction at Syncrude's Coker 8-3 cut output at the 350,000-barrel-a-day site by 70,000 barrels a day. Repairs at the unit, part of a plant that converts tar-like bitumen stripped from the oilsands into refinery-ready crude, were initially expected to take only a few days.

The Syncrude Canada plant is the world's largest producer of synthetic crude oil.

Builder Of Oilsands Upgrader Seeking Partner To Share Costs Of Project

North West Upgrading Inc., a private company building a \$4-billion oilsands upgrader, said yesterday it is searching for a partner willing to shoulder some of the costs for the project. North West has enlisted investment bankers in the hunt to find a buyer for an unspecified share of the independent upgrader, which will convert the tar-like bitumen stripped from the oilsands, pictured above, into re-finery-ready crude. North West this month began construction of the facility in an industrial region 45 kilometres northeast of Edmonton. The first of three phases of the standalone unit, which will buy its feedstock from oilsands producers, is slated to begin processing 77,000 barrels of bitumen a day by 2010. Two other 77,000-bpd phases are also planned. North West said in a release it wanted a partner "in order to reduce the quantum of capital required to complete the project." The company said last month it would likely look for an investor as costs for the project's initial stage climbed from an initial estimate of \$1.6-billion.

Feds, Nova Scotia reach offshore resources deal

In the 2007-08 federal budget, the federal Conservative government changed the equalization formula.

Nova Scotia and Newfoundland and Labrador had the option of keeping the old equalization formula and the 2005 Atlantic Accords, or the new, enriched formula -- at the price of clawbacks of offshore revenues and a fiscal cap.

Nova Scotia, which agreed to the new formula, claimed the new system could cost it up to \$1 billion over time. The feds claim the arrangement provided the province with an immediate benefit of \$100 million.

"We will ensure these provinces keep any such benefits by allowing them to effectively

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 switch back to the 2005 accord under those particular circumstances," Harper said.

"But once again, while this gives greater flexibility to Nova Scotia's choice -- and Newfoundland's choice -- these provinces must still choose between the two equalization arrangements. They cannot have both."

Juno queries Big Oil over bribes

Alaska lawmakers are questioning major oil companies over their role in a bribery scheme that has netted the criminal convictions of a former legislator and two former executives from VECO Corp., once the state's largest oil-service company.

BPPLC, ConocoPhillips Ltd. and Exxon Mobil Corp. have denied involvement in the ongoing political corruption scandal in which the VECO officials used bribes to push for a favourable outcome in an oil-tax overhaul.

Canada needs carbon regulations: Rubin

Canada will most likely introduce a cap-and-trade system to curb greenhouse gas emissions — but only after the U.S. paves the way, a CIBC economist predicted Wednesday.

Setting a price on emissions is the best way to achieve sustainable reductions, Jeff Rubin, chief economist at CIBC World Markets told a Toronto audience of investors, executives and policy makers.

But history shows that's unlikely happen until the U.S. formulates its own policies.

"When Washington adopts firm and hard emission reduction targets, you can rest assured that it will require that its major trading partner, Canada, do the same," Mr. Rubin said.

He expects the next U.S. administration to implement a national carbon-cap-and trade system amid growing public pressure and because such systems are already running in most U.S. states.

Scaling Geothermal for Reliable Baseload Power

Geothermal is the most reliable form of renewable baseload power and given the proper financial support from the private sector -- and favorable policies from government -- it will become a viable alternative to coal, natural gas and nuclear, according to speakers at the Geothermal Resource Council's annual meeting in Reno, Nevada earlier this week.

"We spend a lot of time talking about the resource that beams down from space or blows over us. But we don't spend enough time looking at our very abundant terrestrial

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 geothermal resources that will provide reliable, renewable baseload power."

-- Andy Karsner, Assistant Secretary for Energy Efficiency and Renewable Energy, DOE

No more water and trees; economy is all about oil and minerals now

As the Canadian dollar continued to make parity look simple Thursday morning, opening at a stellar 102.33 cents (U.S.), a new study from Ottawa pointed to a quiet revolution in the nation's commodity sector that has helped push the currency aloft.

The key message in the study, conducted by Philip Cross, chief of current economic analysis at Statistics Canada, is that the old saw about Canadians being hewers of wood and drawers of water is way out of date. What the country now boasts is a true "underground economy" where subsoil resources are providing most of the power.

