



# Drumbeat: October 15, 2009

Posted by Leanan on October 15, 2009 - 8:54am Topic: <u>Miscellaneous</u>

Is Putin losing gas leverage?: Russian output is falling, while shale gas is providing new competition

Vladimir Putin is on a sales binge. The Russian Prime Minister is eager to clinch longterm gas contracts with Russia's neighbours east and west. But can he deliver?

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t share but something more fundamental: it is about control over the pricing mechanism, the way in which gas is bought and sold in Europe. It is an ideological conflict between promoters of free markets and others who support the stability of a managed price. It is also about the potential profits and losses at stake in \$30 billion (£19 billion) worth of unwanted gas.

The gas price has collapsed worldwide. It has been beaten down by recession and at the same time undermined by new discoveries in America and new supplies of sea-borne liquefied natural gas from the Gulf.

Sinopec Group Facing 'Intense' Rivalry for Energy Assets Abroad

(Bloomberg) -- China Petrochemical Corp., Asia's biggest oil refiner, said the race for overseas energy assets is getting tough as companies scramble to acquire resources.

"The competition is intense," Su Shulin, president of the state-owned company known as Sinopec Group, said in an interview in Beijing yesterday. "There are opportunities in overseas acquisitions, but there are also many people looking at them," he said, without identifying where it is seeking assets.

China, the world's second-largest oil consumer, joins South Korea, Japan and India in their quest to secure overseas resources to drive their economies. Sinopec Group's domestic rivals, including state-owned China National Petroleum Corp. and China National Offshore Oil Corp., are also seeking stakes in oil and gas fields in Africa and Latin America, backed by the government's \$2.1 trillion in currency reserves. ABUJA, Nigeria (AP) -- Nigeria's president said an amnesty granted to militants over the past two months in the oil-rich Niger Delta has restored peace to the region.

The government says more than 8,000 militants have disarmed and taken the amnesty offer since it began in August.

# Petrobras Workers Strike Over Pay Impasse, Union Says

(Bloomberg) -- Petroleo Brasileiro SA workers representing about one-fourth of the state-controlled oil producer's refinery employees went on strike today after failing to reach an agreement on a pay increase, a union official said.

# Yemen starts LNG production

SANAA (AFP) – Yemen started on Thursday to produce liquefied natural gas (LNG) at its plant in Balhaf on the Gulf of Aden, the company Yemen LNG announced.

The company, whose main shareholder is France's Total with 39.6 percent, said it would launch exports "in the few coming weeks" from its terminal in Balhaf.

# US headed for massive decline in carbon emissions

For years now, many members of Congress have insisted that cutting carbon emissions was difficult, if not impossible. It is not. During the two years since 2007, carbon emissions have dropped 9 percent. While part of this drop is from the recession, part of it is also from efficiency gains and from replacing coal with natural gas, wind, solar, and geothermal energy.

The U.S. has ended a century of rising carbon emissions and has now entered a new energy era, one of declining emissions. Peak carbon is now history. What had appeared to be hopelessly difficult is happening at amazing speed.

For a country where oil and coal use have been growing for more than a century, the fall since 2007 is startling. In 2008, oil use dropped 5 percent, coal 1 percent, and carbon emissions by 3 percent. Estimates for 2009, based on U.S. Department of Energy (DOE) data for the first nine months, show oil use down by another 5 percent. Coal is set to fall by 10 percent. Carbon emissions from burning all fossil fuels dropped 9 percent over the two years.

# More than 1 billion going hungry, U.N. says

(CNN) -- The global economic crisis has caused a spike in world hunger that has left more than a billion undernourished, United Nations agencies said in a new report.

"It is unacceptable in the 21st century that almost one in six of the world's population is now going hungry," said Josette Sheeran, executive director of the World Food Programme.

#### Bloggers unite on climate change

LONDON, England (CNN) -- It is being billed as the largest-ever social change event on the Web and one which its organizers believe will unite the digital world in a wider conversation about climate change.

The third annual Blog Action Day is bringing together thousands of bloggers to discuss the same issue on the same day.

# Chevy Volt: A lot of unanswered questions

My comments focused on speculation about the performance of the Volt after the batteries discharge and the range-extending gasoline engine kicks in.

Sine the Volt weighs close to 4,000 pounds, according to a knowledgeable source, and the engine only displaces 1.4 liters, some have guessed the Volt would be a slacker under gasoline power.

