



Drumbeat: November 11, 2009

Posted by [Leanan](#) on November 11, 2009 - 9:04am

Topic: [Miscellaneous](#)

[Jeff Rubin: What do we do for the next recession?](#)

Correctly diagnosing the nature of a disease is usually an essential first step to finding its cure. Similarly, knowing what caused this recession seems pretty pivotal to figuring out how to avoid falling into the next one.

Subprime mortgages may have blown up Wall Street, but it was triple-digit oil prices that blew up the world economy. This distinction is not just academic — it has huge implications for what steps governments should have taken and, maybe even more importantly, what steps they shouldn't have taken.

it.

"We tend to fund efforts that appear to have, on the surface, the greatest potential emissions reductions," said Mike Vandenberg, director of Vanderbilt University's Climate Change Research Network. "A real value is in looking not just at potential emissions reductions, but also at plasticity. Because otherwise, you'll be frustrated."

[Matthew Simmons: "Global crude oil peaked in 2005"](#)

Matthew Simmons, Chairman of "Simmons & Company International", is the world's largest private energy investment banker. Moreover, he is a leading expert on the crucial topic of Peak Oil. In the following interview, Mr. Simmons talks about the ongoing recession, explains why we might have reached an end of growth and gives his reading of last year's oil price spike.

[Malthus and Brunel stalk energy outlook](#)

LONDON (Reuters) - The alarmism and defeatism pervading previous editions of the International Energy Agency's (IEA) World Energy Outlook (WEO) have been partly replaced this year with an optimistic emphasis on new sources and technologies.

If previous editions owed their inspiration to Thomas Malthus ("we're all doomed"), this year's is an implied tribute to the great Victorian engineer Isambard Kingdom Brunel ("yes, we can").

[IEA Whistleblower Claims Agency Has Downplayed Looming Oil Shortage](#)

But seriously, almost everyone not hiding in a cave recognizes that our cars and homes won't run on fossil fuel energy sources forever. That's why we created PopSci's realist roadmap to 2050 for energy. It's also why the U.S. Department of Energy's new mad science lab has begun spraying funding in all directions for breakthrough technologies that could boost energy efficiency and improve renewable sources.

[Kjell Aleklett: Comments on Guardian article: "Key oil figures were distorted by US pressure, says whistleblower"](#)

I am not surprised that some within the International Energy Agency (IEA) have leaked this news. Rather, it is astonishing that this has not become known earlier. (See the article in the Guardian: Key oil figures were distorted by US pressure, says whistleblower.)

The article "The Peak and Decline of World Oil and Gas Production" was published as long ago as 2003 in the scientific journal Minerals and Energy – Raw Materials Report by Kjell Aleklett and Colin C. Campbell (Volume 18, Number 1, 2003, pp. 5-20[16].) It was the first "peer reviewed" article to discuss Peak Oil.

[Richard Heinberg: Just Tell Us The Truth](#)

In the past few years these lone voices of warning have garnered the backing of a million-voice chorus: investment banks, oil analytics firms, and investigative journalists have joined the geologists in pointing out that oil production limits are within sight, and in calling for more transparency in official data reporting and forecasting.

But the International Energy Agency has stubbornly refused to come clean. And this is important: while financial analysts and investors are free to draw their own conclusions about Peak Oil (and a great many of them have seen the writing on the wall—hence recent run-ups in oil futures prices), national and local governments must rely on officially sanctioned fuel supply and price projections for all their planning. Energy policy, transport planning, agriculture policy, economic forecasting, and much more depend upon the august pronouncements of the Paris-based IEA.

[Can we handle the truth?](#)

If oil traders knew the truth about declining energy availability, the per-barrel price of oil would be \$300 within a week. If stock traders knew the truth, we'd see capitulation of the markets shortly thereafter. If Americans knew the truth, they just might come to

grips with reality, rally together, put their collective shoulders to the wheel, and start building a better world than the omnicidal culture of make believe to which we've all become accustomed.