"Since 2002, there has been a large shift in the resource sector away from trees and towards commodities found mostly underground, notably oil and metals," Mr. Cross says in the study, which appears in the October issue of Statscan's Canadian Economic Observer. "It is more accurate (if less catchy) to say Canadians are now 'conveyers of crude and moilers of metals'."

The shift reflects what many have dubbed a "super cycle," the longest and largest upswing on record for commodity prices, he says. This began in 2003 in the energy sector, where prices doubled before levelling off in 2005. Then metals developed even more momentum, with prices there tripling, and then, last year, agriculture caught fire, with a doubling in grain boosting farm prices by half.

From hewers of wood to world beaters

The boom in oil, metals and agriculture is financing activity that goes well beyond the country's traditional role as an exporter of raw materials.

Philip Cross, chief of current analysis for Statistics Canada, likens the effect to the gold rush boomtowns – when more durable fortunes were often made by supplying the big-spending miners than by pulling the gold from the ground.

In a report released Thursday, Mr. Cross said Canada has been "rediscovering its base" over the past five years.

"However, the growth of the sector has been anything but traditional," he said.

Canadian companies are developing new technologies to exploit the resources more economically while reducing environmental hazards, are boosting the processing part of their business and are supporting a wide net of secondary industries that feed off them.

In his report, Mr. Cross challenged the old stereotype of a resource-based economy that merely ships raw materials to export markets. And he said energy and metals have replaced forestry products and hydroelectric power as the country's most valuable export commodities.

"Rather than being 'hewers of wood and drawers of water,' it is more accurate to say Canadians are 'conveyors of crude and moilers of metal," he said.

That too is a partial description – failing to capture the full range of business activity generated by the resource sector.

Should we worry about being a resource economy?

Is being a resource-based economy really so bad?

You would think so from the comments Globe and Mail readers posted Thursday after Statistics Canada drew attention to the overwhelming importance of metals and minerals to the Canadian economy.

The tone was practically funereal and there was much discussion about the potential negative consequences of making money from mines and old wells rather than high-tech gadgets and software. It was almost as if the study contained bad news....

....Instead, it chronicled developments in the resource sector and pointed out that Canada has been able to benefit from the so-called commodity super-cycle by having lots of what the world wants, even as demand changes from energy to metals to farm products.

The study went on to say that more processing is done in Canada than is commonly believed, which would seem to be good news. So why the negative reaction?

Canada tops for Third World support, bottom for environment

Canada ranks fifth among the 21 wealthiest nations of the world when it comes to overall support for developing countries, but near the bottom of the list for its environmental policies, according to a new study released Wednesday.

The Commitment to Development Index, produced by the Washington-based Center for Global Studies, concluded that Canada's weak policies on climate change are putting it well behind nearly all industrialized nations, except for the United States, Australia and Spain. In other categories, Canada was praised for showing strong support for research and technology and low trade barriers against exports from developing countries.

"But Canada's positive impact is reduced by its large share of tied foreign aid, its arms exports to undemocratic governments and its poor environmental record from the standpoint of developing countries," reads the report.

The annual index measures the wealthy nations based on their policies and ability to deliver support for the developing world in seven key policies -- aid, trade, investment, migration, security, technology and the environment.

The Netherlands finished at the top of the overall rankings, followed by Denmark, Sweden and Norway. Meantime, Japan finished at the bottom of the index because of trade barriers on exports from developing countries. Greece and Italy were also at the

Cost of nuclear clean-up rises to £73bn

The official cost of cleaning up 20 of Britain's nuclear facilities will be more than \pounds 73bn, 16% higher than estimated last year, according to the Nuclear Decommissioning Authority yesterday. The latest rise in clean-up costs came as the government completed consultation on whether to proceed with a new generation of atomic plants, with one potential operator arguing there was a "moral imperative" to allow more to be built.

The NDA blamed the soaring cost estimates for clean-up on obtaining more detailed estimates for dismantling buildings and clearing sites from individual operators managing locations such as Sellafield in Cumbria for the state-owned agency.

Energy Crunch Threatens South American Nations



For Chile and Argentina, it was the frostiest of winters, and not just the reading on the thermometer.

During one of the coldest South American winters here in decades, neighboring Argentina cut at least 90 percent of the natural gas it sends to Chile 79 times along pipelines that connect the two countries.