"Absolutely incorrect," says a GM spokesperson. "There is no degradation in the Volt's performance after the battery has reached its lower state of charge. The enginegenerator provides sufficient power to propel the vehicle."

#### Cyclists to air their grievances

In Arizona, a driver who hits and kills a cyclist faces a \$1,000 fine. It's the same in South Carolina. In Louisiana, it's \$250.

Those states along with 17 others have safe passing laws. The Lone Star State does not and has no set penalty.

Now that three people, including a San Antonio couple, were struck and killed within a week of each other while bicycling legally, cyclists again are asking what can be done so all road users can travel safely.

(CNN) -- Keith Felch is admittedly a big guy, but more than a few super-fit cyclists in Southern California have been left wondering how that dude just went flying by.

And then his wife, Mary, comes motoring past.

"They stare, like how can a girl go past me," she says, laughing. It takes the other riders a few seconds but then they figure it out.

They have electric motors.

Is Putin losing gas leverage?: Russian output is falling, while shale gas is providing new competition

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#### Edward Burtynsky's Oil

A decade of photographs exploring the impact of oil from the acclaimed Canadian photographer Edward Burtynsky. The collection will be on display at Washington D.C.'s Corcoran Gallery through Dec. 13.

#### Oil demand has peaked in the developed world, but gas may still be on the rise

One of these sources is widely expected to be natural gas. Which is why energy companies continue to buy acreage despite the drop in prices from last year. New technology and expertise has increased estimates of supplies in the US from 30 years worth to 100 years worth, and led producers to band together and lobby Congress for natural gas to have a role in any energy bill that becomes law. They note that not only is it plentiful, but the least carbon intensive of the fossil fuels, and could be used as a transportation fuel.

Indeed, there is so much optimism in the sector that drilling has been climbing steadily in recent weeks. But the short term outlook for natural gas is really unclear. Credit Suisse Equity Research notes in a new report it could go either way, outlining 10 bull and 10 bear arguments for 2010 natural gas.

#### Musings: Deciphering Current Natural Gas Market Data

In the last six weeks natural gas futures prices have jumped from a modern day low to nearly \$5 per thousand cubic foot (Mcf) as commodity traders and investors started to cover their short positions in this fuel as the days moved closer to the beginning of the winter heating season. The jump in the gas price ends what has been an extended price slide that started back in summer of 2008 when prices were in excess of \$13 per Mcf and early signs of the developing global recession emerged.

# Iraq and Turkey set for gas deal

Turkey and Iraq are poised to sign an agreement which will see Iraqi natural gas flow to Europe via Turkey, as the two neighbours look to expand energy and security ties, Turkish officials said.

#### Turkmenistan did not overstate gas reserves

ALMATY - A British auditing firm on Thursday rejected claims made by Russian media this week that energy-rich Turkmenistan massively overstated the size of reserves at a key gas field.

#### Sechin's energy enigma

MOSCOW - The announcement on Tuesday of Russia's agreement in principle to supply up to 70 billion cubic meters per annum of natural gas by pipeline to China is a bit like pornography - it provides a low-cost alternative to the real thing, not to mention the chance to fantasize immediately about a future pleasure that isn't likely to materialize or to be affordable if it does.

Deputy Prime Minister Igor Sechin, in Beijing this week with Prime Minister Vladimir Putin, needs to show in the present that his command of Russia's energy concessions is capable of delivering, at some time in the future, cash into the counting-house.

# US House OKs Bill Targeting Cos Invested in Iran Energy Sector

The U.S. House of Representatives Wednesday overwhelmingly approved a bill authorizing state and local governments to divest from companies doing business in Iran's energy sector.

By a 414-6 vote, the House passed the Iran Sanctions Enabling Act, a censure of firms such as StatoilHydro ASA (STO), Total SA (TOT) and Vitol Holdings BV, which continue to conduct energy business with the Middle-Eastern nation.

#### Dozens die in wave of terror attacks in Pakistan

LAHORE, Pakistan - Teams of gunmen launched coordinated attacks on three law enforcement facilities in Pakistan's eastern city of Lahore and car bombs hit two other cities Thursday, killing a total of 39 people in an escalating wave of anti-government violence.