But we'll never know, because the cabal of morally bankrupt bankers and politicians running this country -- and also the industrialized world -- will keep playing the shell game as long as they are allowed by the impotent media. Or, more likely, until the reality of oil priced in excess of \$200 per barrel interferes with their imperial ambitions.

[A double-front oil attack](#)

The concern that oil may have hit its "peak", leading to higher prices, stares India on one front. On the other, the government insists on tightly regulating oil prices.

[New Neighbors, New Economy](#)

Russia is disappearing. So is Japan. Europe is next to go.

It's not the rising waters of global warming that threaten these parts of the world. The problem is more basic. The Russians and Japanese, as well as large numbers of Europeans, are not having enough children to replace themselves. The birth rates across a large swath of Eurasia are considerably below the replacement rate of 2.1 babies.

[Court battle to slow roll out of Mexico oil reform](#)

MEXICO CITY (Reuters) - A legal challenge to a Mexican oil reform law passed last year means international oil firms will have to wait longer for new contracts aimed at luring them back into the country.

[Hancock's ideas need refinement](#)

And while some are sounding the warning bell that oil demand south of the border has peaked, Greg Stringham, vice-president of the Canadian Association of Petroleum Producers, points out that even if one assumes a flat demand scenario, heavy oil demand is going to rise because of the drop in light oil supply.

In case Hancock hasn't noticed, it's a tough time for the refining business. The way things sit today -- because the difference between the price of a heavy barrel and a light barrel is so thin--refining margins are thin to non-existent. In some cases, the refined barrels are selling for less than what the cost of the inputs are.

[The Philippines: Vegetable traders feel effects of oil price freeze](#)

After farmers and tricycle drivers, the vegetable trade sector became the latest industry to be affected by the price freeze, according to a QTV Balitanghali report.

A television report said that in Quezon province, where some gas stations claimed to have already run out of fuel supplies, vegetable vendors fear losing revenues because they could not transport their products to Metro Manila.

[Take over oil industry, senators urge Arroyo](#)

MANILA, Philippines — Warning of food riots and a stagnating economy should a fuel shortage occur because oil firms were not importing new stocks, three senior senators on Tuesday urged President Gloria Macapagal-Arroyo to take over the oil industry.

Senate President Juan Ponce Enrile, Senate Minority Leader Aquilino Pimentel Jr. and Sen. Miriam Defensor-Santiago also asked the government to import petroleum products to protect the people.

[No propane shortage for harvest, suppliers say](#)

WAVERLY --- Corn dryers are burning large amounts of fuel to keep harvest moving, but liquid propane distributors say farmers shouldn't worry about shortages.

Farmers are buying twice as much LP as usual to dry one of the wettest and biggest corn crops in history. Energy companies are fielding calls from producers concerned about LP availability, which could delay and already slow harvest.

[Saudi Arabia Pursues New Oil Trade Opportunities: Implications for the US](#)

Saudi Arabia has generally had falling oil production since its all-time peak in 1980 of 9.9 million barrels per day (mbpd). Present Saudi production is probably around 9 mbpd. The big question: Is declining Saudi production because the desert kingdom is running out of oil, or a voluntary action to reserve oil for potential higher prices in the future?

Saudi exports make up a total of 7 mbpd – about 9% of world crude oil consumption (around 75 mbpd).

Some oil experts (like Matt Simmons) believe that Saudi Arabia is now beyond peak oil production, or very soon will be. The low quality crude oil (sour and heavy) coming out of Saudi Arabia would also suggest that its oil fields are approaching exhaustion.

[Oil cos racing back to Gulf; rough seas slow LOOP](#)

HOUSTON (Reuters) - Oil companies were flying workers back to offshore platforms in the Gulf of Mexico on Wednesday, but rough seas threatened to stretch return into Thursday.

"Seas are down from what they were at the storm's passage, said Jim Shugart, executive vice president at ERA Helicopters. "But they're still pretty rough out there because winds were high. Today's better. We should be through by end of the day."