Power plants and factories in this smoggy capital were forced to switch to diesel and fuel oil, which belch more air pollution and have nearly quadrupled the cost of producing electricity. Santiago reported its highest number of dangerous smog days in the past seven years.

Argentina's actions have chilled relations between the two countries. But the impact of South America's energy crisis is far broader. Across the region, concerns about energy are roiling national politics, generating tensions between neighbors and emerging as one of the biggest brakes to growth and integration.

Britons Top Table of Carbon Emissions from Planes

Britons are the world's worst offenders when it comes to carbon emissions from air travel, according to figures published on Wednesday by market research company Global TGI.

Not only are Britain's average air emissions per adult the highest out of the 20 countries covered at 603 kg per year, they are also a third higher than second-placed Ireland's 434 kg and more than double the 275 kg from third-placed Americans. "There are clearly a number of reasons for it, some of which include the British weather and people wanting to get away from that, some of which are to do with our being an island," said spokesman Geoff Wicken.

"But the rapid growth in low-cost flying has undoubtedly been a factor," he told Reuters. The British government has pledged to cut the country's carbon emissions as part of the battle against global warming, but it is also backing rapid expansion of air travel.

Shipping pollution 'far more damaging than flying'

New research suggests that the impact of shipping on climate change has been seriously underestimated and that the industry is currently churning out greenhouse gases at nearly twice the rate of aviation.

Shipping, although traditionally thought of as environmentally friendly, is growing so fast that the pollution it creates is at least 50 per cent higher than previously thought. Maritime emissions are also set to leap by 75 per cent by 2020.

The International Maritime Organisation, the UN body set up to regulate shipping, has set up a working group due to report this year. Research seen by the group suggests previous calculations, which put the total at about 600 million tonnes per year, are significantly short. The true figure is set to be more than one billion tonnes, according to a confidential report produced for the IMO by Intertanko, the International Association of Independent Tanker Owners.

In comparison, aviation produces an estimated 650 million tonnes. The old figures were based on 2001 estimates, but shipping has grown by 4.5 per cent on average annually.

While other industries have come under pressure to clean up their acts, shipping has so far escaped.

Killer whales store pollution found in coastal waters

A 3-year-old killer whale appears to be among the most contaminated orcas living in Puget Sound, contradicting what what government researchers expected to find when they started testing the whales for flame retardant and pesticides in a new study.

The researchers said they were expecting to find the highest concentrations of pollutants in the older males and the lowest levels in the older females who are known to clear contaminants out of their systems when they give birth to and nurse their calves....

....He said it's not surprising that killer whales would have relatively high levels of contaminants in their skin and blubber.

"They're a top predator. Virtually everything that moves up through the food chain is going to end up in killer whales," he said.

A study like this helps track trends in the ecosystem and may give clues to why the killer whale population has declined, the researchers said in their report published Wednesday in the Marine Pollution Bulletin.

Canada invests 42.5 million to protect its ocean waters

Canada on Tuesday announced an investment over three years of 42.5 million dollars (US) in conserving and protecting its territorial waters, especially the Arctic Ocean....

....The government said it will also increase its research and protection activities in Canada's Arctic waters. In particular, the money will be used to evaluate the environmental, social and economic consequences of predicted increasing navigation in the Arctic region, as global warming melts the polar ice cap opening a Northwest Passage by 2035.

Canada considers a navigable route off its Arctic coastline part of its territorial waters, while the United States deems it international waters. Prime Minister Stephen Harper's conservative government has repeatedly stated it intends to defend Canada's sovereignty over the Great North.

Will Southwest's economy dry up?

Climate models by U.S. academics project a 15 percent decrease in moisture in the Southwest between the years 2021 and 2040. That might not sound so bad, but the same drop in precipitation led to the great Dust Bowl in the 1930s.

One of the things that tend to come with drought tends to be heat waves -- and the demand for electricity is very very high during those heat waves. And the hydropower system is one of our great buffers there, because they can spin it up very fast.

The immediate and most severe impacts are brownouts.

Mount says those brownouts will likely become more and more frequent. As snowpacks recede, he says, dam levels will drop and strain the region's power grid.

Lake Lanier has three months of water storage left



Lake Sidney Lanier, metro Atlanta's main source of water, has about three months of storage left, according to state and federal officials.