The bloodshed, aimed at scuttling a planned offensive into the Taliban heartland near the Afghan border, highlights the Islamist militants' ability to carry out sophisticated strikes on heavily fortified facilities and exposes the failure of the intelligence agencies to adequately infiltrate the extremist cells.

# Gas shortage due to Shell refinery repairs

A longer than expected maintenance at a Shell refinery has resulted in another gasoline shortage at retail stations in Alberta.

The company's own stations, as well as others supplied by Shell, began running out of gas and diesel over the long weekend.

# The Philippines: Mikey seeks oil price control in typhoon-hit areas

MANILA - Presidential son and House committee on energy chairman Juan Miguel "Mikey" Arroyo is seeking to "manage" oil prices in calamity stricken areas.

Pampanga Rep. Arroyo made the proposal during Thursday's Legislative and Executive Development Advisory Council (LEDAC), a regular meeting between the executive and legislative branches to synchronize their priorities.

"Of course I stated that (oil price control) during times of crisis. Though we are in a deregulated industry, perhaps there would be a need to create mechanisms to prevent distributors, oil companies from exploiting the situation, kasi they might take advantage of it by bringing up the price," he said.

#### Bangladesh: For urgent extraction of coal

THE State Minister for Power and Energy said on Tuesday that generation of electricity from diesel and furnace oil is very costly. He termed coal as the only option for generating electricity at low costs and emphasised the need for its immediate extraction. Power generation has reached a point where the economy is seriously hampered for shortage of electricity by about 1,500 megawatts. Production falters in many industries where gas is either a fuel or a raw material or both. Gas supply to some sectors has to be suspended to meet demands of others. The crisis is such that some big investment proposals for gas-based industries have been deferred for at least three years. This happens due to short supply of natural gas that fuels about 80 percent of power generation. The existing recoverable gas reserve is estimated to last a few years.

#### Brumby warned of power shortage

Victoria could face widespread power disruptions due to the closure of two of its four brown coal power stations in the next decade as Australia reduces its greenhouse gas emissions, according to high-level advice before the State Government.

# Chesapeake Bay Foundation says coal plant is illegal

NORFOLK - For nearly a year, environmentalists have argued that a coal-fired power plant in Surry County would pollute the Chesapeake Bay watershed.

Environmentalists stuck with that assertion Wednesday but added a new wrinkle: the plant, they say, would violate federal clean air laws and therefore is not lawful.

# Saudi Arabia's Money-for-No-Oil Scheme Dubbed a Real Knee-Slapper

Oil-rich Saudi Arabia has a bold new plan to curb greenhouse gases: pay them for the right to stop using so much oil. As The New York Times reports, the Saudis have proposed that countries looking to reduce oil consumption fork over cash as compensation to oil producers. The measure would secure Saudi Arabia's cooperation on climate talks in Copenhagen and would allegedly give the country the kick in the pants it needs to diversify its economy. But the idea of paying Saudi Arabia for oil that's not being used has sparked ridicule, scorn and bemusement across the web. Here are the most savory takes.

# 'Striving for No' in Climate Talks

In doing my reporting for the story in The New York Times today on Saudi Arabia's latest maneuvers in climate treaty talks (they are reviving longstanding demands for compensation for lost oil revenue), I found an interesting paper on the oil kingdom's involvement in climate talks by Joanna Depledge, a research fellow at Cambridge University focusing on climate negotiations.

The paper, "Striving for No: Saudi Arabia in the Climate Change Regime," was published last November in the journal Global Environmental Politics. It is the most comprehensive analysis I've seen of the role that Saudi Arabia and other oil exporters have played through two decades of global climate diplomacy. Dr. Depledge's conclusion is that this is a classic case of parties – in this case Saudi Arabia and other oil-rich states The Oil Drum | Drumbeat: October 15, 2009

- getting involved in a process primarily to obstruct it. She concludes by noting hints that the oil powers appear to be shifting these days to a more constructive role.

#### Environmentalist Rex Weyler calls on Vancouver to "localize"

Imagine a landmass 390 times the size of the city of Vancouver. That's the "biocapacity" required to sustain Vancouver's ecological footprint, according to local environmentalist Rex Weyler.

The Greenpeace International cofounder is set to give a presentation to city council on Tuesday (October 20) calling for the city to make a dramatic shift toward the local production of food and energy, and to put public transit over "car culture".

