The Oil Drum: Canada
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

The Round-Up: March 13th 2007

Posted by Stoneleigh on March 13, 2007 - 2:23am in The Oil Drum: Canada
Topic: Site news
Tags: ethanol, gasoline, housing market, hybrids, income trusts, mackenzie valley pipeline, oil sands, recession, subprime loans [list all tags]

Mackenzie Gas Project to cost $16.2B

> "It's not that surprising, given what we've seen around the world," Steven Paget, analyst with FirstEnergy Capital, said. "In the end, it makes a lot of sense that costs have gone up that much."
>
> Spending throughout the oilpatch has soared in the last two years on rising supply and labour costs, supported by a doubling in commodity prices. However, in the last year, natural gas prices have dropped from earlier highs.
>
> While Broiles would not reveal forward pricing scenarios the consortium was basing the project's economic feasibility on, he did indicate the group was expecting competitive returns from the feds.
>
> "We expect double digit returns on this kind of investment, and we're nowhere near that," he said. "This project needs to be competitive with other opportunities that each of the (co-venturers) have, and it's that simple," he said.
>
> The Mackenzie Pipeline Group has been in discussions with the federal government on several issues, including cost sharing for infrastructure, things like roads and airstrips that residents of the Northwest Territories would also use.

Imperial seeking more aid as Mackenzie cost doubles

> Imperial Oil Ltd. insists it needs billions of dollars in aid from the federal government for its Mackenzie Valley natural gas project, whose estimated cost has more than doubled to $16.2-billion.
>
> On Monday, Imperial outlined its new budget, which has risen by $8.7-billion from a previous estimate of $7.5-billion. Natural gas isn't expected to move until 2014 at the earliest, three years behind the most recent schedule.
>
> About 40 per cent of the cost increase - $3.5-billion - is a result of more precise planning on "what it takes to execute the project, down to accounting for individual workers and the camps and staff required to support them," a company spokesman said. Most of the rest of the increase is attributed to higher costs for things such as steel and labour.

[Oil versus tar: Here's where it gets sticky]

> George W. Bush uses “tar sands,” though he doesn't mean it in a bad way. Most others, from energy companies to the average Albertan, know the massive resource around Fort McMurray as the “oil sands.”
>
> The terms are roughly synonymous — there's no underlying technical or geological difference — but the semantic divide is wide. The use of one or the other is a political declaration, especially with debate over greenhouse gas emissions and a spotlight on the booming oil sands region of Alberta. Oil sands is the standard phrase, but critics almost always say tar sands.
>
> “They were always called the tar sands, when I was young growing up here in the 1970s and [former premier] Peter Lougheed was working to get Syncrude going,” said Brian Mason, leader of the Alberta NDP. “Industry made a deliberate decision to call them oil sands, because it conveyed a cleaner image. The language of tar sands conjured up a sticky, smelly, dirty kind of petroleum resource.”
>
> “And so they [industry] consciously changed it to oil sands,” Mr. Mason said, “and we've [critics] consciously changed it back to tar sands, because that's exactly what it is. This is messy, expensive and dirty oil.”

[Alberta's boom bankrupting its environment, says top scientist]

> Coalbed methane, which involves extracting natural gas from tiny pockets in coal seams, is just starting in Alberta. One of the prime areas for expansion is near the Calgary-Edmonton corridor, where most of Alberta's population expansion is likely to occur.
>
> "How do you drill 80,000 coalbed methane wells over several million folks?" Stelfox asked.
>
> As well, water demand is expected to grow fastest in the south, where river flows are already declining in both quality and quantity. Industrial, residential and agricultural demand on aquifers is also exploding, despite the lack of information on how much water those underground sources can supply.
>
> "It's highly unlikely that the irrigation community will continue to be able to afford it," he said.
>
> Alberta has never considered the cumulative impact of its current environmental boom, Stelfox said.

[PM pledges $156M in green funding for Alberta]

> Prime Minister Stephen Harper has dipped into his Conservative government's new eco fund for the second time in three days, announcing $155.9 million to help Alberta on the climate change front.

[Wood fuel?: Pioneer ethanol deal]

> A small Vancouver company plans to decide when and where to build what could be Canada's first wood-toethanol plant by the end of this year after an agreement with Suncor Energy Products Inc.
>
> The deal sets the stage for the oilsands giant to partner in building the first commercial demonstration plant using technology developed by B.C.-based Lignol Energy Corp. The memorandum of understanding signed this week grants Suncor first right of refusal on Lignol's unique system of transforming wood and forest waste into fuel and other useable products....
>
> ....But the success of the Lignol technology -- which can create ethanol from wood and other cellulosic materials --depends in part on its ability to secure millions in government financing. It hopes to build a small $30- million test plant that produces between 1.5 million and five million litres of ethanol a year. It wants government to cover half the cost.