That's three months before there's not enough water for more than 3 million metro Atlantans to take showers, flush their toilets and cook. Three months before there's not enough water in parts of the Chattahoochee River for power plants to make the steam necessary to generate electricity. Three months before part of the river runs dry.

"We've never experienced this situation before," state Environmental Protection Division Director Carol Couch said of the record-breaking drought and fast-falling lake.

Our Drinkable Water Supply Is Vanishing

Historically water has been a facet of ritual, a place of gathering and the backbone of community.

But times have changed. "In an age when man has forgotten his origins and is blind even to his most essential needs for survival, water has become the victim of his indifference," Rachel Carson wrote.

As a result, today, 35 years since the passage of the Clean Water Act, we find ourselves are teetering on the edge of a global crisis that is being exacerbated by climate change, which is shrinking glaciers and raising sea levels.

We are faced with thoughtless development that paves flood plains and destroys wetlands; dams that displace native people and scar watersheds; unchecked industrial growth that pollutes water sources; and rising rates of consumption that nature can't match. Increasingly, we are also threatened by the wave of privatization that is sweeping across the world, turning water from a precious public resource into a commodity for economic gain.

Ethanol push could threaten water supplies

When it comes to solving the fossil fuel crisis, it seems like every silver lining comes accompanied by a dark cloud.

As attention turns more and more toward using corn and other products to produce ethanol for fuel, experts warn that increased production of these crops could pose a threat to the nation's water supplies.

Both water quality and the availability of water could be threatened by sharply increasing crops such as corn, said Jerald Schnoor, professor of environmental engineering and co-director of the Center for Global and Regional Environmental Research at the University of Iowa....

....Water available depends on where the crops are grown, he added. If it is an area needing irrigation, it takes 7,570 litres of water for every bushel of corn: "That's a high amount of water."

And that is in addition to the secondary issue of how much water is needed by the factories that produce the ethanol, he said.

Biofueling water problems

National Academies' National Research Council (NRC), the top science review board in the U.S., has released a new report that fuels the concerns of environmentalists. The study, Water Implications of Biofuels Production in the United States, warns that if the U.S. continues to expand corn-based ethanol production without new environmental protection policies, "the increase in harm to water quality could be considerable." The results: more soil erosion, more pesticides



and herbicides in waterways, more low-oxygen "dead zones" from fertilizer runoff, and more local shortages in water for drinking and irrigation.

For now, Rash is waiting to see whether corn ethanol will keep its front-runner status or will be replaced by other green fuels. "I'm not anti-ethanol, I'm just really cautious about the boom," he says, citing concerns about both the economic and environmental sustainability of corn ethanol. For one thing, he notes, traditional corn-soy rotation replenishes soil nutrients that could be stripped away by corn in the long run.

USDA: Wheat Stockpiles Shrinking Fast

U.S. wheat stockpiles may shrink to the lowest level in 59 years due to robust demand for the grain following two years of weak harvests worldwide, the U.S. Department of Agriculture said Friday in a report.

The USDA projects wheat supplies for the 2007-2008 crop year will fall to 307 million bushels, down 55 million bushels from its estimate last month, due to the fast pace of export shipments. Foreign appetite for the country's wheat has surged after poor weather damaged harvests around the world this year. Record high prices have done little to dampen demand.

Stockpiles of wheat at the crop year's end would be the lowest since 1949.

Peace likely to erode alongside glaciers, coasts

What does global warming have to do with global peace? The globe may find out sooner than we think, experts say.

"Climate change is and will be a significant threat to our national security and in a larger sense to life on Earth as we know it to be," retired Gen. Gordon Sullivan, former U.S. Army chief of staff, told a congressional panel last month.

The Nobel Peace Prize Committee agrees. In awarding the prize Friday to climate campaigner Al Gore and the Intergovernmental Panel on Climate Change, a U.N.-sponsored network of scientists, the Norwegian committee said the stresses of a changing global environment may heighten the "danger of violent conflicts and wars, within and between states."

Those like Sullivan who study the issues point particularly to the effect of drought and altered climate patterns on food and water supplies, leading to shortages that could spur huge, destabilizing migrations of people internationally.

In a report in May, scientists advising the German government noted specific scenarios that could upend the lives of millions, driving them across borders to overwhelm other lands.

"The dieback of the Amazon rain forest or the loss of the Asian monsoon could have incalculable consequences for the societies concerned," said the German Advisory Council on Global Change.