# Jan Lundberg: U.S. Peak Oil Conference Conflicted Amidst The Oil Recession

Upon the first global recession influenced by the peaking of oil extraction and record high prices, the question for "peak oilers" arises: does peak oil and energy decline mean great profits for modernizing industry, or is peak oil the beginning of huge changes in lifestyle toward sustainability after societal collapse?

# What Bill McKibben learned from the gay rights march

If the mainstream media is going to largely ignore a mass demonstration on the national mall—such as Sunday's National Equality March for gay rights—public demonstrations might as well be small, numerous, and spread all over, says 350.org founder Bill McKibben.

Also, they should be beautiful.

# What Doubt is There About the Science Behind Global Warming?

Climate change is an extremely complex issue, so there will always be room for people with agendas to raise questions and doubts. Yet the basic mechanism of global warming has been well understood for a century, and the best available knowledge has pointed to a sufficiently clear conclusion for more than a decade now. Humans are affecting the climate.

# Use of Forests as Carbon Offsets Fails to Impress In First Big Trial

"Including offsets from tropical forests in a climate bill is a key to affordability," said

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Nigel Purvis, executive director of the bipartisan Commission on Climate and Tropical Forests. "It would be geopolitically and economically foolish for us to push back on that."

But a report Greenpeace will release Thursday questions the premise of using forest conservation overseas to compensate for U.S. pollution, noting that Noel Kempff envisioned keeping 55 million metric tons of carbon dioxide from entering the atmosphere over 30 years but has lowered that expectation to 5.8 million. The revised estimates do not take into account that logging may have moved to areas to the north, east and southwest of the project. And the report notes that the project's three corporate underwriters -- American Electric Power, BP America and PacifiCorp -- overestimated how much carbon the project kept from entering the atmosphere, telling the EPA it accounted for 7.4 million metric tons from 1997 to 2004.

# U.S. solar firms' 3Q accounting may get hard look

LOS ANGELES (Reuters) - Solar companies are likely to report their brightest earnings in a year as the industry emerges from a brutal downturn, but analysts warn aggressive accounting may cast a shadow on the sector's outlook.

The nascent industry has seen its profit margins and sales growth erode in the past 12 months as a glut of supply and a dearth of financing in the industry stunted the business, which had been expanding by more than 40 percent per year.

# Nuke fusion 'could solve energy crisis'

NUCLEAR fusion could help solve the world's energy crisis and the Australian government should commit to greater research in the area.

Leading nuclear physicist Barry Green said nuclear fusion had the potential to produce enormous amounts of clean and affordable energy from an almost unlimited fuel base.

"If harnessed on earth, fusion energy would provide millions of years of base-load energy, with zero greenhouse gas emissions," he said.

# Curbing Climate Change by Sealing Gas Leaks

"This for me is an absolute no-brainer, even more so than putting in those compact fluorescent bulbs in your house," said Al Armendariz, an engineer at Southern Methodist University who studies pollutants from oil and gas fields.

Acting quickly to stanch the loss of methane could substantially cut warming in the short run, even as countries tackle the tougher challenge of cutting the dominant greenhouse emission, carbon dioxide, studies by researchers at the Massachusetts Institute of Technology suggest. Unlike carbon dioxide, which can remain in the atmosphere a century or more once released, methane persists in the air for about 10 years. So aggressively reining in emissions now would mean that far less of the gas would be warming the earth in a decade or so.

#### Oil jumps to fresh 1-year high above \$75

VIENNA – Oil prices reached a fresh one-year high above \$75 a barrel Thursday, boosted by a weaker U.S. dollar and growing investor optimism about an economic recovery.

A slight drop in U.S. inventories — analysts had expected an increase — also supported prices.

# Total Keeps French Refining Units Shut Amid Slump

(Bloomberg) -- Total SA, Europe's largest refiner, said it will keep its Flanders plant and a unit at its Gonfreville facility in France closed after profit from turning a barrel of crude oil into fuels slumped.

Refining margins in Europe plummeted 85 percent to \$6.6 a metric ton in the third quarter, the lowest in at least seven years, from \$45 a ton a year earlier, Total said on its Web site today. That's down from \$12.40 a ton in the second quarter, according to the Paris-based company.

#### U.K. Gas Storage Sites Face Delays, Struggle to Raise Financing

(Bloomberg) -- U.K. natural-gas storage projects face delays as companies struggle to raise financing, the Gas Storage Operators' Group said.