[The parallel worlds of OPEC quotas and actual production](#)

In the world of OPEC, the word production can mean different things. There is official production, whereby OPEC sets quotas for individual members under an overall volume, and there is actual production, which can bear little resemblance to official levels.

And there is a further complication. OPEC, although it has given out the overall target number for the current output agreement, has not published the individual quotas under that target. Which means that people like my colleagues and myself have had to work out those quotas by ourselves, sometimes with a bit of help from delegates or ministers who may confirm figures or indicate that our calculations are close to the mark.

[WSJ: Exxon Lured By Gas Potential](#)

Exxon Mobil Corp. has joined a growing list of major energy companies looking to exploit an emerging source of natural gas once seen mainly as the bane of coal miners.

The world's largest publicly traded company by market capitalization has acquired about two million acres of coalbed-methane resources in Germany, its first foray into the exploration of gas trapped in coal seams in Europe.

[Energise your money and investments](#)

If you saw the final episode of economist David McWilliams' most recent television series, Addicted to Money, you know that while he was making the series he experienced a Damascene moment: he realised that not only was the late, great, global economic boom the consequence of the availability of a century and a half of cheap energy oil but that everyone's assumptions about the future are predicated on how soon we can replace this increasingly costly resource.

[The Choice Ahead: Entrenched Fossil Fuel Dependence Or Climate Change Management](#)

According to Nobel Laureate Joseph Stiglitz and Harvard economist Linda Bilmes, the Iraq War cost three trillion dollars. While much of the money used to conduct the war was borrowed (most notably from Chinese institutions), ultimately American taxpayers will be responsible for many years to come for footing the bill, including the high interest payments on the funds loaned. This is because the federal budget, especially between the military and big business bailout costs, far exceeded the annual and shrinking amount taken in by taxes.

Was it worth it? The answer partly depends on whether one works for or has holdings in one of the oil companies that made out well in the aftermath.

[Experts worry over peak soil](#)

The possibility of “peak soil” was raised by Professor John Crawford, of the University of Sydney’s Institute of Sustainable Solutions, who said Europe was losing soil at the rate of 17 tonnes a hectare, and in China soil was being lost at 57 times the rate at which it could be replaced.

[Nuclear Power: The answer to the UK’s energy woes?](#)

France is a case in point. It derives nearly 80% of its electricity from 59 nuclear plants and is the world’s biggest electricity exporter. It has the cheapest power rates in Europe, and has the lowest carbon footprint per person.

However, the significance of radioactive wastes and contamination threats should not be underestimated if we really want to promote *sustainable* development that considers the intergenerational impact and legacy of such technologies. In this vein, it might be argued that the significant funds for these large infrastructure projects would, in fact, be better targeted at scale-up and capacity building for renewable technologies such as wind, solar, tidal and others, which don’t generate such controversial by-products. For now, the pressure is on in the UK to streamline the planning process to enable the speedy construction required to bridge the expected energy gap.

[Jeff Rubin: What do we do for the next recession?](#)

Correctly diagnosing the nature of a disease is usually an essential first step to finding its cure. Similarly, knowing what caused this recession seems pretty pivotal to figuring out how to avoid falling into the next one.

Subprime mortgages may have blown up Wall Street, but it was triple-digit oil prices that blew up the world economy. This distinction is not just academic — it has huge implications for what steps governments should have taken and, maybe even more

importantly, what steps they shouldn't have taken.

[This economist \(Jeff Rubin\) loves his Audi](#)

"If we're going to go massively into debt, I'd rather we invest in our future not our past. But our future is public transit. Our problem is if 50 million North Americans took the exit lane over the next decade, there isn't a bus to get on.

"During World War Two, Detroit reinvented itself and stopped producing cars and started making tanks and bombers. If they could do that over World War Two, why couldn't today's unemployed auto workers be re-employed making buses, subway cars, and light rapid transit vehicles instead of SUVs?"