Bluetongue, leapfrog and global warming

Q I keep hearing about bluetongue. Why? What is it?

A Bluetongue is an animal virus, spread by tiny flies called midges – also called biting gnats, or no-see-ums. Scientists have been predicting for ages that insect-borne diseases would move north as global warming takes hold. They have predicted since at least 2002 that bluetongue could invade northern Europe and Britain. Those predictions have now come true.

Q Where did it come from?

A Bluetongue infects ruminants – cattle, sheep, goats, deer, and the like – throughout Africa, southern Asia, and parts of Latin America. It does not infect humans. In most

The Oil Drum: Canada | The Energy and Environment Round-Up: October 14thtpp://canada.theoildrum.com/node/3081 places that have it, livestock have evolved resistance to the virus, though it still takes a

Sheep get much sicker with bluetongue than cattle; they develop fever, difficulty with breathing and swallowing, and swollen feet and faces. Sheep's tongues can turn blue if the swelling restricts circulation to the mouth, but despite the disease's name, this rarely happens. In non-resistant sheep, up to 80% of those infected can die.

Gold-mining giants leave Africa to clear up mess: report

Open-cast gold-mining operations in Africa by multinationals have created an ecological and health time-bomb and failed to help local people out of poverty, campaigners said at a book launch Tuesday.

"It's an ecological time-bomb," said Swiss journalist Gilles Labarthe, the author of "Black Gold", which is being published in collaboration with Oxfam France-Agir and the association Survie (Survival).

"The accumulation of ecological degradation and the damage to health caused by opencast gold-mining is going to ruin the producing regions for generations to come," he added.

Cyanide and mercury contamination of the groundwater had led to cases of paralysis, blindess and numerous miscarriages, he said. The two toxic substances are used to purify the minerals during mining.

Invasive, Indeed

toll.

When we farm, clear forests, and build cities, dams, and roads, we dramatically alter the landscape. In some places, we increase the land's productivity—measured as the amount of plant life at the base of the food chain—by adding immense amounts of water and fertilizer. New research indicates that on the whole, however, human presence significantly decreases Earth's biological productivity. For instance, many of today's cities occupy large patches of what had been some of the world's most fertile land.

Of the biological productivity that remains, people are gathering an ever-increasing share, sometimes by boosting their quality of life, but often merely by dint of their burgeoning numbers. In some regions, each spanning millions of square kilometers, human activity consumes almost two-thirds of the biological productivity that would otherwise be available.

"We were surprised how intensively these regions were being affected" by human presence, says K. Heinz Erb, an ecologist at Klagenfurt University in Vienna. "Only onethird of the natural productivity is left for all the other species."

Overall, nearly one-quarter of Earth's land-based biological productivity ends up in people's hands and bellies, Erb and his colleagues estimate. Other research suggests that people appropriate a comparable, but slightly smaller, share of the ocean's productivity —defined as the mass of photosynthetic organisms at the base of the sea's food chain.

A projected 25 percent increase in the world's population by 2030 is bound to strain ecosystems even further. Increasing agricultural efficiency by irrigating and fertilizing the land can add to the strain by boosting erosion and the nutrient runoff that creates toxic algal blooms and large anoxic zones in oceans. Adding insult to injury, proposals to transition from fossil fuels to renewable biofuels would place yet more of Earth's productivity in people's hands.

Some scientists now wonder: At what point do the world's ecosystems begin to break down? Or, more frighteningly, has that process already begun?

Buying Happiness: The Depressing Reality of Materialism

Not only does more money not generally translate into greater happiness, but researchers like Tim Kasser and Juliet Schor have shown that the intense pursuit of wealth and material goods can actually make a person ill. In Born to Buy, Schor's work with "tweens" (children between 8 and 12) showed that "[t]he more they buy into the consumer materialist messages, the worse they feel about themselves, the more depressed they are, and the more they are beset by anxiety, headaches, stomach aches and boredom." Kasser's studies have borne similar results, and he concludes in his book,*The High Price of Materialis*, that "when people follow materialistic values and organize their lives around attaining wealth and possessions, they are essentially wasting their time as far as well-being is concerned."