"The biggest challenge we have is funding," Roddy Monroe, the group's chairman said in an interview in London yesterday. "The need for storage is going to increase."

The U.K. has the least gas storage capacity of any major gas consumer in Europe, exacerbating price volatility at times of high demand or when supplies are curtailed. The country can store only 5 percent of its annual gas demand, compared with France's 18 percent and Germany's 20 percent, according to figures from Centrica Plc, Britain's biggest energy supplier.

The end of affordable oil: Maverick economist says markets will lead us to be greener

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Economist Jeff Rubin cemented his reputation as a maverick when he left his position as chief economist at CIBC World Markets, and a 20-year-career there, to publish a book about the end of cheap oil and the end of globalization, as we know it.

In 2000, Rubin had told Calgary's Petroleum Club that oil - then at an alarming 10year-high of about \$30 per barrel - would rise to \$50 within five years. In 2005, he was among the first to correctly predict \$100 oil.

Now, he says oil will break \$200 as the economic recovers.

Triple-digit oil prices - not an overextended financial system plugged into subprime mortgages - caused the current recession, according to the McGill University graduate and Toronto resident.

# Age of cheap oil coming to an end

Remaining global oil reserves are now estimated to lie in a broad range between 2000-4300 billion barrels. Total global oil consumption by 2007 was 1128 billion barrels.

However, the UKERC says the timing of peak oil is insensitive to the volume of the remaining resource, and will depend as much on economic and technical factors as much as on geology.

"... annual production from a region has rarely exceeded five per cent of the remaining recoverable resources and most regions have reached their peak well before half of their recoverable resources have been produced."

# Sinopec Group, Rosneft May Build Russian Oil Refinery

(Bloomberg) -- China Petrochemical Corp., the country's second-biggest oil company, may help OAO Rosneft finance and build a refinery in Russia's Far East as part of a government plan to develop the remote region.

# Kosmos Team Nears Second Multibillion-Dollar Sale

(Bloomberg) -- James Musselman, the Dallas executive who engineered the \$3.2 billion sale of Triton Energy Ltd. to Hess Corp. in 2001, is attempting another multibillion-dollar deal featuring oil finds in West Africa's Gulf of Guinea.

Musselman heads Kosmos Energy LLC, the closely held U.S. oil explorer that said Oct. 12 it has an agreement to sell its Ghana assets to Exxon Mobil Corp. A person familiar with the deal, which could be torpedoed by a competing bid involving Ghana's government, said the sale is worth at least \$4 billion.

# Exxon Mobil Won't Face Punitive Damages in New York Water Case

(Bloomberg) -- Exxon Mobil Corp. won't face punitive damages in a trial in which New York City accuses it of poisoning water wells with a gasoline additive meant to improve air quality, the trial judge said.

U.S. District Judge Shira Ann Scheindlin in Manhattan ruled in the company's favor yesterday. A jury is deliberating on whether Exxon Mobil, the biggest U.S. oil company, is liable for injuring the city by poisoning five wells in and near the Jamaica area of the borough of Queens with methyl tertiary butyl ether, or MTBE.

# Utah environmental fugitive sentenced in Fla.

SALT LAKE CITY – A Utah man who fled the state after being charged with environmental crimes and later was shot after confronting law officers in Florida with an assault rifle was sentenced to 20 years in prison on Wednesday.

# Toshiba in Talks With Finland to Sell Atomic Reactors

(Bloomberg) -- Toshiba Corp., aiming to win 39 reactor contracts globally by 2015, is in talks with three Finnish utilities seeking to build atomic plants as it challenges Areva SA for a share of the European market.

#### EDP Chief Maps Solar Strategy on Cheap Land in U.S.

(Bloomberg) -- EDP-Energias de Portugal SA, the country's biggest power company, said the U.S. is the most attractive market for expanding in solar energy.

The company, the world's fourth-biggest generator of wind power since acquiring Texas-based Horizon Wind Energy LLC from Goldman Sachs Group Inc. in 2007, is considering solar projects after developing wind farms from New York to Oregon.

"Concerning solar energy, we are mainly considering the U.S. market," EDP Chief Executive Officer Antonio Mexia said in an interview with Bloomberg Television. "We believe it makes more sense: closer to big consumption centers and because the opportunity cost of land is much lower than in Europe."