[Ontario Quits Coal]

> Historically, Ontario residents have not given energy use a second thought, because electricity was dirt cheap and there was never any concern about the availability of nuclear, coal, and hydroelectric power. The result is per capita electric energy consumption that is 55 percent higher than in New York or California.
>
> Despite Ontario's huge power appetite, the government has been under pressure to close the giant coal-fired electricity-generating plants that have been supplying a quarter of its power. Climate change may be an important enough reason to stop burning coal, but the main impetus for the policy has been evidence linking 660 premature deaths and 1100 emergency room visits each year to the chemical stew issuing from smokestacks. Complicating any plan to switch to low-carbon energy sources is the fact that the province gets more than half of its electric power from nuclear reactors that are rapidly approaching the end of their intended life spans and are increasingly in a state of disrepair.
>
> In the face of these competing imperatives, the Ontario Power Authority, in Toronto, set up specifically to manage long-term electric energy planning, has hatched a bold plan that makes hard choices others have shied away from. According to the energy strategy, called the Integrated Power System Plan, Ontario will cut coal "in the earliest practical time frame," with 2009 being the target date. The province will rely heavily on renewable energy, prop up its deteriorating nuclear fleet, and make much more efficient use of its energy resources.

[Taxis better green than yellow]

> The daily urban routine of a cab, he argues, makes the vehicles a perfect fit for hybrid technology. There's a lot of start-and-stop movement, perfect for capturing energy through regenerative breaking. The vehicles are frequently parked and idling as they wait for clients. Again, many hybrids turn off their engine when stopped.

A cab driving two 12-hour shifts a day will spend about $2,400 on gasoline each month at current pump prices. Moving, say, from a gas-powered Ford Taurus to a Toyoto Prius hybrid would mean $1,200 or more in fuel savings each month.

Harris says a major barrier to such a transition is financing. Financial institutions will not lend or lease to cab drivers or fleet owners because they drive too many kilometres a year.

That's where the Cleantech Innovation Institute comes into play. It's currently negotiating with GE Finance, CIBC and other financial institutions in hopes of brokering a special leasing arrangement for cab drivers interested in purchasing a hybrid.

Ont. was warned of possible fuel shortage: group

The Ontario government was warned 13 months ago that the province was facing a possible fuel shortage, according to an industry association official.

Jane Savage, CEO of the Canadian Independent Petroleum Marketers Association (CIPMA), says her group made a presentation to Ministry of Energy officials on Feb. 3, 2006 that warned of possible shortages of gasoline and diesel because of growing demand.

"We suggested to the government that these products are essential to the people of Ontario and that the existing supply and demand balance was extremely vulnerable to shortages," Savage told CTV.ca on Friday.

Gas shortage will see slow recovery

Meanwhile, since gas prices are driven by supply and demand, prices have jumped from 84 cents a litre to around $1, a 17 per cent jump in the past two weeks.

The refinery is now fired up and back on track. Oil companies are trucking extra gasoline into the city to compensate for recent losses. Industry workers are putting in extended hours to deal with fallout from Toronto's fuel shortage.

However, it appears there is still a shortage of gasoline across the city. Part of the problem in replenishing gas supplies at stations is attributed to the finite supply of trucks available to actually transport the fuel. There are only so many trucks and licensed drivers available throughout the city.

Imperial Oil officials said the industry is still reeling and even though the Nanticoke refinery is back to business, it won't be until mid-March before operations at the plant are fully back to normal. It's currently processing crude at half its 118,000-barrel-a-day capacity.

Carbon plan 100 years in the making

Schemes used by environmentally conscious consumers to cut their "carbon footprint" could take up to a century to deliver the promised benefits.

Researchers found it takes that length of time for "carbon offsetting" -- which often involves the planting of trees in the developing world -- to absorb the greenhouse gases emitted by a single airline flight.

Dozens of fortunes have been made in recent years by entrepreneurs offering people and businesses the chance to neutralise their carbon emissions for a fee.

New research, carried out by scientists at the University of East Anglia, in eastern England, and Sweden's Lund University, suggests such schemes may, in fact, do little more than salve the consciences of those paying for them.