[Oil Hoarded By Traders Offshore Hits 10-Year High](#)

Lloyd's List reports that "there are now 129 tankers deployed for temporary storage by traders and investment banks".

These oil hoarders continue to buy lower-priced oil now with the intention to sell it in the future at the currently higher oil prices in the futures market. (ie. trading the oil price contango)

[U.S. giant has partnership in \\$5 billion China project](#)

Exxon Mobil Corp. and partners were expected to announce early today the completion of a \$5 billion refining and chemical complex in China's Fujian province, a sprawling project that arrives as U.S. refineries and chemical plants are closing.

The complex in the city of Quanzhou, which Exxon Mobil developed with Saudi Aramco, China's Sinopec and the Fujian government, will expand production of transportation fuels like diesel and widely used building block chemicals, demand for both of which is projected to grow rapidly in China in coming years.

[China to maintain crude oil imports from Iran](#)

FUZHOU, CHINA: Top Asian refiner Sinopec Corp expects crude oil imports from Iran to stay at 400,000 barrels per day (bpd) or slightly more next year, the company's president said yesterday, a level unchanged from this year's contract amount.

[Phil Flynn: Siting Idle After Ida](#)

After surging yesterday on the weak dollar and now tropical storm Ida, I think we can focus on all the bearish stuff that did not seem to matter. You know stuff like gas gluts and supply surpluses. As Ida hits the coast the market realizes that there is plenty of oil, products and spare production capacity to easily weather this tropical storm. More oil is on the way as the Saudis and OPEC send signals that more oil production is likely at the December OPEC meeting and news that China is raising the domestic cost of gasoline which could put a dent in China's domestic oil demand.

Reuters News reported that Saudi Arabia, the world's top oil exporter, has increased December supplies to large companies, and one Asian customer is expected to receive full contract volume. Bloomberg News reported that OPEC is increasing output at the fastest pace in two years, adding to near-record inventories.

[Will the lights go out on South Africa's World Cup?](#)

An ugly race row has left South Africa's national power company leaderless and is threatening to turn the lights out in the country only nine months before it is due to host the World Cup.

[Venezuela: Government alleges excessive demand to hide energy crisis](#)

Instead of implementing new measures allowing electric utilities to provide "a reliable and high-quality service," the government has issued "compulsive and inconsistent decrees to hide its incompetence," said Miguel Lara, former general manager of the Office of Interconnected Systems Operation (Opsis).

In his view, Minister of Energy and Petroleum Rafael Ramírez, "in an attempt at concealing the true origin of the problem, has said that in recent years Venezuela has recorded an unprecedented growth in power demand."

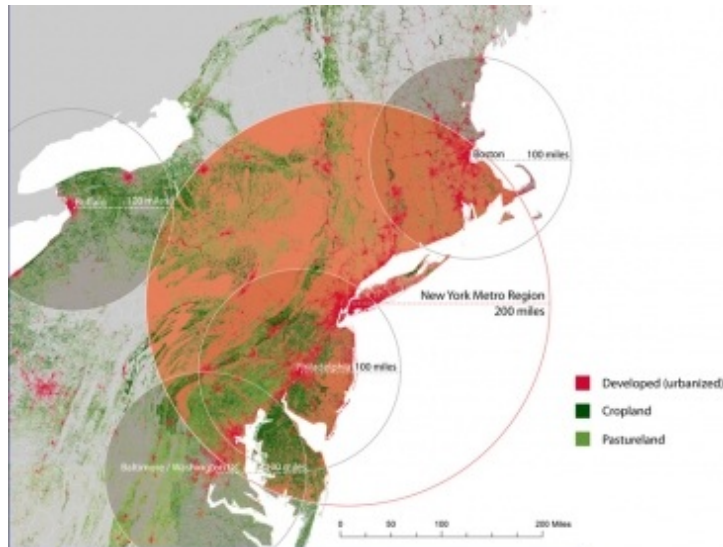
[Goodbye to globalization: In an Age of Catastrophe, resurrecting the globalized economy is a huge mistake](#)

Now is the time to question globalization, to ponder the consequences of allowing the market to run rampant. Is it not possible that we need not more globalization but less, not linking but de-linking, the better to lessen the likelihood of more financial and economic crises — and to deal with the latest and greatest of capitalism's horrors, the ecological footprint of long distance trade?