# PSC considers Western Md. wind power proposal

BALTIMORE – Homeowners who live near the site of proposed Western Maryland wind farm brought their case before utility regulators Wednesday, saying the impact on their safety has not been adequately considered.

"This commission is our last and only hope our government will protect us," said homeowner Victor Fickes.

#### Japanese firm plans zero-emission ferry

TOKYO (AFP) – A Japanese shipmaker said Thursday it planned to launch the world's first large electric ferry -- the latest innovation aimed at reducing greenhouse gas emissions.

A subsidiary of heavy machinery giant IHI Corp. has completed a basic design for a 30metre (99-foot) long ferry that could carry 800 passengers, powered by rechargeable batteries, a company spokesman said.

# Military Fuel-Cell Aircraft Sets Record

The U.S. Navy has developed a hydrogen-powered aircraft that can fly for nearly an entire day without refueling.

During a test flight last week, the Ion Tiger, an unmanned air vehicle (UAV), stayed airborne for approximately 23 hours and 17 minutes, setting an unofficial endurance record for a flight powered by fuel-cell technology.

Iraq May Process Dates for Biofuel, Giving Green Light to Oasis

(Bloomberg) -- Iraq may boost production of dates to produce biofuel for blending with gasoline, as governments seek cleaner-burning alternatives to crude oil.

The biofuel would be used locally and eventually processed into higher-quality fuel for export to Europe, according to Brahim Zitouni, president of Oasis Ltd., a potential project partner. The Dubai-based company proposed its technology a year ago to Iraqi Prime Minister Nuri al-Maliki, who "sanctioned the vision," Zitouni said.

# Pakistan's Engro to Build \$1 Billion Phosphate Plant

(Bloomberg) -- Engro Chemical Pakistan Ltd., the nation's second-largest urea maker, plans to build a \$1 billion phosphate fertilizer plant in North Africa to feed demand in Pakistan and Western Europe. Shares rose.

"Pakistan produces a lot of nitrogenous fertilizer indigenously but we don't have the raw material for phosphatic and potassium fertilizers," Chief Executive Officer Asad Umar, said in an interview at his office in Karachi. "North Africa is the biggest hub of phosphate

#### Gates pledges millions to African, Indian farming

WASHINGTON — Microsoft co-founder turned philanthropist Bill Gates on Thursday will unveil grants totaling 120 million dollars to promote dynamic, home-grown, sustainable agriculture in Africa and India.

The grants, which will be made by the Bill and Melinda Gates Foundation working together with specialized agencies, will be announced by Gates in his keynote speech to the World Food Prize Symposium in Des Moines, Iowa later Thursday, his foundation said.

#### Why high-speed trains are vital for Australia

A zero-emissions, high-speed train network linking Australian cities, would be visionary, nation building and go a long way to stemming our greenhouse gas emissions.

# Education Outside the Ivory Box

Transition Santa Cruz (TSC), a local group committed to reorganizing the community to stimulate a robust local economy, is sponsoring their first Re-skilling Expo October 17. There will be over 20 specialists leading educational demos — including beekeeping, edible landscaping, vermicompost, poultry care, earthworks and food preserving.

TSC's website explains that the word "re-skilling" is used to describe the process of "reacquiring the capacity to function well on mostly local resources."

# Is there still hope for oil?

New evidence has been unearthed (forgive the pun) by an international team of geologists and geophysicists, which gives strong support to an old and once discredited Russian theory. It proposes that new oil is being formed even now.

Deep in the upper mantle of the earth's crust, 40 kilometres or more below the surface, very high temperatures and pressures are generating hydrocarbons, or oil. This oil migrates laterally and upwards through fissures in the crust.

Tracing the fissures to find where they come together will find pools of oil amounting to 200 billion barrels or more. This volume is approximately the same as the known Saudi Arabian reserves, which make up almost a third of the world's total. And, unlike Arabian oil, it is being continuously augmented.

#### RoPo group advocates sustainability

Transition Rogers Park is a new group in the neighborhood teaching members how to become a sustainable community by making their own butter, growing produce and accessing public transportation.

The group is responding to skyrocketing oil prices, a shaky economy and glaciers melting at a rapid rate due to climate change. In February of 2009, co-founders of the group and Rogers Park residents Cynthia Kasper and Pamela Richart discovered a movement to base their efforts on: Transition Town.