Not-So-Perma Frost

Daniel Fortier spends his summers studying the permafrost on Bylot Island, high in the eastern Canadian Arctic. While hiking there early in the 1999 field season, he distinctly heard the sound of running water yet saw no streams nearby. "I thought to myself, 'Where is this sound coming from?'" says Fortier. "So, like a good researcher, I started to dig."

Excavating the soil, known as permafrost because its temperature is below 0C year-round, Fortier tapped into a torrent-filled tunnel a meter or so below the surface. By tracking the water course uphill, he found its source: Large volumes of snowmelt had flowed into open fissures in the ground and had then melted a passage through a network of subterranean ice wedges that had formed over millennia.

Eventually, the surprising tunnel grew so wide that its roof caved in, creating a gully that erosion then widened, says Fortier, a geomorphologist at the University of Alaska in Fairbanks. By the end of the summer, that gully was about 250 m long and 4 m wide. During the next 4 years, the network of underground tunnels at the site turned into a 750-m-long system of gullies that drained an area about the size of four soccer fields. Since then, Fortier and his colleagues have observed the same phenomenon at other sites on Bylot Island.

Taxes are not trusts' only problem

But the problem for the trusts isn't just taxes. Earnings for the sector have been weak as costs for finding and developing new reserves rise to $20 (US$17) a barrel or more, squeezing returns.

"The finding and development costs are terrible numbers," said William Lacey, an analyst at FirstEnergy Capital. "It's become increasing difficult to make money."

Those costs have dismayed investors who had been looking for healthier profits than may trusts have been able to offer.

"The commodity prices have been relatively healthy but yet that hasn't translated into a reasonable performance for many of the trust whose results have not been as good as the market was expecting," said Glenn MacNeill, chief investment officer at Sentry Select Capital Management.

> Investors have been quick to punish the trusts that have been hit by higher costs. Units of Paramount Energy Trust, a mid-sized oil and gas producer, dropped more than 9 percent this week after it reported results that disappointed the market.
>
> High costs have hit smaller trusts the hardest. A number of them have coped by cutting distributions while others, like Thunder Energy Trust, have put themselves on the block.

Hey America !......pssssst....Canada is for Sale !!

> So, will these Trusts spend untold sums of money on legal fees to restructure themselves back into a normal corporate tax-paying structure? If the actions by Borlaex Trust this week are any indication....the answer is NO. Boralex Trust has working interests in hydro-electric power generation facilities in Quebec and in the US North-East. Boralex said this week it is putting itself up for sale. And, what choice does it have? Investors are not going to give it any more investment capital knowing that it will be forced to start paying taxes in a few years time. Without capital, growth opportunities cannot be pursued. Without growth, a company withers away.
>
> Large foreign institutions, private equity firms and the like are all no doubt licking their lips like a fox outside the proverbial henhouse. Here stands a chance to pick up Canadian assets at depressed prices. And it does not stop at Boralex. A large chunk of the Canadian energy sector now exists under the Trust structure. And the same capital argument applies. Without access to capital, growth opportunities cannot be siezed. This also raises the issue of all the junior and intermediate oil & gas firms out there who eventually stood to be bought out by larger Trusts. Now they are stuck....spinning their wheels with no likely suitor waiting in the wings.
>
> Here is what I think will happen. Over the next year, we will see the demise of the Canadian resource sector. Foreign money (and a goodly amount of it from America) will find its way to Canada. Undervalued assets will be "snapped up" with wild abandon.

Oilpatch besieged by climate drive

> The Canadian oilpatch is being bombarded by so many new costs -- primarily linked to climate change -- it is in danger of being stifled and growth plans could be put on hold, it was claimed yesterday.
>
> Pierre Alvarez, head of the Canadian Association of Petroleum Producers, said the Alberta and federal governments are taking aim at oil and gas companies. "There's the perception out there that the industry is just going to carry on and continue to grow regardless of what happens out there and I just don't think that is the case," he said.

Ottawa advised to underwrite carbon technology Task force member says taxes ineffective

> "These regulations are not remotely commensurate with the magnitude of the problem," said Mr. Keith, a long-time proponent of so-called carbon sequestration as a means to combat climate change. "But you have to start somewhere."

Mr. Harper and Alberta Premier Ed Stelmach made a series of environmental announcements this week. Mr. Stelmach announced that major industrial polluters will be required to cut their carbon dioxide emissions per unit of overall production by 12 per cent by the end of the year, or face a $15-a-tonne tax. The Conservative government is also expected to adopt $15-per-tonne tax for companies that exceed emissions limits, a figure that was first proposed by the former Liberal government.