Perhaps we should read and heed the great and wise economist John Maynard Keynes on how the message of the Great Depression of the 1930s was that there should be less international finance and less international trade. Or study today's writers, the American ecologist Bill McKibben and his book, *Deep Economics*, and the American scholar of food, Michael Pollan, on the compelling case for local production, respectful of

community and nature.

[Good food nation: Researchers think America's obesity epidemic can be reversed via 'foodsheds'](#)



A map of northeastern cities depicts their proposed “foodsheds,” the areas that naturally supply metropolitan areas with their food. Image: Urban Design Lab at the Earth Institute, Columbia University

Now, in another report finished this October after meetings with food-industry leaders, the MIT and Columbia researchers propose a solution: America should increase its regional food consumption. Each metropolitan area, the researchers say, should obtain most of its nutrition from its own “foodshed,” a term akin to “watershed” meaning the area that naturally supplies its kitchens. Moreover, in a novel suggestion, the MIT and Columbia team says these local efforts should form a larger “Integrated Regional Foodshed” system, intended to lower the price and caloric content of food by lowering distances food must travel, from the farm to the dinner table.

[How Green Are Your Nukes?](#)

The role that nuclear power might play in addressing the problem of man-made global warming is fiercely disputed among environmentalists. Two new books by big names in the movement stake out the boundaries of that debate. On the pro-nuclear side stands *Whole Earth Discipline: An Ecopragmatist Manifesto*, by Stewart Brand. And parked in the (more or less) anti-nuclear corner is *Our Choice: A Plan to Solve the Climate Crisis*, by Al Gore.

[Nuclear alone won't keep the power flowing](#)

Britain faces two urgent energy problems. First, we have simply not invested enough in infrastructure to meet future demand for heat and power. There is a yawning capacity

gap that, in the next decade, will force prices up for consumers and industry. The second problem is how to mitigate climate change by cutting carbon emissions. The two problems will need more than £200 billion to fix in the next decade.

['Solar panels could solve energy crisis'](#)

IF every south-facing building in the UK fitted solar panels, the country would have all the electricity it needs, an expert has claimed.

[The future of oil: New market dynamics created by climate change, geological and geopolitical pressures will transform our hydrocarbon economies](#)

The race for the world's remaining oil reserves could get very nasty. Recently, Nigerian militants announced their determination to oppose the efforts of a major Chinese energy group to secure six billion barrels of crude reserves, comparing the potential new investors to "locusts". The Movement for the Emancipation of the Niger Delta told journalists that the record of Chinese companies in other African nations suggested "an entry into the oil industry in Nigeria will be a disaster for the oil-bearing communities".

Whatever the facts, the end of the first decade of the twenty-first century is likely to be seen by future historians as the beginning of the final chapter of a unique, unrepeatable period in human development. Even oil companies now see the Age of Oil in irreversible decline – even if that decline spans decades. International oil companies (IOCs) increasingly accept that they must transform themselves completely – or expire – by mid-century.

[The perils of forecasting](#)

A Lex note yesterday, for those who missed it, looks at the WEO and praises the International Energy Agency's data. But it adds:

Like many forecasts, though, it makes the mistake of extrapolating recent trends too freely. For example, the IEA expects global oil production to rise from last year's 85m barrels to 105m by 2030 while acknowledging that about two-thirds of this will come from fields yet to be found or developed. But at what cost?

It adds:

Living with \$300 crude is no more outlandish than suggesting a decade ago that \$80 would be the new normal.