#### Biggest Obstacle to Global Climate Deal May Be How to Pay for It

As world leaders struggle to hash out a new global climate deal by December, they face a hurdle perhaps more formidable than getting big polluters like the United States and China to reduce greenhouse gas emissions: how to pay for the new accord.

The price tag for a new climate agreement will be a staggering \$100 billion a year by 2020, many economists estimate; some put the cost at closer to \$1 trillion. That money is needed to help fast-developing countries like India and Brazil convert to costly but cleaner technologies as they industrialize, as well as to assist the poorest countries in coping with the consequences of climate change, like droughts and rising seas.

This financing is an essential part of any international climate agreement, negotiators and scientists say, because developing nations must curb the growth of their emissions if the world is to limit rising temperatures. Based on calculations by the International Energy Agency for 2005 to 2030, 75 percent of the growth in energy demand will come from the developing world.

# Philippines is climate change victim: Arroyo

MANILA (AFP) – President Gloria Arroyo said Wednesday the Philippines deserved preferential loans and other financial help to recover from recent deadly storms because it had become a victim of climate change.

# Canada announces second carbon capture project

OTTAWA (AFP) – The governments of Canada and its Alberta province on Wednesday announced 778.8 million dollars in funding for a second project to capture carbon emissions in western Canada -- home to its oil sands.

The monies coming partly from Canada's stimulus package will be spent to upgrade

TransAlta's coal-fired Keephills 3 power plant near Edmonton, Alberta and reduce its carbon emissions, said officials.

#### Alaska ports protest rules on cruise ship emissions

WASHINGTON -- Some Alaska ports of call have asked the Environmental Protection Agency to rethink -- or at least slow down -- its plans to impose stricter air quality requirements for cruise ships and other large oceangoing vessels.

The EPA wants all large vessels to stop using so-called bunker fuel within 200 nautical miles of U.S. shorelines, saying that reducing air pollution from the dirty fuel could save the lives of 8,300 people each year, help an additional 3 million people avoid respiratory problems and clear hazy skies as far inland as the Grand Canyon .

#### Climate Change May Mean Slower Winds

This summer scientists published the first study that comprehensively explored the effect of climate change on wind speeds in the U.S. The report was not encouraging. Three decades' worth of data seemed to point to a future where global warming lowers wind speeds enough to handicap the nascent wind industry. But the real story, like so much in climate science, is far more complex.

Carbon emissions must peak by 2015: UN scientist

PARIS (AFP) – The head of the UN's climate scientists on Thursday urged a key conference on global warming to set tough mid-term goals and warned carbon emissions had to peak by 2015 to meet a widely-shared vision.

Rajendra Pachauri, chairman of the Nobel-winning Intergovernmental Panel on Climate Change (IPCC) said the talks in Copenhagen in December must focus on 2020, a far more important target than mid-century.

Secretary Chu Announces Up to \$55 Million in Funding to Develop Advanced Carbon Capture Technology at Existing Coal-Fired Power Plants

Washington, DC — U.S. Energy Secretary Steven Chu announced today that \$55 million will be made available to develop advanced technologies that can capture carbon dioxide from flue gases at existing power plants so that the greenhouse gas may be sequestered or put to beneficial use. The funding announced today is a direct investment in carbon capture and storage related technologies that will support the Obama Administration's effort to help mitigate the effects of CO<sub>2</sub> – a major greenhouse gas and contributor to global climate change.

Arctic Has Potential To Alter Earth's Climate: Arctic Land And Seas Account For Up To 25 Percent Of World's Carbon Sink

ScienceDaily — In a new study in the journal *Ecological Monographs*, ecologists estimate that Arctic lands and oceans are responsible for up to 25 percent of the global net sink of atmospheric carbon dioxide. Under current predictions of global warming, this Arctic sink could be diminished or reversed, potentially accelerating predicted rates of climate change.

#### Arctic to be ice-free in summer in 20 years: scientist

LONDON - Global warming will leave the Arctic Ocean ice-free during the summer within 20 years, raising sea levels and harming wildlife such as seals and polar bears, a leading British polar scientist said on Thursday.

Peter Wadhams, professor of ocean physics at the University of Cambridge, said much of the melting will take place within a decade, although the winter ice will stay for hundreds of years.

The changes will mean the top of the Earth will appear blue rather than white when photographed from space and ships will have a new sea route north of Russia.

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