'China-dependence' going up for life in UK, as World as a whole goes into 'ecological debt' 06/10/07

Released on the day that the world as a whole goes into ecological debt - marked internationally by the Global Footprint Network - Chinadependence reveals the many ways in which Britain is becoming increasingly dependent on the rest of the world to fuel our high-consuming lifestyles. In particular, Chinadependence reveals a striking rise in our dependence on a wide range of Chinese imports. And, because the greenhouse gas pollution that results from their manufacture is blamed on China, not the consumers in the UK, we are turning China into our 'environmental laundry' with devastating consequences for the planet.

Chinadependence also reveals that Britain's dependence on the rest of the world for basics like food and energy is still rising. The report, the second overview of the UK's place in the international system by nef, shows that the burden in terms of resource consumption that our lifestyles exert on the fields, forests, rivers, seas and mines of the rest of the world is still increasing despite increased public concern about climate change. This comes as other research shows that a high quality of life is as easy to achieve at very low levels of consumption as at high levels, and as awareness is growing "During the recent banking emergency people feared that the UK would slide from a liquidity crisis into an insolvency crisis. Few saw the link between easy credit and over-consumption that is leading to a far worse problem: an environmental insolvency crisis. This report shows the urgent need to develop a sensible and positive pattern of interdependence between the UK, the rest of the world and the earth's life-support systems," says Andrew Simms, lead author of the report and nef policy director.

Chinese loggers stripping Myanmar's ancient forests

In eight weeks the quiet narrow road that hugs Nongdao's sugarcane fields on the way to the ancient jungles of Myanmar will be overrun with Chinese trucks loaded down with illegal timber.

The large wheezing diesels will dump their logs in this southwestern border sawmill town where it will be processed, then shipped to Chinese furniture makers on the seaboard before being exported for Western consumption.

"Come December and January this road will be so packed with trucks heavy with Myanmar timber that you can't pass for hours," said Xiao Zhengong, a 32-year-old resident of the area.

Nongdao, a town of just hundreds of people, is one small link in the global supply chain that makes up the multi-billion-dollar wood processing industry centred in China.

Each year caravans of Chinese trucks haul tens of thousands of tonnes of Myanmar's tropical trees to China, the world's largest importer of rare timber and a wood manufacturing centre.

"Six of ten timber logs chopped in the world's forest are destined for China," said Tamara Stark, a forestry expert for Greenpeace in China, a rapacious pace many fear will soon leave much of Southeast Asia treeless.

After 10 years of intense harvesting, Myanmar's forests have disappeared to such an extent that Chinese loggers from Yunnan province are now struggling to find accessible swathes of forest to cut.

Three Gorges Dam could be environmental disaster

China plans to relocate 4m people from the hillsides around the Three Gorges Dam, the world's largest, in an unprecedented effort to stave off an environmental disaster....

....The announcement comes in the wake of increasingly panicked reports of the environmental effects of the £13bn dam, one of the world's most ambitious infrastructure projects, whose first stage opened in 2003.



It has enabled container shipping to reach all the way up the Yangtze River from Shanghai to Chongqing, the biggest city of south-west China, and its hydro-electric turbines will eventually generate as much electricity as 18 nuclear power stations, but at huge cost.



The river is silting up due to the reduced flow of water, while the residue of human and industrial waste gathering behind the dam is causing water quality to deteriorate.

Of most immediate concern is erosion, with the hillsides suffering a series of landslides and the Three Gorges Reservoir's shoreline collapsing in more than 90 places, according to one study.

Last week, a government report admitted: "There exist many ecological and environmental problems concerning the Three Gorges Dam. If no preventive measures are taken, the project could lead to catastrophe."

China to move four million more from Three Gorges area

Already 1.4 million people have been forced to leave their homes to make way for the world's largest hydropower project, which started operations last year, but the new announcement has radically expanded the resettlement project.

The four million residents who will be "encouraged" to leave their homes live near the dam's reservoir, which extends for 600 kilometres (370 miles), the China Daily reported, citing local officials.

They will move to the nearby outskirts of the sprawling Chongqing municipality over the next 10 to 15 years, it said, adding the plan had been approved by China's cabinet last month.

Chongqing vice mayor Yu Yuanmu was quoted as saying the relocations were necessary to "protect the ecology of the reservoir area," which was becoming increasingly threatened by over-population and industrialisation.

"The reservoir area has a vulnerable environment," Yu said.