Energy markets, it says, have so many moving parts that long term forecasts are a mug's game.

[Econbrowser: Will rising oil prices derail the recovery?](#)

Last April I described new research on the role of oil prices in the recent recession. Here's an update on what's happened since then.

[Era of cheap oil 'is over' \(video\)](#)

The International Energy Agency has warned that increasing demand from developing countries will drive fuel prices up in the coming years.

The agency's 2009 World Energy Outlook suggests the economic crisis has cut requirements in the short term, but that the trend will not continue.

[IEA: Has the Titanic Sighted the Iceberg?](#)

Nothing of what the IEA is saying now is new; other organizations have raised warnings for years. But that's exactly the problem. The IEA, as the whistleblowers suggest, is often a barometer for the feelings of its member countries.

[International Energy Association: Forced to Eat Their Optimistic Data on Future Oil Supply?](#)

Let's go back a few months and find some of the early signals, however, indicating this story was likely overdue. In August, a journalist at a separate British newspaper, The Independent, had conducted a long interview with the IEA's chief Fatih Birol. In that interview, Dr. Birol made a number of very clear statements about the rather dire prospects for any future growth in world oil supply. This was unsurprising, in some respects, because the IEA had already asserted, in World Energy Outlook 2008, that existing oil fields were declining by at least 4.00% if not 6.00% per annum, and that to actually lift global oil production would require not billions, but trillions, of investment.

But something odd happened in the weeks that followed this interview. First, Dr. Birol was interviewed by another journalist, this time David Strahan. In this subsequent interview, Birol claimed he'd either been misunderstood, or misquoted, by the Independent's journalist—Steve Connor—who had reported that Birol was calling for “peak oil in about ten years.”

[IEA: Washington made us fudge oil data](#)

The subject of declining reserves was given real momentum by M. King Hubbert , who correctly predicted a decline in US oil output in the 1970s, even as Texas companies were denying his research.

King's methodology has predicted a similar fate for world oil production. Hubbert's

former colleague Kenneth Deffeyes and oil analyst Matthew Simmons say production from existing major sources may already have peaked.

Naturally enough, the implications of such a theory are enormous, but there's also a significant constituency that dismisses entirely the peak oil theory - a constituency that has traditionally included the International Energy Agency, the oil industry, OPEC and Washington.

[Oil up to near \\$80 as the dollar weakens](#)

Oil prices rose to near \$80 a barrel Wednesday as the effects of a weaker dollar trumped a report pointing to a rise in U.S. oil inventories.

[Oil Market Is 'Very Comfortable,' Al-Attiyah Says](#)

(Bloomberg) -- The global crude oil market is "very comfortable" and it is unlikely that OPEC would increase production quotas significantly, Abdullah bin Hamad al-Attiyah, Qatar's energy minister, told reporters today in Singapore.

[OPEC: Pricey crude could erode 2010 demand](#)

CAIRO — OPEC says demand for crude oil will slip in the industrialized nations next year if oil prices climb and are sustained above their current level.

The warning today came as the Organization of the Petroleum Exporting Countries, supplier of about 35 percent of the world's crude, revised its 2010 global crude demand up to 85.07 million barrels per day — 75,000 barrels per day higher than its assessment last month.

[Gazprom Has 'Everything' in Place to Avoid European Gas Cuts](#)

(Bloomberg) -- OAO Gazprom, the world's biggest natural-gas producer, expects to maintain contracted supplies to Europe this winter, avoiding a repeat of a dispute with Ukraine that disrupted shipments in January.

[Russia Warns of Gas Crisis If Ukraine Misses Payment](#)

(Bloomberg) -- Russia warned it may halt gas exports through Ukraine if the bailout-dependent former Soviet state can't keep up payments in what is becoming an annual dispute between the two countries.

“There will be a great danger of another crisis” should Ukraine miss a single monthly payment to energy producer OAO Gazprom, Dmitry Peskov, the spokesman for Prime Minister Vladimir Putin, told reporters late yesterday.