TD urges taxation to fight pollution, global warming

Economists from one of Canada's big banks have thrown their support behind taxing industries and consumers who contribute to global warming, saying that government needs to attach a cost to pollution if any fundamental progress is to be made.

In a report released today by the TD Bank, economists argued that industry and consumers will not change their behaviour as long as it's cheap to pollute. They advocate a policy that combines emissions regulations, taxes, subsidies and a trading system for emissions credits - a varied approach they say would mitigate the impact on the economy.

Only carbon taxes can rekindle conservation

Economics 101 teaches that taxes and tax breaks are designed to encourage certain behaviours and curb others. Registered retirement savings plans, for instance, are a tax break for the middle class, a calculated government policy designed to encourage retirement saving rather than the immediate gratification of spending.

The most powerful instrument for dissuading consumers individuals, government and industry from squandering finite energy resources is to make them more expensive.

Enter the carbon tax, the single most powerful tool for encouraging conservation of the planet's finite coal, oil and natural gas resources, and for diminishing the role of CO_2 emissions in destroying the earth.

An End to Easy Money

"As these defaults accelerate, the end investors are getting spooked," said Michael Larson, a real estate analyst for Weiss Research. "These mortgages are going bad so fast, that makes them want to buy fewer of the bonds and that means Wall Street investors have trouble packaging the securities and it trickles on down the food chain."

That's when the mortgage brokers, the folks on the front lines, start feeling the squeeze, as Daniel Walsh can attest.

"We have had to tell customers that were dreaming and hoping of finding a place to sort of put their search on hold because of the way the market has turned," said Walsh, president of Guardian Funding, a lender and broker in Kensington.

Foreclosure brokers traffic in despair

> The Center for Responsible Lending, a consumer advocacy group, forecasts one in five mortgages taken out by high-risk creditors in 2005 and 2006 will end in foreclosure, with homeowners losing $164 billion, mostly in home equity.
>
> In Massachusetts, where housing prices notched double-digit growth between 1995 and 2004 in a red-hot market, foreclosure filings surged 70 percent to 19,487 homeowners last year, as single-family home prices fell for the time since 1993.
>
> The pace continued in January when the number of homeowners threatened with foreclosure more than doubled in a year to a record -- the most for any state in the U.S. Northeast and exceeding the larger New York property market.
>
> "Our latest data indicates that 2007 may be even worse," said Jeremy Shapiro, president of ForeclosuresMass which compiled the Massachusetts data, adding that it may take months for a house to be seized by lenders after an initial filing.

Desperate houseowners

> 'I think consumers are going to face a triple whammy this year,' he says. 'They're not going to be bailed out by lower energy prices in the way they were in the last quarter of 2006; the wealth effect is negative, given that house prices are falling, on average; and we think that labour income is going to cool as employment growth cools.'
> And these headwinds are hitting consumer spending, a key driver of growth, at a time when Americans are already spending more than they earn; the savings ratio - the proportion of income people are stashing away - is negative for the first time since the 1930s. 'At best, you're looking at a much more sluggish consumer in 2007,' Iley says. 'At worst, you get a relatively violent response'.

Crisis Looms in Mortgages

> On March 1, a Wall Street analyst at Bear Stearns wrote an upbeat report on a company that specializes in making mortgages to cash-poor homebuyers. The company, New Century Financial, had already disclosed that a growing number of borrowers were defaulting, and its stock, at around $15, had lost half its value in three weeks.
>
> What happened next seems all too familiar to investors who bought technology stocks in 2000 at the breathless urging of Wall Street analysts. Last week, New Century said it would stop making loans and needed emergency financing to survive. The stock collapsed to $3.21.
>
> The analyst’s untimely call, coupled with a failure among other Wall Street institutions to identify problems in the home mortgage market, isn’t the only familiar ring to investors who watched the technology stock bubble burst precisely seven years ago.
>
> Now, as then, Wall Street firms and entrepreneurs made fortunes issuing questionable securities, in this case pools of home loans taken out by risky borrowers. Now, as then, bullish stock and credit analysts for some of those same Wall Street firms, which

profited in the underwriting and rating of those investments, lulled investors with upbeat pronouncements even as loan defaults ballooned. Now, as then, regulators stood by as the mania churned, fed by lax standards and anything-goes lending.