Missing the barefoot doctors

In recent years China's Communist Party has begun to pay attention to a deep malaise in the countryside: the prohibitive cost of health care and education for the rural poor, mounting debts at the lowest levels of government, bloated bureaucracy and a growing wealth gap between rural and urban areas. Riots have become common, fuelled by the attempts of avaricious governments to raise money by selling farmers' land. Incomes may have been rising, but so has dissatisfaction. In some parts of China, more than 60% of those in dire poverty have been driven there by medical expenses. And for many rural residents the higher levels of schooling are becoming unaffordable.

President Hu Jintao and his prime minister, Wen Jiabao, like to take credit for what they portray as a change of tack. Under their leadership, the party's emphasis has switched from an all-out pursuit of economic growth to the need for balanced development that takes more account of the country's poorest. The need, they often say, is to build a "new socialist countryside"....

....The 2,217 delegates to the congress, for whom dissent is taboo, will praise Mr Hu's achievements. For the first time in Chinese history, farmers, except for tobaccogrowers, have been exempted from tax on their land or agricultural production. This has marked the end of a process of rural tax cuts that began well before Mr Hu took office. Since 2003 a new medical-insurance system, involving for the first time a financial commitment by the central government, has been set up in at least 80% of rural counties in place of the long-discarded barefoot-doctor scheme. At the same time, rural children have begun to enjoy free education during their nine years of compulsory schooling—although many still have to pay for their textbooks.

A diet for a small planet that includes some (but not much) meat

First, the obvious news: A completely vegetarian diet would allow New York to support a larger population than a high meat-and-fat diet. But here's the head-twister: Add a little bit of meat and dairy, and you can feed even more people. (Although one might also observe, none of the above diets comes close to allowing New York to support its current population.)....

....The reason is that fruits, vegetables and grains must be grown on high-quality cropland, [explains lead researcher Chris Peters]. Meat and dairy products from ruminant animals are supported by lower quality, but more widely available, land that can support pasture and hay. A large pool of such land is available in New York state because for sustainable use, most farmland requires a crop rotation with such perennial crops as pasture and hay.

Thus, although vegetarian diets in New York state may require less land per person, they use more high-valued land. "It appears that while meat increases land-use requirements, diets including modest amounts of meat can feed more people than some higher fat vegetarian diets," said Peters.

But best not to go overboard! The researchers conclude that about two ounces of meat and dairy a day is the most the land can support.

Sharon Astyk: We're Going to Need More Pie

Pies are part of a whole lifestyle - if you want to eat pie, you have to cook, or you have to have a little Mom and Pop bakery. And those things are democratic too - as opposed to corporatist.

Sure, you say, but if I eat too much pie, I'll get fat. And lord knows, that's a real possibility. But here's the thing. How many of you have ever met a really fat Amishman? I haven't. And they eat pie more or less constantly, or so my Amish

neighbors tell me. Pie can power a human-powered lifestyle in the way that junky processed crap can't. Certainly the Amish cookbooks I've seen are filled with pies. And back when dessert (or breakfast in New England) was routinely pie, people were a lot thinner.

One might argue that pie isn't what makes you fat - it is not living the pie lifestyle. Because the pie lifestyle means picking berries or walking to the bakery. It means eating pie as a treat, and as the place where you put your special festival foods that you don't have all the time, while most of you meals are basic, beans, rice, greens, vegetables. Instead, our breakfasts are poptarts, which despite a plastic resemblance are not pies at all - because they aren't actually food. The poptart lifestyle makes you fat, the pie lifestyle makes you thin, or thinner.

Van Jones: Spiritually Fulfilling, Ecologically Sustainable AND Socially Just?

People are always talking about their comfort zones, you ever heard that expression? "This is outside of my comfort zone." Grow your goddamn comfort zone then, okay? 'Cause we are running out of time. My suggestion is, grow the comfort zone.

People say that I am hard core about some of this stuff but I know because I have been to Davos, and I've sat with Bill Clinton and I've sat with Bill Gates and I've sat with Tony Blair and I've sat with Nancy Pelosi. I've sat with all these people who we think are in charge, and they don't know what to do. Take that in: they don't know what to do! You think you're scared? You think you're terrified? They have the Pentagon's intelligence, they have every major corporation's input; Shell Oil that has done this survey and study around the peak oil problem. You think we've got to get on the Internet and say, "Peak oil!" because the system doesn't know about it? They know, and they don't know what to do. And they are terrified that if they do anything they'll loose their positions. So they keep juggling chickens and chainsaws and hope it works out just like most of us everyday at work. That's real, that's real.

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