[Blackouts Plague Energy-Rich Venezuela](#)

CARACAS, Venezuela — This country may be an energy colossus, with the largest conventional oil reserves outside the Middle East and one of the world’s mightiest hydroelectric systems, but that has not prevented it from enduring serious electricity and water shortages that seem only to be getting worse.

President Hugo Chávez has been facing a public outcry in recent weeks over power failures that, after six nationwide blackouts in the last two years, are cutting electricity for hours each day in rural areas and in industrial cities like Valencia and Ciudad Guayana. Now, water rationing has been introduced here in the capital.

[Brazil Restores Power After Outage Hits 12 States](#)

(Bloomberg) -- Power was restored in Brazil after an outage at a dam providing 20 percent of the country’s energy thrust about half of the nation’s 190 million people into darkness for at least two hours.

The 14,000-megawatt Itaipu Binacional hydroelectric dam said operations were back to normal at 6 a.m. local time after transmission failed, causing the world’s largest dam by output to forcibly shut down for the first time since it went online in 1983. The government is investigating the incident.

[Saudi Oil Pricing Paradigm Shift: WTI Index Out, ASCI Index In](#)

US Gulf oil output, currently at about 1.2mn b/d, is expected to climb to 1.4mn b/d next year and 1.9mn b/d in 2013 boosting spot market trading volumes. This decision by Aramco in part demonstrates the emerging importance of the US Gulf as the new center for price discovery.

Meanwhile, the abandonment of WTI, a longtime standard since the 1980’s, for a five-month-old Argus index by Saudi Arabia is a big deal in the crude pricing assessment world. The move not only highlights some specific problems of WTI, but also signifies ongoing shifts in the global energy landscape, as emerging countries take an increasingly prominent role in the oil trade.

[Aramco to shut Ras Tanura crude unit](#)

State-run oil exporter Saudi Aramco is expected to shut the crude distillation unit at its Ras Tanura refinery in mid-December for planned maintenance, industry sources said on Wednesday.

The 325,000 barrels per day (bpd) crude processing unit was expected to be offline between 30 to 50 days, industry sources said.

[Iraq Invites Bids From Drilling-Equipment Suppliers by Nov. 22](#)

(Bloomberg) -- Iraq, holder of the world's third- largest oil reserves, is seeking bids from providers of drilling equipment as the Persian Gulf producer seeks to increase crude output from fields and new wells.

[Pakistan's energy sector and the great game](#)

HARRIS: Whether or not you believe in Peak Oil, Pakistan will present attractive exploration opportunities, as you can see here with 125 delegates at this meeting. That means there's interest.

QADRI: But multinationals are not the only ones interested in Pakistan's energy sector. With its ever-growing population, Pakistan has struggled to match energy supplies with demand. Those difficulties turned violent in August when angry mobs in Karachi and the Punjab protested against the long daily power cuts that have brought modern life to a standstill here. I asked Asim Hussain what the Pakistan government was doing about this problem.

[Energy-use activist focuses on the individual](#)

Pat Murphy says we should super-insulate our houses and travel in shared vans to survive peak oil and climate change.

Murphy, executive director of Ohio-based Community Solution, believes it's more important to focus on houses, private cars and food -- rather than factories and jet planes -- because individual consumption accounts for two-thirds of energy use.

[GM board approves plug-in Cadillac hybrid: sources](#)

DETROIT (Reuters) - The board of General Motors Co has approved a plan to produce a plug-in hybrid for the luxury Cadillac brand that will adapt technology developed for the upcoming Chevrolet Volt, according to people briefed on the decision.

[6 most fuel-efficient cars](#)

These vehicles top their class in fuel economy while offering strong performance, too.

[Thin-film share of solar market to double: report](#)

LOS ANGELES (Reuters) - Solar panels that use thin-film technology in place of traditional silicon-based materials will more than double their share of the solar panel market by 2013, according to a report issued on Tuesday by industry research firm iSuppli.