Investment manias are nothing new, of course. But the demise of this one has been broadly viewed as troubling, as it involves the nation's $6.5 trillion mortgage securities market, which is larger even than the United States treasury market.

New Century creditors to halt financing

New Century Financial Corp. said Monday all of its lenders have cut funding or announced their intent to halt financing after the sub-prime mortgage lender failed to make payments, pushing the company further toward bankruptcy.

"The company and its subsidiaries do not have sufficient liquidity to satisfy their outstanding repurchase obligations under the company's existing financing arrangements," New Century said in a filing with the U.S. Securities and Exchange Commission.

The Mortgage Mess Spreads

The canaries in the coal mine are keeling over fast. After years of easy profits, the $1.3 trillion subprime mortgage industry has taken a violent turn: At least 25 subprime lenders, which issue mortgages to borrowers with poor credit histories, have exited the business, declared bankruptcy, announced significant losses, or put themselves up for sale. And that's just in the past few months.

Now there's evidence that the pain is spreading to a broad swath of hedge funds, commercial banks, and investment banks that buy, sell, repackage, and invest in risky subprime loans. According to Jim Grant of Grant's Interest Rate Observer, the market is starting to wake up to the magnitude of the problem, entering what he calls the "recognition stage." Says Terry Wakefield, head of the Wakefield Co., a mortgage industry consulting firm: "This is going to be a meltdown of unparalleled proportions. Billions will be lost."

Hedge funds, those freewheeling, lightly regulated investment pools, seem particularly vulnerable. *BusinessWeek* has learned that $700 million Carrington Capital and $3 billion Greenlight Capital may have gotten badly burned because of their intricate dealings with New Century Financial, a major subprime lender whose stock has plunged 84% in four weeks amid a Justice Dept. investigations into its accounting. Magnetar Capital, a $4 billion fund formed two years ago, may be on shaky ground, too. The question is, how many others may be suffering? "This is a very opaque industry, so no one really knows," says Mark M. Zandi, chief economist and co-founder of Moody's Economy.com (MCO) "My guess is that if you look at the top hedge funds, they're bearing most of the risk."

Three Bears, No Goldilocks - Part I - Financial Armageddon

> Michael Panzner's Financial Armageddon is in many ways an updated version of the 1970's debt warning books, since the original debt threats were never resolved, and they never went away. They just got worse. And with the passing of time, the existing threats were joined by altogether new ones, which Panzner elaborates on. His book's subtitle is Protecting your future from four impending catastrophes, which he sees as: 1) Debt, (excessive consumer, corporate and government debt) 2) The retirement system (excessive corporate and government retirement promises that cannot be paid, and a huge baby-boom population that is woefully unprepared to support themselves in their sunset years) 3) Government guarantees (real and implied that cannot be delivered in the event they are needed - think FDIC, Fannie Mae and Freddie Mac, as well as PBGC - the Pension Benefit Guaranty Corporation) and 4) Derivatives (think Long Term Capital Management, and its 1998 crisis that nearly brought down the global financial house).

Three Bears, No Goldilocks - Part II - Crash Proof

> Hooray for truth! It is a rare treat to hear someone tell it like it is. Schiff does not fear to tread where the establishment media (including Lou Dobbs) won't dare go. He takes the gloves off and unmasks the Federal Reserve for the fraud that it is in chapter four, Inflation Nation: The Federal Reserve Fallacy. He tears into what he sees as the obscene irresponsibility of the Wall Street / banking cartel and its role in rampant speculation, incessant cheerleading, and efforts to roll the financial bubble through every sector of the US economy, extracting maximum financial gain before finally letting it pop. He explains that through the Fed's policy of negative real interest rates, a nation of savers has -- through rational behavior -- been converted to a nation of borrowers and spenders. Borrowers are rewarded while savers are punished. The dollar retains its strength simply by virtue of the fact that it is the global reserve currency. Asian central banks keep the global ponzi-scheme going with their citizens' hard earned money in order to keep export markets open and their goods priced competitively. Behaving rationally to the irrational policies and schemes of the world's central bankers has created the current global mess - including our current housing bubble. But eventually, Schiff assures us, this mess will have to be cleaned up. But first, things are going to get even messier.