Thin-film panels, such as those made by First Solar Inc, the largest U.S. solar power company, are cheaper to make per watt of electricity than are standard panels.

[The Price of a Pipeline: Rena Effendi's Powerful Photos of Lives Destroyed By the Oil Industry](#)

Boosters of the Nabucco pipeline project tout the economic and political clout it will bring to Turkey. But where there are winners, there are also often losers -- as Rena Effendi's powerful photojournalism makes poignantly clear.

Recently exhibited at the 11th International Istanbul Biennial and published in a book this year, Effendi's photographic series "Pipedreams: A Chronicle of Lives Along the Pipeline" focuses on the people affected by a similar project in the region: the Baku-Tbilisi-Ceyhan (BTC) pipeline, which stretches 1,700 kilometers from the photographer's home country of Azerbaijan to a Turkish port on the Mediterranean.

[Al Gore crusades against global warming](#)

San Rafael -- Al Gore and his crusade against global warming landed in the Bay Area this week with a call to arms and a message for those who still think the former vice president is tilting at windmills.

[Senate Working on 'Framework' for Climate Talks, Lieberman Says](#)

(Bloomberg) -- A bipartisan "framework" to combat climate change may be reached in the U.S. Senate before global meetings in Copenhagen next month to craft a new treaty on global warming, Senator Joe Lieberman said.

Lieberman, a Connecticut independent, said he's working with Senator John Kerry, a Massachusetts Democrat, and Senator Lindsey Graham, a South Carolina Republican, to "move the Senate as far as we can before Copenhagen."

[Cost of extra year's climate inaction \\$500 billion: IEA](#)

LONDON (Reuters) - The world will have to spend an extra \$500 billion to cut carbon emissions for each year it delays implementing a major assault on global warming, the International Energy Agency said on Tuesday.

[Storm could follow calm in EU carbon market](#)

LONDON (Reuters) - The European carbon market is bracing itself for a storm as another wave of selling by industrial companies is anticipated at the end of December or early January.

"Concerns over industrial surplus are so huge that all financial institutions are nervous," an emissions trader said.

[Sceptics anger Arctic scientists](#)

Tomso, Norway - As the world climate summit closes in, scientists monitoring the impact of global warming in the far north have grown frustrated by public apathy and disbelief about the extent of the problem.

[Ice loss offsets global warming: study](#)

Global warming has been blamed for the alarming loss of ice shelves in Antarctica, but a new study says newly-exposed areas of sea are now soaking up some of the carbon gas that causes the problem.

[Terrestrial ecosystems and oceans can absorb much more CO₂ than expected](#)

A new study by researchers from the Bristol University, UK, has suggested that terrestrial ecosystems and the oceans have a much greater capacity to absorb CO₂ (carbon dioxide) than had been previously expected.

The results run contrary to a significant body of recent research which expects that the capacity of terrestrial ecosystems and the oceans to absorb CO₂ should start to diminish as CO₂ emissions increase, letting greenhouse gas levels skyrocket.

Dr Wolfgang Knorr at the University of Bristol found that in fact the trend in the airborne fraction since 1850 has only been 0.7 - 1.4 percent per decade, which is essentially zero.

[What Would Failure at Copenhagen Mean for Climate Change?](#)

This is the consequence of failure at Copenhagen: A marked shift in scientific effort from solving global warming to adapting to its consequences, a hodge-podge of uncoordinated local efforts to trim emissions - none of which deliver the necessary cuts - and an altered climate.

Climate experts, scientists and negotiators say that, absent international agreement, the children and grandchildren of those living today will negotiate a world where planetary geo-engineering is a part of daily life, sea-walls defend coastal cities, the world's poor are hammered by drought, floods and famine and our planet is heading toward conditions unseen for the last 100 million years.

The December talks are, in other words, the last, best chance to change course before chaos descends.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](#).