Subprime Defaults Are `Beginning of Wave,' Bies Says

> Banks' losses from risky home loans made at low introductory rates are just beginning, U.S. Federal Reserve Governor Susan Bies said.
>
> Bies, who has been Fed's top banking policy official in her tenure at the U.S. central bank, said today banks are likely to see more missed payments and foreclosures as consumers with weak credit histories begin to face higher monthly mortgage payments.
>
> "What's happening is the front end of this wave of teaser- rate loans that are coming into full pricing," Bies said at a risk-management forum in Charlotte, North Carolina. "So what we're seeing in this narrow segment is the beginning of the wave -- this is not the end, this is the beginning."

FBI: "Mortgage Fraud is pervasive and growing"

> Amerifunding was a Mortgage Brokerage owned and operated by Gerald Small in Colorado, which maintained two "warehouse" lines of credits, each at a large federally-insured financial institution in the U.S. In order to support a lavish lifestyle, Small created fictitious loans to live off of the lines of credit. The borrower information, name, and social security number, were invented. Eventually, one of the creditors asked for verification of identification thereby defeating the "invention" process. To deal with this, Small placed an advertisement for a $100,000+ Account Representative position at his company. Applicants eagerly completed applications inclusive of names, social security numbers and copies of driver's licenses which Small wasted no time in utilizing for more fictitious loans. Investigation determined that Small had kited over $200 million in fraudulent mortgage loans and used the stolen identities of 47 job applicants to obtain mortgage funding for fictitious home loans, or "air loans" totaling over $21.5 million during a 24-month period.

Breeding Rural Poverty and Environmental Degradation

> Many citizen organizations in Brazil are concerned that what appears to be an economic panacea may be a social and ecological disaster. They claim that as the industry expands and more hectares are planted mono-cropping sugarcane, existing problems in rural areas of landlessness, hunger, unemployment, environmental degradation, and agrarian conflicts will be exacerbated.
>
> A recent declaration from the Forum of Resistance to Agribusinesses, a consortium of non-governmental organizations (NGOs) throughout South America states, "The implementation of the model of production and export of biofuels represents a grave threat to our region, our natural resources, and the sovereignty of our people."
>
> There is concern that while expansion of the ethanol industry may boost Brazil's GDP and some Brazilians will become very wealthy in the process, the majority of the population will not benefit from the ethanol export boom. Given U.S. plans to increase imports of Brazilian ethanol and the alliance slated to be forged during Bush's South America visit in March, it is likely the livelihoods of many Brazilians, especially the rural poor, will be subordinated to maintain U.S. consumption.
>
> "The era of biofuels will reproduce and legitimize the logic of the occupation of rural areas by multinational agribusiness, and perpetuate the colonial project to subvert ecosystems and people to the service of the production and maintenance of a lifestyle in other societies," states the Forum. The group alleges that Brazil's effort to supply the Global North with ethanol is simply a repeat of the same model of economic growth via agro-export that has been practiced since Portuguese colonization.

Brazil's ethanol slaves: 200,000 migrant sugar cutters who prop up renewable energy boom

> Behind rusty gates, the heart of Brazil's energy revolution can be found in the stale air of a squalid red-brick tenement building. Inside, dozens of road-weary migrant workers are crammed into minuscule cubicles, filled with rickety bunk-beds and unpacked bags, preparing for their first day at work in the sugar plantations of Sao Paulo.
> This is Palmares Paulista, a rural town 230 miles from Sao Paulo and the centre of a

South American renewable energy boom that is transforming Brazil into a global reference point on how to cut carbon emissions and oil imports at the same time.

Inside the prison-like construction are the cortadores de cana - sugar cane cutters - part of a destitute migrant workforce of about 200,000 men who help prop up Brazil's ethanol industry.

Biofuels are mega-business in Brazil. Such has been the success of the country's ethanol programme - launched during the 1970s military dictatorship - that it is now attracting attention from around the world. Yesterday President George Bush arrived in Sao Paulo to announce an "ethanol alliance" with his Brazilian counterpart, Luiz Inacio "Lula" da Silva. The bilateral agreement has been touted by the Brazilian media as the first step towards the creation of an "ethanol Opec".

Peru's alarming water truth

Peru has the largest number of tropical glaciers in the world. These water towers are crucial for slowly releasing water, particularly in the dry season. And Peru desperately needs the water all year round.

Apart from the need for drinking water, 80% of the country's power has traditionally come from hydro-electricity. And, the current boom sectors of the economy - agro-exports and mining - also absorb huge volumes of water.
Estimates by a team of Peruvian and international scientists say that Peru and Bolivia, which together account for more than 90% of the world's tropical glaciers, have lost about a third of the surface area of their glaciers between the 1970s and 2006.